

**FEAR AND LOATHING ABOUT THE PUBLIC RIGHT
TO KNOW: THE SURPRISING SUCCESS OF THE
EMERGENCY PLANNING AND COMMUNITY
RIGHT-TO-KNOW ACT**

SIDNEY M. WOLF*

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* Director, Graduate Program in Regional Planning, University of Massachusetts at Amherst; B.G.S., University of Iowa; M.A., Urban and Regional Planning, University of Iowa; J.D., University of Iowa; Ph.D., University of Illinois.

I. INTRODUCTION

On December 4, 1984, more than 2500 people were killed and over 200,000 others injured in Bhopal, India when a highly toxic pesticide was released from a storage tank at a Union Carbide facility.¹ Nine months later, more than 150 individuals required medical attention when another toxic chemical used to make pesticides, aldicarb oximine, was released by a Union Carbide facility in Institute, West Virginia.² In Bhopal, Union Carbide failed to seriously consider emergency prevention measures in operating its pesticide facility. Additionally, its emergency response planning and resources were clearly inadequate.³ In West Virginia, Union Carbide's officials failed to notify local authorities about the release of the pesticide-laden gas because they did not believe the gas would leave the plant's perimeter.⁴

In both accidents local authorities were confused about what was happening, what substance was involved, and how to protect citizens.⁵ No comprehensive national program existed to provide local citizens with important information on hazardous chemicals in their communities, or establish emergency planning and response requirements, despite the magnitude of the toxic chemical releases. In 1985 the Environmental Protection Agency (EPA) determined that during the previous five years more than 6900 incidents involving the release of toxic chemicals had occurred in the United States, causing 135 deaths and nearly 1500 injuries.⁶

Congress sought to remedy this shortcoming⁷ through the passage of the Emergency Planning and Community Right-to-Know Act of

1. PAUL SHRIVASTAVA, *BHOPAL: ANATOMY OF A CRISIS* 64-67 (1987); WARD MOREHOUSE & M. SUBRAMANIAM, *THE BHOPAL TRAGEDY: WHAT REALLY HAPPENED AND WHAT IT MEANS FOR AMERICAN WORKERS AND COMMUNITIES AT RISK* vii (1986) (describing Bhopal as the "Hiroshima" of the chemical industry); BHOPAL ACTION RESOURCE CENTER, *BHOPAL AND ITS AFTERMATH: SELECTED BIBLIOGRAPHY* (1989); *The Bhopal Tragedy: Social and Legal Issue: A Symposium*, 20 TEX. INT'L L.J. 267 (1985). The Union Carbide facility released 20 tons of methyl isocyanate, a highly toxic chemical used in the manufacture of insecticides and herbicides. 13 ENCYCLOPEDIA OF CHEMICAL TECHNOLOGY 806 (3d ed. 1981).

2. Stuart Diamond, *Carbide Leak Highlights Defects in Systems Handling Toxic Matter*, N.Y. TIMES, Aug. 19, 1985, at A1; *Steam in Chemical Storage Tank Named As Likely Cause of Union Carbide Accident*, 16 Env't Rep. (BNA) 635 (Aug. 16, 1985) [hereinafter *Steam*].

3. Diamond, *supra* note 2, at A1.

4. *Steam*, *supra* note 2, at 635.

5. Thomas A. Curtis & Michael C. Whittington, *Reporting Requirements: Under the Federal Emergency Planning and Community Right-to-Know Act and Texas Chemical Reporting Act*, 53 TEXAS B.J. 568 (June 1990).

6. *Draft EPA Study Counts 6,900 Releases of Acutely Toxic Chemicals in Five Years*, 16 Env't Rep. (BNA) 1022 (Oct. 11, 1985).

7. *Carbide Accident May Speed Controls, Right-to-Know, Emergency Response Rules*, 16 Env't Rep. (BNA) 635 (Aug. 16, 1985).

1986 (EPCRA).⁸ This Congressional action was influenced by two things: (1) a strong grassroots movement which had previously resulted in numerous state and local laws meant to provide workers and communities with information on chemical hazards; and (2) the lack of information on toxic waste generation by factories. But it was the Bhopal tragedy which finally pushed Congress to attempt to alleviate the lack of comprehensive emergency response planning and the scarcity of information on dangerous chemical releases around the nation.⁹ Prior to Bhopal, Congress had been concerned primarily with reworking the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA),¹⁰ commonly called the "Superfund" law, which was propelled into being by another famous toxic chemical tragedy, Love Canal.¹¹ Bhopal convinced Congress, in the midst of its consideration of the reauthorization of CERCLA, to promulgate statutory provisions addressing the concern about toxic chemical releases and accidents.

Originally, EPCRA was introduced as a separate bill, but Congress inserted it into the Superfund Amendments and Reauthorization Act of 1986 (SARA) as Title III.¹² SARA was intended to amend the original Superfund Act.¹³ EPCRA, however, was meant to be a free-standing law and not part of CERCLA or its amendments.¹⁴ Rather, EPCRA was enacted to "establish programs to provide the public with important information on the hazardous chemicals in their communities, [as well as to] establish emergency planning and notification requirements which would protect the public in the event of a release of hazardous chemicals."¹⁵

8. Pub. L. 99-499, tit. III, § 301, 100 Stat. 1729 (1986) (codified as amended at 42 U.S.C. §§ 11001-11050 (1988 & Supp. V 1993)).

9. February/March 1991 edition of Working Notes on Community Right-to-Know, available in RTK-NET, Entry No. 225, May 16, 1991. For a more detailed discussion of the Right-to-Know Network (RTK-NET) see *infra* note 415 and accompanying text.

10. Pub. L. No. 96-510, tit. I, § 101, 94 Stat. 2767 (1980) (codified as amended at 42 U.S.C. §§ 9601-9675 (1988 & Supp. V 1993)).

11. CERCLA was designed to clean up thousands of leaking toxic chemical dumps around the nation. See Sidney M. Wolf, *Public Opposition to Hazardous Waste Sites: The Self-Defeating Approach to National Hazardous Waste Control Under Subtitle C of the Resource Conservation and Recovery Act of 1976*, 8 B.C. ENVTL. AFF. L. REV. 467 n.13 (1980) (describing the Love Canal tragedy).

12. Pub. L. No. 99-499, §§ 300-330, 100 Stat. 1613, 1728-58 (1986) (codified in scattered sections of the I.R.C. and titles 10, 29, 33 and 42 of the U.S.C.).

13. See Steven J. Christiansen & Stephen H. Urquhart, *The Emergency Planning and Community Right to Know Act of 1986: Analysis and Update*, 6 B.Y.U. J. PUB. L. 235-36 (1992).

14. H.R. REP. NO. 99-962, 99th Cong., 2d Sess. 281 (1986), reprinted in 1986 U.S.C.C.A.N. 3374. See also *A.L. Laboratories, Inc. v. EPA*, 826 F.2d 1123, 1125 (D.C. Cir. 1987) (holding that EPCRA was an independent act rather than an amendment to CERCLA).

15. H.R. REP. NO. 99-962, 99th Cong., 2d Sess. 281 (1986), reprinted in 1986 U.S.C.C.A.N. 3374.

As its name implies, EPCRA has two major functions: (1) emergency planning and notification; and (2) community right-to-know. Both functions involve information gathering and dissemination. Implementation of EPCRA occurs to a great degree through the requirement that businesses and industry make information on their chemical use and disposal publicly available.

The emergency planning facet requires states and local communities to make advanced preparations for dealing with emergencies relating to hazardous materials. These requirements are intended to prepare state and local communities for chemical accidents, of both major and minor proportions. EPCRA does not dictate that any particular method of emergency planning be adopted by a community or local government, but rather provides a framework within which local governments and citizens can fashion measures for emergency planning. The emergency notification procedures, however, do direct that state and local agencies be immediately informed of hazardous chemical releases so that they can take appropriate action.

The community right-to-know feature of EPCRA provides ordinary citizens, without the help or need of governmental intervention, with new rights to critical information about hazardous and toxic chemicals possessed and released by businesses.¹⁶ As a means to effectuate community right-to-know, EPCRA requires unprecedented disclosure by industry, as well as citizen access, concerning the presence and release of hazardous and toxic chemicals at industrial locations. The right-to-know portions of EPCRA were hotly debated, and were included in the Act despite heavy opposition from industry and the Reagan Administration EPA.¹⁷

EPCRA started out in obscurity. Unlike other major federal pollution control statutes (such as the Clean Water Act¹⁸, Clean Air Act¹⁹ and CERCLA²⁰), it remains relatively obscure. However, it has turned out to be one of the most significant pieces of environmental legislation in decades, most particularly its right-to-know provisions about toxic chemicals, the Toxics Release Inventory (TRI). TRI requires manufacturing facilities to report routine releases of toxic chemicals to the public and the EPA. Making TRI data publicly

16. Robert Abrams & Douglas Ward, *Prospects for Safer Communities: Emergency Response, Community Right to Know, and Prevention of Chemical Accidents*, 14 HARV. ENVTL. L. REV. 135, 154 n.74 (1990).

17. The House included, by only a one-vote margin, chemicals that cause chronic health effects. (212-211). *Id.*

18. Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (1994).

19. 42 U.S.C. §§ 7401-7642 (1988 & Supp. V 1993).

20. 42 U.S.C. §§ 9601-9675 (1988 & Supp. V 1993).

available to any citizen has been described by an EPA administrator as "among the most important weapons in efforts to combat pollution."²¹ The present Clinton EPA administration regards the TRI as "among our most potent environmental weapons."²²

This article is likely the most comprehensive law journal article on EPCRA to date.²³ Part II describes the legislative provisions in detail. Part III examines the initial worries about EPCRA from those who had the most to fear from it: governmental officials and industry. Part IV discusses whether these fears were justified. One such fear that did prove valid was industry's concern that publicly-provided information on toxic chemical releases would lead to a backlash against toxic polluters and stronger efforts to uncover and control toxic pollution. Part V discusses the profound effect the TRI has had on environmental organizations, the press, legislators, regulatory agencies, and most importantly, industry. And finally, Part VI describes recent threats to the very existence of the TRI program by the so-called "regulatory reform" pursued by the Republican-led Congress as part of that party's "Contract with America" campaign.

II. EPCRA PROVISIONS

EPCRA is organized into three subtitles.²⁴ Subtitle A, "Emergency Planning and Notification," consists of sections 301-305.²⁵ This subtitle establishes the procedure used to create state and local emergency planning bodies, the development of emergency response plans, and emergency notification requirements in the event of chemical releases. Subtitle B, "Reporting Requirements," covers sections 311-313,²⁶ and creates the right-to-know component of the legislation through reporting requirements for facilities where toxic and hazardous chemicals are found. Subtitle C, "General Provisions,"

21. *National Report Released*, Working Notes on Community Right-to-Know, November 1990 Working Group on CRTK Newsletter, available in RTK-NET, Entry No. 1941, April 25, 1991 (Bush administration EPA administrator).

22. Carol M. Browner, *1993 Statement on '91 Toxics Release Inventory*, available in RTK-NET Entry No. 4133, May 25, 1993 (statement of EPA Administrator Carol M. Browner).

23. Other law journal articles include: Christiansen & Urqhart, *supra* note 13; Portia C. Smith, Comment, *The Preemptive Effect of the Emergency Planning and Community Right-to-Know Act of OSHA's Hazard Communication Standard*, 67 WASH. U.L.Q. 1156 (1989); Abrams & Ward, *supra* note 16; Wayne T. Halbleib, *Emergency Planning and Community Right-to-Know Act*, in ENVIRONMENTAL HANDBOOK 278, 278-307 (1995).

24. In the United States Code, "subchapters" are used rather than "subtitles." Therefore, Subchapters I-III in the code correspond to Subtitles A-C of Title III of SARA as enacted by Congress.

25. 42 U.S.C. §§ 11001-11005 (1988 & Supp. V 1993).

26. 42 U.S.C. §§ 11021-11023 (1988 & Supp. V 1993).

encompasses sections 321-330²⁷ and includes, among other things, trade secret protection, enforcement, and citizen suits.

A. *Emergency Planning and Notification*

1. *Emergency Plans*

Under EPCRA, states are required to establish two kinds of governmental entities to undertake emergency planning and process the information which businesses are required to submit: (1) state emergency response commissions (SERCs); (2) and local emergency planning committees (LEPCs). The SERCs, appointed by the governor, serve as the focal point for emergency response coordination. They also provide a federal government link for enforcement requests.²⁸ In turn, SERCs divide the state into local emergency planning districts, appoint a LEPC for each and supervise and coordinate the LEPC's activities.²⁹

The LEPCs, which theoretically represent a broad cross-section of their communities,³⁰ are required to prepare and implement plans for chemical emergencies.³¹ Both SERCs and LEPCs are responsible for receiving and processing information received by businesses for emergency planning, and must formulate procedures for handling public requests for this information.³²

EPCRA provides no more than a road map for the preparation of emergency plans, specifying minimum requirements and leaving the

27. 42 U.S.C. §§ 11041-11050 (1988 & Supp. V 1993).

28. 42 U.S.C. § 11001(a) (1988 & Supp. V 1993). The governor can choose to name one or more existing state agencies, such as the environmental, emergency, health, transportation, and other relevant agencies, as the SERC. Members of trade associations, public interest organizations and others with expertise in emergency planning may be included on the SERC. *Id.* Congress set April 17, 1987 as the deadline for establishing SERCs. *Id.*

29. 42 U.S.C. § 11001(b) (1988 & Supp. V 1993). SERCs were required to designate LEPCs by July 17, 1987. *Id.* Existing political subdivisions or multi-jurisdictional planning organizations may be designated by the SERC as a LEPC. *Id.*

30. The members a SERC chooses for a LEPC must, at a minimum, include representatives from the following groups or organizations: elected state and local officials; law enforcement, civil defense, fire-fighting, first aid, health, local environmental, hospital and transportation personnel; broadcast and print media; community groups; and owners and operators of facilities subject to EPCRA. 42 U.S.C. § 11001(c) (1988 & Supp. V 1993). Any "interested person" dissatisfied with the composition of a LEPC can petition the SERC to have the membership modified. 42 U.S.C. § 11001(d) (1988 & Supp. V 1993).

31. 42 U.S.C. § 11001(c) (1988 & Supp. V 1993). The initial plans were required to be completed by October 17, 1988 and must be reviewed at least once a year. 42 U.S.C. § 11003(a) (1988 & Supp. V 1993). EPCRA directs LEPCs to establish rules under which they are to function and that the rules provide for public notification of committee activities, public meetings to discuss emergency plans, public comments, response to the comments, and distribution of the emergency plans. 42 U.S.C. § 11001(c) (1988 & Supp. V 1993).

32. 42 U.S.C. § 11001(a), (c) (1988 & Supp. V 1993).

details up to the LEPC.³³ Funding is also up to the LEPC. EPCRA does not authorize federal funds to support this planning effort.

2. Emergency Planning Notification—Covered Facilities and Substances

Emergency response planning by states and communities is directed at facilities which use or store “extremely hazardous substances” (EHS) in excess of “threshold planning quant[ities]” (TPQs).³⁴ These hazardous substances were originally drawn from a list of 386 chemicals published by the EPA a year before the enactment of EPCRA. Facilities which have threshold amounts³⁵ of any EHSs on their premises must designate a business emergency planning coordinator, notify the SERC of the presence of the substance, and cooperate with the LEPC in emergency planning.³⁶ Additionally, a facility subject to the emergency planning and notification requirements for EHSs must provide the LEPC with all the information necessary, or requested, to develop a plan.³⁷ This information typically includes safety audits and hazards assessments.³⁸ All information provided to the SERCs and the LEPCs by the covered facilities must be made available to the public.³⁹

3. Emergency Release Notification

33. LEPC emergency plans are required, at the very least, to do the following: identify facilities and transportation routes where hazardous substances are present; establish emergency response procedures, including evacuation plans, for accidental chemical releases; set up notification procedures for emergency response personnel and the public; establish methods for determining the occurrence and severity of a release and the areas and populations likely to be affected; identify emergency equipment available in the community; set forth a program and schedules for training local emergency response and medical workers to respond to chemical emergencies; provide methods and schedules for conducting exercises to test the elements of the emergency response plan, and designate a community coordinator and facility coordinators to carry out the plan. 42 U.S.C. § 11003(c) (1988 & Supp. V 1993).

34. 42 U.S.C. § 11002(b)(1) (1988 & Supp. V 1993).

35. The EPA was required to set a threshold amount for all the substances on its original EHS list. If the EPA failed to set a TPQ for any substance, EPCRA automatically sets the threshold at two pounds. 42 U.S.C. § 11002(a)(3)(A), (C) (1988 & Supp. V 1993). Like the EHS list, the EPA can revise the thresholds from time to time. 42 U.S.C. § 11002(a)(4) (1988 & Supp. V 1993).

36. 42 U.S.C. § 11003(d) (1988 & Supp. V 1993). The governor or the SERC may designate additional facilities as subject to emergency planning requirements. 42 U.S.C. § 11002(b)(2) (1988 & Supp. V 1993).

37. 42 U.S.C. § 11003(d)(3) (1988 & Supp. V 1993).

38. OMB WATCH, USING COMMUNITY RIGHT TO KNOW: A GUIDE TO A NEW FEDERAL LAW 13 (1988).

39. 42 U.S.C. § 11044(a) (1988 & Supp. V 1993).

EPCRA requires a facility to immediately notify the community and the state (i.e., the LEPC and the SERC) of any release or spill of predetermined amounts outside the facility's boundary. These predetermined amounts are designated as a "reportable quantity" (RQ) of hazardous substances and extremely hazardous substances.⁴⁰ Chemicals covered under the emergency release notification include not only over 300 EHSs to which emergency planning requirements apply,⁴¹ but also more than 700 hazardous substances subject to the emergency release notification requirement of the Superfund law.⁴² More facilities are covered under the emergency release notification requirements than under the planning requirements, because release reporting may be required even when the TPQ of a substance is not present.⁴³

For some of the most hazardous and toxic chemicals on EPCRA and Superfund lists, releases of more than one pound must be reported.⁴⁴ For others, the reporting quantities range from ten pounds to ten thousand pounds.⁴⁵ All accidental release information provided to the LEPC or the SERC is available to the public.⁴⁶

B. Community Right to Know

There are two kinds of industry-provided information which provide the basis for community right-to-know under EPCRA. One

40. 42 U.S.C. § 11004(a)(1) (1988 & Supp. V 1993). The initial report may be by telephone, but a follow-up written report with additional, more detailed information is also required. 42 U.S.C. § 11004(b), (c) (1988 & Supp. V 1993). The immediate notification must include: the name of the chemical; the location of the release; whether the chemical is on the "extremely hazardous" list; how much of the substance has been released; the time and duration of the incident; whether the chemical was released into the air, water or soil or some combination of the three; known or anticipated health risks and necessary medical attention; proper precautions, such as evacuation; and a contact person at the facility. 42 U.S.C. § 11004(b)(2) (1988 & Supp. V 1993). As soon as practicable after the release, the facility must submit a written report to both the LEPC and the SERC. 42 U.S.C. § 11004(c) (1988 & Supp. V 1993). This follow-up report must update the original notification and provide additional information on response actions taken, known or anticipated health risks, and, if appropriate, advice regarding any medical care needed by exposure victims. *Id.*

41. 42 U.S.C. § 11004(a)(2) (1988 & Supp. V 1993). The reportable quantities for EHSs are set out in 40 C.F.R. § 355, app. A. (1995).

42. 42 U.S.C. § 11004 (a)(1) (1988 & Supp. V 1993). Of the hazardous substances for which emergency notification was required, EPCRA adopted those which EPA defined as hazardous substances and listed as requiring notification to federal authorities when released pursuant to section 103(a) of CERCLA. 42 U.S.C. § 11004(a)(1) (1988 & Supp. V 1993) (*referring to* 42 U.S.C. § 9603(a)). The list of hazardous substances and their reportable quantities under CERCLA are set out at 40 C.F.R. § 302.4 (1995).

43. 42 U.S.C. §§ 11004(a)(2), 11002(b) (1988 & Supp. V 1993).

44. 42 U.S.C. § 11004(a)(2), 11004(3)(B)(i) (1988 & Supp. V 1993).

45. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, CHEMICALS IN YOUR COMMUNITY: A GUIDE TO THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT 6 (1988).

46. 42 U.S.C. § 11044(a) (1988 & Supp. V 1993).

kind of information available to the public pertains to use and storage. This kind of information includes reports of the types, amounts, location and potential effects of hazardous chemicals being used or stored in designated quantities in a community. The other kind pertains to releases and includes reports of toxic chemical releases into the air, water or soil.

1. Hazardous and Extremely Hazardous Chemical Reporting

Hazardous chemical reporting under EPCRA builds upon the Occupational Safety and Health Act of 1970 (OSHA) and its regulations,⁴⁷ which previously provided employees with a "right to know" about hazardous chemicals in the workplace by allowing them access to Material Safety Data Sheets (MSDSs)⁴⁸ as prescribed by OSHA's Hazard Communication Standard (HAZCOM).⁴⁹ More than 50,000 hazardous chemicals are covered by the HAZCOM standard.⁵⁰

There are two different ways facilities must report on their production, use, or storage of OSHA-regulated hazardous chemicals.⁵¹

47. Pub. L. No. 91-596, 84 Stat. 1590 (codified as amended in scattered sections of 15 U.S.C.), 42 U.S.C. § 11021(a) (1988 & Supp. V 1993).

48. 42 U.S.C. § 11049(6) (1988 & Supp. V 1993) (defining an MSDS as the sheet required to be developed under 29 C.F.R. § 1910.1200(8)). An MSDS is a fact sheet which contains the chemical names and safety instructions for hazardous chemicals. 29 C.F.R. § 1910.1200(g) (1995). Manufacturers of hazardous chemicals must provide employers with MSDS sheets about the hazardous chemicals they receive. The MSDS is divided into eight sections: 1) product identity; 2) hazardous ingredients; 3) physical data; 4) fire and explosion data; 5) reactivity data; 6) health hazard data; 7) precautions for handling; and 8) control measures. Employers must make the MSDS information available to employees by maintaining copies of the MSDSs in the establishment and making them readily accessible to employees during work shifts. 29 C.F.R. § 1910.1200(g)(8) (1995).

49. 29 C.F.R. § 1910.1200 (1995). The standard covers employment under Standard Industrial Classification Codes 20-39, which cover manufacturing of a wide variety of products, including food, textiles, apparel, lumber, wood, furniture, paper products, chemicals, petroleum products, rubber and plastics, leather goods, stone, glass, clay, metals, machinery, and other miscellaneous goods. 29 C.F.R. § 1910.1200(a)(2), (b)(1) (1995). Under OSHA, companies are required to keep MSDSs on file for all hazardous chemicals used in the workplace. Chemicals considered hazardous under OSHA are those known by the manufacturer to: cause acute health effects; cause cancer or other chronic hazards to humans; or have special dangerous physical properties, like reactivity or flammability. 42 U.S.C. 11002 indicates that, with some exceptions, the HAZCOM standard of OSHA, 29 C.F.R. § 1910.1200(c) (1995) defines hazardous chemicals under EPCRA.

50. OMB WATCH, *supra* note 38, at 12.

51. OSHA defines a "hazardous chemical" as either a "physical hazard or a health hazard." 29 C.F.R. § 1910.1200(c) (1995). A "physical hazard" is deemed to be any "chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water reactive." *Id.* "Health hazard" is "a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees." *Id.* See also Appendix A of OSHA standard (defining a health hazard in greater detail) and Appendix B

First, facilities must report on-site chemicals to the SERC, the LEPC, and the local fire department. This requirement covers hazardous chemicals specified under OSHA, that is, chemicals for which employers must maintain MSDSs. Section 311 of EPCRA directs that if a facility is required to prepare MSDSs under OSHA, it must submit either actual copies of its MSDSs or lists of MSDSs for hazardous chemicals exceeding threshold amounts to the SERC, the LEPC, and the local fire department.⁵² The EPA is authorized to establish the threshold quantities for this form of reporting.⁵³ The reporting requirement is triggered if during the previous year, a facility held more than 10,000 pounds of a hazardous chemical, or more than 500 pounds or 55 gallons, or above the threshold quantity, whichever is lower, of an EHS.⁵⁴ The MSDSs or lists must be updated whenever a facility uses more than a threshold amount of a new chemical.⁵⁵ A public request for a facility's MSDS information must be made through the LEPC, which in turn is required to obtain the MSDS from the facility and make it available to the public.⁵⁶

Second, companies that submit MSDSs or lists are also required to file more detailed chemical inventory information with the LEPC, the

(specifying the criteria necessary for making a hazardous chemical determination). 29 C.F.R. § 1910.1200 app. A (1988); 29 C.F.R. § 1910.1200 app. B (1988).

52. 42 U.S.C. § 11021(a)(1), (2) (1988 & Supp. V 1993). Where a list is supplied in lieu of individual MSDSs, it must include, for each chemical, the chemical name or common name and any hazardous component of each chemical as these were provided on the MSDS. 42 U.S.C. § 11021(a)(2) (1988 & Supp. V 1993). Upon request of a LEPC, the actual MSDS must be provided by the facility. 42 U.S.C. § 11021(c)(1) (1988 & Supp. V 1993).

53. 42 U.S.C. § 11021(b) (1988 & Supp. V 1993).

54. 40 C.F.R. § 370.20(b)(1)-(2) (1995). Section 311 of EPCRA ties reporting to the "hazardous chemicals" for which the MSDS requirement of OSHA applies. 42 U.S.C. § 11021(a)(1) (1988 & Supp. V 1993). Section 311 states that the term "hazardous chemical" for the purposes of EPCRA is the same as its HAZCOM definition under 29 C.F.R. § 1910.1200(c). 42 U.S.C. § 11021(e) (1988 & Supp. V 1993). In its rules, the EPA added to the section 311 reporting requirement the "extremely hazardous" substances for which EPCRA section 302 requires emergency release notification. 40 C.F.R. § 370.20(b)(1) (1995). These chemicals too are subject to the MSDS requirements. The EPA had set the emergency release reporting threshold for extremely hazardous substances at 500 pounds or the TPQ, whichever is lower. 40 C.F.R. § 370.20(b)(1) (1995). As a result, if the chemical is an extremely hazardous substance and subject to the section 302 emergency planning and release notification requirement, the threshold for reporting is 500 pounds or the TPQ for extremely hazardous substances, whichever is lower. All other chemicals for which MSDS reporting is required are subject to reporting by a facility if present in amounts equal to or greater than 10,000 pounds. 40 C.F.R. § 370.20(b) (1995).

55. 42 U.S.C. § 11021(d)(2) (1988 & Supp. V 1993). The initial deadline for submission of the MSDS information was October 17, 1987. 42 U.S.C. § 11021(d)(1)(A) (1988 & Supp. V 1993).

56. 42 U.S.C. § 11021(c)(2) (1988 & Supp. V 1993). If a list of chemicals is provided rather than the actual MSDSs, the LEPC can obtain the MSDSs from the facility. 42 U.S.C. § 11021(c)(1) (1988 & Supp. V 1993). Any person can request the LEPC to obtain and make available the MSDSs. 42 U.S.C. § 11021(c)(2) (1988 & Supp. V 1993). If a facility fails to make the information available, any state or local government can bring suit in federal district court to compel compliance. 42 U.S.C. § 11046(a)(2)(A)(iii) (1988 & Supp. V 1993).

SERC, and the local fire department.⁵⁷ These inventory forms, required under section 312 of EPCRA, provide information on the types, the amounts (in ranges) and the general location of chemicals present at a facility. This information is important because it alerts communities as to how and where large amounts of potentially dangerous chemicals reside.⁵⁸ Although the LEPC and the SERC must respond to public written requests for inventory data on a chemical within forty-five days, fulfilling these requests is discretionary, unless the chemical is an EHS or if more than 10,000 pounds of the chemical is held on-site at any one time.

There is a two-tier approach to the annual chemical inventory reporting. The Tier I form, submitted to the LEPC, the SERC, and the local fire department, is essentially an annual general summary of the aggregate amounts and general locations of all chemicals at a facility. The chemicals are grouped in categories according to health and physical hazards; specific chemical identities are not revealed.⁵⁹ In contrast, the Tier II form is for specific chemicals and is more detailed about location and storage information.⁶⁰

Tier I forms are required, but Tier II forms are not, unless they are requested for specific chemicals by the LEPC, the SERC, or the local fire department.⁶¹ However, a company may elect to provide Tier II

57. 42 U.S.C. § 11022(a), (c) (1988 & Supp. V 1993). The forms are called "emergency and hazardous chemical inventory" forms. 42 U.S.C. § 11022(a)(1) (1988 & Supp. V 1993).

58. OMB WATCH, *supra* note 38, at 141.

59. EPCRA required the first Tier I inventory to be submitted to the LEPC, the SERC, and the local fire department by March 1, 1988 and every March afterwards, with the annual inventory covering the preceding calendar year. 42 U.S.C. § 11022(a)(2) (1988 & Supp. V 1993). In the Tier I inventory, aggregated amounts of hazardous substances are grouped into five OSHA health hazard categories: (1) acute or immediate health hazards (substances which can cause immediate health effects); (2) chronic or delayed health hazards (substances which may cause health effects that may only be detectable after a period of time); (3) fire hazards; (4) reactive hazards (substances which may react with other hazards); and (5) sudden release of pressure hazards. 42 U.S.C. § 11022(d)(1)(A) (1988 & Supp. V 1993). The Tier I annual report includes an estimate (in ranges) of the aggregate maximum and aggregate average daily amounts and general location of each category of hazardous chemicals at the facility. 42 U.S.C. §§ 11022(d)(1)(B)(i)-(iii) (1988 & Supp. V 1993).

60. The Tier II report includes the same information on the amounts for a specific chemical (using estimated ranges) that is required for aggregate chemicals in the Tier I report. Compare 42 U.S.C. § 11022(d)(1)(B)(i)-(ii) (1988 & Supp. V 1993) with 42 U.S.C. § 11022(d)(2)(B)-(C) (1988 & Supp. V 1993). However, the Tier II report also describes the manner of storage of the chemical and its specific location at the facility. 42 U.S.C. § 11022(d)(2)(D)-(E) (1988 & Supp. V 1993). While the facility must indicate the specific location of chemicals in the Tier II form which it provides to the SERC, the LEPC and the fire department, it may elect to specify that such locational information for any chemical be withheld from disclosure under the public availability of information provision of EPCRA. 42 U.S.C. §§ 11022(d)(2)(F), 11044(a) (1988 & Supp. V 1993).

61. 42 U.S.C. § 11022(e) (1988 & Supp. V 1993). Because Tier II information can only be provided upon a specific request for information for a particular facility, the statute prevents

forms instead of the Tier I version.⁶² A key difference between the two levels of information—and a key reason why companies may prefer to provide Tier II forms—is that Tier I information is readily discloseable to the public,⁶³ while the availability of Tier II information is subject to restrictions. Tier II availability depends upon the status of the requesters, and whether they are: (1) SERCs, LEPCs, or the local fire department; (2) state or local officials; or (3) the public.⁶⁴

The MSDSs, the MSDS lists, and the chemical inventories of sections 311 and 312 of EPCRA can be considered part of the community right-to-know because they consist of reported information that is readily available to the public. However, the most significant use of this information is for emergency planning. The bulk of the

any governmental official from establishing as an annual reporting requirement the Tier II forms on specific chemicals. H.R. REP. NO. 99-253(V), 99th Cong., 2d Sess. 290 (1986), *reprinted in* 1986 U.S.C.C.A.N. 3383.

62. 42 U.S.C. § 11022(a)(2) (1988 & Supp. V 1993).

63. SERCs and LEPCs are to make available to the public Tier I inventory forms they receive. 42 U.S.C. § 11044(a) (1988 & Supp. V 1993).

64. 42 U.S.C. § 11022(e) (1988 & Supp. V 1993). For the first category, state commissions, local committees, and local fire departments can directly request a facility to provide Tier II information on a specific chemical. 42 U.S.C. § 11022(e)(1) (1988 & Supp. V 1993). The state and local officials, when acting in an official capacity, can request that a facility provide Tier II information on specific chemicals, but only through a request to the state commission or local committee. 42 U.S.C. § 11022(e)(2) (1988 & Supp. V 1993). Neither the SERC nor the LEPC can deny this kind of request by state and local officials. *Id.* Public access to Tier II information is generally governed by EPCRA section 324, its public availability provision, which specifies that information received by a SERC or a LEPC can be viewed during the operating hours and on their premises. 42 U.S.C. §§ 11044(a), 11022(e)(3) (1988 & Supp. V 1993). In the Tier II form, the facility may indicate whether the specific location of a chemical may be kept confidential from the public, and if this indication is made then the information is not subject to public disclosure. 42 U.S.C. §§ 11022(f)(2)(F), 11044(a) (1988 & Supp. V 1993). Put another way, the SERC, the LEPC, and the local fire department may use the location information but not disclose it to the public. Requests by members of the public for the information must be in writing, facility specific, and either the LEPC or the SERC must respond within 45 days. 42 U.S.C. § 11022(e)(3)(A), (D) (1988 & Supp. V 1993).

Where the Tier II information is in possession of the state commission or local committee, then it must be made available, with the exception of the specific location of the chemical at the facility that the facility owner had elected to be withheld from disclosure in the Tier II form. 42 U.S.C. §§ 11022(d)(2), 11022(e)(3)(B), 11044(a) (1988 & Supp. V 1993). If the state commission or local committee does not have the Tier II form, whether it can obtain the information from a facility at the request of the public is affected by the amount of chemical at the facility. It is required to obtain the Tier II information upon request and make it available to the public if the facility stored 10,000 pounds or more of the chemical during the preceding calendar year. 42 U.S.C. § 11022(e)(3)(B) (1988 & Supp. V 1993). When the amount stored is less, the SERC or the LEPC has the discretion to honor a public request to obtain a Tier II form from the facility, and the person making the request must include a statement of the general need for such information. 42 U.S.C. § 11022(e)(3)(C) (1988 & Supp. V 1993). It should be noted that any Tier II information already in the possession of the SERC or the LEPC must be made available to any person upon request and is not subject to the amount requirement or statement of need requirement. 42 U.S.C. §§ 11022(e)(3)(B), 11044(a) (1988 & Supp. V 1993).

information used by LEPCs for preparing emergency release response plans is provided this way.⁶⁵

2. Toxic Chemical Release Reporting

The most far-reaching, important and controversial right-to-know provision in EPCRA is section 313.⁶⁶ Section 313 requires large manufacturing facilities to file annual reports on routine releases and transfers of several hundred toxic chemicals found in wastes.

The reports are collected by the states and the EPA and disseminated through a variety of means. The EPA must make this information public in a computerized database.⁶⁷ The data collected

65. Jeffrey T. Pender, *High Penalties and Citizen Suits Await Small Businesses Unaware of EPCRA Reporting Requirements*, CORP. COUNS. REV. 81, 92-93 (May 1991).

66. 42 U.S.C. § 11023 (1988 & Supp. V 1993).

67. 42 U.S.C. § 11023(j) (1988 & Supp. V 1993). This database is to be made accessible to any person at cost via computer telecommunications. *Id.* The EPA has fulfilled this on-line access requirement by incorporating the TRI database into the National Library of Medicine (NLM) TOXNET system. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1992 TOXICS RELEASE INVENTORY: PUBLIC DATA RELEASE, at B-2 (April 1994) (745-R-94-001) [hereinafter 1992 TRI REPORT]. Included on TOXNET is the Integrated Risk Information System (IRIS) which contains health risk assessment and adverse health effects information summaries from various EPA programs. *Id.* The nonprofit organizations OMB Watch and the Unison Institute, which are essentially public interest environmental organizations, have created an on-line computer news service and database concerned with issues arising out of matters related to EPCRA. *Id.* There is no charge for access to this news service and database, which contains data sets that can be linked to facilitate integrated analysis and provides access to the complete TRI for all reporting years. *Id.*

The EPA has incorporated the TRI data onto electronic media which the public can obtain from the Government Printing Office in the forms of CD-ROM, diskettes and magnetic tapes. *Id.* at B-2, B-3. The Department of Commerce has incorporated the TRI data on a CD-ROM they make available quarterly and which also includes environmental and socio-economic data from fifteen federal agencies. *Id.* at B-3.

Printed media which contains the TRI data includes microfiche that incorporates TRI data from the 1987 to the 1990 reporting years. *Id.* The EPA publishes detailed annual reports which present the TRI data received and reported for particular years. These reports provide summaries, analyses and comparison of TRI data year by year, including summarization of data on total releases and transfers of the TRI chemicals; geographic distribution of the TRI releases and transfers; industrial patterns of releases and transfers; and the interstate and intrastate transport of wastes and other kinds of analysis. The first report was issued in 1989 and covered the 1987 TRI data, representing the typical two year lag between the time industry is to submit their annual toxic release information and EPA's publication of reports.

The EPA has developed other databases or electronic bulletin boards to complement those previously mentioned. 1992 TRI REPORT, *supra*, at B-4. One is TRI-FACTS which complements TRI release data by providing information related to health and ecological effects and safety and handling information for these chemicals and which is available on the NLM TOXNET system, the TRI CD-ROM and printed format. *Id.* Another is the 313 Roadmap Database which was developed to assist TRI users to perform preliminary, site-specific exposure and risk assessments. *Id.*

The Government Printing Office provides an electronic bulletin board with TRI state specific data. *Id.* The EPA also provides telephone assistance services for use of the TRI data and other EPCRA matters. *Id.* at B-4, B-5. These include the TRI-US Service, in which

by the EPA is collectively known as the TRI data. The TRI database is the first chemical-specific, multi-media accounting of toxic releases to the environment ever mandated by federal law.

According to EPCRA, the toxic chemical release reporting forms are intended to provide information to federal, state, and local governments and to the public, including citizens who live in areas surrounding the facilities which released or transferred the toxic chemicals.⁶⁸ TRI data is meant to inform citizens about toxic chemical releases and transfers, assist government and researchers in conducting research and data gathering, and aid in the development of environmental regulations and standards.⁶⁹

The TRI reporting covers releases that occur as a result of normal business operations, and must be distinguished from section 304's reporting requirements for abnormal emergency releases.⁷⁰ The toxic chemical release reports are submitted on standardized forms (Form R) created by the EPA.⁷¹ Form R is submitted to the EPA and state environmental agencies.⁷² Facilities must use Form R to report their total annual releases of toxic chemicals into the air, surface water and soil,⁷³ as well as transfers of these chemicals off-site to public sewers or waste treatment, storage or disposal facilities.⁷⁴ The report must

specialists provide information about the TRI and access to the various data formats, and the EPCRA Hotline, which provides regulatory, policy, and technical assistance to federal agencies, local and state governments, the public, regulated community and other interested parties in response to questions concerning EPCRA. *Id.*

68. 42 U.S.C. § 11023(h) (1988 & Supp. V 1993).

69. *Id.*

70. H.R. REP. NO. 99-962, 99th Cong., 2d Sess. 292 (1986), *reprinted in* 1986 U.S.C.C.A.N. 3385. The accidental releases are included as part of the total releases of toxic chemicals the facility reports.

71. The EPA was required to publish a uniform toxic chemical release form by June 1, 1987. 42 U.S.C. § 11023(g)(1) (1988 & Supp. V 1993). Should the EPA fail to publish this form, a facility may submit the information by letter. *Id.* A citizen suit may be brought to require the EPA to publish the form. 42 U.S.C. § 11046(a)(1)(B)(iii) (1988 & Supp. V 1993). The EPA has published Form R. 40 C.F.R. § 372.85 (1995). "The most current version of EPA Form R . . . may be obtained by writing to the section 313 Document Distribution Center, P.O. Box 12505, Cincinnati, Ohio 45212." *Id.*

72. 42 U.S.C. § 11023(a) (1988 & Supp. V 1993). EPCRA does not require the form to be filed with SERCs or LEPCs, but a governor can designate these agencies to be the recipient for the form. *Id.*

73. This includes all toxic substances released into the air, discharged into rivers or streams, disposed on land at the site, injected into underground wells at the site or transported in waste water to public sewage treatment works. ENVIRONMENTAL PROTECTION AGENCY, TITLE III SECTION 313 RELEASE REPORTING GUIDANCE: ESTIMATING CHEMICAL RELEASES (EPA 560/4-88-004b, Jan. 1988).

74. 42 U.S.C. § 11023(g)(C)(iii)-(iv) (1988 & Supp. V 1993). More specifically, the form must:

(C) provide for submission of each of the following items of information for each list chemical known to be present at the facility:

use estimates of releases, not actual measurements of releases.⁷⁵ The first toxic chemical release forms were supposed to be submitted on July 1, 1988 to cover releases for the 1987 calendar year, and then every year afterwards by July 1 to cover preceding calendar year releases.⁷⁶

Reporting is generally directed at large manufacturing operations. EPCRA specifies that an establishment is required to report only if it meets three criteria. The facility must: (1) manufacture in Standard Industrial Classifications (SIC codes) 20-39;⁷⁷ (2) employ ten or more full time workers;⁷⁸ and (3) manufacture, process, import or otherwise use toxic chemicals above yearly threshold amounts.⁷⁹

(i) Whether the toxic chemical at the facility is manufactured, processed, or otherwise used, and the general category or categories of use of the chemical.

(ii) An estimate of the maximum amounts (in ranges) of the toxic chemical present at the facility during the preceding calendar year.

(iii) For each wastestream, the waste treatment or disposal methods employed, and an estimate of the treatment efficiency typically achieved by such methods for that wastestream.

(iv) The annual quantity of the toxic chemical entering each environmental medium.

42 U.S.C. § 11023(g)(1)(C)(i)-(iv) (1988 & Supp. V 1993).

75. 42 U.S.C. § 11023(g)(1)(C)(ii) (1988 & Supp. V 1993). EPCRA requires the establishment to use no more than existing, readily available data in fulfilling the information requirements for toxic chemical release forms. EPCRA does not require additional measurements or monitoring beyond that which is required under other provisions of EPCRA or other federal laws or regulations. 42 U.S.C. § 11023(g)(2) (1988 & Supp. V 1993).

76. 42 U.S.C. § 11023(a) (1988 & Supp. V 1993).

77. 42 U.S.C. § 11023(b)(1)(A) (1988 & Supp. V 1993). These SIC codes are primarily manufacturing facilities. These are the same SIC codes to which the MSDS requirement applies. *See supra* text accompanying note 49. These SIC industry categories are: food products (20); tobacco products (21); textile mill products (22); apparel and other finished products made from fabrics (23); lumber and wood products, except furniture (24); furniture and fixtures (25); paper and allied products (26); printing and publishing (27); chemicals and allied products (28); petroleum refining and related industries (29); rubber and miscellaneous plastics products (30); leather products (31); stone, clay, glass and concrete products (32); primary metals (33); fabricated metals, except machinery and transportation equipment (34); industrial and commercial machinery and computer equipment (35); electronic and electric equipment, except computer equipment (36); transportation equipment (37); measuring, analyzing and controlling equipment, photographic, metal and optical goods and watches and clocks (38); miscellaneous manufacturing (39). The EPA may add or delete SIC codes, but this authority is limited to SIC codes for facilities which manufacture, process or use toxic chemicals. 42 U.S.C. § 11023(b)(1)(B) (1988 & Supp. V 1993).

The EPA has the discretion to apply the toxic release reporting requirement to a particular facility, not just to SIC codes, acting on its own motion or at the request of a state, provided the addition of a particular facility is warranted on the basis of the toxicity of the chemical, proximity to other sites that release the toxic chemical or to population centers, the history of releases of the chemical at the facility, and other factors the agency deems appropriate. 42 U.S.C. § 11023(b)(2) (1988 & Supp. V 1993).

78. 42 U.S.C. § 11023(b)(1)(A) (1988 & Supp. V 1993).

79. 42 U.S.C. § 11023(f)(1) (1988 & Supp. V 1993). This section of EPCRA sets the threshold amounts as follows:

EPCRA originally established a threshold of 10,000 pounds⁸⁰ for use of toxic chemicals, and a declining threshold for manufactured or processed toxic chemicals: 75,000 pounds for the first report for the 1987 calendar year, 50,000 pounds for the next year, and 25,000 pounds for subsequent reports.⁸¹ The toxic chemical release reporting requirement was originally applied by EPCRA to a list containing 320 chemicals,⁸² although the EPA has the authority to add or delete toxic chemicals to the list on its own initiative or by petition.⁸³ In 1994, the list of reportable TRI chemicals nearly doubled, to over 600.⁸⁴

Congress expanded the TRI reporting requirements in 1990 with the enactment of the Pollution Prevention Act (PPA).⁸⁵ The goal of this legislation was to encourage industry to engage in pollution pre-

The Threshold amounts for purposes of reporting toxic chemicals under this section are as follows:

(A) With respect to a toxic chemical used at a facility, 10,000 pounds of the chemical per year.

(B) With respect to a toxic chemical manufactured or processed at a facility—

* * *

(iii) For the form required to be submitted on or before July 1, 1990, and for form thereafter, 25,000 pounds of the toxic chemical per year.

Id.

80. 42 U.S.C. § 11023(f)(1)(A) (1988 & Supp. V 1993).

81. 42 U.S.C. § 11023(f)(1)(B) (1988 & Supp. V 1993). The EPA has discretion to revise the thresholds and categories of industries subject to changed thresholds. 42 U.S.C. § 11023(f)(2) (1988 & Supp. V 1993).

82. The list is found in Committee Print Number 99-169 of the Senate Committee on Environment and Public Works and is entitled "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right to Know Act of 1986." 42 U.S.C. § 11023(c) (1988 & Supp. V 1993). This original list was created by combining chemical lists created under similar reporting laws in Maryland and New Jersey. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, TOXICS IN THE COMMUNITY, NATIONAL AND LOCAL PERSPECTIVES—THE 1989 TOXICS RELEASE INVENTORY NATIONAL REPORT 80 (Sept. 1991) (EPA 560/4-91-014) [hereinafter 1989 TRI REPORT].

83. 42 U.S.C. § 11023(d) (1988 & Supp. V 1993). The EPA can add a chemical to the list if it determines the chemical causes, or can reasonably be anticipated to cause, any of three problems: (1) significant adverse human health effects beyond the boundaries of the plant; (2) cancer, birth defects, serious or irreversible reproductive dysfunctions, neurological disorders, heritable genetic mutations, or other chronic effects, whether they occur inside or outside the boundaries of the plant; or (3) significant adverse effects on the environment. 42 U.S.C. § 11023(d)(2)(A)-(C) (1988 & Supp. V 1993). Chemicals capable of causing significant adverse environmental damage can make up no more than twenty-five percent of the chemicals on the list. 42 U.S.C. § 11023(d)(2)(C) (1988 & Supp. V 1993).

The EPA may delete a chemical from the list if it determines that none of the three effects mentioned are caused by it. 42 U.S.C. § 11023(d)(3) (1988 & Supp. V 1993). Any person may petition the EPA to add or delete a toxic chemical on the grounds that it is (for inclusion) or is not (for deletion) capable of significantly harming human health. 42 U.S.C. § 11023(e)(1) (1988 & Supp. V 1993). A state governor may petition the EPA to add or delete a chemical on the same criteria of health and environmental harms applying to the EPA's decision to add or delete chemicals. 42 U.S.C. § 11023(e)(2) (1988 & Supp. V 1993).

84. See *infra* note 427 and accompanying text for discussion of expansions in TRI chemicals.

85. Pub. L. No. 101-508, §§ 6601-6610, 104 Stat. 1388, 1388-21 to 1388-327 (codified at 42 U.S.C. §§ 13101-13109).

vention,⁸⁶ which is directed at eliminating or reducing the generation of pollutants, as opposed to pollution control, which is directed at managing pollutants and wastes once they are created. Pollution control is overwhelmingly the predominant means by which pollution is regulated in the United States.⁸⁷ PPA's main objective was to encourage the pollution prevention strategy of source reduction, where the pollution is curtailed at the industrial origin.⁸⁸

86 42 U.S.C. § 13101 (b) (1988 & Supp. V 1993).

87. E. Lynn Grayson, *The Pollution Prevention Act of 1990: Emergence of a New Environmental Policy*, 22 ELR (ELI) 10392 (June 1992). Pollution prevention, also known as "input pollution control," reduces or eliminates the input of pollutants and wastes into the environment. G. TYLER MILLER, JR., *LIVING IN THE ENVIRONMENT: PRINCIPLES, CONNECTIONS, AND SOLUTIONS* 16-18 (8th ed. 1994). Pollution prevention is concerned with the "front end" of toxic chemical production, seeking to reduce the use of toxic chemicals and the generation of toxic wastes at the point of origin. SANFORD LEWIS & MARCO KALTOFEN, *THE NATIONAL TOXICS CAMPAIGN FUND, FROM POISON TO PREVENTION: A WHITE PAPER ON REPLACING HAZARDOUS WASTE FACILITY SITING WITH TOXICS REDUCTION* i (1989). This approach is summarized by biologist Barry Commoner's "law of pollution prevention," in which he maintains that if you don't put something into the environment, it isn't there. MILLER, *supra*, at 16-18. The strategies for pollution prevention are embodied in the three R's of resource use: Reduce, Reuse, Recycle. *Id.*

Pollution control, also known as pollution cleanup and output pollution control, deals with pollutants once they have been generated or after they have already been introduced into the environment. *Id.* Pollution control involves "end of the pipe" solutions to dealing with pollution. Put another way, prevention avoids the use of chemicals and the creation of wastes, while control measures attempt to manage wastes after they have been created. CITIZENS FUND, *POISONS IN OUR NEIGHBORHOODS: TOXIC POLLUTION IN THE UNITED STATES, Volume I*, 17 (November 1993). The approach followed by most environmental regulation and by industry to date focuses on end of the pipe solutions, seeking to control the disposal or release of toxics once they become waste by-products rather than preventing or curtailing their production in the first place. LEWIS & KALTOFEN, *supra*, at i. Examples of pollution control include auto emission devices, sewage treatment, and landfills.

Environmentalists prefer pollution prevention over pollution cleanup because the latter is seen as temporary, removing pollutants from one part of the environment only to transfer it to another, and as more costly in the long run. Miller, *supra*, at 16-18.

88. Source reduction is viewed as the highest and best form of pollution prevention. Grayson, *supra* note 87, at 10392. The PPA favors source reduction. 42 U.S.C. §§ 13101(b), 13102(5)(A)-(B) (1988 & Supp. V 1993). According to the PPA, "[s]ource reduction is fundamentally different and more desirable than waste management and pollution control" and "a first step in preventing pollution." 42 U.S.C. § 13101(a)(4)-(5) (1988 & Supp. V 1993).

The Act defined "source reduction" as any practice which:

- (i) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and
- (ii) reduces the hazards to public health and the environment associated with the release of such substances, pollutants or contaminants.

42 U.S.C. § 13102(5)(A)(i)-(ii) (1988 & Supp. V 1993).

Congress also characterized source reduction as federal environmental policy in the PPA:

The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or

The initial Form R adopted pursuant to EPCRA required facilities to report releases to air, land and water and certain transfers of TRI chemicals off-site. Reportable off-site transfers included shipments of toxic chemical wastes for treatment or disposal. With the adoption of the PPA, reporting additional kinds of releases was required: on-site and off-site transfers of TRI chemicals; and source reduction, recycling, and waste minimization efforts by companies.⁸⁹ For reporting purposes, one-time releases of an accidental, remedial or abnormal nature were added to routine releases.⁹⁰ As a result of the PPA, Form R reporting requirements added TRI chemicals sent elsewhere to be recycled, as well as reporting of on-site TRI chemical recycling and treatment.⁹¹ Waste stream data in the TRI form was required by the PPA's decree that the form include the quantity of TRI chemicals generated as waste prior to recycling, treatment, or disposal.⁹² Finally, the PPA directed that Form R was to include source reduction efforts undertaken by the facility for the TRI chemicals.⁹³ All the additional reporting mandated by the PPA was to begin in the 1991 reporting year.⁹⁴

C. Other Provisions

1. Trade Secrets

EPCRA allows facilities to exempt their trade secrets from reporting requirements, but the withholding of such secrets is limited, and subject to confidential reporting to, and approval from, the EPA.⁹⁵ Only a specific chemical identity may be protected as a trade secret.⁹⁶ Even a trade secret chemical must have its generic class or category submitted to the EPA if it is classified as hazardous, extremely

other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

42 U.S.C. § 13101(b) (1988 & Supp. V 1993).

89. 42 U.S.C. § 13106 (1988 & Supp. V 1993). See also 56 Fed. Reg. 48,475 (Sept. 25, 1991) (proposed changes in the EPA rules for toxic chemical release reporting pursuant to EPCRA).

90. 42 U.S.C. § 13106(b)(7) (1988 & Supp. V 1993).

91. 42 U.S.C. § 13106(b)(2) (1988 & Supp. V 1993).

92. 42 U.S.C. § 13106(b)(1) (1988 & Supp. V 1993).

93. 42 U.S.C. § 13106(b)(3) (1988 & Supp. V 1993).

94. 42 U.S.C. § 13106(a) (1988 & Supp. V 1993).

95. 42 U.S.C. § 11042 (1988 & Supp. V 1993).

96. This includes the chemical name and other specific identification. 42 U.S.C. § 11042(a)(1)(A) (1988 & Supp. V 1993). The term "other specific identification" refers to information other than the name of the chemical, such as the Chemical Abstracts Service (CAS) number, which uniquely identifies the chemical. 40 C.F.R. § 350.1 (1995).

hazardous, or toxic.⁹⁷ Trade secret protection does not apply to emergency release notification of hazardous substances.⁹⁸

In order for a chemical to be entitled to trade secret protection, certain statutory conditions apply: (1) the withheld information must not have been disclosed to anybody other than the government or a person bound by a confidentiality agreement; (2) no disclosure is likely under any other law; (3) forced disclosure must be likely to cause harm to the competitive position of the business; and, (4) it must be unlikely that the chemical would be discovered through reverse engineering.⁹⁹

The facility seeking to withhold the information has the burden of establishing trade secret protection. If the EPA has determined that the information is not a trade secret, it cannot be withheld.¹⁰⁰ Information on trade secret chemicals may still be disclosed to certain members of the public or the state under certain circumstances: information must be disclosed to health professionals for diagnostic, treatment, and preventative purposes.¹⁰¹ Upon a request by the state's governor, the EPA is required to provide trade secret information to the state.¹⁰² Trade secret claims may be challenged by the public by petitioning the EPA.¹⁰³

97. 42 U.S.C. § 11042(a)(1)(B) (1988 & Supp. V 1993).

98. The trade secret provision expressly applies to EPCRA provisions concerning emergency response plans, material data safety sheets, hazardous chemical inventory forms, toxic chemical release forms and follow-up emergency notices. 42 U.S.C. § 11042(a)(1) (1988 & Supp. V 1993). It omits from mention, and thereby protection, section 304 of EPCRA, which requires facilities to make emergency release reports of hazardous substances. *Id.*

99. 42 U.S.C. § 11042(b)(1)-(4) (1988 & Supp. V 1993).

100. 42 U.S.C. § 11042(a)(3) (1988 & Supp. V 1993).

101. 42 U.S.C. §§ 11042(e), 11043 (1988 & Supp. V 1993). In order to get trade secret information, the health professional must make a written request for it to the facility withholding the information. 42 U.S.C. § 11043(a) (1988 & Supp. V 1993). Except in the instance of a medical emergency, the written request must be accompanied by a written statement of need, and the health professional must enter into a confidentiality agreement limiting the use and disclosure of the information. 42 U.S.C. § 11043(a)-(d) (1988 & Supp. V 1993). In the case of a medical emergency where the specific chemical identity is necessary for or will assist in emergency or first-aid diagnosis or treatment, the physician is entitled to the information without a written statement of need. 42 U.S.C. § 11043(b) (1988 & Supp. V 1993).

102. 42 U.S.C. § 11042(g) (1988 & Supp. V 1993). If the EPA refuses or fails to provide this information, the state can commence an action in federal court to compel the EPA to do so. 42 U.S.C. § 11046(a)(2)(C) (1988 & Supp. V 1993).

103. 42 U.S.C. § 11042(d) (1988 & Supp. V 1993). If the EPA fails to respond to the petition within nine months, a suit can be brought against it to compel it to come to a decision. 42 U.S.C. § 11046(a)(1)(B)(vi) (1988 & Supp. V 1993). The EPA can initiate a review of a trade secret claim on its own petition. 42 U.S.C. § 11042(d)(1) (1988 & Supp. V 1993).

2. Preemption

EPCRA expressly does not preempt any state or local law or affect or modify the obligations or liabilities of any person under other federal laws.¹⁰⁴ As a result, a state or locality may impose stricter requirements for emergency planning, reporting, and notification regarding the release of hazardous and toxic chemicals.

3. Enforcement and Civil Suits

(a) Federal Government Enforcement

EPCRA provides the federal government with a system of administrative, civil and criminal penalties for enforcement of the legislation. Enforcement measures are primarily directed towards facilities which violate the law; there are no enforcement provisions which would allow the EPA to undertake an action against a governor, a SERC, or a LEPC for failing to carry out responsibilities for implementing or administering portions of EPCRA.

The EPA can order a facility to comply with the emergency planning notification requirements and enforce the order in federal district court.¹⁰⁵ The federal court can impose a civil penalty of up to \$25,000 per day for each violation of an EPA order to comply with the emergency notification requirements.¹⁰⁶ The EPA can also assess administrative penalties.¹⁰⁷ The EPA may impose one of two kinds of administrative penalties:¹⁰⁸ Class I, which involves an informal administrative process and allows a maximum penalty of \$25,000¹⁰⁹ per violation, or Class II, which involves a formal administrative process and allows a penalty of up to \$25,000 per day for each day the violation continues.¹¹⁰

104. 42 U.S.C. §§ 11041(a)(1), 11041(a)(3) (1988 & Supp. V 1993).

105. 42 U.S.C. § 11045(a) (1988 & Supp. V 1993).

106. *Id.*

107. 42 U.S.C. § 11045(b) (1988 & Supp. V 1993).

108. It may choose one or the other administrative penalty to pursue against a violator of the emergency notification requirements, but not both.

109. 42 U.S.C. § 11045(b)(1) (1988 & Supp. V 1993). For a Class I administrative penalty, the person accused of the violation must be given notice and opportunity for a hearing. 42 U.S.C. § 11045(b)(1)(B) (1988 & Supp. V 1993).

110. 42 U.S.C. § 11045(b)(2) (1988 & Supp. V 1993). A formal hearing must be instituted by the EPA and concluded before a Class II penalty can be assessed by the agency. See 42 U.S.C. § 11045(b)(2) (1988 & Supp. V 1993). Another difference between the kinds of penalties is that the Class I administrative penalty is a single monetary penalty assessed on a per violation basis while the Class II monetary penalty is assessed on a per day basis and escalates with subsequent violations. The Class II administrative penalty includes a monetary penalty of up to \$25,000 per violation per day for the first violation, and up to \$75,000 per day per violation for subsequent violations. *Id.*

Additionally, the EPA may initiate administrative actions or civil suits in federal court to collect penalties for violations of requirements relating to MSDS information, toxic chemical release forms, emergency and hazardous chemical inventory forms, or trade secret claims.¹¹¹ Failure to submit MSDSs or lists of MSDS chemicals, to provide information requested by health professionals on trade secret chemicals, or to submit all information the EPA requires to evaluate a trade secret claim is subject to penalties of up to \$10,000 per day for each violation.¹¹² A civil or administrative penalty of up to \$25,000 per violation can be assessed for failure to comply with the TRI inventory requirements, for failure to comply with the annual emergency and hazardous chemical inventory requirements,¹¹³ and for frivolous trade secret claims.¹¹⁴

EPCRA's criminal coverage is much more limited than its civil and administrative coverage. Criminal prosecution is limited to violations of emergency notification requirements¹¹⁵ and for unlawful disclosure of trade secret information.¹¹⁶

*(b) Enforcement by Citizens, State Governments,
and Local Governments*

Two kinds of suits are authorized by EPCRA,¹¹⁷ those allowed for "any person" and those restricted to state and local governments, including SERCs and LEPCs. The first kind, commonly known as the citizen suit, can be divided into four categories based upon the nature of the defendant. First, citizen suits can be brought against facilities.¹¹⁸ These include suits for failure to submit emergency follow-up notices, MSDSs or MSDS lists, Tier I hazardous chemical inventory forms, and toxic chemical inventory forms.¹¹⁹ Second,

111. 42 U.S.C. § 11045(c)(4) (1988 & Supp. V 1993).

112. 42 U.S.C. § 11045(c)(2)-(3) (1988 & Supp. V 1993).

113. 42 U.S.C. § 11045(c)(1), (3) (1988 & Supp. V 1993). The penalty is assessed on a per day basis, which means each day a violation continues it is considered a separate violation. *Id.*

114. 42 U.S.C. § 11045(d)(1) (1988 & Supp. V 1993). The penalty is for each claim and is not on a per day basis. *Id.* § 11045(d)(1)(A).

115. 42 U.S.C. § 11045(b)(4) (1988 & Supp. V 1993). Criminal penalties may be imposed for knowing and willful violations of the emergency notification requirements. For the first conviction, the criminal penalties include a fine of up to \$25,000 or a prison term of up to two years, or both. *Id.* In the case of a second and subsequent criminal convictions, the maximum fine increases to \$50,000, and the maximum prison term increases to five years. *Id.*

116. A criminal penalty of up to \$20,000 or imprisonment of not more than one year, or both, is provided for a knowing or willful disclosure of trade secret information. 42 U.S.C. § 11045(d)(2) (1988 & Supp. V 1993).

117. 42 U.S.C. § 11046 (1988 & Supp. V 1993).

118. 42 U.S.C. § 11046(a)(1)(A) (1988 & Supp. V 1993).

119. 42 U.S.C. § 11046(a)(1)(A)(i)-(iv) (1988 & Supp. V 1993).

citizen suits are allowed against the EPA for failure to carry out its responsibilities under the Act. Such neglected responsibilities may include publishing uniform hazardous chemical inventory forms, responding to petitions to list or delete substances subject to the TRI reporting, establishing TRI computer databases, promulgating trade secret protection regulations, or rendering timely decisions to petitions challenging trade secret protection by facility.¹²⁰ Third, where the EPA or a state fails to provide a mechanism for public access to EPCRA information, a citizen suit is authorized to obtain compliance.¹²¹ And finally, citizen suits are permitted against the EPA or a state for failure to respond within 120 days to a public request for a Tier II annual hazardous chemical report from a facility.¹²² It should be noted that EPCRA does not authorize citizen suits against LEPCs.

States or local governments can bring suits against facilities for failure to provide emergency planning notification, MSDSs or MSDS lists, MSDS information sought by a LEPC or the public, or hazardous chemical inventory forms.¹²³ SERCs, LEPCs, or fire departments may institute suits against facilities for failure to provide emergency response plans and Tier II hazardous chemical inventory forms.¹²⁴ A state can sue the EPA for its failure to comply with a state's request for the identity of a chemical for which a facility has claimed trade secret protection.¹²⁵ In any of these EPCRA suits, the federal court can award attorney fees and costs to any party that prevails.¹²⁶

4. Availability of EPCRA Information to the Public

Except for trade secrets,¹²⁷ EPCRA provides that each emergency plan, MSDS, hazardous chemical list, chemical inventory form, toxic chemical release form, and written follow-up emergency notice, must be made available to the general public at government offices designated by the EPA, the state, or the local emergency planning committee.¹²⁸ Each LEPC must annually insert public notices in local newspapers that such information is available to the public.¹²⁹

120. 42 U.S.C. § 11046(a)(1)(B)(i)-(iv) (1988 & Supp. V 1993).

121. 42 U.S.C. §§ 11044(a), 11046(a)(1)(C) (1988 & Supp. V 1993).

122. 42 U.S.C. § 11046(a)(1)(D) (1988 & Supp. V 1993).

123. 42 U.S.C. § 11046(a)(2)(A)(i)-(iv) (1988 & Supp. V 1993).

124. 42 U.S.C. § 11046(a)(2)(B) (1988 & Supp. V 1993).

125. 42 U.S.C. § 11046(a)(2)(C) (1988 & Supp. V 1993).

126. 42 U.S.C. § 11046(f) (1988 & Supp. V 1993).

127. Only the specific identities of the chemicals designated as trade secrets may be withheld. 42 U.S.C. § 11042(a)(1)(A) (1988 & Supp. V 1993).

128. 42 U.S.C. § 11044(a) (1988 & Supp. V 1993).

129. 42 U.S.C. § 11044(b) (1988 & Supp. V 1993).

Congress understood that for data obtained from the toxic release forms, the EPA could fulfill the requirement for public availability by establishing a national computer database for TRI data which is accessible to the public.¹³⁰

III. FEARS, CONCERNS, AND EXPECTATIONS FOR EPCRA

Virtually all the early fears and apprehensions about EPCRA came from business and industry. Some of their concerns proved to be completely unwarranted; others were fulfilled, but in varying degrees. Certain unwelcome consequences had been completely unanticipated but turned out to be quite significant.

Environmental groups had few major discernible reservations or great expectations about EPCRA at first. For them, like the general public, EPCRA was an obscure, relatively unimportant informational law compared to other federal pollution laws with regulatory purposes and clout. Conversely, EPCRA has turned out to be a boon to environmental organizations.

State and local governments had some early concerns about the impact and burdens of EPCRA. The federal government initially had few concerns or hopes for EPCRA, and therefore, the law was given low priority. However, the legislation eventually increased in importance for the federal government.

A. Business Cost and Burden Concerns

The EPA originally estimated that EPCRA would cost the average business between \$400 and \$10,000 a year.¹³¹ Obviously, large companies can afford the cost of environmental compliance with EPCRA more easily than small companies.¹³² Typically, small business interests complain about new or additional government regulation as both unnecessary and overly burdensome and inflexible. This complaint is frequently accompanied by proposals to eliminate or

130. H.R. REP. NO. 99-253(V), 99th Cong., 2d Sess. 308 (1986), *reprinted in* 1986 U.S.C.A.N. 3401 (referring to section 313(j) of EPCRA, now codified at 42 U.S.C. § 11023(j) (1988 & Supp. V 1993)). *See also* 42 U.S.C. § 11043(h) (1988 & Supp. V 1993) (stating that the toxic chemical release forms are intended to provide information to the public).

131. Pender, *supra* note 65, at 81, 102 n.125 (citing ENVIRONMENTAL PROTECTION AGENCY, MUNICIPALITIES, SMALL BUSINESS, AND AGRICULTURE--THE CHALLENGE OF MEETING ENVIRONMENTAL RESPONSIBILITIES (Pub. L. No. 230-09/88-037, 1988)). The EPA estimated that industry compliance with the hazardous chemical reporting requirements under sections 311 and 312 of EPCRA would cost \$238 million the first year, \$303 million the second, \$217 million the third and stabilize at \$64 million in subsequent years. *Hazardous Chemical Reporting, Emergency Planning and Community Right-to-Know Programs, Proposed Rule*, 52 Fed. Reg. 2836, 2842 (to be codified at 40 C.F.R. § 370 (*reprinted in* 17 Env't Rep. (BNA) 1684, 1690 (Jan. 30, 1987))).

132. Pender, *supra* note 65, at 81, 102 n.125.

dilute regulatory requirements upon small businesses. Speaking for these concerns, the Small Business Administration (SBA) during the Bush Administration characterized EPCRA as creating "much pain, little gain" for small business.¹³³

Shortly after EPCRA was enacted, the EPA proposed rules establishing thresholds for the MSDS reporting and hazardous chemical information inventory form reporting under sections 311 and 312 of EPCRA. The proposed rule called for phasing-in the threshold for hazardous chemical inventory reporting at 10,000 pounds the first year the rule would take effect, 500 pounds the second year and zero the third year.¹³⁴

The SBA disagreed with the EPA's certification that the proposed rule would not have a significant impact on small businesses, arguing that it would annually "cost thousands of dollars for over 100,000 small business facilities, many of which have profits in the \$10,000 range."¹³⁵ It urged the EPA to increase the threshold instead and thus effectively exclude small businesses from hazardous chemical inventory reporting.¹³⁶ The SBA maintained that more TRI reporting by small businesses would yield little useful data while creating high costs for them.¹³⁷ The SBA argued that the EPA should use its discretion to adopt either risk-based or emissions-related requirements for reporting, instead of basing the TRI reporting on aggregate production or use-based amounts and on SIC manufacturing categories.¹³⁸ This suggested approach was intended to

133. Kevin L. Bromberg, *Right-to-Know: Much Pain, Little Gain*, 5 ENVTL. F. 24 (Sept./Oct. 1988). Bromberg wrote this article while Assistant Chief Counsel for Energy and Environment at the Office of Advocacy of the Small Business Administration.

134. 40 C.F.R. § 370.20(b)(1)-(3). The EPA decided not to set a zero-pound threshold for the third and subsequent years pending further consideration and comment on the possibility of setting a nonzero threshold such as 500 pounds. Bromberg, *supra* note 133, at 38, 50.

135. *SBA Warns EPA that Right-to-Know Proposal Will Have 'Detrimental' Effect on Small Firms*, 17 Env't Rep. (BNA) 2148 (Apr. 24, 1987).

136. *Id.* The SBA requested that the EPA alter the thresholds to 20,000 pounds the first year and 10,000 pounds thereafter for manufacturing facilities. *Id.* The SBA also proposed a much higher threshold for non-manufacturing operations of 50,000 pounds, which would effectively exempt service and retail businesses. *Id.*

137. *SBA Urges Exemption for Small Firms from Community Right-to-Know Reporting*, 18 Env't Rep. (BNA) 916 (July 31, 1987). This was the position of SBA Chief Counsel for Advocacy, Frank Swain, in testimony made at an EPA public meeting. *Id.* Swain contended that small firms collectively contribute only ten to fifteen percent of all toxic emissions but that to report them will impose costs of nine to twenty-three percent of the median profits of manufacturers with ten to forty-nine employees. *Id.* at 916.

138. EPCRA required facilities that used more than 10,000 pounds of a listed toxic chemical to report releases of the chemical in the TRI annual forms. 42 U.S.C. § 11023(f)(1)(A) (1988 & Supp. V 1993). It phased in thresholds for TRI reporting for facilities that made or processed toxic chemicals, setting the thresholds at 75,000 pounds for the 1987 releases, 50,000 pounds for the 1988 releases, and 25,000 pounds for the 1989 releases. 42 U.S.C. §

effectively exempt most small businesses from the TRI reporting, since it concluded that the releases of thousands of small facilities posed little or no risk to the environment and constituted only a small portion of overall releases.¹³⁹

B. State and Local Government Cost and Paperwork Concerns

The main concern of localities and states was the additional paperwork and financial burdens that EPCRA might create for them,¹⁴⁰ since the responsibility for chemical disaster emergency planning falls exclusively upon state and local governments through their respective SERCs and LEPCs.¹⁴¹ Additionally, states share responsibility with the EPA for receiving and using the TRI reports.¹⁴² Administration of the other reporting and notification requirements of

11023(f)(1)(B)(i)-(iii) (1988 & Supp. V 1993). The EPA had the discretion to revise the threshold quantities and covered SIC categories. 42 U.S.C. § 11023(f)(2) (1988 & Supp. V 1993).

The risk-based analysis the SBA called for would have used thresholds based upon the anticipated or actual toxic risks posed by specific chemicals and not on an arbitrary amount of chemicals used or made, although the SBA's counsel conceded this could be infeasible for certain chemicals for which there was insufficient information on toxicity. *SBA Urges Exemption for Small Firms from Community Right-to-Know Reporting*, 18 Env't Rep. (BNA) 916, 917 (July 31, 1987). The emission based requirement for the TRI reporting advocated by the SBA would require reporting only from firms that released a specified minimum amount of a covered chemical. *Id.*

139. The SBA contended that small firms collectively contributed only ten to fifteen percent of all toxic emissions. *Id.* It also argued that EPA studies revealed that of more than 10,000 plants in four regions in the United States, no more than two small plants (less than 100 employees) could be identified as posing significant toxics air risks. Bromberg, *supra* note 133, at 24, 30.

140. The EPA estimated that the costs to SERCs, LEPCs, and fire departments to administer the hazardous chemical reporting requirements under sections 311 and 312 of EPCRA would be \$34 million the first year, \$24 million the second, \$27 million the third and stabilize at \$24 million in subsequent years. *EPA Proposed Uniform Procedures for Complying with Requirements for Hazardous Chemical Reporting Under Title III of Superfund Law*, 52 Fed. Reg. 2836, 2843 (codified in 40 C.F.R. § 370) (reprinted in 17 Env't Rep. (BNA) 1684, 1690 (Jan. 30, 1987)).

141. 42 U.S.C. §§ 11001, 11003 (1988 & Supp. V 1993). The SERCs are responsible for designating local emergency planning districts, appointing the LEPCs for each district, and supervising and coordinating their activities. *Id.* § 11001. The LEPCs in turn prepare the emergency plans. *Id.* § 11003.

142. Facilities that make, use or process chemicals above thresholds established under the legislation, have 10 or more full time employees, and fall under the SIC manufacturing codes 20 through 39 are required to submit their TRI inventory forms to both EPA and the states. 42 U.S.C. §§ 11023(a), (b)(1)(A), (f) (1988 & Supp. V 1993). The EPA estimates there are approximately 180,000 facilities in SIC Codes 20-39. ENVIRONMENTAL PROTECTION AGENCY, REQUEST FOR PUBLIC COMMENT ON SMALL BUSINESS ADMINISTRATION PETITION TO REVIEW REPORTING THRESHOLD UNDER COMMUNITY RIGHT-TO-KNOW LAW, 57 Fed. Reg. 48706, 48708 (to be codified at 40 C.F.R. § 372) (reprinted in 23 Env't Rep. (BNA) 1698, 1700 (Oct. 30, 1992)) [hereinafter SBA PETITION].

the legislation variously fall upon the SERCs, the LEPCs, and the fire departments.¹⁴³

An early study in Texas found that even communities with established emergency planning and response programs anticipated that managing right-to-know data and public outreach would be a serious burden.¹⁴⁴ The greatest early concern of local officials around the nation was the prospect of being swamped with paper.¹⁴⁵ One fire chief noted that as a result of the first-time facilities required to submit MSDS information and annual hazardous chemical inventories, 33,000 fire departments, 30,000 of which were volunteer, faced receiving from 3 million to 20 million documents detailing the hazardous properties of 50,000 chemical products.¹⁴⁶ The fire chief doubted whether fire departments could bear or afford the responsibility.¹⁴⁷

Rural areas were assumed to be less able to cope with and afford EPCRA responsibilities than urban areas.¹⁴⁸ The Director of the New Jersey Division of Environmental Quality, which administered a community and state right-to-know law enacted prior to EPCRA,¹⁴⁹ noted from experience that funding, or lack of it, was the key factor to successful implementation of any new program and predicted that many state and local efforts would fail because of insufficient funding.¹⁵⁰ He and other state officials contended that federal

143. The SERCs and LEPCs receive notification from facilities that have extremely hazardous substances above threshold planning quantities, so that they can participate in emergency planning. 42 U.S.C. § 11002(c) (1988 & Supp. V 1993). The SERCs and LEPCs receive the emergency release notifications, in which facilities are required to notify them of accidental releases of hazardous substances and provide written reports on actions taken and medical effects. 42 U.S.C. §§ 11004(b), (c) (1988 & Supp. V 1993). The SERCs, LEPCs, and fire departments receive the MSDSs or lists of MSDS chemicals and the emergency and hazardous chemical inventory forms from facilities. 42 U.S.C. §§ 11021, 11022 (1988 & Supp. V 1993).

144. *Localities Not Benefiting Fully From Right-To-Know Law, Texas Study Says*, 19 Env't Rep. (BNA) 745 (Aug. 26, 1988).

145. *Fire Chief Feels Frustrated in Effort to Form Clearinghouse on Chemical Data*, 17 Env't Rep. (BNA) 2051 (Apr. 3, 1987).

146. *Id.*

147. *Id.*

148. Pender, *supra* note 65, at 81, 102.

149. N.J. STAT. ANN. §§ 34:5A-1 to -31 (West 1988); N.J. ADMIN. CODE tit. 7, §§ 1G-1.1 to -7.10 (1984 & Supp. 1988); N.J. ADMIN. CODE, tit. 8, §§ 59-1.1 to -10.3 (1984 & Supp. 1986).

150. Jorge H. Berkowitz, *The Law and the Promise*, 5 ENVTL. F. 24, 28 (Sept./Oct. 1988). The assistant director in charge of release prevention and emergency response for the New Jersey Department of Environmental Protection noted EPCRA's emergency planning provisions were similar in many respects to New Jersey's Toxics Catastrophe Prevention Act, enacted several months earlier. *State Officials See Problems Ahead in Meshing State, Federal Right-to-Know Laws*, 17 Env't Rep. (BNA) 2131, 2132 (Apr. 17, 1987) [hereinafter *State Officials*]. He too declared that for EPCRA "[f]unding is a major problem." *Id.* The only explicit authorization of funds in EPCRA was \$5 million each fiscal year through 1990 for "training grants" to state and local emergency planning and response programs. 42 U.S.C. § 11005 (1988 & Supp. V 1993). There was no guarantee that Congress would actually appropriate or the executive branch would

financial and technical assistance and EPA leadership was important to state and local efforts to undertake EPCRA, but questioned whether this help and guidance would be forthcoming.¹⁵¹

C. Loss of Trade Secrets

The issue of trade secrets was an early cause for concern after the enactment of EPCRA. Environmentalists feared that the Bush Administration EPA was moving toward being too permissive in granting trade secret protection requests for information required by EPCRA, with the result that industry would be able to withhold data necessary to protect public health and the environment.¹⁵² Most of the anxiety expressed over trade secrets came from industry and its sympathizers in government. One commentator called the requirement that businesses divulge trade secrets to the EPA a “formidable burden” and one which could “ruin many businesses.”¹⁵³

Once a trade secret is lost, it is lost forever.¹⁵⁴ The information can fall into the hands of competitors either from the EPA’s failure to grant protection under EPCRA, or leaks from Congress, the EPA, or state governments.¹⁵⁵ EPCRA was criticized because it allegedly

spend this small amount. See also 42 U.S.C. § 11050 (1988 & Supp. V 1993), which does not authorize a specific amount for EPCRA but merely provides that Congress may authorize such sums “as may be necessary” to carry out the law. Compare with 42 U.S.C. § 13109 (1988 & Supp. V 1993), the funding authorization provision of the Pollution Prevention Act, which authorizes up to \$8 million to the EPA for each of the fiscal years 1991, 1992 and 1993 to carry out the law and \$8 million for each of these fiscal years for grants to the states.

151. Berkowitz, *supra* note 150, at 28 (declaring the EPA’s long-term commitment to EPCRA was questionable, its funding for it was inadequate, that EPCRA was a low agency priority, and urging the EPA to provide more spirit and leadership for the program); *SBA Warns EPA that Right-To-Know Proposal Will Have ‘Detrimental’ Effect on Small Firms*, 17 Env’t Rep. (BNA) 2148 (Apr. 24, 1987) (quoting a comment from the Washington Department of Ecology that “[w]ithout federal funding and technical support, the intent of Title III will probably not be accomplished”). See also *When the Going Got Tough . . .*, 5 ENVTL. F. 26, 32-33 (Sept./Oct. 1988).

152. *Environmental Group Asks EPA to Revise Proposed Rule on Claiming Trade Secrets*, 18 Env’t Rep. (BNA) 1818 (Dec. 4, 1987). The Natural Resources Defense Council (NRDC) claimed in late 1987 that EPA’s proposed rule on trade secrets indicated it was “bending over backwards” to allow industry to withhold data. *Id.* It stated the EPA proposal should be reworked because it thwarted congressional intent and undermined public access to information. *Id.* See 40 C.F.R. § 350 (listing the final EPA rules on trade secrets). See also *Procedures for Claiming Confidentiality of Trade Secret Information Issued by EPA*, 19 Env’t Rep. (BNA) 469-70 (Aug. 5, 1988).

153. Joel R. Burcat & Arthur K. Hoffman, *The Emergency Planning and Community Right-to-Know Act of 1986: An Explanation of Title III of SARA*, 18 Env’tl. L. Rep. (Env’tl. L. Inst.) 10007, 10027 (Jan. 1988); see also Carla E. Hjelm, *Environmental Law I: Worker and Community Right-to-Know Laws*, 1987 ANN. SURV. AM. L. 701, 714 (1987).

154. *TSCA Confidentiality Claims May be Lost with Community Right-To-Know Law*, ACS Told, 17 Env’t Rep. (BNA) 2098 (Apr. 10, 1987) [hereinafter *TSCA Confidentiality*].

155. Burcat & Hoffman, *supra* note 153, at 10027; see also Hjelm, *supra* note 153, at 714.

would require manufacturers to report information which they previously withheld as confidential under the Toxic Substances Control Act (TSCA).¹⁵⁶ Trade secret protection under EPCRA was characterized as confusing, unreliable, unpredictable, and unwieldy. Additionally, the EPA would “find itself awash in trade secret issues to a far greater degree than any federal agency in history.”¹⁵⁷ An EPA spokesperson predicted that trade secrecy issues under EPCRA would be heavily litigated.¹⁵⁸

D. Litigation and Enforcement Concerns

EPCRA created widespread industry dread about expensive lawsuits and costly damages which might result from the enforcement or use of the legislation.¹⁵⁹ This anticipated litigation was expected to rise from the three fronts of numerous citizen suits, federal enforcement actions and penalties, and toxic torts based upon information generated by EPCRA.

EPCRA was called the “most important environmental enactment of the 1980s” by one attorney providing instruction at a conference informing businesses on how to cope with expected EPCRA lawsuits.¹⁶⁰ He called section 313, the TRI provision, the “nuclear bomb” of the law, and regarded it as a fruitful basis for citizen suits that alleged failed or flawed submissions of forms by companies.¹⁶¹ A corporate attorney intimated that minor or inadvertent errors could become the basis for citizen suits.¹⁶² Citizen suits over toxic and hazardous chemical information held the prospect of becoming “embarrassing” to businesses.¹⁶³ A few of the early EPCRA citizen suits filed by one major regional environmental group were interpreted by a corporate law publication to be the tip of the iceberg for

156. TSCA Confidentiality, *supra* note 154 at 2098. The Toxic Substances Control Act is codified at 15 U.S.C. §§ 2601-2671 (1994). The Act provides for a procedure allowing data submitted to the EPA under the TSCA to remain confidential. 15 U.S.C. § 2613(c) (1994).

157. TSCA Confidentiality, *supra* note 154, at 2098.

158. Hjelm, *supra* note 153, at 714 n.108 (citing *Emergency Planning*, Toxics L. Rep. (BNA) No. 2 at 197 (July 15, 1987)).

159. BNA Sponsors National Conference on Managing SARA Title III Lawsuits, 19 Env't Rep. (BNA) 3 (May 6, 1988).

160. *Speakers Analyze Implications of Title III, Say Information May Provide Basis for Lawsuits*, 19 Env't Rep. (BNA) 78 (May 20, 1988) [hereinafter *Speakers Analyze Implications*].

161. *Id.*

162. *Id.* See also TSCA Confidentiality, *supra* note 154 at 2098 (reporting a law professor informing a symposium at the American Chemical Society national meeting that TRI data may be used by environmental or citizen groups in citizen suits).

163. Pender, *supra* note 65, at 81, 106 (May 1991); see also *Speakers Analyze Implications*, *supra* note 160, at 78 (predicting that there may be ‘panic in the streets’ when certain information is released to the public for the first time).

future citizen suit litigation. It was also predicted that citizen suits would provide the bulk of EPCRA enforcement.¹⁶⁴ The EPA, as well, expected citizen suits to be a significant enforcement factor for EPCRA.¹⁶⁵

Filing citizen suits is one form of enforcing EPCRA. Another form of enforcement that created anxiety for businesses was enforcement of the legislation by the federal government, in particular by the EPA.¹⁶⁶ In both instances business feared being hit with heavy penalties for EPCRA violations.¹⁶⁷ There was concern that small businesses would become major victims of the EPA's enforcement,¹⁶⁸ a prospect the EPA very early attempted to dispel.¹⁶⁹

The most extensive alarm raised about EPCRA-connected lawsuits was that they could have a far-reaching and significant effect on increasing the exposure of businesses to toxic tort litigation.¹⁷⁰ One corporate attorney called EPCRA a "veritable gold mine" for potential plaintiffs in toxic tort suits.¹⁷¹ Information a producer or user of chemicals is forced to divulge concerning its emissions or practices under EPCRA supposedly can be used by plaintiffs' attorneys to investigate and find situations for toxic tort suits, to identify defendants, and to ease discovery and proof of liability in such suits.¹⁷²

164. Pender, *supra* note 65, at 105, 106; *Emergency Releases Most Likely Target of Initial Enforcement, State Official Says*, 18 Env't Rep. (BNA) 2241 (Feb. 26, 1988) (reporting that the director of the North Carolina Right-to-Know Division considered violations of the section 304 emergency release reporting requirements as the earliest kinds of enforcement actions likely to be taken by government and that citizen suits "are potentially the biggest enforcement mechanism" for section 304 violations).

165. *EPA Announces Final Rule Under Title III Governing Toxic Chemical Release Reporting*, 18 Env't Rep. (BNA) 2131 (Feb. 12, 1988).

166. Nicholas C. Yost & John M. Schultz, *The Chemicals Among Us*, 4 WASHINGTON LAWYER 24, 55 (Mar./Apr. 1990).

167. *BNA Sponsors National Conference on Managing SARA Title III Lawsuits*, 19 Env't Rep. (BNA) 3 (Apr. 6, 1988).

168. See generally Pender, *supra* note 65, at 104-09.

169. *EPA Developing Strategy That May Use States, Citizens to Help Enforce EPCRA*, 18 Env't Rep. (BNA) 1818-19 (Dec. 4, 1987) (reporting an EPA official stating that, during the first year of EPCRA, enforcement should be directed at larger companies that present the greatest threat to the public health and the environment, keeping with the key goal of the legislation, namely to prevent Bhopal-like disasters).

170. Jayne S.A. Pritchard, *A Closer Look at Title III of SARA: Emergency Planning and Community Right-To-Know Act of 1986*, 6 PACE ENVTL. L. REV. 203, 246-50 (1988). *Contra Right-to-Know Chemical Data Both Boon, Burden to Defendants in Toxic Tort Lawsuits*, 20 Env't Rep. (BNA) 199-200 (June 2, 1989) (reporting remarks of toxic tort plaintiff attorney, Anthony Z. Roisman, at an EPCRA seminar sponsored by the ABA, that EPCRA data will not play a crucial role in current toxic tort lawsuits but may be helpful for toxic tort cases in the future) [hereinafter *Right-to-Know Chemical Data*].

171. *Speakers Analyze Implications*, *supra* note 160, at 78.

172. Pritchard, *supra* note 170, at 203, 246-50; see also Yost & Schultz, *supra* note 166, at 55-56.

Toxic tort suits are typically time-consuming and costly. One corporate lawyer noted that EPCRA lowers the “entry barriers” to toxic tort litigation.¹⁷³

It was feared that right-to-know data would create “sensationalism” and a bad litigation climate for industry with the publication of “terrifying” chemical data, distort the public perception about chemical risks which would lead to harsh public perceptions about chemical releases, provide large amounts of chemical data that non-traditional experts could use to acquire undeserved credibility, and raise the possibility of increased jury awards when a defendant failed to comply with any EPCRA requirement.¹⁷⁴ EPCRA was seen as a potent discovery instrument for litigation not only involving toxic torts, but also regarding facilities, personal injury, product liability and zoning.¹⁷⁵

EPCRA information in general may serve as a potential tool to enforce other environmental laws. The EPA was expected to use information under EPCRA not only to enforce this law, but also to enforce other major environmental laws like RCRA, CERCLA, the Clean Air Act, and the Clean Water Act.¹⁷⁶ EPCRA reports were seen as enabling the EPA and citizen litigants to uncover evidence of discharges in violation of these other laws.¹⁷⁷

E. Preemption Concern

Concern about preemption arose. EPCRA expressly provides it will not preempt state and local laws.¹⁷⁸ From the business perspective, preemption was preferred because it was feared the failure of EPCRA to preempt state and local emergency planning and community right-to-know regulation would lead to conflicting requirements in which businesses would be caught in the middle.¹⁷⁹ It was contended that EPCRA would be no more than a regulatory floor, allowing sharply divergent local interests in several jurisdictions to impose different requirements that would dramatically increase the

173. *Speakers Analyze Implications*, *supra* note 160, at 78; *see also* Pritchard, *supra* note 170, at 246; Yost & Schultz, *supra* note 166, at 55-56.

174. *Right-to-Know Chemical Data*, *supra* note 170, at 199-200 (reporting remarks of a corporate toxic tort defense attorney).

175. Burcat & Hoffman, *supra* note 153, at 10027.

176. *Emergency Releases Most Likely Target of Initial Enforcement*, *State Official Says*, 18 *Env't Rep.* (BNA) 2241 (Feb. 26, 1988).

177. *TSCA Confidentiality*, *supra* note 154, at 2098.

178. 42 U.S.C. § 11021 (1988 & Supp. V 1993).

179. Burcat & Hoffman, *supra* note 153, at 10027.

cost of compliance due to additional paperwork, chemical lists, and reporting demands.¹⁸⁰

For the states, the preemption concern ran in a different direction. States feared that the EPA would forget the existence and importance of state and local programs and neglect to integrate EPCRA responsibilities and requirements with them.¹⁸¹ This state sensitivity over preemption by EPCRA had some basis in past experience. OSHA had conflicted with state and local community and worker right-to-know laws, and the federal courts largely determined that OSHA preempted them.¹⁸²

F. Burden on Federal Government

The EPA found the responsibilities of EPCRA to be daunting. An EPA assistant administrator whose division would be responsible for managing EPCRA saw the "sheer magnitude" of handling the information as a serious challenge.¹⁸³ He noted that the EPA had to take an enormous amount of EPCRA data and put it in a form understandable to the public.¹⁸⁴ He predicted 30,000 facilities would have to file information in the first year, that this number would double in three years, and that over this period a total of 120,000 reports would be handled by the agency.¹⁸⁵

G. Public Chemophobia

By far, the greatest fear stirred up by EPCRA was the fear by some in the chemical industry that this newly released information would lead to a severe public reaction against them. The head of the EPCRA committee of chemical industry executives, a group formed by the Chemical Manufacturers' Association, described the public as "chemophobic."¹⁸⁶ An IBM executive told a trade association that

180. *Id.*

181. *State Officials*, *supra* note 150, at 2131, 2132.

182. See Portia C. Smith, *The Preemptive Effect of the Emergency Planning and Community Right-to-Know Act and OSHA's Hazard Communication Standard*, 67 WASH. U. L.Q. 1153, 1156, 1167-73 (1989); Hjelm, *supra* note 153, at 714-25; see also *Federal Pre-emption of Right-to-Know Laws Unclear When Both Workers, Public Covered*, 18 Env't Rep. (BNA) 1626 (Oct. 30, 1987) (noting that while EPCRA specifically says it does not preempt community right-to-know requirements enacted by states, OSHA says with equal clarity, that it does preempt state worker right-to-know regulations).

183. *EPA Official Advises Industry to Begin Local Public Dialogue Before Releasing Data*, 17 Env't Rep. (BNA) 1799, 1800 (Feb. 20, 1987) [hereinafter *EPA Official*].

184. *Id.*

185. *Id.*

186. *CMA Advises Firms to Go Beyond Compliance with Title III Mandates to Avoid Problems*, 18 Env't Rep. (BNA) 1327 (Sept. 11, 1987).

once EPCRA information was made public it is "probably going to scare a lot of people."¹⁸⁷ The chairman of Du Pont Chemical advised the chemical industry to try to convince the public that chemical releases were "not of crisis proportion."¹⁸⁸ A corporate attorney was particularly graphic, stating that there may be "panic in the streets" when EPCRA information is revealed to the public for the first time and that the law would "lift the veil of secrecy" about chemicals and "create a new mystery: how can companies release toxic chemicals without killing us all?"¹⁸⁹ Reagan Administration EPA officials appeared to share this general industry perception that the public would be shocked by what EPCRA revealed.¹⁹⁰

Public concern about toxic chemicals, in and of itself, was not what industry most feared, but rather the consequences of that concern. Perhaps the worst nightmare of industry was the description of the law provided by a corporate environmental lawyer: "[a]s it discloses, it will inform, it will interest, and it will be a *rabble rouser*."¹⁹¹ An environmental official from Johnson Wax expressed the worst consequence industry could face from EPCRA disclosures: that EPCRA would lead to greater governmental environmental regulation when the public reacted to the risks perceived from the disclosed data.¹⁹² Fear of an adverse reaction from a "chemophobic" public and more governmental regulation prompted a few prescient industry representatives to warn their allies and colleagues throughout American manufacturing that EPCRA could be a public relations nightmare and that they should engage in damage control as early as possible.¹⁹³

187. *Compliance with Right-to-Know Advised Although Payoff is Not Immediately Obvious*, 18 Env't Rep. (BNA) 1035 (Aug. 14, 1987).

188. *Du Pont Chairman Sees Need to Build Consensus on 'Right Response' to Environmental Problems*, 17 Env't Rep. (BNA) 1227 (Nov. 21, 1986).

189. *Speakers Analyze Implications*, *supra* note 160, at 78.

190. John Moore, the EPA assistant administrator for pesticides and toxic substances, told a meeting sponsored by the American Institute of Chemical Engineers that EPCRA information will "haunt the dialogue between those people making and handling chemicals and the communities where they do so." *EPA Official*, *supra* note 183, at 1799. He noted that because of past chemical incidents of the type which inspired EPCRA that "the public is nervous and has greater unease about what is going on in its backyard." *Id.* Charles Elkins, head of the EPA's Office of Toxic Substances, told a meeting of the Chemical Specialties Manufacturers Association that citizens will be surprised when they find out that neighborhood companies are discharging tons of toxic chemicals, and will assume they have been exposed and will encounter serious health problems as a result. *Prepare Now for Public Questions on Emissions Data*, *EPA Official Recommends*, 18 Env't Rep. (BNA) 1561-62 (Oct. 16, 1987) [hereinafter *Prepare Now*].

191. *Speakers Analyze Implications*, *supra* note 160, at 78 (emphasis added).

192. Gene I. Matsumoto, *Confrontation or Compromise*, 5 ENVTL. F. 25, 31 (Sept./Oct. 1988).

193. See *Prepare Now*, *supra* note 190, at 1561; *CMA Advises Firms to Go Beyond Compliance with Title III Mandates to Avoid Problems*, 18 Env't Rep. (BNA) 1327, (Sept. 11, 1987); *EPA Official*,

IV. FEARS FULFILLED AND UNFULFILLED

A. *No Trade Secret Problem*

The concern about trade secrets appears unwarranted.¹⁹⁴ Very few trade secret claims have been made under EPCRA. In the first year of TRI reporting, the EPA indicated that for over 19,000 facilities submitting TRI reports, only twenty-eight filed forms with trade secret claims.¹⁹⁵ The EPA received about 2000 trade secret claims for MSDS information submitted under section 311 of EPCRA, a relatively modest amount considering that at least 3 million MSDS forms for over 50,000 chemicals are annually submitted under this program.¹⁹⁶ Leaks of trade secret information would seem an even more tenable concern in the few states which have expanded their chemical information programs, but there appear to be no problems in these places as well.¹⁹⁷

B. *Preemption Problem Unrealized*

Preemption has not been a serious problem for EPCRA. At the very least it has not generated significant litigation. Only one court has addressed the preemption issue, the Ohio Supreme Court, and it ruled that EPCRA did not foreclose additional requirements for

supra note 183, at 1799; *Du Pont Chairman Sees Need to Build Consensus on 'Right Response' to Environmental Problems*, 17 *Env't Rep.* (BNA) 1227 (Nov. 21, 1989).

194. The EPA has issued rules for trade secret information. 40 C.F.R. Part 350 (1995).

195. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *THE TOXICS RELEASE INVENTORY: A NATIONAL PERSPECTIVE*, 1987, at 66-67 (June 1989) (EPA 560/4-89-005) (representing about 0.06 percent of all forms and 0.01 percent of all releases) [hereinafter 1987 TRI REPORT].

196. *TSCA Confidentiality*, *supra* note 154, at 2098.

197. New Jersey and Massachusetts both require industry to report materials accounting (MA) data to the state agencies, also known as "mass balance" information. EPA OFFICE OF POLLUTION PREVENTION AND TOXICS: ISSUES PAPER EXPANSION OF THE TOXICS RELEASE INVENTORY (TRI) TO GATHER CHEMICAL USE INFORMATION: TRI-PHASE 3: USE EXPANSION, available in RTK-NET, Entry No. 6597, Oct. 19, 1994. Mass balance is an engineering term for a procedure that identifies and compares all chemical inputs at a facility with the outputs and accumulations. *Id.* Proponents of mass balance type information claim these procedures provide an important ledger-sheet which serves as a means to check on the TRI estimates, and that chemical inputs and outputs are themselves a right-to-know issue. *Id.* Opponents of including this type of information questioned the need for information that went beyond release data, and they expressed concerns over trade secrets. *Id.* Both Massachusetts and New Jersey allow businesses to withhold MA data as "Confidential Business Information" (CBI), but report that they made CBI claims for MA data at a rate of less than one percent of the time. *Id.* See also Memorandum from Paul Orum, Working Group Coordinator, to Interested Activists, *Right to Know More Campaign*, July 11, 1991, available in RTK-NET, Entry No. 1760 (confirming that less than one percent of the data submitted under the New Jersey law was claimed to be confidential).

hazardous chemical reporting imposed by Ohio.¹⁹⁸ A number of states showed no reluctance in enacting right-to-know law provisions which were more stringent than those of EPCRA.¹⁹⁹

C. Small Business Tempest

The small business problem has nagged at EPCRA. As already noted, in the Reagan Administration, soon after the enactment of EPCRA, the SBA urged the EPA to effectively exempt all small

198. *Ohio Chamber of Commerce v. State Emergency Response Comm'n*, 597 N.E.2d 487 (Ohio 1992). The Ohio Chamber of Commerce and tire-maker B.F. Goodrich challenged additional requirements for hazardous chemical inventory reporting imposed by the state pursuant to its own right-to-know statute meant to implement EPCRA. See OHIO REV. CODE ANN. § 3750 (Baldwin 1995). According to the Chamber and B.F. Goodrich, these requirements were unlawful because they were "substantially more stringent" than those of the federal program, raising the issue of the degree to which, if any, EPCRA preempts state and local laws. *Ohio Chamber*, 597 N.E.2d at 489. Under EPCRA regulations, states are not required to use federal forms for Section 313 hazardous chemical inventory reporting, but instead can create and use their own so long as they contain information identical to that in the federal form. 40 C.F.R. §§ 370.40(a), 370.41(a) (cited in *Ohio Chamber*, 597 N.E.2d at 490.) The additional requirement under challenge was that the Ohio regulations also required facilities to submit a map showing the location of hazardous chemicals and substances attached to the reporting form. OHIO ADMIN. CODE § 3750-30-20-(F)(4), (H)(7) (cited in *Ohio Chamber*, 597 N.E.2d at 489.)

The Ohio Supreme Court construed both the state right-to-know law and EPCRA as allowing the Ohio SERC to promulgate rules that exceed the reporting requirements of EPCRA. First, it observed that language in the state law directed the Ohio SERC to "adopt rules . . . that are consistent with and equivalent in scope, content, and coverage to [EPCRA]." *Ohio Chamber*, 597 N.E.2d at 489 (citing and quoting OHIO REV. CODE ANN. § 3750.02(b)(1) (Baldwin 1995)) (emphasis added). According to the court, this prescribed only minimum regulatory requirements and did not inhibit the SERC from adopting rules more stringent than those required by EPCRA. *Id.* *Ohio Chamber* noted that EPCRA's section 321(a) expressly provided it did not preempt state or local law and that section 321(b), "Effect on MSDS requirements," anticipated state and local authorities would expand upon federal requirements and require location information for the MSDS based hazardous chemical reporting. *Id.* at 490. The court quoted EPCRA section 321(b), which in part stated:

In addition, a State or locality may require the submission of information which is supplemental to the information required on the data sheet (including information on the location and quantity of hazardous chemicals present at the facility), through additional sheets attached to the data sheet or such other means as the State or locality deems appropriate.

Id. (emphasis added).

The Ohio Supreme Court also cited several EPA policy statements which encouraged state flexibility in implementing EPCRA and supplementing the requirements of federal regulation. *Id.* at 490-91 (quoting 52 F.R. 38357 (1987)). The court finally observed that the interests of the business community in opposing the map requirement specifying the location of hazardous chemical at plants did not compare favorably with the public interest. It noted that the main reason for the challenge to the map requirement was to avoid the expense of preparing a map. *Id.* at 491. The court declared that the usefulness and advantages of the map were "indisputable," and that identifying the location of hazardous chemicals could reduce the risks to emergency personnel and "may even save lives." *Id.* at 492.

199. These states included Wisconsin [*Governor Signs Right-to-Know Statute Giving State Authority to Enforce Federal Law*, 19 Env't Rep. (BNA) 50 (May 13, 1988)]; New Jersey [*Florio Signs Pollution Prevention Bill with Goal to Cut Hazardous Releases by Half*, 22 Env't Rep. (BNA) 1035 (Aug. 9, 1991)]; and Massachusetts [*All Funding Eliminated by Agency for Right-to-Know Programs in State*, 20 Env't Rep. (BNA) 805 (Aug. 8, 1989)].

businesses from the law's reporting requirements.²⁰⁰ It is important to note that EPCRA is explicitly constructed to exempt most small businesses from TRI reporting. It does this by excluding facilities with less than 10 employees and those which fall below the chemical activity-based thresholds set at several thousand pounds.²⁰¹

Small businesses cannot be considered categorically harmless toxic polluters. Small facilities may use large quantities of toxic chemicals that pose a significant threat to workers and the environment.²⁰² Nevertheless, the EPA from the outset yielded to small business concerns by providing them relief in the initial 1988 regulations implementing the TRI reporting requirements. These regulations included a provision to allow "range reporting" for annual toxic chemical releases of less than 1000 pounds, thereby alleviating some of the TRI reporting burden to small businesses.²⁰³

This modest accommodation from the EPA did not satisfy small business interests. The SBA assistant counsel, who in that capacity in 1988 had urged the EPA to reduce the reporting burden on small businesses, was in private practice four years later and representing a small business coalition seeking exemption from TRI reporting.²⁰⁴ In 1992, the SBA, backed by a group of small business trade associations,²⁰⁵ formally petitioned the EPA to waive the annual TRI

200. This included both the section 313 TRI reporting requirements and the sections 311 and 312 MSDS and chemical use inventory requirements, respectively. The SBA asked the EPA to adopt risk-based or emissions-based requirements for TRI reporting rather than amount based. *SBA Urges Exemption for Small Firms from Community Right-to-Know Reporting*, 18 Env't Rep. (BNA) 916 (July 31, 1987). For section 311 and 312 reporting, the SBA advocated increasing the threshold amount levels for reporting which would result in freeing most small businesses from reporting. *SBA Warns EPA that Right-to-Know Proposal Will Have 'Detrimental' Effect on Small Firms*, 17 Env't Rep. (BNA) 2148 (Apr. 24, 1987).

201. 42 U.S.C. § 11023(b)(1)(A) (1988 & Supp. V 1993). The EPA estimates that there are approximately 180,000 facilities in the SIC codes 20-39, and 23,000 facilities actually reporting under the current law. SBA PETITION, *supra* note 142, at 1700. The EPA pointed out that the current 10 employee limitation and activity thresholds in EPCRA excluded eighty percent of the universe of reporting facilities. SBA PETITION, *supra* note 142, at 1700.

202. 1991 RIGHT TO KNOW, FACT SHEET # 3, available in RTK-NET, Entry No. 220 (May 30, 1991). "For example, [a] Maryland company with only 12 employees reported that they emitted over 100,000 pounds of toxics into the air and shipped off-site over 500,000 pounds of hazardous waste." *Id.* "If the company had less than 10 employees, their toxic releases would have remained undisclosed to the public." *Id.*

203. *EPA Announces Final Rule Under Title III Governing Toxic Chemical Release Reporting*, 18 Env't Rep. (BNA) 2131 (Feb. 12, 1988). The provision permitted a facility which released "less than 1,000 pounds of a listed toxic chemical in a given year to" merely check a box on the TRI "form representing one of three release ranges rather than coming up with an exact figure" for releases. *Id.*

204. See Bromberg, *supra* note 133 and accompanying text; *Group Gives EPA Small Business TRI Proposal*, 23 Env't Rep. (BNA) 905 (July 17, 1992).

205. An organization called the Small Business Coalition for a Responsible TRI Policy, which represented more than twenty small business organizations, promoted an exemption

reporting requirement for small companies that emitted small amounts of toxics, asking the EPA to instead shift from reporting the extent of use of chemicals to actual releases.²⁰⁶ The SBA specifically proposed that the EPA shift to release-based exemptions for the TRI facilities, exempt reports of individual releases or transfers of 5000 or less pounds for the vast majority of chemicals listed under section 313,

like that proposed in the SBA petition. *Proposal to Exempt Some Small Businesses from TRI Reporting Under Review*, Official Says, 23 Env't Rep. (BNA) 2723, 2724 (Feb. 19, 1993). The spokesman and counsel for this group was former SBA attorney Kevin Bromberg. *Small Businesses Seek Compromise on TRI Exemption*, 23 Env't Rep. (BNA) 3097 (Apr. 2, 1993). It was Bromberg who drafted the SBA petition in the first place when he was employed by the EPA. Alair Maclean, *What's Ahead for the Right-To-Know*, THE RTK NET NEWSLETTER, Vol. 3, No. 4, (Spring 1994), available in RTK-NET, Entry No. 5897 (March 14, 1994).

206. SBA PETITION, *supra* note 142, at 1698; see also *Comment Sought by EPA on Exclusion for Small Business Reporting to TRI*, 23 Env't Rep. (BNA) 1671 (Oct. 30, 1992) [hereinafter *Comment Sought*]. The SBA petition was based on the opening provided by EPCRA section 313 final rule issued in 1988, which stated that the EPA could consider changing the statutorily specified thresholds for TRI reporting after experience with several years of data collection. SBA PETITION, *supra* note 142, at 1699 (citing 53 Fed. Reg. 4508, Feb. 16, 1988).

TRI reporting requirements are based on the use of chemicals. To be required to file yearly toxic release inventory forms, companies must fit under an SIC code category between 20-39, employ ten or more employees, and manufacture, process or import more than 25,000 pounds, or otherwise use more than 10,000 pounds of a toxic chemical. 42 U.S.C. § 11023(f)(1) (1988 & Supp. V 1993). Because these thresholds are directed at particular classes of industry they can also be called "activity based" thresholds. SBA PETITION, *supra* note 142, at 1701. The small source exemption requested by the SBA was based on releases rather than use. For instance, a company that manufactures more than 25,000 pounds of chlorine (which is covered by the TRI reporting requirements) and packages it in drums for sale, may estimate that 200 pounds of the chlorine is released into the air. If the release threshold were 5000 pounds, as the SBA petition requested, then the firm would not have to report for chlorine. See *Revamped TRI Could Reduce Reporting Burden for Small Chemical Release Sources*, EPA Says, 24 Env't Rep. (BNA) 1764 (Feb. 11, 1994).

The petition differentiated between "high release volume" of the TRI chemicals, that is, over 5000 pounds, and urged the EPA to adopt a second 10-pound threshold for "low release volume" but extremely hazardous chemicals. SBA PETITION, *supra* note 142, at 1699. "Low release volume" chemicals, as described in the SBA petition, are primarily extremely hazardous substances, while "high release volume" refers to remaining chemicals subject to TRI reporting requirements. *Id.*

Supporters of the exemption not only lobbied the EPA, but also sought backing from President Reagan's Council on Competitiveness and the White House Council of Economic Advisors. *OMB Urged by House Members to Approve Expanded Form R, Interpretative Guidance*, 22 Env't Rep. 2699, 2700 (Apr. 10, 1992) [hereinafter *OMB*]. These supporters included the Chemical Specialties Manufacturers Association, which represents the major pesticide makers, and the U.S. Chamber of Commerce. *Id.*

The EPA received a similar petition from the American Feed Industry Association (AFIA) to exempt livestock foodmakers from TRI reporting on the grounds that releases of chemicals, primarily from feed additives, from this industry was insignificant and would not further the purposes of EPCRA. 58 Fed. Reg. 19308 (Apr. 13, 1993). This exemption would be achieved by removing the SIC code 2048, which consisted of the livestock feed industry, from TRI reporting. *Id.* As an alternative to the SIC code deletion, the AFIA petition suggested the adoption of the approach proposed in the SBA petition. *Id.*

and provide separate regulatory treatment for highly toxic or low release volume chemicals.²⁰⁷

The SBA argued that these facilities should not have to report because they release insignificant amounts of toxics and pose no threat to communities or the environment. Moreover, the SBA maintained, the exemption would save nearly \$331 million annually in compliance costs, reduce the regulatory burden on small businesses, allow the EPA and the state environmental agencies to direct scarce budget and enforcement resources to more significant environmental problems,²⁰⁸ concentrate TRI reporting on facilities responsible for the vast majority of releases, remove virtually all small facilities, improve the effectiveness and efficiency of the TRI reporting program, and result in major savings to small businesses.²⁰⁹ The SBA was also concerned about an increasing burden for small businesses because of costly state and federal “piggyback” or “domino” reporting requirements.²¹⁰ The SBA contended that if a threshold of 5000 pounds were used to trigger release reporting for TRI chemicals, ninety-nine percent of air releases, ninety-five percent of water releases, and ninety-eight percent of land releases still would be reported,²¹¹ and that the TRI would still capture eighty-five percent or more of the toxic chemical releases but eliminate ninety percent of the reports and nearly ninety percent of the reporting facilities.²¹²

The EPA was cool to the particulars of the 1992 SBA proposal, but appeared open to the general idea of finding other options for easing

207. SBA PETITION, *supra* note 142, at 1699.

208. *See OMB, supra* note 206, at 2670.

209. SBA PETITION, *supra* note 142, at 1699-700. The SBA asserted that the EPA could exclude facilities with releases and transfers of less than 5000 pounds for the vast majority of TRI chemicals and still satisfy the community right to know requirements and statutory objectives. *Id.* at 1699. The SBA contended that if this data were removed from reporting, the EPA would save ninety percent of the projected \$19 million it would otherwise pay to administer the section 313 program. *Id.* This money could be then directed toward better federal monitoring, compliance and database activities. *Id.* The SBA argued that small sources release an insignificant amount of section 313 chemicals and have a minimal environmental impact but the collection of this data unnecessarily drains millions of dollars of the EPA's resources. *Id.* at 1700.

210. *Panel Awaits Framework for Revamping TRI Before Reviewing Small-Source Exemption Plan*, 24 *Env't Rep.* (BNA) 316 (June 18, 1993). The “piggyback” or “domino” effect requires businesses that report TRI data to comply with additional—and to them, costly—standards under state toxic use reduction laws, federal storm water requirements, and Clean Air Act requirements. *Id.* The SBA petition was specifically concerned with this effect for new federal legislative proposals involving storm water control, hazardous pollution prevention planning, hazardous waste management, water pollution control, and toxic releases which relied upon existing activity based thresholds, that if enacted, would greatly increase costs for both the EPA and small businesses. SBA PETITION, *supra* note 142, at 1699-700.

211. *See OMB, supra* note 206, at 2700.

212. SBA PETITION, *supra* note 142, at 1699.

the TRI reporting responsibility.²¹³ The director of EPA's Toxics Release Inventory staff cautioned that "[a] small business does not necessarily mean a small source."²¹⁴

Not surprisingly, environmental organizations objected to the SBA proposal.²¹⁵ Environmentalists do not want less information, they want more.²¹⁶ An environmental coalition contended that the TRI exemption would reduce public access to information on the significant contribution to toxic pollution made by small businesses.²¹⁷ While expressing some sympathy with giving small businesses a break, the coalition urged that the reporting policy in general should go in the opposite direction: expanding, rather than contracting, TRI reporting.²¹⁸ The Natural Resources Defense Council (NRDC) claimed that the exemption would complicate reporting and enforcement and diminish both public and government access to the very considerable toxic pollution created by small businesses. NRDC pointed out that the vast majority of small businesses were already exempt from the TRI reporting because the requirement did not apply to facilities with less than 10 employees.²¹⁹

What is perhaps most surprising is that big industry did not side with small business. Like environmental groups, the Chemical Manufacturers Association (CMA) paid lip service to the idea of somehow easing the burden of TRI reporting on small businesses.²²⁰ The CMA, however, opposed the SBA proposal to replace the activity-based or use-based thresholds applicable to manufacturing,

213. *Id.* at 1701.

214. *See OMB, supra* note 206, at 2670.

215. Among the public interest groups which opposed the SBA's 5000 pound exemption were Citizen Action, Environmental Action, Physicians for Social Responsibility, and the Working Group on Community Right-to-Know. *Hearing Debates "Low" Release Exemption, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW* (January-February 1994), available in RTK-NET, Entry No. 5042 (March 15, 1994).

216. *See OMB, supra* note 206, at 2670.

217. *Small Businesses Seek Compromise on TRI Exemption*, 23 *Env't Rep.* (BNA) 3097 (Apr. 2, 1993). An environmental coalition organized to oppose the SBA proposal included the Environmental Defense Fund, the Natural Resources Defense Council and the Working Group on Community Right-To-Know. *Id.*

218. A representative of the Natural Resources Defence Council indicated that ninety-five percent of toxic releases are not covered by the TRI reporting requirements and that as a result, "[i]nstead of carving our new exemptions for special interest groups, EPA needs to look at ways to make TRI more comprehensive." *Comment Sought by EPA on Exclusion for Small Business Reporting to TRI*, 23 *Env't Rep.* (BNA) 1671, 1672 (Oct. 30, 1992).

219. *Proposal to Exempt Some Small Businesses from TRI Reporting Under Review, Official Says*, 23 *Env't Rep.* (BNA) 2723, 2724 (Feb. 19, 1993) [hereinafter *Proposal*]. The NRDC claimed that because of the 10 employee rule nearly eighty-three percent of all potential facilities were not subjected to TRI reporting. *Id.*

220. *Comment Sought, supra* note 206, at 1671, 1672.

processing and other activities with release-based thresholds.²²¹ The CMA criticized release-based standards proposed to provide the small business exemption as “[s]ignificantly increasing the workload on all businesses by forcing all facilities to [undertake] complicated release calculations, possibly for hundreds of sources”²²² The CMA also charged that these standards would “[m]ake it difficult for the public, the EPA and the industry to compare future TRI reports with historical data” and would increase the burden on EPA enforcement authorities attempting to audit the accuracy of release-based reports.²²³ The states have also objected to release-based standards for small businesses, contending that if companies were exempted from reporting small release amounts, then pollution prevention programs would suffer.²²⁴

In 1994, the EPA yielded to small business concerns by proposing a rule that has the effect of exempting the vast majority of small businesses from filing Form Rs.²²⁵ The proposed rule called for a higher alternative reporting threshold of one million pounds for facilities with low-level releases, which was defined as less than 100 pounds of the listed chemicals.²²⁶ Instead of filing a Form R, the

221. *Id.* In comments the CMA submitted to the EPA concerning the SBA petition, the trade association indicated that it could accept a release-based threshold, provided it did not replace current thresholds or serve as an alternative basis for reporting. *Proposal, supra* note 219, at 2723. The CMA suggested that the EPA relieve small businesses of TRI reporting by modifying the “de minimis” exemption allowed by EPCRA regulations. *Id.* at 2723. De minimis refers to a concentration of a chemical in a mixture so low that threshold determinations and release calculations are not required. 40 C.F.R. § 372.38(a) (1995). The exemption rule states that if a listed chemical is less than one percent of a mixture, or one-tenth of a percent for carcinogens, emissions of the substance need not be reported to the TRI. *Id.*

222. *Comment Sought, supra* note 206, at 1672.

223. *Id.*

224. *TRI Small Release Exemption Plan Draws Objections From State Officials*, 24 *Env't Rep.* (BNA) 1899 (Mar. 4, 1994). Section 8 of Form R requires firms to report pollution prevention data. A number of states have indicated they would lose this information with small release exemptions. *Id.* The head of the Ohio Division of Air Pollution Control noted that with a 5000 pound release exemption the state “would lose nearly 3,700 TRI reports annually [and that would result] in a twenty-eight percent loss of pollution prevention data.” *Id.* Several representatives voiced the opinion that EPCRA already provided considerable small business relief and that a major change to release-based standards would further burden the regulatory process. *Id.*

225. EPA Proposed Rule on Reporting Low-level Chemical Releases Under EPCRA, 59 *Fed. Reg.* 684 (July 28, 1994) (*reprinted in* 25 *Env't Rep.* (BNA) 684 (Aug. 5, 1994)) [hereinafter *Low-Level Release Rule*].

226. *Low-Level Release Rule, supra* note 225, at 685-86. The proposed rule changed only the threshold requirement for TRI reporting but did not modify or eliminate the other elements which determined whether a facility was subject to TRI reporting, namely that it have ten or more employees, be in SIC codes 20-39, and make, process, or otherwise use a chemical listed as a toxic chemical. *Id.* at 686. If a facility met these other requirements but released less than 100 pounds of a listed chemical and made, processed, or used more than 1 million pounds of a listed chemical, then it was released from TRI reporting for that particular listed chemical. *Id.*

facilities would file an annual certification that they were covered by the exemption. As has been noted, the use-based statutory thresholds for reporting are 25,000 pounds per year for manufacturing, processing, and importing and 10,000 pounds per year for other uses of a toxic chemical.²²⁷ The proposal exempted an otherwise covered facility from the TRI reporting for any listed chemical it released, or transferred offsite for treatment or disposal, in amounts less than 100 pounds if the facility generated less than one million pounds of all listed chemicals combined.

The effect of the higher alternative threshold standard for low-level releases would be to eliminate 20,500 annual TRI forms submitted to the EPA, or roughly thirteen percent of all annual reports that would otherwise be filed with the EPA. Additionally, the higher alternative threshold standard would partially eliminate reporting for over 10,000 facilities and completely eliminate reporting for nearly 4000 facilities.²²⁸ The EPA analysis showed that such an exemption would reduce the total amount of releases reported to the EPA by .01 percent, or approximately 200,000 pounds out of 4.5 billion pounds of all releases.²²⁹ However, while the loss of information for releases would appear to be relatively insignificant, the same is not true for the loss of information about waste generation that is important to know for pollution prevention efforts. More than 16 percent of the total waste reported to the EPA, up to 6.1 billion pounds, would be excluded by this definition.²³⁰

The EPA alternate threshold/low-release proposal was a strange hybrid of a use-based/release-based standard. During the nearly two years between the SBA petition and the proposed rule, the only option the EPA had been seriously considering was pure, straightforward release standards.²³¹ In response to the SBA petition, for nearly two

at 685-86. As alternatives to the 100 pound low-level standard, the EPA offered for public comment four other standards of less than 500 pounds, less than 10 pounds and zero, and a facility category based on the amounts reported for total waste generation rather than toxic chemical releases or transfers. *Id.* at 689-90.

227. 42 U.S.C. § 11023(f)(1)(A), (B)(iii) (1988 & Supp. V 1993).

228. Low-Level Release Rule, *supra* note 225, at 688. The EPA estimated that for 1992 reporting the 20,500 forms affected by the alternate thresholds came from an estimated 10,600 facilities, of which 3800 would meet the "low-level release" category for all chemical reports submitted. *Id.*

229. *Id.* The EPA was using figures for 1991 releases.

230. *Id.* The EPA was using figures for 1992 releases. *Id.* The EPA noted that this would be the total waste volume which would go unreported if all the 20,500 forms estimated to be eligible to apply the alternate threshold level did so. *Id.*

231. Environmentalists were especially surprised by the proposal. A spokesman for the Working Group on Community Right-To-Know, which represents more than 20 environmental organizations, said they were "caught off-guard." *Small-Source Exemption Would be Set From Some Facilities Under TRI Proposal*, 25 *Env't Rep.* (BNA) 626, 627 (Aug. 5, 1994).

years the EPA had indicated that it was considering four separate release-based thresholds of zero pounds, 500 pounds, 1000 pounds and 5000 pounds for small business relief from the TRI reporting.²³² The EPA's solution was a dangerous compromise, adopting a partial release-based standard with a partial use-based threshold.

The EPA partly justified the proposed new exemption as giving small businesses needed relief without resulting in significant loss of data or environmental protection.²³³ The EPA's principal rationale for the exemption appeared to be: (1) that it planned to greatly expand the TRI program by adding over 300 chemicals to the TRI reporting; (2) that this expansion would represent a great expense to businesses and industry; and (3) that to offset the burden the EPA could exempt small facilities and releases to some extent.²³⁴ Behind this rationale was the likelihood that the EPA was under pressure from the Clinton Administration Office of Management and Budget (OMB) to "balance" steps that expanded the TRI reporting with moves that reduced the overall reporting burden on business.²³⁵ The OMB, which must approve EPA regulations, had been under pressure from small businesses to lighten the reporting load under EPCRA.²³⁶

Environmentalists are the chief critics of exemptions for small chemical releases. They contend that small releases of toxic chemicals can still lead to significant, sometimes enormous, dangers to public health and the environment, and that the true dangers of toxic chemicals are not fully understood.²³⁷ The EPA supported the view

232. See, e.g., *Proposed EPCRA Additions Would Double Number of Chemicals Requiring TRI Reports*, 24 Env't Rep. (BNA) 1619 (Jan. 14, 1994); *TRI Small Release Exemption Plan Draws Objections from State Officials*, 24 Env't Rep. (BNA) 1899 (March 4, 1994); *Release Amount, Not Size of Business, Should Determine TRI Exemption, CMA Says*, 24 Env't Rep. (BNA) 1789 (Feb. 18, 1994).

233. Low-Level Release Rule, *supra* note 225, at 684-85.

234. *Id.* at 685. The EPA had proposed sharply expanding the scope of the TRI program with a rule that would add 313 chemicals and chemical categories to the list of reportable toxic chemicals. *Id.* (referring to 59 Fed. Reg. 1788). According to the EPA the exemption would lead to a reduction of 20,500 forms it received, while the expansion of the TRI reporting due to adding new chemicals to its list would generate 28,000 new reports to the EPA. *Id.* See also *Proposed EPCRA Additions Would Double Number of Chemicals Requiring TRI Reports*, 24 Env't Rep. (BNA) 1619 (Jan. 14, 1994). The EPA has estimated that its proposed expansion would add 26,000 new reports and increase compliance costs by \$155 million in its first year. *Id.*

235. *EPA to Expand Chemical List, Proposal Would Double Right-to-Know Chemicals*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, available in RTK-NET, Entry No. 5042 (Jan./Feb. 1994).

236. Alair MacLean, *What's Ahead for the Right-To-Know*, THE RTK NET NEWSLETTER, available in RTK-NET, Entry No. 5897 (March 14, 1994).

237. "Low" releases of toxic chemicals can have profound environmental effects. The head of the Working Group on Community Right-to-Know asserted that "[l]ow releases[] can be harmful" noting that "an IBM plant in South Brunswick, New Jersey, dumped 10 gallons of trichloroethylene onto the ground, closing one of the town's municipal drinking water wells."

that small releases can be harmful in the annual TRI report it released several months prior to issuing the proposed rule.²³⁸ For environmentalists, the only credible release-based exemption would be an exemption set as close to zero releases as possible.²³⁹ Small

Small Release Exemption Could Harm Public Health, Witnesses Tell Agency, 24 Env't Rep. (BNA) 1854 (Feb. 25, 1994). A representative of the Physicians For Social Responsibility, in critiquing the EPA proposals for small release exemptions, noted that "[l]ess than 10 percent of the chemicals in commerce have been tested for toxicity." *Id.* He concluded that the result is that even de minimis releases of chemicals may pose a threat to humans. *Id.* "Persistent toxic chemicals in particular pose problems." *Small Releases, Big Problems*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW (Jan./Feb. 1994), available in RTK-NET, Entry No. 5042 (March 15, 1994). "Scientists are finding that some potent chemicals are disrupting the ability of entire wildlife populations to reproduce." *Id.* "Many federal agencies do not recognize a safe level of exposure to cancer causing contaminants." *Id.* Environmentalists saw the proposal as opening a giant loophole for off-site transfers to "energy recovery" and "recycling" facilities but not counting transfers for recycling or incineration unless the facilities used more than 1 million pounds of the chemical annually. *Small-Source Exemption Would Be Set for Some Facilities under TRI Proposal*, 25 Env't Rep. (BNA) 627 (Aug. 5, 1994). A representative of the Working Group on Community Right-To-Know noted that because of this provision, companies that "send toxic wastes to incinerators could simply sidestep reporting by shipping waste to cement kilns for so-called energy recovery" and that "[t]his loophole would gut the Pollution Prevention Act of 1990." *Id.* He noted that "the proposal would keep more than 100 million pounds of toxic waste sent to cement kilns, solvent recyclers and other recovery operations from being reported to the public." *Id.*

238. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, 1991 TOXICS RELEASE INVENTORY: PUBLIC RELEASE DATA (EPA 745-R-93-003) (May 1993) [hereinafter 1991 TRI REPORT]. The EPA notes that "[t]he TRI list consists of chemicals that vary widely in their ability to produce toxic effects." *Id.* at 19. It states that "[s]ome high-volume releases of not significantly toxic chemicals may appear to be a more serious problem than lower -volume releases of highly toxic chemicals, when just the opposite may be true." *Id.* As to "[p]otential degradation or persistence of the chemical in the environment," the Report notes that "[s]unlight, heat, or microorganisms may or may not decompose the chemical." *Id.* "Exposure to a chemical is also dependent upon how long the chemical remains unchanged in the environment." *Id.* According to the EPA report, "microorganisms readily degrade some chemicals, such as methanol, into less toxic chemicals; volatile organic chemicals, such as ethylene and propylene, react in the atmosphere, contributing to smog; metals are persistent and will not be degraded upon release to the environment." *Id.* The EPA indicates that "[a]s a result, small releases of a persistent highly toxic chemical may create a more serious problem than large releases of a chemical that is rapidly transformed in the environment." *Id.* It mentions bioconcentration of a chemical in the food chain. *Id.* "The chemical may concentrate or may disperse as it moves up the food chain." *Id.* "Some chemicals . . . will accumulate as they move up the food chain; other chemicals . . . will disperse rather than bioconcentrate in higher organisms." *Id.* at 19-20.

239. *Small Release Exemption Could Harm Public Health, Witnesses Tell Agency*, 24 Env't Rep. (BNA) 1854 (Feb. 25, 1994). Four public interest groups—Citizen Action, Environmental Action, Physicians for Social Responsibility, and the Working Group on Community Right-to-Know—opposed the "low" release exemption and proposed only exempting companies that report zero toxic releases and off-site transfers, provided they comply with certain conditions. *Hearing Debates "Low" Release Exemption*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW (Jan./Feb. 1994), available in RTK-NET, Entry No. 5042 (March 15, 1994). The conditions include:

- (1) The owner or operator submits an annual written certification that the facility has no releases, transfers, and waste streams;
- (2) The owner or operator keeps accurate records supporting the exemption (available upon request) and the

release exemptions, which relieve large numbers of facilities from reporting, also appear vexing to environmental representatives in light of extensive noncompliance with the TRI reporting requirements by businesses.²⁴⁰ The EPA conceded that as a result of its small release exemption proposal, some communities would be deprived of the right-to-know about virtually all waste generation data that would ordinarily be captured by the TRI reports.²⁴¹ Low-release exemptions are also inconsistent with EPA and other future federal efforts to pursue zero discharge regulatory restrictions for some serious toxic chemicals.²⁴²

In late November 1994, the EPA adopted the low-release/high-threshold approach in a final rule.²⁴³ The rule retained the one million pound threshold level, but made several changes from the earlier proposal to address some of the concerns of environmentalists and state regulators. The EPA adopted a "total waste" requirement for arriving at the one million pound threshold and dropped what environmentalists called the "recycling loophole" which would have removed from this calculation, and thus from the TRI information gathering, transfers of wastes for recycling or incineration for energy

certification is recorded in the TRI database; (3) Reporting obligations are automatically reinstated if there are future releases or transfers, or changes in business activity; (4) The exemption does not relieve potential future reporting obligations under a chemical use inventory.

Id. According to these environmental organizations, the "EPA's analysis shows that about 6,300 'zero' reports would be replaced with simple certifications under the alternative." *Id.* Paul Orum of the Working Group on Community Right-to-Know noted that, "[w]e would feel that we had won a victory if there had to be certification and only releases below ten pounds were exempted." Alair MacLean, *What's Ahead for the Right-To-Know*, THE RTK-NET NEWSLETTER, available in RTK-NET, Entry No. 5897 (March 14, 1994).

240. *Small Release Exemption Could Harm Public Health, Witnesses Tell Agency*, 24 Env't Rep. (BNA) 1854 (Feb. 25, 1994). An attorney for the Environmental Action Foundation claimed that "[n]early one-third of the facilities [required to file TRI forms] fail to do so" and that using "a released-based threshold as an exemption [is only advisable] when everyone is in compliance." *Id.*

241. *Low-Level Release Rule*, *supra* note 225, at 688. Fifty-two counties around the nation would lose ninety-one to one hundred percent of the total waste generation data under the EPA proposal. *Id.* The agency did not report figures of lesser but still significant losses of reporting data to other communities. *Id.* The NRDC and the New York Public Interest Research Group contend that this data is essential for understanding health risks existing in urban environments. *Revamped TRI Could Reduce Reporting Burden for Small Chemical Release Sources, EPA Says*, 24 Env't Rep. (BNA) 1764 (Feb. 11, 1994).

242. The head of the EPA's water office declared: "You're clearly going to see the agency pushing for zero discharge for a number of persistent toxics over the next three years." *Hearing Debates "Low" Release Exemption*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW (Jan./Feb. 1994), available in RTK-NET, Entry No. 5042 (March 15, 1994). He noted that "[i]f the agency is serious, a 'low' release exemption to the TRI is the wrong place to start." *Id.*

243. 59 Fed. Reg. 61488 (Nov. 30, 1994) (to be codified at 40 C.F.R. § 372).

recovery.²⁴⁴ The final rule increased the low-level release level from the previously proposed 100 pound level to 500 pounds. The EPA indicated the higher release level would result in nearly the same large reduction in the number and proportion of the Form Rs as that contemplated in the original proposal, but there would be a substantial difference and decrease in the amount of data lost with a small-source exemption.²⁴⁵ The EPA primarily justified the final rule exempting small sources as a means to offset another rule issued the same day which substantially expanded the number of chemicals covered by the TRI reporting.²⁴⁶

D. Emerging Concern of Spending

1. Federal Funding

EPCRA spending began inauspiciously and has been subject to a modest degree of uncertainty since. Furthermore, EPCRA requires states and local jurisdictions to administer major portions of the law,²⁴⁷ and is therefore vulnerable to the rising revolt against

244. *Id.* at 61490-91. The EPA appeared to agree with the environmentalists that not including this information as a criterion qualifying a facility for reporting would undermine source reduction and be in conflict with the national policy established in the Pollution Prevention Act of 1990. *Id.* at 61490. The environmentalists had observed that the recycling loophole encouraged the incineration of toxic wastes in cement kilns rather than encouraging source reduction for these substances. *Id.* The environmentalists had pointed out that the TRI requires data on transfers of hazardous waste for recycling and was important because it indicated where releases from further processing of toxic materials may be occurring. *Id.* at 61490-91.

245. The proposed 100 pound low-level release exemption would decrease the number of Form Rs from 83,000 to 62,500, a twenty-five percent decline, while the 500 pound exemption would reduce the number to 63,000, a twenty-four percent reduction. 58 Fed. Reg. 61492. This is not much of a difference in the number of forms submitted. However, the difference between the 500 and 100 pound exemption would be quite substantial in terms of data reported. Under the 100 pound level, the EPA would lose reporting data on 6.1 billion pounds of toxic substances, or about 16.7% of the 37 billion pounds reported as of 1992. *Id.* In contrast, under the 500 pound level, it would lose data on 2.5 million pounds, or about 1/100th of all annual reportable amounts. *Id.*

246. The EPA added 286 chemicals and chemical categories to the list of toxic chemicals subject to TRI reporting. 59 Fed. Reg. 61432 (Nov. 30, 1994) (to be codified at 40 C.F.R. § 372).

247. EPCRA requires each state to set up a SERC. 42 U.S.C. § 11001(a) (1988 & Supp. V 1993). Among the duties of SERCs is to establish local emergency planning districts within the state, appoint a local emergency planning committee to serve each of the districts, review local emergency response plans annually, notify the EPA of all facilities in the state that are covered under emergency planning requirements, coordinate and supervise the activities of local committees, and coordinate proposals for and distribution of training grants. 42 U.S.C. §§ 11001, 11002(c)-(d), 11003(e) (1988 & Supp. V 1993). The SERCs receive reports and notifications required by EPCRA: materials safety data sheets or lists of MSDS chemicals, emergency and hazardous chemical inventory forms, and notices of emergency releases. 42 U.S.C. §§ 11004(b)(1), 11021(a)(1)(B), 11022(a)(1)(B) (1988 & Supp. V 1993). The SERC is also responsible for establishing procedures for receiving and processing public requests for information col-

unfunded federal mandates. Soon after President Reagan signed EPCRA into law in October of 1986, his administration attempted to deprive it of its own independent line of funding. The Reagan Administration EPA publicly acknowledged in December 1986 that rather than seek a separate appropriation from Congress to fund EPCRA activities, it would subordinate the program to part of the Superfund program and fund it from the appropriations and special taxes used to finance the Superfund.²⁴⁸

The Superfund and EPCRA are in fact separate programs. EPCRA was enacted by Congress in the same public law as the Superfund reauthorization, but this was largely a matter of convenience.²⁴⁹ The irony of the decision by the Reagan Administration EPA to dip into the Superfund to finance EPCRA is that the President almost vetoed the Superfund because of his opposition to a broad-based business tax as a new source of revenue for funding the Superfund.²⁵⁰ President

lected under the Act, asking for further information from facilities at the request of the states or another party at its own discretion, requesting information from the EPA on the health effects of chemicals that the EPA has agreed to designate a trade secret and ensuring this information is available to the public, and taking civil action against facility owners or operators who fail to comply with reporting requirements. 42 U.S.C. §§ 11001(a), 11022(e), 11044, 11046(a)(2) (1988 & Supp. V 1993). A state also designates an agency to receive the annual TRI reports. 42 U.S.C. § 11023(a) (1988 & Supp. V 1993).

The LEPCs initially must develop chemical emergency response plans. 42 U.S.C. §§ 11001(c), 11003 (1988 & Supp. V 1993). They receive emergency release and hazardous chemical inventory forms submitted by local facilities and must make this information available to the public upon request. 42 U.S.C. §§ 11004(b)(1), 11021(a)(1)(A), 110021(c), 10022(a)(1)(A), 11022(e), 110044 (1988 & Supp. V 1993). The LEPC must establish and publicize procedures for handling these requests. 42 U.S.C. § 11001(c) (1988 & Supp. V 1993). The LEPCs can request additional information from facilities for their own planning purposes or on behalf of others. LEPCs can undertake civil actions against facilities if they fail to provide information under the Act. 42 U.S.C. § 110046(a)(2) (1988 & Supp. V 1993).

Fire departments traditionally participate in emergency planning and training. Under EPCRA they receive information about hazardous chemicals from facilities within their jurisdiction. This information is in the form of either MSDSs and lists of MSDS chemicals and hazardous chemical inventory forms, and is the same data submitted to LEPCs and SERCs. 42 U.S.C. §§ 11021(a)(1)(C), 11022(a)(1)(C) (1988 & Supp. V 1993).

248. *Thomas Considers Using Superfund Money for Right-to-Know*, Rep. Dingell Objects, 17 Env't Rep. (BNA) 1491 (Jan. 2, 1987) [hereinafter *Thomas Considers*]. The EPA was planning to use \$16 million of the 1987 Superfund appropriations for the right-to-know law "and requested \$19.5 million for fiscal 1988 as part of the Reagan Administration budget request." *Thomas Halts Plan to Use Superfund Money to Carry Out Right-to-Know Program*, 17 Env't Rep. (BNA) 1779, 1780 (Feb. 20, 1987) [hereinafter *Thomas Halts*].

249. Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499. EPCRA constituted Title III of Pub. L. No. 99-499. The other titles constituted the Superfund Amendments and Reauthorization Act of 1986.

250. *Reagan Signs Superfund Renewal Bill Despite Doubts About New Broad-Based Tax*, 17 Env't Rep. (BNA) 955 (Oct. 24, 1986). The 1986 reauthorization increased funding "for the cleanup program from \$1.6 billion under the original 1980 law to \$9 billion . . ." *Id.* The original law utilized special taxes on chemicals and on petroleum to raise \$1.4 billion, with the rest to come from congressional appropriations. *Id.* For the reauthorized law, Congress had adopted a

Reagan philosophically opposed broad-based business taxes to fund pollution programs and he was urged by his OMB, Treasury and Energy departments to use his veto.²⁵¹ Reagan bowed to strong public support for passage of the Superfund reauthorization in deciding not to veto it.²⁵²

The EPA had indicated that it would go ahead with its plan to divert Superfund monies to the right-to-know program unless Congress objected.²⁵³ Key Congressional figures immediately attacked the Reagan Administration's intention to use Superfund revenues to fund the right-to-know program as a violation of the Superfund legislation. This disapproval operated on the premise, as one congressional aide put it, that the Superfund program and the right-to-know program were two separate laws, "like night and day or apples and oranges."²⁵⁴ Democratic Representative John Dingell, the powerful

surtax on business to provide \$2.5 billion for the Superfund, in addition to petroleum and chemical taxes, general revenues and other sources. *Id.* The surtax was levied "on businesses with an annual income in excess of \$2 million, as determined [by] using" an alternative minimum taxable income tax that imposed a tax of \$12 on every \$10,000 earned. *Id.* (citing H.R. 3838, a tax revision bill which accompanied Superfund).

251. *Reagan Signs Superfund Renewal Bill Despite Doubts About New Broad-Based Tax*, 17 *Env't Rep.* (BNA) 955 (Oct. 24, 1986).

252. *Id.*

253. *Thomas Considers*, *supra* note 248, at 1491. The then head of EPA, Lee M. Thomas, stated that the "EPA's Office of General Counsel [had] informed him that 'we can use Superfund resources to fund the program [Right-to-Know] at least in fiscal 1987 and possibly further unless Congress disagrees with us.'" *Id.*

254. *Thomas Considers*, *supra* note 248, at 1491 (noting that the Congressional aide to Representative Dennis Eckart of Ohio contended that Congress had meant the right-to-know program to be funded separately because it was not part of the Superfund cleanup program and that EPCRA "is a free-standing statute").

See also *A.L. Laboratories, Inc. v. EPA*, 826 F.2d 1123 (D.C. Cir. 1987). The company sought judicial review in the Circuit Court of Appeals of the District of Columbia of an EPA regulatory action to list "bacitracin as an 'extremely hazardous substance' under" EPCRA. *Id.* The company contended that jurisdiction to review the EPA's action rested in this federal circuit court under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), which exclusively confers jurisdiction for regulatory review upon the D.C. Circuit Court of Appeals. *Id.* at 1124 (citing 42 U.S.C. § 9613(a) (1982)).

A.L. Laboratories argued that EPCRA was an amendment to CERCLA and that therefore jurisdiction to review EPA's action rested under CERCLA. *Id.* CERCLA, otherwise known as the Superfund Act, was enacted in 1980 to control toxic chemical disposal and the environmental damage from hazardous substances releases. Comprehensive Environmental Response, Compensation and Liability Act of 1980, Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended in scattered sections of 26 U.S.C. and 42 U.S.C., primarily codified in 42 U.S.C. §§ 9601-9675 (1982 & Supp. IV 1986)). In 1986 Congress enacted the Superfund Amendments and Reauthorization Act (SARA) which amended the original Superfund Act. Pub. L. No. 99-499, 100 Stat. 1613 (1986) (codified in scattered sections of titles 10 and 15 of U.S.C.). EPCRA was enacted as Title III of SARA. Pub. L. No. 99-499, §§ 300-330, 100 Stat. 1613, 1728-58 (codified in 42 U.S.C. §§ 11001-11050 (Supp. IV 1986)). The EPA maintains that EPCRA is a free-standing law, wholly separate from CERCLA, and the Circuit Court agreed. *A.L. Laboratories*, 826 F.2d at 1124-25.

chairman of the House Energy and Commerce Committee, stated that he was "mystified" by the move, called it a "serious mistake," and noted that Congress intended EPCRA be funded by its own congressional appropriations and that the Superfund could not be treated as a "slush fund" to fund other EPA responsibilities.²⁵⁵

Dingell had been pivotal in the passage of the Superfund legislation and he indicated that he would seek congressional appropriations specifically for EPCRA.²⁵⁶ The EPA alleged it had legal authority to divert the Superfund money to EPCRA, but quickly backed off when Dingell and others in Congress showed irritation.²⁵⁷ An apparent deal was struck in which the EPA backed off from treating the Superfund as a continuing source of funds for the right-to-know program, in return for a one-time congressional approval for transfer of Superfund monies for the first year of EPCRA's operation in 1987.²⁵⁸

Funding continues to be a persistent problem for states and local governments in administering the emergency planning and response activities of EPCRA.²⁵⁹ Fire departments and other emergency responders have long complained that they lack the training and equipment for emergency response and that this jeopardizes the safety and health of the public, the workers at the facilities, and the

The court found the legislative history of EPCRA clearly showed that EPCRA was not merely an amendment to CERCLA but an independent act. *Id.* at 1124-25 (noting that EPCRA was originally introduced as a separate bill but was later incorporated into SARA; citing H.R. REP. NO. 99-962, 99th Cong., 2d Sess. 281). The court quoted the Conference Report as stating that it specifically adopted the House Amendment that EPCRA was to be established "as a free-standing title, not amending CERCLA." *Id.* at 1125 (quoting H.R. REP. NO. 99-962).

Since EPCRA did not provide for jurisdiction in the D.C. Circuit Court of Appeals, the court dismissed the A.L. Laboratories petition for review of the EPA's regulatory action to list bacitracin as an extremely hazardous substance. The court agreed with the EPA that since EPCRA did not contain a provision conferring jurisdiction upon it for regulatory review, that jurisdiction rested with a federal district court under the general jurisdiction statute for regulatory review. *Id.* at 1124 (citing 28 U.S.C. § 1331 (1982)).

255. *Thomas Considers*, *supra* note 248, at 1491. One of Dingell's aides said that taking Superfund money to fund the right-to-know program would be bad precedent since the EPA "would be taking money from an account [that] was specifically intended to support another program that needed [the funds]." *Thomas Halts*, *supra* note 248, at 1780. An aide for another congressman observed that if the EPA used the Superfund money for the right-to-know program, then it could just as easily use it for clean air, clean water or any other program it wished. *Thomas Considers*, *supra* note 248, at 1491. See also *President's Budget Proposal Would Provide \$2 billion in Water Act Construction Grants*, 17 *Env't Rep.* (BNA) 1531, 1532 (Jan. 9, 1987).

256. *Thomas Halts*, *supra* note 248, at 1779. Dingell also had headed the House-Senate conference committee that resolved differences between the two chambers over Superfund legislation during 1986. *Id.*

257. *Thomas Considers*, *supra* note 248, at 1491.

258. *House Panel Reports Supplemental Money Bill for EPA Sewer Grant, Right-to-Know Programs*, 17 *Env't Rep.* (BNA) 2087 (Apr. 10, 1987)

259. *State Officials See Problems Ahead in Meshing State, Federal Right-To-Know Laws*, 17 *Env't Rep.* (BNA) 2131-32 (Apr. 17, 1987).

emergency responders.²⁶⁰ LEPCs and fire departments particularly lack financial support, both from the federal government and from their own states.²⁶¹

Lack of funding has had a significant effect on the willingness and ability of states to engage in outreach efforts to help the public to use and understand the TRI data.²⁶² Neither the EPA nor Congress has been supportive of direct funding to state and local governments to carry out their EPCRA responsibilities.²⁶³ LEPCs believe that both federal and state assistance is inadequate.

The absence of federal efforts to fund the states in carrying out EPCRA responsibilities contrasts with federal funding initiatives for other important federal pollution control legislation which mandates state participation.²⁶⁴ EPCRA authorized no more than "training grants" to the states, which were suspended by the Reagan Administration in 1988.²⁶⁵ The EPA initially proposed sharing the fines it received from enforcing EPCRA, but it probably lacked the authority to do so and did not follow through.²⁶⁶

260. *No Proper Training to Address Sites, Firefighters, Emergency Responders Say*, 24 Env't Rep. (BNA) 148 (May 21, 1993).

261. Alair MacLean & Paul Orum, PROGRESS REPORT: COMMUNITY RIGHT-TO-KNOW 13 (July 1992) (A report issued by OMB Watch and Working Group on Community Right-to-Know, which consists of numerous local, state and national environmental groups.) [hereinafter PROGRESS REPORT]. See also *Virginia Planning Groups Surveyed by VPI Found Capable of Developing Response Plans*, 19 Env't Rep. (BNA) 2265 (Feb. 17, 1989).

262. UNITED STATES GENERAL ACCOUNTING OFFICE, REPORT TO CONGRESS, TOXIC CHEMICALS: EPA'S TOXIC RELEASE INVENTORY IS USEFUL BUT CAN BE IMPROVED 36-37 (June 1991) (GAO/RCED-91-121) [hereinafter GAO REPORT].

263. *Aide Asserts Additional Funds Needed to Fully Carry Out Emergency Planning Law*, 19 Env't Rep. 247 (June 24, 1988) [hereinafter *Aide Asserts*] (reporting on remarks of the majority associate counsel for the Senate Environment and Public Works Committee to a National Governors' Association Conference).

264. For example, President Reagan's proposed 1990 EPA budget called for \$79 million for state grants to enforce hazardous waste regulations, \$8 million in a three-year state grant program to mitigate radon pollution, \$1.2 billion in sewage treatment construction grants for states, and \$17.4 million to support state efforts to control ozone and carbon monoxide pollution. *\$4.9 Billion Requested for EPA in Fiscal 1990 Budget*, 19 Env't Rep. (BNA) 1827, 1828-29 (Jan. 13, 1994) [hereinafter *\$4.9 Billion Requested*].

265. Section 305 of EPCRA authorized \$5 million for training programs, but limited the grants to no more than eighty percent of the state or local costs and required the balance be funded from non-federal sources. 42 U.S.C. § 1105(a)(2) (1988 & Supp. V 1993). See *Aide Asserts*, *supra* note 263, at 274 (reporting Senate committee counsel calling for restoration of training grants by Congress); *\$4.9 Billion Requested*, *supra* note 264, at 1831 (noting the fiscal 1990 Reagan budget had not requested funding for emergency training grants to states and local governments).

266. *EPA Developing Strategy That May Use States, Citizens to Help Enforce EPCRA*, 18 Env't Rep. (BNA) 1818-19 (Dec. 4, 1987) (noting an EPA official conceding that under EPCRA, penalties are supposed to go to the federal treasury). It is questionable whether penalties the federal government collects under EPCRA can be directly diverted to state and local governments. It is generally understood that federal penalties for violations of pollution control statutes are paid directly to the federal treasury. Like most federal environmental statutes, EPCRA is

President Reagan signed EPCRA into law. His last budget before leaving office proposed \$4.9 billion for the EPA. The EPCRA program was proposed to receive only \$21 million of that amount.²⁶⁷ The EPA's actual spending to carry out its EPCRA responsibilities have been relatively modest ever since.²⁶⁸ Environmentalists have long complained that EPCRA has not been adequately funded by the federal government.²⁶⁹

2. State and Local Funding

States as well have had problems funding EPCRA responsibilities. At least thirty-two states provide no funding to local communities for LEPC activities, and the emergency response planners in these places often must rely upon donations of equipment to do their work.²⁷⁰ Only slightly more than half the states have reported legislative appropriations for their SERCs.²⁷¹

The funding that the states do provide is fragile. For example, California, which comprises one-fifth of the nation's population and was one of the first states with right-to-know legislation that preceded

modeled after early environment legislation like the Clean Water Act, which is generally regarded as permitting federal penalties to be turned over to the United States Treasury. See *Middlesex County Sewerage Auth. v. National Sea Clammers Ass'n*, 453 U.S. 1, 4 n.3 (interpreting the Clean Water Act and stating that "[c]ivil penalties under the Act are payable to the U.S. Treasury"). See also SENATE COMM. ON PUBLIC WORKS, REPORT ON FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1971, S. REP. NO. 414, 92 Cong., 2d. Sess. 80 (reprinted in 1972 U.S.C.C.A.N. 3668, 3675) ("It should be noted that any penalties imposed would be deposited as miscellaneous receipts . . ."). See generally Marcia R. Gelpe & Janis L. Barnes, *Penalties in Settlements of Citizen Suit Enforcement Actions Under the Clean Water Act*, 16 WM. MITCHELL L. REV. 1025, 1028 (1990); Lauren Mileo O'Sullivan, Comment, *Citizen Suits Under the Clean Water Act*, 38 RUTGERS L. REV. 813, 819 (1986); Jeffrey G. Miller, *Private Enforcement of Federal Pollution Control Laws, Part II*, 14 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10063, 10079 (February 1984); Robert F. Blomquist, *Rethinking the Citizen as Prosecutor Model of Environmental Enforcement Under the Clean Water Act: Some Overlooked Problems of Outcome Independent Values*, 22 GA. L. REV. 337, 389 (1988).

267. \$4.9 Billion Requested, *supra* note 264, at 1831.

268. Between fiscal years 1988 and 1990, EPA spent approximately \$40 million to implement the TRI program, increasing yearly expenditures from \$8 million to \$19 million. GAO REPORT, *supra* note 262, at 13-14.

269. *Coalition Advocates Greater Public Role in Controlling Hazards of Toxic Chemical Use*, 23 *Env't Rep. (BNA)* 1112-13 (July 31, 1992).

270. PROGRESS REPORT, *supra* note 261, at 13 (A report issued by OMB Watch and Working Group on Community Right to Know, which consists of numerous local, state and national environmental groups). Another source, reporting on an EPA survey conducted in Spring of 1990, indicates that states provided a mere \$1,319,204 to LEPCs. See *Status Report—Emergency Planning*, available in RTK-NET, Entry No. 1941 (April 25, 1991). Seven states reported that they fund LEPCs; thirty-nine states reported that they did not fund their LEPCs. *Id.*

271. See *Status Report—Emergency Planning*, available in RTK-NET, Entry No. 1941 (April 25, 1991). In a survey conducted by the EPA in 1990, eighteen states reported providing no appropriations for SERCs, twenty-six reported providing funding and the rest provided incomplete information. *Id.*

the federal law,²⁷² had funding for its right-to-know program threatened by a poor economy and budget shortfall.²⁷³ Several states, such as Missouri, where legislative appropriations have not been adequate to administer right-to-know legislation, have turned to imposing new industry fees to support EPCRA activities.²⁷⁴

E. Enforcement Nothing to Fear

EPCRA has not given rise to a great wave of government and citizen enforcement and litigation. What *has* happened is that there is more to fear from noncompliance than enforcement and subsequent substantial punitive results.

1. Noncompliance

The EPA has characterized the TRI, which annually compiles information on the release of toxic chemicals by manufacturing facilities, as one of the "cornerstones" of EPCRA.²⁷⁵ If this is true, that cornerstone is somewhat cracked.

Significant TRI reporting undercompliance has continually plagued EPCRA from its inception. The EPA revealed that of the

272. See Smith, *supra* note 182, at 1153, 1154 n.8 (1989) (citing Cal. Adv. Legis. Serv. 558 (Deering)); CAL HEALTH & SAFETY CODE §§ 25,500-25,541 (West Supp. 1989); CAL. LAB. CODE §§ 6360-6399.5 (West 1989); CAL. ADMIN. CODE tit. 8, § 5194 (1985).

273. *California Budget Threatens Right-to-Know Program*, 23 Env't Rep. (BNA) 1165 (Aug. 7, 1992); *Firms Should Plan to Include More Chemicals in TRI Emissions Reporting by 1994, EPA Says*, 24 Env't Rep. (BNA) 358 (June 25, 1993).

274. *State Chemical Inventory Fee Legislation Expected to Bolster Right-to-Know Efforts*, 23 Env't Rep. 774 (July 10, 1992). Missouri enacted fee legislation in 1992 and expected to raise as much as \$1 million annually. Its intention was to resurrect the state's right-to-know program. The legislation requires fees for companies that file chemical inventory reports. A business can pay up to \$10,000 in fees. The law sets fees for facilities, except gas stations, that include a \$100 annual fee, an additional twenty dollar fee for each listed hazardous or extremely hazardous chemical after the first three, and up to a \$10,000 cap for each facility. Fees for gas stations are capped at fifty dollars. Sixty-five percent of the funds are to be distributed to LEPCs, twenty-five percent to the Missouri SERC and ten percent to fire departments for emergency training. *Id.* Georgia imposes a \$500 fee on companies filing chemical inventory forms and a \$1000 fee in 1994 on companies filing a TRI form, to go up to \$1500 in 1995 and thereafter. *Legislation Creates New Hazardous Waste Fee, Charges Companies Required to File EPCRA Forms*, 24 Env't Rep. (BNA) 2113 (Apr. 15, 1994). Florida funds its EPCRA program by fees based on the number of employees at a facility, with fees ranging from \$25 to \$2000. *Florida Urged to Keep EPCRA Fee Structure*, 25 Env't Rep. (BNA) 544 (July 22, 1994). West Virginia provides for a fee system and local grant program to implement EPCRA. Fees include a \$100 maximum fee per facility for emergency planning notification and chemical inventory reporting, including a twenty percent surcharge for failure to meet filing deadlines. *Governor Signs Title III Legislation to Codify Federal Right-to-Know Requirements*, 20 Env't Rep. (BNA) 127 (May 12, 1989). As of 1991, the National Governors' Association reported eighteen states had EPCRA fee laws. PROGRESS REPORT, *supra* note 261, at 13 n.22. *But see All Funding Eliminated by Agency for Right-to-Know Programs in State*, 20 Env't Rep. (BNA) 805 (Sept. 8, 1989).

275. 1987 TRI REPORT, *supra* note 195, at vii.

nearly 30,000 companies it believed were subject to the TRI reporting in 1987, the first year for EPCRA reporting, more than one in three companies, or around 10,000, failed to report.²⁷⁶ The percentage of facilities required to report under the TRI program, but which have not reported, has consistently hovered around the thirty percent range ever since.²⁷⁷ Almost four years after the passage of EPCRA, the EPA admitted enforcement was a problem for the TRI.²⁷⁸

The quantity of data lost due to nonreporting is unknown but could be substantial, with one estimate speculating that in TRI reporting's first year, up to ninety-five percent of the total emissions escaped reporting.²⁷⁹ In some manufacturing sectors, compliance appears to be particularly bad.²⁸⁰ The rate of noncompliance is worse in some states than in others.²⁸¹

276. GAO REPORT, *supra* note 262, at 50 (citing an EPA study published in 1990 which examined the first year for TRI reporting, which was 1987, and indicating that thirty-four percent of the facilities that were supposed to report did not). See also *Title III Filings Suggest Underreporting; Enforcement to Focus on Non-Filers, Elkin Says*, 19 Env't Rep. (BNA) 399 (July 22, 1988) (showing that the EPA conceded the significant underreporting for the toxic chemical release reports required in 1988).

277. Even though more than 23,000 companies filed for the 1990 toxic release inventory, the EPA estimated that this may be only about sixty-seven percent of the facilities that should be filing. David Hanson, *Toxic Release Inventory Data Show Steady Drop in Emissions*, CHEMICAL ENGINEERING NEWS 13, 15 (June 15, 1992). See also *Industrial Non-Notifiers Targeted by EPA, Regions Add Creative Efforts, Officials Report*, 23 Env't Rep. (BNA) 1419, 1420 (Sept. 18, 1992); *Report Says Relatively Few Companies Join Voluntary Effort to Cut Chemical Emissions*, 23 Env't Rep. (BNA) 1507 (Oct. 2, 1992); *Most Toxic Chemicals Released in U.S. Concentrated in Few States, From Few Plants*, 21 Env't Rep. (BNA) 1146 (Oct. 12, 1990).

Non-reporting or false reporting of EPCRA's requirements is part of a larger problem of the reporting and record-keeping transgressions across the spectrum for other federal environmental laws and one which the Clinton Administration EPA has characterized as serious criminal violations which raise questions about the integrity of the entire regulatory system. *More Agents, New Enforcement Programs Will Increase Prosecutions, Agency Says*, 24 Env't Rep. (BNA) 1956-57 (Mar. 18, 1994) (reporting an EPA assistant administrator for enforcement and compliance noting that reporting and record-keeping requirements are not just "busy work forms" but that violations show companies are not keeping track of what they discharge into the environment and are often quite serious); see also *Industrial Non-Notifiers Targeted by EPA, Regions Add Creative Efforts, Officials Report*, 23 Env't Rep. (BNA) 1419, 1420 (Sept. 18, 1992) (describing the Bush era EPA which indicated that companies failing to file required reports or whose reporting is inadequate can expect agency enforcement action).

278. *Manufacturers' Releases of Toxics in 1988 9 Percent Less Than in Previous Year, EPA Says*, 20 Env't Rep. (BNA) 2006 (Apr. 27, 1990).

279. Of thirty-nine state environmental agencies the GAO surveyed in 1991 concerning non-reporters, estimates of non-reporting ranged from zero percent in North Dakota to eighty-three percent in Pennsylvania. GAO REPORT, *supra* note 262, at 3.

280. See, e.g., *EPA Region II Cites Eight Facilities for Failing to File Required EPCRA Reports*, 19 Env't Rep. (BNA) 1151 (Oct. 7, 1988) (reporting a low rate of compliance for toxic chemical release reporting from the manufacturing sectors of chemical products, publishers, and bookbinders).

281. GAO REPORT, *supra* note 262, at 50.

Undercompliance also afflicted other portions of EPCRA. The law required communities, as represented by their LEPCs, to submit emergency response plans by October 17, 1988.²⁸² About forty percent of 3808 LEPCs required to submit these plans failed to meet this deadline, with great variation in compliance across the nation for better or worse.²⁸³

The interest groups who have been concerned about EPCRA undercompliance have primarily blamed the EPA for the problem. Congress and the environmental community were among the first to show concern and find reasons for low rates of industry, state and local compliance.²⁸⁴ They placed a substantial part of the blame for inadequate local emergency planning compliance on the EPA's conflicting policy position: on the one hand, that the states bear primary responsibility for enforcing this area of the legislation, and on the other hand, refusing to provide adequate funds to the states and local governments for carrying out their emergency planning duties.²⁸⁵ The EPA's implementation and enforcement of toxic chemical release reporting has been faulted by critics as inadequately funded.²⁸⁶

The most complete and convincing assessment of underreporting can be found in a 1990 General Accounting Office (GAO) study which focused upon significant problems in the EPA's enforcement of the TRI program.²⁸⁷ The GAO regarded most non-reporting as unintentional and concentrated among small and medium size manufacturing facilities who were unaware of the reporting requirement.²⁸⁸

However, the GAO criticized the EPA for inadequate enforcement efforts concerning the TRI non-reporting and found them partly to

282. 42 U.S.C. § 11003 (1988 & Supp. V 1993).

283. *About 60 Percent of Local Planning Groups Meet Deadline for Submitting Plans, EPA Says*, 19 Env't Rep. (BNA) 1287 (Nov. 4, 1988). New Hampshire expected to receive plans from only fifteen of its 234 LEPCs. *Id.* However, all of the LEPCs in North Dakota and Washington were expected to comply with the October 17, 1988 statutory deadline. *Id.* Rural areas tended to be less likely to meet the deadline for the local emergency response plans than urban areas. *Id.*

284. *Stronger Commitment Needed to Carry Out Requirements of EPCRA, Lautenberg Claims*, 19 Env't Rep. (BNA) 183-84 (June 3, 1988).

285. *Id.* In a hearing of the Senate Environment and Public Works Subcommittee, the subcommittee chairman noted that the Reagan Administration requested and received the \$5 million emergency training grants to states as authorized by EPCRA for fiscal 1987 and 1988, but did not request funds for fiscal 1989. At the hearing, state and local agencies and a representative of the National Wildlife Foundation urged the EPA to provide more assistance to states and localities to help carry out EPCRA. *Id.*

286. *Id.*

287. GAO REPORT, *supra* note 262.

288. *Id.* at 51-52.

blame for this problem.²⁸⁹ The GAO faulted the EPA for its inefficient strategies to identify non-reporters.²⁹⁰ The GAO contended that the EPA did not screen facilities before undertaking inspections and that the failure to do so led to noncompliance.²⁹¹ The GAO agreed with the EPA's concern over the failure of EPCRA to grant it explicit authority to inspect facilities for compliance,²⁹² unlike other federal pollution control statutes.²⁹³

The GAO found the EPA slow to take enforcement action even after conducting inspections and finding facilities were not reporting the TRI releases.²⁹⁴ Moreover, the GAO noted that the EPA was slow in resolving the few complaints it did initiate.²⁹⁵ The GAO determined that the EPA's delays in issuing civil complaints were key reasons why so few enforcement cases were resolved.²⁹⁶ The GAO stated that delays in the EPA's settlement process also contributed to a backlog of enforcement cases.²⁹⁷

The GAO not only found fault with the EPA's enforcement against non-reporters, but also with the EPA's failure to undertake enforcement against late reporters of emission data, which numbered in the thousands.²⁹⁸ At the time of the GAO report, the EPA simply had not devised a policy for taking enforcement action against late reporters. It is evident that the EPA dedicated scant resources to the

289. *Id.* at 4, 49-61.

290. *Id.* at 49, 52-55.

291. *Id.* GAO found a direct link between the procedures used to target inspections by the EPA regional offices and the regions' success in identifying non-reporters. It noted that the likelihood of finding a non-reporter was three times greater in the EPA regions that screened facilities and gave them advance notice of inspections. *Id.* at 53-54.

292. *Id.* at 55.

293. *See, e.g.,* Toxic Substances Control Act, 15 U.S.C. § 2610 (1994); Comprehensive Environmental Response, Compensation and Liability Act (Superfund), 42 U.S.C. § 9604(e) (1988 & Supp. V 1993); and Clean Air Act, 42 U.S.C. § 7414 (1988 & Supp. V 1993).

294. GAO REPORT, *supra* note 262, at 55. As of March 1990, all of the EPA's regions had conducted 1199 inspections. According to the GAO, the EPA had issued only 209 civil complaints from these inspections. *Id.* at 53, 55.

295. *Id.* Of the 209 complaints EPA brought as of March 1990, only sixty-eight, or one-third, were resolved. *Id.*

296. *Id.* at 56. It was the EPA's policy to issue a civil complaint against non-reporters within 180 days after an inspection. The GAO found that several EPA regions frequently failed to conform with this policy. *Id.* at 56-57.

297. *Id.* at 57 (referring to the fact that EPA had settled only sixty-eight of the 209 complaints it issued against non-reporters.)

298. *Id.* at 55. The EPA was taking enforcement action against non-reporters that submitted TRI reports after an inspection. But the EPA had not determined what enforcement action, if any, to take against facilities that submitted late reports without having been inspected. EPA data revealed that more than 4200 facilities submitted over 11,000 reports for their 1988 release after the July 1, 1989 deadline. At least 3400 of the reports were ninety or more days late, and 2268 emission data forms from 941 facilities were more than 180 days past due. *Id.* at 58.

early enforcement of the TRI reporting, providing only two full-time staff members for this purpose in each of its regions.²⁹⁹

Government enforcement of environmental laws requires the ability to investigate, and this, in turn, is dependent upon adequate inspection authority. The EPA very early on conceded this to be a hole in EPCRA enforcement capability because the legislation does not expressly authorize either the EPA or the states to enter and inspect facilities that are suspected to be out of compliance with the law's reporting requirements.³⁰⁰ The EPA believed that it had strong implicit inspection authority under the toxic chemical release reporting provision of section 313 because the reports were sent directly to the EPA.³⁰¹ However, for this provision and the other EPCRA reporting requirements, the EPA indicated that it might have to rely upon other federal laws to conduct inspections.³⁰² It indicated that information gathered by states under their own laws could be used in an EPA enforcement action under sections 311 and 312 for hazardous chemical reporting and that close cooperation between the states and the EPA was needed to accomplish this.³⁰³

2. EPA Judicial and Administrative Enforcement

Fear over frequent federal enforcement and heavy judicial and administrative penalties so far has not turned into reality.³⁰⁴ When compared with the scale and penalties associated with federal

299. EPA Guidance on EPCRA Section 313 Details Two-Part Enforcement Strategy, 18 Env't Rep. (BNA) 2372 (March 25, 1988). The EPA appeared to approach regional staffing for EPCRA more as a venture in civic service than as a serious, professional undertaking worthy of the agency investing its own personnel. Each EPA region hired or planned to hire for enforcement two or three retired persons, albeit technically qualified, through the American Association of Retired Persons. *Id.*

300. *Creative Approaches May Be Needed for EPCRA Enforcement, Officials Say*, 19 Env't Rep. (BNA) 340 (July 8, 1988) [hereinafter *Creative Approach*]. The EPA has also complained that EPCRA does not provide it with other explicit and standard investigatory powers, such as subpoena and warrant authority. Letter from Office of Policy, Planning and Evaluation, U.S. Environmental Protection Agency, to Richard Hembra, Director of Environmental Protection Issues, U.S. General Accounting Office (May 15, 1991) (contained in GAO REPORT, *supra* note 262, at 77, 82 (providing comments and response to draft GAO report)). The EPA has indicated that it has been successfully using the guidelines for inspections set out by the Supreme Court in *Marshall v. Barlow's, Inc.*, 436 U.S. 307 (1978) (upholding a challenge to a warrantless OSHA inspection, but providing guidelines for conducting consensual inspections).

301. *Creative Approaches*, *supra* note 300, at 340.

302. *Id.* The EPA indicated that if facilities challenged its authority to inspect under section 313, it would look to other federal laws, particularly TSCA. *Id.* It would rely upon TSCA, CERCLA and the Clean Air Act to gain admission to facilities to investigate violations of other sections of EPCRA. *Id.* See also GAO REPORT, *supra* note 262, at 55.

303. *Creative Approaches*, *supra* note 300, at 340.

304. See Pender, *supra* note 65, at 81, 86 (contending that the EPA had "unveiled a new and ambitious enforcement scheme for the 1990s").

enforcement of other environmental laws, EPCRA has a long way to go.

The first TRI reports were due on July 1, 1987. By this date 19,278 manufacturing facilities submitted 74,152 individual chemical reports.³⁰⁵ Nearly a year and half later the EPA issued its first complaints for failures to submit toxic release information against a mere twenty-five companies,³⁰⁶ a seemingly inconsequential number given the huge number of facilities covered by EPCRA. This was an unimpressive first effort by the EPA at enforcement.

The EPA estimates that ninety-five percent of its enforcement actions under all environmental laws result in settlements.³⁰⁷ EPCRA enforcement appears to follow this overwhelming tendency toward settlement.³⁰⁸ EPCRA violators are inclined to settle because there is little incentive for them to litigate: the costs of furnishing the required reports and notifications are relatively low compared with potential penalty assessments.³⁰⁹ The EPA has shown an increasing tendency to accept settlements that allow companies to undertake pollution control measures in lieu of hefty fines.³¹⁰

Federal enforcement of EPCRA has covered all the reporting requirements.³¹¹ The typical EPCRA penalty ranges from several

305. 1987 TRI REPORT, *supra* note 195, at 1.

306. *EPA Fines 42 Companies \$1.65 Million, Cites Failure to Report Toxic Discharges*, 20 ENV'T. REP. (BNA) 496 (June 30, 1989) (reporting EPA proposed \$1.5 million in penalties and indicating the highest fine submitted in this first round of enforcement was \$721,000 against Inland Steel). See also *Complaints Issued Against 25 Firms for Failing to Submit Section 313 Reports*, 19 ENV'T REP. (BNA) 1782 (Dec. 30, 1988); *Decision Against Furniture Maker by ALJ is First Such Ruling Under EPCRA*, 19 ENV'T REP. (BNA) 2608 (Apr. 14, 1989) (reporting the first decision by an EPA administrative law judge under EPCRA; the violator being one of the twenty-five firms against which the EPA brought suit for failing to submit toxic release forms).

307. *Criminal Cases, Fine Collections Rise in 1993, EPA Says in Report on Enforcement*, 24 ENV'T REP. (BNA) 1516 (Dec. 17, 1993).

308. See, e.g., *Fine Settles Community Right-to-Know Charges*, 23 ENV'T REP. 2960 (Mar. 12, 1993) (reporting BP Oil agreed to pay a \$162,000 fine to settle an EPA administrative action for failure to report accidental release of an extremely hazardous substance).

309. Adam Babich, *Community Right-to-Know: Cost-effective Enforcement at the Local Level*, J. ENVTL. HEALTH 327, 329 (July/Aug. 1989). This is provided that a reasonable settlement proposal is made to the violator. *Id.* The costs of coming into compliance and moderate monetary penalties is relatively low compared to the potential penalty assessments under EPCRA, which range from \$10,000 to \$75,000 per day. *Id.* There are no caps on the total penalty for which a facility may be liable for not reporting toxic release information.

310. *New EPA Enforcement Policy to Expand Search for Incomplete, Inaccurate TRI Data*, 23 ENV'T REP. (BNA) 1276, 1277 (Aug. 28, 1992).

311. *General Chemical Fined \$65,625 by EPA*, 24 ENV'T REP. (BNA) 1084 (Oct. 8, 1993) (reporting that a company was fined for violations of emergency notification requirements of chemical releases); *Penalties Proposed Against Four Companies for Alleged Violations of Right-To-Know Act*, 24 ENV'T REP. (BNA) 1012 (Oct. 1, 1993) (reporting penalties totaling \$169,280 proposed against four New England companies for failure to submit MSDS forms and chemical inventory forms for several chemicals); *Chlorine Leak Leads to Fine*, 20 ENV'T REP. (BNA) 1147 (Nov. 3, 1989) (reporting that Champion International will not contest a \$20,000 fine levied

thousand to several hundreds of thousands of dollars.³¹² EPCRA follows the EPA pattern for other federal environmental laws where most enforcement is via administrative action rather than criminal or civil judicial actions.³¹³ The EPA acknowledges that a penalty is likely to be higher in a judicial case than in an administrative case.³¹⁴

against the paper company for a violation of section 304 of EPCRA for a chlorine leak from a Maine plant it failed to report to state and local officials); *Plastics Manufacturer Fined for Reporting Violation*, 21 Env't Rep. (BNA) 1262 (Nov. 2, 1990) (reporting that a plastic manufacturer agreed to pay the EPA a penalty of \$34,650 for failing to submit MSDS information and emergency and hazardous chemical inventory forms). See also *Plastics Maker Agrees to EPCRA Fine*, 21 Env't Rep. (BNA) 1287 (Nov. 9, 1990); *In re Seekonk Lace Company*, No. EPCRA-I-90-1007, contained in *Consent Decrees Regarding EPCRA or Pollution Prevention*, available in RTK-NET, Entry No. 224, July 1, 1991 (consent order imposing a \$15,000 penalty by company as settlement of violation of EPCRA hazardous chemical reporting requirements); *Massachusetts Firm Ordered to Pay EPCRA Fine*, 20 Env't Rep. (BNA) 1581 (Jan. 12, 1990) (reporting that the EPA administrative court ordered All Regions Chemical Labs, Inc. to pay \$89,840 for violating emergency release notification requirements of EPCRA); see also *Massachusetts Firm Assessed First Penalty for Violating EPCRA Section on Notification*, 19 Env't Rep. (BNA) 1251 (Oct. 28, 1988) (reporting that the EPA assessed the first fine for failure of All Regions Chemical Labs to provide emergency notification about the release of chlorine, which forced 6,000 residents living within a mile of the facility to be evacuated); *Failure to File Section 313 SARA Reports Leads to Proposed Fines for Seven Companies*, 20 Env't Rep. (BNA) 1422 (Dec. 15, 1989) (reporting that the EPA proposed fines ranging from \$17,000 to \$126,000 and totaling \$363,000 for five companies for failure to file toxic release reports); *Chlorine Leak Leads to Fine*, 20 Env't Rep. (BNA) 1147 (Nov. 3, 1989) (reporting a \$20,000 EPA fine against a paper company for failing to report chemical leak at a Maine facility); *Plastics Firm Faces EPCRA Penalty*, 21 Env't Rep. (BNA) 828 (Aug. 24, 1992) (reporting that the EPA proposed a \$59,000 penalty against a South Carolina rubber and plastics manufacturer for failure to report toxic release information); *Facility Improvements Allowed in Lieu of Penalties*, 21 Env't Rep. (BNA) 164 (May 11, 1990) (reporting that a Pennsylvania manufacturer agreed to undertake pollution prevention projects as part of a toxic emissions non-reporting settlement with the EPA in which a \$64,000 possible penalty would be lowered to \$1,000 if reductions are achieved for the chemical); *New Jersey Firms Face EPCRA Fines*, 20 Env't Rep. (BNA) 1785 (Feb. 16, 1990) (reporting that the EPA proposed \$107,000 in penalties against two companies for failure to file TRI reports); *Illinois Firm Agrees to Pay EPCRA Fine*, 20 Env't Rep. (BNA) 1785 (Feb. 16, 1990) (reporting that the EPA originally proposed \$51,000 in fines against companies for failure to file TRI report but ultimately agreed to a \$43,000 payment).

312. *EPA Fines 42 Companies \$1.65 Million, Cites Failure to Report Toxic Discharges*, 20 Env't Rep. (BNA) 496 (June 30, 1989) (reporting proposed fines ranging from \$5000 to \$118,000 sought by the EPA against companies for failure to report annual toxic releases); *Complaints Filed Against 23 Companies for Alleged Right-to-Know Law Violations*, 21 Env't Rep. (BNA) 441 (July 6, 1990) (reporting the EPA administrative complaints against twenty-three companies for violations of non-TRI requirements of EPCRA, which propose fines ranging from \$6600 to \$247,500).

313. For instance, in 1993, the EPA reported that of its 2110 enforcement actions, 1614, or seventy-five percent, were administrative penalty actions. *Criminal Cases, Fine Collections Rise in 1993, EPA Says in Report on Enforcement*, 24 Env't Rep. (BNA) 1516 (Dec. 17, 1993). The remainder included 140 criminal cases, 338 civil cases and 18 actions to enforce existing consent decrees. *Id.* See also *Criminal Fines Rise Sharply in 1992, Civil Penalties Also Up, Report Says*, 24 Env't Rep. (BNA) 260 (June 11, 1993) (stating that the EPA National Penalty Report for 1993 indicated that ninety percent of its enforcement actions were administrative cases in 1993 compared to ten percent that were civil or criminal judicial cases).

314. Ninety percent of EPA's civil enforcement are administrative actions, but sixty-three percent of its civil penalties are from judicial proceedings. *Record \$61 Million in Civil Penalties*

EPCRA is not only an environmental law which the EPA can enforce but it also can be and is used by the EPA as a tool to enforce other federal environmental laws. The TRI has been used by the EPA as one of the main tools to spot violators of the hazardous waste dumping requirements of the Resource Conservation and Recovery Act.³¹⁵ The EPA has announced that it will use the TRI as an investigatory instrument, taking information from the inventory, along with its other databases, to target hazardous waste sites for inspections.³¹⁶

Standing alone, some of the federal enforcement statistics for EPCRA would seem at first glance to be impressive. The EPA has so far tabulated enforcement statistics for EPCRA's TRI program from calendar year 1988, the baseline for enforcement numbers, to 1993.³¹⁷ During this period, the EPA issued 832 complaints for TRI violations, almost all for non-reporting, undertook 4064 inspections and proposed penalties in excess of \$40 million.³¹⁸ There are examples of significant EPA monetary settlements of EPCRA actions.³¹⁹ The EPA has consistently pursued some degree of monetary penalties for

Collected in Fiscal 1990, EPA Reports, 22 Env't Rep. (BNA) 129 (May 17, 1991) (reporting that in fiscal 1990, the EPA undertook 1263 administrative enforcement actions and 137 judicial cases but that it collected \$38.5 million from judicial actions and \$22.8 million from administrative cases); *Criminal Fines Rise Sharply in 1992, Civil Penalties Also Up, Report Says*, 24 Env't Rep. (BNA) 260, 261 (June 11, 1993) (noting that an EPA 1992 enforcement study showed the highest administrative penalty for an environmental enforcement action was \$900,000, brought for violations of RCRA and TSCA, whereas the highest judicial penalty obtained was \$6.7 million, brought for Clean Air Act violations).

315. David Hanson, *EPA Widens Net to Catch Small Violators*, CHEMICAL ENGINEERING NEWS 15, February 24, 1992.

316. *Congressional and Administrative Outlook for Environmental Issues in 1994*, 24 Env't Rep. (BNA) 1660, 1673 (Jan. 21, 1994). See also *Industrial Non-Notifiers Targeted by EPA, Regions Add Creative Efforts, Officials Report*, 23 Env't Rep. (BNA) 1419, 1420 (September 18, 1992) (noting that the TRI is used by the EPA to identify facilities for regulation and enforcement, set priorities, develop pollution prevention strategies, and craft settlements for other environmental laws).

317. 1992 TRI REPORT, *supra* note 67, at A-20. 1987 was the first year industry was required to report TRI releases, but the EPA uses 1988 as the baseline year in comparing TRI data across the several years in which TRI has been reported because of concerns about the data quality of industry's submissions for the first year. *Id.* at 155. Therefore, for tabulating compliance and enforcement statistics for the TRI program, the EPA also uses 1988 as its baseline year. *Id.* at A-20.

318. 1992 TRI REPORT, *supra* note 67, at A-20.

319. See *Company Settles EPCRA Reporting Complaint*, 21 Env't Rep. (BNA) 1691 (Jan. 16, 1991) (reporting a Massachusetts plastics and rubber manufacturer will pay \$142,800 to settle an EPA administrative enforcement action for violations of TRI reporting, the largest settlement as of 1991 in New England under EPCRA).

EPCRA violations.³²⁰ According to the EPA, EPCRA's TRI program is the "largest regulatory net ever cast."³²¹

Despite the fact that EPCRA's coverage extends more widely than other environmental laws,³²² its enforcement is minuscule compared to theirs. EPCRA enforcement, measured in terms of the collection of penalties and fines, constitutes less than one percent of total EPA enforcement of its various environmental statutes.³²³ In 1994, the EPA collected a record \$165.2 million in fines, \$128.4 million in civil penalties and \$36.8 in criminal fines for all the environmental statutes it enforces.³²⁴ EPCRA fines reached a record year in 1994 as well, with the EPA announcing \$26 million in proposed fines and \$10 million in collected fines.³²⁵

However, the typical EPCRA penalty, which ranges from several thousand to several hundred thousand dollars, is low compared to the multi-million dollar amounts which occasionally occur with other federal environmental laws.³²⁶ EPCRA settlements pale in comparison with those achieved under other federal environmental

320. See, e.g., *Five Companies Cited for Reporting Violations*, 21 Env't Rep (BNA) 1501 (Nov. 30, 1990) (reporting three New Jersey and two New York firms cited for not reporting annual toxic emissions for a total of \$117,000 in penalties).

321. *Industrial Non-Notifiers Targeted by EPA, Regions Add Creative Efforts, Officials Report*, 23 Env't Rep. (BNA) 1419, 1420 (Sept. 18, 1992).

322. *Id.*

323. *Criminal Fines Rise Sharply in 1992, Civil Penalties Also Up, Report Says*, 24 Env't Rep. (BNA) 260 (June 11, 1993) (reporting the results of the 1992 EPA National Penalty Report, which indicated the Clean Water Act program led in civil penalties assessed, with twenty-nine percent of total civil penalties, followed by the stationary air program with twenty-five percent of the total, with civil penalties from RCRA, CERCLA and TSCA accounting for slightly more than forty-six percent, and all other programs, which included EPCRA, accounting for less than one percent). See also *All-Time Records for EPA Criminal Referrals, Civil Penalties Cited in Enforcement Report*, 23 Env't Rep. (BNA) 404 (May 22, 1992) (describing an EPA report ranking the agency programs in descending order of civil and criminal penalties assessed which places EPCRA behind other EPA programs and indicating TRI penalty collection ranked ahead of other EPCRA sections).

324. *New Records for Actions, Fines Set by EPA Despite Restructuring of Program*, 25 Env't Rep. (BNA) 1501 (Dec. 2, 1994).

325. *Emergency Planning*, 25 Env't Rep. (BNA) 1773 (Jan. 13, 1995).

326. See, e.g., *Court Fines Bethlehem Steel \$6 Million, Imposes Record Penalty for RCRA Violations*, 24 Env't Rep. (BNA) 845, 846 (Sept. 10, 1993) (reporting a record fine by the federal district court in *United States v. Bethlehem Steel Corp.*, DC N. Ind., No. H-90-326, 8.31/93, for steel company's long-standing violation of federal hazardous waste laws); *Criminal Fines Rise Sharply in 1992, Civil Penalties Also Up, Report Says*, 24 Env't Rep. (BNA) 260 (June 11, 1993) (reporting a \$6.7 million judicial penalty under the Clean Air Act). The largest environmental criminal penalty ever imposed is \$125 million and the largest single civil monetary settlement in history is \$900 million, both arising out of the Exxon Valdez oil spill in Alaska. *Department of Justice Announces Record \$2 Billion Year for Environmental Enforcement*, available in RTK-NET, Entry No. 2810, October 29, 1992.

laws.³²⁷ EPCRA enforcement actions and penalty collections by the EPA, while seemingly significant in themselves, appear to make up only a small portion of total EPA enforcement and penalties.³²⁸ Proposed penalties of the kind the EPA touts for EPCRA can be misleading because the EPA has been criticized for actually settling cases for low amounts.³²⁹ Moreover, though the EPA has announced significant settlements,³³⁰ it reportedly has a checkered record in pursuing and collecting the penalties agreed upon in settlements.³³¹

The EPA proclaimed soon after EPCRA's enactment that enforcement actions should be aimed primarily at larger companies because they present the greatest threat to public health.³³² They also present the greatest sources for large penalties. Reports of EPCRA enforcement actions do not reveal that the EPA actually followed up on a policy which targeted larger companies.

The EPA's enforcement of EPCRA has steadily improved during the Clinton Administration. In mid-1993, the EPA announced the wholesale issuance of administrative actions against thirty-seven companies for alleged non-reporting of TRI data, with nearly \$2.8 million in potential fines.³³³

The Clinton Administration contends that resources in the EPA have been shifted over the last several years toward beefing up investigative staff for discovering and prosecuting environmental crimes like non-reporting and false reporting under federal laws.³³⁴

327. See, e.g., *Louisiana-Pacific to Pay \$11 Million to Settle Charges of Clean Air Violations*, 24 Env't Rep. (BNA) 179 (May 28, 1993) (reporting a settlement between a wood paneling company and the EPA that was the second largest civil penalty at the time for violation of a federal environmental law and the largest for air pollution violations, consisting of a \$11.1 million fine and the required installation of \$70 million in state-of-the-art pollution control equipment).

328. The EPA reported that it collected \$133 million in fines in 1993: \$103.8 million in civil penalties and \$29.5 million in criminal fines. *Criminal Cases, Fine Collections Rise in 1993, EPA Says in Report on Enforcement*, 24 Env't Rep. (BNA) 1516 (Dec. 17, 1993).

329. *Criminal Fines Rise Sharply in 1992, Civil Penalties Also Up, Report Says*, 24 Env't Rep. (BNA) 260, 261 (June 11, 1993) [hereinafter *Criminal Fines*] (reporting a study by the director of the George Washington University Environmental Crimes Project which noted that half of the EPA settlements resulted in penalties of less than \$5000).

330. See *supra* notes 319-20.

331. *Criminal Fines, supra* note 329 (discussing accusation of report by George Washington University Environmental Crimes Program). But see *Report Alleges Justice Department to Prosecute Environmental Crimes Vigorously*, 23 Env't Rep. (BNA) 1710, 1711 (Oct. 6, 1992) (reporting the Justice Department's rebuttal of the report).

332. *EPA Developing Strategy That May Use States, Citizens to Help Enforce EPCRA*, 18 Env't Rep. (BNA) 1818 (Dec. 4, 1987).

333. *Criminal Fines, supra* note 329, at 263.

334. *More Agents, New Enforcement Programs Will Increase Prosecutions, Agency Says*, 24 Env't Rep. (BNA) 1956-57 (March 18, 1994) (reporting the EPA administrator for enforcement and compliance stating that the agency has and will continue to increase the number of investigators to discover and prosecute environmental crimes). The Clinton Administration now

Nevertheless, criminal enforcement of EPCRA is monumentally unimpressive. By late 1994, the federal government secured only one criminal prosecution under EPCRA.³³⁵

The EPA enforcement of EPCRA has a long way to go for the "largest regulatory net ever cast"³³⁶ to catch the big fish caught by other environmental laws. In sum, while the EPA's EPCRA regulatory net may be wide, it appears not to be cast out often enough to make any significant catches.

3. State EPCRA Enforcement

With the exception of toxic chemical release reporting under section 313, most of EPCRA's mandates are supposed to be carried out by states and localities. Despite this fact, EPCRA does not mirror other federal laws in which the vast majority of environmental enforcement actions and highest total of penalty collections are on the state level rather than the federal level.³³⁷ The secondary role that states play in EPCRA enforcement compared to the federal government is opposite the usual primary enforcement role they play for other environmental laws where responsibilities are delegated to them.³³⁸

States have shown forbearance in enforcing community right-to-know and pollution prevention legislation.³³⁹ States may bring citizen suits against EPCRA violators but these actions appear rare.³⁴⁰ Most

declares it views criminal prosecution of reporting violations of environmental laws as generally insufficient. *Id.* (reporting the EPA's director of criminal enforcement noting that state agencies have not been aggressive in criminal environmental investigation and enforcement).

335. *In First Criminal Case Under EPCRA, Utility Pleads Guilty to Reporting Charge*, 25 Env't Rep. (BNA) 1307 (Nov. 4, 1994)

336. *Industrial Non-Notifiers Targeted by EPA, Regions Add Creative Efforts, Officials Report*, 23 Env't Rep. (BNA) 1419, 1420 (Sept. 18, 1992).

337. According to the EPA's head of compliance policy and planning in 1992, seventy percent of all enforcement actions of federal environmental laws were done by the states; and these states collected fines in the aggregate which were "orders of magnitude" higher than those collected by the federal government. *Criminal Fines*, *supra* note 329.

338. *Criminal Cases, Fine Collections Rise in 1993, EPA Says in Report on Enforcement*, 24 Env't Rep. (BNA) 1516-17 (Dec. 17, 1993). In 1993, the EPA undertook a record 2110 enforcement actions, compared to 10,000 actions taken by the states. *Id.* As another example, in 1991, the New York State Department of Environmental Conservation initiated 2328 civil cases, finalized 1524 consent orders, and obtained sixty-eight convictions against environmental law violators. *New York Reports Lawsuits, Settlements, Convictions*, 22 Env't Rep. (BNA) 535 (June 28, 1991). The state obtained \$15 million in penalties and responsible parties agreed to spend \$277 million in remedial projects. *Id.*

339. *See No Fines For Late Pollution Plans in New Jersey*, 25 Env't Rep. (BNA) 430 (June 24, 1994).

340. *Illinois Asks Federal District Court to Fine Food Company for EPCRA Violations*, 19 Env't Rep. (BNA) 2608 (Apr. 14, 1989) (reporting the citizen suit brought by the State of Illinois

states have come to rely upon the EPA to handle enforcement of the key TRI program.³⁴¹ Only thirteen states have statutory authority to take enforcement action against companies that do not file TRI reports; and generally, states with enforcement authority fail to exercise it.³⁴² The EPA acknowledges that state and local governments can bring enforcement actions against companies that do not comply with the TRI reporting requirement law, but they usually fail to do so.³⁴³ In fact, the states have begged the EPA to take on this responsibility.³⁴⁴

The EPA does not generally have high regard for state enforcement of environmental programs.³⁴⁵ In EPCRA's early days, the EPA declared that the development of working relationships between the EPA and the state emergency response commissions were central to EPCRA enforcement.³⁴⁶ However, the EPA has not appeared to have gone much further than merely stating this recognition.

Implementation and enforcement of EPCRA by the states is dependent upon, in large part, the states' desires and abilities to fund their EPCRA responsibilities. Budget-cutting by state governments across the nation calls into question the prospect of effective and sustained state enforcement of EPCRA.³⁴⁷ In sum, facilities do not have to generally fear state enforcement of EPCRA.

4. Toxic Torts and Citizen Suit Enforcement of EPCRA

Citizen suits did not become the significant EPCRA enforcement mechanism that industry feared,³⁴⁸ nor has the legislation come to be

against a food distributor for failure to notify the state and local authorities about the presence of extremely hazardous materials on the site).

341. *States Call for EPA Action Against Companies That Fail to Report TRI Data*, 23 Env't Rep. (BNA) 3015 (Mar. 19, 1993).

342. *Id.*

343. *Id.*

344. *Id.*

345. The EPA assistant administrator for enforcement and compliance assurance, who is the chief enforcement official of the agency, has criticized the most aggressive form of environmental enforcement by states, namely criminal enforcement. He noted that "[s]ome states have good programs" but they have not been "racing each other" to begin criminal investigations. *More Agents, New Enforcement Programs Will Increase Prosecutions*, Agency Says, 24 Env't Rep. (BNA) 1956 (Mar. 18, 1994).

346. *EPA Issues Interim Enforcement Strategy on Reportable Releases, Emergency Notification*, 19 Env't Rep. (BNA) 1808 (Jan. 6, 1989).

347. See, e.g., *California Budget Threatens Right-to-Know Program*, 23 Env't Rep. (BNA) 1165 (Aug. 7, 1992) (reporting a sluggish economy and soaring deficit has caused California, the nation's most populous state, to consider budget cuts which threaten its community right-to-know program).

348. Pender, *supra* note 65; *Emergency Releases Most Likely Target of Initial Enforcement*, State Official Says, 18 Env't Rep. (BNA) 2241 (Feb. 26, 1988); *TSCA Confidentiality Claims May be Lost With Community Right-to-Know Law*, ACS Told, 17 Env't Rep. (BNA) 2098 (Apr. 10, 1987)

an aid to toxic tort litigation. Most of the modest number of citizen suits have been brought by relatively small environmental organizations.

The OMB Watch, the nation's only public interest group that principally focuses on EPCRA, predicted during the early stages of the law that community and environmental groups were not likely to engage in a great deal of citizen suits.³⁴⁹ It recommended that citizen suit litigation be used selectively to set precedents in key areas.³⁵⁰ This has not in fact occurred.

The best known national environmental groups have not extensively relied upon EPCRA citizen suit enforcement. An overwhelming number of citizen suits have been undertaken by lesser-known national environmental organizations and regional groups. Environmental organizations reported to have instituted citizen suits include the Atlantic States Legal Foundation (ASLF) located in Buffalo, New York, Environmental Action and Trial Lawyers for Public Justice headquartered in Washington, D.C., New Jersey Public Interest Research Group, Citizens for a Better Environment in Wisconsin and Illinois, the Ecology Center of Michigan, and the

(reporting a law professor warning that the TRI reports filed with the EPA each year will include evidence of discharges in violation of other environmental laws and that these may be used by environmental or citizen groups in citizen suits).

349. *Public Interest Group to Start Road Show to Inform Public of Emergency Planning Act*, 19 Env't Rep. (BNA) 277 (June 24, 1988).

350. *Id.*

Delaware Valley Toxic Coalition of Philadelphia.³⁵¹ Few citizen suits have been brought by individuals.³⁵²

The first citizen suit against a corporate violator was filed in July 1990 by the ASLF.³⁵³ Very little reported case law has been generated by EPCRA.³⁵⁴ In general the sparse EPCRA case law reflects the small

351. See Pender, *supra* note 65, at 86 (contending that the EPA had "unveiled a new and ambitious enforcement scheme for the 1990s"). See also *EPCRA Citizen Suit Filed in Minnesota*, 23 Env't Rep. (BNA) 1953 (Dec. 4, 1992) (citing *Citizens for a Better Environment v. Taylor Corp.*, DC Minn. No. 3-CIV-92-785, Dec. 30, 1992, a citizen suit alleging failure by a Minnesota company to report toxic releases from 1987 to 1991); *Settlement Reached in EPCRA Reporting Case*, 23 Env't Rep. (BNA) 2734 (Feb. 19, 1993) (citing *Citizens for a Better Environment v. Taylor Corp.* and reporting company agreeing to settle by making payment of \$40,000 to four environmental planning and education programs); *Companies Sued For Right-To-Know Violations*, 21 Env't Rep. (BNA) 2237 (Apr. 12, 1991) (citing *Trial Lawyers for Public Justice v. IR International Inc.*, DC EVA. No. 91-CV-00134, March 14, 1991, a citizen suit brought by Trial Lawyers on behalf of Environmental Action and Natural Resources Defense Council for the alleged failure of a Virginia company to file toxic release inventory reports for three years); *Michigan Group Sues Firm for Late Reporting Seeks Safety Efforts, Cut in Toxic Chemical Use*, 22 Env't Rep. (BNA) 1350 (citing *Ecology Center v. Johnson Inc.*, DC E. Mich., No. 91-CV-60304-AA, the citizen suit brought for alleged failure by the Michigan company to report yearly releases of 1.5 million pounds of a persistent toxic chemical during four years); *Delaware Valley Toxics Coalition v. Kurz-Hastings, Inc.*, 813 F. Supp. 1132, 1141 (E.D. Penn. 1993) (reporting citizen suit by the Delaware Valley Toxics Coalition, a Philadelphia based environmental group, which was joined in the litigation by the Philadelphia Project on Occupational Safety and Health, a coalition of nearly 200 trade unions). See also *Right of Citizens to Sue Under EPCRA Upheld as Judge Refuses to Dismiss Suit*, 23 Env't Rep. 2944 (Mar. 12, 1993).

352. *Williams v. Leybold Technologies, Inc.*, 784 F. Supp. 765 (N.D. Cal. 1992). The suit was brought by an employee of a manufacturing plant for its failure to submit MSDs pursuant to section 311(a)(1) of EPCRA, 42 U.S.C. § 11021(a)(1) (1988 & Supp. V 1993), for hazardous nickel and nickel compounds. *Id.* at 766-67; *Keslick v. Pennsylvania Parks & Recreation, C.A. No. 93-3384*, 1993 U.S. Dist. LEXIS 13133 (E.D. Pa. Aug. 25, 1993) (dismissing *pro se* suit for failure to properly show jurisdiction).

353. *Atlantic States Legal Foundation v. Com-Cir-Tek, Inc.*, No. CIV-90-772C (W.D.N.Y. filed July 25, 1990) (*cited in* Pender, *supra* note 65, at 86 n.23). The New York company agreed to a settlement where it would pay \$2500 and set up a pollution prevention program in lieu of a \$50,000 fine for alleged violations of sections 311, 312 and 313 of EPCRA. *Fine Exchanged for Pollution Prevention Plan*, 22 Env't Rep. (BNA) 535 (June 28, 1991).

354. See *Atlantic States Legal Found., Inc. v. Eastman Kodak Co.*, 809 F. Supp. 1040 (W.D.N.Y. 1992), *aff'd* 12 F.3d 353 (2d Cir. 1993) (affirming district court summary judgment against the ASLF and holding that the discharge of EPCRA listed substances does not violate permits issued under the Clean Water Act); *A.L. Lab., Inc. v. EPA*, 674 F. Supp. 894 (D.D.C. 1987) (holding the EPA's refusal to remove the antibiotic bacitracin and phthalate esters from the section 302 list of extremely hazardous chemicals to be arbitrary, capricious and contrary to EPCRA); *A.L. Lab., Inc. v. EPA*, 826 F.2d 1123 (D.C. Cir. 1987) (holding the court of appeals lacked jurisdiction under EPCRA to review listing of bacitracin); see also *EPA Removes Bacitracin, Other Chemicals from List of Extremely Hazardous Substances*, 18 Env't Rep. (BNA) 1954 (Dec. 25, 1987); *Appeals Court Rejects Company Petition to Remove Bacitracin from Title III List*, 18 Env't Rep. (BNA) 1371 (Sept. 18, 1987); *Atlantic States Legal Found. v. Whiting Roll-Up Door Mfg.*, 772 F. Supp. 745 (W.D.N.Y. 1991) (holding EPCRA allows citizen suits for reporting violations that are not ongoing at the time the lawsuit is filed, that is, past violations); see also *Public Has Right to Sue Industries for EPCRA Violations*, 22 Env't Rep. (BNA) 1310 (Sept. 9, 1991); *EPCRA Allows Citizen Suits for Past Violations*, 22 Env't Rep. (BNA) 1384 (Sept. 27, 1991); *Atlantic States Legal Found. v. Buffalo Envelope*, 823 F. Supp. 1065 (W.D.N.Y. 1993) (holding that EPCRA does not violate separation of powers and appointments clause of Constitution)

degree of enforcement by government and citizens alike. Most of the case law has resulted from the citizen suits and the ASLF has initiated most of the citizen suits.³⁵⁵ The most active federal forum for citizen suits and all other EPCRA litigation has been the Western District of New York—possibly due to the Buffalo-based ASLF's location in this district.

The ASLF has achieved notable settlements and awards.³⁵⁶ Its victories include not only monetary penalties, but also court orders and settlement agreements which creatively require facilities to gather and report information over and above the minimum requirements of the statute and to contribute money, property or services to environmentally beneficial services, such as environmental groups or state and local bodies administering EPCRA.³⁵⁷ But EPCRA citizen

and reporting thresholds do not violate due process); *see also* Atlantic States Legal Found. v. Whiting Roll-Up Door Mfg., No. 09-CV-1109s, 1994 U.S. Dist. LEXIS 6071 (W.D.N.Y. March 23, 1994) (holding that EPCRA does not prevent plaintiffs in citizen suits from collecting attorney fees); *Citizen Groups May Recover Attorney Fees from Companies That Violate EPCRA*, Court Rules, 24 Env't Rep. (BNA) 2105 (Apr. 15, 1994); *Public Interest Groups Ask EPA Not to Back Amicus Brief to Limit EPCRA Citizens' Suits*, 22 Env't Rep. (BNA) 2672 (Apr. 3, 1992); Ohio Chamber of Commerce v. SERC, 597 N.E.2d 487 (Ohio 1992) (holding the SERC could require companies to submit detailed plant specific maps with chemical inventory reports); *see also* Ohio Supreme Court Upholds Mapping Rule, 23 Env't Rep. (BNA) 1482 (Sept. 25, 1992); All Regions Chemical Lab. v. EPA, 745 F. Supp. 76 (D. Mass. 1990) (denying the EPA's motions for a more definite statement in chemical company's challenge of the EPA administrative penalty for EPCRA violation).

355. By April of 1992, the ASLF had sent thirty notices of intent to sue to companies which they claimed violated EPCRA. *Public Interest Groups Ask EPA Not to Back Amicus Brief to Limit EPCRA Citizen Suits*, 22 Env't Rep. (BNA) 2672, 2673 (April 3, 1992). It developed twenty-one cases as a result. *Id.* The EPA pre-empted nine of the cases. *Id.* Of the remaining fifteen cases, ASLF settled nine. *Id.*

356. *See infra* note 357 and *supra* note 355.

357. For instance, in one settlement that ASLF secured in a citizen suit against a Wisconsin manufacturer for failure to submit toxic chemical release information, the company agreed to a \$50,000 credit for installing pollution control equipment, investigating pollution reduction options, and for "study[ing] toxics use reduction, pollution prevention, and waste minimization." *Wisconsin Manufacturer Settles Right-to-Know Case*, 23 Env't Rep. (BNA) 1165 (Aug. 7, 1992) (citing an order in Atlantic States Legal Found. v. Communications Prods. Corp., D.C. W. Wis. No. 92C-570S, July 31, 1992). The firm would pay the credited sum to the federal government if the projects were not completed. *Id.* The firm also was to make payments to two Wisconsin environmental groups, a county LEPC, and the federal government. *Id.* In a \$180,000 settlement secured in an ASLF citizen suit, a New York company agreed to pay a \$13,000 penalty to the federal government, \$30,000 to a county LEPC (\$20,000 of which was to fund a "pollution prevention and risk reduction seminar for Western New York"), \$15,000 to the state emergency management office, \$62,000 to two environmental organizations, \$50,000 to the joint United States and Canadian water quality programs relating to the Great Lakes, and \$10,000 to a local fire department. RTK-NET, Entry No. 4642 (October 13, 1993) (citing a consent decree in ASLF v. International Imaging Materials, Inc., (docket number omitted). *See generally* Adam Babich, *Community Right-to-Know: Cost-Effective Enforcement at the Local Level*, 52 J. ENVTL. HEALTH 327, 328 (July/Aug. 1989). Supplemental Environmental Projects (SEPs) is the term the EPA uses to describe projects that facilities may undertake, as part of the settlement process, to protect or restore the environment through pollution prevention, waste minimization, and/or a decrease

suit settlements and awards of the ASLF, or anyone else, are far below the stratospheric level achieved in citizen suits brought under other environmental laws.³⁵⁸

V. FEAR OF EMBARRASSMENT

Only a few industry members anticipated what they should have feared most about EPCRA. This was the Jeffersonian ideal of the power of information in democracy.³⁵⁹ EPCRA started out as an obscure, minor environmental law. However, the TRI attracted much attention. The EPA and citizen groups, in their efforts to quell toxic emissions, have used information that the TRI reveals as a potent weapon.³⁶⁰

The TRI has spawned extensive grassroots agitation, numerous governmental and environmental organization reports, significant regulatory and legislative actions, major industry initiatives, and wider public consciousness about massive toxic releases and the need to reduce them. The TRI confirms the observation that more information on an important public issue tends to lead to public pressure which can lead to reform.³⁶¹ One commentator, referring to the TRI, stated it amounted to "regulation by information."³⁶² Another stated, perhaps more cleverly, that the TRI data has led to "regulation by embarrassment."³⁶³

A. *The First Shocking TRI Data*

in a natural resource use. 1992 TRI REPORT, *supra* note 67, at A-20. The EPA indicates that since fiscal year 1991, when it began to track SEPs, the agency has closed 152 civil complaints containing one or more SEPs for TRI violation cases. *Id.*

358. See, e.g., Alan McLean, *NWF Announces Largest Settlement in Clean Air Litigation*, available in RTK-NET, Entry No. 9709 (Feb. 2, 1995) (reporting the largest settlement in the twenty-five year history of the Clean Air Act, \$250 million, in a lawsuit filed by the National Wildlife Federation against the Copper Range Company for toxic pollution of Lake Superior; the award encompasses a new \$200 million smelter in compliance with the Clean Air Act, pollution reduction measures, and \$1.8 million in fines).

359. Thomas Jefferson stated that "if we think [the people are] . . . not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion." Letter from Thomas Jefferson to William Charles Jarvis (Sept. 28, 1820), reprinted in 7 WRITINGS OF THOMAS JEFFERSON 177, 179 (H. Washington ed., 1955), quoted in *Natural Resources Defense Council v. Nuclear Regulatory Comm'n*, 547 F.2d 633, 655 (D.C. Cir. 1976).

360. EPA head Carol Browner stated that "[t]he [TRI] inventory is among our most potent environmental weapons." David Hanson, *Toxic Release Inventory: Firms Make Strides in Cutting Emissions*, 71 CHEMICAL AND ENGINEERING NEWS 6 (May 31, 1993).

361. See Brad Knickerbocker, *Toxic Releases and the Right to Know*, CHRISTIAN SCIENCE MONITOR, Sept. 3, 1992, at 11.

362. Kevin J. Finto, *Regulation by Information Through EPCRA*, 4 NAT. RESOURCES & ENV'T. 13 (Wtr. 1990).

363. Mary Beth Regan, *An Embarrassment of Clean Air*, BUSINESS WEEK, May 31, 1993, at 34.

Every year the EPA issues a thick national report which compiles and summarizes the TRI data which it receives from manufacturers.³⁶⁴ The report analyzes which states and companies are releasing and transferring chemicals and the amounts and types of releases and transfers. The report also examines information on the prevention and management of toxic chemicals in waste and compares current data on toxic chemical releases and transfers with similar data from previous years.

The EPA released its first report in 1989. This report reviewed 1987, the first calendar year of reporting under the TRI.³⁶⁵ Prior to the EPA's first report, only a few environmentalists expected significant or revolutionary implications for EPCRA.³⁶⁶ A few industry members thought that EPCRA could become a public relations nightmare and advised manufacturers to gear up for damage control and put a good face on bad news.³⁶⁷ Those who expected the TRI data to have a stunning effect turned out to be oracles.

The country was shocked when the first national report revealed that manufacturers released more than twenty billion pounds of toxic chemicals into the environment in 1987.³⁶⁸ The EPA announced that these results were "startling"³⁶⁹ and "far higher than we thought was

364. See, e.g., Appendices 1-6. The EPA has issued five reports since 1989. See *infra* note 446. There is a two year lag between the reporting year for the TRI reports filed by industry and the EPA's national reports compiling the data. Thus, for instance, the first reporting year for industry submission of their TRI data was 1987. However, the EPA issued the national release report for the 1987 reporting year in 1989. See 1987 TRI REPORT, *supra* note 195.

365. 1987 TRI REPORT, *supra* note 195.

366. Referring to the July first deadline for manufacturers to report their toxic releases, Congressman James Florio of New Jersey, one of EPCRA's authors, stated that "[o]n July 4th, we celebrate our nation's independence. On July 1st, we celebrate our independence from environmental ignorance." OMB WATCH, USING COMMUNITY RIGHT TO KNOW: A GUIDE TO A NEW FEDERAL LAW 35 (1988). He predicted, "Those three little words—right to know—just might pack the punch we need to win the long fight against pollution." *Id.* at 36. In 1988 it was reported that the director of the EPA's Office of Toxic Substances called the TRI inventory "revolutionary." Fred Millar, *The Beginnings of Chemical Control*, 5 ENVTL. F. 26 (Sept./Oct. 1988).

367. See generally *Right-to-Know Chemical Data Both Boon, Burden to Defendants in Toxic Tort Lawsuits*, 20 Env't Rep. (BNA) 199, 199-200 (June 2, 1989); *Petroleum Industry Faces Problems in Complying With EPCRA, API Head Says*, 19 Env't Rep. (BNA) 303 (July 1, 1988); *Compliance With Right-to-Know Advised Although Payoff Is Not Immediately Obvious*, 18 Env't Rep. (BNA) 1035 (Aug. 14, 1987); *CMA Advises Firms to Go Beyond Compliance with Title III Mandates To Avoid Problems*, 18 Env't Rep. (BNA) 1327 (Sept. 11, 1987); *Prepare Now for Public's Questions on Emissions Data, EPA Official Recommends*, 18 Env't Rep. (BNA) 1561 (Oct. 16, 1987); *EPA Official Advises Industry to Begin Local Public Dialogue Before Releasing Data*, 17 Env't Rep. (BNA) 1799 (February 20, 1987); *Du Pont Chairman Sees Need to Build Consensus on 'Right Response' to Environmental Problems*, 17 Env't Rep. (BNA) 1227 (Nov. 21, 1986); Gene Matsumoto, *Confrontation or Compromise*, 5 ENVTL. F. 31 (Sept./Oct. 1988).

368. Pender, *supra* note 65, at 84-85.

369. *Data From EPCRA Emissions Reporting Called 'Startling' by Environmental Agency*, 19 Env't Rep. 2628, 2629 (Apr. 21, 1989) [hereinafter *Data From EPCRA*].

going to occur.”³⁷⁰ One of the principal authors of EPCRA, Senator Frank Lautenberg, Democrat from New Jersey, declared that the data was “staggering”³⁷¹ and showed that “we were assaulting the environment with toxic emissions into the air, water and ground.”³⁷²

The first national report revealed eye-opening data on the toxic releases and transfers into the air, land and water,³⁷³ the top releasing states,³⁷⁴ the substances,³⁷⁵ and the industry groups.³⁷⁶ In subsequent national reports, the EPA made it a practice to list the top releasing companies and facilities, disclosing huge releases and transfers for individual plants³⁷⁷ and parent companies.³⁷⁸ These reports

370. Philip Shabecoff, *Industrial Pollution Called Startling*, N.Y. TIMES, April 13, 1989, at D21.

371. *Data From EPCRA*, *supra* note 369, at 2629.

372. Shabecoff, *supra* note 370, at D21.

373. A total of 19,278 manufacturing facilities reported to TRI. 1987 TRI REPORT, *supra* note 195, at 8. The first national report broke down TRI releases according to five environmental mediums. Water: About 9.7 billion pounds of toxic chemicals were released into surface water in 1987, or about forty-three percent of all releases. *Id.* at 130. Ninety-five percent of the releases into water consisted of sodium sulfate, which the EPA was in the process of deleting from the section 313 list on the grounds that it did not meet the toxicity criteria. *Id.* at 85. Without sodium sulfate, about eight percent of all releases were into surface water. *Id.* at 83. Air: 2.7 billion pounds of toxic chemicals, or twelve percent of all releases, were released into the air. *Id.* at 109. Sixty-eight percent or, 1.8 billions pounds, were from point sources, while the remainder were fugitive emissions, such as evaporative losses and leaks. *Id.* Land: The reported releases to land on-site were nearly 2.5 billion pounds, eleven percent of all toxic releases, and most fell into the category of waste disposal. *Id.* at 171-73. Underground Injection: More than 3.2 billions pounds of toxic chemicals were injected into underground wells in 1987, fourteen percent of the total. *Id.* at 93. Discharges to publicly owned treatment works: 1.9 billion pounds of TRI chemicals, nine percent of the TRI total, were discharged into public sewage systems. *Id.* Transfers to other off-site facilities: 2.6 billion pounds of TRI chemicals, twelve percent of the total, were released from locations such as hazardous waste treatment facilities. *Id.* at 93, 215.

374. More than half of the 19,278 manufacturing facilities which reported to the TRI were located in 10 states. 1987 TRI REPORT, *supra* note 195, at 8. California had the largest number (1662) and the highest total TRI releases and transfers. In terms of total TRI releases and transfers, California was followed, in descending order, by Texas, Louisiana, Alabama, Michigan, Indiana, Ohio, Georgia, Mississippi, and Tennessee. *Id.* See also Appendicies 1-2.

375. Of the over 300 chemicals on the original TRI list, twenty-five chemicals accounted for ninety-four percent of all releases and transfers. 1987 TRI REPORT, *supra* note 195, at 18. In order of rank, they were sodium sulfate, aluminum oxide, hydrochloric acid, sulfuric acid, sodium hydroxide, ammonia, methanol, toluene, phosphoric acid, acetone, xylene, methyl ethyl ketone, 1,1,1-trichloroethane, copper, zinc compounds, dichloromethane, carbon disulfide, chlorine, ammonium nitrate, manganese compounds, nitric acid, zinc flume or dust, ethylene, and freon 113. *Id.*

376. In order of ranking, the top three industries, of the SIC Codes 20-39 required to report, were chemicals, paper products and primary metals. 1987 TRI REPORT, *supra* note 195, at 14-15. Together these industries were responsible for seventy-eight percent of all releases and transfers. *Id.* The chemical and allied products industry alone produced more than half of the TRI total for all industries, roughly 12.1 billion pounds. *Id.* Paper products and primary metals were the only other industries to report releases and transfers of over 1 billion pounds. *Id.*

377. The TRI national report for 1988 listed the top fifty facilities with the largest total releases and transfers and the top five facilities for each environmental medium. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, TOXICS IN THE COMMUNITY, 1988: NATIONAL

continued to show enormous toxic releases, transfers, and waste generation.³⁷⁹

A variety of groups have used the TRI data extensively. They can be roughly divided into environmental and citizen organizations and activists, governmental agencies and legislative bodies, the press, and industry. The TRI data has had a profound effect on all these groups.

B. Environmental and Citizen Organizations and Activists

The TRI data is relatively easy to obtain and use. While the facility preparing a TRI form is not required to provide a copy to a member of the public, states and the EPA, upon request, must make the TRI data release information available to the public.³⁸⁰ The TRI data is accessible to the public on a national computerized database, as well as by other means.³⁸¹ While relatively few individuals have utilized

AND LOCAL PERSPECTIVES (EPA 560/4-90-017) 61-62 (September 1990) [hereinafter 1988 TRI REPORT]. The top five facilities each reported more than 100 million pounds of toxic releases in 1988, and included an American Cyanamid factory in Westwego, Louisiana (176 million pounds), Shell Oil operations in Multorco, Louisiana (158 million pounds), a Du Pont facility in Beaumont, Texas (111 million pounds), the Amax Magnesium facility in Ooele, Utah (109 million pounds), and the Monsanto Company in Brazoria, Texas (103 million pounds). *Id.* For lists of the names and locations of top facilities in subsequent reporting years, see 1989 TRI REPORT, *supra* note 82, at 63; 1991 TRI REPORT, *supra* note 238, at 57; 1992 TRI REPORT, *supra* note 67, at 46; Appendicies 3-4, 6.

378. The TRI national report for 1988 data showed a pattern of concentration of toxic releases from a comparatively small number of companies; this continued to be shown in subsequent reports. The EPA's 1988 report showed that 338 facilities (fewer than two percent of all TRI facilities) operated by ten companies, contributed twenty-five percent (1.6 billion pounds) of the 1988 TRI total. 1988 TRI REPORT, *supra* note 377, at 171. Du Pont led the list, followed by Monsanto, American Cyanamid, Shell Chemical, BP America, Freeport Mcmoran, Amax, Allied Signal, Asarco, and Occidental Petroleum. *Id.* See 1989 TRI REPORT, *supra* note 82, at 66; 1991 TRI REPORT, *supra* note 238, at 58; 1992 TRI REPORT, *supra* note 67, at 49 (for lists of the names and locations of the top facilities in subsequent reporting years); Appendicies 3-4.

379. For example, the EPA national report for the 1991 TRI data revealed that industries generated nearly 3.8 billion pounds of waste containing TRI materials, in addition to 3.4 billion pounds of toxic releases, into the environment. 1991 TRI REPORT, *supra* note 238, at 15. EPA Administrator Carol M. Browner pointed out that the toxic waste generated was enough to "fill a line of tanker trucks that would stretch bumper-to-bumper half way around the world." Carol M. Browner, *Statement on '91 Toxics Release Inventory, available in* RTK-NET, Entry No. 4134 (May 25, 1993).

380. 42 U.S.C. §§ 11023(h), 11044 (1988 & Supp. V 1993).

381. The EPA makes this information public in a computerized "Toxics Release Inventory"—the first publicly accessible on-line environmental database ever mandated by federal law. 1992 TRI REPORT, *supra* note 67, at B-1. Accessing TRI data is easy. The EPA provides the data in a variety of common computer and hard-copy formats which are meant to ensure that everyone can easily use the information. *Id.* Over 4000 libraries have TRI data in their collections. *Id.* TRI is available on diskette, CD-ROM, magnetic tape and computer bulletin boards. *Id.* The EPA makes the data available on an on-line national computer database. *Id.* The EPA maintains user support services for TRI and other EPCRA data. *Id.* The TRI reports can be obtained from the states and the EPA. *Id.* There are many other routes for accessing TRI data. *Id.* The three main sources of on-line access to TRI data are the National Library of

EPCRA, environmental and public interest organizations use the law extensively.³⁸²

Environmental and public interest groups often perform the role of proxies for the environmental concerns of the public.³⁸³ Environmental organizations around the nation have formed a coalition based upon the right-to-know law and, in the spirit of the legislation, are connected via a computer network.³⁸⁴ These groups have become

Medicine (NLM) TOXNET System, the Integrated Risk Information System (IRIS), and the Right-to-Know Network (RTK-NET). *Id.* at B-2. The first two are operated by the federal government; the EPA provides TRI data. TOXNET provides user-friendly on-line searching for TRI data and IRIS contains health-risk assessment and adverse health effects information from the EPA. *Id.* RTK-NET is an on-line network and news group concerned with environmental issues, particularly matters arising from EPCRA. It is operated by OMB-Watch, a nonprofit public interest group that advocates for the public's right to know, and Unison Institute, a center for computer systems and software technology in the public interest. RTK-NET was used extensively in the preparation of this Article. For electronic media, TRI data is available in diskettes and magnetic tapes from the National Technical Information Service (NTIS) and two kinds of CD-ROM. *Id.* at B-3. TRI CD-ROM contains the national TRI reporting for all reporting years and can be obtained from NTIS, the Government Printing Office, the Federal Depository Libraries and the EPA Regional Offices. The NESE-DB (National Economic, Social and Environmental Data Bank) CD-ROM also includes TRI state data and national public data release files, along with other socio-economic data from over fifteen federal agencies. It is available from the Department of Commerce, NTIS, and selected federal depository libraries. For printed media, the EPA has provided a TRI information kit, detailed annual reports on TRI, microfiche for TRI, and facsimiles of TRI facility reports. *Id.* at B-3, B-4. The federal government has created three other databases and bulletin boards relevant to the TRI. TRI-FACTS complements environmental release data on TRI chemicals by providing information related to health, ecological effects, and the safety and handling of these chemicals, and is available on TOXNET and the TRI CD-ROM. *Id.* at B-4. The 313 ROADMAPS DATABASE is accessed through NTIS and was developed to assist TRI users in performing preliminary, site-specific exposure and risk assessments. *Id.* The Government Printing Office provides an electronic bulletin board with state specific TRI data. *Id.* The EPA provides telephone assistance services to help with TRI and EPCRA. The TRI-US Service provides general information about the TRI and access to data formats. The Emergency Planning and Community Right-to-Know Act Hotline provides regulatory, policy and technical assistance to federal agencies, local and state governments, the public and the regulated community. *Id.* at B-5. The EPA has also published guidance documents for using the TRI data. *Id.*

382. GAO REPORT, *supra* note 262, at 25.

383. *Id.*

384. Two dozen national groups and 1500 state and local groups are affiliated with the Working Group on Community Right-to-Know, a network of environmental and public interest groups. 1994 ON-LINE: THE RTK NET NEWSLETTER, Vol. 3, No. 4, Spring 1994, available in RTK-NET, Entry No. 5897 (August 15, 1994). These groups are some of the chief users of RTK-NET, which they employ to communicate with each other and the public over right-to-know and other environmental issues. US-PIRG is the host organization for the Working Group. *Id.* The Working Group uploads bi-monthly newsletters to the Newsletters section of RTK-NET and uses the network to communicate other notices of current activities. RTK-NET now provides on-line computer access to: the annual toxics release reports; a database of chemical accidents; facility Clean Water Act permits; summaries of Department of Justice suits against polluters; census data; and other environmental information. When the EPA calls for comments on environmental rules, environmentalists use the NET to communicate through e-mail—exchanging messages, documents and sample comments. The admin-

some of the most prolific users of TRI data.³⁸⁵ Environmental and public interest organizations have produced scores of secondary reports by using the TRI data. This data is directed towards educating the public and policy makers about toxic pollution issues and pressuring industry to reduce the generation of toxic substances.³⁸⁶ These reports have covered local, state,³⁸⁷ regional³⁸⁸, national³⁸⁹ and international³⁹⁰ settings, and polluters.

istrators of the computer network also gather information relevant to EPCRA and respond to other requests for information.

385. GAO REPORT, *supra* note 262, at 25.

386. *See id.* at 74-76 (listing thirty-one reports from environmental and public interest groups), and *infra* note 388 listing over 150 reports (cited in *Reports Using Toxics Release Inventory (TRI) Data*, available in RTK-NET, Entry No. 5962 (Sept. 10, 1984) [hereinafter *Reports*], consisting of a listing of nearly 200 published reports and other documents utilizing TRI data generated under EPCRA).

387. *See Reports, supra* note 386. *See, e.g.*, CALIFORNIA PUBLIC INTEREST RESEARCH GROUP, TOXIC HAZARDS IN LOS ANGELES COUNTY (Apr. 1989) (discussing "LA's toxic releases—which would fill an end-to-end stack of 55 gallon drums 110 miles high—in the context of toxics use reduction and the limits to risk assessment"); ROBERT HOGNER, COLLEGE OF BUSINESS ADMINISTRATION, FLORIDA INTERNATIONAL UNIVERSITY, FLORIDA'S TOXIC SOUP: TRACKING TOXIC TRENDS (outlining "Florida's toxic releases with charts for principle chemicals, companies, and counties"); CITIZENS FOR A BETTER ENVIRONMENT, TOXIC AIR POLLUTION IN ILLINOIS: AN ANALYSIS OF 1987 TOXIC RELEASE INVENTORY REPORTS (Feb. 1989) (examining "toxic emissions in Illinois, with a focus on air toxics"); GREENPEACE USA, TOXIC WASTE AND MORTALITY IN LOUISIANA'S CHEMICAL CORRIDOR (Nov. 1988) (comparing "the nation's highest concentrations of TRI releases to elevated local cancer and mortality rates"); CLEAN WATER ACTION, WATER POLLUTION CONTROL IN MAINE (Feb. 1994) (documenting "pollution problems in Maine and advocates that polluting industries bear a greater portion of the cleanup costs"); CLEAN WATER ACTION FUND/ECOLOGY CENTER OF ANN ARBOR/PIRG TOXIC ACTION PUBLIC INTEREST RESEARCH GROUP IN MICHIGAN, DANGER: TO THE OZONE LAYER IN MICHIGAN (July 1989) (documenting "the contribution of Michigan companies" to the ozone depletion crisis); CLEAN WATER FUND OF NORTH CAROLINA, PRELIMINARY FINDINGS FROM A STUDY OF THE UPPER FRENCH BROAD RIVER BASIN (Mar. 1991) (using "data from TRI and other sources [to] document serious toxic loadings into the Upper French Broad River, a potential drinking water supply for the Asheville-Buncombe county area"); SIERRA CLUB, APPALACHIAN REGIONAL OFFICE, TOXIC AIR POLLUTION IN VIRGINIA (Jan. 1990) (examining "state and federal air pollution regulations in the context of Virginia's 1987-88 air toxics data"); NATIONAL INSTITUTE FOR CHEMICAL STUDIES, WEST VIRGINIA SCORECARD [1991]: POLLUTION REDUCTION AND PREVENTION IN WEST VIRGINIA INDUSTRY (Jan. 1993) (presenting "statewide emissions data by industry, chemical, and area, with narrative information on individual chemical facilities' prevention and control technologies, facility contacts, and corporate goals").

388. *See Reports, supra* note 386. *See, e.g.*, CENTER FOR CLEAN PRODUCTS AND CLEAN TECHNOLOGIES, UNIVERSITY OF TENNESSEE KNOXVILLE, EVALUATION OF TRI RELEASES IN INDIANA, LOUISIANA, OHIO, TENNESSEE AND TEXAS (June 1993) (comparing the total releases and transfers for top states, industries, and chemicals, and developing a chemical hazard ranking method to assess potential hazards); CITIZENS FUND, POISONING THE GREAT LAKES: MANUFACTURERS' TOXIC CHEMICAL RELEASES (Apr. 1992) (compiling the TRI data for the Great Lakes Watershed and surrounding states to present top releases by chemical, health effects, release medium, facility, and industry with basic analysis and policy recommendations).

389. *See Reports, supra* note 386. *See, e.g.*, CITIZENS FUND, POISONS IN OUR NEIGHBORHOODS: TOXIC POLLUTION IN [STATE] (Oct. 1989) (using 1987 data and beginning an annual series of 50 state-specific reports which comprehensively presents each state's TRI releases by company, industry, county, zip code and toxicity); NATIONAL ENVIRONMENTAL LAW CENTER/ U.S. PUBLIC

Often following on the heels of the EPA's annual national TRI reports, environmental organizations have produced reports publicizing the names of top polluting facilities, industries, chemicals, and states in an effort to invite public and regulatory pressure for toxic substance reductions.³⁹¹ Some of these public interest reports have questioned the EPA and industry claims of concern and success for pollution prevention.³⁹² Reports using TRI data have been used to address one of the newest areas of environmental concern, environmental justice, which is concerned with the reputedly disproportionate burden for environmental and public health impacts borne by low income and minority communities.³⁹³

INTEREST RESEARCH GROUP, TOXIC TRICK OR TREATMENT: AN INVESTIGATION OF TOXIC DISCHARGES TO OUR NATION'S SEWERS (Oct. 1991) (targeting for reduction the half billion pounds of toxics dumped into public sewers in 1989, including discharges that sewer systems are not equipped to treat).

390. See Reports, *supra* note 386. See, e.g., FRIENDS OF THE EARTH, KNOW MORE TOXICS: WILL COMPANIES GIVE CITIZENS AROUND THE WORLD THE RIGHT TO KNOW? (July 1992) (involving request by environmental group to forty-three international chemical companies for TRI-equivalent data on overseas toxics releases, with only eleven providing data, despite widespread participation in voluntary "Responsible Care" and "33/50" programs).

391. GAO REPORT, *supra* note 262, at 25.

392. See Reports, *supra* note 386. See, e.g., CITIZENS FUND POISONS IN OUR NEIGHBORHOODS: TOXIC POLLUTION IN THE U.S., VOL. 1: NATIONAL OVERVIEW, VOL. 2: TOXIC WASTE IN THE STATES, ALABAMA - MICHIGAN, VOL. 3: TOXIC WASTE IN THE STATES, MINNESOTA - WYOMING (Nov. 1993) (comprising comprehensive volumes which examine total TRI releases across the country, pollution prevention activities, and potential health risks and including "pollution prevention report card" for top facilities); NATIONAL WILDLIFE FEDERATION, PHANTOM REDUCTIONS: TRACKING TOXIC TRENDS (Aug. 1990) (examining changes in EPA's 1987-88 national TRI reports for twenty-nine major dischargers, finding both real pollution prevention and "phantom" paper changes); U.S. PIRG, TRUST US, DON'T TRACK US (1992) (investigating the chemical industry's "responsible care" program and casting doubt on its motives and supposed accomplishments).

393. "Environmental racism" has recently become a major area of concern to environmental scholars and activists alike. Discussion and study has been directed at whether there is a relationship between socio-economic status, race and environmental degradation. See Vicki Been, *Analyzing Evidence of Environmental Justice*, 11 J. LAND USE & ENVTL. LAW 1 (1995). One major review of literature on the subject notes that while some researchers have found race the most important factor, others find it is class, and still others are unable to conclude one way or another. However, the preponderance of the evidence so far suggests that while obviously highly correlated with each other and difficult to disaggregate: (1) race and class have independent effects; and (2) race is the more important factor. Paul Mohai & Bunyan Bryant, *Environmental Racism: Reviewing the Evidence, in RACE AND THE INCIDENCE OF ENVIRONMENTAL HAZARDS: A TIME FOR DISCOURSE*. 163-76 (Bryant & Mohai eds., 1992).

For use of TRI data in studying environmental justice issues, see LAURETTA M. BURKE, CENTER FOR GEOGRAPHIC INFORMATION/ANALYSIS, UNIVERSITY OF CALIFORNIA SANTA BARBARA, ENVIRONMENTAL EQUITY IN LOS ANGELES (July 1993) (mapping significant relationships between race, income, and proximity to industrial toxic emissions in Los Angeles); CITIZENS FOR A BETTER ENVIRONMENT, RICHMOND AT RISK: COMMUNITY DEMOGRAPHICS AND TOXIC HAZARDS FROM INDUSTRIAL POLLUTERS (Feb. 1989) (analyzing toxics-release reports together with demographic data to reveal the disproportionate toxic burden borne by low income, minority citizens); INSTITUTE FOR ENVIRONMENTAL ISSUES AND POLICY ASSESSMENT, SOUTHERN UNIVERSITY, BATON ROUGE, MISSISSIPPI RIVER SOUNDINGS: ENVIRONMENTAL STRATEGIES FROM

One of the most important uses of EPCRA data by grass roots citizen and environmental groups has been to induce or compel companies and governmental bodies to mitigate or eliminate the generation, release, or impact of toxic substances. Environmental organizations have organized campaigns to publicize companies' TRI chemical releases.

EPCRA helped a citizen group in California convince IBM to phase out use of ozone depleting CFCs; was combined by a group of activists with two progressive state right-to-know laws to combat toxic exposure in Arcata; helped citizens in Richmond to demand that companies develop chemical accident prevention plans; empowered a citizens group in San Diego to advance a community planning and economic development proposal for land-use planning; and, in Contra Costa County, helped citizens convince the state to affirm local committees' right to obtain chemical hazard information for accident prevention.³⁹⁴ In Ohio, the TRI data provided the weapon for a citizen group from the town of Lima to obtain funding for the first state airborne toxic substances monitoring project; helped an Akron group to obtain BF Goodrich's commitment to a seventy percent reduction in toxic airborne emissions; and, in Cuyahoga County, resulted in companies turning to less dangerous chemicals to reduce hazards.³⁹⁵

In Texas, TRI data was used by a hunger striker to spotlight a major polluter and win recognition of new pollution concerns. EPCRA data was the basis for plume mapping that revealed a serious ammonia release danger in Cloverleaf, Texas.³⁹⁶ A Berlin, New Jersey citizen group used the TRI data to induce a local company to adopt a chemical hazard accident plan.³⁹⁷ In Asheville, North Carolina, the TRI data assisted in obtaining funding for a water treatment plant, and statewide data spurred the passage of airborne toxic substances

BATON ROUGE TO NEW ORLEANS (Nov. 1992) (using the TRI data to help characterize socio-economic and environmental conditions; this study launches a five-year program to reduce environmental risk along the Mississippi River corridor from Baton Rouge to New Orleans).

394. PROGRESS REPORT, *supra* note 261, at 5, 22. See also NITA SETTINA, CENTER FOR POLICY ALTERNATIVES, MAKING THE DIFFERENCE, PART II: MORE USES OF RIGHT-TO-KNOW IN THE FIGHT AGAINST TOXICS, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW SUBJECT: SEPTEMBER-OCTOBER 1991 WORKING GROUP ON CRTK NEWSLETTER, available in RTK-NET, Entry No. 2100 (Oct. 25 1991) [hereinafter RTK-NET Entry No. 2100].

395. PROGRESS REPORT, *supra* note 261, at 5, 22. See also RTK-NET Entry No. 2100, *supra* note 394.

396. PROGRESS REPORT, *supra* note 261, at 5, 22. See also RTK-NET Entry No. 2100, *supra* note 394.

397. PROGRESS REPORT, *supra* note 261, at 5, 22. See also RTK-NET Entry No. 2100, *supra* note 394.

legislation.³⁹⁸ Similarly, the TRI data for Louisiana facilitated the passage of a bill to address previously unregulated airborne toxic substances emissions.³⁹⁹

In Massachusetts, activists used the TRI data to win a pledge from defense contractor Raytheon to replace ozone depleting chemicals with safer substitutes, and the statewide data provided ammunition for environmentalists in the successful effort to secure the enactment of a far-reaching state toxic substances reduction law.⁴⁰⁰ In Oregon, the TRI data was used by environmentalists to spur the enactment of a strong toxic reduction statute.⁴⁰¹ In New York City, the TRI data helped residents of a neighborhood to win a twelve-year battle for cleaner air, while citizen groups in the state have successfully utilized citizen suits to enforce compliance with the TRI reporting.⁴⁰² Labor

398. PROGRESS REPORT, *supra* note 261, at 5, 22. See also RTK-NET Entry No. 2100, *supra* note 394.

399. PROGRESS REPORT, *supra* note 261, at 5, 22. See also RTK-NET Entry No. 2100, *supra* note 394.

400. PROGRESS REPORT, *supra* note 261, at 5, 22. The Massachusetts Public Interest Research Group (MassPIRG) used TRI data to identify and target Raytheon with a public accountability campaign. Under the toxics release inventory, Raytheon reported emitting 3.6 million pounds of the stratospheric ozone eaters CFC-113 and methyl chloroform over a two year period (1987-88). MassPIRG issued a report called "Local Error, Global Terror" which revealed the huge Raytheon releases that made it the largest emitter of ozone depleting substances in the state. The report drew extensive press coverage. Initially the company showed no signs of reducing ozone emissions. MassPIRG raised the issue at a Raytheon stockholders meeting, drawing extensive press coverage again. The meeting included a shareholder resolution sponsored by the Evangelical Lutheran Church calling for a phase-out. Also attending the meeting were high school students from Andover, Massachusetts, who had chosen a neighboring Raytheon factory as a topic of concern. The students exhibited petitions and letters urging the company to address the issue. Raytheon relented and, in a joint press conference with MassPIRG, announced a corporate pledge to replace the ozone-destroying substances with safer alternatives. *Ozone Advocates Score Victory (1991)*, available in RTK-NET, Entry No. 1943 (May 28, 1991).

401. PROGRESS REPORT, *supra* note 261, at 5, 22.

402. *Id.* The residents of Boerum Hill, a Brooklyn, New York neighborhood were frustrated by their inability to convince officials to control the nail polish-like fumes from Ulano, a graphic art supplies manufacturer releasing the toxic chemical toluene into the air. The fumes were so bad they were blamed by residents for recurring headaches and nausea. The residents finally got results when they obtained TRI data. This information made their case that the plant was the city's worst toxic air polluter and the resultant outcry led to immediate reductions in the plant's emissions. A small group of local citizens formed the Boerum Hill-South Brooklyn Clean Air Committee, staged demonstrations with gas masks, and sent state representatives odor report cards. Not much happened until TRI quantified the problem and gave citizens a tool for action. The Consumer Policy Institute (CPI), a division of Consumers Union, used 1988 TRI data to prepare a May 1990 report identifying Ulano as the top industrial toxic air polluter in New York City. It showed that Ulano was responsible for seventeen percent of the city's toxic air pollution as reported in the 1988 TRI data. The CPI report was released in a press conference co-sponsored by the Boerum Hill Committee and drew extensive media attention. On the same day, the New York State Department of Environmental Conservation (DEC) announced Ulano would be ordered to begin using a new incinerator to reduce emissions by July 18, 1990, or face stiff fines. The DEC contended that

union and community groups in Northfield, Minnesota, won a reduction pledge from a local company for worker and community exposure to methylene chloride.⁴⁰³ In Henderson, Kentucky, citizens used a trade secret challenge involving the TRI data to highlight important community environmental issues.⁴⁰⁴

Environmental organizations have organized campaigns to publicize companies' releases of TRI chemicals.⁴⁰⁵ The TRI data, as well as other EPCRA information, is the basis for "good neighbor" agreements which some environmental organizations have urged citizen groups to negotiate with local facilities for the purpose of reducing or eliminating toxic substance generation and hazardous chemical risks to plant employees and communities.⁴⁰⁶

incineration would reduce toluene emissions by ninety-five percent. The residents felt that they had won a significant victory. RTK-NET Entry No. 2100, *supra* note 394.

The ASLF of New York has led the way in bringing and winning citizen suits to enforce the TRI requirements and other mandates of EPCRA and winning pollution prevention concessions from industry. See *supra* notes 351-58 and accompanying text.

403. PROGRESS REPORT, *supra* note 261, at 5, 22. The experience in Northfield is particularly interesting. The TRI data helped bring community and labor leaders together to achieve reduction of a company's toxic emissions. Officials of the Amalgamated Clothing and Textile Workers Union (ACTWU), fearful over workers' exposure to methylene chloride, had been battling for years to convince Sheldahl, Inc. to reduce worker exposure. It was not until TRI data became available that the community's residents became aware that they too were at risk. This small rural community learned from the TRI data that the local plant was the forty-fifth largest emitter in the nation of an air pollutant suspected of causing cancer. This revelation led to the formation of two citizens' groups, the Northfield Air Toxics Study Group (ATSG) and Clean Air in Northfield (CAN). The increased citizen concern and media attention about Sheldahl's toxic releases happened alongside tense contract negotiations between Sheldahl and the ACTWU. The union officials quickly incorporated community concerns into contract negotiations with Sheldahl. The company agreed to phase-out use of the chemical by the year 2000. RTK-NET Entry No. 2100, *supra* note 394. See also Carol M. Browner, *Statement on '91 Toxics Release Inventory (1993)*, available in RTK-NET, Entry No. 4134 (May 25, 1993).

404. PROGRESS REPORT, *supra* note 261, at 5, 22.

405. 1991 ON-LINE: RTK NET NEWSLETTER, FALL 1991, available in RTK-NET, Entry No. 2087 (October 22, 1991).

406. The National Toxics Campaign announced that it is planning to mobilize as many as 100 local campaigns to get industries to sign legally binding good neighbor agreements to reduce pollution and use of toxic and ozone-destroying chemicals. Sanford J. Lewis, *Citizens as Regulators of Local Polluters and Toxics Users*, NEW SOLUTIONS, Spring 1990, at 20. One of the aims of a good neighbor agreement is for citizens to secure more protection than a standard government order to comply with existing regulations. *Id.* The conditions on facilities which citizens have sought in these agreements include: providing a study and reduction of toxic chemical usage and waste generation; furnishing technical assistance to residents to review the firm's activities; permitting residents the right to inspect the facility on a regular basis; establishing chemical accident prevention programs; and granting citizens the right to ongoing participation in a company health and safety committee handling decisions about toxics. *Id.*

The Minnesota branch of Citizens for a Better Environment (CBE) has undertaken a "good neighbor project." *Project Spurs "Good Neighbor" Involvement*, available in RTK-NET, Entry No. 9722 (Feb. 6, 1995). The purpose of the project is to create broad-based community representation in pollution prevention at local facilities. CBE indicates it begins the process by raising community awareness of local toxic pollution and by stressing the importance of prevention.

After meeting with the community the next step is to request a non-adversarial dialogue with local facilities to develop prevention goals and commitments for the company. CBE provides the technical assistance needed for citizens to work proactively with facilities. *Id.*

The starting point for community education is CBE's report called "Get to Know Your Local Polluter." *Id.* The report includes a succinct step-by-step process to take communities through a good neighbor agreement with a facility in a non-adversarial manner. It also includes toxic profiles for Minnesota's top forty toxic polluters. The profiles furnish citizens in a simple format with the basic information needed to begin constructive discussions, including business information, labor contacts, community resources, right-to-know data, health effects information, a regulatory history, and census data for surrounding populations. Many of the facilities in the profiles are in low and moderate income communities. CBE has been working with eighteen communities covered by the profiles, which include rural, suburban, and urban areas. *Id.*

CBE stresses that it attempts to create non-adversary communications with facilities with toxic generation problems. *Id.* Part of the technical assistance CBE provides to communities is from the Boston-based Environmental Careers Organization (ECO), which links retired engineers with non-profit organizations that are addressing toxics issues. Through this program, CBE hired a technical advisor who goes through a plant at no cost and develops pollution prevention recommendations.

The range of results in the project include a pollution prevention audit for a foundry and a pollution prevention plan from Ford Motor. In the foundry example, the ECO engineer obtained by CBE worked with the facility to create a three to six year capital plan to phase in both pollution prevention and additional controls. The foundry in turn approached its suppliers about lowering the toxic content of raw materials, and developed a thirty-month revolving safety training plan. At first the foundry rejected CBE's offer of involvement in a good neighbor project but eventually agreed to meet with CBE and community members. Ford gave CBE their pollution prevention plan, which no other facility had done voluntarily. CBE noted that Ford relied extensively on pollution discharge technologies but that they have moved to pollution prevention measures. These pollution prevention measures include a paint that has lower emissions, an employee program to reduce the amount of grease and grime coming off the assembly line, and more water-based cleaning to remove oil and grease before painting. CBE is also working with the United Auto Workers Union to get them more involved in encouraging pollution prevention measures at Ford which reduce the chemical exposure of workers. *Id.*

Another resource created by CBE's Good Neighbor Project is MAKING OUR LOCAL INDUSTRIES CLEAN AND SAFE THROUGH NEIGHBOR-LABOR AUDITS, an easy to read fifteen-page fact sheet on the concepts, case studies, and sample laws and programs for establishing local health and environmental safety audits of industrial facilities. *Good Neighbor Audits*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, NOVEMBER-DECEMBER 1994 "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 9722 (Feb. 6, 1995).

The TRI data has been responsible for spurring a good neighbor agreement in Boulder, Colorado. RTK-Net Entry No. 2100, *supra* note 394. Boulder, the home of the University of Colorado, prides itself on environmental sensitivity. To the surprise of many residents, press reports of the TRI data showed Boulder County has consistently ranked among the top counties in the state of Colorado for toxic air emissions. The press reported the pharmaceutical manufacturer Syntex Chemicals Corporation to be the largest source of toxic air emissions in the Boulder area. The company found this disclosure to be a public relations embarrassment. It willingly agreed to meet with local citizens and elected officials for a public meeting in 1990. By 1991, Syntex indicated a desire to pledge itself to be a "good neighbor" to reduce emissions. The company's headquarters in Palo Alto, California, signed a good neighbor agreement to cut its 1989 reported toxic air emissions fifty percent by 1994. Syntex further promised to set up a citizen advisory panel to serve as a channel to improve the company's communication with the public and to help maintain the company's accountability. *Id.*

Not all good neighbor agreements start out positively or are non-adversarial. JANUARY-FEBRUARY, 1993, "WORKING NOTES" NEWSLETTER, NEWSLETTER OF THE WORKING GROUP ON COMMUNITY RIGHT-TO-KNOW, available in RTK-NET, Entry No. 4243 (June 12, 1993). An

C. The Press and TRI Information

The press is a major user of the TRI data and has used it to provide reports about the status of toxic pollution nationwide.⁴⁰⁷ Press stories come in two forms: overviews of the TRI data after its yearly release, or in-depth analysis of specific locations or companies.⁴⁰⁸

The very first EPA national annual report on the TRI data attracted national press attention, beginning with a bang in 1989 when the widely distributed national newspaper, *USA Today*, used the 1987 calendar year data freshly released by the EPA for a special three-day series about toxic pollution that reached two million daily readers.⁴⁰⁹

example occurred when the inspection and monitoring agreement community and environmental groups in Texas negotiated with a Houston area chemical plant owned by Rhone-Poulenc. Community groups, working with the statewide environmental organization, Texans United, won the agreement from the giant petrochemical firm Rhone-Poulenc to get information, negotiate safety improvements and inspect its plant in Manchester, Texas. Manchester is a low-income, minority community in the midst of large petrochemical plants along the Houston Ship Channel. The chemical company specifically agreed to permit community representatives to participate in annual safety audits that would physically inspect the plant, interview workers and review documents. The documents included hazard assessments, risk analyses, emergency response, waste reduction plans, and other non-confidential information. Rhone-Poulenc also agreed to model accident scenarios in consultation with the community, fund a citizens' health survey, and permit independent verification of water samples. *Id.*

Community leverage and the company's fear of a public relations black eye were the main reasons Rhone-Poulenc agreed to the good neighbor pact. Two events created this leverage and fear. First, in June 1992, Rhone-Poulenc spilled poisonous sulfur dioxide that injured twenty-seven people. Second, a public hearing on a plant environmental permit gave citizens and Texans United an event around which they could organize and concentrate their concerns. Manchester citizens, which included employees of Rhone-Poulenc, agreed to drop opposition to the company's permit changes and instead sought a degree of oversight under a legally binding agreement. Rhone-Poulenc chose to accommodate the community rather than experience bad relations. *Id.* See also *Paper and Airplanes in Washington*, ON-LINE: THE RTK-NET NEWSLETTER, Vol. 3, No. 2, Fall 1993, available in RTK-NET, Entry No. 4706 (Nov. 5 1993) (reporting efforts of an environmental group from Washington state and British Columbia to negotiate a good neighbor agreement with Boeing Company concerning their toxic emissions and pollution prevention practices).

407. GAO REPORT, *supra* note 262, at 26.

408. PROGRESS REPORT, *supra* note 261, at 8-9.

409. GAO REPORT, *supra* note 262, at 26 (citing *Special Report: Tracking Toxics*, USA TODAY (July 31-Aug. 2, 1989)). The series described air, ground, and water emissions for each state and 500 counties where the release of toxic chemicals was the greatest and identified the top toxic polluters in the country. In the first day of the series, five articles covered various aspects and implications of the TRI data. Rae Tyson et al., *The Chemicals Next Door: A First Peek Behind the Plant Gates*, USA TODAY, July 31, 1989, at A1 (focusing on Jefferson County, Texas and noting its residents can almost always smell the odor of gasoline in the air and are constantly reminded that their county, which has several refineries, is one of the most polluted by toxic releases in the nation); Rae Tyson, *Land: Firms Say Volume Being Cut*, USA TODAY, July 31, 1989, at B5 (reporting that the EPA's TRI has spurred efforts to reduce the volume of hazardous wastes, especially that dumped in landfills); Rae Tyson, *Treated Like an "Open Sewer"*, USA TODAY, July 31, 1989, at B5 (reporting that the EPA's TRI shows that manufacturers released 2.6 billion pounds of toxic pollutants into the air in 1987, indicating that environmentalists hoped the data would provide impetus for tougher air pollution laws); Rae Tyson, *Water: Toxics Flow with the Mississippi*, USA TODAY, July 31, 1989, at B5 (noting that although the EPA's TRI has

The first inventory results also received national television coverage.⁴¹⁰ Media stories based upon annual reports on the TRI data published by the EPA and the states or based on studies and reports issued by environmental organizations for advocacy use have now become a yearly press ritual.⁴¹¹

shown that the Mississippi was a dumping ground for a staggering 232 million pounds of toxic chemicals in 1987, some officials contend water quality has improved); Rae Tyson, *Companies Leading the List: Factories Leading the List*, USA TODAY, July 31, 1989, at B5 (showing in a table the top 10 companies and the top 10 factories emitting the greatest volume of toxic chemicals into the environment in 1987, with the Aluminum Company of America topping both lists).

410. GAO REPORT, *supra* note 262, at 26 (reporting that in March and June 1989, ABC-TV's WORLD NEWS TONIGHT made the inventory the focus of news stories spotlighting the country's toxic pollution problems).

411. See, e.g., *Toxic Releases Down in Va.*, WASH. POST, Jan. 16, 1990, at B7 (according to a report by Virginia's Sierra Club, toxic air emissions in the state remained "staggering" despite a reduction from 1987 to 1988); Christine Russell, *How EPA's New Toxics List Can Help Trace Nearby Hazards*, WASH. POST, June 27, 1989, at WH8 (featuring the EPA's new Toxic Release Inventory); Larry Tye, *High-Tech Industry Cited for Pollution*, BOSTON GLOBE, Apr. 26, 1989, at 29 (reporting a study by the Massachusetts Public Interest Research Group which showed that the electronics and computer industries of the state accounted for nearly a third of all reported toxic releases to the air and water); Phillip Shabecoff, *Industrial Pollution Called Startling*, N.Y. TIMES, Apr. 13, 1989, at D21 (reporting that the first national inventory of toxic releases in the nation's environment has shown that manufacturers disposed of at least 22.5 billion pounds of hazardous substances in 1987, which is much higher than expected); Gary Hendricks, *Forest Park Plant Trims Toxic Release Report*, ATLANTA CONSTITUTION, Sept. 19, 1991, at XI2 (reporting that a Georgia facility of American National Can Company revised downward the amount of toxic materials it reported releasing in 1990, after being surprised by figures that showed pollution increasing nearly forty percent in a year's time); *How Companies Stack Up in Terms of Toxic Releases*, ATLANTA CONSTITUTION, Aug. 22, 1991 (listing the results of the latest TRI reported filed with the Georgia Environmental Protection Division by Cobb County companies); Keith Schneider, *Toxic Pollution Shows Drop in '89*, N.Y. TIMES, May 17, 1991, at A32 (reporting the results from the third annual TRI for the nation, noting for the second straight year that Texas and Louisiana released more toxic chemicals into the environment than any other state in 1989); Linda Kanamine & Rae Tyson, *Both Sides Put Emissions Data to Practical Use*, USA TODAY, May 17, 1991, at A10 (reporting that environmental activists and industry find themselves sharing the TRI as the tool in their anti-pollution efforts); Brad Knickerbocker, *Toxics Release and the Right to Know*, CHRISTIAN SCIENCE MONITOR, Sept. 3, 1992, at 11 (commenting on the effectiveness of EPCRA and noting it was designed to increase public pressure to reform toxic release practices of companies, saying that some evidence suggests that the effects have not been adequate); *Group Ties Cut in Toxic Releases to Loopholes*, WASH. POST, Aug. 28, 1992, at A11 (reporting industry claims of reduced toxic chemical releases reflected in EPA's fourth annual TRI report result from loopholes in reporting or revised record keeping and not actual pollution cuts); Rae Tyson, *Emissions Monitored Since 1986*, USA TODAY, May 28, 1992, at A7 (reporting on the fourth annual EPA national report on TRI emissions); Doug Payne, *Lockheed Says 1992 Data on Emissions Misleading*, ATLANTA CONSTITUTION, March 17, 1994, at XIX1 (reporting that according to the state's annual toxic release report based on the TRI data, Lockheed Aeronautical Systems Co. was Georgia's second worst dumper of cancer-causing chemicals in 1992, and the pollutants generated by the company went up 4000 percent between 1991 and 1992, and discussing the amount of toxic chemicals released in Cobb County); Gary Hendricks, *Pollution Up from Industry on Southside*, ATLANTA CONSTITUTION, March 17, 1994, at XIX16 (reporting a rise in industrial pollution in south Fulton County, Georgia according to the TRI for 1992 produced by Georgia's Environmental Protection Division); Seth Coleman, *Toxic Industrial Emissions Drop, Says State*, ATLANTA CONSTITUTION, March 17, 1994, at AJN16 (listing Atlanta companies that reported releasing significant amount of pollutants in 1992); Scott

The TRI, a computer database, has contributed to making environmental journalism more mature and responsible.⁴¹² The TRI is part of the advent of computer assisted reporting which has enabled environmental reporters to go far in furnishing in-depth information to the public.⁴¹³ Journalists have not been entirely independent in using or accessing the TRI data.⁴¹⁴ They often depend upon citizen and environmental organizations as a source for acquiring and interpreting the TRI data.⁴¹⁵ The stream of information on toxic

Bernstein, *Release of Carcinogens Down—But Still Hefty*, ATLANTA CONSTITUTION, Mar. 12, 1994, at B2 (reporting industries in Georgia reported releases of more than 5.8 million pounds of suspected carcinogens into the environment); Matt Kemper, *Air Fairly Free of Toxicity*, Report Says, ATLANTA CONSTITUTION, May 27, 1993, at XH3 (noting that dozens of companies lob pollution missiles into the skies of metropolitan Atlanta but that little has occurred in north Fulton County); Scott Bernstein, *Ga. Toxic Wastes Decline*, ATLANTA CONSTITUTION, May 25, 1993, at A1 (reporting on toxic releases of Georgia industries in 1991).

412. Bud Ward, *American Journalism Has a New Arrow in its Quiver*, ENVIRONMENTAL HEALTH, Feb. 1992, at 63.

413. *Id.*

414. PROGRESS REPORT, *supra* note 261, at 8. A preliminary review of 100 stories from large urban dailies found that less than twenty percent of reporters access the TRI data themselves. *Id.* (citing F. Kent Goshern, *Electronic Journalism and the Public's Right-to-Know: The Toxics Release Inventory*, paper for presentation to the American Environmental Journalism and Media Conference 1992 Convention, Montreal).

415. PROGRESS REPORT, *supra* note 261, at n.14 (citing Frances Lynn et al., *The Toxic Release Inventory: Environmental Democracy in Action*, EPA/700-F-92-001 (a report of the United States Environmental Protection Agency)). One source through which journalists have accessed TRI data is an environmental database called RTK-NET (Right-to-Know Computer Network). RTK-NET is a joint project of Unison Institute and OMB Watch. The Unison Institute is a center for computer systems and software technology in the public interest. OMB Watch is a nonprofit public interest group that advocates for the public's right-to-know and greater government accountability. The RTK-NET publishes and republishes papers and documents concerned with the public's right-to-know, contains and offers access to TRI and other EPA databases, and trains and assists citizens, citizen organizations, and the press on how to use environmental data. RTK-NET reports significant use of its database and on-line publications by journalists. *Making the Most of RTK-NET, Pressing the Right-to-Know*, ON-LINE: RTK-NET NEWSLETTER, FALL 1991, available in RTK-NET, Entry No. 2087 (October 22, 1991).

Reporters from a suburban Boston newspaper chain with 165,000 readers used the RTK-NET to access the TRI data for an investigative series on lead in local schools. *Id.* Massachusetts requires that all school children be screened for lead poisoning. The paper identified local factories that release lead. They included information on lead's health effects from the New Jersey Fact Sheets obtained from the RTK-NET database. The newspaper then planned to run lab tests of the actual lead levels in drinking water at twenty-two schools. The final articles sought to combine TRI data obtained in the RTK-NET with the results of these lab tests and the state's screening data. Using the RTK-NET, a reporter at the KNOXVILLE NEWS-SENTINEL in Tennessee recently wrote a story about a nearby Alcoa aluminum plant, one of the nation's largest emitters of TRI chemicals. *Id.* The story spotlighted the plant's PCB emissions. The reporter planned to investigate "everything" that is going into the drinking water of Knoxville by searching for TRI releases to the Tennessee River. The RTK-NET is also used by the publisher of a monthly Florida newspaper called the PRO EARTH TIMES. *Id.* Nearly every issue reports on the emissions of at least one of the largest local polluters, which includes Monsanto, Champion International, and Air Products. See, e.g., Oliver, *Alachua County Citizens Fight to Protect Clean Air and Property Values*, PRO EARTH TIMES, January 1996, at 10 (discussing Florida Rock Industries, Inc.'s drive to put a cement plant 2.5 miles outside of Newberry, Florida). The

chemicals is particularly helpful in providing continuing education for reporters, and this in turn makes them more responsible to their audiences.⁴¹⁶ Newspapers and broadcast media have based many investigative stories on the TRI data.⁴¹⁷ This data has provided journalism with timely information, a meaningful context to evaluate toxic pollution, an understanding of tools for illustrating chemical hazards, and a foundation for communication with local industry officials and plant representatives.⁴¹⁸

D. Impact on Legislation and Regulation

EPCRA has been said to reveal the success or failure of environmental laws and regulations.⁴¹⁹ This has included holding a mirror up to EPCRA itself.

Environmentalists contend that despite the original TRI list of over 300 plus chemicals covered by EPCRA, approximately ninety-five percent of all toxic chemical releases still escaped reporting.⁴²⁰ Environmentalists note that many substances listed as toxic or hazardous under other federal environmental laws, including the Clean Water Act, Safe Drinking Water Act, and RCRA, were not covered by EPCRA.⁴²¹ Conversely, the release of the TRI data made it apparent that large quantities of toxic chemicals put into the environment were not being controlled by federal laws meant to

monthly publication has also reported on releases by an Ohio company that local boosters sought to draw to the Florida panhandle.

The Washington correspondent for the Thomson Newspapers has used the TRI data in the RTK-NET to identify the five largest local industrial employers in each of the 122 cities that receive the chain's papers. *Id.* Over the course of a year, he seeks to detail each of these employers' toxic releases to air, land and water.

Finally, an instructor at Columbia University's School of Journalism uses RTK-NET to introduce graduate students to the TRI. *Id.* The instructor believes that detailed and regular investigative reporting which uses the raw TRI data is much more promising than the typical "whizbang" annual stories that simply compile emissions totals.

See also How I Got That Story, ON-LINE: THE RTK-NET NEWSLETTER, WINTER 1993, available in RTK-NET, Entry No. 3866 (April 21, 1993); *Reporting on the Right-to-Know*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, MAY 1991; WORKING GROUP ON CRTK NEWSLETTER, available in RTK-NET, Entry No. 1945 (June 2, 1991).

416. Ward, *supra* note 412, at 63. *But see* F. Kent Goshern, *Electronic Journalism and the Public's Right-to-Know: The Toxic Release Inventory* (cited in PROGRESS REPORT, *supra* note 261, at 8) (finding in a preliminary review of 100 stories from large urban dailies that less than twenty percent of reporters accessed the TRI databases themselves, but that most relied on TRI information passed on second hand by environmentalists).

417. PROGRESS REPORT, *supra* note 261, at 8.

418. *Id.* at 1, 8-9.

419. *Id.* at 9.

420. U.S. PUBLIC INTEREST RESEARCH GROUP, FACT SHEET ON RIGHT TO KNOW MORE ACT OF 1991 (S. 2123) AND THE HAZARDOUS POLLUTION PREVENTION PLANNING ACT (S. 761) (June 1991) (unpaginated).

421. *Id.*

regulate toxic pollution. Most of the TRI releases are into the air, but as of 1992 only two were regulated as toxic air pollutants by the Clean Air Act nearly twenty years after that statute was enacted.⁴²²

The TRI data has been credited with stimulating actual and proposed federal and state legislation and regulation for more stringent pollution monitoring, control and prevention.⁴²³ EPCRA itself was amended by Congress with the Pollution Prevention Act of 1990 to include new data elements on source reduction and recycling to the TRI, starting with the 1991 calendar year.⁴²⁴ This was the first

422. PROGRESS REPORT, *supra* note 261, at 9.

423. GAO REPORT, *supra* note 262, at 23. One of the sponsors of EPCRA predicted the law would have this effect. James J. Florio, *A Law that Can Help Scrub the Air*, N.Y. TIMES, June 24, 1988 (Congressman Florio predicted that, "[f]rom the right to know will flow the right to demand, and get, tougher laws and safer practices").

424. Pub. L. No. 101-508, Nov. 5, 1990 (codified at 42 U.S.C. §§ 13101- 13109 (1988 & Supp. V 1993)). The reports became due July 1, 1992. The data required by the Act added large amounts of chemical wastes to the inventory: wastes which are recycled, treated or sent to energy recovery facilities. In the first reporting year alone the waste totaled 38 billion pounds, compared to 3.4 billion pounds of direct release to the environment that were reported under the conventional TRI reporting for releases and transfers. STATEMENT ON '91 TOXICS RELEASE INVENTORY BY EPA ADMINISTRATOR CAROL M. BROWNER, *available in* RTK-NET, Entry No. 4134 (May 25, 1993). This amount of waste is the equivalent of a line of tank trucks that stretches half way around the world. *Id.* The Pollution Prevention Act, which is meant to fix the "recycling loophole," allowed companies to sidestep federal right-to-know reporting requirements by shipping toxic waste to "recycling" facilities such as incinerators. RTK-NET, Entry No. 2070 (October 21, 1991). These shipments were regarded by critics as a regular source of serious harm to public health and the environment. The bulk of the off-site "recycling" shipments were known to be burned in unregulated cement kilns, blast furnaces and industrial boilers. Large amounts were also sent off-site to solvents or metals recovery operations. *Report Targets "Recycling" Loophole*, *available in* RTK-NET, Entry No. 225 (May 16, 1991) (reprinting an article which appeared in the February/March 1991 edition of WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: A WORKING PAPER ON OUR RIGHT-TO-KNOW ABOUT TOXIC POLLUTION, the newsletter of the Working Group on Community Right-to-Know, the article summarizing the results of a report by several environmental organizations entitled THE "RECYCLING" LOOP-HOLE IN THE TOXICS RELEASE INVENTORY: OUT OF SITE, OUT OF MIND). It was alleged that companies were shipping at least 197 million pounds of toxic chemicals off-site for "recycling" or "reuse" without having to report these transfers under the TRI. Environmental critics contended this reporting loophole undermined the public's right-to-know about shipments of toxic wastes and reduced the usefulness of TRI data for monitoring industrial pollution prevention activities. *Id.* The problems that are regularly caused by hazardous waste recycling include worker exposure, site contamination, air emissions, transportation accidents, fires, spills, incomplete combustion, and other failures and releases. *Id.*

The Pollution Prevention Act added reporting requirements for source reduction and recycling. The legislation specifically requires facilities that must comply with toxic release and transfer reporting requirements of section 313 of EPCRA to provide source reduction and recycling data and authorizes the EPA to amend the form for reporting under section 313 of EPCRA (EPA Form R) to include this additional information. 42 U.S.C. § 1306 (1988 & Supp. V 1993). The additional data to be gathered includes information on the quantity of reportable chemical in waste, the quantity entering treatment and recycling, the quantity released as a result of remedial actions or other one-time events not associated with production processes, a description of source reduction activities and the techniques used to identify opportunities for them, and the production ratio or index of another variable that is the primary influence on waste characteristics or volume. 42 U.S.C. § 1306(b) (1988 & Supp. V 1993). The Pollution Pre-

major expansion of EPCRA. It was followed by other significant expansions of the law's coverage. The second such expansion occurred with President Clinton's 1993 executive order requiring federal facilities to submit the TRI reports,⁴²⁵ which environmental organizations had persistently sought.⁴²⁶

The third expansion came in late 1994 with another Clinton Administration EPA rule,⁴²⁷ which added nearly 286 more chemicals

vention Act was enacted to implement a national objective of preventing pollution at the source. This involves the EPA establishing a source reduction program and assisting States in providing technical assistance to industry to implement source reduction programs. 42 U.S.C. § 13101(b) (1988 & Supp. V 1993).

425. Executive Order No. 12856, Aug. 3, 1993, FEDERAL COMPLIANCE WITH RIGHT-TO-KNOW LAWS AND POLLUTION PREVENTION REQUIREMENTS. The federal facilities were also to comply with all the emergency reporting and planning provisions of EPCRA. Among the details of the order were: toxics release reporting was to start with 1993 or 1994 (depending on the agency); reports will be public at the earliest in Spring 1995; voluntary agency-wide goals to reduce toxic releases and transfers fifty percent by 1999; written pollution prevention strategies were required for each agency; revised procurement practices to reduce toxic chemicals; and public access to all strategies, plans, and reports. See also *President Directs Federal Agencies to Take Lead in Pollution Prevention*, 24 Env't Rep. (BNA) 623 (Aug. 13, 1993).

The EPA originally estimated 500 federal facilities would be covered. *Administration Broadens Right-to-Know*, ON-LINE: THE RTK NET NEWSLETTER, Vol. 3, No. 2, Fall 1993, available in RTK-NET, Entry No. 706 (Nov. 5, 1993). A more recent figure is that up to 1652 federal facilities, roughly half of which are military services, will have to report. *Uncle Sam to Report*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, MAY-JUNE 1994 "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 5839 (July 9, 1994).

New York enacted a similar kind of legislation which requires state agencies and public authorities to be subject to the TRI reporting. *Measure Would Require State Facilities to File Toxic Release Inventory Reports*, 25 Env't Rep. (BNA) 511, 511-12 (July 15, 1994). The measure requires state government facilities to report toxic pollution under the TRI starting in 1996 and covers state government facilities such as prisons, transportation operations, and power and port authorities. *New York to File Pollution Reports*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, SEPTEMBER-OCTOBER 1994 "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 6929 (Nov. 9, 1994).

426. 1994 ON-LINE: THE RTK NET NEWSLETTER, Vol. 3, No. 4, Spring 1994, available in RTK-NET, Entry No. 5897 (Aug. 15, 1994). The order will reveal large federal pollution sources for the first time. *Federal Facilities to Report, Reduce Toxics*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, July-Aug. 1993, available in RTK-NET, Entry No. 4594 (September 11, 1993). The United States military alone is alleged to be responsible for some 14,000 toxic hot spots. *Id.* The executive order was "clearly a victory" for the grassroots groups that supported it, according to a spokesperson for the Military Toxics Network. *Id.* The executive order was condemned by an industry coalition that included The Chemical Manufacturers Association, United States Chamber of Commerce, National Association of Manufacturers, American Forest and Paper Association, the American Petroleum Institute, National Agricultural Chemicals Association, and others. They complained that the executive orders bypassed Congress and constituted a major change in policy. *Administration Broadens Right-to-Know*, ON-LINE: THE RTK-NET NEWSLETTER, Vol. 3, No. 2, Fall 1993, available in RTK-NET, Entry No. 4706 (Nov. 5, 1993).

The 1994 New York law requiring state agencies and public authorities to report their toxic chemicals was a legislative priority for that state's environmental groups. *New York Law Requires Reporting by Agencies*, 25 Env't Rep. (BNA) (Aug. 12, 1994).

427. Addition of Certain Chemicals; Toxic Chemical Release Reporting; Community Right-to-Know, 59 Fed. Reg. 61432 (1994) (to be codified in 40 C.F.R. § 372).

to the TRI list for industry reporting, nearly doubling the number of substances manufacturers and users must report in their annual inventory reports.⁴²⁸ This substantial broadening of coverage of the TRI reporting had long been urged by environmental groups⁴²⁹ and was depicted by the Clinton Administration EPA as the first of three phases for expanding the TRI even more.⁴³⁰ Nearly half of the new chemicals added to the list were pesticides that were regulated under the federal pesticide law, FIFRA,⁴³¹ but that had not been placed on the original TRI list.⁴³² While expansions of EPCRA are significant,

428. 59 Fed. Reg. 61432 (1994). The 286 chemicals were added to the 368 chemicals already covered by the TRI, bringing the total to 654. The final list is "slightly smaller" than the one proposed to add 313 chemicals in January 1994. 59 Fed. Reg. 1788 (1994). The EPA had originally proposed expanding the rule to cover 313 chemicals, but some were dropped and others deferred because of technical questions. *EPA to Expand List of Chemicals on Toxic Report*, WALL ST. J., Jan. 7, 1994, at B5; see also *Proposed EPCRA Additions Would Double Number of Chemicals Requiring TRI Reports*, 24 Env't Rep. 1619, 1619-20 (Jan. 14, 1994); *More Chemicals, available in RTK-NET*, Entry No. 9722 (Feb. 6, 1995). See also *A List of the 286 Chemicals and Chemical Categories Being Added to EPCRA Section 313 List, available in RTK-NET*, Entry No. 8230, December 1, 1994.

429. *Changes Modify Right-to-Know*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: NOVEMBER-DECEMBER 1994, available in RTK-NET, Entry No. 9722 (February 6, 1995). In 1992, the EPA considered a petition by the Natural Resources Defense Council, and the Governor of New York, Mario Cuomo, to list eighty chemicals and two chemical categories as toxic because they can cause chronic health effects, such as birth defects, mutations, or cancer. *Petition Pushes List Expansion*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: 1992 SEPTEMBER-OCTOBER NEWSLETTER, available in RTK-NET, Entry No. 2753 (October 17, 1992). All the chemicals had been regulated as "chronic toxins" by the EPA under RCRA. *NRDC Petitions to Expand TRI, available in RTK-NET*, Entry No. 2337 (March 7, 1992). The EPA responded with a proposal to list sixty-eight chemicals and two chemical categories. 57 Fed. Reg. 41020-41046 (Sept. 8, 1992). See also *Action Alert, available in RTK-NET*, Entry No. 2736 (October 11, 1992); *Regulation and Legislation: EPA Proposes Adding New Chemicals to TRI-Solicits Comments, available in RTK-NET*, Entry No. 2715 (October 5, 1992).

430. *More Chemicals, available in RTK-NET*, Entry No. 9722 (Feb. 6, 1995). The EPA indicated that "Phase I" would be completed after expanding the list to include forty chemicals for which it had deferred action from its original proposal and for persistent bioaccumulative substances, such as dioxin, that fall below current reporting thresholds. *Id.* "Phase II" would add many currently exempt non-manufacturing industries to the program (a proposal is expected during 1995-96), and "Phase III" will explore ways to require reporting on chemical use and worker exposure. *Id.*

431. Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § 136 (1994).

432. The expansion added 170 pesticides regulated under FIFRA, joining the twenty-four which had previously been reported under the TRI. *EPA to Expand List of Chemicals on Toxic Report*, WALL ST. J., January 7, 1994, at B5; *Proposed EPCRA Additions Would Double Number of Chemicals Requiring TRI Reports*, 24 Env't Rep. 1620 (Jan. 14, 1994). The chemical industry, unsurprisingly, opposed the expansion. *Industry Opposes Proposed TRI Expansion; Additions Could Hurt Business, Officials Say*, 24 Env't Rep. (BNA) 1922 (Mar. 11, 1994). The industry trade groups opposing the expansion included the Chemical Manufacturers Association, the Chlorinated Paraffins Industry Council, and the major pesticide trade group, the Chemical Specialties Manufacturers Association. *Id.* While most of the additions were pesticides, significant additions were made for substances regulated under the Clean Air Act, RCRA, Safe Drinking Water Act, and Toxic Substances Control Act. *286 Chemicals Added to TRI Reporting List; Alternative Small-Source Regulation Approved*, 25 Env't Rep. (BNA) 1500 (Dec. 2, 1994).

even more extensive and rigorous changes have been occasionally proposed in Congress that have served to stimulate changes which eventually did in fact occur.⁴³³

The United States TRI is the first substantial mandated environmental inventory to be introduced by a national government. This pioneer pollutant inventory is being copied by other countries. In its home country it has been proposed to be used or has been actually used for international applications.

Other countries with established or pending inventories include Australia, the Netherlands, Norway, Canada and the United Kingdom. The Organization for Economic Co-operation and Development (OECD), as a follow up to the 1992 United Nations Conference in Rio, is developing guidelines on establishing inventories for the nations of the world.⁴³⁴ The United States EPA has ordered companies that operate maquiladora factories inside Mexico to report their toxic chemical pollution.⁴³⁵ The TRI has come to be seen as a model by the

433. See, e.g., "Right-to-Know More" Act, S. 2123 (expanding the list of right to know chemicals, broadening the scope of covered facilities, improving compatibility with other environmental laws, initiating reporting on toxic chemical use and production and requiring industries to develop toxics use reduction plans); H.R. 2880, 102nd Cong., 2d Sess. (1992) (Right-to-Know More Act of 1991) (providing companion House bill to S. 2123, including required toxic pollution prevention planning by industry); S. 761 (Hazardous Pollution Prevention Planning Act) 102nd Cong., 1st Sess. (1991) (requiring companies to develop toxics use reduction plans and goals). See also *Regulation and Legislation: First Defeat for the Right-to-Know More*, available in RTK-NET, Entry No. 2387 (Mar. 27, 1992) (reporting vote against H.R. 2880 by congressional subcommittee); *Regulation and Legislation: Right-to-Know More Legislation Introduced*, available in RTK-NET, Entry No. 1760 (July 11, 1991); *Half of U.S. Toxic Chemical Releases Come From 10 States, Citizen Action Says*, 22 Env't Rep. (BNA) 797 (July 26, 1991); *Sikorski Bill Would Significantly Expand Toxics Release Inventory Reporting for Industry*, 22 Env't Rep. (BNA) 792 (July 26, 1991); *U.S. PIRG Report Says Chemical Companies Lax on Answering Questions; CMA Disputes Findings*, 22 Env't Rep. (BNA) 2574 (Mar. 20, 1992); *Legislation Would Require More Reporting of Industry's Emissions of Toxic Substances*, 22 Env't Rep. (BNA) 1947 (Dec. 6, 1991); DEBORAH A. SHEIMAN, NATURAL RESOURCES DEFENSE COUNCIL, *THE RIGHT TO KNOW MORE v* (May 1991).

434. COMMONWEALTH ENVIRONMENT PROTECTION AGENCY, NATIONAL POLLUTION INVENTORY PUBLIC DISCUSSION, May 1994, available in AUSTRALIAN ENVIRONMENTAL RESOURCES INFORMATION NETWORK [hereinafter ERIN]. Representatives of non-governmental organizations from ten countries also issued an international declaration setting forth every citizen's right-to-know and right-to-act. The ten point declaration was signed at an international conference on Emergency Preparedness, Response and Prevention held in Veszprem, Hungary in September, 1990. *Declaration Sets Forth International Agenda*, available in RTK-NET, Entry No. 1943 (May 28, 1991). See generally, Charles R. Fletcher, *Reconciling GATT and Multilateral Environmental Agreements within the Existing World Trade Regime*, 5 J. TRANSNAT'L L. & POL'Y (forthcoming 1996).

435. *Border Reports Ordered*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: NOVEMBER-DECEMBER 1994, available in RTK-NET, Entry No. 9722 (February 6, 1995) (reporting that EPA ordered ninety-five companies to submit TRI information, abandoning requests for voluntary toxics release data when only four of the companies provided information). The EPA has also sought to obtain cooperation with the Mexican government for chemical emergency planning

United States and other nations to monitor global climate warming gases.⁴³⁶

EPCRA in general, and the TRI in particular, have been catalysts and the basis for a variety of significant legislative, administrative, and regulatory initiatives by the states and the federal government. Chemical release data compiled by the EPA as part of its TRI inventory has been the driving force behind laws, proposed legislation, and rule-making efforts on the federal level.⁴³⁷

The enactment of the Pollution Prevention Act of 1990 has already been mentioned. However, the Clean Air Act Amendments of 1990⁴³⁸ are collectively the single most important federal law influenced by the TRI. The TRI data showing massive releases of toxic chemicals in the atmosphere confirmed the woeful inadequacy of federal control of toxic air pollution. The first annual TRI report covered over 300 toxic chemicals for 1987, providing a sharp contrast with the fact that by this time the EPA had used its authority under the Clean Air Act⁴³⁹ to regulate only seven air toxics in nineteen years.⁴⁴⁰ The TRI data showed nearly 2.7 billion pounds of toxic air releases, with nearly eighty-eight percent, or 2.3 billion pounds coming from twenty-five chemicals. Only one chemical regulated by the EPA as a toxic air substance, benzene, was among the top twenty-five, and it ranked

on the border. *Border Emergency Preparedness to be Discussed*, 23 Env't Rep. (BNA) 1688 (Oct. 30, 1992). See also 1989 TRI REPORT, *supra* note 82, at 321.

436. U.S. Urged to Use EPCRA to Get Climate Treaty Data, 23 Env't Rep. (BNA) 936 (July 24, 1992); *Global Right-to-Know Program Suggested as Method to Curb Greenhouse Gas Emissions*, 25 Env't Rep. (BNA) 314 (June 17, 1994).

437. Carole L. Macko, *Expanded Toxic Chemical Reporting Linked to Right-to-Know*, 23 Env't Rep. (BNA) 1692 (Oct. 30, 1992).

438. Pub. L. No. 101-549, Nov. 15, 1990, 104 Stat. 2399 (1990) (codified in various sections of 42 U.S.C. § 7401 (1988 & Supp. V 1993)).

439. The Clean Air Act was actually the Clean Air Act Amendments of 1970. The prior federal statute relied entirely upon voluntary state efforts to control air pollution. 69 Stat. 322 (1955). The 1970 legislation established a national system of air pollution control, administered by the EPA. Pub. L. No. 91-604, 84 Stat. 1705. The EPA had authority under section 112 of the Clean Air Act Amendments of 1970 to regulate toxic air pollutants, designated as "extremely hazardous substances" (EHSs) and under a program to set national standards for hazardous air pollutants referred to by the acronym NESHAPS. ZYGMUNT J.B. PLATER, ET AL., ENVIRONMENTAL LAW AND POLICY: A COURSEBOOK ON NATURE, LAW, AND SOCIETY 790 n.14 (1992).

440. *Legislation to Control Air Toxics Needed, Waxman Says in Releasing Toxic Emissions Data*, 19 Env't Rep. (BNA) 2512 (Mar. 24, 1989). By 1990, the EPA had designated only eight substances as extremely hazardous substances. NATURAL RESOURCES DEFENSE COUNCIL, A WHO'S WHO OF AMERICAN TOXIC AIR POLLUTERS, A GUIDE TO MORE THAN 1,500 FACTORIES IN 46 STATES EMITTING CANCER-CAUSING CHEMICALS 2 (June 19, 1989) [hereinafter NRDC WHO'S WHO]. These included asbestos, beryllium, vinyl chloride, arsenic, benzene, and radionuclides. *Id.* The EPA had listed coke emissions, but final emission control regulations had not been issued. *Id.* at n.2.

twenty-first.⁴⁴¹ The 1987 TRI data revealed air releases totaling 361.5 million pounds nationwide for eleven cancer-causing air pollutants which the EPA had promised to regulate since 1984, but failed to do so.⁴⁴² The Clean Air Act Amendments of 1990 grabbed over 170 chemicals from the TRI list and directed the EPA to regulate them as air toxics.⁴⁴³

Federal farm legislation enacted in 1990 adopted a public right-to-know provision for agricultural pesticide use.⁴⁴⁴ Federal rule-making and proposed legislation linked to right-to-know has been undertaken for the Clean Air Act, Clean Water Act, CERCLA, Safe Drinking Water Act, and RCRA.⁴⁴⁵ Federal agencies, particularly the EPA, have used the TRI data to produce reports, guides and reviews focusing on specific aspects of toxic releases and risks.⁴⁴⁶ The TRI data is

441. 1987 TRI REPORT, *supra* note 195, at 118. The report also lists the TRI emissions for NESHAP air pollutants for 1987. *Id.* at 121.

442. NRDC WHO'S WHO, *supra* note 440, at 1.

443. See 42 U.S.C. § 7412(b)(1) (1988 & Supp. V 1993). Compare with 1988 TRI REPORT, *supra* note 377, at B-1-6 (providing table of the TRI chemicals). See also ENSR CONSULTING AND ENGINEERING, SPECIAL REPORT: PENDING CLEAN AIR ACT AMENDMENTS OF 1990, TITLE III - AIR TOXICS 3-4 (June 1990); *Proposed EPCRA Additions Would Double Number of Chemicals Requiring TRI Reports*, 24 Env't Rep. (BNA) 1619 (Jan. 14, 1994).

444. *President Bush Signs Farm Bill: Public Access to Records Questioned*, 21 Env't Rep. (BNA) 1496 (Nov. 30, 1990).

445. Macko, *supra* note 437, at 1692-94. See also 1989 TRI REPORT, *supra* note 82, at 331-35; *Definition of Federally Permitted Release Under Superfund, EPCRA Proposed by Agency*, 19 Env't Rep. (BNA) 423 (July 29, 1988); *Industries Object to Being Singled Out in Storm Water Rules for Toxic Chemical Use*, 22 Env't Rep. (BNA) 1792, 1792-93 (Nov. 22, 1991); *Review of Right-to-Know Compliance Will Help on Air Toxics, Consultant Says*, 23 Env't Rep. (BNA) 2870, 2870-71 (Mar. 5, 1993); SBA PETITION, *supra* note 142, at 1699-700.

446. *The National Toxic Release Inventory; Preliminary Air Toxic Data, Subcommittee on Health and the Environment, U.S. House of Representatives*, 101st Cong., 1st Sess. (1989) (using preliminary 1987 data released by Congressman Henry Waxman during Clean Air Act reauthorization debates to help illustrate the scope of legal toxic dumping into the air); 1987 TRI REPORT, *supra* note 195 (providing the EPA's first national report on the first year of TRI data collected, 1987, and containing extensive analyses, maps, charts, and graphs); 1988 TRI REPORT, *supra* note 377 (using 1987-88 data, EPA's second annual report documents the nation's TRI releases, providing extensive charts, tables, maps, and figures and including discharge data for top polluters and a partial toxicity matrix for TRI chemicals); 1989 TRI REPORT, *supra* note 82 (using 1989 data, the EPA's third national report is similar but more extensive than the previous report, and includes similar facility-specific and partial chemical toxicity data); 1991 TRI REPORT, *supra* note 238 (providing the first part of the EPA's fourth national report and including extensive analysis by industry, chemical, region, year, etc.); U.S. ENVIRONMENTAL PROTECTION AGENCY, STATE FACT SHEETS (May 1993) (EPA 745-F-93-002) (providing the second part of the EPA's fourth national report based on 1991 data and containing state fact sheets which show top chemicals and facilities by state); 1992 TRI REPORT *supra* note 67 (providing first part of the EPA's fifth national report, including more detailed year-to-year comparisons than previous reports); U.S. ENVIRONMENTAL PROTECTION AGENCY, STATE FACT SHEETS (Apr. 1994) (EPA 745-F-94-001) (providing the second part of the EPA's fifth national report based on 1992 data and containing state fact sheets which show top chemicals and facilities by state); U.S. ENVIRONMENTAL PROTECTION AGENCY, THE TOXICS RELEASE INVENTORY: ENVIRONMENTAL DEMOCRACY IN ACTION (Jan. 1992) (EPA 700-F-92-001) (providing an eight page analysis

extensively used by EPA headquarters and regional offices, often in conjunction with other EPA databases, in the initiation of new programs and the implementation of existing ones concerned with prevention initiatives, compliance reviews, inspection targeting, enforcement actions, and risk screening.⁴⁴⁷

describing the TRI program, diverse uses of the data and diverse roles of data users, public access and future directions of the program, including a bibliography of TRI reports); RESEARCH TRIANGLE INSTITUTE RESEARCH TRIANGLE PARK, ASSESSMENT OF CHANGES IN REPORTED TRI RELEASES AND TRANSFERS BETWEEN 1989 & 1990 (May 1993) (using 1989-90 data in an EPA-sponsored study to examine the extent to which reported improvements in emissions were related to cleaner production); GAO REPORT, *supra* note 262 (providing a review of the use and accessibility of the TRI data and recommending that the EPA include more emissions sources and chemicals in the TRI, increase compliance, and verify more emissions data). See *Reports Using Toxics Release Inventory (TRI) Data*, available in WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, JULY-AUGUST 1994 WORKING GROUP ON COMMUNITY RIGHT-TO-KNOW, available in RTK-NET, Entry No. 5962 (September 10, 1994). See also UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, CHEMICALS IN YOUR COMMUNITY: A GUIDE TO THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (Sept. 1988); Appendices 1-6.

447. 1989 TRI REPORT, *supra* note 82, at 316-20; 1991 TRI REPORT, *supra* note 238, at 319-24; 1992 TRI REPORT, *supra* note 67, at D-1 to D-9. The EPA branches which use TRI data include the Office of Air and Radiation (OAR), Office of Pollution Prevention and Toxics (OPPT), Office of Enforcement (OE), Office of Compliance Monitoring (OCM), Office of Solid Waste and Emergency Response (OSWER), and Office of Water (OW). 1991 TRI REPORT, *supra* note 238, at 319-24. For instance, OAR has used the TRI data for numerous tasks related to implementing the Clean Air Act Amendments of 1990 (CAAA), including identifying the number of facilities emitting a chemical and amount emitted to assist in setting research priorities for the 189 Hazardous Air Pollutants (HAPs) identified in the CAAA, estimating the major sources that might be affected by HAP regulations, taking TRI emissions from POTWs to establish maximum achievable control technology (MACT) standards required by the CAAA, helping state and local agencies to identify potential source categories of air toxics in their jurisdictions, aiding in identifying violations of national standards for lead emission, and as a measure for evaluating the progress of the CAAA in reducing air toxics. 1992 TRI REPORT, *supra* note 67, at D-2 to D-3. OPPT uses the TRI data to support EPA's Source Reduction Review Project (SRRP), an agency-wide effort to promote source reduction in the regulatory development process. *Id.* at D-3. It uses TRI data for risk screening, testing and pollution prevention activities in the agency's risk management assessment process. *Id.* at D-3 to D-4. OSWER uses TRI data in analyzing long-term trends and particular industry practices that warrant attention for its solid waste initiatives. *Id.* at D-4. The TRI data supplements other data sources to help in the development of the Office's enforcement priorities and as a means of establishing Superfund site location and liability by the Office. *Id.* OW uses TRI data to assist in identifying and prioritizing drinking water contaminants; screen possible sources of wellhead contamination, identify and quantify inputs of toxic chemicals to the Gulf of Mexico in a program directed at this body of water; identify industrial users with the greatest combination of toxic pollutants to city sewer systems; identify types and sources of pollutants discharged to publicly owned treatment works; develop effluent guidelines; and develop a national database of point source discharges that may result in sediment contamination. *Id.* at D-4 to D-5. Also note, the TRI database is among the approximately twelve Agency databases that are linked in the Agency's Integrated Data for Enforcement Analysis (IDEA) system. *Id.* at D-1. IDEA provides enforcement planners with complete compliance files of industry sectors and individual companies across the different statutes administered and enforced by EPA. *Id.* OE, OCM and EPA regional offices use the TRI data as a tool in inspection targeting and enforcement. 1991 TRI REPORT, *supra* note 238, at 321-22 (May 1993) (EPA 745-R-93-003). For instance, OCM and OE cross-check data collected under EPCRA and the Toxic Substance Control Act to identify facilities or types of business that reported for some but not all of the

The TRI data forms the backbone of the EPA's principal pollution prevention initiative which was mounted in 1991 and labeled the "33/50 Program,"⁴⁴⁸ so-called because it asks companies to voluntarily reduce emissions of seventeen high-priority TRI chemicals thirty-three percent by 1992 and fifty percent by 1995.⁴⁴⁹ The 33/50 program appears to have been fostered by the Bush Administration's EPA's embarrassment following the release of the second TRI in 1990. It made public the massive releases of toxic chemicals that went un- or underregulated. The 33/50 program fit perfectly with the Bush Administration's philosophy of substituting corporate volunteerism for regulation as the preferred means to achieve pollution reductions.⁴⁵⁰

various EPA reporting regulations. TRI data aids OE in developing enforcement initiatives, helping it to distinguish between industrial sectors based on risk, types of chemicals emitted, total pounds released, types of releases, and average pounds released per facility. *Id.* at 322.

Various EPA regional offices use the TRI data for pollution prevention efforts, compliance reviews, inspection, and enforcement targeting purposes, and risk screening. *Id.* at 323. For instance, EPA Region IV used TRI data with other data sources to develop toxicological profiles of two Kentucky towns to enable it to identify areas of high, medium, and low potential risk. 1989 TRI REPORT, *supra* note 82, at 316-19. Regions with coastal borders have used the data to assess coastal water pollution problems and develop regional strategies. *Id.* EPA Region III has used the TRI data in connection with its Chesapeake Bay program to update the database concerning toxic chemicals entering the Bay basin and to assist in the development of runoff models from point sources and non-point sources entering the Bay. *Id.*

448. The program was originally the Industrial Toxics Project. PROGRESS REPORT, *supra* note 261, at 17. The project was proposed as part of the EPA's stated strategy to implement the Pollution Prevention Act of 1990. 56 Fed. Reg. 7849. The strategy called for setting forth a program that would achieve objectives in pollution prevention within a reasonable time frame. *Id.* To address this objective the strategy included a plan to target fifteen to twenty high-risk chemicals that offered opportunities for prevention and set a voluntary goal of reducing environmental releases of the chemicals by thirty-three percent by the end of 1992, and at least fifty percent by 1995. *Id.* at 7850.

449. 1989 TRI REPORT, *supra* note 82, at 318. The EPA used the 1989 TRI data to develop its list of priority companies, and the TRI reports from the following years were intended to be used to measure the success of the program. *Id.* The EPA targeted seventeen chemicals known for their significant health and environmental effects, potential exposure, and production volume, and included benzene, cadmium and compounds, carbon tetrachloride, chloroform, chromium and compounds, cyanides, dichloromethane, lead and compounds, mercury and compounds, methyl ethyl ketone, methyl isobutyl ketone, nickel and compounds, tetrachloroethylene, toluene, trichloroethane, trichloroethylene, and xylenes. The EPA invited more than 7600 companies to participate in the program. 1991 TRI REPORT, *supra* note 238, at 245-46. The seventeen chemicals comprised twenty-three percent of all TRI releases and transfers and forty percent of all TRI chemicals released to the air. *Id.* at 257. The EPA initially invited the companies with the greatest amounts of releases and transfers, the "Top 600," but later expanded its invitation to 7600 companies. *Id.*

450. Bush Administration EPA head William K. Reilly is quoted as saying "this program could set the pace for a new cooperative way of addressing the nation's environmental goals." Keith Schneider, *Knowledge of Polluters is Power*, N.Y. TIMES, March 24, 1991. The voluntary nature of the 33/50 program was meant to establish a new relationship between government and industry which Reilly was confident would achieve environmental protection goals more efficiently than regulation. The project originated from August 1989 meetings held by EPA

The Clinton Administration's EPA appears to have enthusiastically embraced the philosophy of the 33/50 program⁴⁵¹ and claims the program has achieved significant and admirable progress.⁴⁵² Environmental organizations, however, contend the program is a sham whose design is badly flawed, whose reported results are suspect, and whose existence was created principally for the purpose of avoiding the use of tougher, more effective mandatory pollution prevention regulation.⁴⁵³

Administrator Reilly with the CEOs of nine major companies to seek voluntary emissions reductions. *EPA Launches Industrial Toxics Project, Preventing Pollution? Depleting Grassroots Resources? Or Filling a Regulatory Void?*, available in RTK-NET, Entry No. 1945 (June 2, 1991).

451. The EPA's TRI report for 1991 released in 1993 by the Clinton Administration EPA stated that "the Program . . . can augment the Agency's traditional command-and-control approach by achieving targeted reductions more quickly than would regulations alone" and noted that the program "seeks to instill a pollution prevention ethic throughout the highest echelons of American businesses." 1991 TRI REPORT, *supra* note 238, at 245. The deputy assistant administrator for policy, planning, and evaluation at the EPA told participants at an energy industry luncheon that the Agency generally wishes to move away from the "police culture" of regulation and wants to emphasize "compliance assistance" over compliance enforcement. *Five-Year Agency Plan Includes Strategies On Environmental Justice, Ecosystem Protection*, 25 Env't Rep. (BNA) 449 (July 1, 1994).

452. In 1993, when the EPA issued the TRI for 1991 calendar year, it declared the 33/50 program's interim goal of thirty-three percent national reduction had been reached a full year ahead of schedule. It reported that for 1991, a thirty-four percent reduction in the high priority chemicals had been accomplished, slashing releases from 1.474 billion pounds in 1988 to 973 million pounds in 1991, a 501 million pound reduction. 1991 TRI REPORT, *supra* note 238, at 243. In 1994, the EPA's TRI predicted that there was a trend toward early attainment of the 1995 goal of fifty percent reduction. 1992 TRI REPORT, *supra* note 67, at 262.

453. According to two reports by the Citizens Fund, a major flaw of the 33/50 program included its skewed definition of pollution prevention and allowing waste reduced through end-of-pipe pollution control methods to count toward program goals for pollution prevention. CITIZENS FUND, POLLUTION PREVENTION OR PUBLIC RELATIONS?: AN EXAMINATION OF EPA'S 33/50 PROGRAM 1, 3, 11 (May 1994) [hereinafter CITIZEN FUND I]; CITIZENS FUND, POISONS IN OUR NEIGHBORHOODS: TOXIC POLLUTION IN THE UNITED STATES, VOLUME II: NATIONAL OVERVIEW 25 (November 1993) [hereinafter CITIZEN FUND II]. They alleged that 33/50 is little more than a measure of reductions in TRI releases and transfers and not of pollution prevention. CITIZEN FUND I, *supra*, at 10. Any reductions companies report in releases and transfers of the seventeen chemicals, whether they are achieved by pollution prevention or pollution control, count toward the 33/50 targets. *Id.* at 10-11. The report noted that the 33/50 program's flawed definition of pollution prevention contradicted the definition of the Pollution Prevention Act of 1990 and the EPA's general pollution prevention policy. *Id.* The Citizens Fund surveyed participants in the 33/50 program and found they confused pollution prevention with pollution control in reporting reductions in their releases and transfers. *Id.* at 12.

The 1992 TRI appears to confirm the suspicion of the Citizens Fund that 33/50 program chemicals were not being reduced at the source, the proper definition of pollution prevention, but rather that the chemicals were being shifted into wastes. The inventory reported that while releases and transfers of the 33/50 chemicals were reduced significantly between 1991 and 1992, total production wastes associated with the chemicals increased between 1991 and 1992. 1992 TRI REPORT, *supra* note 67, at 263. It added that these wastes were projected to decline between 1993 and 1994. *Id.* The Citizens Fund contended that it was difficult to distinguish reductions that are truly voluntary from those that might have occurred because of pollution control regulations. CITIZEN FUND II, *supra*, at 25. Since chemicals on the 33/50 list are

Like the federal government, state governments have made worthwhile use of the TRI data. States use the TRI data to produce reports and reviews focusing on specific aspects of toxic releases and risks, and many states maintain their own databases and publish hard copy analyses of the releases within their borders.⁴⁵⁴ The TRI program has had a significant impact in spurring state pollution control and prevention legislation, strengthening existing programs, and aiding in the development of new regulatory and program initiatives. At least fifteen states have enacted pollution prevention

recognized for causing important health and environmental damage, they are more likely to be regulated under federal and state environmental and workplace laws and regulations. *Id.* at 26. For example, 1,1,1-trichloroethane will be banned in 1996 because it is an ozone depleter. *Id.* Benzene is regulated as a hazardous air pollutant under the Clean Air Act. *Id.* The so-called voluntary reductions claimed to be achieved by the 33/50 Program were also regarded as attributable to embarrassment and fear over public reaction and potential regulation resulting from the disclosure of massive releases of the seventeen chemicals compelled by the TRI inventory information. CITIZEN FUND I, *supra*, at 25.

A report by still another environmental coalition contends that the TRI-based voluntary program was used to stall further regulation, including mandatory pollution prevention. PROGRESS REPORT, *supra* note 261, at 17. It pointed out that the Bush Administration EPA Administrator had testified against mandatory programs in proposed right-to-know legislation. *Id.* See also *Voluntary Pollution Prevention Program Labeled 'Sham' by Environmental Group*, 25 Env't Rep. (BNA) 280 (June 10, 1994); *Coalition Advocates Greater Public Role in Controlling Hazards of Toxic Chemical Use*, 23 Env't Rep. (BNA) 1112 (July 31, 1992); *Report Says Relatively Few Companies Join Voluntary Effort to Cut Chemical Emission*, 23 Env't Rep. (BNA) 1507-08 (Oct. 2, 1992); *EPA Launches Industrial Toxics Project, Preventing Pollution? Depleting Grassroots Resources? Or Filling a Regulatory Void?*, available in RTK-NET, Entry No. 1945 (June 2, 1991); Sanford Lewis, *Corporate Volunteerism: 1,000 Points of Blight*, available in RTK-NET, Entry No. 2186 (Nov. 23 1991) (noting environmental groups such as the National Toxics Campaign and Greenpeace assert that the EPA should completely ban many of these chemicals, not merely ask corporations to reduce their emissions and that the EPA's effort implicitly commits the agency not to exercise its regulatory power to ban voluntary reduction chemicals during the intervening five years).

Many states have included the 33/50 chemicals within the framework of pollution prevention and reduction programs existing prior to the establishment of the 33/50 program and others have used it as a model for new pollution prevention and reduction initiatives. 1991 TRI REPORT, *supra* note 238, at 243.

454. The states which have produced secondary reports using TRI data or reports on yearly TRI releases and transfers include Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Michigan, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, Utah, Virginia, Washington, and Wisconsin. *Reports Using Toxics Release Inventory (TRI) Data*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, JULY-AUGUST 1994 "WORKING NOTES," available in RTK-NET, Entry No. 5962 (September 10, 1994). City and regional governmental reports have also been published using the TRI data. *Id.* New Jersey publishes a community action packet kit entitled *Toward a Toxic Free Environment in New Jersey* for anti-toxics, safety and prevention efforts. *Organizing and Using Environmental Data*, available in RTK-NET, Entry No. 200 (June 12, 1991). See also *Survey Assesses State Programs*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, MAY-JUNE 1994, available in RTK-NET Entry No. 5839 (July 9, 1994). At least thirty-four states have entered at least one year's TRI data into a computer database, at least twenty-six generate customized database reports, at least twenty provide data runs for the public and at least six allow direct public access to the computerized database. 1991 TRI REPORT, *supra* note 238, at 324.

and reduction laws,⁴⁵⁵ some of them roused into action through the efforts of public interest groups using the TRI data to influence legislative action.⁴⁵⁶

For existing state pollution control and prevention programs, the TRI data has been used in improving and toughening permit programs and for enforcing other major environmental programs.⁴⁵⁷ The TRI has been applied in Ohio to determine if additional pollutants should be included in water pollution discharge permits; in Connecticut to decide if additional controls are necessary for discharge permits; and in Wisconsin as part of the information considered in facility audits and permits for water pollution discharges.⁴⁵⁸

The TRI is used as an enforcement tool by helping to identify pollution control targets that were not apparent through conventional emissions information.⁴⁵⁹ It has been applied to cross-check reporting facilities with other environmental databases to select facilities for inspections and compliance under other environmental statutes.⁴⁶⁰

In addition to strengthening existing regulations, the TRI data has been used to develop and inspire a new wave of environmental

455. PROGRESS REPORT, *supra* note 261, at 18-19. See also *Florio Signs Pollution Prevention Bill With Goal To Cut Hazardous Releases By Half*, 22 Env't Rep. (BNA) 1035 (Aug. 9, 1991) (reporting enactment of pollution prevention legislation in New Jersey which covers facilities required to report TRI data).

456. GAO REPORT, *supra* note 262, at 23. In 1989, Oregon and Massachusetts enacted the first laws in the nation mandating reductions in the use of toxic chemicals. The Oregon law requires all companies that submit TRI reports and hazardous waste generators to set goals to reduce pollution by 1991 and small generators to do so by 1992. The Massachusetts statute establishes a statewide goal of a fifty percent reduction in industrial toxic waste generation by 1997. *Id.* In response to the TRI data Minnesota enacted the Minnesota Toxic Pollution Prevention Act of 1990. 1991 TRI REPORT, *supra* note 238, at 308. States also use the TRI data as elements of their pollution prevention legislation, such as Illinois and the District of Columbia. *Id.* at 308-09.

457. 1989 TRI REPORT, *supra* note 82, at 308-12. See ERIN, *supra* note 434 (reporting that the TRI data is used by at least thirty-four state agencies to track toxic chemical emissions, thirty-three states to enforce environmental programs, twenty-four states to regulate toxic chemicals, nineteen states to screen health risks, eighteen states to screen environmental risks, and eighteen states to conduct pollution prevention projects). See also 1991 TRI REPORT, *supra* note 238, at 324-25; 1992 TRI REPORT, *supra* note 67, at D-7 to D-9.

458. 1989 TRI REPORT, *supra* note 82, at 311.

459. See ERIN, *supra* note 434.

460. For example, Texas uses the TRI data to monitor the state's water and air dischargers for additional compliance and inspection, Delaware reviews the TRI data to determine if reporting facilities are also subject to its program for regulating extremely hazardous substances, and to cross-check air discharge permit levels, Oklahoma compares the TRI air data with point source emissions information to find inconsistencies, and Ohio cross-checks the TRI data to identify violators of its solid waste laws. 1991 TRI REPORT, *supra* note 238, at 312. Massachusetts environmental agencies used the data to select facilities that emitted large quantities of toxic chemicals in a region of the state and to secure compliance with various state and federal environmental regulations by these facilities. GAO REPORT, *supra* note 262, at 24.

regulation and improvement programs. At least six states have used TRI data for environmental justice projects.⁴⁶¹ States have used TRI data for identifying sources for further air toxics regulations, verifying emission inventory data from other programs, determining point source and fugitive air emissions for target chemicals, and prioritizing air toxics and ground water quality activities.⁴⁶² State agencies have used the TRI data to screen for potential health and environmental risks posed by toxic chemical releases and transfers.⁴⁶³ They have also used the TRI to target technical assistance to TRI facilities.⁴⁶⁴ The federal TRI program has encouraged states to undertake additional right-to-know programs and initiatives meant to alert the public about toxic releases and transfers within their borders.⁴⁶⁵

E. Effect on Industry

The TRI is not just a reporting measure, but it is also a revelation of the extent of the toxics problem. It has become “probably the most significant measure of industry’s overall environmental performance and progress in reducing wastes and emissions” as well as an important indicator of the responsiveness of companies to environmental and human health issues.⁴⁶⁶ In many cases, the TRI shows the astonishing extent to which industries use our environment as a dumping ground.⁴⁶⁷

461. Arizona used TRI data for analysis of a Phoenix neighborhood; California for a state comparative risk project; Connecticut to detect release trends in minority communities; Georgia in response to specific environmental equity concerns; Louisiana to compare facilities and releases with the location of low-income communities in East Baton Rouge Parish (county), and South Carolina by the state Black Caucus to develop environmental equity legislation. 1992 TRI REPORT, *supra* note 67, at D-9.

462. 1989 TRI REPORT, *supra* note 82, at 313.

463. *Id.* at 314. Utah’s air toxics control program used TRI data to identify facilities, locations and chemicals for a more detailed risk assessment and also in its water pollution control program to identify water bodies affected by toxic chemical discharges. Minnesota had undertaken a project to make use of multiple pollution release databases to identify areas for more detailed risk assessment. *Id.* Arizona, in conjunction with the federal Public Health Service, created a program entitled “Healthy People 200” which establishes goals to reduce human exposure to toxic agents by reducing the total pounds of these agents released into the environment. 1992 TRI REPORT, *supra* note 67, at D-7 to D-8. The data comes, in part, from the TRI. *Id.*

464. 1989 TRI REPORT, *supra* note 82, at 315 (giving Minnesota and Texas as examples).

465. *Id.* at 314 (noting that states including Illinois, Louisiana, New Jersey, New York, Minnesota, and Virginia have prepared annual reports on the volume and nature of releases and transfers within their borders, by facility and geographical place).

466. Ann M. Thayer, *Growing Exchange of Information Spurs Pollution Prevention Efforts*, CHEMICAL AND ENGINEERING NEWS 8 (July 26, 1993).

467. See *Organizing and Using Environmental Data, Responding to Reduction Claims*, available in RTK-NET, Entry No. 249 (July 26, 1989).

A major early fear of some in industry was that once released the TRI data would lead to a public outcry and this would eventually lead to greater regulation. The law was called a “real sleeper”⁴⁶⁸ which could “haunt” industries handling chemicals.⁴⁶⁹ Soon after EPCRA was enacted, and before the first TRI data would be publicly released, an official with the Bush Administration EPA advised industry to conduct a public relations campaign to convince the public about progress they have made and would continue to make to reduce discharges.⁴⁷⁰ The head of Du Pont offered public relations as a tactic to “offer some assurance” to the public “that the problem [was] not of crises proportion.”⁴⁷¹

The TRI has had several impacts on industry. Industry is one of the largest, if not the largest, user of the TRI database.⁴⁷² There is a rising trend in major corporations of issuing environmental progress reports, similar to stockholder reports, but focusing on pollution, to counter adverse publicity that might be caused by their annual toxic release data.⁴⁷³ The most important impact is that public availability and disclosure of inventory data has motivated industry to promise to meet sharp pollution reduction goals in well-publicized campaigns. They have done this to fend off public outcry and the implications which come from it.⁴⁷⁴

From the very first year that the TRI data was released, 1989, the data has been a significant prod to industry to cut back emissions.

468. *Compliance With Right-to-Know Advised Although Payoff Is Not Immediately Obvious*, 18 Env't Rep. (BNA) 1035 (Aug. 14, 1987) (reporting on the remarks of IBM executive Khristine Hall).

469. *EPA Official Advises Industry to Begin Local Public Dialogue Before Releasing Data*, 17 Env't Rep. (BNA) 1799 (Feb. 20, 1987) (reporting on remarks by Bush Administration EPA assistant administrator for pesticides and toxic substances, John A. Moore).

470. *Prepare Now for Public's Questions on Emissions Data, EPA Official Recommends*, 18 Env't Rep. (BNA) 1561, 1561-62 (Oct. 16, 1987).

471. *Du Pont Chairman Sees Need to Build Consensus on 'Right Response' to Environmental Problems*, 17 Env't Rep. (BNA) 1227 (Nov. 21, 1986) (quoting Richard E. Heckert, CEO of DuPont). See also *Petroleum Industry Faces Problems in Complying with EPCRA, API Head Says*, 19 Env't Rep. (BNA) 303 (July 1, 1988) (reporting that the head of the American Petroleum Institute fears citizens may overreact to chemical release data for petroleum industry and advises members to put a good face on the data.)

472. Industry representatives constituted nearly half (48.8%) of the users of the TRI public data base during the first fifteen months of operation according to the National Library of Medicine (NLM), which manages the database. GAO REPORT, *supra* note 262, at 37, 72. NLM reports that for the balance, research centers constituted 25.4% of the users, the federal government 12.6%, private citizens 7.7% and states governments 5.5%. *Id.* at 37.

473. *Companies Producing Environmental Reports to Counter Publicity Over EPCRA Release Data*, 23 Env't Rep. (BNA) 3090 (Apr. 2, 1993). They include Monsanto, Du Pont, Amoco, and General Electric. *Id.* at 3090-91. Monsanto prints 100,000 copies of an annual report describing its progress in pollution prevention and reduction. *Id.* at 3090.

474. Mary Beth Regan, *An Embarrassment of Clean Air*, BUS. WK., May 31, 1993, at 34.

The current EPA head says that it serves “as an eye opener to lots of CEOs” who find themselves embarrassed by the bad publicity created by the findings of the TRI reports.⁴⁷⁵ Monsanto, for instance, was revealed by the first inventory results to be a top air polluter.⁴⁷⁶ As its vice-chairman noted, “[w]e knew the numbers were high, and we knew the public wasn’t going to like it.”⁴⁷⁷ Thus, on the eve of the first national release of the TRI data, Monsanto pledged to cut its releases of inventory chemicals by ninety percent of its 1987 levels by 1992.⁴⁷⁸

The TRI has goaded industry groups to create new or improve existing pollution prevention programs, many patterned after the EPA’s 33/50 program, by using voluntary partnerships with federal, state, and local governments.⁴⁷⁹ In effect, the TRI has amounted to “regulation by information” for industry.⁴⁸⁰

Perhaps the best known voluntary initiative is that launched in 1988 by the Chemical Manufacturers Association (CMA) called “Responsible Care.”⁴⁸¹ The EPA’s 33/50 program was patterned after Responsible Care.⁴⁸² The CMA called Responsible Care the most ambitious and comprehensive environmental improvement effort ever undertaken by industry and claimed all 184 of its members had

475. Timothy Noah, *EPA to Expand List of Chemicals on Toxic Report*, WALL ST. J., Jan. 1, 1994, at B5. A spokesman at a Louisiana American Cyanamid plant has noted that because of the TRI reporting “there is much more public pressure for us to reduce discharges.” Keith Schneider, *For Communities, Knowledge of Polluters is Power*, N.Y. TIMES, March 24, 1991, at E5.

476. The 1987 national TRI report does not provide a list of companies with the largest TRI releases and transfers but the 1988 report does, and it showed Monsanto to be the second largest behind DuPont. 1988 TRI REPORT, *supra* note 377, at 172. Monsanto reported releases and transfers of over 201 million pounds of TRI chemicals. *Id.*

477. Regan, *supra* note 474, at 34.

478. *Id.* By 1990, Monsanto had cut its toxic air emissions fifty-eight percent compared to 1987 levels; and in 1993, Monsanto proclaimed that the 1992 data, when compiled, would show it made its ninety percent goal. John W. Johnstone, *Chemical Industry Cleans Up Its Act*, FORUM FOR APPLIED RESEARCH AND PUBLIC POLICY 65, 66 (Spring 1993). *See also* Appendix 3 (listing Monsanto Co. as the sixth largest Parent Company for total TRI releases, releasing over fifty-five million pounds).

479. Such programs mounted by business associations and government agencies, often in partnership, include Green Lights, WasteWiSe, Energy Star, Green Sectors, WAVE, NICE3, Design for the Environment, Climate Wise, Motor Challenge, and MERIT (Mutual Efforts to Reduce Industrial Toxics). CITIZENS FUND, POLLUTION PREVENTION . . . OR PUBLIC RELATIONS: AN EXAMINATION OF EPA’S 33/50 PROGRAM 5 (May 1994); *Five-Year Agency Plan Includes Strategies on Environmental Justice, Ecosystem Protection*, 25 Env’t Rep. (BNA) 449 (July 1, 1994). WasteWiSe was launched by the EPA and asks companies “to set specific recycling and waste reduction goals.” *More Than 280 Companies Join Effort to Reduce, Reuse, Recycle Waste*, EPA Says, 25 Env’t Rep. (BNA) 529 (July 22, 1994). By mid-summer 1994, more than half of the Fortune 500 companies had joined. *Id.*

480. Finto, *supra* note 362, at 13.

481. Johnstone, *supra* note 478, at 65 (that author is chairman of Olin Corporation and the Chemical Manufacturers Association).

482. *Id.*

committed to it.⁴⁸³ Among other things, the CMA promised to go well beyond existing laws to reduce pollution and to fling open plant gates to inform and conduct dialogues with the public.⁴⁸⁴

The head of CMA admitted "Responsible Care was launched for one basic reason: the industry had no choice."⁴⁸⁵ He noted that incidents like Bhopal had plunged public trust of the chemical industry to "dismal depths," with CMA's own surveys showing the public ranked the chemical industry behind only the tobacco industry among the top threats to public health and the environment.⁴⁸⁶ Responsible Care is thus not voluntary pollution reduction done for altruistic purposes, but is rather primarily pre-emptive public relations seeking to avoid mandatory regulation which the public might demand if chemical data was not interpreted in the manner the chemical industry wished. In 1987, after the passage of EPCRA, a major chemical company executive heading CMA's Title III committee urged chemical companies to put the proper spin on the TRI data the first time it was to be released to the nation to counter a "chemophobia" reaction from the public that might lead to more broad-scale environmental regulation for industry.⁴⁸⁷

It is apparent that public knowledge about the TRI emissions has led to very real efforts at changes in industrial practices for the purpose of reducing toxic releases and transfers.⁴⁸⁸ Environmen-

483. *Id.*

484. *Id.* at 69. The stated goals of Responsible Care committed CMA members to "be safe and environmentally responsible" in making, transporting, storing, using, and disposing of chemicals; "to respond to community concerns about chemicals and operations;" to help communities respond to chemical emergencies; and to "keep the public and government officials informed about chemical-related health and environmental" dangers. CAROLYN HARTMANN, U.S. PUBLIC INTEREST RESEARCH GROUP, TRUST US DON'T TRACK US: AN INVESTIGATION OF THE CHEMICAL INDUSTRY'S "RESPONSIBLE CARE" PROGRAM 7 (March 1992).

485. Johnstone, *supra* note 478, at 69.

486. *Id.*

487. *CMA Advises Firms to Go Beyond Compliance With Title III Mandates To Avoid Problems*, 18 *Env't Rep.* (BNA) 1327 (Sept. 11, 1987). The head of CMA's Title III coordinating committee warned that if the chemical industry could not further explain or interact with the public about upcoming TRI data, the public could demand tighter air emissions controls, legislation mandating waste minimization more stringent hazardous waste disposal restrictions, ground water protection measures, more extensive control of hazardous waste transportation, toxic chemical compensation laws, chemical specific facility permits and more stringent controls on chemical process design and safety. *Id.* at 1328.

488. One survey of 1000 reporting facilities found that over half had made one or more operational changes resulting from the TRI program. See ERIN, *supra* note 434 (referring to a 1989 study by the United States General Accounting Office but not providing a citation). The types of changes reported, in order of frequency, were: improved inventory controls (thirty-nine percent); a switch to alternative chemicals (thirty-two percent); improved chemical use controls (thirty-one percent); improved equipment efficiency (twenty-three percent); changed manufacturing processes (twenty-one percent); reduced point source emissions (twenty percent); and reduced fugitive emissions (twelve percent). *Id.* at Attachment A.

talists, however, are cynical about the motives behind efforts at corporate volunteerism and the effectiveness of results claimed by industry. Companies which make promises to reduce pollution out of fear of bad publicity and harsher regulation are not really acting voluntarily. They are capitulating to not just regulation-by-information but to regulation-by-embarrassment.⁴⁸⁹

The CMA member companies constitute more than ninety percent of United States chemical company production and the chemical industry comprises by far the largest industrial sector for TRI releases and transfers.⁴⁹⁰ The CMA claims reductions in toxic chemical releases from the chemical sector reflected in the TRI data are real and attributes them to massive investment in pollution control expenditures due to increased public accountability imposed upon the industry by the TRI.⁴⁹¹

Environmentalists have called reductions in the TRI releases and transfers, claimed by the EPA and American industry, "phantom," contending that most of the largest decreases in toxic emissions are the result of changes in reporting requirements, analytic methods, and production volume, and not from real pollution prevention or abatement.⁴⁹² Five years after its celebrated pledge to cut by ninety percent its toxic releases to the air, Monsanto claimed it achieved its goal. But a brief report from environmental groups claimed that paper recalculations were the source of some emission declines.⁴⁹³ The Citizens Fund contacted fifty top waste generating facilities in the chemical industry to gauge their progress in preventing pollution.⁴⁹⁴ The head of the group claimed that twelve of the fifteen lowest ranking facilities were operated by CMA members and called the Responsible Care campaign ineffective.⁴⁹⁵ Union Carbide, a CMA member, has claimed it searched for and found ways to reduce its TRI

489. See Regan, *supra* note 474, at 34.

490. *TRI Emissions From Chemical Plants Decreased in 1992, Industry Study Says*, 24 *Env't Rep. (BNA)* 2106 (Apr. 15, 1994).

491. *Id.*; David Hanson, *Toxics Release Inventory Data Show Steady Drop in Emissions*, *CHEMICAL AND ENGINEERING NEWS* 14 (June 14, 1992).

492. GERALD V. POJE & DANIEL M. HOROWITZ, NATIONAL WILDLIFE FEDERATION, *PHANTOM REDUCTIONS: TRACKING TOXIC TRENDS 1* (August 1990); CITIZENS FUND, *POISONS IN OUR NEIGHBORHOODS: TOXIC POLLUTION IN THE UNITED STATES, VOLUME I: NATIONAL OVERVIEW 17* (November 1993).

493. *Assessing Those Changes*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, SEPTEMBER-OCTOBER 1993, available in RTK-NET Entry No. 4689 (October 30, 1993) (noting that Monsanto was given credit for preventative changes).

494. CITIZENS FUND, *POISONS IN OUR NEIGHBORHOODS: TOXIC POLLUTION IN THE UNITED STATES, VOLUME I: NATIONAL OVERVIEW 25* (NOVEMBER 1993).

495. *U.S. Manufacturers Not Doing Enough to Prevent Pollution, Group Charges*, 24 *Env't Rep. (BNA)* 1338, 1338-39 (Nov. 19, 1993).

releases; but, cross-checking by environmental groups of the company's releases reported under the nation's hazardous waste law, RCRA, make this claim suspect.⁴⁹⁶

Part of the Responsible Care campaign was a pledge that chemical companies would open up the plant gates and answer citizen questions about toxic chemical use and accident prevention. A study by another environmental group called this pledge into question by showing plant doors in many instances remain closed.⁴⁹⁷

Many CMA members may very well be sincere in their commitment toward the Responsible Care campaign. It is clear that this trade association cannot guarantee every company in the chemical industry will keep the pledge of openness to the public. It is likewise clear that the CMA cannot keep individual members from going to substantial lengths to subvert this pledge. For example, Ashland Oil, which claims to subscribe to the principles of Responsible Care, has been accused of suppressing publication of a year-long investigation of serious, long-standing pollution at one of the company's facilities by the official magazine of the American Chemical Society, of which Ashland is a member.⁴⁹⁸

496. *Studies Expose Phantom Reductions, Assessing the Rush to Reduce*, available in RTK-NET, Entry No. 1942 (April 25, 1991). A report entitled PRESENT DANGERS . . . HIDDEN LIABILITIES "examined data from Union Carbide facilities across the country," and found that reported toxic release and transfers "declined under the toxics-release inventory (TRI) while increasing under RCRA . . . Union Carbide generated over 300 million pounds of hazardous waste in 1988 - an increase of more than 70 million pounds" from the year before. *Id.* This sharp increase far offset the decrease of 10 million pounds in emissions of reported under the TRI. *Id.*

497. HARTMANN, *supra* note 484, at 3-4. U.S. PIRG conducted a survey of 192 CMA member facilities in twenty-eight states to investigate commitments by these firms to keep the public informed about chemical-related hazards. It found that at eighty-one facilities, or forty-two percent, callers were unable to reach anyone to answer their questions despite repeated attempts. *Id.*

498. *Magazine Squelches Investigation*, WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW, SEPTEMBER-OCTOBER 1994, available in RTK-NET, ENTRY No. 6929 (November 9, 1994). Ashland executives lobbied the American Chemical Society (ACS) to kill publication in the Chemical and Engineering News magazine of a year-long investigation into pollution at Ashland Oil's Catlettsburg, Kentucky, refinery. The ACS is a scientific organization which seeks to serve the professional interests of chemists and has 150,000 readers, split nearly evenly between academia and industry, and it publishes the magazine. *Id.* A top Ashland executive flew to the ACS Washington, D.C., headquarters to stop publication of the story by the group's newsmagazine. The refinery, the nation's thirteenth largest, "has a long history of environmental violations and poor relations with the surrounding community." It lacked a valid operating permit for decades and polluted the Big Sandy and Ohio rivers. Its air emissions far exceed similar refineries. The company had been fined for many air quality and other violations, and because the plant sits in a valley it is the source of pollutants that are frequently trapped in air inversions. Fallout of powdery soot and other problems have spurred lawsuits involving over 1000 plant neighbors. The company has been accused of not practicing what is preached by the Responsible Care Program and its own propaganda, by inundating the local media with public relations extolling the company as a good neighbor, donating to local schools and charities, while generally resisting protests to clean up. *Id.*

VI. CONCLUSION

Obscure as it was, there were neither great expectations nor great fears about EPCRA when it was enacted. Most of the relatively small concerns about the legislation have not been realized. The few who did fear the power of information fostered by EPCRA, and particularly the Toxic Release Inventory, proved to be right. EPCRA does not attract the same attention or resources as more notable federal pollution laws, but it created a quiet revolution with its effects on the public, regulators, legislators, press, citizen groups, and public consciousness in relation to toxic chemicals and the environment. The most important impact of EPCRA is that it has firmly established and justified the principle that members of the public have a right-to-know about emissions and their risks. The public's right-to-know about toxics released into the environment is now widely accepted. The pressure of public exposure on government and industrial performance has been positive, leading to actual or promised environmental improvements through voluntary cleaner production and pollution prevention initiatives, even though this has avoided direct regulatory measures environmentalists generally trust more.⁴⁹⁹

While the very real success of the toxic right-to-know provision of EPCRA was not anticipated during the early stages of life for the program, continued future success is by no means assured. The current Republican Congress has made emasculating environmental and health and safety regulation one of its premier goals in the name of regulatory reform, and several bills meant to fulfill this purpose might end right-to-know as we know it.⁵⁰⁰ These proposals have both the intent and the effect of subjecting governmental communication about chemical risks and exposure to paralyzing review and delay.⁵⁰¹ These efforts reverse the momentum from the public's right to know more about toxic substances to knowing less. The chemical industry is in league with those in Congress who wish to roll back the public right-to-know about toxics. Prior to the last election, when it appeared that it would have to live with a robust and expanding TRI program, the chemical industry tried to put the best face on the bad news revealed in the TRI findings and gave the impression it wholeheartedly embraced the program. This is no longer the case.

Two types of legislation have emerged which threaten the very successful TRI program. The first is an indirect assault on the TRI.

499. ERIN, *supra* note 434.

500. WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL "WORKING NOTES" NEWSLETTER, *available in* RTK-NET, ENTRY No. 10109 (May 24, 1995).

501. *Id.*

That is, legislation which is a broad attempt at reducing and hampering all federal regulation, and which happens to encompass and harm the TRI program in the process. The other is the direct assault on the TRI, the legislation that specifically intends to hurt the TRI program.

One kind of indirect assault which would have a profound effect on the TRI is the regulatory moratorium legislation promised by the Republicans as part of the Contract with America campaign. This effort started out as a proposal for a harsh regulatory moratorium and turned into one for a more modest opportunity for a legislative veto of federal regulation.

In February 1995, the House passed a one-year moratorium on virtually all federal regulations retroactive to November 9, 1994, and sent the measure to the Senate.⁵⁰² If this comprehensive moratorium had become law it would have stalled or blocked the EPA's addition of 286 chemicals to the TRI list. The Senate took a different approach, in late March, voting 100-0 to flatly reject a comprehensive moratorium and instead adopted a congressional layover measure which used a 45-day time period during which Congress could scuttle any new regulations.⁵⁰³

In a surprise move in early June 1995, the House took up and passed the Senate bill but substituted the language of the comprehensive moratorium it first wanted.⁵⁰⁴ This was a political maneuver meant to lead to a House-Senate conference in which the House proponents of the moratorium hoped to prevail in a final bill adopting the moratorium instead of the layover.⁵⁰⁵ Senators Carl Levin (D-MI) and John Glenn (D-OH) have vowed they will fight the regulatory moratorium and try to stop a House-Senate conference on the subject with a procedural floor fight in the Senate.⁵⁰⁶

Another major indirect attack on the TRI found in the regulatory reform legislation of the Contract with American agenda seeks to impose an extensive process of cost-benefit analysis and risk assessment upon federal regulation. The chief threat to the TRI is the risk

502. H.R. 450, 104th Cong., 1st Sess. (1995). The bill passed the House on February 24, 1995 by a vote of 276-146. The house bill was formally titled the Regulatory Transition Act of 1995 and given the popular titles of Contract with American bill and Regulatory Freeze bill. It was referred to the Senate Committee on Governmental Affairs. It provides certain emergency exceptions for presidentially designated imminent threats to health or safety, or actions necessary for the enforcement of criminal laws. The bill also would authorize civil actions by anyone adversely affected by any conduct of a federal agency in violation of the moratorium.

503. S. 219, 104th Cong., 1st Sess. 103 (1995).

504. CITIZENS FOR SENSIBLE SAFEGUARDS, *available in* RTK-NET, Entry No. 10178 (June 9, 1995).

505. *Id.*

506. *Id.*

assessment⁵⁰⁷ measure which would require that a risk assessment be taken before any federal agency adopts a major health, safety or environmental regulation, and that this assessment justify the regulatory action.

In March 1995, the United States House of Representatives passed the Risk Assessment and Cost-Benefit Act of 1995.⁵⁰⁸ The key Senate counterpart for risk assessment legislation, the Comprehensive Regulatory Reform Act of 1995,⁵⁰⁹ was introduced by Senator Dole, which is in most respects similar to H.R. 9.⁵¹⁰ The House and Senate bills both would subject major federal rules to a costly, time-consuming, possibly industry influenced risk-assessment process, and easy legal challenges. This would clearly hobble, if not altogether prevent, any meaningful future expansion of the TRI.⁵¹¹

These two bills, S. 343 and H.R. 9, would require that any major federal regulation, defined as one which would have an economic impact starting at \$50 million, would have to undergo the risk-assessment and cost-benefit analysis. Fifty million dollars is a very low figure and would easily ensure that any important federal regulation would be subject to the process. The latest expansion of the TRI list, which doubled it, was estimated to cost industry well over \$50 million.⁵¹² Critics complain that subjecting all major new or existing

507. Risk assessment involves using data, assumptions and models to estimate the probability of harm to human health and the environment that may result from exposures to specific hazards, such as toxic and hazardous chemicals in the environment. G. TYLER MILLER, JR., *LIVING IN THE ENVIRONMENT: CONCEPTS, PROBLEMS AND ALTERNATIVES* 533 (1975).

508. H.R. 9, 104th Cong., 1st Sess. (1995). H.R. 9 is the Job Creation and Wage Enhancement Act of 1995. The Risk Assessment and Cost-Benefit Act of 1995 made up Division D of HR 9 and requires all government agencies to conduct risk assessment and cost-benefit analyses for every major rule or regulation. Division D incorporates the text of a bill originally known as HR 1022, 104th Cong., 1st Sess. (1995). The risk assessment and cost-benefit measure passed the House on March 3, 1995, by a 277-141 vote and was referred to the Senate Committee on Governmental Affairs.

509. S. 343, 104th Cong., 1st Sess. 622 (1 1995).

510. Initially the Dole bill competed in the Senate with S. 291, introduced by Senator Roth (R-Del). S. 291, 104 Cong., 1st Sess. The Roth measure was labeled as Contract with America legislation, given the popular title of "Regulatory Overhaul Bill," and was labeled formally as the "Regulatory Reform Act of 1995." The Roth measure was reported out of the Senate Committee on Governmental Affairs in late May and set for a vote in the Senate. The two bills were similar in many respects, but the Dole bill was tougher and to the right of the Roth bill. RTK-NET, Entry No. 10185 (June 12, 1995). The major difference is that the Dole bill established a lower threshold for the amount of monetary economic impact used to trigger extensive agency cost-benefit and risk assessment analysis, using \$50 million as compared to \$100 million in the Roth measure. This meant that more federal regulations would be subject to the review process.

511. WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 10109 (May 24, 1995).

512. Addition of Certain Chemicals; Toxic Chemical Release Reporting; Community Right-to-Know, 59 Fed. Reg. 61432, 61471 (1994) (to be codified at 40 C.F.R. § 372). The EPA esti-

regulations to a protracted risk assessment and cost-benefit analysis process will eat up enormous resources for federal agencies. In the case of the EPA, the constant study of risks, costs and benefits would be at the expense of real pollution regulation and prevention.⁵¹³

The bills provide that once the federal agency has completed a risk study it will be subjected to a peer review panel. Critics have called these "de facto veto panels"⁵¹⁴ and even if the panels don't kill regulatory action by an agency they might micromanage it into uselessness.⁵¹⁵ The bills expressly do not exclude from the panels experts who might have financial interests in the outcome of the review, including representatives or employees of any industry which is to be subject to the proposed regulation.⁵¹⁶ Moreover, a conflict of interest by members of review panels need only be made known to the agency, not to the public, and the peer review panel may proceed in secret.⁵¹⁷

The bills contain sunset provisions which automatically call for the end of any government program, like the TRI, if the EPA fails to complete a lengthy cost-benefit finding that showed the program's costs are justified. Critics claimed the sunset provision would consume enormous agency resources and offer numerous new opportunities for legal challenges.⁵¹⁸ Moreover, the sunset provisions provide opportunities for a hostile administration to make regulatory programs disappear by stalling review.⁵¹⁹

The bills include petition and lookback provisions which allow numerous opportunities for industries to make government agencies add new rules to a review process or to undertake risk assessment or

mated the total costs to industry of adding the new chemicals to the TRI list at approximately \$99 million the first year and \$49 million each year afterward. *Id.* The EPA's costs were estimated to be \$1 million a year. *Id.*

513. WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 10109 (May 24, 1995).

514. *Id.*

515. LATEST ON REGULATORY REFORM BILL, CITIZENS FOR SENSIBLE SAFEGUARDS, available in RTK-NET, Entry No. 10248 (June 26, 1995). The bills require that any decision likely to cost the economy more than \$100 million must be accompanied by a full peer review of outside experts. But the OMB can require peer review even if the costs don't reach \$100 million. *House Passes Costly Risk Assessment Bill*, RACHEL'S ENVIRONMENT & HEALTH WEEKLY #435, March 30, 1995, available in RTK-NET, Entry No. 9941 (March 29, 1995).

516. WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 10109 (May 24, 1995).

517. *House Passes Costly Risk Assessment Bill*, RACHEL'S ENVIRONMENT & HEALTH WEEKLY #435, March 30, 1995, available in RTK-NET, Entry No. 9941 (March 29, 1995) [hereinafter *House Passes Bill*]; *Dole/Johnston Regulatory Reform Bill*, CITIZENS FOR SENSIBLE SAFEGUARDS, available in RTK-NET, Entry No. 10250 (June 26, 1995) [hereinafter *Dole/Johnston Bill*].

518. WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL "WORKING NOTES" NEWSLETTER, available in RTK-NET, Entry No. 10109 (May 24, 1995).

519. *Id.*

cost-benefit analysis for existing rules.⁵²⁰ These provisions give industry the power to significantly slow down rule-making or force an agency to divert resources from activities it really favors.⁵²¹ Critics contend that the measures for petition/lookback reviews and sunset reviews in the end provide a “back door route” to delay or kill rules either the federal agency or industry dislikes.⁵²²

The bills contain broad judicial review that readily allow suits for contentions of noncompliance with the law. Environmentalists maintain this would allow industry to easily delay or stop regulations with lawsuits which were groundless or based on minor errors, inviting excessive litigation and flooding the courts as a result, all without leading to improved EPA decision-making or better regulations.⁵²³ In sum, environmentalists consider the risk assessment and cost-benefit bills to be tantamount to “paralysis by analysis” which would delay or kill action on important health, safety and environmental regulation.⁵²⁴

The key risk assessment and cost-benefit bills, in the form that they had for most of their development, would clearly present new obstacles for the EPA to overcome before it could list new chemicals or industries, add new manufacturing industries, or require other kinds of chemical use information.⁵²⁵ However, the TRI program itself is not directly the intended target of these bills, at least at first, since they cover nearly all federal regulation and the TRI program would only be one of many programs affected. The effect on the TRI, as well as other federal regulatory programs, would mostly be in the future, arresting the development of the program, not rolling it back.

All this changed as the Dole bill reached the Senate floor, at which time the TRI was no longer a possible hapless victim of the cross-fire of regulatory reform but an intended target where crippling, if not killing, the program was the aim. In an effort to win over more votes from Democratic senators to increase the chances of Senate approval

520. *Dole/Johnston Bill*, *supra* note 517.

521. *Id.*

522. *Id.*

523. *House Passes Bill*, *supra* note 517; *Dole/Johnston Bill*, *supra* note 517.

524. *In the Main Ring Dole “Reg Reform” Bill Heads to Senate Floor*, available in RTK-NET, Entry No. 10221 (June 19, 1995). The bills have also been criticized as “budget busters.” *Id.* Critics contend that the EPA alone will require an additional \$220 million every year to carry out the risk assessment and cost-benefit analysis, and it is only one agency affected by the legislation. *Id.* Moreover, the legislation is seen as a red tape monster, forcing government to expand rather than streamline. *Id.* It is estimated that the EPA will need an additional 1000 employees to carry out the mandates. *Id.*

525. WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL “WORKING NOTES” NEWSLETTER, available in RTK-NET, Entry No. 10109 (May 24, 1995).

of regulatory reform and resist a potential Presidential veto, Senator Dole struck a compromise with Senator Bennett Johnston, a Democrat from Louisiana.⁵²⁶ Louisiana regularly ranks highest in releases of toxics.⁵²⁷ Johnston, who has been considered crucial to passage of the legislation because he wished regulatory reform, is a leader and advocate of risk assessment, and probably would bring several more Democratic votes⁵²⁸ as well as moderate Republicans.⁵²⁹

Johnston, long an ally of the chemical industry, at its urging inserted into the compromise bill a provision to scale back the TRI program.⁵³⁰ The chemical industry is especially duplicitous in this matter in light of its previous public pronouncements of support for the program. The provision would nullify the addition of the 286 chemicals the EPA added to the list in November 1994, which had nearly doubled the previous list of 330 chemicals. This special favor to the chemical industry provided by Johnston was hidden in the compromise bill and has been criticized as a "stealth attack" on the right-to-know law.⁵³¹ The Johnston measure would require the EPA to provide risk assessment and cost-benefit analysis for all the chemicals added to the TRI in November 1994 within six months of the enactment of the regulatory reform bill, otherwise they would be removed.⁵³²

Environmental groups found the Dole-Johnston compromise unacceptable,⁵³³ and the Clinton White House, regarding it too radical,

526. *Dole/Johnston Bill*, supra note 517. Johnston initially sought to soften portions of the Dole bill. RTK-NET, Entry No. 10200 (June 12, 1995). See also RTK-NET, Entry No. 10233 (June 23, 1995); *Riding the Wild Senate Roller Coaster of Politics*, available in RTK-NET, Entry No. 10239 (June 23, 1995).

527. For example, in the 1992 national report release by EPA Louisiana had the highest total releases of any state, over 464 million pounds of toxic chemicals. 1992 TRI REPORT, supra note 67, at 35. See also Appendices 1-4.

528. REGULATORY REFORM UPDATE, available in RTK-NET, Entry No. 10200 (June 12, 1995).

529. *Action Alert, Proposed Legislation to Weaken Food Safety Standards*, PESTICIDE ACTION NETWORK, June 27, 1995, available in RTK-NET, Entry No. 10258 (June 27, 1995).

530. *Diary, Yesterday in Washington*, N.Y. TIMES, June 28, 1995, at A16; John H. Cushman Jr., *Efficient Pollution Rule Under Attack: Requirement to Disclose Toxic Emissions Led to Big Reductions*, N.Y. TIMES, June 28, 1995, at A16.

531. *Stealth Attack Expected on Right-to-Know*, available in RTK-NET, Entry No. 10245 (June 25, 1995).

532. *Id.* An even more draconian delisting had been proposed in an early spring amendment to the regulatory reform legislation by Senator Trent Lott (R-Mississippi). WORKING NOTES ON COMMUNITY RIGHT-TO-KNOW: MARCH-APRIL "WORKING NOTES" NEWSLETTER, available in RTK-NET, ENTRY No. 10109 (May 24, 1995). Lott would have effectively ended the TRI program altogether. *Id.* Lott's amendment called for automatic removal of any chemical from the TRI list if the EPA failed within 60 days to prove it caused health problems beyond the plant gates. *Id.* This would have been nearly impossible for the EPA to do. The amendment failed to be considered by the full Senate Energy Committee. *Id.*

533. *The Dole/Johnston Regulatory Reform Bill*, CITIZENS FOR SENSIBLE SAFEGUARDS, available in RTK-NET, ENTRY No. 10254 (June 27, 1995).

threatened to veto the measure.⁵³⁴ In July 1995 the Dole Bill failed to get the sixty votes needed to cut off debate. Senator Dole has promised to revive this bill during the current Congressional session. All in all, the future success of the TRI is now uncertain.

534. *Dole Hits Threat of Regulatory Veto*, BOSTON GLOBE, June 27, 1995, at 62. CITIZENS FOR SENSIBLE SAFEGUARDS, *White House Veto Threat*, available in RTK-NET, Entry No. 10248 (June 26, 1995).

APPENDIX 1

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APPENDIX 6

THE BEST LAID PLANS: THE RISE AND FALL OF GROWTH MANAGEMENT IN FLORIDA

MARY DAWSON*

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* The author was previously a county commissioner in Martin County, Florida. In that capacity, she developed and adopted the Martin County Comprehensive Growth Management Plan in accordance with the Florida Growth Management Act of 1985. B.A. 1966, Rice University, Houston, Texas; J.D. Expected May 1997, Shepard Broad Law Center, Nova Southeastern University. The author wishes to thank Dana Tucker for her assistance in editing this article. The author also wishes to thank Noreen Dreyer, of Simmons, Solomon, Dreyer & Mancini, Port St. Lucie, Florida for her help in the preparation of this article.

I. INTRODUCTION

Florida's Growth Management Act of 1985¹ (Growth Management Act) was implemented by the adoption of local government comprehensive plans which were based on the expectation that land use amendments would receive deferential review by the courts. The Florida Supreme Court has ruled that, on a case-by-case basis, land use amendments may be quasi-judicial acts rather than quasi-legislative acts, and therefore subject to strict scrutiny.² This makes the process of challenging or defending a land use amendment decision so complex, expensive and potentially unfair that it could bring Florida's growth management program to a halt.

Part II of this article gives a short history of growth management nationwide, beginning in 1926 with *Village of Euclid v. Ambler Realty Co.*, in which the United States Supreme Court ruled that local governments may regulate private property through zoning.³ This part touches on why growth management programs were instituted by the states and why early efforts proved only partially successful. This part also offers a history and short description of Florida's leadership role in the development of growth management theory and describes how local governments developed local comprehensive plans as required by Florida's growth management laws.

Part III then analyzes the impact of the Florida Supreme Court's decision in *Board of County Commissioners of Brevard County v. Snyder*⁴ on Florida's growth management program. In *Snyder*, the court ruled that certain land use decisions are quasi-judicial in nature and subject to strict scrutiny by writ of certiorari.⁵ That ruling cast the Florida growth management program into turmoil by imposing procedural requirements in land use decisions that inhibit the public's ability to participate. The ruling also undercuts the administrative review procedure established in the Growth Management Act and makes the courts the final arbiters of local government planning decisions.

Next, Part IV analyzes some of the legal issues courts must wrestle with in applying *Snyder* to local government comprehensive plan amendment decisions. This part concludes that *Snyder's* application of strict scrutiny is finding its way into land use cases not traditionally

1. Ch. 85-55, 1985 Fla. Laws (codified as amended at FLA. STAT. §§ 163.3161-163.3215 (1995)) (officially titled the "Omnibus Growth Management Act of 1985").

2. See *infra* note 148 for a discussion of the distinction between strict scrutiny in land use cases and strict scrutiny as used in constitutional cases.

3. 272 U.S. 365 (1926).

4. 627 So. 2d 469 (Fla. 1993).

5. *Id.* at 474-75.

subject to such review.⁶ Rather, those decisions were traditionally given great deference by the courts.

Part V connects *Snyder's* application of strict scrutiny in reviewing comprehensive plan amendment decisions to the recent line of United States Supreme Court decisions raising the level of scrutiny given to cases involving regulatory takings. This part concludes that although the *Snyder* Court sought to remove politics from land use decision making,⁷ the effect of applying strict scrutiny to comprehensive plan amendment decisions shifts the focus of political pressure from elected local officials to elected circuit court judges. This not only fails to achieve the court's purpose, it violates the doctrine of separation of powers.⁸

Part VI consists of two interviews. The first is with Noreen Dreyer, the former County Attorney for Martin County. Two years after Martin County adopted its comprehensive plan, three plan amendment decisions made by the Martin County Commission were challenged in circuit court. Ms. Dreyer points out that by giving property owners a second chance at every land use decision through strict scrutiny, *Snyder* shifts the resources of a local government away from planning and into litigation. The second interview is with Richard Grosso, Legal Director of 1000 Friends of Florida. He advocates changes in the growth management program not only to accommodate *Snyder*, but also to refine the process to address the requirements of the Florida Private Property Rights Protection Act.⁹

Part VII concludes that although Florida has been a leader in growth management since 1972,¹⁰ its growth management program is in danger of collapsing under the weight of strict judicial scrutiny. For Florida's planning effort to function effectively in the future, the Florida Supreme Court, the Florida Legislature, and the Department of Community Affairs must all take immediate action.

6. See *id.* at 471 ("The district court of appeal acknowledged that zoning decisions have traditionally been considered legislative in nature. Therefore, courts were required to uphold them if they could be justified as being 'fairly debatable.'").

7. *Id.* at 472-73.

8. FLA. CONST. art. II, § 3. "The powers of the state government shall be divided into legislative, executive, and judicial branches. No person belonging to one branch shall exercise any powers appertaining to either of the other branches unless expressly provided herein." *Id.*

9. Ch. 95-181, 1995 Fla. Laws (codified at FLA. STAT. § 70.001). For a discussion of Florida's Private Property Rights Protection Act see Ellen Avery, *The Terminology of Florida's New Property Rights Law: Will It Allow Equity to Prevail or Government to be "Taken" to the Cleaners?*, 11 J. LAND USE & ENVTL. L. 181 (1995).

10. See, e.g., James H. Wickersham, *The Quiet Revolution Continues: The Emerging New Model for State Growth Management Statutes*, 18 HARV. ENVTL. L. REV. 489, 490 (1994).

II. A SHORT HISTORY OF GROWTH MANAGEMENT

To effectively evaluate the current state of growth management in Florida and the impact of the recent judicial trend toward closer scrutiny of the land use decisions of local governments, a review of the history of growth management is necessary. This part offers a glimpse at how land use regulation developed.

A. *In the Beginning: Village of Euclid v. Ambler Realty Co.*

In 1926, the United States Supreme Court, in *Village of Euclid v. Ambler Realty Co.*,¹¹ held that zoning is a constitutional exercise of the state's police power, even though it limits property owners' use of their land.¹² The legislative power to control the use of land in order to promote the health, safety and welfare of residents could be delegated by the state to local governments.¹³ As a result, zoning decisions made by local governments were reviewed deferentially by the courts and were generally held constitutional, so long as it was fairly debatable whether the regulation served a legitimate government purpose.¹⁴ The concept was that local elected officials, with the discretion to weigh the legal technicalities of zoning proposals against the myriad of social and political issues that make up local politics, will make the best land use choices for their own communities.¹⁵ It was a simple, straight forward system based on the fundamental American political concept of separation of powers.¹⁶ This legislative power was

11. 272 U.S. 365 (1926).

12. *Id.* at 397. See also Wickersham, *supra* note 10, at 492-93 (by 1926, when the Supreme Court ruled in *Euclid*, over 400 municipalities had zoning ordinances in place. "Today, almost every state and major city, with the exception of Houston, Texas, employs zoning as its tool of land use regulation.").

13. Jeffrey M. Taylor, *Untangling the Law of Site-Specific Rezoning in Florida: A Critical Evaluation of the Functional Approach*, 45 U. FLA. L. REV. 873, 878-79 (1993). "States and municipalities were given the authority to zone under the Department of Commerce's Standard State Zoning Enabling Acts of 1924 and 1926 and the Standard City Planning Enabling Act of 1928." *Id.* at 879 n.38. The Florida version of those acts "existed as Chapter 176, Fla. Stat. (1991) [sic], until repealed as part of the implementation of municipal home rule powers in 1973." Brief of Amicus Curiae at 17, Board of County Comm'rs v. Snyder, 627 So. 2d 469 (Fla. 1993) (No. 79,720).

14. John W. Howell & David J. Russ, *Planning vs. Zoning: Snyder Decision Changes Rezoning Standards*, 68 FLA. B.J., May 1994, at 16; Thomas G. Pelham, *Quasi-Judicial Rezoning: A Commentary on the Snyder Decision and the Consistency Requirement*, 9 J. LAND USE & ENVTL. L. 243, 246 (1994). There is broad consensus that the current trend towards viewing land use decisions by local governments as quasi-judicial actions, and therefore subject to heightened scrutiny, is a stark contrast to the deferential review local governments have previously enjoyed in land use decision making for the past seventy years. See Pelham, *supra*, at 246-47.

15. See Daniel L. Mandelker & A. Dan Tarlock, *Shifting the Presumption of Constitutionality in Land Use Law*, 24 URB. LAW. 1, 4 (1992).

16. See *supra* note 8 and accompanying text.

balanced on the one hand by the power of residents to vote offending officials out of office and on the other hand by a property owner's access to constitutional remedies through the courts.¹⁷

Like many fundamental American political concepts, local control of land use decisions came under pressure with the population boom following the end of World War II.¹⁸ By the 1970s, states like Florida, which had experienced massive population growth, recognized land development as both a major economic force and a major challenge.¹⁹ Traditional reliance on the Euclidean approach developed into a highly irrational and politicized process with both citizens and landowners demanding preferential treatment.²⁰ Zoning proved inadequate to regulate major projects and to protect critical resources in the face of such growth.²¹

Growth states became concerned that the local governments to which they had delegated their land use authority and, therefore, the responsibility for dealing with growth issues, were having difficulty predicting and shaping long term development trends without the coordination and guidance offered by the principles of comprehensive land use planning.²² It appeared that local governments, which

17. Such a constitutional remedy is a claim for a taking under the Fifth Amendment of the United States Constitution. U.S. CONST. amend. V. There is a long line of decisions developing this area of law. See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922); *Penn Central Transportation Co. v. New York City*, 438 U.S. 104 (1978); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982); *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304 (1987); *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987); *Lucas v. South Carolina Coastal Council*, 105 U.S. 1003 (1992); *Dolan v. City of Tigard*, 114 S. Ct. 2309 (1994). See also *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (holding that the zoning ordinance in question was constitutional, but nonetheless considering the constitutionality of the ordinance as applied to the specific property).

18. See Wickersham, *supra* note 10, at 494-95 (zoning regulation operates prospectively, affecting new development in the southern and far western sunbelt cities greater than the older northern and midwestern cities).

19. See David L. Powell, *Managing Florida's Growth: The Next Generation*, 21 FLA. ST. U. L. REV. 223, 226 (1993). "Properly defined and understood, growth management, far from being a code word for no-growth or slow-growth efforts, has as central to its meaning a commitment to plan carefully for the growth that comes to an area so as to achieve a responsible balance between the protection of natural systems [and growth] . . . [Growth management] is deeply committed to a responsible 'fit' between development and the infrastructure needed to support the impacts of development." *Id.* at 227 (quoting John M. DeGrove & Deborah A. Mines, LINCOLN INSTITUTE OF LAND POLICY, *THE NEW FRONTIER IN LAND POLICY: PLANNING & GROWTH MANAGEMENT IN THE STATES* 9 (1992)). See also Cristina Binkley, *Florida Land Use Laws: A Solution to the Land Use Law? It Depends What the Problem Is*, WALL ST. J., Mar. 29, 1995, at F1. In 1995, Florida was growing by 900 people per day. *Id.*

20. Pelham, *supra* note 14, at 246-47.

21. Wickersham, *supra* note 10, at 496-98.

22. Taylor, *supra* note 13, at 879. Another concern was the impropriety, discrimination, and misuse of the Euclidean deferential system of decision-making which allowed local governments to both violate the precepts of comprehensive planning and adopt plans to such an extent that a plan may realistically cease to exist. *Id.*

commonly made piece-meal zoning changes in response to specific developer requests,²³ were failing to adequately consider the cumulative effects of their decisions on issues of regional and state-wide importance.²⁴ Thus, the states began to reassert some of their regulatory power.²⁵ However, the states did not simply take back the regulatory power they had delegated to the local governments; rather, they created hybrid systems in which local governments retained the authority to make local decisions so long as those decisions met criteria established by the states.²⁶

The hybrid systems attempted to blend the best of both worlds: local decision making and state-wide policy making.²⁷ By offering guidance rather than issuing commands, the state plans of the 1970s encouraged local governments to adopt land use plans that were aspirational.²⁸ The planning process was intended to provide a forum where elected officials and citizens, aided by experts, would debate and establish a consensus on the desired future character of the community.²⁹ Land use decisions under the new plans were still treated deferentially by the courts.³⁰ This left the ballot box as the strongest restraint on land use decisions, giving local voters almost total control over their community's future.³¹

B. Florida's Plans: To Dream the Impossible Dream

Largely in response to a substantially high rate of growth, which increased Florida's population from 2.7 million people in 1950 to 6.8

23. *Id.* at 884. "When developers or individual landowners submit rezoning applications for small parcels of land to a local zoning board, the probability of abuse, discrimination, or improper planning increases. Local commissioners often substitute rational scrutiny of rezoning applications with personal interest or favoritism. As a result, zoning districts may develop haphazardly and in conflict with the comprehensive plan." *Id.*

24. Wickersham, *supra* note 10, at 503-05.

25. *Id.*

26. *Id.* at 511. "In the early 1970s, three states, Vermont, Florida, and Oregon, passed growth management statutes that shifted considerable regulatory power back to the state or regional level." *Id.* at 512.

27. See John M. DeGrove, *State and Regional Planning and Regulatory Activity: The Florida Experience and Lessons for Other Jurisdictions*, C930 A.L.L.-A.B.A. 397, 426 (1994).

28. See Wickersham, *supra* note 10, at 499 ("[B]ecause the purpose of a plan is to offer guidance for shaping land development trends in an uncertain and rapidly changing future, it needs to be aspirational rather than commanding, general rather than specific.").

29. *Id.*

30. *Id.* at 518. Pre-*Snyder* land use decisions were considered quasi-legislative actions which were sustained by the courts so long as they were fairly debatable. Pelham, *supra* note 12, at 246; *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 388 (1926) ([I]f the validity of the legislative classification for zoning purposes be fairly debatable, the legislative judgment must be allowed to control.").

31. Wickersham, *supra* note 10, at 522-24.

million in 1970,³² Florida leapt to the forefront of state-wide planning in 1972 when the Florida Legislature passed the Florida Environmental Land and Water Management Act.³³ This was the first in a series of interacting statutes designed to bring the impacts of growth under control by addressing some of the persistent problems raised by Euclidean zoning and local control of land use.³⁴ The cornerstone of the series was the Local Government Comprehensive Planning and Land Development Regulation Act of 1975.³⁵ These acts combined to protect areas of critical state environmental concern, to regulate developments large enough to have regional impacts,³⁶ and to motivate local governments to adopt land use plans.³⁷ Under these acts, Regional Planning Councils develop plans in conformance with the State Comprehensive Plan.³⁸ The local government plans, though often grudgingly adopted,³⁹ are reviewed for compliance with both the State Comprehensive Plan and regional plan.⁴⁰ Under this system, local governments still enjoyed almost absolute discretion in making land use decisions. If the local decisions concern developments of

32. DeGrove, *supra* note 27, at 426; BUREAU OF ECONOMIC AND BUSINESS RESEARCH COLLEGE OF BUSINESS ADMINISTRATION, FLORIDA STATISTICAL ABSTRACT 3 (Anne H. Shermeyen ed., 1991) [hereinafter ABSTRACT].

33. Ch. 72-317, 1972 Fla. Laws (codified as amended at FLA. STAT. ch. 380 (1995)); Wickersham, *supra* note 10, at 514.

34. Wickersham, *supra* note 10, at 512. The series of acts included the Water Resources Act, the State Comprehensive Planning Act, and the Land Conservation Act. See DeGrove, *supra* note 27, at 427. For a discussion of the Water Resources Act, see Ronald A. Christaldi, *Sharing the Cup: A Proposal for the Allocation of Florida's Water Resources*, 23 FLA. ST. U. L. REV. (forthcoming 1996); Phyllis Park Saarinen & Gary D. Lynne, *Getting the Most Valuable Water Supply Pie: Efficiency in Florida's Reasonable-Beneficial Use Standard*, 8 J. LAND USE & ENVTL. L. 491 (1993). For a discussion of the State Comprehensive Planning Act see Richard G. Rubino, *Can the Legacy of the Lack of Follow-Through in Florida State Planning Be Changed?*, 2 J. LAND USE & ENVTL. L. 27 (1986); Jerry Mitchell, *In Accordance with a Comprehensive Plan: The Rise of Strict Scrutiny in Florida*, 6 J. LAND USE & ENVTL. L. 79 (1990).

35. Ch. 75-257, 1975 Fla. Laws (codified as amended at FLA. STAT. §§ 163.3161-163.3215 (1995)).

36. David L. Callies, *The Quiet Revolution Revisited: A Quarter Century of Progress*, 26 URB. LAW. 197, 203 (1994).

37. DeGrove, *supra* note 27, at 427.

38. FLA. STAT. § 186.507 (1995). See generally Douglas R. Porter, *State Growth Management: The Intergovernmental Experiment*, 13 PACE L. REV. 481, 482 (1993) (discussing state growth management plans in general); *Compact Urban Developments in Florida: A Roundtable Discussion*, 5 J. LAND USE & ENVTL. L. 225 (1989).

39. See Porter, *supra* note 38, at 482.

[L]ocal governments usually were among the most vociferous opponents of the statutes. They viewed state acts as setting up regional 'supergovernments' and state bureaucracies that would direct decision making on development and that would quickly lead to the ruination of their communities. They also resisted yet another state mandate that would require increased local expenditures and yield no discernible benefits for their communities.

Id.

40. FLA. STAT. §§ 163.3184(5)-163.3184(6) (1995).

regional impact (DRI),⁴¹ or development in areas of critical state concern,⁴² those decisions could be challenged by means of appeal to the Florida Land and Water Adjudicatory Commission (Adjudicatory Commission).⁴³ Standing to appeal to the Adjudicatory Commission is limited to the state planning agency, the property owner, and the developer.⁴⁴ Affected citizens, abutters, other local property groups, and citizen intervenors, such as environmental groups, do not have standing to challenge local land use decisions to the Adjudicatory Commission, even though land use decisions often affect both property values and the quality of life in a community.⁴⁵

Even these limited infringements on local power sparked legal and political debates between localities and the state.⁴⁶ The additional time required for review of projects and plan amendments delayed projects and increased development costs.⁴⁷ Affected property owners and citizens groups became frustrated because they did not have standing to legally challenge projects in court.⁴⁸ Even if the

41. FLA. STAT. § 380.06 (1995) (“[D]evelopment of regional impact,’ as used in this section, means any development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of more than one county.”). Florida courts have read the threshold requirements flexibly, allowing jurisdiction under the statute for projects that do not meet numerical tests. *General Dev. Corp. v. Division of State Planning*, 353 So. 2d 1199 (Fla. 1st DCA 1977).

42. FLA. STAT. § 380.05 (1995); Porter, *supra* note 38, at 482. “State officials . . . understood that they had to retain a significant role for local governments in growth management, . . . [o]ften expressing the principle of continuing local control over day-to-day decisions.” *Id.*

43. FLA. STAT. § 380.07 (1995). Wickersham, *supra* note 10, at 517-18.

44. FLA. STAT. § 380.07 (1995); Friends of Everglades, Inc. v. Board of County Comm’rs, 456 So. 2d 904, 909 (Fla. 1st DCA 1984) (holding that while Chapter 380, *Florida Statutes*, does not abrogate the rights of citizens to challenge local zoning decisions in circuit court, citizens may not exercise their limited standing to challenge local zoning decisions before the Adjudicatory Commission); Caloosa Property Owners Ass’n, Inc. v. Palm Beach County Bd. of County Comm’rs, 429 So. 2d 1260, 1263-64 (Fla. 1st DCA 1983) (holding that: (1) only the State land planning agency, the appropriate regional planning councils, the developer, and the landowner may appeal a land development order; and (2) implicit in the Act’s statement of legislative purpose, section 380.021, *Florida Statutes*, is the view that “the DRI review process is primarily a comprehensive land use review technique for large scale development involving primarily two groups—developers on the one hand, and on the other, governmental planners and permitting authorities”); Wickersham, *supra* note 10, at 518.

45. Wickersham, *supra* note 10, at 518. *Cf. White v. Metropolitan Dade County*, 563 So. 2d 117, 127 (Fla. 3d DCA 1990) (denying standing in court action to individuals who are neither directly nor adversely affected by the County’s action and who failed to show that they had a legally recognizable interest in the property).

46. Wickersham, *supra* note 10, at 517.

47. *Id.* at 497 (“Municipalities seek to maintain the overall use and density mix for the project area [To achieve this they] may exact compromises from developers in exchange for approval of major projects: the dedication of land for public purposes such as roads, parks, and schools, or . . . payments into a public fund for offsite improvements.”).

48. See *Citizens Growth Management Coalition, Inc. v. City of West Palm Beach*, 450 So. 2d 204 (Fla. 1984) (holding that “only those persons who already have a legally recognizable right

politicians who approved controversial projects were voted out of office, the projects they had approved could still be developed.⁴⁹ Frustration grew at the state level as well. Lacking the actual power to approve or disapprove local planning decisions,⁵⁰ state and regional planners could not effectively coordinate and oversee local planning and regulation.⁵¹ Local governments changed their plans "willy-nilly virtually every time a city council or county commission met,"⁵² and the system was not effectively coping with the infrastructure needs or environmental impacts of new growth.⁵³

During the 1980s, Florida's population growth rate had increased to over 300,000 new residents per year.⁵⁴ State regulators, local governments, developers, and citizens were all frustrated by their differently perceived failures of the planning process,⁵⁵ and the time was ripe for a comprehensive reassessment of Florida's growth management program.⁵⁶

The legislature went back to the drawing board, and in 1985 engineered one of the nation's most comprehensive and ambitious planning programs.⁵⁷ Incorporating many of the recommendations of the governor-appointed Environmental Land Management Study Committee II,⁵⁸ the legislature amended the Florida State Comprehensive Planning Act of 1972,⁵⁹ adopted the Comprehensive State Plan,⁶⁰ and passed the Growth Management Act.⁶¹ These acts

which is adversely affected have standing to challenge a land use decision on the ground that it fails to conform with the comprehensive plan").

49. In Martin County, a DRI was the focal point of elections in 1982, and two of the three commissioners who voted for it were voted out of office. Interview with Noreen Dreyer, former County Attorney for Martin County, Florida (June 19, 1995) [hereinafter Dreyer Interview]. A second DRI, the subject of *Jensen Beach Land Co. v. Citizens for Responsible Growth of the Treasure Coast, Inc.*, 608 So. 2d 509 (Fla. 4th DCA 1992), was the focal point of the 1990 commission election, and the only commissioner who voted for that DRI and was up for reelection was voted out of office. Dreyer Interview, *supra*. Citizens who attempted to challenge the first DRI did not have standing. *Id.* Citizens who challenged the second one did. *Id.* In both cases, the DRIs survived the tenure of the politicians who voted for them. *Id.*

50. DeGrove, *supra* note 27, at 428.

51. Wickersham, *supra* note 10, at 502 ("[T]o conclude that municipal regulation of land use is at the mercy of the state is to confuse form with substance.").

52. DeGrove, *supra* note 27, at 428.

53. *Id.* at 427.

54. ABSTRACT, *supra* note 32, at 38 (3,190,965/10 years = >300,000/year).

55. See Wickersham, *supra* note 10, at 501-05.

56. DeGrove, *supra* note 27, at 428.

57. Pelham, *supra* note 14, at 248.

58. DeGrove, *supra* note 27, at 429.

59. Ch. 72-295, 1972 Fla. Laws (codified as amended at FLA. STAT. ch. 186 (1995)).

60. Ch. 85-57, 1985 Fla. Laws (codified as amended at FLA. STAT. ch. 187 (1995)).

61. Ch. 85-55, 1985 Fla. Laws (codified as amended at FLA. STAT. §§ 163.3161-163.3215 (1995)). The Growth Management Act "amended the previous Local Government Comprehensive Planning and Land Development Regulation Act of 1975 . . . and established the local

mandated that the Regional Planning Councils employ regional plans consistent with the newly adopted state plan.⁶² Local governments were required to adopt detailed comprehensive plans by 1992.⁶³ Also, the Growth Management Act required that local plans be consistent with the goals and policies of both the regional and state plans,⁶⁴ and that local governments implement their plans through consistent local land development regulations and land use decisions.⁶⁵ The Act mandated that local governments choose a specific level of service for water, sewer, solid waste, drainage, conservation, recreation and open space.⁶⁶ The Act additionally ordered "concurrency,"⁶⁷ requiring that facilities and services needed by new development be in place in time to serve that development.⁶⁸ Concurrency is designed to accomplish two major goals: (1) to make sure that the impact of new development is realistically assessed before it is approved; and (2) to eliminate the lag time between the development and the provision of services.⁶⁹ Therefore, local governments must commit to providing these services when a new development creates a need for them.⁷⁰

The Growth Management Act's enforcement provisions were revolutionary. Local governments which make land use decisions inconsistent with local, regional and state plans can be held accountable in four new ways: (1) the state can withhold grants and other state funds from governments that adopt inconsistent plans or amendments;⁷¹ (2) the state can seek an injunction requiring the local government to act consistently;⁷² (3) affected citizens, who were granted broad standing by the Growth Management Act, can challenge land use plan amendments that are inconsistent with local plans

comprehensive plan as the primary source for local land use determinations." Mitchell, *supra* note 34, at 79.

62. FLA. STAT. § 186.507(1) (1995); Callies, *supra* note 36, at 204.

63. FLA. STAT. § 163.3167 (1995); DeGrove, *supra* note 27, at 433 ("As of May 1992, 302 local plans had been found in compliance, 43 plans were near compliance.").

64. FLA. STAT. §§ 163.3184(5)-163.3184(6) (1995); DeGrove, *supra* note 27, at 430.

65. FLA. STAT. § 163.3201 (1995); Callies, *supra* note 36, at 204.

66. FLA. STAT. § 163.3180(1) (1995).

67. FLA. STAT. § 163.3180 (1995). See David L. Powell, *Recent Changes in Concurrency*, 68 FLA. B.J., Nov. 1994, at 67.

68. FLA. STAT. § 163.3180 (1995).

69. FLA. STAT. §§ 163.3161, 163.3180 (1995); Powell, *supra* note 65.

70. Powell, *supra* note 65. See Powell, *supra* note 17, at 291-97.

71. FLA. STAT. § 163.3184(11)(a) (1995). See also Porter, *supra* note 36, at 494 ("Florida . . . may suspend recreation and state revenue-sharing grants, as well as federally-funded community development grants.").

72. FLA. STAT. § 163.3184(11) (1995); Porter, *supra* note 38, at 494. The Growth Management Act provides for state preparation of a local plan if the local government fails to prepare it. FLA. STAT. § 163.3167(3) (1995).

through an administrative appeal process;⁷³ and (4) affected citizens, under a more limited standing allowance, may challenge inconsistent development orders, including zoning decisions, through an action in court for injunctive relief or other relief.⁷⁴

The Growth Management Act is a monumental balancing act.⁷⁵ It attempts to establish a consensus by giving something of value to every interested group. In addition to the new powers given to the citizens and the state, the Act promised to benefit the development community by speeding up the development review process and making it more reliable.⁷⁶ To do this, the Act removes much of the intense political pressure that frequently accompanies development review decisions.⁷⁷ The local government did not receive the benefit of additional power and control like that given to other parties affected by the Act, including the property owners, state government and development communities. Functionally, the Growth Management Act creates a substantial shift in power from local government back to the state.⁷⁸

Although the Growth Management Act reclaimed some of the state's land use decision-making power, both the legislature and local officials understood that it was not intended to drastically affect local government decision making because of its firm foundation in the familiar Euclidean zoning model. So long as broad state or regional plans were not violated, local governments could choose the intensity and rate of growth which their community wanted.⁷⁹ All that local

73. FLA. STAT. §§ 163.3184(9), 163.3184(10) (1995).

74. FLA. STAT. § 163.3215(1) (1995).

75. Powell, *supra* note 19, at 339. On the whole, the benefits relating to natural resource protection, provision of adequate public facilities, and community development must be weighed against potential economic dislocations, unfair burdens on individuals, and excessive state involvement in local affairs. *Id.*

In the next generation of growth management in Florida, this commitment to making the growth management system the servant of everyone—and not a captive of any single constituency at the expense of others—may present the most daunting challenge of all [W]e have learned through the years that growth management, to work effectively, must balance the affected but often competing interests of *all* our people.

Id. at 339-40. (quoting Letter from Lawton Chiles, Gov., Fla., to Rep. Bolley L. Johnson, Speaker, Florida House of Representatives (Feb. 19, 1993) (copy on file, Florida State University Law Review)).

76. FLA. STAT. § 163.3161 (1995).

77. Howell, *supra* note 14, at 16.

78. Wickersham, *supra* note 10, at 512.

79. FLA. STAT. §§ 163.3177(2), 163.31775 (1995). “[T]he Minimum Criteria for Review of Local Government Comprehensive Plans and Determination of Compliance of the Department of Community Affairs determine compliance with the Growth Management Act.” FLA. STAT. § 163.3177(10) (1995). The minimum criteria are commonly referred to as Rule 9J-5, which sets

governments had to do was provide the services which they had promised in their plans.⁸⁰ The legislature expressly stated in the Growth Management Act that it should “not be interpreted to limit or restrict the powers of municipal or county officials, but [the Act] shall be interpreted as a recognition of their broad statutory and constitutional powers to plan for and regulate the use of land.”⁸¹ The intent of the legislature was to build public support for Growth Management by utilizing the political nature of local government’s legislative land use decision-making process, and mandated public participation in the process to “the fullest extent possible.”⁸² The legislature attempted to keep growth management decisions in the political/legislative arena by requiring that challenges to a plan, element or amendment’s consistency with the Growth Management Act⁸³ be processed through the Department of Administrative Hearings,⁸⁴ culminating in a hearing before the governor and cabinet sitting as the Adjudicatory Commission.⁸⁵ Only after passing through a series of hearings or negotiations with administrative and political bodies is an appeal of a local government decision intended to slip from the legislative arena and enter the court system.⁸⁶ However, in 1985, even the Florida court system treated local government land use decisions as legislative acts under the Euclidean scheme.⁸⁷ Therefore,

out general guidelines for achieving compliance. *Id.* The specifics were left up to the local governments. FLA. ADMIN. CODE ANN. r. 9-J (1995).

80. See Powell, *supra* note 67, at 67. The Growth Management Act creates a broad mandate to achieve concurrency, but does not give a detailed methodology by which to achieve it or standards by which to judge it. See FLA. STAT. § 163.3177(10)(h) (1995).

81. FLA. STAT. § 163.3161(8) (1995); 85-197 Op. Fla. Att’y Gen. (1985). The Attorney General additionally reassured local officials that “the Legislature has recognized the broad home rule powers of municipalities and counties for planning and regulating the use of land within their respective jurisdictions.” *Id.*

82. FLA. STAT. § 163.3181(1) (1995).

83. See FLA. STAT. § 163.3184(13) (1995) (proceedings under this section are the sole proceeding or action for a determination of whether a local government’s plan, element, or amendment is in compliance).

84. FLA. STAT. § 163.3184(10)(a) (1995).

85. FLA. STAT. §§ 163.3164(1), 163.3184(11) (1995).

86. FLA. STAT. § 120.68(1) (1995) (“A party who is adversely affected by final agency action is entitled to judicial review.”); FLA. STAT. § 120.68(2) (1995) (“[A]ll proceedings for review shall be instituted by filing a petition in the district court of appeal in the appellate district where the agency maintains its headquarters or where a party resides.”).

87. See, e.g., *Southwest Ranches Homeowners Ass’n v. Broward County*, 502 So. 2d 931 (Fla. 4th DCA 1987) (holding that rezonings are legislative acts, but require stricter scrutiny). After adoption of the Growth Management Act, Florida District Courts of Appeal developed a variety of approaches to decide whether zoning was a legislative or quasi-judicial act. See *Snyder v. Board of County Comm’rs of Brevard County*, 595 So. 2d 65 (Fla. 5th DCA 1991) (holding that zoning is a quasi-judicial action requiring strict scrutiny and placing a heavy burden on the government), *rev’d*, 627 So. 2d 469 (Fla. 1993); *Machado v. Musgrove*, 519 So. 2d 629 (Fla. 3d DCA 1987) (holding that strict scrutiny is used to determine whether zoning

local officials were justified in approaching their new comprehensive planning chores with confidence, because they were traversing familiar legal and political territory and the courts would treat their land use decisions deferentially.

Nevertheless, the plan adoption process placed an extraordinary strain on local governments. Local officials struggled to comply with the confusing new rules,⁸⁸ while under intense pressure to meet the plan adoption deadlines.⁸⁹ They negotiated compliance agreements to settle their differences with the Department of Community Affairs (DCA),⁹⁰ they faced sanctions before the governor and cabinet,⁹¹ and they defended their plans from appeals by citizen groups.⁹² Comprehensive planning turned out to be an expensive,⁹³ time-consuming effort,⁹⁴ for which few locally elected officials were adequately trained or experienced.⁹⁵

Nor, for the most part, did local officials have the political will, time or expertise to formulate true long-range consensus plans and make sweeping land use changes throughout their jurisdictions to implement those plans.⁹⁶ Instead, many utilized the broad, generalized land use categories found in their old plans, because of their confidence in continuing to make land use decisions in response to

deviates from the comprehensive plan); *City of Cape Canaveral v. Mosher*, 467 So. 2d 468 (Fla. 5th DCA 1985) (holding that consistency requires stricter scrutiny).

88. DeGrove, *supra* note 27, at 433.

89. FLA. STAT. § 163.3167(2) (1995). Submission could not be later than July 1, 1991. FLA. STAT. § 163.3167(2)(b) (1995).

90. DeGrove, *supra* note 27, at 434. One half of all local plans submitted initially were found not to be in compliance. *Id.* The threat of sanctions put heavy pressure on local governments to settle their differences and make plans consistent before an administrative hearing took place. *Id.*

91. Pelham, *supra* note 14, at 252.

92. Porter, *supra* note 38, at 495. "Florida's appeals process has been the forum for many objections to state decisions on plan reviews . . . The appeals processes are credited with providing a pressure release valve for complaints, as well as for helping to establish more specific interpretations of state goals." *Id.*

93. DeGrove, *supra* note 27, at 442. Through 1991, the state had given \$44 million in planning support to local government. *Id.* This is in addition to local funds spent on the planning process. *Id.*

94. Richard Grosso, *Florida's Growth Management Act and Relevant Administrative and Judicial Opinions Interpretations*, C930 A.L.I.-A.B.A. 497, 499 (1994). The last plan was adopted in mid-1992. *Id.* By 1992, only 302 of Florida's 458 local governments had completed plans that had been found in compliance. DeGrove, *supra* note 27, at 433.

95. Taylor, *supra* note 13, at 915.

96. See Powell, *supra* note 19, at 269. "Many local plans have been criticized for being written to satisfy the DCA 'checklist' and not to a specific future condition—a 'destination'—that represents the shared values of the community." *Id.* See also Porter, *supra*, note 38, at 490 (explaining that "[t]he shortage of funding and time frames have 'led to the use of 'cookbook' approaches and other short cuts that are antithetical to rational, comprehensive planning'") (citing Charles L. Siemon, *Growth Management in Florida: An Overview and Brief Critique*, in STATE AND REGIONAL INITIATIVES FOR MANAGING DEVELOPMENT 35, 40 (1992)).

specific landowner requests.⁹⁷ Each broad land use category allowed a variety of zoning designations to control the details of eventual development on a particular property.⁹⁸ Textual provisions in the plans set standards to control the timing, location and intensity of development.⁹⁹ Most plans included amendment procedures and standards that must be met for a property to qualify for a plan amendment.¹⁰⁰ Local officials intended to make plan amendments in the future in response to market and political forces just as they had under the old system. The planning program was revolutionary, but the plans relied on the traditional exercise of Euclidean discretion for their implementation.¹⁰¹

By the 1992 plan-adoption deadline, almost all of Florida's 458 local governments had adopted comprehensive plans or were far along in the process.¹⁰² Those landowners and citizens who participated in the planning process¹⁰³ understood that the new plans would not eliminate requests for land use map amendments and zoning changes, although they expected that the process would still be political every step of the way. The comprehensive plans would serve as an additional check and balance against local government decisions.¹⁰⁴ Land use changes must be tailored to meet the policies of the plans.¹⁰⁵ If the changes are not consistent with the plan, they could be challenged through the administrative process established in the Growth Management Act.¹⁰⁶ It was never the intention or expectation of any of the involved parties that the courts, rather than

97. DeGrove, *supra* note 27, at 428.

98. Howell, *supra* note 14, at 18.

99. *Id.* at 18-19.

100. *See, e.g.*, FLA. STAT. § 163.3187 (1995). "The procedure for amendment of an adopted comprehensive plan or element shall be as for the original adoption of the comprehensive plan or element set forth in s. 163.3184." MARTIN COUNTY COMPREHENSIVE GROWTH MANAGEMENT PLAN §§ I-II(C)(2) (1990). The staff would recommend denial of any proposed amendment that does not meet any of the following standards: (1) change in the area made the proposed change logical; (2) development of vacant land in the area has altered its character; (3) the proposed change would correct an inappropriate use; or (4) the proposed change would "meet a necessary public need which enhances the health, safety or general welfare of County residents." *Id.* The standards are couched in legislative terms, presupposing that the decision as to whether a public need is met would be legislative. *Id.*

101. Howell, *supra* note 14, at 16.

102. Grosso, *supra* note 94, at 497.

103. *See* FLA. STAT. § 163.3181 (1995) ("It is the intent of the Legislature that the public participate in the comprehensive planning process to the fullest extent possible.")

104. *See* FLA. STAT. § 163.3202 (1995) (each municipality must adopt land development regulations which are consistent with the comprehensive plan).

105. *See id.*

106. FLA. STAT. § 163.3184(10) (1995). *See* Wickersham, *supra* note 10, at 517-18. The administrative process is set out in sections 163.3184(8)-(13), *Florida Statutes* (1995).

the political body, would become the final arbiters of comprehensive plan land use decisions.

III. THE FLORIDA SUPREME COURT SHIFTS THE CONTROL OF COMPREHENSIVE PLANNING FROM LOCAL GOVERNMENT TO THE COURTS

In a series of decisions, the Florida Supreme Court has raised the level of review that the courts give local government actions when a court determines that a government action is quasi-judicial. This has led to a shift in the control of comprehensive planning from the local decision makers to the courts.

A. *Along Came Snyder: Board of County Commissioners of Brevard County v. Snyder; City of Melbourne v. Puma*

On October 7, 1993, the Supreme Court of Florida, in *Board of County Commissioners of Brevard County v. Snyder*,¹⁰⁷ held that local comprehensive plans are legally binding and that such plans provide courts with a meaningful standard of review for amendment requests.¹⁰⁸ Before *Snyder*, most, if not all, of Florida's local comprehensive plans were found to be in compliance with the Growth Management Act. The holding should have been good news for state planners, but the supreme court applied a newly created legal standard in a way that caught state planners and local governments by surprise. The court, in essence, reversed the very basis of Euclidean decision making.¹⁰⁹ Quoting *Euclid*, the court acknowledged that historically local governments have enjoyed broad discretion over zoning decisions because they were considered legislative actions subject to highly deferential review.¹¹⁰ The advent of comprehensive plans, the court opined, changed that.¹¹¹

The Florida Supreme Court ruled that comprehensive plans transformed some zoning decisions from quasi-legislative to quasi-judicial actions.¹¹² The concept that zoning should be a quasi-judicial

107. 627 So. 2d 469 (Fla. 1993). Brevard County denied Snyder a zoning change on a one-half acre parcel of property. *Id.* at 472. The Florida Supreme Court quashed the district court's ruling, but in so doing, established new judicial rules for reviewing land use decisions. *Id.* at 476.

108. *Snyder*, 627 So. 2d at 472.

109. *Id.*

110. *Id.*

111. *See id.* The court explained that the Growth Management Act required zoning to be consistent with the comprehensive plans. *Id.* Therefore, those zoning decisions which are the application of adopted policy to specific property are quasi-judicial actions deserving strict scrutiny. *Id.*

112. *Id.* at 473-74.

action was not new.¹¹³ Two decades earlier, the Oregon Supreme Court ruled that zoning should be a quasi-judicial action.¹¹⁴ A conflict between Florida's District Courts of Appeal¹¹⁵ on this issue prompted the Florida Supreme Court to hear *Snyder* to settle the issue.¹¹⁶ Planning experts presumably looked forward to the removal of zoning decisions from the political arena as a positive benefit of the comprehensive planning process.¹¹⁷ What was surprising, however, was that the ruling also transformed decisions on certain comprehensive plan amendments into quasi-judicial actions subject to strict judicial scrutiny. This violates both the intent and the purpose of the Growth Management Act,¹¹⁸ and promises to have a significant effect on Florida's ability to manage growth in the future.

To clarify this issue, the Florida Supreme Court explained the rationale for its holding. A legislative action "results in the *formulation* of a general rule of policy, whereas [a] judicial action results in the *application* of a general rule of policy."¹¹⁹ The court could have simply ruled that the adoption of and amendment to the comprehensive plan is the formulation of policy, and therefore is a legislative act. It would logically follow that as a general policy, the issuance of development orders and zoning decisions consistent with the plan would be quasi-judicial acts.¹²⁰ A decision based on this distinction between planning and zoning would have built on and reinforced the planning structure created by the legislature;¹²¹ it would have clearly defined the

113. Pelham, *supra* note 14, at 243; HAGMAN & JUERGENSMEYER, URBAN PLANNING AND LAND DEVELOPMENT CONTROL LAW 793-803 (1986); Jerold S. Kayden, *Land Use Regulations, Rationality, and Judicial Review: The RSVP in the Nollan Invitation (Part I)*, 23 URB. LAWYER 301, 302-09 (1991). In an effort to make development permitting more efficient and less political, there was substantial support for making zoning quasi-judicial. *Id.*

114. *Fasano v. Board of County Comm'rs*, 507 P.2d 23, 29 (Or. 1973).

115. *Compare Lee County v. Sunbelt Equities, II, Ltd. Partnership*, 619 So. 2d 996 (Fla. 2d DCA 1993) (holding that the mere fact that an application for a rezoning is consistent with the comprehensive plan does not give a landowner a right to the rezoning it desires) *with Board of County Comm'rs of Brevard County v. Snyder*, 595 So. 2d 65 (Fla. 5th DCA 1991) (holding that owner-initiated, site-specific rezoning proceedings are quasi-judicial in nature), *rev'd* 627 So. 2d 469 (Fla. 1993).

116. *Board of County Comm'rs of Brevard County v. Snyder*, 627 So. 2d 469, 470-71 (Fla. 1993).

117. *See id.* at 469.

118. FLA. STAT. § 163.3161 (1995).

119. *Snyder*, 627 So. 2d at 474 (emphasis in original).

120. Pelham, *supra* note 14, at 273. *See also* Brief of Amicus Curiae, *Board of County Comm'rs of Brevard County v. Snyder*, 627 So. 2d 469 (Fla. 1993) (No. 79,720).

121. *See* FLA. STAT. § 163.3167 (1995) (requiring municipalities to adopt a comprehensive plan); FLA. STAT. § 163.3203 (1995) (requiring municipalities to adopt land development regulations consistent with the policies of the comprehensive plan). *See* Wickersham, *supra* note 10, at 521. Florida adopted a state plan, chapter 187, *Florida Statutes* (1995), and created regional planning councils, section 186.504, *Florida Statutes* (1995), which adopted regional plans that conform with the state plan, section 186.507, *Florida Statutes* (1995). Local governments are

separation of powers between local governments and the courts in land use decision making,¹²² and it would have largely removed decisions on development orders from the political arena resulting in inconsistent, "ad hoc, sloppy and self-serving decisions."¹²³ Such a holding would have created clarity where there had been confusion and would have given Florida's growth management efforts firm legal ground on which to build. But the court instead utilized a functional analysis of the "legislative versus quasi-judicial" issue which had been gathering support in the District Courts of Appeal since the late 1980s.¹²⁴

Under this functional analysis, it is the "character of the hearing that determines whether or not board action is legislative or quasi-judicial,"¹²⁵ rather than whether the decision was a planning or zoning decision. The court explained that:

[I]t is evident that comprehensive rezonings affecting a large portion of the public are legislative in nature. However, . . . 'rezoning actions which have an impact on a limited number of persons or property owners, on identifiable parties and interests, where the decision is contingent on a fact or facts arrived at from distinct alternatives presented at a hearing, and where the decision can be functionally viewed as policy application, rather than policy setting, are in the nature of . . . quasi-judicial action.'¹²⁶

Had this reasoning applied only to zoning decisions and other development orders, it would have had little impact on Florida's efforts to manage growth. However, the court suggested that, under this analysis, a court should not make a distinction between requests for zoning changes and requests for land use changes which require amendment to a comprehensive plan.¹²⁷

required to adopt local plans which conform with the regional and state plans. FLA. STAT. §§ 163.3184(9)-163.3184(10) (1995). Until 1993, Land developments of regional impact required approval by both regional and state agencies. *Id.*; Wickersham, *supra* note 10, at 521.

122. *See supra* note 8.

123. *Snyder*, 627 So. 2d at 473 (quoting Daniel R. Mandelker & A. Dan Tarlock, *Shifting the Presumption of Constitutionality in Land-Use Law*, 24 URB. LAW. 1, 2 (1992)).

124. *Board of County Comm'rs of Brevard County v. Snyder*, 595 So. 2d at 78 (Fla. 5th DCA 1991), *rev'd* 627 So. 2d 469 (Fla. 1993); Pelham, *supra* note 14, at 275.

125. *Snyder*, 627 So. 2d at 474.

126. *Id.* (quoting the lower court, 595 So. 2d 65, 78).

127. *Id.*

[Q]uasi-legislative and quasi-executive orders, after they have already been entered, may have a quasi-judicial attribute if capable of being arrived at and provided by law to be declared by the administrative agency only after express statutory notice, hearing and consideration of evidence to be adduced as a basis for the making thereof.

Id. (quoting *West Flagler Amusement Co. v. State Racing Comm'n*, 165 So. 64, 65 (1935)). Comprehensive plan amendments require notice, hearing and consideration of evidence. FLA.

Four months later, in *City of Melbourne v. Puma*,¹²⁸ a case which dealt with a comprehensive plan amendment on a small parcel of land, the Florida Supreme Court made its position clear by applying *Snyder* to the facts in *Puma*.¹²⁹ Since the functional analysis applies to plan amendments as well as to zoning changes, a court can eventually rule that any decision on a land use amendment to a comprehensive plan is legislative or quasi-judicial, depending on the facts of each case. The court's redefinition of local government decisions on comprehensive plan amendments as quasi-judicial acts will have several serious impacts on Florida's ability to manage growth.

B. What a Tangled Web We Weave: Parker v. Leon County; Jennings v. Dade County

The same day that the Florida Supreme Court decided *Snyder*, the court held, in *Parker v. Leon County*,¹³⁰ that the administrative hearing process established in the Growth Management Act applies only to third-party intervenors who are challenging the consistency of land use decisions.¹³¹ In *Parker* the court interpreted *Snyder* to hold that land owners must challenge quasi-judicial land use decisions by common-law certiorari in circuit court.¹³² Although *Parker* dealt with development orders and not with land use amendments, the holding dovetails with the court's logic in *Snyder*, which also dealt initially with a development order—a rezoning.¹³³ Moreover, *Snyder* did not distinguish between rezonings and land use amendments; rather, it distinguished between quasi-judicial and legislative land use decisions.¹³⁴ Read together, these rulings make clear that a landowner who wants to challenge a land use decision must seek common law

STAT. § 163.3184(15) (1995). See also FLA. STAT. § 163.3187(1)(c)2. ("A local government is not required to comply with the requirements of s. 163.3184(15)(c), for plan amendments . . . if the local government complies with . . . s. 125.66(4)(a) for a county, or in s. 166.041(3)(c) for a municipality.").

128. 630 So. 2d 1097 (Fla. 1994).

129. *Id.* The Florida Supreme Court remanded *Puma*, a case in which the Fifth District Court of Appeal denied a request for a land use amendment for "further consideration consistent with [the] opinion in *Snyder*." *Id.* Neither *Puma* nor *Snyder* expressly stated that amendments are quasi-judicial acts. However, by remanding *Puma* for resolution in accordance with *Snyder*, which dealt exclusively with zoning, the court implied that the *Snyder* analysis applies to land use amendments as well. See *id.*

130. 627 So. 2d 476 (Fla. 1993).

131. *Id.* at 479.

132. *Id.*

133. Board of County Comm'rs of Brevard County v. Snyder, 627 So. 2d at 474. A "development order" is any order granting a development permit, which includes a rezoning. FLA. STAT. §§ 163.3164(6)-163.3163(8) (1995).

134. *Snyder*, 627 So. 2d at 474.

remedies, while a third party who wants to challenge the same decision must do so through the procedures outlined in the Growth Management Act. This makes challenging and defending local land use decisions complex, time consuming and costly for property owners and local governments.

For the benefit of all interested parties, the Florida Legislature sought to standardize and expedite challenges to land use decisions by requiring that the administrative appeals process defined in the Growth Management Act "be the sole proceeding or action for a determination of whether a local government's plan, element, or amendment is in compliance with this act."¹³⁵ Thus, pre-*Snyder* appeals were limited to two possible procedures, the administrative hearing process defined in the statute¹³⁶ and an appeal on constitutional grounds, much like the one which was the basis of the first Euclidean zoning decision.¹³⁷ Both of these procedures place a heavy burden on the challenging party to overcome the presumption of the local government's consistency and constitutionality.¹³⁸

The Florida Supreme Court's decisions in *Snyder*, *Puma*, and *Parker* complicated the growth management process by adding an unanticipated third procedure for reviewing comprehensive plan amendments, namely writ of certiorari in the local circuit court.¹³⁹ Common law certiorari review, like an appeal, entails review of the hearing record,¹⁴⁰ rather than a trial de novo. The circuit court determines: (1) whether procedural due process has been afforded; (2) whether the essential requirements of the law have been observed; and (3) whether the land use decision is supported by competent, substantial evidence.¹⁴¹ With this added method of challenge, every

135. FLA. STAT. § 163.3184(13) (1995). This is consistent with the Oregon model in which all land use cases are heard by a seven member Land Conservation and Development Commission. OR. REV. STAT. §§ 197.030-197.065, 197.225 (1995); Wickersham, *supra* note 10, at 523-24.

136. FLA. STAT. § 163.3213 (1995).

137. See J. Freitag, *Takings 1992: Scalia's Jurisprudence and a Fifth Amendment Doctrine to Avoid Lochner Redivivus*, 28 VAL. U. L. REV. 743 (1994). Since the 1930s, the United States Supreme Court has set the tone for review of legislative decisions by refusing to replace the social policies of elected officials with those of the courts. *Id.* This has resulted in deferential review using the fairly debatable standard for due process and equal protection claims. *Id.* In takings cases, until recently, legislative acts have also enjoyed the same review. *Id.*

138. FLA. STAT. §§ 163.3184(8)-163.3184(13) (1995).

139. See Board of County Comm'rs of Brevard County v. Snyder, 627 So. 2d 469, 474 (Fla. 1993).

140. City of Deerfield Beach v. Vaillant, 419 So. 2d 624, 626 (Fla. 1982).

141. *Id.* However, courts have not clarified what constitutes substantial, competent evidence and what weight a local government may give the opinions voiced by its citizens in the context of a quasi-judicial public hearing. This requirement alone may severely reduce the effectiveness of public participation. See Metropolitan Dade County v. Blumenthall, Nos. 94-52, 94-137, 1995 WL 366684 (Fla. 3d DCA June 21, 1995).

local government decision on a land use amendment could result in a de novo administrative hearing, a circuit court trial, an action for injunctive relief, a strictly scrutinized review of the record by writ of certiorari, or possibly all four at the same time.

For example, if a government made a compromise decision to allow more intense development on a property which attracted public attention because of environmental concerns, the property owner, third-party intervenors, and the involved state agencies could challenge the decision. Until a court rules on whether the decision is legislative or quasi-judicial, the property owner must seek constitutional relief, injunctive relief and review by writ of certiorari. Regardless, the state agencies and intervenors would challenge consistency through the administrative process. The property owner or the third party could also seek actual damages in circuit court, but only the third party could seek injunctive relief in the circuit court, if a development order is involved.¹⁴² Additionally, in order to protect their legal interests, dissatisfied property owners must file and maintain both a constitutional challenge and a petition for writ of certiorari, because the land use decision will be characterized after the fact by the courts as quasi-judicial or quasi-legislative, and only filing one action may result in no remedy at all.¹⁴³ The need for a person to simultaneously pursue and defend multiple claims will burden the courts and raise the cost of comprehensive planning for all involved. Furthermore, the existence of different procedures with different standards of review for different parties to a land use dispute creates the potential for inconsistent or conflicting results.

The potential for inconsistent results also raises serious equal protection issues. After the *Parker* and *Snyder* decisions, a third-party intervenor, who may be an individual whose property rights are seriously affected by a land use decision or a group of citizens trying to preserve their community's property values and quality of life,¹⁴⁴ is treated differently than the property owner who seeks to change the land use. Third-party intervenors must follow the administrative procedure established in the Growth Management Act, which consists

142. Interview with Richard Grosso, Legal Director for 1000 Friends of Florida, in Ft. Lauderdale, Florida. (June 27, 1995) [hereinafter Grosso Interview]. See also *Turner v. Sumter County Bd. of County Comm'rs*, 649 So. 2d 276 (Fla. 5th DCA 1995) (holding that a third party may have a certiorari action in addition to a claim under the Growth Management Act).

143. See *Martin County v. Yusem*, 664 So. 2d 976 (Fla. 4th DCA 1995) (holding that the land owner had no avenue of relief other than a reapplication when he failed to file a petition for writ of certiorari to challenge a land use decision that was eventually ruled to be quasi-judicial five years after the decision was made).

144. For a discussion of quality of life as a consideration in zoning decisions see Bradley C. Karkkainen, *Zoning: A Reply to the Critics*, 10 J. LAND USE & ENVTL. L. 45 (1994).

of a series of settlement conferences and hearings, and which ultimately results in a final order issued by the Adjudicatory Commission that may be appealed to the district court.¹⁴⁵ While a property owner who seeks to force a local government into making a land use change needs only to file a petition for writ of certiorari directly in the circuit court,¹⁴⁶ a third-party intervenor must first overcome a very deferential review of the local government decision in order to prevail.¹⁴⁷ Not only are these de novo hearings expensive and time consuming, they also provide the landowner a second opportunity to strengthen the record for court review by introducing new evidence into the record. Obviously, the procedure applicable to the landowner is preferential because it is shorter, less expensive and provides no opportunity for the parties to supplement the record. The landowner also has the advantage since the court will apply a high level of scrutiny to the government's decision to deny the land use request.¹⁴⁸ This system clearly tips the scales of justice in favor of the property owner seeking the change, even though a third party challenging the decision may have equal or more significant property rights at stake.

Additionally, by shifting land use amendments into the realm of quasi-judicial acts, the *Snyder* decision has thrown a procedural roadblock in front of the Growth Management Act's two primary goals—intergovernmental coordination and public participation.¹⁴⁹ Since elected officials have traditionally met personally with their constituents to discuss issues that concern them, the shift from legislative to quasi-judicial procedural requirements immediately created a

145. FLA. STAT. §§ 163.3184(9)-163.3184(11), 120.57 (1995) (establishing that hearings result in final orders); FLA. STAT. § 120.68(2) (1995) (establishing that final actions of agencies may be appealed to district courts of appeal).

146. FLA. CONST. art. V, § 5(b).

147. FLA. STAT. §§ 163.3184(9)-163.3184(10) (1995).

148. Board of County Comm'rs of Brevard County v. Snyder, 627 So. 2d 469, 475 (Fla. 1993). "This term as used in the review of land use decisions must be distinguished from the type of strict scrutiny review afforded in some constitutional cases." *Id.* "[T]he proposed change cannot be *inconsistent* [with the comprehensive plan], and will be subject to the 'strict scrutiny' of *Machado* to insure this does not happen." *Id.* at 475-76 (emphasis in original) (citation omitted). The *Machado* Court explained strict scrutiny as follows:

"Strict implies rigid exactness . . . [and that the] thing scrutinized has been subjected to minute investigation Strict scrutiny is thus the process whereby a court makes a detailed examination of a statute, rule or order of a tribunal for exact compliance with, or adherence to, a standard or norm. It is the antithesis of a deferential review."

Machado v. Musgrave, 519 So. 2d 629, 632 (Fla. 3d DCA 1987) (citations omitted).

149. See FLA. STAT. §§ 163.3184(2), 163.3184(4)-163.3184(6) (1995) (requiring coordination and intergovernmental review); FLA. STAT. § 163.3181 (1995) (stating that it is the "intent of the Legislature that the public participate in the comprehensive planning process"). This process requires public hearings. FLA. STAT. § 163.3181 (1995).

conflict with the prohibition against *ex parte* communications. In *Jennings v. Dade County*,¹⁵⁰ the Third District Court of Appeal ruled that *ex parte* communications with elected officials can invalidate a quasi-judicial land use decision.¹⁵¹ When combined with *Jennings*, *Snyder* drove a wedge of misunderstanding and distrust between the people and their local governments by making it a violation for citizens to talk about hotly-contested land use issues with their elected representatives. Political frustration grew so quickly that the Florida Legislature responded with legislation that mitigated the effect of *Jennings*, by giving the voters access to their elected representatives.¹⁵²

Jennings, however, exposed only the tip of the procedural iceberg when it deemed land use decisions quasi-judicial. Although land use decisions are made at public hearings, which are different from trials, circuit courts will review many land use decisions as quasi-judicial acts. Other than *Snyder's* holding that local governments need not make formal findings of fact when rendering their decisions,¹⁵³ the Florida Supreme Court has offered no guidance to the lower courts as to the procedural requirements to be applied at quasi-judicial public hearings.¹⁵⁴ Whether concerned members of the public must have standing to speak, must be sworn in or must be subjected to cross examination, and whether conventional rules of evidence apply remain unanswered questions.¹⁵⁵ If the full procedural requirements of quasi-judicial hearings are imposed, public participation in land use hearings could become so onerous as to eviscerate specific legislative goals for public participation and intergovernmental coordination.¹⁵⁶ The not-for-profit organization, 1000 Friends of Florida,¹⁵⁷ which was created to promote effective comprehensive planning, has formulated a Model Ordinance for local governments to adopt in order to balance fair procedural requirements with the need to ensure public access to the process.¹⁵⁸ Richard Grosso, Legal Director for 1000 Friends of

150. 589 So. 2d 1337 (Fla. 3d DCA 1991), *cert. denied*, 598 So. 2d 75 (Fla. 1992).

151. *Id.* at 1341.

152. Ch. 95-352 Fla Laws, 1995 (codified at FLA. STAT. § 286.0115 (1995)).

153. Board of County Comm'rs of Brevard County v. Snyder, 627 So. 2d 469, 475 (Fla. 1993).

154. *See id.*

155. Grosso Interview, *supra* note 142.

156. *Id.* *See* Metropolitan Dade County v. Blumenthal, Nos. 94-137, 94-52, 1995 WL 366684 (Fla. 3d DCA June 21, 1995) (*per curiam*) (holding that certain kinds of public comment by lay persons do not constitute substantial, competent evidence for purposes of review).

157. This organization is modeled after 1000 Friends of Oregon, "a public advocacy group instrumental in shaping the implementation of [Oregon's growth management law] and in forging a coalition of support from environmental, development, and housing advocates." Wickersham, *supra* note 10, at 523.

158. Grosso Interview, *supra* note 142.

Florida, notes that even less onerous procedures intimidate citizens, take longer and cost more, effectively causing the land use decision-making process to come to a halt.¹⁵⁹

C. It Is All in How You Look at It: Applying Strict Scrutiny

Despite the burden of dealing with new procedural problems, Florida's growth management process would still be able to function much as it was designed to function. However, the *Snyder* holding goes further by requiring strict scrutiny for quasi-judicial decisions and reallocating the burden of proof used by lower courts when evaluating individual cases.¹⁶⁰ These changes play a significant role in determining who ultimately gets to make land use decisions because local governments must show a legitimate public purpose which justifies maintaining the existing use.¹⁶¹ At the heart of the *Snyder* ruling is the concept that "a property owner's right to own and use his property is constitutionally protected."¹⁶² Another concept on which the court based its holding is "the necessity of strict compliance with the comprehensive plan."¹⁶³ These two concepts combine to make the review of land use decisions subject to strict scrutiny.¹⁶⁴ The strict scrutiny standard is much harder to meet than the previously employed, fairly debatable standard of review.

Previously, a local government decision also enjoyed a presumption of correctness.¹⁶⁵ In *Rural New Town, Inc. v. Palm Beach County*,¹⁶⁶ the property owner brought a cause of action seeking to estop enforcement of a zoning decision. The court held that "the burden is *not* upon the governing authority to [prove] or establish by competent substantial evidence that the zoning regulation or classification is reasonable or is in furtherance of its police powers."¹⁶⁷ The party challenging the decision has the burden of overcoming that presumption by establishing a "prima facie case that the ordinance is arbitrary, unreasonable and confiscatory and, thus, unconstitutional."¹⁶⁸ Since *Euclid*, this has been a very heavy, almost

159. *Id.*

160. Board of County Comm'rs of Brevard County v. Snyder, 627 So. 2d 469, 471 (Fla. 1993).

161. *Id.* at 476.

162. *Id.*

163. *Id.* at 475.

164. *Id.*

165. Lambros, Inc. v. Town of Ocean Ridge, 392 So. 2d 993, 994 (Fla. 4th DCA 1981).

166. 315 So. 2d 478 (Fla. 4th DCA 1975).

167. *Id.* at 480 (emphasis in original).

168. Lambros, 392 So. 2d. at 994.

insurmountable burden.¹⁶⁹ The *Snyder* court substituted a much easier burden by requiring proof that the proposed land use is “consistent with the comprehensive plan and complies with all procedural requirements of the zoning ordinance.”¹⁷⁰

On its face, it might appear that the burden to prove that a request for a plan amendment is consistent with the comprehensive plan is difficult to establish; however, in practice it is not. The comprehensive plans adopted by local governments anticipated and welcomed requests for future land use amendments. Most plans include a process, with specific criteria, for making and evaluating land use amendments.¹⁷¹ An amendment that complies with that process complies with the plan¹⁷² and will be consistent with the plan so long as it does not directly conflict with any of the plan’s elements such as traffic, drainage, or recreation.¹⁷³ Amendments affecting small parcels of land, such as those in *Snyder* and *Puma*, may have negligible individual impacts on other plan elements. The impacts caused by changing the land use on larger parcels can be addressed by submitting textual plan amendments to the other plan elements.¹⁷⁴ If a property owner proposes a combination of facility improvements and simultaneous text amendments that adjust the various elements of the plan to address the impacts of his proposed land use change, the

169. See, e.g., Freitag, *supra* note 137, at 748.

170. Board of County Comm’rs of Brevard County v. Snyder, 627 So. 2d 469, 476 (Fla. 1993).

171. See, e.g., MARTIN COUNTY COMPREHENSIVE GROWTH MANAGEMENT PLAN §§ I-9 (1990). Staff can recommend approval of a plan amendment if one of the following criteria are met: (1) changes in land use designations in the general area make the change logical and consistent, and there is availability of public services; (2) growth in the area has made the request reasonable and consistent with area land use characteristics; (3) the change would correct an inappropriate designation; or (4) the change would meet a public service need which enhances the health, safety or general welfare. *Id.*

172. Grosso Interview, *supra* note 142; Dreyer Interview, *supra* note 49. Both Grosso and Dreyer emphasize that these criteria were included in the plans to ward off inappropriate requests. *Id.* Under strict scrutiny, however, the criteria are being used as the key for arguing that a change must be approved if it is consistent with this language. Grosso and Dreyer argue that the criteria are only a threshold question to see if an amendment should even be considered. *Id.*

173. Hiss v. Sarasota County, 602 So. 2d 535 (Fla. 1st DCA 1992).

174. This is easier than it sounds. If a plan sets a certain level of service for a road, that level of service can be met even if the proposed amendment doubles the traffic by doubling the number of lanes on the road. Similarly, previously unexpected water users can be supplied by new treatment plants, maintaining the approved level of service. This is especially easy for large projects with the cash flow to front the money for improvements. For example, the *Martin County Comprehensive Growth Management Plan* § 7(4) (1990), establishes the level of service for community parks at “2 developed acres per 1,000 population.” See also *Environmental Coalition of Fla., Inc. v. Broward County*, 586 So. 2d 1212, 1215 (Fla. 1st DCA 1991) (holding that data supporting a plan amendment need not even be accurate, if it is the best available data).

plan will remain internally consistent and in compliance with the Growth Management Act.¹⁷⁵ Thus, a well framed amendment is consistent with the plan if the amendment does not require adoption of a new policy or change to an existing policy,¹⁷⁶ and if it is not so extreme that it violates a basic concept of the plan. Most amendments, therefore, will be consistent, and the burden of proof will then shift to the local government.

The government's burden under *Snyder* is "to demonstrate that maintaining the existing zoning classification with respect to the property accomplishes a legitimate public purpose . . . [and that] the refusal to rezone the property is not arbitrary, discriminatory, or unreasonable."¹⁷⁷ The court slightly mitigated the harshness of the burden by explaining that a local government still has the discretion to deny a requested zoning change so long as it approves "some development that is consistent with the plan and the government's decision is supported by substantial, competent evidence."¹⁷⁸ However, this only grants a local government limited discretion in evaluating requests for zoning changes. The *Snyder* decision does not address the thornier problem of what degree of discretion a local government has in making decisions on proposed amendments to the plan itself. Nor does it address what standard the courts should use when reviewing those decisions on proposed plan amendments.

On certiorari review, the key question the circuit court will ask is whether there was substantial, competent evidence presented at the hearing to establish that the decision to deny a land use amendment in a comprehensive plan accomplished a legitimate public purpose and was not arbitrary, discriminatory or unreasonable. Since a multitude of land use scenarios for a particular piece of property may be consistent with its plan,¹⁷⁹ a local government will be hard pressed to prove that the denial of one consistent use was not arbitrary, discriminatory or unreasonable, while a different consistent use which

175. FLA. STAT. § 163.3177(10)(a) (1995) (stating that a local plan is consistent if it "is compatible with" and "furthers" state and regional plans). See *Hiss*, 602 So. 2d at 535 (finding plan consistent, even though statutory requirements not met, where as a whole it is calculated to meet requirements).

176. *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609, 612 (Fla. 4th DCA 1994), cert. denied, 654 So. 2d 920 (Fla. 1995).

177. *Board of County Comm'rs of Brevard County v. Snyder*, 627 So. 2d 469, 476 (Fla. 1993).

178. *Id.* at 475.

179. *Respondent's Showing of Cause at 9, Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677), cert. denied, 651 So. 2d 1195 (Fla. 1995). Ten land use scenarios for the subject property were considered by the County Commission. *Id.* All were consistent with the plan. *Id.*

serves a legitimate public purpose is approved. The fact that the concerns of the neighbors and the political will of the community do not constitute substantial, competent evidence¹⁸⁰ makes the government's legal position even harder to defend. Without the deference afforded to legislative actions, the circuit courts are unlikely to find that the government's decision was supported by substantial, competent evidence, and therefore is not arbitrary, discriminatory or unreasonable.¹⁸¹

Whether there was substantial, competent evidence to support the government's decision will be decided on a case-by-case basis by the circuit courts, and a circuit court's decision on this point is not subject to review on appeal.¹⁸² Therefore, the combined effect of the *Snyder*, *Parker*, and *Puma* rulings is to undermine the Growth Management Act by stripping local government of most of its legislative land use decision making power and placing that power directly in the hands of the circuit courts.

IV. THE LOWER COURTS WRESTLE WITH THE *SNYDER* DOCTRINE

Due to the ambiguities left by the *Snyder* decision and the ad hoc nature with which the courts now apply the quasi-legislative/quasi-judicial standard, courts have been able to restrict even further the authority of local governments to make land use decisions. Several cases involving Martin County's planning and zoning decisions illustrate this point.

A. *FIT to be Tied*: Florida Institute of Technology v. Martin County¹⁸³

The impact of the supreme court's decisions in *Snyder*, *Parker*, and *Puma* on local government's ability to implement the Growth

180. See *Metropolitan Dade County v. Blumenthal*, Nos. 94-137, 94-52, 1995 WL 366684 (Fla. 3d DCA June 21, 1995) (per curiam) The opinions, hopes, dreams and promises of local residents, although socially and politically perhaps the most important evidence, are not relevant or competent evidence to the courts. *Id.* at *2. The courts require experts and facts. *Id.*

181. See Freitag, *supra* note 137, at 743-47 (discussing the *Lochner* era and the relevance of deferential review). Deference given to the decisions of an elected body is an acknowledgment that the courts should not substitute their policy judgments for that of legislative officials. *Id.*

182. *City of Deerfield Beach v. Vaillant*, 419 So. 2d 624, 626 (Fla. 1982). "[A] final judgment of a circuit court acting in its review capacity is not appealable as a matter of right to a district court if it has already been directly 'appealed' to a circuit court . . . [T]he district court . . . [only] determine[s] that the procedural due process was afforded and essential requirements of law were observed." *Id.* (citing FLA. R. APP. P. 9.030(b)(2)(B)). *Snyder* requires that district courts review circuit court decisions according to *Vaillant*. Board of County Comm'rs of Brevard County v. Snyder, 627 So. 2d 469, 475 (Fla. 1993). See also *Education Dev. Ctr. v. City of West Palm Beach Zoning Bd. of Appeals*, 541 So. 2d 106, 108 (Fla. 1989) (holding certiorari review of zoning cases to the two discrete components of review in *Vaillant*).

183. 641 So. 2d 898 (Fla. 4th DCA 1994), *rev. denied*, 651 So. 2d 1195 (Fla. 1995).

Management Act was felt immediately by the local governments. Martin County, a small county on the edge of south Florida's urban expansion,¹⁸⁴ embraced comprehensive planning with the adoption of comprehensive plans in 1982 and 1990.¹⁸⁵ Florida Institute of Technology (FIT), through foreclosure, regained title to an eighty-one-acre parcel of land which had the appropriate land use and zoning designations for an ambitious Planned Unit Development (PUD). When FIT approached the county staff to clarify the project's status, FIT and the staff agreed that both FIT and the county might benefit if they joined forces to reassess the land use and zoning of the parcel.¹⁸⁶ Without making any promises as to what the result would be, Martin County initiated a land use amendment for the property, and FIT paid some of the costs of seeking the amendment.¹⁸⁷ The existing land use for the property allowed forty-eight acres of low density residential, seven acres of commercial office residential, and twenty-six acres of waterfront commercial.¹⁸⁸ At the first public hearing, FIT and the county staff supported two different plans for the property, both of which were consistent with the comprehensive plan and were less intense than the existing land use designation.¹⁸⁹ Because the existing land use had been approved to accommodate a PUD that guaranteed continued public access to the Indian River, public comment at the hearing was intense.¹⁹⁰ The County Commission proposed to adopt an even less intense use, which did not include any waterfront commercial property at all.¹⁹¹ FIT did not agree to the change, and the county did not adopt a plan amendment.¹⁹² FIT filed a verified complaint to challenge the county's decision pursuant to the administrative procedure in the Growth Management Act, but did not pursue that action when the county agreed to consider additional plans for the property.¹⁹³ At a second public hearing, county staff

184. ABSTRACT, *supra* note 32, at 39. Martin County, located north of Palm Beach County on Florida's east coast, had 64,000 residents in 1980. *Id.* By 1990, it had grown to 100,900 residents. *Id.*

185. Marc Freeman, *Martin County Defends 'Absurd' Growth Plan*, PALM BEACH POST, June 1, 1994, at 1B.

186. Initial Brief of Appellant at 11-12, *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677), *rev. denied*, 651 So. 2d 1195 (Fla. 1995).

187. *Id.* at 12.

188. *Id.* at 7.

189. *Id.*

190. See Martin County Commission Minutes, (September 15, 1992) (available at Commission Records, Martin County Administration Building, Stuart, Florida).

191. *Id.*

192. *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898, 899 (Fla. 4th DCA 1994), *rev. denied*, 651 So. 2d 1195 (Fla. 1995).

193. *Id.* at 898.

presented nine potential land use scenarios for the property.¹⁹⁴ All were consistent with the comprehensive plan.¹⁹⁵ Once again there was extensive public input. During this hearing, the County Commission proposed a tenth land use scenario which the staff stated would also be consistent with the comprehensive plan.¹⁹⁶ The commission and FIT could not reach an agreement, and once again, the county did not adopt any land use amendment.¹⁹⁷ At the end of the hearing, the property was still approved for a valid PUD and still enjoyed a land use designation more intense than any of the scenarios proposed by the county staff, the county commission, or FIT.¹⁹⁸

The FIT attorneys were aware that the supreme court had accepted *Parker* for review, so they filed a petition for writ of certiorari in the circuit court in addition to a verified complaint per the Growth Management Act.¹⁹⁹ The circuit court dismissed the writ after ruling that the commission's action was legislative, and therefore certiorari review was not the proper vehicle for an appeal.²⁰⁰ FIT appealed the decision to the Fourth District Court of Appeal, arguing that the county's action was quasi-judicial, because the proposal included a zoning change which would have been made if the land use amendment had been adopted.²⁰¹ Martin County argued that the only decision made at the hearing was a decision not to adopt a comprehensive plan amendment and that comprehensive plan amendments, because they are legislative acts, are not subject to certiorari review.²⁰²

While the case was under consideration at the Fourth District, the supreme court issued its *Snyder* and *Parker* rulings. Subsequently, the district court rejected Martin County's arguments.²⁰³ Quoting *Snyder's* holding that "[i]t is the character of the hearing that determines whether or not board action is legislative or quasi-judicial,"²⁰⁴ the district court ruled that:

194. *Id.*

195. Respondent's Showing of Cause at 9, *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677), *rev. denied*, 651 So. 2d 1195 (Fla. 1995).

196. *Florida Inst. of Technology*, 641 So. 2d at 898-99.

197. *Id.* at 899.

198. Initial Brief of Appellant at 7, *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677), *rev. denied*, 651 So. 2d 1195 (Fla. 1995).

199. *Florida Inst. of Technology*, 641 So. 2d at 899.

200. *Id.*

201. Initial Brief of Appellant at 21, *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677), *rev. denied*, 651 So. 2d 1195 (Fla. 1995).

202. *Id.* at 16.

203. *Florida Inst. of Technology*, 641 So. 2d at 899-900.

204. *Id.* at 899.

[the Martin County] board hearings essentially addressed the change in land use designation for a particular piece of property. There was discussion as to whether the suggested change was consistent with the policies of the growth management plan . . . [which] leads to the conclusion that this board's action, in this instance, was quasi-judicial in nature.²⁰⁵

The district court directed the circuit court to reinstate the certiorari proceedings and apply the standard of review in *Snyder*.²⁰⁶ Martin County's request for review by the supreme court was denied,²⁰⁷ and rather than subject itself to *Snyder's* standard of review, the commission agreed to a settlement with FIT under which the land use would be changed through a land use amendment.²⁰⁸ The agreement allowed FIT to present preferences and support any one of three scenarios considered at the second hearing in 1992.

The Fourth District understood that the only decision made by Martin County at the hearings was to not grant a comprehensive plan amendment.²⁰⁹ Therefore, this ruling established that *Snyder* is not limited only to zoning cases. Under *Snyder's* functional analysis, some local government decisions on land use amendments will also be ruled quasi-judicial actions. The court did not address the question of whether any decision on a land use amendment could be deemed a legislative act after *Snyder*.

*B. Field of Nightmares: Section 28 Partnership, Ltd. v. Martin County*²¹⁰

The answer came quickly from the Fourth District Court of Appeal as to whether any decision on a land use amendment could be deemed a legislative act after *Snyder*. Section 28 Partnership, Ltd. (the Partnership) sought to amend Martin County's comprehensive plan so that 628 acres of land used for agricultural purposes could be developed as a commercial and residential PUD.²¹¹ The property is located in southern Martin County, bordering Palm Beach County,²¹² and is situated at the headwaters of the Loxahatchee River, which has been designated as a Wild and Scenic River by the National Park

205. *Id.* at 900.

206. *Id.*

207. *Martin County v. Florida Inst. of Technology, Inc.*, 651 So. 2d 1195 (Fla. 1995).

208. *See* Joint Motion to Stay Proceedings, *Florida Inst. of Technology, Inc. v. Martin Co.* 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677); *Florida Inst. of Technology, Inc. v. Martin County*, Case No. 92-494-CA (Fla. 19th Cir. Ct., Apr. 21, 1995).

209. *Florida Inst. of Technology*, 641 So. 2d at 898-99.

210. 642 So. 2d 609 (Fla. 4th DCA 1994), *cert. denied*, 654 So. 2d 920 (Fla. 1995).

211. *Id.* at 612.

212. *Id.*

Service. Jonathan Dickenson State Park borders the property on two sides.²¹³ The requested land use amendment would have increased the intensity of development on the property from a maximum of 200 homes to 810 housing units, “a golf course, a clubhouse, and 50,000 square feet of retail and office use.”²¹⁴ As was the case in *FIT*, this was a controversial request. Again, local residents were quite vocal about the impact of the project’s traffic on the roads in the area and in their neighborhoods.²¹⁵ Residents of both counties were concerned about protecting the park and the river.²¹⁶

Martin County previously denied an earlier amendment request for a less intensive development on this property;²¹⁷ but the Partnership redesigned the project and applied again.²¹⁸ The new request addressed the technical issues brought up at the earlier hearing²¹⁹ and asked that the county adopt a new plan policy creating an “Adjacent County Urban Service Area” so that the project could be serviced by utilities from Palm Beach County.²²⁰ At the hearing, the Partnership presented extensive testimony by development experts that the amendment would result in greater compliance with the policies of the comprehensive plan than the current land use designation.²²¹ On the other hand, nearby local governments and local residents asked the county not to approve the amendment, and the county staff recommended denial.²²² After listening to all of the arguments, the commission denied the amendment.²²³ The Partnership filed a verified complaint with the county;²²⁴ a constitutional claim in the circuit court,²²⁵ and a petition for certiorari review in circuit court.²²⁶ The Honorable John E. Fennelly, the circuit court

213. *Id.* at 610.

214. *Id.* at 612.

215. See Martin County Commission Minutes, (May 5, 1992) (available at Commission Records, Martin County Administration Building, Stuart, Florida).

216. *Id.*

217. Freeman, *supra* note 185, at 1B.

218. *Id.*

219. Dreyer Interview, *supra* note 49. At the second public hearing, the Partnership attempted to thoroughly address the technical issues raised by the proposed project. *Id.*

220. Section 28 Partnership, Ltd. v. Martin County, 642 So. 2d 609, 612 (Fla. 4th DCA 1994), *cert. denied*, 654 So. 2d 920 (Fla. 1995).

221. Martin County Commission Minutes, (May 5, 1992) (available at Commission Records, Martin County Administration Building, Stuart, Florida). One of the major thrusts of the Partnership’s presentation was that the proposed project would improve rather than harm the environment. *Id.*

222. *Id.*

223. Section 28, 642 So. 2d at 609.

224. Initial Brief of Appellee at 33, Section 28 Partnership, Ltd. v. Martin County, 642 So. 2d 609 (Fla. 4th DCA 1994) (No. 93-0747), *cert. denied*, 654 So. 2d 920 (Fla. 1995).

225. *Id.*

226. *Id.*

judge,²²⁷ who had previously ruled that the county's land use decision in the *FIT* case had been a legislative act, similarly ruled in *Section 28* that the county had acted legislatively; both decisions also denied review by writ of certiorari.²²⁸ The Partnership appealed to the Fourth District Court of Appeal just as *FIT* had previously done.²²⁹ *Section 28* was assigned to a different panel of judges than *FIT*,²³⁰ but both panels were in the district court at the time *Snyder*, *Parker* and *Puma* were decided. The significance of this case to Florida's growth-management program was stressed to the court in an amicus brief filed by the DCA,²³¹ the state agency charged with implementing the Growth Management Act.²³² Both the DCA and Martin County argued that decisions on comprehensive plan amendments are legislative acts.²³³ The Partnership initially argued, as had *FIT*, that the request included both a zoning and a comprehensive plan amendment, and that the zoning aspect of the request made the decision a quasi-judicial act.²³⁴ Martin County responded that the plan amendments were threshold issues without which the zoning was a moot point, and the action was, therefore, purely a planning decision.²³⁵ To this, the Partnership, using the logic of *Snyder*, replied that because the plan set standards for land use amendments, such amendments should be considered an application of general policy to specific property.²³⁶ Therefore, the district court had all of the relevant arguments before it when it ruled in *Section 28*.

The district court could have distinguished *Section 28* from *FIT* based on the fact that the property involved in *Section 28* was much

227. *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994); *Section 28*, 642 So. 2d at 609. As one of the first circuit court judges to apply the *Snyder* ruling, Judge Fennelly analyzed the impact of the decisions in: Hon. John E. Fennelly, *Examining the Current State of Post-Comprehensive Plan Land-Use Decision Making in Florida: A Property Owner's Guide to the Local Government Comprehensive Planning and Land Development Regulation Act*, 7 ST. THOMAS L. REV. 1 (1994) (analyzing the impact of post-*Snyder* decisions).

228. *Section 28*, 642 So. 2d at 609; *Florida Inst. of Technology*, 641 So. 2d at 898.

229. *Section 28*, 642 So. 2d at 609.

230. *Florida Inst. of Technology*, 641 So. 2d at 900; *Section 28*, 642 So. 2d at 613.

231. Brief of Amicus Curiae, Department of Community Affairs, *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609 (Fla. 4th DCA 1994) (No. 93-0747), *cert. denied* 654 So. 2d 920 (Fla. 1995).

232. FLA. STAT. § 163.3204 (1995).

233. Brief of Amicus Curiae, Department of Community Affairs, *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609 (Fla. 4th DCA 1994) (No. 93-0747), *cert. denied*, 654 So. 2d 920 (Fla. 1995); Reply Brief of Appellee at 25-26, *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609 (Fla. 4th DCA 1994) (No. 93-0747), *cert. denied*, 654 So. 2d 920 (Fla. 1995).

234. Initial Brief of Appellant at 2, 4, *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609 (Fla. 4th DCA 1994) (No. 93-0747), *cert. denied*, 654 So. 2d 920 (Fla. 1995).

235. Reply Brief for Appellee at 2, *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609 (Fla. 4th DCA 1994) (No. 93-0747), *cert. denied*, 654 So. 2d 920 (Fla. 1995).

236. *Id.* at 8.

larger or that the requested increase in land use intensity was much greater. The district court could have supported drawing a distinction on these lines by analogizing the distinction drawn in *Snyder* between “comprehensive rezonings affecting a large portion of the public,” which the *Snyder* court found to be legislative in nature,²³⁷ and those which “have an impact on a limited number of persons or property owners,” which the *Snyder* Court found to be quasi-judicial.²³⁸ Instead, the Fourth District made it clear that the size of the property and the increase in intensity of use are not necessarily determinative.²³⁹ Nor did the court find determinative the fact that the request was owner initiated and site specific.²⁴⁰ Rather, two of the three district court judges focused on *Snyder*’s first and most broad holding²⁴¹ that “legislative action results in the formulation of a general rule of policy, whereas judicial action results in the application of a general rule of policy.”²⁴² Therefore, the court held that the county’s decision not to create a new policy for urban service areas was a legislative or policy making decision.²⁴³ The third judge, while concurring with the result, argued that land use amendments are legislative in nature.²⁴⁴ Additionally, the *Section 28* court held that “the pristine nature of the land in the park and around the river, the size of the park, and the use of it by the public” also made decisions on the changes sought for the *Section 28* property a matter of policy.²⁴⁵ The Fourth District denied certiorari review.²⁴⁶ The Florida Supreme Court refused to review this decision, as it had refused to review *FIT*.²⁴⁷

FIT and *Section 28* define the post-*Snyder* landscape as one in which local government decisions concerning comprehensive plan amendments will be considered quasi-judicial acts unless they neces-

237. Board of County Comm’rs of Brevard County v. Snyder, 627 So. 2d 469, 474 (Fla. 1993).

238. *Id.* (quoting lower court opinion in *Snyder*, 595 So. 2d 65, 78 (Fla. 5th DCA 1991)).

239. Section 28 Partnership, Ltd. v. Martin County, 642 So. 2d 609, 612 (Fla. 4th DCA 1994).

240. *Id.*

241. *Id.*

242. *Snyder*, 627 So. 2d at 474 (emphasis in original).

243. *Section 28*, 642 So. 2d at 612.

244. *Id.* at 613 (Stone, J., concurring specially). This split among the judges was reminiscent of the opinion in *Battaglia Properties, Ltd. v. Florida Land and Water Adjudicatory Commission*, in which only the judge who wrote the opinion considered general comprehensive zoning and planning ordinances, maps and amendments to be legislative in nature, while both the concurring judge and the dissenting judge agreed that in the particular case, involving one parcel of land under one ownership, the decision was quasi-judicial.

245. *Section 28*, 642 So. 2d at 612.

246. *Id.*

247. Section 28 Partnership, Ltd. v. Martin County, 654 So. 2d 920 (Fla. 1995); Martin County v. Florida Inst. of Technology, Inc., 651 So. 2d 1195, 1195 (Fla. 1995).

sitate the adoption or alteration of a plan policy or affect environmentally sensitive lands of great public interest. Whether there is a property size or relative increase in land use intensity that will cross the threshold into legislative policy formation is not settled.

C. Through a Looking Glass: Section 28 II

The curious tale of *Section 28*, however, did not end with the district court's ruling. In *Section 28 Partnership, Ltd. v. Martin County (Section 28 II)*,²⁴⁸ the Partnership originally sought \$38.9 million in damages²⁴⁹ for substantive due process violations, equal protection violations and takings clause violations.²⁵⁰ The Partnership also sought declaratory and injunctive relief.²⁵¹ In a de novo trial, the circuit court "heard over 13 days of testimony from more than 30 witnesses, [and] received over 200 items of evidence."²⁵² The circuit court issued its final judgment before the Fourth District made its ruling on appeal of the denial of the writ of certiorari.²⁵³

Referring to the Florida Supreme Court's holding in *Snyder*,²⁵⁴ the circuit court's first conclusion of law directly contradicted the previous ruling of the Nineteenth Judicial Circuit and the eventual Fourth District ruling. The circuit court concluded, as a matter of law, that Martin County's decision "involved the application of adopted policy to the Partnership's individual interests and basic property rights."²⁵⁵ The county's action was quasi-judicial and thus it was not the proper action to seek injunctive relief²⁵⁶ because injunctive relief is only available to challenge legislative actions.²⁵⁷

The circuit court then applied a very non-deferential level of review to the Partnership's constitutional claims. Despite the voluminous testimony to the contrary, the circuit court also concluded that the county's refusal to grant the site-specific applications was "arbitrary and capricious and [did] not bear a substantial relationship

248. No. 92-569-CA (Fla. Cir. Ct. 1994).

249. Freeman, *supra* note 185, at 1B.

250. Final Judgment at 4-5, *Section 28 II*, No. 92-569-CA (Fla. Cir. Ct. 1994).

251. *Id.*

252. *Id.* at 1.

253. *Id.* at 7 (indicating that the Final Judgment on the constitutional issues was issued on July 14, 1994). The Fourth District issued its opinion on September 9, 1994. *Section 28*, 642 So. 2d at 609.

254. 627 So. 2d 469 (Fla. 1993).

255. Final Judgment at 5, *Section 28 II*, No. 92-569-CA (Fla. Cir. Ct. 1994).

256. *Snyder*, 627 So. 2d at 469.

257. See *Naples Airport Auth. v. Collier Dev. Corp.*, 513 So. 2d 247 (Fla. 2d DCA 1987); *Zukowski v. Casselberry*, 244 So. 2d 179 (Fla. 4th DCA 1971); *Sunset Islands 3 & 4 Assoc. v. City of Miami*, 214 So. 2d 45 (Fla. 3d DCA 1968).

to the public health, safety and welfare."²⁵⁸ Finally, the court concluded that a buffer requirement, which had been discussed as part of the PUD, constituted a taking,²⁵⁹ even though the county never approved the PUD.²⁶⁰

The circuit court awarded the Partnership \$100,000 for the substantive due process claim and \$100,000 for the takings claim.²⁶¹ The court also enjoined Martin County from enforcing any restriction on the Partnership's property which was more restrictive than one unit per acre.²⁶² The court further ordered Martin County to approve the Partnership's application for the PUD as submitted to the commission on May 5, 1992, as if the commission had amended the comprehensive plan.²⁶³ Then the court ordered the commission to amend its comprehensive plan to accommodate these changes.²⁶⁴ Martin County appealed the circuit court decision to the Fourth District Court of Appeal.

In February, 1996, the Fourth District issued its decision reversing the takings damages granted by the lower court, quashing the injunction, and remanding the case to be heard as a legislative land use decision.²⁶⁵ If the Fourth District had not ruled that the circuit court applied the wrong standard of review, it was possible that portions of the *Section 28 II* ruling would have stood because rulings on due process and equal protection claims are upheld if no mistake of law is found. District courts will not reweigh the evidence or overturn the circuit court's conclusions of fact unless they are clearly erroneous.²⁶⁶ However, the Fourth District ruled that the county's decision was a legislative action and thus subject to the fairly debatable standard.²⁶⁷ The circuit court's references to *Snyder* notwithstanding, the original cause of action followed the appropriate

258. Final Judgment at 5, *Section 28 II*, No. 92-569-CA (Fla. Cir. Ct. 1994).

259. *Id.*

260. *Section 28 II*, 642 So. 2d at 609. Because the land use amendment was not approved, the PUD could not be approved; PUD is a zoning category, and zoning must be consistent with the land use designation. *Snyder*, 627 So. 2d at 473 (citing FLA. STAT. §§ 163.3194(1)(a), 163.3202, 163.3194(3) (1991)).

261. Final Judgment at 7, *Section 28 II*, No. 92-569-CA (Fla. Cir. Ct. 1994).

262. *Id.*

263. *Id.*

264. *Id.* at 6-7.

265. *Martin County v. Section 28 Partnership, Ltd.*, 1996 WL 81781 (Fla. 4th DCA 1996).

266. *Oceanic Int'l Corp. v. Lantana Boatyard*, 402 So. 2d 507, 511 (Fla. 4th DCA 1981); *Department of Trans. v. Morehouse*, 350 So. 2d 529 (Fla. 3d DCA 1977); *Courshan v. Fontainebleau Hotel Corp.*, 307 So. 2d 901 (Fla. 3d DCA 1975).

267. *Section 28 II*, 1996 WL 81781 at *1.

procedure to press claims challenging legislative actions.²⁶⁸ The circuit court has previously exercised its authority to enjoin local government from imposing any land use restriction less than a certain intensity on a specific parcel of property, however, the Fourth District quashed the injunction. The court concluded by noting that not all requests to amend comprehensive plans will necessarily be considered legislative.²⁶⁹

*D. Between a Rock and a Hard Place: Martin County v. Yusem*²⁷⁰

Within two years after Martin County adopted a comprehensive plan, three judges from the Nineteenth Judicial Circuit individually presided over four cases challenging Martin County's plan amendment decisions. In *FIT* and *Section 28*, the court ruled that plan amendments were legislative acts and denied writs of certiorari.²⁷¹ In *Section 28 II*, the court ruled that the county's land use decision was quasi-judicial, and consequently, applied strict scrutiny.²⁷² In *Martin County v. Yusem*, the court raised the question, but did not answer it.²⁷³

Yusem took an unusual and convoluted path through the growth management system. In 1989, while Martin County was in the process of adopting its comprehensive plan, Melvyn Yusem applied for a land use amendment to increase the residential density on his fifty-four-acre property to two units per acre.²⁷⁴ Martin County adopted its comprehensive plan in February, 1990,²⁷⁵ and approved Yusem's amendment in May, 1990.²⁷⁶ The county sent the amendment to the DCA for review according to the requirements of the Growth Management Act, and the agency did not approve the land use change.²⁷⁷ Because of the deferential standard of review traditionally applied by the courts to land use decisions,²⁷⁸ few landowners had

268. See *Naples Airport Auth. v. Collier Dev. Corp.*, 513 So. 2d 247 (Fla. 2d DCA 1987); *Zukowski v. Casselberry*, 244 So. 2d 179 (Fla. 4th DCA 1971); *Sunset Islands 3 & 4 Assoc. v. City of Miami*, 214 So. 2d 45 (Fla. 3d DCA 1968).

269. *Section 28 II*, 1996 WL 81781 at *5. See also *City of Sanibel v. Goode*, 372 So. 2d 181 (Fla. 2d DCA 1979); *Dade County v. Beauchamp*, 348 So. 2d 53 (Fla. 3d DCA 1977).

270. *Martin County v. Yusem*, 664 So. 2d 976 (Fla. 4th DCA 1995).

271. *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898, 900 (Fla. 4th DCA 1994) (holding that the action was legislative); *Section 28*, 642 So. 2d at 609 (holding that the action was legislative).

272. Final Judgement at 5, *Section 28 II*, No. 92-569-CA (Fla. Cir. Ct. 1994).

273. 664 So. 2d 976 (Fla. 4th DCA 1995).

274. *Id.* at 976.

275. MARTIN COUNTY GROWTH MANAGEMENT PLAN, *supra* note 100.

276. *Yusem*, 664 So. 2d at 976.

277. *Id.*

278. *Board of County Comm'rs v. Snyder*, 627 So. 2d 469, 471 (Fla. 1993).

ever challenged Martin County's decision to deny a land use amendment. However, the DCA was a guaranteed adversary and gave Martin County two options: deny the amendment or revise the data and analysis for the plan to justify the designation.²⁷⁹ The county staff had not recommended approval of the amendment,²⁸⁰ therefore, the county commission chose to withdraw their approval of the amendment,²⁸¹ rather than challenge the DCA and risk the eventual imposition of financial sanctions.²⁸² At the time, Martin County must have thought that this decision was the most risk efficient.

However, the landowner immediately filed suit against the county for declaratory relief, based on a violation of due process rights, denial of equal protection and inconsistency with the comprehensive plan.²⁸³ The case was assigned to a Nineteenth Circuit Court judge who had not participated in any of the other Martin County land use cases.²⁸⁴ Again, Martin County argued that a decision not to amend the comprehensive plan is a legislative decision subject to deferential review.²⁸⁵ The property owner argued for strict scrutiny supported by substantial, competent evidence, as defined in *Snyder*.²⁸⁶ After a trial de novo, the circuit court applied strict scrutiny based on the lower court's decision in *Snyder*,²⁸⁷ which just weeks later was partially overruled by the supreme court.²⁸⁸ The *Yusem* court acknowledged that *Snyder* was a rezoning case, which did not deal with a comprehensive plan amendment, but concluded that the same rationale applied in both cases.²⁸⁹ The court then found that there was "no substantial competent evidence to support the County's denial of the requested land use amendment"²⁹⁰ and ruled that Martin County's decision not to adopt the *Yusem* amendment was arbitrary, unreasonable and inconsistent with the comprehensive plan.²⁹¹ As did the court in *Section 28 II*, the circuit court enjoined the county from "enforcing any land use restrictions or zoning designations on

279. *Id.*

280. Final Judgment at 4, *Martin County v. Yusem*, No. 91-04-CA.

281. *Id.*

282. FLA. STAT. § 163.3184(11)(a) (1995).

283. Final Judgment at 1, *Martin County v. Yusem*, No. 91-04-CA.

284. *Id.* at 7 (the Honorable Robert Makemson was assigned).

285. *Id.* at 1.

286. *Id.*

287. *Id.* (applying the standard in *Snyder*, 595 So. 2d at 65).

288. The *Yusem* opinion was rendered on Sept. 23, 1993 and the *Snyder* opinion was rendered Oct. 9, 1993.

289. Final Judgment at 2, *Martin County v. Yusem*, No. 91-04-CA.

290. *Id.* at 6.

291. *Id.* at 7.

Plaintiff's land more restrictive than two units per acre.²⁹² Martin County appealed the ruling to the Fourth District Court of Appeal.²⁹³

On appeal, Martin County argued that the trial court erred in subjecting the county's land use decision to strict scrutiny rather than the fairly debatable standard applicable to legislative actions.²⁹⁴ However, over a vigorous dissent,²⁹⁵ the Fourth District found the action in *Yusem* to be quasi-judicial, distinguishing *Yusem* from *Section 28* and noting the consistency of its decision with *Puma*.²⁹⁶ The *Yusem* court justified its holding by pointing out that the county's land use decision had a limited impact on the public, and the decision addressed a change in the land use designation of a particular piece of property.²⁹⁷ As a result, the circuit court did not have jurisdiction over the case, due to the property owner's failure to pursue a writ of certiorari concurrently with his other claims.²⁹⁸ The Fourth District's ruling did not address whether strict scrutiny was the appropriate standard of review by the circuit court.

Both parties were unhappy with the result. The property owner immediately filed a Motion for Rehearing and Request for a Certified Question.²⁹⁹ He argued that because his original action directly challenged the constitutionality of the comprehensive plan as applied to his property, the action should not be excluded from review by the circuit court, even if the land use decision was quasi-judicial. The property owner requested that the following question be certified to the Florida Supreme Court:

Does a determination that a governmental action is quasi-judicial preclude a direct action challenging the constitutionality of an existing ordinance or regulation, as applied to one's property, as being arbitrary and unreasonable?³⁰⁰

Martin County has not asked for a rehearing. Instead, pointing out that *Puma* actually provides little guidance and that *FIT* and *Section 28* produced conflicting results, the county has asked the Fourth District to certify the following question to the Florida Supreme Court:

292. *Id.*

293. *Martin County v. Yusem*, 664 So. 2d 976 (Fla. 4th DCA 1995).

294. *Id.* at 976.

295. *Id.* at 978-82 (Pariente, J., dissenting).

296. *Id.* at 975.

297. *Id.*

298. *Id.* at 978.

299. Motion for Rehearing and Request for a Certified Question, *Martin County v. Yusem*, 664 So. 2d 976 (Fla. 4th DCA 1995) (filed Sept. 14, 1995).

300. *Id.* at 5.

Whether the adoption of comprehensive plan amendments in accordance with the Growth Management Act is a legislative or quasi-judicial act.³⁰¹

Yusem, the County argued, presents the issue in its purest form.³⁰² On November 22, 1995, the Fourth District reissued its August 30, 1995 opinion in *Yusem*, ordered a rehearing on the land owner's constitutional issue and certified the following question to the Florida Supreme Court:

Can a rezoning decision which has limited impact under *Snyder*, but which does require an amendment of the comprehensive land use plan, still be a quasi-judicial decision subject to strict scrutiny review?³⁰³

The Supreme Court of Florida has accepted jurisdiction and a large number of amicus briefs have been filed. The Supreme Court's ruling promises to have more meaning for the future of growth management in Florida than it will for the parties.

V. THE TREND IN THE UNITED STATES SUPREME COURT TOWARDS STRICTER SCRUTINY IN LAND USE CASES

The trend of the United States Supreme Court appears to be toward increasing the level of review that courts give land use decisions. The Florida Supreme Court, in *Snyder*, seems to have followed this trend. The decisions of lower courts also are in line with this march toward courts micro-managing local government land use decisions.

A. *The Apple Does Not Fall Very Far From the Tree*

Section 28 II and *Yusem* are bellwether cases for growth management in Florida. They demonstrate a not-so-subtle shift to stricter judicial scrutiny in all forms of property rights cases decided by the

301. Motion for Certification at 1, *Martin County v. Yusem*, 664 So. 2d 976 (Fla. 4th DCA 1995) (filed Sept. 14, 1995).

302. *Id.* at 3. After the Fourth District's ruling that the land use decision in *FIT* was quasi-judicial, Martin County wanted to ask the court to certify this question. However, because the court's holding that the land use decision in *Section 28* was legislative was before the Florida Supreme Court for review at the same time as *FIT*, the county was caught on the horns of a dilemma. Dreyer Interview, *supra* note 49. Therefore, the county unsuccessfully requested the Fourth District to certify the question of whether *Snyder* applies to comprehensive plan land use amendments which are initiated by local governments. Motion for Rehearing and Certification at 8, *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 93-0677).

303. *Martin County v. Yusem*, 664 So. 2d 976, 982 (Fla. 4th DCA 1995).

Supreme Courts of the United States and Florida.³⁰⁴ The shift to stricter scrutiny is trickling down into rulings made by the lower courts in various combinations and permutations, but this shift is having a significant impact on land use.

Since the 1930s, the judicial scrutiny given to substantive due process claims, such as those in *Yusem* and *Section 28 II*, has been highly deferential review, requiring the court to find only that the regulation serves the identified public interest in some rational way.³⁰⁵ Thus, if reasonable people could fairly debate an issue, then the regulation will be found a valid exercise of the police power.³⁰⁶ Similarly, in equal protection cases, the courts have applied deferential review except in cases concerning suspect classifications or deprivation of a group's fundamental rights.³⁰⁷ In recent years, however, higher judicial scrutiny has been more frequently applied in regulatory takings claims,³⁰⁸ such as the one brought in *Section 28 II*.

A trend toward higher scrutiny surfaced in *Nollan v. California Coastal Commission*,³⁰⁹ and has developed in *Lucas v. South Carolina Coastal Council*³¹⁰ and *Dolan v. City of Tigard*,³¹¹ indicating that the current Supreme Court "will scrutinize more closely than previous Courts the legislative motives behind police power legislation that adversely affects private property interests."³¹² To avoid being a taking, a "cause-and-effect relationship must exist between the property restricted by the regulation and the social evil that the regulation seeks to remedy."³¹³ The regulation must "substantially

304. See Freitag, *supra* note 122. This shift has a political counterpart. In 1995, the Florida Legislature passed the Bert J. Harris, Jr., Private Property Rights Protection Act, which "provides remedies for real property owners whose property has been inordinately burdened by governmental action." Ch. 95-181 Fla. Laws, 1995 (codified at FLA. STAT. § 70.001 (1995)). See Ellen Avery, *The Terminology of Florida's New Property Rights Law: Will It Allow Equity to Prevail or Government to be "Taken" to the Cleaners?*, 11 J. LAND USE & ENVTL. L. 181 (1995), for a discussion on Florida's new Private Property Rights Act.

305. *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 465 (1981) (cited by Freitag, *supra* note 137, at 744 n.6). This deferential approach was defined in *Nebbia v. New York*, 291 U.S. 502 (1934) and *West Coast Hotel v. Parrish*, 300 U.S. 379 (1937).

306. Pelham, *supra* note 14, at 246.

307. See, e.g., *Beauchamp v. Murphy*, 37 F.3d 700, 707 (1st Cir. 1994) ("Since there is no suspect classification here involved, nor any deprivation of fundamental rights, the ordinary equal protection test is extremely deferential."), *cert. denied*, 115 S. Ct. 1365 (1995); see Freitag, *supra* note 137, at 763.

308. See Freitag, *supra* note 137, at 746.

309. 483 U.S. 825 (1987).

310. 105 U.S. 1003 (1992). See Daniel R. Mandelker, *Of Mice and Missiles: A True Account of Lucas v. South Carolina Coastal Council*, 8 J. LAND USE & ENVTL. L. 285 (1993).

311. 114 S. Ct. 2309 (1994).

312. Freitag, *supra* note 137, at 746.

313. *Pennell v. City of San Jose*, 485 U.S. 1, 15 (1988).

advance” a legitimate state interest.³¹⁴ In addition to raising the level of judicial review, this shifts the focus of the debate from whether the government can identify a protectable legitimate interest to (1) whether the regulation, as applied in each specific case, substantially advances that interest,³¹⁵ and (2) whether the impact on the specific property is in proportion to the property’s impact on the interest.³¹⁶ This is a question of fact, which must be answered on a case-by-case basis at the lowest court level.³¹⁷ The factual findings of the lower court receive a very deferential review on appeal and will not be overturned unless clearly erroneous.³¹⁸

The Florida Supreme Court’s ruling in *Snyder*, as applied in *FIT*, *Section 28*, and *Yusem* will result in most land use amendment decisions being declared quasi-judicial, subject to a strict-scrutiny review.³¹⁹ The Florida Supreme Court’s ruling is consistent with the trend established by the United States Supreme Court. Although the *Snyder* Court gave authority to the local government to use discretion when making land use decisions,³²⁰ its judicial foundation stands on the concept that “a property owner’s right to own and use his property is constitutionally protected, [and] review of any governmental action abridging that right is subject to close judicial scrutiny.”³²¹ In *Section 28*, the Fourth District Court interpreted *Snyder* as “recognizing that a landowner has a constitutional right to use property in a manner consistent with preexisting government plans, absent clear evidence of a conflicting public necessity justifying a more restrictive use.”³²² The Fourth District’s emphasis on requiring “clear evidence” and “public necessity justifying a more restrictive use” places a heavy burden of proof on the government. This standard is a far cry from the deferential review requirement of establishing a rational relationship between the land use decision and a legitimate public interest. Local governments will be hard pressed to meet this new standard.³²³

314. *Nollan v. California Coastal Comm’n*, 483 U.S. 825, 831 (1987).

315. Freitag, *supra* note 137, at 760.

316. *Id.*

317. *Id.* at 760-61 (explaining that *Pennell* rested on an inadequate factual basis in finding a taking as an example of the factual reliance of higher scrutiny).

318. *Oceanic Int’l Corp. v. Lantana Boatyard*, 402 So. 2d 507, 511 (Fla. 4th DCA 1981) (citing *In re Estate of Donner*, 364 So. 2d 742, 748 (Fla. 3d DCA 1978)).

319. *Board of County Comm’rs of Brevard County v. Snyder*, 627 So. 2d 469, 475 (Fla. 1993).

320. *See id.*

321. *Id.* at 471.

322. *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609, 612 (Fla. 4th DCA 1994).

323. *Id.*

B. All Roads Lead to the Circuit Court

By relabeling decisions on land use amendments as quasi-judicial actions, the Florida Supreme Court has effectively transferred one of the most traditional, relevant and politically volatile legislative powers from elected officials to circuit court judges. Although the change in labels avoids a semantic violation of the Florida Constitution's separation of powers doctrine,³²⁴ the change functionally places the legislative responsibility for making land use policy on the circuit courts. This usurps the authority of both the legislature and the local governments, and violates the spirit, if not the letter, of the separation of powers doctrine.³²⁵ The Growth Management Act clearly intended land use amendments to be an exercise of legislative power³²⁶ and to be reviewed by the legislative and executive branches.³²⁷ For the courts to control zoning is a violation of the intent and spirit of the Growth Management Act.³²⁸ The courts should "safeguard the powers vested in the Legislature from encroachment by the Judicial branch of the Government . . . [S]uch encroachments ultimately result in tyranny, in despotism, and in destruction of constitutional processes."³²⁹

Whether a case follows the administrative hearing path, the original action path or the writ of certiorari path, a court will likely make the ultimate land use decision. On certiorari review, the circuit court will decide whether substantial, competent evidence exists to sustain the decision.³³⁰ If the court finds there was not such evidence, then the decision will be quashed.³³¹ A local government's choices at that time will be to settle the case, as Martin County did in *FIT*,³³² to grant the originally requested use or to go through the process and deny the land use change again, with the intention of laying an acceptable evidentiary record at the second public hearing. In an

324. FLA. CONST. art. II, § 3.

325. *Id.* "No person belonging to one branch shall exercise any powers appertaining to either of the other branches unless expressly provided herein." *Id.*

326. *See* FLA. STAT. § 163.3187 (1995) (listing procedures for local governments to follow in amending a comprehensive plan).

327. *See* FLA. STAT. § 163.3184 (1995) (listing methods for review by local government and the Adjudicatory Commission).

328. *See* *Pepper v. Pepper*, 66 So. 2d 280 (Fla. 1953) (holding that orders issued by the lower courts effectively amended a statute, and an attempt by the judicial branch to exercise powers appertaining to the legislative branch would be a violation of the separation of powers doctrine in the Florida Constitution).

329. *Id.* at 284.

330. *City of Deerfield Beach v. Vaillant*, 419 So. 2d 624, 626 (Fla. 1982).

331. *Id.*

332. Joint Motion to Stay Proceedings at 1, *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994) (No. 92-010).

original action, the circuit court will weigh the evidence, and if it finds the government decision to be arbitrary or capricious, the court may issue an injunction setting a minimum land use intensity for the parcel.³³³ In review of a writ of certiorari, the district court is not allowed to review the circuit court's evaluation of the evidence.³³⁴ In an original action, the district court gives very deferential review to the circuit court's factual findings and may overrule them only if they are clearly erroneous.³³⁵ Only where a case traverses the full length of the administrative hearing path and is subject to the Adjudicatory Commission's order, will a district court, rather than a circuit court, hear the initial challenge.³³⁶

As *FIT*, *Section 28*, *Section 28 II*, and *Yusem* illustrate, even within the same jurisdiction, different circuit court judges have varied interpretations of the highly specialized and technical body of law governing comprehensive planning.³³⁷ This variance could result in inconsistent decisions, with no effective mechanism to review and correct these decisions. *Education Development Center, Inc. v. City of West Palm Beach Zoning Adjustment Board of Appeals*,³³⁸ exemplifies this potential for conflict. In that case, the Fourth District Court of Appeal quashed the circuit court which had overturned a decision of a zoning board.³³⁹ The zoning board had denied the Center's land use application, and the circuit court granted the Center's writ of certiorari, "concluding that there was 'substantially competent evidence' to support the Center's application as required by the zoning code."³⁴⁰ The district court ruled that "the circuit court had applied the incorrect standard of review"³⁴¹ and quashed the circuit court order.³⁴² On remand, the circuit court again reversed the zoning board's decision, "this time finding that there was no substantial,

333. FLA. STAT. § 163.3215(1) (1995). A third party may also bring action for injunctive relief after a zoning approval is given. *Id.* Here, the circuit court would rule on the zoning issues rather than the land use issues for the property.

334. *Education Dev. Ctr. v. City of W. Palm Beach Bd. of Appeals*, 541 So. 2d 106, 108-09 (Fla. 1989); *Bell v. City of Sarasota*, 371 So. 2d 525 (Fla. 2d DCA 1979).

335. *Oceanic Int'l Corp. v. Lantana Boatyard*, 402 So. 2d 507, 511 (Fla. 4th DCA 1981); *Department of Transportation v. Morehouse*, 350 So. 2d 529 (Fla. 3d DCA 1977); *Courshon v. Fontainebleau Hotel Corp.*, 307 So. 2d 901 (Fla. 3d DCA 1977).

336. FLA. STAT. § 120.68 (1995).

337. See *Florida Inst. of Technology, Inc. v. Martin County*, 641 So. 2d 898 (Fla. 4th DCA 1994); *Section 28 Partnership, Ltd. v. Martin County*, 642 So. 2d 609, 612 (Fla. 4th DCA 1994); *Section 28 II*, No. 92-569-CA (Fla. Cir. Ct. 1994); *Martin County v. Yusem* 664 So. 2d 976 (Fla. 4th DCA 1995).

338. 541 So. 2d 106 (Fla. 1989).

339. *Id.* at 107.

340. *Id.*

341. *Id.*

342. *Id.*

competent evidence to support the city's denial of the petition.³⁴³ The district court reversed the circuit court a second time because it disagreed with the circuit court's conclusion as to the existence of substantial, competent evidence.³⁴⁴ The district court found that the circuit court had "either reinterpreted the inferences which the evidence supported or reweighed the evidence; in either event substituting its judgment for that of the zoning board, which it may not properly do."³⁴⁵

The Florida Supreme Court settled this dispute by ruling that the district court did not have the authority to review the circuit court's conclusion about sufficiency of evidence.³⁴⁶ Rather, a district court review of a writ of certiorari is limited to determining whether "the 'circuit court afforded procedural due process and . . . applied the correct law.'"³⁴⁷ Thus, unless the circuit court commits some other reversible error, its conclusion as to whether there was sufficient evidence to support a local government's land use decision will be the final one.³⁴⁸ As Justice McDonald proffered, in his dissent in *Educational Development Center*, circuit court judges will be clothed "with powers of absolute czars" in land use matters.³⁴⁹

Placing the ultimate authority for land use decisions on the circuit court may also have unexpected ramifications for the court system. Land use is perhaps the most important and is certainly one of the most volatile political arenas of local government. *Snyder* listed the

343. *Id.*

344. *Id.*

345. *Id.* (quoting *City of West Palm Beach Zoning Bd. v. Education Dev. Ctr., Inc.*, 526 So. 2d 775, 777 (Fla. 4th DCA), *rev'd*, 541 So. 2d 108 (Fla. 1988)).

346. *Id.* at 108-09.

347. *Haines City Community Dev. v. Heggs*, 658 So. 2d 523, 530 (Fla. 1995) (reaffirming that *City of Deerfield Beach v. Vaillant*, 419 So. 2d 624 (Fla. 1982), controls this issue). In *Snyder*, the Florida Supreme Court stated that *Vaillant* applies in land use cases. 627 So. 2d at 476.

348. *Heggs*, 658 So. 2d at 530-31.

349. *Education Dev. Ctr. v. City of W. Palm Beach Bd. of Appeals*, 541 So. 2d 106, 109 (Fla. 1989) (McDonald, J., dissenting). This is just one of many cases where the propensity of the circuit courts to substitute their judgment for that of elected officials has been acknowledged. Judge McDonald argued that the district court should have the ability to review the circuit court's ruling on the sufficiency of the evidence to determine if the circuit court's ruling followed the appropriate law in assessing factual matters. *Id.* This concern was restated emphatically by the dissent in *Metropolitan Dade County v. Blumenthal*, Nos. 94-137, 94-52, 1995 WL 366684, at *11 (Fla. 3d DCA June 21, 1995) (Cope, J., dissenting). Judge Cope argued that a circuit court's reweighing of the evidence is a misapplication of the law, which should be reviewed by the district court. Judge Cope cites *Multidyne*, where the district court granted certiorari after ruling that the circuit court applied an incorrect legal standard in deciding that a city commission decision was not supported by substantial, competent evidence. See *id.* at *10-11 (citing *City of Ft. Lauderdale v. Multidyne Medical Waste Management, Inc.*, 567 So. 2d 955 (Fla. 4th DCA 1990)).

fact that land use decisions are subject to “neighborhoodism and rank political influence” as one of the primary reasons courts should take control of land use decisions.³⁵⁰ Circuit court judges are elected officials.³⁵¹ They must run for election every six years in a process that is designed to be as apolitical as possible.³⁵² However, to win when opposed, judges must accept campaign contributions and make political speeches just like any other political candidate. With so much focus on the circuit court’s role in land use decisions, a judicial candidate’s position on growth management and land use policy could become a litmus test for political support in communities facing serious growth management choices. By shifting land use authority from the local government to the circuit court, *Snyder* has not removed land use from the political arena. Instead, it has thrust the circuit courts into the garishly lit arena of politics.

VI. SAVING THE FUTURE OF BOTH GROWTH MANAGEMENT AND LOCAL GOVERNMENT IN FLORIDA: THE EFFECTS OF *SNYDER* MUST BE REVERSED

Under the current state of the law, land use planning decisions have been effectively taken away from local governments. This not only defies the intent of the Growth Management Act, it has the effect of destroying productive planning. This next section is comprised of two interviews regarding the future of growth management in Florida.

A. *A Voice in the Wilderness: Interview with the Martin County Attorney*

Noreen Dreyer was the Martin County Attorney during the period in which the county adopted its comprehensive plan and while *FIT*, *Section 28*, *Section 28 II*, and *Yusem* worked their way through the courts. During 1994, her office simultaneously had two land use amendment cases pending review by the Florida Supreme Court, one case pending review in district court, and one case in circuit court.³⁵³ Ms. Dreyer believes that the Growth Management Act and the case law following *Snyder* and *Parker* have created a maze from which local officials cannot escape.³⁵⁴ She believes that local officials unfairly bear

350. Board of County Comm’rs of Brevard County v. Snyder, 627 So. 2d 469, 472-73 (Fla. 1993).

351. FLA. CONST. art. V, § 10(b).

352. FLA. STAT. § 105.071 (1995).

353. Martin County v. Florida Inst. of Technology, Inc., 641 So. 2d 898 (Fla. 4th DCA 1994), cert. denied, 651 So. 2d 1195 (Fla. 1995); Section 28 Partnership, Ltd. v. Martin County, 642 So. 2d 609, 612 (Fla. 4th DCA 1994), cert. denied, 654 So. 2d 920 (Fla. 1995); Section 28 II (No. 94-02243); Martin County v. Yusem, 664 So. 2d 976 (Fla. 4th DCA 1995).

354. Dreyer Interview, supra note 47.

the brunt of the land use debate.³⁵⁵ The state forced local governments to adopt complex plans based on policies, such as concurrency,³⁵⁶ that had never been tried before. Court decisions have placed barriers between elected officials and their constituents and no longer give deference to home rule decision making.³⁵⁷ The process is so confusing that no one knows exactly what will happen next, and everyone is frustrated or angry.³⁵⁸ As a result, local officials have turned out to be expendable foot soldiers on the front line of the growth management "Land Use War[s]."³⁵⁹

Ms. Dreyer believes that local government land use amendment decisions are inherently legislative in nature because local officials bring much more to the planning table than just the law.³⁶⁰ They have intimate knowledge of their constituents' fears, hopes and needs, and they are the keepers of the community vision.³⁶¹ The people in a community become involved in land use decisions because the decisions have a significant effect on everyday life.³⁶² These decisions determine how many children are in the schools, how many cars are on the roads and what kinds of projects will be built next door.³⁶³ In the past, citizens have controlled local land use by voting for officials who share their community vision. If local officials no longer have legislative discretion in land use decision making, the community no longer has a voice in its own future.³⁶⁴

Ms. Dreyer is also concerned that the cost³⁶⁵ of untangling the Gordian knot of procedural requirements and litigation will generate a taxpayer revolt against both local government and comprehensive planning.³⁶⁶ She cites Martin County's experience as an example of the high cost at every level of the comprehensive planning process as

355. *Id.*

356. FLA. STAT. § 163.3180 (1995). See Powell, *supra* note 67.

357. Dreyer Interview, *supra* note 49.

358. *Id.*

359. Freeman, *supra* note 185, at 1B.

360. Dreyer Interview, *supra* note 49.

361. See FLA. STAT. § 163.3181(1) (1995) (the intent of the legislature is that the public participate in the comprehensive planning process). The community's vision is crucial to the entire concept of planning. The Growth Management Act requires public participation to develop that consensus for that vision. *Id.* Without consensus, there is no support for the plan. See Powell, *supra* note 19, at 270.

362. See generally Karkkenian, *supra* note 144.

363. *Id.*

364. Dreyer Interview, *supra* note 49.

365. Freeman, *supra* note 185, at 1B. Martin County had spent \$200,000 defending its decision on *Section 28*, before *Section 28 II* went to trial. *Id.* The developer had spent over \$500,000. *Id.*

366. Dreyer Interview, *supra* note 49.

it is currently being applied.³⁶⁷ If the legislature does not act quickly to free local governments from the land use maze, she says, the refusal of either the taxpayers or the politicians, or both, to pay the cost will halt Florida's growth management efforts.³⁶⁸

B. Florida Needs a Little Help from Its Friends: Interview with the Legal Director for 1000 Friends of Florida

Richard Grosso, Legal Director for 1000 Friends of Florida,³⁶⁹ is also concerned about the effect of shifting land use decision making from the legislative to the judicial arena. He argues that all comprehensive plan amendments should be deemed legislative actions, and that, within the plan framework, all zoning decisions should be quasi-judicial.³⁷⁰ He explains that two entirely different kinds of land use decisions must always be made. Planning is the decision of "whether" a land use should be allowed; it is the legislative creation of policy.³⁷¹ Zoning is the decision of "how" property should be developed within that land use; it is the quasi-judicial application of that policy.³⁷² This is a clear functional distinction that could easily be applied by all interested parties.³⁷³ Because *Snyder* did not expressly recognize that distinction, Grosso is concerned that the courts which have interpreted it will create a comprehensive planning process in Florida very different from that which the legislature intended.³⁷⁴ While he supports the logic of *Snyder*, he believes that the lower courts have applied it too broadly and that they have intentionally advanced the private property rights of landowners over the rights of the public.³⁷⁵ He calls these rulings examples of "judicial activism," made with neither concern for, nor a deep appreciation of, the public's rights in the land planning process.³⁷⁶

Nonetheless, Grosso remains optimistic that *Snyder* has not shifted the burden of proof in land use cases so drastically that the courts will routinely nullify local government land use decisions.³⁷⁷ However, that prospect, combined with the Florida Legislature's adoption of the

367. *Id.*

368. *Id.*

369. 1000 Friends of Florida is a not for profit organization dedicated to effective comprehensive planning. Their address is: P.O. Box 5948, Tallahassee, Florida 32314.

370. Grosso Interview, *supra* note 142.

371. *Id.*

372. *Id.*

373. *Id.*

374. *Id.*

375. *Id.*

376. *Id.*

377. *Id.*

Private Property Rights Protection Act,³⁷⁸ has convinced him that comprehensive planning in Florida must evolve to survive.³⁷⁹

If the courts do exercise expanded jurisdiction over land use decisions, however, Grosso feels that the legislature should address *Snyder*, *Parker*, and *Puma* by amending the Growth Management Act to clarify that decisions to approve or reject comprehensive plan amendments are legislative actions deserving deferential review by the courts.³⁸⁰ That would establish a clear separation of power between legislative and judicial bodies, giving control of land use amendments back to local government. To make the process of challenging decisions consistent and more efficient, Grosso would also support the creation of a land use board of appeals, similar to that in Oregon, which hears all land use challenges.³⁸¹ He points to the legislature's success in adopting legislation in response to *Jennings*,³⁸² as evidence that the legislature can sensitively balance the competing interests involved.

Grosso points out, however, that while the legislature and the courts are struggling with broad policy issues, the DCA, through its rulemaking authority, can mitigate the impact of both the Private Property Rights Protection Act and the *Snyder*-driven case law by adjusting its method of reviewing plan amendments.³⁸³ This would also better achieve the Growth Management Act's goals in the post plan adoption era.³⁸⁴

Grosso is enthusiastic about a proposal under which the DCA could make it easier for state agencies, members of the public, local governments and property owners to reach agreement on land use amendments and, thereby, avoid litigation all together.³⁸⁵ The solution is a simple one: merely change the requirements for drawing

378. Ch. 95-181, Fla. Laws 1995 (codified at FLA. STAT. § 70.001 (1995)). This act provides "remedies for real property owners whose property has been inordinately burdened by governmental action." *Id.*

379. Grosso Interview, *supra* note 142.

380. *Id.*

381. *Id.* This is consistent with the opinion expressed by James F. Murley, Secretary of the Florida Department of Community Affairs and former Executive Director of 1000 Friends of Florida, who believes that a "land court" would be a more efficient way to resolve disputes. Oregon is one state that uses a land court which could be used as a model for the legislature to consider. Binkley, *supra* note 19. Oregon established an administrative land court to decide land use challenges. The Oregon Supreme Court ruled that zoning decisions are quasi-judicial and are subject to review by the courts. See *Board of County Comm'rs v. Fasano*, 507 P.2d 23, 30 (Or. 1973).

382. See *supra* note 152 and accompanying text.

383. Grosso Interview, *supra* note 142.

384. *Id.*

385. *Id.*

land use maps.³⁸⁶ Under the current system, uniform land use categories are designated on parcels of property based on their location and ownership boundaries, with little regard for the varying environmental systems within the specific parcels.³⁸⁷ Therefore, the suitability and capacity of a property for development is determined, not at the planning phase of decision making, but at the zoning stage of the development, which is when all of the environmental issues are addressed under the current system.³⁸⁸ Grosso points out that under the new Private Property Rights Protection Act,³⁸⁹ continued use of this approach could increase the frequency of litigation by inviting takings claims, because a landowner may be prohibited at the zoning stage from developing his property in accordance with its approved land use.³⁹⁰ The proposed approach would require a detailed review of each property for which a land use amendment is proposed to identify its environmental sensitivity, suitability and capacity for development before the land use plan amendment is considered. Land use map amendments should designate the specific areas scheduled for conservation and the appropriate intensity of development on the remaining areas based on that analysis.³⁹¹

This proposal for review of land use map amendments would address several growth management problems. By making such a detailed review of each property, local governments will build a strong factual basis for their land use decisions. A strong factual record will constitute substantial, competent evidence to withstand strict scrutiny of land use decisions by the courts. This will make it easier for local governments to win in actions either for injunctive relief or by writ of certiorari, and the more cases local governments win, the less time they will spend in court. A second benefit is that identifying a property's development limitations before granting a more intense land use will avoid giving a property owner a false sense of the land's potential. Since the decision to limit a property's development will be made at the time the increase in land use is granted, it will help avoid takings actions.³⁹² The proposal will also bring credibility back to the planning effort. By making land use map amendments based on the physical and environmental characteristics of the land rather than on abstract planning principles and ownership

386. *Id.*

387. *Id.*

388. *Id.*

389. FLA. STAT. § 70.001 (1995).

390. Grosso Interview, *supra* note 142.

391. *Id.*

392. *Id.*

boundaries, the maps will begin to reflect the concrete goals and benefits of planning. This concrete representation of the results of planning, combined with the reduction in cost and the reduction in negative publicity resulting from litigation, should help rebuild public support for the planning effort. A change of this nature is within the rule-making authority of the DCA and would not need legislative approval.³⁹³

VII. CONCLUSION

The *Wall Street Journal* is right: "Just about everybody agrees that Florida's 10-year-old land use law is broken."³⁹⁴ The organization that Grosso heads, 1000 Friends of Florida, is concerned that the public will be squeezed out of the process.³⁹⁵ Local officials, who must raise tax revenues to pay for the process, feel that adopting the plans and then defending them in court will turn out to be so expensive that the public will rebel against paying the additional taxes.³⁹⁶ Developers say that the process puts them through "hell."³⁹⁷ Everyone involved fears that resolution of land use amendment disputes can become an endless process.³⁹⁸

These fears are justified as evidenced by the last three years in Martin County. Martin County is only one of 458³⁹⁹ local governments in Florida attempting to implement new comprehensive plans. If the Martin County experience proves typical, comprehensive planning in Florida is doomed to suffocate under a mountain of appellate briefs, final judgments and motions, unless a change is made.

A large part of the problem was created by the Florida Supreme Court. In *Snyder, Parker and Puma*, the supreme court created a procedure and standard of review for land use amendment decisions that is at odds with the intent and the structure of the Growth Management Act. If the court has reached the conclusion that the Growth Management Act is an inappropriate infringement on the private property rights of landowners, it should have ruled the Act unconstitutional. Instead, the court gutted the Growth Management Act by taking away the local governments' discretion to plan for their communities. The result has been an increased case load of costly

393. *Id.*

394. Binkley, *supra* note 19, at F1.

395. Grosso Interview, *supra* note 142.

396. Dreyer Interview, *supra* note 49.

397. Freeman, *supra* note 185, at 1B.

398. Binkley, *supra* note 19, at F1.

399. Powell, *supra* note 67, at 268.

litigation that has alienated the public, weakened local government and driven up the cost of building homes and businesses.

The district courts can take the first step toward saving Florida's Growth Management program by certifying to the Florida Supreme Court the question of whether *Snyder* applies to land use amendments. Since *Snyder* did not directly address land use amendments, *Puma's* terse ruling could be considered ambiguous. The supreme court should explain or reconsider *Puma* and rule that its holding in *Snyder* does not apply to comprehensive plan amendments. The supreme court should further clarify that, although zoning is a quasi-judicial action, plan amendments are legislative actions subject to the traditional deferential review given policy-making decisions.

Even if the courts agree to address the issue, the legislature should still act immediately. It may either establish a land court or amend the Growth Management Act to define land use amendments as legislative acts subject to deferential review similar to that established in the Growth Management Act. The functional result of either action must be to create a single, consistent procedure for challenging land use amendment decisions that is available to all parties. The procedure selected must be both fair and efficient.

Regardless of the decisions made by the legislature and the courts, the DCA should revise the way it reviews land use map amendments. By requiring that amendments to land use maps allocate uses based on the suitability of property rather than the property boundaries, the DCA can maximize its effectiveness in achieving the functional goals of the Growth Management Act under any standard of review. If these actions are not taken, Florida's growth management program will collapse under its own weight and the twenty-year effort will be riddled with uncertainty, signifying nothing but broken dreams and litigation.

**ADDING A STATUTORY STICK TO THE BUNDLE
OF RIGHTS: FLORIDA’S ABILITY TO REGULATE
WETLANDS UNDER CURRENT TAKINGS
JURISPRUDENCE AND UNDER THE PRIVATE
PROPERTY RIGHTS PROTECTION ACT OF 1995**

TIRSO M. CARREJA, JR.*

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I. INTRODUCTION

The controversy regarding the preservation of wetlands involves two diametrically opposed and equally important interests: the maintenance of Florida’s sensitive ecology and the continued increase in Florida’s population. As Florida’s population increases, the need for land development proportionately increases. Since a large portion of Florida’s undeveloped landmass is comprised of wetlands,¹ and

* B.S. in Electrical Engineering, 1992, University of Central Florida; J.D. expected May 1996, Florida State University College of Law; Research Editor of *Journal of Land Use & Environmental Law*, 1995-96.

1. Whether property constitutes a wetland is determined by the statutory definition of wetlands. See FLA. STAT. § 373.019(17) (1995). See also discussion *infra* part II.A. Generally, Florida attempts to classify land as wetlands based on the land’s physical characteristics, including soil type, plant species and several hydrological factors. See FLA. STAT. § 373.019(17) (1995). See also discussion *infra* part II.A. These statutory and regulatory factors are subject to

wetlands are relatively easy and inexpensive to develop, wetlands have been targeted by many developers as the construction site of choice. However, given the important role that wetlands play in Florida's ecology, the State protects wetlands by regulating their development.

Wetlands serve a vital function in Florida's ecology and economy by acting as breeding grounds for commercial fish and shellfish, habitats for many migratory birds and recreational hunting fowl, estuaries for many endangered species, and a water filtration system for Florida's water sources. In fact, wetlands serve as habitats for about fifty percent of Florida's endangered species and provide spawning grounds, nurseries and food to two-thirds of marine life along the Atlantic Coast and the Gulf of Mexico.² Wetlands also serve "as nature's kidneys, storing and cleansing water as it makes its way into rivers, lakes and streams."³ Thus, in addition to their aesthetic beauty, wetlands are essential to Florida's ecology.

However, every year, Florida's wetlands are threatened by an equally important competing interest: progress. Florida contains approximately 39.5 million acres of landmass.⁴ Over the past two hundred years, Florida's cultural evolution has resulted in a loss of over 9.3 million acres of wetlands.⁵ This decrease in wetlands stems from a continued increase in Florida's population, which shows no signs of waning.⁶

Generally, landowners must dredge and fill wetlands to develop them for habitable purposes. Since Florida's wetlands regulations may prohibit landowners from dredging and filling wetlands, an issue

change as scientists learn more about wetlands. By changing the statutory definition of wetlands, the percentage of Florida's landmass that constitutes a wetland is also subject to expansion or contraction.

2. Pamela Davis-Diaz, *Water, Water Everywhere Series: Xtra Credit*, ST. PETERSBURG TIMES, Apr. 3, 1995, at 3D.

3. Craig Quintana, *Proposed Wetlands Rule Could be All Wet*, ORLANDO SENTINEL, Jan. 13, 1994, at B1.

4. Charles H. Ratner, *Should Preservation be Used as Mitigation in Wetland Mitigation Banking Programs?: A Florida Perspective*, 48 U. MIAMI L. REV. 1133, 1135 (1994) (citing W.E. FRAYER & J.M. HEFENEN, *FLORIDA WETLANDS: STATUS AND TRENDS, 1970s to 1980s*, at 2 (1991)).

5. Dennis J. Priolo, *Section 404 of the Clean Water Act: The Case for Expansion of Federal Jurisdiction Over Isolated Wetlands*, 30 LAND & WATER L. REV. 91, 92 (1995) (citing THOMAS E. DAHL, *WETLAND LOSSES IN THE UNITED STATES, 1780s to 1980s*, at 1 (1990)).

6. Florida's estimated population in 1995 was 14.2 million, and could pass 22 million by the year 2020. Sergio R. Bustos, *Report Calls For Further Immigrant Restrictions: Group Says Foreigners Fuel Excessive Growth*, FT. LAUDERDALE SUN-SENTINEL, Jan. 19, 1996, at 1B. See also Craig Quintana, *Controlling Population Boom: Growth Problem Hits Close to Home*, ORLANDO SENTINEL, Sept. 5, 1994, at A1. Florida's population growth and urbanization have helped reduce wetlands from fifty-one percent of the state's area in 1900 to less than thirty percent today. Bustos, *supra*, at 1B.

has arisen regarding whether owners of wetlands should be compensated for the inability to develop their land. This issue has ordinarily been litigated under takings law.⁷ However, in 1995, the Florida legislature gave landowners another tool—the Bert J. Harris, Jr., Private Property Rights Protection Act (PPRPA)⁸—to recover compensation for the loss of a landowner's ability to engage in land use activities.

This article focuses on Florida's ability to regulate wetlands under current takings jurisprudence and under the PPRPA. Accordingly, Part II of this article focuses on the topographical characteristics that are necessary for land to constitute a wetland. Part III then analyzes the history of wetlands regulations under the Takings Clause. This part also evaluates and compares takings jurisprudence under the Florida and federal judiciary systems. Finally, Part IV outlines the PPRPA and considers the extent to which the PPRPA may affect Florida's ability to regulate wetlands.

II. FLORIDA'S DEFINITION OF "WETLANDS"

A. Statutory Definition of "Wetlands"

Prior to the Florida Environmental Reorganization Act of 1993 (Reorganization Act),⁹ no statutory definition of "wetlands" existed in Florida. During this time, all governmental entities with the authority to regulate wetlands, including state agencies, water management districts (WMDs), and local governments, developed independent delineation methodologies and therefore independent definitions of wetlands.¹⁰ As a result, Florida lacked a uniform system of wetlands regulation.

Florida's piecemeal wetlands regulatory system proved to be administratively burdensome to landowners and agencies. The problems stemmed from an overlap in the jurisdictional powers among different governmental entities.¹¹ This overlap required landowners seeking to alter wetlands to secure permits from the

7. *E.g.*, Tampa-Hillsborough County Expressway Auth. v. A.G.W.S. Corp., 640 So. 2d 54 (Fla. 1994); Department of Transp. v. Jirik, 498 So. 2d 1253 (Fla. 1986); City of Riviera Beach v. Shillinburg, 659 So. 2d 1174 (Fla. 4th DCA 1995); Florida Game & Fresh Water Fish Comm'n v. Flotilla, Inc., 636 So. 2d 761 (Fla. 2d DCA 1994); Vatalaro v. Department of Env'tl. Reg., 601 So. 2d 1223 (Fla. 5th DCA), *rev. denied*, 613 So. 2d 3 (Fla. 1992).

8. 1995, Fla. Laws ch. 95-181, § 1 (codified at FLA. STAT. § 70.001).

9. 1993, Fla. Laws ch. 93-213 (codified in scattered sections of FLA. STAT. chs. 252, 253, 259, 367, 370, 373, 403 (1993)).

10. John J. Fumero, *Environmental Law: 1994 Survey of Florida Law--At a Crossroads in Natural Resource Protection and Management in Florida*, 19 NOVA L. REV. 77, 98 (1994).

11. *Id.* at 80.

Department of Environmental Protection (DEP), WMDs, and local governments.¹² Agencies frequently determined different wetlands boundaries on the same parcel of land, causing confusion to land-owners regarding which agency's regulations controlled.¹³

Criticism from this overlap and duplication of effort¹⁴ led to the enactment of the Reorganization Act.¹⁵ This Act has established a uniform system of delineating and defining wetlands, and has streamlined wetlands permitting into a single regulatory approval known as an "environmental resource permit."¹⁶ This Act defines wetlands as:

those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce, or persist in aquatic environments or anaerobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes, tidal marshes, mangroves swamps and other similar areas. Florida wetlands generally do not include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.¹⁷

The statutory definition of wetlands requires an agency to consider three issues when determining whether land may be classified as a wetland. These issues are: (1) whether the land is inundated¹⁸ or saturated¹⁹ by surface waters²⁰ or groundwaters;²¹ (2) whether the

12. *Id.*

13. *Id.* at 98.

14. *Id.* at 81.

15. *See supra* note 9.

16. Fumero, *supra* note 10, at 83.

17. FLA. STAT. § 373.019(17) (1995).

18. "Inundation' means a condition in which water from any source regularly and periodically covers a land surface." FLA. ADMIN. CODE ANN. r. 62-340.200(10) (1995).

19. "'Saturation' means a water table six inches or less from the soil surface for soils with a permeability equal to or greater than six inches per hour in all layers within the upper 12 inches, or a water table 12 inches or less from the soil surface for soils with a permeability less than six inches per hour in any layer within the upper 12 inches." *Id.* at r. 62-340.200(14).

20. "'Surface water' means water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classi-

land's soil is hydric²² or alluvial;²³ and (3) whether the land's vegetation consists of facultative²⁴ or obligate²⁵ hydrophytic macrophytes that typically grow in wetland soil. Although these issues seem cryptic to the average person, the Florida Legislature and the DEP have promulgated statutes and rules that define many of the technical words within the statutory definition of wetlands.²⁶

Generally speaking, wetlands are classified as lands that: (1) are regularly or periodically covered with water; (2) contain anaerobic soils; and (3) support, or are capable of supporting, vegetation listed under rule 62-340.450 of the *Florida Administrative Code*. All agencies and WMDs are required to use this definition to determine whether an area is subject to regulation as a wetland.

B. Delineation Methodologies for Approximating the Landward Extent of Wetlands

Chapter 62-340 of the *Florida Administrative Code* offers agencies five distinct methodologies for applying the statutory definition of wetlands to an area of land. All methodologies require agencies to use "reasonable scientific judgment" and consider all reliable information in determining whether a particular area is a wetland.²⁷

Methodology One requires agencies "to locate the landward extent of wetlands visually by on site inspection, or aerial photointerpretation in combination with ground truthing."²⁸ This methodology focuses on a direct application of the statutory definition of wetlands.

fied as surface water when it exits from the spring onto the earth's surface." FLA. STAT. § 373.019(10) (1995).

21. "'Groundwater' means water beneath the surface of the ground, whether or not flowing through known and definite channels." *Id.* § 373.019(9).

22. "'Hydric [s]oils' means soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile." FLA. ADMIN. CODE ANN. r. 62-340.200(8) (1995).

23. No statutory definition of "alluvial" exists. The *American Heritage Dictionary* defines alluvium as "[s]ediment deposited by flowing water, as in a river bed." AMERICAN HERITAGE DICTIONARY 50 (3d ed. 1992).

24. Rather than define the term "facultative," the administrative code provides a plant species list. FLA. ADMIN. CODE ANN. rr. 62-340.200(4)-(5), 62-340.450(2)-(3) (1995). The code recognizes a distinction between facultative plants and facultative wet plants. *Id.* at r. 62-340.200(4)-(5). Facultative plants are equally likely to be found in both upland and wetland areas. Fumero, *supra* note 10, at 100 n.116. Facultative wet plants are two-thirds more likely to be found in wetland areas than in upland areas. *Id.*

25. Rather than define the term "obligate," the administrative code provides a plant species list. FLA. ADMIN. CODE ANN. rr. 62-340.200(11), 62-340.450(1) (1995).

26. See FLA. STAT. § 373.019 (1995). See also FLA. ADMIN. CODE ANN. r. 62-340.200 (1995).

27. FLA. ADMIN. CODE ANN. r. 62-340.300 (1995).

28. *Id.* at r. 62-340.300(1).

Agencies are required to use Methodology One unless visual detection proves to be impossible or impracticable.²⁹

Chapter 62-340 offers four additional methodologies for delineating the landward extent of wetlands.³⁰ These alternative methodologies “approximate the combined landward extent of wetlands” when a precise calculation cannot be achieved through the use of Methodology One.³¹ Generally, an area of land is a wetland if the land’s characteristics meet the specifications established by any of the remaining four methodologies.³²

Methodologies Two and Three consider the percentage of plants listed under rule 62-340.450 that are present in the given area.³³ Once the appropriate percentage of obligate and facultative wet plants are identified, the agency must determine: (1) whether the area’s soil consists of soils generally found in wetlands; or (2) whether “one or more of the hydrological indicators listed in . . . [rule] 62-340.500 . . . are present and reasonable scientific judgment indicates that inundation or saturation is present sufficient to meet” the statutory definition of wetlands.³⁴

Methodology Four considers solely the given area’s soil characteristics. To qualify as a wetland, the area must consist of undrained hydric soils with characteristics listed under rule 62-340.300(c). Hydric soils are presumptively considered undrained unless reasonable scientific judgment indicates that the area no longer supports the formation of hydric soils due to permanent artificial alterations.³⁵

Methodology Five classifies areas as wetlands if: (1) the area contains “one or more of the hydrological indicators listed in . . . [rule] 62-340.500;” (2) the area’s soil is hydric; and (3) “reasonable scientific

29. *Id.* at r. 62-340.300. This chapter was ratified by the Florida Legislature. FLA. STAT. § 373.4211 (1995).

30. FLA. ADMIN. CODE ANN. r. 62-340.300 (1995).

31. *Id.* at r. 62-340.100(1).

32. *Id.* at r. 62-340.300(2).

33. *Id.* at r. 62-340.300(2)(a), (b). Methodology Two requires the aerial extent of obligate plants to be greater than the aerial extent of upland plants. Methodology Three requires the aerial extent of obligate or facultative wet plants—in combination or separately—to be greater than eighty percent of all plants in that area. Methodology Three excludes facultative plants from consideration because they are equally likely to be found in both upland and wetland areas. Fumero, *supra* note 10, at 100 n.116. *See also supra* note 24.

34. FLA. ADMIN. CODE ANN. r. 62-340.300(2)(a)(3) (1995).

35. *Id.* at r. 62-340.300(2)(c). Presumably, the policy behind this exception is that once alterations have eliminated the area’s ability to support wetland characteristics, the area should not be regulated as a wetland. Methodology Three also exempts pine flatwoods and improved pastures from wetland classification. *Id.* For the purposes of this methodology, pine flatwoods and improved pastures are defined in rule 62-340.300(2)(c)(4) of the *Florida Administrative Code*.

judgment indicates that inundation or saturation is present sufficient to meet” the statutory definition of wetlands.³⁶

Although these methodologies are generally useful, they may not be capable of reliably delineating the landward extent of wetlands in areas of land that have been altered by natural or human-induced factors. Under these circumstances, Chapter 62-340 requires agencies to use the most reliable available information³⁷ coupled with “reasonable scientific judgment” to determine where the landward extent of wetlands would have been located but for the land’s alteration.³⁸ However, altered lands are exempt from this requirement if: (1) the alteration was permitted or did not require a permit; and (2) the land “no longer inundates or saturates at a frequency and duration sufficient to meet” the statutory definition of wetlands.³⁹

The delineation methodologies promulgated in Chapter 62-340 supersede all delineation methodologies previously developed by other wetlands regulatory agencies of the state.⁴⁰ Chapter 62-340 requires all regulatory agencies to follow these delineation methodologies when determining the landward extent of wetlands.⁴¹

Courts have neither interpreted the statutory definition of wetlands nor evaluated the effectiveness of the delineation methodologies. However, Chapter 62-340 establishes uniform procedures for determining whether property is subject to wetlands regulations.

III. THE HISTORY OF WETLANDS REGULATION UNDER THE TAKINGS CLAUSE

A. *General Overview of the Takings Clause*

The Takings Clause of the Fifth Amendment states: “[N]or shall private property be taken for public use, without just compensation.”⁴² This clause has been applied to the states through the Fourteenth Amendment.⁴³ Although, on its face, the Takings Clause

36. *Id.* at r. 62-340.300(2)(d).

37. *Id.* at r. 62-340.300(3)(a). “Reliable available information may include, but is not limited to, aerial photographs, remaining vegetation, authoritative site-specific documents, or topographical consistencies.” *Id.*

38. *Id.*

39. *Id.* at r. 62-340.300(3)(b).

40. FLA. STAT. § 373.421(1) (1995).

41. FLA. ADMIN. CODE ANN. r. 62-340.300 (1995). *See also* FLA. STAT. § 373.421(1) (1995).

42. U.S. CONST. amend. V. The Florida Constitution also includes a taking provision similar to the United States Constitution’s Takings Clause. FLA. CONST. art. X, § 6. For purposes of this article, the term “Takings Clause” includes the takings clauses of both the United States Constitution and the Florida Constitution. An analysis of the distinctions between the two documents’ taking clauses is beyond the scope of this article.

43. *See Nollan v. California Coastal Comm’n*, 483 U.S. 825, 829 (1987).

seems unambiguous, courts have wavered when determining whether private property has been "taken" for public use. Failure to find a clear distinction between a governmental exercise of police powers and a taking of private property is especially manifest in regulatory takings cases.⁴⁴ Courts, however, have been more consistent in finding a taking and awarding "just compensation" when land is appropriated through a permanent physical invasion.⁴⁵

The Takings Clause was established to publicly spread the costs of redistributing resources from private individuals to the public at large.⁴⁶ Generally, three categorical outcomes exist in takings cases. First, when a government exercises its powers of eminent domain,⁴⁷ compensation to the landowner is constitutionally required. For example, if a city determines that certain privately owned land is needed for public purposes, the city may use its powers of eminent domain to condemn the land for public use, but the city must pay the market value of the land.

Second, when a government "takes" property without exercising its powers of eminent domain a landowner may recover compensation through an "inverse condemnation" proceeding.⁴⁸ For example, a landowner may bring an inverse condemnation suit against the city if the city imposes ordinances which constitute a permanent physical invasion of the land.⁴⁹ Although the city has not used its powers of

44. Compare *Agins v. City of Tiburon*, 447 U.S. 255, 261 (1980) (holding that "zoning ordinances substantially advance legitimate governmental goals" and, therefore, were valid "exercises of the city's police power to protect the [city's] residents . . . from the ill defects of urbanization") (emphasis added) and *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 138 (1978) (holding that a city's laws restricting the ability to use the airspace above plaintiff's property did not constitute a taking because the laws were "substantially related to the promotion of the general welfare" and merely limited plaintiff's use of the land) (emphasis added) with *Nollan*, 483 U.S. at 838-39 (finding a taking where the city's permit grant imposed a condition which required plaintiffs to grant the public an easement across their beachfront property) and *Nectow v. City of Cambridge*, 277 U.S. 183, 186-87 (1928) (finding a zoning ordinance unconstitutional because the restrictions rendering a portion of plaintiff's land worthless for commercial use failed to bear a substantial relation to the public's health, safety and welfare).

45. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982) ("Our cases further establish that when the physical intrusion reaches the extreme form of a permanent physical occupation, a taking has occurred.").

46. GEOFFREY R. STONE ET AL., *CONSTITUTIONAL LAW* 1565 (2d ed. 1991).

47. "Eminent domain refers to a legal proceeding in which a government asserts its authority to condemn property." *Agins*, 447 U.S. at 258 n.2 (citing *United States v. Clarke*, 445 U.S. 253, 255-58 (1980)).

48. "Inverse condemnation is 'a shorthand description of the manner in which a landowner recovers just compensation for a taking of his property when condemnation proceedings have not been instituted.'" *Id.* (citing *Clarke*, 445 U.S. at 257).

49. The Supreme Court has stated that permanent physical invasions of land constitute a taking of property. See *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1028-29 (1992); *Loretto*, 458 U.S. at 419.

eminent domain to condemn the land for public use, it has nonetheless taken the property for public use and must pay just compensation.

Third, when courts find that a regulation is justified by a governmental exercise of its police powers, then no taking has occurred and no compensation to the landowner is necessary.⁵⁰ For example, a court may find that a governmental exercise of its police powers restricting a landowner's ability to develop land does not constitute a taking because the restriction advances a public benefit.

The latter two situations, termed "regulatory takings," encompass the majority of judicial disputes between the government and private landowners. Usually, courts must determine whether a governmentally enacted regulation is sufficiently intrusive upon a private landowner's property rights to constitute a taking.

An inverse relationship exists between the government's police powers and the Takings Clause. If the government's police powers were expanded infinitely, the Takings Clause would become completely ineffective;⁵¹ conversely, if the Takings Clause were given complete deference, then the government would be required to pay compensation for any interference, no matter how minor, with a landowner's use of private land.⁵² Courts have failed to establish clear distinctions between the police power vs. takings, and have generally determined cases based on ad hoc factual inquiries.⁵³ During these ad hoc inquiries, courts use several factors to determine whether a taking has occurred, including: (1) the regulation's economic impact on the landowner; (2) the extent to which the regulation

50. *E.g.*, *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978). However, regulations that require property owners to suffer a physical invasion of their property are compensable regardless of the public interest advanced by the regulation. *Lucas*, 505 U.S. at 1028-29. See also discussion *infra* part III.B. Regulations that deny landowners "all economically beneficial [or productive] use of land" are considered categorical takings and must be compensated regardless of the public interest advanced by the regulations, unless the property's title was subject to regulation through state "background principles" of property and nuisance. *Lucas*, 505 U.S. at 1029. See also discussion *infra* part III.B.

51. "If . . . the uses of private property were subject to unbridled, uncompensated qualification under the police power, 'the natural tendency of human nature [would be] to extend the qualification more and more until at last private property disappear[ed].'" *Lucas*, 505 U.S. at 1014 (quoting *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922)).

52. "'Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.'" *Penn Central*, 438 U.S. at 124 (quoting *Mahon*, 260 U.S. at 413).

53. *Penn Central*, 438 U.S. at 124; see also *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 397 (1926) (holding that a zoning ordinance which decreased the value of a landowner's property was a valid exercise of the city's police powers, but stating that the Court "preferred to follow the method of a gradual approach to the general by a systematically guarded application and extension of constitutional principles to particular cases as they arise . . .").

interferes with the landowner's investment-backed expectations; and (3) the character of the governmental action.⁵⁴

In *Lucas v. South Carolina Coastal Council*, the United States Supreme Court recognized two forms of categorical takings which do not require a factual balancing test.⁵⁵ These two forms of categorical takings are: (1) permanent physical invasions; and (2) regulations that deprive landowners of "all economically beneficial or productive use of land."⁵⁶ The latter form of categorical taking is particularly important to wetlands regulation because wetlands regulation frequently deprives a landowner of virtually all land uses.⁵⁷

B. The Lucas Decision

In 1986, Lucas purchased two beachfront lots on a South Carolina barrier island, intending to erect a single-family residence on each lot.⁵⁸ At the time that Lucas purchased these lots, he was not legally required to obtain a permit from the South Carolina Coastal Council (Coastal Council) to develop the land.⁵⁹ All properties adjacent to these lots were developed prior to 1986.⁶⁰

In 1988, the South Carolina Legislature enacted the Beachfront Management Act (BMA),⁶¹ which directed the Coastal Council to establish a new coastal erosion "baseline."⁶² The Coastal Council fixed the baseline landward of Lucas's two lots.⁶³ Under the BMA, construction of single-family residences was prohibited seaward of a

54. *Penn Central*, 438 U.S. at 124-25.

55. *Lucas*, 505 U.S. at 1015-16.

56. *Id.* at 1015.

57. Most legal commentators have praised the *Lucas* decision, maintaining that it has provided an effective tool in protecting landowners' interests against oppressive governmental regulations. See, e.g., Michael J. Quinlan, *Lucas v. South Carolina Coastal Council: Just Compensation and Environmental Regulation—Establishing a Beach Head Against Evisceration of Private Property Rights*, 12 TEMP. ENVTL. L. & TECH. J. 173 (1993); Kent A. Meyerhoff, *Regulatory Takings—Winds of Change Blow Along the South Carolina Coast: Lucas v. South Carolina Coastal Council*, 72 NEB. L. REV. 627 (1993). Nonetheless, commentators disagree on the impact of the *Lucas* ruling on wetlands regulations. Compare Jan Goldman-Carter, *Protecting Wetlands and Reasonable Investment-Backed Expectations in the Wake of Lucas v. South Carolina Coastal Council*, 28 LAND & WATER L. REV. 425 (1993) (arguing that the Court's decision in *Lucas* might give rise to numerous takings claims of landowners and thereby have a detrimental effect on wetlands regulations), with Richard C. Ausness, *Regulatory Takings and Wetland Protection in the Post-Lucas Era*, 30 LAND & WATER L. REV. 349, 351 (1995) ("*Lucas* does not pose much of a threat to wetland protection regulations that recognize the interests of landowners as well as the needs of the environment.").

58. *Lucas*, 505 U.S. at 1003.

59. *Id.* at 1008

60. *Id.*

61. S.C. CODE ANN. § 48-39-50 (Law. Co-op. 1988).

62. *Lucas*, 505 U.S. at 1008.

63. *Id.*

line drawn twenty feet landward of, and parallel to, the baseline⁶⁴ Therefore, Lucas was barred from erecting a single-family residence on his two barrier island lots.⁶⁵

Lucas filed suit against the Coastal Council, stating that the BMA's restrictions on his property resulted in a taking without just compensation.⁶⁶ The trial court determined that the BMA completely usurped Lucas' barrier island lots of all value and that the Coastal Council was required to pay just compensation regardless of whether the legislature had acted within its police power.⁶⁷ However, the South Carolina Supreme Court reversed, reasoning that "when a regulation respecting the use of property is designed 'to prevent serious public harm' no compensation is owing under the Takings Clause regardless of the regulation's effect on the property value."⁶⁸ Subsequently, the United States Supreme Court granted certiorari to resolve whether a regulation's total economic devaluation of private property results in a constitutional taking of that property.⁶⁹

1. General Takings Analysis for Property Deprived of All Economically Beneficial Land Uses

Generally, the United States Supreme Court analyzes takings cases based on "ad hoc factual inquiries" to determine whether the regulation goes "'too far' for the purposes of the Fifth Amendment."⁷⁰ Thus, a determination of whether a governmental action constitutes a taking is dependent on the facts of each case. However, in *Lucas*, the Court recognized two forms of regulations that constitute a categorical taking: (1) "regulations that compel the property owner to suffer a physical 'invasion' of his property,"⁷¹ and (2) regulations that deny a property owner "all economically beneficial or productive use of land."⁷² This article will refer to the first form of regulation as a "physical invasion regulation" and the second form of regulation as a "total economic devaluation regulation."⁷³

64. S. C. CODE ANN. § 48-39-290(A) (Law. Co-op. 1988).

65. *Lucas*, 505 U.S. at 1007.

66. *Id.* at 1009.

67. *Id.*

68. *Id.* at 1010 (citations omitted).

69. *Id.* at 1007.

70. *Id.* at 1015 (quoting *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978)).

71. *Id.* See also *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982).

72. *Lucas*, 505 U.S. at 1015.

73. Note that regulations that decrease the value of land but do not eliminate *all* economic uses of the land are not included within this definition.

These two forms of categorical takings require governmental entities to compensate landowners regardless of the public interest advanced by the regulation.⁷⁴ However, a total economic devaluation regulation does not mandate the payment of compensation if the regulation is based on state “background principles” of property and nuisance.⁷⁵

In *Lucas*, the Court recognized total economic devaluation regulations as categorical takings because:

when no productive or economically beneficial use of land is permitted, it is less realistic to indulge our usual assumption that the legislature is simply ‘adjusting the benefits and burdens of economic life,’ in a manner that secures an ‘average reciprocity of advantage’ to everyone concerned. And the functional basis for permitting the government, by regulation, to affect property values without compensation . . . does not apply to the relatively rare situations where the government has deprived a landowner of all economically beneficial uses.⁷⁶

The Court’s total economic devaluation rule in *Lucas* does not take the place of the traditional ad hoc factual analysis, but merely adds to current takings jurisprudence by identifying another form of categorical taking; the traditional, ad hoc takings analysis remains intact.⁷⁷ Therefore, the categorical takings rule, based on a total

74. *Lucas*, 505 U.S. at 1015-16. “In general (at least with regard to permanent invasions), no matter how minute the intrusion, and no matter how weighty the public purpose behind it, we have required compensation.” *Id.* at 1015. This rule also generally applies to total economic devaluation regulations. *Id.* at 1016. (“[T]he Fifth Amendment is violated when land use regulation . . . ‘denies an owner economically viable use of his land.’”) (quoting *Agins v. Tiburon*, 447 U.S. 255, 260 (1980)).

75. *Id.* at 1029. See also *infra* part III.B.2.

76. *Lucas*, 505 U.S. at 1017-18 (citations omitted) (quoting *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978)).

77. In *Lucas*, Justice Stevens criticized the majority’s decision, stating that “the deprivation of all economically beneficial use” rule is “wholly arbitrary” because the rule is not sufficiently flexible to account for regulations that fall short of depriving all beneficial property uses. *Id.* at 1064 (Stevens, J., dissenting). However, the majority responded to Justice Stevens’ critique by stating that:

[Justice Stevens’] analysis errs in its assumption that the landowner whose deprivation is one step short of complete is not entitled to compensation. Such an owner might not be able to claim the benefit of our categorical formulation, but, as we have acknowledged time and again, “[t]he economic impact of the regulation on the claimant and . . . the extent to which the regulation has interfered with distinct investment-backed expectations” are keenly relevant to takings analysis generally.

Id. at 1019 n.8 (quoting *Penn Central*, 438 U.S. at 124). Therefore, the question is not whether a ninety-five percent devaluation constitutes a taking under the *Lucas* total economic devaluation standard; in fact, it does not. *Id.* The question becomes whether a ninety-five percent devaluation based on the facts of the particular circumstances constitutes a taking under a traditional

economic devaluation, does not preclude courts from determining that a regulation “takes” a landowner’s property even though the regulation does not deprive the landowner of all economically beneficial use of the property. However, if the regulation does not deprive the landowner of all economically beneficial land use, then the categorical takings rule is not applicable and a traditional ad hoc analysis is required. Therefore, the *Lucas* case is limited to situations where a regulation eliminates all economically beneficial use of a landowner’s property; *Lucas* may not affect traditional ad hoc factual inquiries.

2. *Exception to Categorical Takings Based on a Total Economic Devaluation: Common-Law Principles of Property and Nuisance*

The *Lucas* Court recognized an exception to categorical takings from a total economic devaluation regulation. Since land title is subject to “background principles of the State’s law of property and nuisance,” governmental entities may eliminate all economically beneficial uses of property without compensation only when the regulation proscribes a use that was previously impermissible under that state’s common-law principles of property and nuisance.⁷⁸

This exception is premised on the theory that landowners take title subject to state property and nuisance principles.⁷⁹ Although a landowner may engage in land uses that inhere to the title of the land, a landowner is prohibited from engaging in land uses that are proscribed by these background principles.⁸⁰ Thus, the government may regulate land uses based on these background principles without paying compensation, because the regulation merely prohibits the landowner from engaging in land uses that were already prohibited by state property and nuisance laws.

If a property’s land uses are based on expectations created by a state’s common law, then the land uses inherent in the land’s title may

ad hoc takings analysis. The *Lucas* analysis is not controlling if a trial court determines that the regulation has not deprived the land of all economically beneficial uses.

78. *Id.* at 1029. The Court gave some examples of regulations that deprive landowners of all economically beneficial uses of their property without requiring compensation under the Takings Clause:

[T]he owner of a lake bed, for example, would not be entitled to compensation when he is denied the requisite permit to engage in a landfilling operation that would have the effect of flooding others’ land. Nor the corporate owner of a nuclear generating plant, when it is directed to remove all improvements from its land upon discovery that the plant sits astride an earthquake fault.

Id.

79. *Id.*

80. *Id.* at 1029-30.

change as the common law changes.⁸¹ One may argue that a statutorily defined nuisance becomes part of that state's common law of nuisance.⁸² Under this reasoning, states may avoid compensation by merely promulgating a statute that declares specific land uses as public nuisances. However, allowing states to circumvent the Takings Clause by enacting statutes that recognize new forms of public nuisance is not compatible with the theory behind the nuisance exception, because these new proscriptions have not inhered to the title of the land.⁸³ The Court in *Lucas* warned that state courts "must do more than proffer the legislature's declaration that the [land] uses . . . are inconsistent with the public interest . . ." ⁸⁴ State courts must base their decisions on firmly grounded common-law principles.

In determining whether a regulation is sufficiently grounded in state property or nuisance laws to avoid just compensation, the *Lucas* Court reviewed the balancing test for nuisance included in the *Restatement (Second) of Torts*.⁸⁵ This balancing test is similar, but not necessarily identical to, most states' nuisance laws. The balancing test evaluates the following factors: (1) the degree of harm that the proposed land use may pose to public lands and resources or to adjacent private property;⁸⁶ (2) the social value of the proposed land use and its suitability to the locality in question;⁸⁷ and (3) the ease with which the harm may be avoided through mitigation by the landowner or by the governmental entity.⁸⁸ The Court stated, however, that it

81. The Court in *Lucas* stated that because common law property and nuisance exceptions to a total categorical takings analysis are a question of state law, state courts should decide the issue. *Id.* at 1031. Thus, state courts may prohibit certain land uses by determining that the common law of property and nuisance has changed to prohibit such activity. For example, in Florida, the common law is viewed as a continually evolving body of law.

The common law has not become petrified; it does not stand still. It continues in a state of flux. And, its ever present fluidity enables it to meet and adjust itself to shifting conditions and new demands. It has been described as a leisurely stream that has not ceased to flow gently and continuously in its proper channel, at times gradually and imperceptibly eroding a bit of the soil from one of its banks and at other times getting rid of and depositing a bit of silt.

State v. Egan, 287 So. 2d 1, 7 (Fla. 1973). See also David L. Powell et al., *Measured Step to Protect Private Property Rights*, 23 FLA. ST. U. L. REV. 255, 290-91 (1996).

82. *Cf. Commonwealth v. Parks*, 30 N.E. 174, 175 (Mass. 1892) (stating that the authority to enact nuisance statutes is the authority to "change the common law as to nuisances, and . . . move the line either way, as to make things nuisances which were not so, or to make things lawful that were nuisances . . ."). See also Powell, *supra* note 81, at 291 n.225.

83. See *supra* notes 78-80 and accompanying text.

84. *Lucas*, 505 U.S. at 1031.

85. *Id.* at 1030-31. See also RESTATEMENT (SECOND) OF TORTS §§ 826-28, 830-31 (1979).

86. *Lucas*, 505 U.S. at 1030-31. See also RESTATEMENT (SECOND) OF TORTS §§ 826-27 (1979).

87. *Lucas*, 505 U.S. at 1031. See also RESTATEMENT (SECOND) OF TORTS §§ 828(a), 828(b), 831 (1979).

88. *Lucas*, 505 U.S. at 1031. See also RESTATEMENT (SECOND) OF TORTS §§ 827(e), 828(c), 830 (1979). The Court also noted two factual circumstances that undermine a governmental entity's

would be rare for common-law principles of property and nuisance to prevent a landowner from erecting all types of “habitable or productive improvements.”⁸⁹

3. *The Ripeness Issue*

Prior to oral arguments before the South Carolina Supreme Court, the South Carolina Legislature amended the BMA. This amendment authorized the Coastal Council to issue “special permits,” allowing construction of residential properties seaward of the baseline.⁹⁰ The Coastal Council argued that this amendment left Lucas’ takings claim unripe because Lucas had failed to seek a “special permit” and thus exhaust all administrative remedies available to him.⁹¹

However, the South Carolina Supreme Court declined to address the ripeness issue and decided the case on its merits.⁹² Although the United States Supreme Court agreed with the Coastal Council’s ripeness argument, the Court determined that the South Carolina Supreme Court’s discussion of the merits had precluded Lucas from seeking compensation for past temporary deprivations.⁹³ Thus, the Court held that this case was ripe for review as a temporary takings claim for loss of use between 1988 and 1990.⁹⁴

4. *The Segmentation Issue*

Since all parties in the *Lucas* case acknowledged that the BMA denied Lucas of all economically beneficial land uses, the Court refused to address whether the “all economically beneficial” use test pertained to the parcel as a whole or merely to that portion of the

ability to assert that the regulation is based on common-law principles of property or nuisance laws, and thus avoid compensating landowners. *Id.* The first situation is where a particular use has historically been engaged in by similarly situated landowners. *Id.* The second situation is where other landowners under similar circumstances are permitted to continue the use denied to the landowner seeking compensation. *Id.* These two factual circumstances were also gleaned from the *Restatement (Second) of Torts*. See RESTATEMENT (SECOND) OF TORTS § 827, cmt. g (1979).

89. *Lucas*, 505 U.S. at 1031 (“[I]t seems unlikely that common-law principles would have prevented the erection of any habitable or productive improvements on petitioner’s land; they rarely support prohibition of the ‘essential use.’”). However, the Court noted that whether the state’s common law precluded the owner from all “habitable or productive” land uses was dependent on state law. *Id.*

90. *Id.* at 1010-11 (citing S.C. CODE ANN. § 48-39-290(D)(1) (Supp. 1991)).

91. *Id.* at 1011. See also Thomas E. Roberts, *Ripeness and Forum Selection in Fifth Amendment Takings Litigation*, 11 J. LAND USE & ENVTL. L. 37 (1995).

92. *Id.*

93. *Id.* (citing *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304 (1987) (noting that temporary land use deprivations are compensable under the Takings Clause)).

94. *Id.* at 1011-12.

parcel that was subject to the regulation.⁹⁵ The Court acknowledged that “this uncertainty regarding the composition of the denominator in our ‘deprivation’ fraction has produced inconsistent pronouncements by the Court.”⁹⁶ However, the Court stated:

The answer to this difficult question may lie in how the owner’s reasonable expectations have been shaped by the State’s law of property—i.e., whether and to what degree the State’s law has accorded legal recognition and protection to the *particular interest* in land with respect to which the takings claimant alleges a diminution in (or elimination of) value.⁹⁷

This precursor to an issue that will inevitably reach the United States Supreme Court suggests that the Court may reconcile the “denominator” issue by focusing on the degree of importance that state law has afforded the particular interest being regulated, rather than on the amount of regulated land relative to the entire parcel.

For example, suppose that a landowner purchases property with the expectation of erecting a residence. The law of the state in which the property is located “has accorded [the landowner] legal recognition and protection” of fee simple interests in the property.⁹⁸ Suppose further that the topography of the property renders only ten percent of the property capable of being developed, and that a regulation is subsequently promulgated denying the landowner permission to construct a residence because the construction would be contrary to the public interest. Although such regulation merely prohibits the landowner from developing ten percent of the property, the landowner has essentially been deprived of “all economically beneficial” land uses.

Since the landowner purchased the property for the specific purpose of building a residence, the Court may find that the regulation eliminated all of the property’s economically beneficial uses by depriving the landowner of the “*particular interest* in land with respect to which the takings claimant alleges a diminution in (or elimination of)

95. *Id.* at 1016 n.7.

96. *Id.* (citing *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978) and *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922)). The *Lucas* Court acknowledged the prior inconsistencies that it had created when addressing this issue. *Id.* The Court further stated, in dicta, that the calculus used by a New York court in *Penn Central* was “extreme” and “unsupportable.” *Id.* In *Penn Central*, the Court affirmed the New York court’s determination that the diminution in the parcel’s value failed to constitute a taking because the diminution in value was viewed in light of the total value of the landowner’s property. *Penn Central*, 438 U.S. at 104.

97. *Lucas*, 505 U.S. at 1016 n.7 (emphasis added).

98. *Id.* The *Lucas* Court recognized fee simple interests in property as having a “rich tradition of protection at common law.” *Id.*

value.”⁹⁹ Although the regulation affected less than 100 percent of the property’s total area, a court may determine that under these circumstances a categorical taking based on a total economic devaluation is appropriate because the “reasonable expectations” to develop the property of that landowner have been deprived.¹⁰⁰

C. Florida’s Post-Lucas Ability to Regulate Wetlands Under the Takings Clause

In light of the *Lucas* decision, the Florida judiciary has continued to develop the law of regulatory takings. This section contrasts Florida takings law with federal takings law to determine which law, if any, is more expansive. An overview of the nuances between federal and Florida takings jurisprudence is necessary to determine Florida’s ability to regulate wetlands under the Fifth Amendment. Also, this juxtaposition is necessary to analyze whether, and to what extent, the PPRPA may affect subsequent wetlands regulations. Although federal takings law is binding in Florida courts, Florida may develop its own body of takings law, as long as such law does not relax federal requirements.

1. Florida’s General Takings Rule

Generally, Florida employs a traditional takings analysis by requiring an ad hoc factual inquiry to determine whether a regulation goes “too far” for the purposes of the Fifth Amendment.¹⁰¹ Florida also recognizes the two forms of categorical takings enunciated in *Lucas*. However, Florida’s takings law differs from federal law in two respects: (1) the scope of Florida’s total economic devaluation regulations is broader than that of the corresponding federal regulations; and (2) Florida has resolved the segmentation issue left unanswered in *Lucas*. Since wetlands regulations may affect only a portion of the landowner’s property but substantially deprive a landowner of all economically beneficial land uses, these distinctions are significant to the government’s ability to regulate wetlands in Florida.

Wetlands regulations generally usurp environmentally sensitive wetlands of substantially all economically beneficial land uses by prohibiting landowners from altering the wetlands. Under the cate-

99. *Id.* (emphasis added).

100. *Id.*

101. *Reahard v. Lee County*, 968 F.2d 1131, 1135 (11th Cir. 1992) (citing *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922)). See also Richard J. Grosso & David J. Russ, *Takings Law in Florida: Ramifications of Lucas and Reahard*, 8 J. LAND USE & ENVTL. L. 431 (1993).

gorical takings rule enunciated in *Lucas*, a wetland regulation violates the Takings Clause *per se* only if it deprives the landowner of all economically beneficial land uses.¹⁰² If the wetlands regulation leaves some economically beneficial land use, regardless of how small that use is, then the landowner must seek compensation under the traditional ad hoc takings analysis.¹⁰³

The Florida Supreme Court has determined that “[a] taking occurs where regulation denies *substantially* all economically beneficial or productive use of land.”¹⁰⁴ This determination expands Florida’s total economic devaluation regulations to include regulations that devalue the property by less than 100 percent.¹⁰⁵ The Florida Supreme Court may have intended merely to allow a categorical-takings analysis when an “all economically beneficial,” or an extremely nominal residual land use, remained on the property; however, this expansion muddies the clear distinction established by *Lucas*, requiring an ad hoc factual inquiry for regulatory devaluations of less than 100 percent of the property value.¹⁰⁶

Since the Florida Supreme Court has arguably interpreted Florida’s total economic devaluation rule to be more expansive than the federal rule, more categorical takings challenges may be brought under Florida’s categorical takings rule than under the federal rule. This distinction is significant because once a landowner proves that the property is subject to a total economic devaluation regulation, the burden shifts to the government to show that the regulation is based on common law principles of property and nuisance.¹⁰⁷ Otherwise, in a traditional ad hoc analysis, the landowner always has the burden of showing that the regulation constitutes a taking of the property. Thus, Florida’s more expansive rule may be more burdensome to governmental entities because it may place more cases under a categorical takings analysis based on a total economic devaluation.

However, one may argue that Florida’s rule is simply a restatement of the federal rule as to what constitutes a “total” taking. In *Lucas*, the Court adhered to the lower court’s finding that the land was valueless even though, as Justice Blackmun pointed out, several

102. *Lucas*, 505 U.S. at 1017-18.

103. See *supra* note 77 and accompanying text.

104. *Tampa-Hillsborough County Expressway Auth. v. A.G.W.S. Corp.*, 640 So. 2d 54, 58 (Fla. 1994) (emphasis added).

105. Compare *Lucas*, 505 U.S. at 1017-18 (holding that the Fifth Amendment is violated when a “regulation denies all economically beneficial or productive use of land”) with *A.G.W.S. Corp.*, 640 So. 2d at 58 (“A taking occurs where regulation denies *substantially* all economically beneficial or productive use of land.”) (emphasis added).

106. *Lucas*, 505 U.S. at 1019 n.8. See also *supra* note 77 and accompanying text.

107. See *Lucas*, 505 U.S. at 1031.

residual economic land uses were still available to the landowner.¹⁰⁸ Thus, since the total economic devaluation rule established in *Lucas* was used despite the fact that residual economic land uses remained on the property, courts may determine that Florida law mirrors federal law regarding whether a total economic devaluation analysis is warranted.

Florida courts have established several factors to determine whether a regulation has deprived a landowner of substantially all economically beneficial land uses. These factors include: (1) the landowner's knowledge of existing regulations at the time of purchasing the property;¹⁰⁹ (2) the landowner's reasonable expectations under state common law;¹¹⁰ (3) the diminution in the landowner's reasonable investment-backed expectations caused by the regulation;¹¹¹ and (4) the determination of whether the government has proposed alternative land uses or offered to grant a variance to the regulation subject to some reasonable restriction.¹¹²

Regarding a landowner's knowledge of existing regulations at the time of purchasing the property, the Florida Supreme Court has determined that a landowner does not buy property with the expectation that a "conveyance carrie[s] with it a guarantee from the state that dredging and filling the property [is] permitted."¹¹³

108. *Id.* at 1044 (Blackmun, J., dissenting) ("State courts frequently have recognized that land has economic value where the only residual economic uses are recreation or camping.")

109. *State v. Burgess*, 1995 WL 518776, at *3 (Fla. 1st DCA 1995) ("[I]n considering whether the permit denial deprived Burgess of all economically beneficial use of his property, the trial court must weigh evidence relating to numerous issues, including Burgess' knowledge and expectations when he purchased the property . . .").

110. *Id.* See also *Reahard v. Lee County*, 968 F.2d 1131, 1136 (11th Cir. 1992).

111. *Reahard*, 968 F.2d at 1136.

112. See *Burgess*, 1995 WL 518776, at *2. Under factor four, an additional takings inquiry must be considered if the governmental entity offers to grant a variance from the regulation, subject to the imposition of an exaction on the property. A court must determine whether a nexus exists between the governmental exaction and the land use that is sought. See *Nollan v. California Coastal Comm'n*, 483 U.S. 825, 838 (1987). If a court determines that no nexus exists between the exaction and the prohibited land use, then the government's offer violates the Takings Clause and should not be considered when determining whether the regulation denies the landowner of substantially all economically beneficial land uses. See generally *id.* This additional takings inquiry is outside the scope of this article.

113. *Graham v. Estuary Properties, Inc.*, 399 So. 2d 1374, 1379 (Fla.), cert. denied sub nom., *Taylor v. Graham*, 454 U.S. 1083 (1981). In *Graham*, the Florida Supreme Court held that denying a permit to develop over 1800 acres of environmentally sensitive wetlands did not constitute a taking. *Id.* at 1374-75. The court reasoned that the protection of environmentally sensitive wetlands is a legitimate public concern and within the police powers. *Id.* at 1381. The court also determined that "[t]he owner of private property is not entitled to the highest and best use of his property if that use will create a public harm." *Id.* at 1382. Regarding reasonable investment-backed expectations, the court noted that these expectations do not include the landowner's subjective expectation that the land is subject to development. *Id.* at 1383. Thus, the court in *Graham* made it extremely difficult for landowners to obtain

However, after *Lucas*, at least one Florida court, the Fifth District Court of Appeal in *Vatalaro v. Department of Environmental Regulation*, has determined that constructive knowledge, prior to purchasing the land, of a regulation's deprivation of substantially all economically beneficial land uses does not exempt a government from paying just compensation under the Takings Clause.¹¹⁴ Although the *Vatalaro* Court acknowledged that constructive knowledge at the time of purchase is sufficient "in a case involving the denial of a rezoning or variance application, its logic fails in a case . . . involving a permit denial."¹¹⁵

The *Vatalaro* Court reasoned that, unlike zoning regulations, where a landowner takes title with the knowledge that certain activities are prohibited, permit regulations do not prohibit land use activities until the permit is denied.¹¹⁶ Thus, no constructive knowledge exists regarding the permit regulation's effect on the property's land uses because a landowner takes title "with future development legitimately anticipated and with no existing bar thereto."¹¹⁷ However, the *Vatalaro* Court acknowledged that "an owner has no absolute right to change the character of his land if the change injures the public."¹¹⁸

2. The Ripeness Issue

Florida's ripeness doctrine mirrors the federal doctrine.¹¹⁹ In order for a regulatory takings case to be ripe for review in Florida, a court must determine whether there has "been a final decision from the appropriate governmental entity as to the nature and extent of the

compensation for economic devaluations caused by wetlands regulations. Since the supreme court required reasonable investment-backed expectations to be viewed objectively, Florida landowners who purchase submerged lands would not be allowed to recover compensation under a takings claim because the land was purchased "with full knowledge that part of it was totally unsuitable for development." *Id.* at 1381-82.

114. 601 So. 2d 1223, 1229 (Fla. 5th DCA) (holding that the Department's denial of a permit to develop a private residence on an environmentally sensitive wetland constituted a taking because the permit denial deprived the landowner of all economically beneficial land uses), *rev. denied*, 613 So. 2d 3 (Fla. 1992). For an analysis of the *Vatalaro* court's decision, see Valerie A. Collins, *Vatalaro v. Department of Environmental Regulation: The Mysterious Takings Rule*, 8 J. LAND USE & ENVTL. L. 611 (1993) and William I. Gulliford, III, *The Effect of Notice of Land Use Regulations upon Investment-Backed Expectations and Takings Challenges*, 23 STETSON L. REV. 201 (1993).

115. *Vatalaro*, 601 So. 2d at 1229.

116. *Id.*

117. *Id. Contra Graham*, 399 So. 2d at 1379.

118. *Vatalaro*, 601 So. 2d at 1229 (citing *Graham*, 399 So. 2d at 1382).

119. *Taylor v. Village of North Palm Beach*, 659 So. 2d 1167, 1173 (Fla. 4th DCA 1995) ("Florida courts have adopted the federal ripeness policy of requiring a 'final determination from the government as to the permissible uses of the property.'").

development that will be permitted.”¹²⁰ Thus, a landowner must be denied a permit to engage in a desired land use activity before the landowner’s takings claim becomes ripe.¹²¹

Two exceptions exist to the general rule regarding ripeness. First, a claim is considered ripe if past history shows that an attempt to seek a permit would be futile.¹²² Second, a claim is considered ripe if the governmental entity concedes that a permit request would be denied.¹²³ However, both of these exceptions are narrowly construed and rarely applicable.

3. *The Segmentation Issue*

Although the United States Supreme Court has not conclusively answered the segmentation issue,¹²⁴ Florida courts have addressed it. Generally, Florida courts have held that “‘where it is established that the parcels are physically contiguous, a presumption arises that the parcels are one unit. However, this presumption can be rebutted by evidence that the parcels are otherwise separate.’”¹²⁵

120. *City of Riviera Beach v. Shillinburg*, 659 So. 2d 1174, 1180 (Fla. 4th DCA 1995).

121. See *Reahard v. Lee County*, 968 F.2d 1131, 1135 (11th Cir. 1992) (“[A] Fifth Amendment just compensation claim is not ripe until the landowner has pursued the available state procedures to obtain just compensation.”); *Shillinburg*, 659 So. 2d at 1174, 1178 (holding that the landowner’s taking claim was not ripe for review because the landowner had failed to apply for a permit); *Tippett v. City of Miami*, 645 So. 2d 533 (Fla. 3d DCA 1994) (holding that a facial challenge alleging that the creation of a historic district was an unconstitutional taking was not ripe for review because the landowner had failed to apply for a permit).

122. *Shillinburg*, 659 So. 2d at 1181.

123. *Id.*

124. While the Court has addressed the issue several times, inconsistencies have been created regarding the proper method for evaluating the segmentation issue. See discussion *supra* part III.B.4.

125. *State v. Schindler*, 604 So. 2d 565, 567 (Fla. 2d DCA) (quoting Department of Transp. v. *Jirik*, 471 So. 2d 549, 553 (Fla. 3d DCA 1985)), *rev. denied*, 613 So. 2d 8 (Fla. 1992). In *Schindler*, the court held that submerged land was not separate from the landowner’s entire property for purposes of determining whether a total economic devaluation taking had occurred. *Id.* at 567-68. The court also noted that the landowner had purchased the property “from a private individual ‘with full knowledge that part of it was totally unsuitable for development.’” *Id.* (quoting *Graham v. Estuary Properties, Inc.*, 399 So. 2d 1374 (Fla.), *cert. denied sub nom.*, Taylor v. *Graham*, 454 U.S. 1083 (1981)).

Prior to *Schindler*, the Florida Supreme Court established a test consisting of three factors to determine whether the “all economically beneficial” use test pertains to the parcel as a whole or merely to a portion of the parcel that is subject to governmental intrusion. These factors are: (1) physical contiguity; (2) unity of ownership; and (3) unity of use. *Department of Transp. v. Jirik*, 498 So. 2d 1253, 1255 (Fla. 1986). In *Jirik*, the landowner owned three adjacent pieces of property. The government erected a wall that eliminated the landowner’s access to one of his lots. *Id.* The supreme court considered whether the landowner’s three adjacent parcels of property were separate and independent for purposes of the Fifth Amendment. *Id.* The supreme court determined that, although the use of property is the most important factor, when platted urban lots are vacant “a presumption of separateness . . . is reasonable.” *Id.* at

In *Florida Game and Fresh Water Fish Commission v. Flotilla, Inc.*,¹²⁶ the Second District Court of Appeal considered whether a restriction on the development of forty-eight acres of the landowner's 173-acre parcel constituted a taking.¹²⁷ The *Flotilla* Court relied on *Penn Central Transportation Co. v. New York City*¹²⁸ to determine that, for purposes of a takings analysis, land must be considered in its entirety when determining whether a regulation violates the Fifth Amendment.¹²⁹ Thus, the *Flotilla* Court held that the regulation did not effect a taking because the landowner "retained the desired use of the majority of its land."¹³⁰ However, the *Flotilla* Court's reliance on *Penn Central* ignored footnote seven of *Lucas*, which indicates that the Court's determination of the denominator factor in *Penn Central* may be re-evaluated in future takings claims.¹³¹ Therefore, although the segmentation issue is resolved in Florida, the *Lucas* decision indicates that modification of Florida's existing law may be necessary in the future.

Florida courts evaluate property as a whole rather than merely considering the portion of the property which is subject to the regulation or considering the "particular interest" regulated.¹³² As a result, categorical takings claims based on a total economic devaluation are difficult to prove in Florida. Federal law has not established a clear rule regarding the segmentation issue.¹³³ In this respect, Florida takings law is more stringent than the federal law and favors the government's ability to reasonably regulate property without paying just compensation.

1257. Thus, the *Jirik* Court crafted an exception to the general rule that lands owned by one person and sharing a common use are generally considered as a whole.

126. 636 So. 2d 761 (Fla. 2d DCA 1994).

127. *Id.* at 765.

128. 438 U.S. 104, 130-31 (1978).

129. *Flotilla*, 636 So. 2d at 765. Other Florida courts have also relied on *Penn Central* to determine that property should be viewed as a whole when considering whether a regulation violates the Fifth Amendment. See *Vatalaro v. Department of Env'tl. Reg.*, 601 So. 2d 1223, 1228 (Fla. 5th DCA), *rev. denied*, 613 So. 2d 3 (1992).

130. *Flotilla*, 636 So. 2d at 765.

131. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1016 n.7 (1992). See also discussion *supra* part III.B.4.

132. *Lucas*, 505 U.S. at 1016 n.7. See also discussion *supra* part III.B.4.

133. Compare *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978) (evaluating property as a whole to determine whether permit denial constituted a taking) with *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922) (evaluating only the portion of the parcel regulated to determine whether a law restricting subsurface extraction of coal effected a taking). But see *Loveladies Harbor, Inc. v. United States*, 28 F.3d 1171, 1180 (D.C. Cir. 1994) (holding that the denominator factor should include the entire parcel minus: (1) any land that was developed prior to the existence of the regulation; and (2) any land deeded to the state in exchange for a permit).

4. Summary of Wetlands Regulation Under Florida's Takings Law

Florida's takings jurisprudence makes it difficult for landowners to recover when a wetlands regulation deprives the landowner of substantially all economically viable uses of property. Florida provides several hurdles that a landowner must overcome before compensation under the Takings Clause is warranted.

First, a landowner must show that the regulation deprives the land of substantially all economically viable land uses.¹³⁴ Since wetlands regulations generally prohibit any alterations to environmentally sensitive wetlands, this hurdle is not difficult to surpass. Second, a landowner must show that the wetland was purchased with the expectation of development.¹³⁵ Florida law fails to recognize the dredging and filling of wetlands as an interest that inheres to the property's title;¹³⁶ thus, this requirement is difficult for landowners to meet. Third, a landowner must show that the appropriate governmental entity has issued a final decision regarding the proposed land use activity and that the landowner has exhausted all administrative remedies.¹³⁷ Many Florida takings cases are dismissed on this ground due to a lack of ripeness. Finally, a landowner must show that regulation devalues the property as a whole.¹³⁸ This requirement, known as the segmentation issue, deprives many Florida landowners of compensation because many wetlands properties include upland areas that retain some economically viable uses.

IV. THE BERT J. HARRIS, JR., PRIVATE PROPERTY RIGHTS PROTECTION ACT AND ITS EFFECT ON WETLANDS REGULATION

Since recovery under Florida's takings law has proven to be difficult, a new cause of action has been introduced with the enactment of the PPRPA.¹³⁹ The PPRPA was enacted on May 18, 1995 and became effective on October 1, 1995.¹⁴⁰ The PPRPA is designed to coexist with current takings jurisprudence and to provide landowners with a separate and distinct cause of action against governmental regulations that "unfairly affect real property."¹⁴¹

134. See *Tampa-Hillsborough County Expressway Authority v. A.G.W.S. Corp.*, 640 So. 2d 54, 58 (Fla. 1994). See also discussion *supra* part III.C.1.

135. See *Graham v. Estuary Properties, Inc.*, 399 So. 2d 1374, 1379 (Fla. 1981).

136. *Id.*

137. See discussion *supra* part III.C.2.

138. See discussion *supra* part III.C.3.

139. FLA. STAT. § 70.001 (1995).

140. 1995, Fla. Laws ch. 95-181, § 6.

141. FLA. STAT. § 70.001 (1995).

The PPRPA consists of six major sections. Section I establishes the intent and application of the act.¹⁴² Section II establishes a general test for determining whether a landowner is entitled to compensation under the act.¹⁴³ Section III defines the main operative terms used.¹⁴⁴ Section IV requires the government to issue a written settlement offer and to mitigate any “inordinate burdens” placed on the property.¹⁴⁵ Section V establishes ripeness for purposes of compensation under the PPRPA.¹⁴⁶ Section VI determines the extent of judicial involvement.¹⁴⁷

Generally, the PPRPA differs from takings law by using a “carrot-and-stick” approach. The PPRPA softens takings requirements by awarding compensation for any loss in the fair market value of the property once a court determines that a regulation “inordinately burdens” the property.¹⁴⁸ In takings law, courts generally require a regulation to deprive the landowner of “all economically beneficial” land uses before compensation is available.¹⁴⁹ The PPRPA also eases ripeness requirements for the landowner.¹⁵⁰ Thus, landowners may bring a claim under the PPRPA even where a takings claim would not be ripe.

However, the PPRPA may function as a “stick,” encouraging parties to find a reasonable solution to wetlands development and to avoid litigation by entitling the prevailing party to attorney’s fees and court costs if a reasonable solution was available but not accepted by the other party.¹⁵¹ Thus, the PPRPA gets the parties to the negotiating table by softening compensation and ripeness requirements but discourages parties from seeking judicial determinations by subjecting each party to potentially costly attorney’s fees and court costs.

A. Legislative Intent and Application of the PPRPA

The PPRPA states:

The Legislature recognizes that some laws, regulations, and ordinances of the state . . . may inordinately burden, restrict, or limit private property rights without amounting to a taking under the State Constitution or the United States Constitution [I]t is the

142. *Id.* See discussion *infra* part IV.A.

143. FLA. STAT. § 70.001(2) (1995). See discussion *infra* part IV.B.

144. FLA. STAT. § 70.001(3) (1995). See discussion *infra* part IV.B.

145. FLA. STAT. § 70.001(4) (1995). See discussion *infra* part IV.C.

146. FLA. STAT. § 70.001(5) (1995). See discussion *infra* part IV.D.

147. FLA. STAT. § 70.001(6)-(13) (1995). See discussion *infra* part IV.E.

148. See discussion *infra* part IV.A and part IV.B.1.

149. See discussion *supra* part III.B.1.

150. See discussion *infra* part IV.D.

151. FLA. STAT. § 70.001(6)(c) 1-3 (1995). See discussion *infra* part IV.E.

intent of the Legislature that, as a separate and distinct cause of action from the law of takings, . . . [the PPRPA] provides for relief, or payment of compensation, when a new law, rule, regulation, or ordinance of the state . . . unfairly affects real property.¹⁵²

Thus, although the PPRPA uses several terms that seem to be derived from takings jurisprudence, courts may determine that, for purposes of PPRPA compensation, these terms have a different application. Certainly, courts are not bound by takings law when interpreting what constitutes compensation under the PPRPA.

The PPRPA applies to statutes, rules, regulations, or ordinances adopted or altered after the end of the 1995 Legislative Session.¹⁵³ Thus, this prospective application does not apply to any laws that existed on or before the enactment of the PPRPA. However, alterations to pre-existing laws subject these laws to the PPRPA "to the extent that the application of the amendatory language imposes an inordinate burden apart from" the burdens placed by the pre-existing rule.¹⁵⁴

A question arises as to whether permit denials based on laws that existed prior to the enactment of the PPRPA are subject to the act. To decide this issue, courts may consider whether a property was subject to a permit regulation prior to the time that the permit is sought.

Governmental entities will argue that, since most inordinately burdensome regulations involve permit determinations, permit denials based on pre-existing regulations were grandfathered in with the regulation itself. Otherwise, the PPRPA's exemption of pre-existing laws would have no effect. Under this analysis, governmental entities could avoid compensation by regulating wetlands under the status quo. Governmental entities would be subject to the PPRPA only where new statutes required the enactment of further regulation or where alteration of current regulations was necessary.

However, landowners will assert that permit denials are not grandfathered by the PPRPA because the law of Florida recognizes that lands are not subject to permit regulations until a permit is sought and a determination is issued.¹⁵⁵ In *Vatalaro*, the court held that the landowner's constructive knowledge of the property being subject to existing regulations did not relieve the Department of Environmental

152. FLA. STAT. § 70.001(1) (1995).

153. *Id.* § 70.001(12).

154. *Id.*

155. See *Vatalaro v. Department of Env'tl. Reg.*, 601 So. 2d 1223, 1229 (Fla. 5th DCA 1992). The *Vatalaro* court suggested that the bundle of rights is compromised at the time of the permit denial. *Id.* Therefore, one may conclude that the mere existence of permit regulations does not result in notice to the landowner that the property's land uses are restricted.

Protection's (DEP) duty to pay just compensation under the Takings Clause.¹⁵⁶ The court stated that, even where the land is subject to permit regulations, land acquisition is conducted with "future development legitimately anticipated and with no existing bar thereto" because no restrictions are imposed until the permit is denied.¹⁵⁷

As a matter of policy, the prospective application of the PPRPA should also apply to permit regulations because the PPRPA was designed to protect individuals only from new laws, rules, or regulations that inordinately affect property. Since landowners may apply for permits after having been denied in the past, a retrospective application of the PPRPA to permit regulations may require the government to pay compensation under existing laws to landowners who have previously been denied permits. This result would be inequitable and in derogation of the plain language of the statute.

B. General Test for Compensation Under the PPRPA

The PPRPA's test for general compensation states:

When a specific action of a governmental entity has inordinately burdened an existing use of real property or a vested right to a specific use of real property, the property owner of that real property is entitled to relief, which may include compensation for the actual loss to the fair market value of the real property caused by the action of government.¹⁵⁸

Florida courts may determine that the PPRPA's test for compensation is more expansive than current takings jurisprudence because the PPRPA does not require a regulation to deprive the landowner of "substantially all economically beneficial" land uses.¹⁵⁹ Instead, the PPRPA awards compensation if a regulation has "inordinately burdened" existing land uses.¹⁶⁰

1. Inordinate Burden Defined

In order for a governmental action to "inordinately burden"¹⁶¹ land, the action must either: (1) directly restrict or limit the land's use

156. *Id.*

157. *Id.*

158. FLA. STAT. § 70.001(2) (1995).

159. See *Tampa-Hillsborough County Expressway Auth. v. A.G.W.S. Corp.*, 640 So. 2d 54, 58 (Fla. 1994). See also *supra* notes 102-110 and accompanying text.

160. FLA. STAT. § 70.001(3)(e) (1995).

161. For a general analyses of the statutory term "inordinate burden" and for a discussion of the issue of burden of proof in establishing an "inordinate burden," see Ellen Avery, *The*

to the extent that the action permanently eliminates the landowner's "reasonable investment-backed expectations"¹⁶² of the property as a whole; or (2) unreasonably restrict the property's land uses to the extent that the landowner "bears permanently a disproportionate share of a burden imposed for the good of the public"¹⁶³ Temporary impacts or governmental actions that remediate "a public nuisance at common law or a noxious use of private property" are exempt from the definition of "inordinate burden."¹⁶⁴

Since the definition of "inordinate burden" contains two mutually exclusive prongs, uncertainty exists regarding whether the property must be viewed in its entirety or whether the portion of the property being regulated may be separated to determine whether an inordinate burden has been placed on the property. Under current takings law, Florida courts have resolved the segmentation issue by considering the property as a whole.¹⁶⁵

Certainly, under the first prong of the "inordinate burden" test, the property must be evaluated as a whole to determine whether the regulation "directly restricts" and permanently eliminates the landowner's "reasonable investment-backed expectations."¹⁶⁶ Thus, the government may not be required to pay compensation if the regulation restricts a land use on a particular portion of the land but generally allows the land use on the parcel as a whole.

However, the second prong of the "inordinate burden" test does not specify whether courts should consider the entire parcel or merely

Terminology of Florida's New Property Rights Law: Will It Allow Equity to Prevail or Government To Be "Taken" to the Cleaners?, 11 J. LAND USE & ENVTL. L. 181, 186-200, 203-07 (1995).

162. FLA. STAT. § 70.001(3)(e) (1995). In determining whether a land use contained "reasonable investment backed expectations" for takings purposes, the United States Supreme Court has generally relied on whether the landowner had knowledge, prior to purchasing the property, that the land use was regulated. See, e.g., *Kaiser Aetna v. United States*, 444 U.S. 164 (1979) (holding that the United States Army Corps of Engineers' lack of notice to the property owner that dredging a pond may subject the property to navigational servitude interfered with the property owner's reasonable investment-backed expectations). In Florida, courts have also considered the landowner's knowledge when determining whether a regulation deprived the landowner of all reasonable investment-backed expectations. *Reahard v. Lee County*, 968 F.2d 1131 (11th Cir. 1992). However, a landowner's knowledge that a permit is required to engage in development activities may be insufficient in Florida. See *Vatalaro v. Department of Env'tl. Reg.*, 601 So. 2d 1223, 1228 (Fla. 5th DCA 1992). The court in *Vatalaro* stated:

It cannot be concluded that a permit denial has not resulted in a taking merely on the basis that the property continues to exist in the state in which it was acquired. Certainly the land is physically unchanged by a permit denial, yet the bundle of rights the owner had has been diminished.

Id.

163. FLA. STAT. § 70.001(3)(e) (1995).

164. *Id.*

165. See discussion *supra* part III.C.3.

166. FLA. STAT. § 70.001(3)(e) (1995).

a portion thereof when determining whether the landowner should be compensated under the PPRPA. This “inordinate burden” prong warrants compensation if the regulation “unreasonably restricts” the property’s land uses to the extent that the landowner shares a disproportionate share of the burden imposed for the public good.¹⁶⁷ Although this prong does not specify that the entire parcel should be evaluated, Florida courts may apply the same analysis used in takings jurisprudence to inject the whole-parcel analysis into this prong.¹⁶⁸

When considering whether a property is “unreasonably restricted,” the distinction between evaluating the parcel as a whole and merely considering the portion of the parcel being regulated may be purely academic. The second prong of the “inordinate burden” test requires a determination of whether the landowner disproportionately shares the burden imposed by the regulation. Since the governmental entity may offer alternative solutions to the activity sought by the landowner,¹⁶⁹ courts may refuse to consider the segmentation issue and focus merely on whether the desired land use is unreasonably restricted by the regulation. Such a method focuses more on the particular interest being regulated than on the amount of regulated land relative to the entire parcel. By focusing on the property’s land use rather than on the restriction placed on a specific portion of the property, the segmentation issue may become moot. This analysis more closely resembles the United States Supreme Court’s discussion of the segmentation issue in *Lucas*¹⁷⁰ than the current status of the segmentation issue in Florida takings law.¹⁷¹

For example, suppose that a fifty-acre lot comprises forty acres of upland and ten acres of environmentally sensitive wetlands. A landowner purchases the property with the intention of constructing a development, requiring twenty acres of land. The landowner seeks a permit to fill the ten acres of wetlands because this area is more aesthetically appealing than other areas of the parcel. Suppose further that the DEP denies the permit.

The landowner seeks compensation under the PPRPA because the permit denial “unreasonably restricts” the use of ten acres of the property. The DEP issues a settlement offer mitigating the restriction

167. *Id.*

168. See discussion *supra* part III.C.3.

169. See discussion *infra* part IV.C.

170. See discussion *supra* III.B.4. See also *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1016 n. 7 (1992) (implying that the Court’s future analysis of the segmentation issue may focus on the particular interest being regulated rather than on the amount of the regulated land relative to the entire parcel).

171. See discussion *supra* part III.C.3.

by suggesting that the landowner construct the development on the upland portion of the property. A court may refuse to address the segmentation issue and merely consider whether the permit denial “unreasonably restricted” the landowner’s use of the property. In the instant case, a court may determine that the alternative solution issued by the governmental entity was reasonable and offered the landowner the opportunity to engage in the desired land use. Since the landowner was afforded the opportunity to engage in the desired land use, no burden exists that should be transferred to the public. Thus, the court may deny compensation without addressing the segmentation issue.

2. *Governmental Entity Defined*

The PPRPA broadly defines “governmental entity” to generally include all state entities that exercise governmental authority.¹⁷² This definition includes state agencies, regional or local governments, and municipalities.¹⁷³ However, “governmental entity” does not include federal agencies or state governmental entities whose regulatory powers were delegated by the federal government.¹⁷⁴ Thus, state agencies that are forced by federal authority to promulgate rules that “inordinately burden” land are exempt from the PPRPA.

Florida’s wetlands regulations are not delegated by the federal government. Thus, state agencies that regulate wetlands are not exempt under the act’s definition of governmental entity. However, some dredge and fill activities are regulated by the federal government under the Clean Water Act (CWA).¹⁷⁵ The CWA regulates the discharge of dredged or filled materials into United States navigable waters through the use of a section 404 permit program.¹⁷⁶ This program is administered by the United States Army Corps of Engineers and the United States Environmental Protection Agency (EPA).¹⁷⁷ Under the section 404 permit program, states are required to issue certification, verifying that proposed discharges “will have only minimal cumulative adverse effect on the environment.”¹⁷⁸

172. FLA. STAT. § 70.001(3)(c) (1995).

173. *Id.*

174. *Id.*

175. Pub. L. No. 92-500, 86 Stat. 816 (1972) (codified as amended at 33 U.S.C. §§ 1251-1387 (1994)).

176. 33 U.S.C. § 1344 (1994).

177. *Id.* §§ 1344 (a)-(d).

178. *Id.* § 1344 (e)(1).

Florida is currently considering whether to seek "assumption" of the section 404 permit program.¹⁷⁹ "Assumption is the process by which the EPA reviews state programs to determine whether they meet certain minimum standards. If accepted by the EPA, assumption allows for use of the federally approved state procedures and regulations."¹⁸⁰

If Florida obtains delegation of the section 404 permitting program, state governmental agencies acting under the section 404 permitting process would be exempt from the PPRPA because their regulatory powers would be delegated by the federal government. The PPRPA specifically exempts state agencies with federally delegated rulemaking authority from the requirements of the act.¹⁸¹ Thus, if assumption occurs, state governmental agencies may choose to deny dredge and fill permits under this program in order to avoid possible PPRPA compensation.

3. Existing Use Defined

The PPRPA's definition of "existing use" includes: (1) the property's actual, present land use; and (2) the property's "reasonably foreseeable, nonspeculative land uses."¹⁸² Thus, "existing use" includes any land uses for which the property may be reasonably suited. Takings jurisprudence uses a similar analysis to determine whether a regulation deprives a landowner of "substantially all economically beneficial" land uses.¹⁸³ The PPRPA neither expands nor contracts a landowner's ability to seek compensation for future land uses.

Although the PPRPA's definition of "existing use" does not constitute an expansion of possible uses for which the governmental entity may be required to pay compensation, the PPRPA does require the governmental entity to pay a premium for "inordinately burdened" land.¹⁸⁴ Given the premium requirement, the government may lack the financial funding necessary to adequately regulate wetlands development. Instead, the government may choose either: (1) to avoid future wetlands regulation; or (2) to structure future

179. Fumero, *supra* note 10, at 113.

180. *Id.* at 114.

181. 1995, FLA. STAT. § 70.001(3)(e) (1995).

182. *Id.* § 70.001 (3)(f).

183. See Tampa-Hillsborough County Expressway Auth. v. A.G.W.S. Corp., 640 So. 2d 54, 58 (Fla. 1994) ("A taking occurs where regulation denies substantially all economically beneficial or productive use of land.").

184. The PPRPA requires compensation which may include "the actual loss to the fair market value of the real property caused by the action of government." FLA. STAT. § 70.001(2) (1995).

wetlands regulations in a manner that enables governmental entities to avoid compensation by offering reasonable mitigation measures that relieve any “inordinate burdens” placed on the property.¹⁸⁵ In light of the importance that wetlands play in Florida’s ecology, it is likely that governmental entities will choose the latter alternative.

4. *Vested Rights Defined*

Under the PPRPA, a court must look to principles of equitable estoppel and substantive due process when considering whether a landowner possesses vested rights in a property.¹⁸⁶ “Vested rights” include both common law principles and statutory principles of state law.¹⁸⁷

To determine whether a landowner has a vested right in a particular land use by virtue of equitable estoppel, Florida courts generally consider whether the landowner has detrimentally relied on an act or omission of the government to the extent that inequity would result if the landowner was denied the right to engage in that activity.¹⁸⁸ Since Florida courts have generally held that property title does not include a vested right to develop land,¹⁸⁹ landowners will not be able to assert a “vested rights” argument unless the governmental entity has lulled the landowner into believing that land development was allowable.¹⁹⁰

Courts must also look to common law principles of substantive due process to determine whether a landowner has a vested right in a particular land use.¹⁹¹ In determining whether a government has violated a person’s rights to substantive due process, Florida courts consider whether “a regulation is arbitrary and capricious, does not

185. See discussion *infra* part IV.C.

186. FLA. STAT. § 70.001(3)(a) (1995).

187. *Id.*

188. Powell, *supra* note 81 (manuscript at 19, on file with author).

189. *Graham v. Estuary Properties*, 399 So. 2d 1374, 1382 (Fla. 1981) (“An owner of land has no absolute and unlimited right to change the essential natural character of his land so as to use it for a purpose for which it was unsuited in its natural state and which injuries [sic] the rights of other.”) (quoting *Just v. Marinette County*, 201 N.W.2d 761, 768 (Wis. 1972)).

190. See generally *Kaiser Aetna v. United States*, 444 U.S. 164 (1979) (holding that the Corps of Engineers’ lack of notice that dredging and filling a pond would subject landowner to navigational servitude violated the Fifth Amendment). In *Kaiser Aetna*, the Court stated that the landowner’s belief that the land use activity would not subject the land to the navigational servitude resulted from assurances by the Corps of Engineers that no permit was necessary for dredging and filling. *Id.* See also *Sakolsky v. City of Coral Gables*, 151 So. 2d 433, 434-35 (Fla. 1963) (holding that a city was estopped from rescinding a building permit because the landowner had “changed his position materially and incurred very substantial expense in reliance upon the . . . permit issued by the respondent City.”).

191. FLA. STAT. § 70.001(3)(a) (1995).

bear a substantial relation to the public health, safety, morals, or general welfare, and is therefore an invalid exercise of the police power.”¹⁹² This test establishes a high standard for the landowner to meet.

A substantive due process challenge may be either a facial challenge or an as applied challenge.¹⁹³ Under a facial challenge, the landowner must show that the governmental entity acted in an arbitrary and capricious manner when it promulgated the regulation. The remedy available for a facial challenge is “the striking down of the regulation.”¹⁹⁴ Under an as applied challenge the landowner must show that the regulation—as applied against the landowner—constitutes an arbitrary and capricious exercise of governmental police powers.¹⁹⁵ The remedy for an as applied challenge “is an injunction preventing the unconstitutional application of the regulation to plaintiff’s property and/or damages resulting from the unconstitutional application.”¹⁹⁶

Since these two forms of substantive due process challenges provide different types of relief, one must consider the impact that a vested rights claim based on substantive due process will have on the PPRPA. The PPRPA provides that relief “*may include* compensation for the actual loss to the fair market value of the real property caused by the action of government”¹⁹⁷ Thus, relief under the PPRPA is not limited to monetary compensation; courts may fashion remedies that more adequately redress the inordinate burden. Therefore, courts faced with PPRPA claims based on substantive due process challenges may choose to follow traditional substantive due process remedies, including elimination of the regulation or injunctive relief.

It is important to note, however, that under the PPRPA courts merely must look to principles of substantive due process to determine whether the landowner has a vested right to a particular land use. Once the vested right is identified, the court must determine

192. *Eide v. Sarasota County*, 908 F.2d 716, 721 (11th Cir. 1990). See also *City of Jacksonville v. Wynn*, 650 So. 2d 182, 187 (Fla. 1st DCA 1995); *City of Pompano Beach v. Yardarm Restaurant, Inc.*, 641 So. 2d 1377 (Fla. 4th DCA 1994); *Conner v. Reed*, 567 So. 2d 515, 518 (Fla. 2d DCA 1990). For an analysis of the Eleventh Circuit’s decision in *Eide*, see Bruce I. Wiener, *Obstacles and Pitfalls for Landowners: Applying the Ripeness Doctrine to Section 1983 Land Use Litigation* (*Eide v. Sarasota County*, 908 F.2d 716 (11th Cir. 1990)), 7 J. LAND USE & ENVTL. L. 387 (1992).

193. *Eide*, 908 F.2d at 722.

194. *Id.*

195. See, e.g., *Bello v. Walker*, 840 F.2d 1124, 1129 (3d Cir. 1988) (holding that a permit denial based on “partisan political or personal reasons unrelated to the merits of the application for the permits” constituted a violation of substantive due process).

196. *Eide*, 908 F.2d at 722.

197. FLA. STAT. § 70.001(2) (1995) (emphasis added).

whether the regulation is inordinately burdensome to that vested right.

Since substantive due process employs an arbitrary and capricious standard, governmental entities need only show that some relationship existed between the regulation and its application to the landowner's property.¹⁹⁸ Wetlands regulations generally focus on water quality and habitat maintenance. Thus, it is unlikely that a court will strike down a wetland regulation under a facial substantive due process challenge because the governmental entity should be able to meet the arbitrary and capricious standard. As applied substantive due process challenges should similarly be difficult to assert under wetlands regulations because of the deference that the arbitrary and capricious standard pays to governmental agencies.

5. Nuisance and Noxious Use Exception

The PPRPA exempts regulations that remediate public nuisances or noxious uses.¹⁹⁹ Generally, a public nuisance is an activity that "violates public rights, subverts public order, decency or morals, or causes inconvenience or damage to the public generally."²⁰⁰ Florida has subscribed to the view that this general rule should be applied on an ad hoc factual basis to determine whether an action constitutes a public nuisance.²⁰¹

Although a noxious use need not rise to the level of a public nuisance, it must potentially inflict injury upon a community.²⁰² It is unclear how courts will distinguish between public nuisances and noxious uses for purposes of the PPRPA. However, the United States Supreme Court, in *Lucas*, eliminated noxious uses as an exception to categorical takings based on a total economic devaluation, because the Court found that it was difficult to distinguish between regulations conferring benefits and regulations preventing harmful uses.²⁰³

198. See, e.g., *Conner v. Reed*, 567 So. 2d 515, 518-19 (Fla. 2d DCA 1990).

199. FLA. STAT. § 70.001(3)(e) (1995).

200. *Orlando Sports Stadium, Inc. v. State*, 262 So. 2d 881, 884 (Fla. 1972).

201. *Id.* ("It is not possible to define comprehensively 'nuisances' as each must turn upon its facts and be judicially determined.")

202. See Powell, *supra* note 81 (manuscript at 45, on file with author).

203. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1026. The Court in *Lucas* stated:

When it is understood that "prevention of harmful use" was merely our early formulation of the police power justification necessary to sustain (without compensation) any regulatory diminution in value; and that the distinction between regulation that "prevents harmful use" and that which "confers benefits" is difficult, if not impossible, to discern on an objective, value-free basis; it becomes self-evident that noxious-use logic cannot serve as a touchstone to distinguish

Under the Reorganization Act, the legislature granted state governmental entities the authority to consider the “cumulative impact on the surrounding area” when determining whether to issue dredge and fill permits.²⁰⁴ Cumulative impact analysis is designed to equitably distribute dredge and fill activities in a manner that maintains water quality standards and is in the public interest.²⁰⁵ Since governmental entities may consider cumulative impacts when determining whether to grant dredge and fill permits, compensation may be avoided under the nuisance exception to the PPRPA if the governmental entity can demonstrate that the cumulative impacts of the proposed land use will cause damage to the public by compromising water quality standards or other public interests.

regulatory “takings”—which require compensation—from regulatory deprivations that do not require compensation.

Id.

204. 1993, Fla. Laws ch. 93-213, § 30(8) (codified at FLA. STAT. § 373.414(8) (1995)). “[C]umulative impact analysis . . . insure[s] that the Department [of Environmental Protection] . . . consider ‘the cumulative impacts of similar projects which are existing, under construction, or reasonably expected in the future.’” Bruce Wiener & David Dagon, *Wetlands Regulation and Mitigation After the Florida Environmental Reorganization Act of 1993*, 8 J. LAND USE & ENVTL. L. 521, 539 (1993) (quoting *Conservancy, Inc. v. A. Vernon Allen Builder, Inc.*, 580 So. 2d 772, 778 (Fla. 1st DCA), *rev. denied*, 591 So. 2d 631 (Fla. 1991)).

205. Wiener & Dagon, *supra* note 204, at 539.

6. *Temporary Impacts Exception*

Although temporary deprivation of land uses are compensable under takings jurisprudence,²⁰⁶ the PPRPA exempts temporary impacts placed on land from the definition of "inordinate burden."²⁰⁷ Thus, in this respect, takings jurisprudence is more expansive than the PPRPA.

C. *Mitigation through Written Settlement Offers*

One hundred and eighty days prior to filing an action for compensation under the PPRPA, a landowner must inform in writing the appropriate governmental entity of the landowner's intent to seek compensation.²⁰⁸ During this 180-day period, the governmental entity must attempt to resolve the landowner's grievance through a written settlement offer.²⁰⁹

Courts are required to consider the written settlement offer in determining whether reasonable alternatives were offered to the landowner that would have relieved the property from inordinately burdensome regulations.²¹⁰ Generally, no compensation will be awarded if a court determines that reasonable alternatives were available to the landowner and the landowner refused to accept the alternatives.²¹¹ Also, the landowner may be subject to paying the governmental entity's attorney's fees and court costs if the landowner has failed to accept any reasonable alternatives included in the settlement offer.²¹² Thus, the settlement offer may prove to be an important tool for the government to avoid PPRPA compensation and to encourage landowners to accept reasonable mitigating alternatives. The settlement offer may effectuate the following:

- (1) An adjustment of land use or permit standards;
- (2) A request for modification of the requested land use;
- (3) A transfer of developmental rights;
- (4) A request for land swaps or exchanges;
- (5) Mitigation;
- (6) A requirement that locates the land use in the least sensitive portion of the property;
- (7) A condition on the desired land use or development;

206. See *Lucas*, 505 U.S. at 1007 (citing *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304 (1987)).

207. 1995, Fla. Laws ch. 95-181, § 1(3)(e).

208. *Id.* § 1(4)(a).

209. *Id.* § 1(4)(c).

210. *Id.* § 70.001(6)(a).

211. See *infra* notes 254-257 and accompanying text.

212. See *infra* notes 254-257 and accompanying text.

- (8) A request for a more comprehensive study of the proposed land use;
- (9) The issuance of a variance or special exception to the permit;
- (10) The purchase of the real property; or
- (11) No change to the governmental action.²¹³

Since courts are required to consider whether the mitigating alternatives offered by the government were sufficient to relieve any "inordinate burden" caused by the regulation at issue,²¹⁴ the key issue in PPRPA litigation will likely surround a question whether reasonable alternatives were offered to the landowner in the written settlement offer.

A settlement offer that includes a modification, variance, or special exception to the regulation at issue must continue to "protect the public interest served by the regulation at issue and be the appropriate relief" available to prevent an inordinate burden to the property.²¹⁵ This requirement precludes governmental entities from making modifications, variances, or special exceptions that may contravene the purpose of the regulation merely to avoid compensation under the act.²¹⁶ However, the PPRPA does not specifically contain a citizen suit provision enabling third parties to stop the governmental entity from issuing mitigating alternatives that completely dilute the effectiveness of the regulation.

Florida courts generally deny third party standing in the context of land use permitting.²¹⁷ If courts also prevent third parties from intervening in settlement offers under the PPRPA, no safeguards will exist to preclude governmental entities from avoiding compensation under the act by merely issuing variances that are in derogation to the public interest.

213. FLA. STAT. § 70.001(4)(c) (1995).

214. *Id.* § 70.001(6)(a)

215. *Id.* § 70.001(4)(d)1.

216. *Id.*

217. To appeal a permit determination, parties must seek review under the *Florida Administrative Procedure Act*. FLA. STAT. § 120.57(6) (1995). To establish standing under the *Florida Administrative Procedure Act*, a party must have a "substantial interest" in the governmental activity. See *Friends of the Everglades, Inc. v. Board of Trustees of the Internal Improvement Trust Fund*, 595 So. 2d 186, 188 (Fla. 1st DCA 1992) (citing *Agrico Chem. Co. v. Department of Env'tl. Reg.*, 406 So. 2d 478 (Fla. 2d DCA 1981)).

A party seeking to show a substantial injury must demonstrate:

- (1) that he will suffer an injury in fact which is of sufficient immediacy to entitle him to a section 120.57 hearing; and
- (2) that his substantial injury is of the type or nature which the proceeding is designed to protect.

Id. (citing *Agrico*, 406 So. 2d at 482).

The PPRPA makes a distinction between settlement offers that exempt a property from a regulation and settlement offers that exempt a property from a statute.²¹⁸ If the settlement offer contravenes the application of a *statute*, both the governmental entity and the landowner must jointly seek judicial approval “to ensure that the relief granted protects the public interest served by the statute”²¹⁹ This requirement provides safeguards against the government’s ability to avoid compensation by ignoring statutory provisions.

Wetlands development generally requires the destruction of wetlands through dredging and filling. Therefore, the government’s ability to find reasonable alternatives to regulations that prohibit wetlands destruction is limited. Mitigation techniques may serve a significant role in this context.

“Mitigation includes any type of activity performed to minimize the degradation of wetlands, particularly through their restoration, enhancement, or creation.”²²⁰ Governmental entities may rely on four types of mitigation techniques to provide reasonable alternatives that relieve any inordinately burdensome regulations.²²¹ These four techniques are (1) wetland avoidance, (2) wetland restoration, (3) wetland enhancement, and (4) wetland creation.²²²

1. Wetland Avoidance

Due to its relatively low cost, wetland avoidance is generally the most cost-effective alternative for relieving property from inordinately burdensome regulations.²²³ Wetland avoidance involves strategic placement of land use activities so that these activities do not affect environmentally sensitive wetlands.²²⁴ Since wetland avoidance provides an alternate location for the desired land use, courts may

218. FLA. STAT. §§ 70.001(4)(d) 1-2 (1995).

219. *Id.* § 70.001(4)(d)2.

220. Wiener & Dagon, *supra* note 204, at 521-22 (citing DAVID SALVESEN, WETLANDS: MITIGATING AND REGULATING DEVELOPMENT IMPACTS 3 (Nigel Quinney ed., 1990)).

“Mitigation” means an action or series of actions that will offset the adverse impacts on the waters of the state that cause a proposed dredge and fill project to be not permissible. “Mitigation” does not mean:

(a) avoidance of environmental impacts by restricting, modifying or eliminating the proposed dredging and filling.

(b) cash payments, unless payments are specified for use in a previously identified, Department endorsed, environmental or restoration project and the payments initiate a project or supplement an ongoing project .

FLA. ADMIN. CODE ANN. r. 62-312.310(6) (1995).

221. Wiener & Dagon, *supra* note 204, at 574.

222. *Id.*

223. *See id.* at 575.

224. *Id.*

determine that this mitigation technique adequately relieves any inordinately burdensome regulations affecting a landowner's property. However, wetland avoidance may not be feasible if the landowner's property is substantially composed of wetlands. In this case, no suitable alternative land would be available for the requested land use.²²⁵ Under these circumstances, a different technique must be used.

2. *Wetland Restoration*

Wetland restoration focuses on allowing the dredging and filling of an existing wetland in exchange for returning "a damaged wetland to its previous ecologically productive state."²²⁶ From an economic standpoint, wetland restoration is generally preferred over wetland creation.²²⁷ However, under the PPRPA, governmental entities may offer wetland restoration as a relief to an inordinately burdensome regulation only if the restoration "protect[s] the public interest served by the regulations."²²⁸

3. *Wetland Enhancement*

Wetland enhancement generally involves "the selective enhancement of 'a wetland to boost one desirable attribute, such as waterfowl habitat, over another, such as flood control.'"²²⁹ Since the arguments supporting and opposing wetland enhancement are similar to those of wetland restoration, governmental entities should similarly offer wetland enhancement as a relief to an inordinately burdensome regulation only if the enhancement "protect[s] the public interest served by the regulations."²³⁰

4. *Wetland Creation*

Wetland creation is the most expensive form of mitigation technique because it requires landowners to create "wetlands from scratch, turning dry woods into swamps, [and] sandy shores into salt marshes."²³¹ Although wetland creation is an appealing alternative,

225. *Id.*

226. *Id.* (citing John D. Brady, *Mitigation of Damage to Wetlands in Regulatory Programs and Water Resource Projects*, 41 MERCER L. REV. 893, 931 (1990)).

227. *See id.* at 576.

228. FLA. STAT. § 70.001(4)(d)1 (1995).

229. Wiener & Dagon, *supra* note 204, at 577.

230. FLA. STAT. § 70.001(4)(d)1 (1995).

231. Wiener & Dagon, *supra* note 204, at 577 (quoting DAVID SALVESEN, *WETLANDS: MITIGATING AND REGULATING DEVELOPMENT IMPACTS* 3 (Nigel Quinney ed., 1990)).

it has two significant disadvantages: (1) "wetlands are difficult to create because experts in the field have yet to understand the interdependencies between a wetland's vegetation and its animals;"²³² and (2) wetland creation is extremely costly.²³³

Wetland creation may not constitute a suitable settlement offer for two reasons. First, courts may determine that wetland creation is excessively speculative to constitute a reasonable alternative that continues to "protect the public interest served by the regulations."²³⁴ Second, courts may determine that wetland creation is excessively costly to constitute a reasonable alternative to landowners. Given the uncertainties surrounding wetland creation and the high costs involved in its implementation, courts may determine that this is not a reasonable alternative to relieving inordinately burdensome regulations.

5. Mitigation Banking

The mitigation banking process resembles a normal savings account by treating wetlands as fungible commodities that may be interchanged through a credit system. In a normal savings account, a person deposits money into an account. While the dollar amount is credited to that person's account, the actual money deposited is placed into the bank's general reserves and used for other purposes. The person's savings account represents the amount of money that person is entitled to withdraw at any time; however, the amount withdrawn may not exceed the amount deposited. Similarly, mitigation banking is a process where a landowner accumulates mitigation credits by creating, restoring, or preserving wetlands in a given area.²³⁵ Credits are assessed by evaluating the positive effects of the mitigation activity on the environment.²³⁶ The landowner may use these credits to engage in land use activities that result in the destruction of wetlands in other areas.²³⁷ The amount of destroyed wetlands may not exceed the amount of the credits accumulated through the earlier mitigation process.²³⁸ Like a normal savings account, the credits

232. *Id.* at 578. "A Florida study shows an overall survival rate of 27 percent for created wetlands but with the rate at only 12 percent for freshwater sites." Robert E. Beck, *The Movement in the United States to Restoration and Creation of Wetlands*, 34 NAT. RESOURCES J. 781 (1994).

233. Wiener & Dagon, *supra* note 204, at 578.

234. FLA. STAT. § 70.001(4)(d)1 (1995).

235. Wiener & Dagon, *supra* note 204, at 579 (citing CATHLEEN SHORT, MITIGATION BANKING 1-2 (1988)).

236. *Id.*

237. *Id.*

238. *Id.*

received through mitigation banking are fungible because one does not develop the same wetlands that were used to obtain the credit. Instead, the credits are transferable and are used to develop other wetlands areas.

Governmental entities may use mitigation banking as a means of providing reasonable alternatives to the landowner for developing a wetland. Mitigation banking may provide relief from otherwise inordinately burdensome regulations.²³⁹ The PPRPA states:

“[I]nordinately burdened” mean[s] that an action . . . has directly restricted . . . the use of real property such that the property owner is *permanently* unable to attain the reasonable, investment-backed expectation for the existing use of the real property . . . or that the property owner is left with existing . . . uses that are unreasonable . . . [and] bears permanently a disproportionate share of a burden imposed for the good of the public²⁴⁰

Thus, the issues regarding whether mitigation banking relieves a landowner from an otherwise inordinately burdensome regulation become: (1) whether the mitigation banking process retains the property’s investment-backed expectations; and (2) whether requiring a landowner to expend funds by accumulating or purchasing credits elsewhere results in a landowner bearing “a disproportionate share of a burden imposed for the good of the public.”²⁴¹

Courts will likely find that the mitigation-banking process retains a property’s reasonable investment-backed expectations because this process gives a landowner the ability to engage in land use activities that may otherwise be prohibited by wetlands regulations. Thus, mitigation banking preserves a property’s value. Also, since compensation under the PPRPA hinges on whether a regulation *permanently* restricts a land use,²⁴² mitigation banking relieves a governmental entity from paying compensation for any temporary restrictions that may result while the landowner obtains the mitigation credits necessary to develop the property.

239. The importance of mitigation banking as a means of minimizing adverse impacts of wetlands regulation has been recognized by the Florida Legislature.

The Legislature finds that the adverse impacts of activities regulated under this part may be offset by the creation and maintenance of regional mitigation areas of mitigation banks. Mitigation banks can minimize mitigation uncertainty and provide ecological benefits. Therefore, the department and the water management districts are directed to participate in and encourage the establishment of private and public regional mitigation areas and mitigation banks.

FLA. STAT. § 373.4135 (1995).

240. FLA. STAT. § 70.001(4)(e)1 (1995) (emphasis added).

241. *Id.*

242. *Id.*

However, since mitigation credits are obtained by creating, restoring, or preserving other wetlands, a landowner may argue that mitigation banking places an “inordinate burden” on the “existing uses” of the wetlands subject to the mitigation.²⁴³ Thus, the mitigation banking process may relieve the inordinate burden of the property which the landowner seeks to develop, while simultaneously creating a secondary inordinate burden on the mitigating property. The landowner may then attempt to seek compensation under the PPRPA for the secondary burden placed on the mitigating property.

Landowners may also argue that governmental entities are required to pay compensation for requiring the creation, restoration, or preservation of another wetland because this requirement unreasonably results in the landowner’s disproportionately sharing a burden imposed for the public good—the cost of creating, restoring, or preserving wetlands. Thus, the landowner may also seek compensation for these costs under the PPRPA. If courts determine that these costs are compensable under the PPRPA, governmental entities should choose mitigation sites that have no, or very little, “existing uses.”²⁴⁴

However, courts may determine that secondary burdens are not compensable under the PPRPA because the PPRPA treats such burdens as viable forms of settlement offers²⁴⁵ which are designed to relieve any inordinate burdens placed on a property and which must be accepted by the landowner in order to be implemented. Since the landowner must accept the settlement offer in order for the offer to become effective, a court may find that the landowner waived any right to assert that a secondary burden on the mitigating property is compensable under the PPRPA.

D. Ripeness Decisions

If a settlement offer is not accepted by the landowner during the 180-day period, governmental entities must issue a written ripeness

243. This article refers to burdens placed on properties used for mitigation banking as secondary burdens. Mitigation banking creates burdens by requiring landowners to offset the environmental impact of a property’s “existing uses” by restricting the “existing uses” of other wetlands through creation, restoration or preservation. See *supra* notes 235, 240-42 and accompanying text.

244. FLA. STAT. § 70.001(3)(f) (1995) (defining the term “existing use” as including the property’s current use and any suitable “reasonably foreseeable, non-speculative land uses”). *Id.*

245. *Id.* § 70.001(4)(c).

decision describing the property's allowable land uses.²⁴⁶ The ripeness decision, as a matter of law, deems the landowner's claim ripe for review.²⁴⁷ This provision significantly differs from normal takings jurisprudence by allowing the landowner's claim to become ripe at the end of the 180-day period, regardless of whether other administrative remedies are available.²⁴⁸ Generally, under takings jurisprudence, a landowner must exhaust all administrative remedies before a takings claim for compensation becomes ripe.²⁴⁹ However, under the PPRPA, once the written ripeness decision is filed, the landowner may seek compensation. A claim under the PPRPA must be presented within one year "after a law or regulation is first applied by the governmental entity to the property at issue."²⁵⁰

E. Judicial Involvement in the PPRPA

The circuit court of the county where the land is located has jurisdiction to hear claims arising from the PPRPA.²⁵¹ The court must determine: (1) "whether an existing use of the real property or a vested right to a specific use of the real property existed" prior to the existence of the regulation at issue; and, if so, (2) whether, "considering the settlement offer and the ripeness decision, the governmental entity . . . inordinately burdened the real property."²⁵² If a court determines that the governmental action inordinately burdens the property, a jury is impaneled to determine the amount of compensation that the landowner should be awarded.²⁵³

Compensation is determined by calculating the difference between the property's fair market value prior to the governmental action and the fair market value after the governmental action, taking into account the settlement offer and the ripeness decision.²⁵⁴

246. *Id.* § 70.001(5)(a). A governmental entity's failure to issue a ripeness decision during the 180-day period "shall operate as a ripeness decision that has been rejected by the property owner." *Id.*

247. *Id.*

248. *Id.*

249. See discussion *supra* part III.B.3 and part III.C.2.

250. FLA. STAT. § 70.001(11) (1995). However, the statute of limitations for bringing a claim under the PPRPA is tolled until any administrative or judicial proceedings that the landowner brings against the governmental entity are concluded. *Id.*

251. *Id.* § 70.001(5)(f).

252. *Id.* §§ 70.001(6)-(9). If more than one governmental entity inordinately burdens the land, then the judiciary must determine "the percentage of responsibility [that] each governmental entity bears with respect to the inordinate burden." *Id.*

253. *Id.*

254. *Id.* The fair market value prior to the governmental action includes any reasonable investment- backed expectations. *Id.*

Compensation also includes prejudgment interest, attorney's fees, and reasonable costs associated with the litigation.²⁵⁵

The prevailing party is entitled to recover attorney's fees and court costs if the court determines that the settlement offer, including the ripeness decision, either failed to constitute a bona fide offer to resolve the claim²⁵⁶ or constituted a bona fide claim that the landowner should have accepted.²⁵⁷

This provision is important because it gives landowners and governmental entities the incentive to resolve the dispute equitably without requiring a judicial determination. Since attorney's fees may be substantial, landowners may be more willing to accept reasonable settlement offers rather than pursue judicial determinations that may subject them to liability for the government's attorney's fees and court costs. Similarly, governmental entities faced with paying substantial attorney's fees and court costs for both sides may be more inclined to offer reasonable solutions to regulations that impose inordinate burdens on the landowner's property.

V. CONCLUSION

The PPRPA should have a considerable effect on Florida's ability to regulate wetlands. Although the PPRPA subjects governmental entities to another cause of action requiring compensation for inequitable restrictions on land uses, the PPRPA may result in more good faith efforts by landowners and the state to find reasonable solutions to these restrictions. Thus, the PPRPA's effects on the duty of all governmental entities to regulate wetlands may not be all negative. The PPRPA also provides governmental entities with many options to eliminate the inordinate burdens that wetlands regulations may place on private property.

Whether the PPRPA is successful in converging the interests of private landowners and governmental entities depends largely upon judicial interpretations of the act. The PPRPA encourages parties to sit at the negotiating table by softening compensation and ripeness requirements, but discourages parties from seeking judicial determinations by subjecting each party to potentially costly attorney's fees

255. *Id.* §§ 70.001(6)(b)-(c)1. The award of prejudgment interest dates back to the date that the landowner presented the claim to the governmental entity. *Id.* § 70.001(6)(f).

256. *Id.* §§ 70.001(6)(c)1-2. A determination that the settlement offer failed to constitute a bona fide offer to resolve the issue results in attorney's fees and court costs being awarded to the landowner. *Id.* § 70.001(6)(c)1.

257. *Id.* A determination that the landowner failed to accept a bona fide settlement offer results in attorney's fees and court costs being awarded to the governmental entity. *Id.* § 70.001(6)(c)2.

and court costs. When determining whether compensation should be paid under the PPRPA, courts should focus on the reasonableness of any mitigating alternatives offered by the governmental entity. This approach would give both landowners and governmental entities a strong incentive to offer and accept reasonable solutions.

**DRAWING LINES IN THE SHIFTING SANDS OF
CAPE CANAVERAL: WHY COMMON BEACH
EROSION SHOULD NOT YIELD A COMPENSABLE
TAKING UNDER THE FIFTH AMENDMENT**

JEREMY N. JUNGREIS*

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* J.D., expected May 1996, Florida State University College of Law; B.S., 1993, University of Central Florida. Upon graduation, the author will serve as an officer and attorney in the United States Marine Corps. The author wishes to thank Associate Dean Donna R. Christie, Florida State University, for her advice and encouragement, Elizabeth Williamson for her skillful editing, and his fiancée, Jeanette Watkins for seemingly endless patience and understanding during the writing and revision of this article.

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I. INTRODUCTION

Picture the scenario: the year is 1863 and the war between the states is on. The naval fleet protecting Washington sits in an Atlantic port. It has been a difficult winter. The unimproved natural harbor protecting the vessels has been subjected to extensive physical damage from storms; the naval vessels have sustained damage as well. Accordingly, the United States, acting under its constitutional mandate to protect navigation, builds a jetty and breakwater designed to protect the harbor and the naval vessels therein. The navigational improvements are a great success. Damage to the harbor is substantially decreased and national security is bolstered. The only drawback of the harbor improvement project appears to be that the undeveloped and largely unpopulated lands to the south are now eroding at slow but constant rates.

One hundred and thirty years later, a posh development is constructed to the south of the harbor project at Town X. Erosion has been slow but perpetual at Town X for 130 years, but wealthy landowners purchase beach-front property there anyway. Shortly thereafter, a Fifth Amendment takings claim is filed against the federal government on behalf of Town X. Residents of Town X claim that the jetty and improvements have obstructed 130 years of sand that would otherwise have reached their beach. They allege that "but for" the harbor improvements, their dry sand beaches would be approximately three times larger. A federal court, caught up in the spirit of the times, awards the property owners of Town X one billion dollars in damages for the sand that never reached them. The already wealthy property owners of Town X gain compensation for property they never owned—a bountiful windfall. And, of course, federal taxpayers pay the bill for benefits that they never receive. Similar inverse condemnation suits are soon pending throughout the country.

The aforementioned hypothetical, which would have seemed fantastic in years past, became disturbingly realistic in 1994, and remains so. In a remarkably similar case, the United States Court of

Appeals for the Federal Circuit issued an opinion in *Applegate v. United States*¹ allowing 320 property owners to sue the Federal Government for a taking² of their dry sand beaches. The nature of the claim was that federal navigational improvements of the Cape Canaveral Harbor in 1951 had taken sand over a forty year period that otherwise would have replenished the plaintiffs' beaches.³ The *Applegate* case is expected to be tried in the Fall of 1996.⁴ A victory by the plaintiffs in *Applegate* will represent an unprecedented extension of takings doctrine, departing significantly from settled Supreme Court precedent, and contravening prudent fiscal and political policy.

During the last ten years, the Rehnquist Court has significantly broadened the scope of compensable takings under the Fifth and Fourteenth Amendments.⁵ Likewise, the Court of Appeals for the Federal Circuit, which hears all appeals of takings claims against the United States,⁶ has also broadened takings doctrine over the last two years.⁷ Since this shift, state and federal courts are now entertaining

1. 25 F.3d 1579 (Fed. Cir. 1994) (holding that the six year Tucker Act statute of limitations, 28 U.S.C. § 1491 (1988), did not bar a Fifth Amendment inverse condemnation action against the federal government, though the government constructed the Canaveral Harbor Project in 1951).

2. Private property may not be taken for public use without the payment of just compensation to the affected property owner. U.S. CONST. amend. V. The Supreme Court has held that the takings clause of the Fifth Amendment is applicable to the states through the Fourteenth Amendment. *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 160 (1980); *Chicago B. & Q. R.R. Co. v. Chicago*, 166 U.S. 226, 241 (1897).

3. See generally Plaintiffs' Complaint for Inverse Condemnation, *Applegate v. United States*, 28 Cl. Ct. 554 (1993) (No. 93-5180) [hereinafter *Complaint for Inverse Condemnation*].

4. Tony Boylan, *Lawyer, Residents Await Outcome of Suit Over Erosion*, FLA. TODAY (Melbourne, Fla.), Sept. 24, 1995, at 9A.

5. See, e.g., *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304 (1987) ("temporary takings" are compensable, even if the government has relinquished control of the property); *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987) (holding that to be valid, land use exactions must have an "essential nexus" between the exaction and the burden sought to be alleviated); *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992) (establishing a categorical rule that a 100 percent reduction in economic value of land is a "per se taking"); *Dolan v. City of Tigard*, 114 S. Ct. 2309 (1994) (holding that exactions demanded as conditions for development permits must be "roughly proportional" to the impact caused by the new development).

6. See, e.g., *Avenal v. United States*, 33 Cl. Ct. 778 (1995).

7. See, e.g., *Florida Rock Indus., Inc. v. United States*, 18 F.3d 1560 (Fed. Cir. 1994), cert. denied, 115 S. Ct. 898 (1995) (holding that any diminution in value of property may be compensable as a "partial" regulatory taking); *Loveladies Harbor, Inc. v. United States*, 28 F.3d 1171 (Fed. Cir. 1994) (holding that fee ownership may be divided into discrete segments for purposes of determining if a *Lucas* categorical taking has occurred). *Florida Rock* and *Loveladies Harbor* have both come under strong criticism from academia and from some judges on the Federal Circuit. Critics argue both that the decisions contravene Supreme Court precedent, and moreover, stand as examples of unabashed judicial activism. See, e.g., *Florida Rock*, 18 F.3d at 1573 (Nies, C.J., dissenting) ("The majority's theory is contrary to Fifth Amendment 'takings' jurisprudence as delineated by the Supreme Court Labeling its lost use/value theory a 'partial taking' (*ipse dixit*) does not give it any legitimacy."); Michael C. Blumm, *The End of*

more takings claims than ever, prompting some legal scholars to opine that the Takings Clause of the Fifth Amendment has been transformed into the new sword for striking down certain judicially unpopular economic regulations.⁸ Most of this “takings revolution” has occurred in the context of regulatory takings.⁹ The Supreme Court, in contradiction of its relative activism in the regulatory takings arena, has largely eschewed any expansion of the physical takings doctrine despite repeated invitation to do so.¹⁰ *Applegate*, presumably a

Environmental Law? Libertarian Property, Natural Law, and the Just Compensation Clause in the Federal Circuit, 25 ENVTL. L. 171, 173 (1995) (“[U]nderpinning the Federal Circuit decisions is a radically libertarian view of property which countenances an unprecedented vision of judicial activism in reviewing land use [decisions] The result is the creation of a kind of natural law of property development which has no basis in the text of the Constitution, the intent of the Framers, or the history of Anglo-American property law.”).

8. For example, Justice Stevens argues that the Supreme Court’s heightened takings scrutiny in *Dolan*, and other recent takings cases, is very similar to the “substantive due process” analysis used by turn of the century courts to strike down economic regulations in cases like *Lochner v. New York*, 198 U.S. 45 (1905). Specifically, Justice Stevens stated that “both doctrines are potentially open-ended sources of judicial power to invalidate state economic regulations that Members of this Court view as unwise or unfair.” *Dolan*, 114 S. Ct. at 2327 (Stevens, J., dissenting); see also *Nollan*, 483 U.S. at 864 (Stevens, J., dissenting); Blumm, *supra* note 7, at 197-98 (criticizing the Federal Circuit’s decisions in *Florida Rock* and *Loveladies Harbor* (“They reflect a radical libertarian concept of property, grounded in natural law principles and judicial oversight of legislative decision making that will not maximize social welfare as we approach the Twenty-first Century.”)); Edward J. Sullivan, *Substantive Due Process Resurrected Through the Takings Clause: Nollan, Dolan and Ehrlich*, 25 ENVTL. L. 155 (1995).

9. Traditionally, there have been two categories of takings claims under the Fifth Amendment. The first, and more traditional category, is the “physical takings” claim. See generally William Michael Treanor, *The Original Understanding of the Takings Clause and the Political Process*, 95 COLUM. L. REV. 782 (1995). Physical takings claims generally occur when the government physically deprives property owners of the beneficial use of part or all of their land, be it through flood, pervasive noise, or physical trespass by government agents. See, e.g., *Pumpelly v. Green Bay Co.*, 80 U.S. 166 (1871) (finding a physical taking by flooding of land); *United States v. Causby*, 328 U.S. 256 (1946) (holding that frequent low overflights that interfere directly and immediately with use and enjoyment of land requires compensation); *Hendler v. United States*, 952 F.2d 1364, 1376 (Fed. Cir. 1991) (holding that repeated trespass by government on private land may constitute a physical taking).

Regulatory takings are the second, and more recently developed, category of takings. Treanor, *supra*, at 785-98. Regulatory takings occur when government actions deprive private property of such significant value that they are deemed to have gone “too far,” such that compensation is the only way to insure constitutional fairness. *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922) (“The general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking.”).

10. See *Dolan*, 114 S. Ct. at 2309 (holding that exactions are subject to the “rough proportionality” standard and are not to be treated as physical takings); *Yee v. City of Escondido*, 505 U.S. 519, 527-28 (1992) (holding that a rent control ordinance that made land alienation difficult did not constitute a physical taking); *Stevens v. City of Cannon Beach*, 114 S. Ct. 1332 (1994) (Scalia, J., dissenting from denial of certiorari) (protesting certiorari denial of physical takings claim emanating from doctrine of “custom” on Oregon beaches). Some commentators and federal judges have expressed frustration with the Supreme Court for refusing to extend the scope of the physical takings doctrine. See Jay Plager, *Takings Law and Appellate Decision Making*, 25 ENVTL. L. 161, 165 (1995) (arguing that the Supreme Court “could have disposed of [*Dolan v. City of Tigard*] in a page-and-a-half by declaring it a physical taking”). Judge Plager

physical takings claim, presents a factual scenario that, if ruled a taking, would significantly increase the scope of compensable physical takings nationwide¹¹ and effectively eviscerate well-established constitutional doctrine dating back to the Eighteenth Century.¹²

This article advocates drawing a line in the proverbial sand and resisting the expansion of physical takings doctrine, particularly through its application to the facts of *Applegate*. Though arguably societal good has come from the Supreme Court's extension of regulatory takings,¹³ this article argues that a dramatic expansion of physical takings doctrine will result in harm to American society.¹⁴ Abstract expectancies in public goods are simply an insufficient reason to support a new genre of compensable physical takings claims.¹⁵

Accordingly, Part II of this article delineates the traditional constitutional parameters and defenses of physical takings doctrine and assesses the treatment of these themes during modern times. Part III then presents the factual backdrop of the *Applegate* litigation, and examines the Federal Circuit's controversial resolution of a potentially far-reaching statute of limitations issue. Part IV analyzes the significant legal issues presented in *Applegate*, questioning whether free-floating sand can ever be considered a compensable property interest. Assuming a compensable property interest can exist, Part V addresses whether the government can directly "take" beach sands, given the dynamic nature of ocean and beach systems. Part VI assumes, *arguendo*, that a property interest and causation can be established, and thereby discusses what declaration of compensable taking, if any, would be required in the *Applegate* case given modern takings jurisprudence. Finally, Part VII posits economic and political

neglects to observe, however, that to have declared a physical taking in *Dolan* would have been to effectively overrule *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987) and fifty years of state court adjudications of exactions. See *Dolan*, 114 S. Ct. at 2309.

11. See Craig Quintana, *Court Reinstates Suit on Brevard Beach Loss: An Appeals Court Said the Corps of Engineers Had Taken Property While Digging at Port Canaveral*, ORLANDO SENTINEL, June 16, 1994, at B1. "[T]he Army Corps of Engineers is going to be accountable for things they've done all over the country." *Id.* (quoting *Applegate* Plaintiffs' lead attorney Gordon "Stumpy" Harris).

12. See *infra* notes 62-76, 146-68, and accompanying text for a discussion of the navigational servitude doctrine and the public trust doctrine.

13. See generally Frank I. Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165 (1967).

14. See *infra* notes 251-68 and accompanying text for an economic analysis of an expanded physical takings doctrine.

15. *Cf.* Fallini v. United States, 31 Cl. Ct. 53, 57 (1994), *vacated on other grounds*, 56 F.3d 1378 (Fed. Cir. 1995); Avenal v. United States, 33 Cl. Ct. 778, 785 (1995); Broughton Lumber Co. v. United States, 30 Cl. Ct. 239, 243 (1994).

policy arguments against expanding physical takings doctrine into the context of *Applegate*-genre injuries to private property.

II. PHYSICAL TAKINGS DOCTRINE: RECONCILING THE IRRECONCILABLE

A. *The Birth of a Doctrine: Physical Takings by Flood—An Ambiguous Beginning*

The intentional taking of private property for public use is compensable and has been so since the enactment of the Fifth Amendment.¹⁶ The original intent of the Takings Clause was primarily to protect against the uncompensated exercise of eminent domain powers.¹⁷ However, approximately one hundred years after the enactment of the Fifth Amendment, the United States Supreme Court vacated such a strict construction in *Pumpelly v. Green Bay Co.*¹⁸

In *Pumpelly*, no seizure of tangible property occurred. Rather, the Green Bay Company, pursuant to a Wisconsin statute, erected a dam on the Fox River which subsequently flooded Pumpelly's property.¹⁹ The Supreme Court acknowledged that no land had been seized for public use by the State of Wisconsin, but nevertheless concluded that a taking had occurred.²⁰ The Court reasoned that compensation was appropriate because total economic value in the plaintiff's property had been destroyed as a result of government-induced flooding.²¹ However, the Court was careful to narrowly circumscribe the types of value losses that would create an obligation of compensation, limiting the *Pumpelly* holding to cases "where real estate is actually invaded by superinduced additions of water, earth, sand, or other material, or by having any artificial structure placed on it, so as to effectually destroy or impair its usefulness"²²

The Supreme Court first applied *Pumpelly* to find a taking in *United States v. Lynah*.²³ *Lynah* addressed the level of diminution

16. See Treanor, *supra* note 9, at 782.

17. *Id.* at 791-92 ("St. George Tucker, the first legal scholar to offer an interpretation of the [Takings] clause, took the position that it was concerned with physical seizures. In his 1803 treatise, he wrote that the clause 'was probably intended to restrain the arbitrary and oppressive mode of obtaining supplies for the army, and other public uses, by impressment, as was too frequently practiced during the revolutionary war.'") (citation omitted).

18. 80 U.S. 166 (1871).

19. *Id.* at 166-67.

20. *Id.* at 177-78.

21. *Id.*; see also Treanor, *supra* note 9, at 795 n.74.

22. *Pumpelly*, 80 U.S. at 181.

23. 188 U.S. 445, 450 (1903), *overruled in part* United States v. Chicago, M., St. P. & P. R.R. Co., 312 U.S. 592 (1941) (holding that the flooding of 18 inches of water on a South Carolina farm as the result of a dam project rendered the property an "irreclaimable bog" subject to compensation requirement).

required to compel a compensation obligation. Finding for the injured landowner, the *Lynah* Court held that “where the government by the construction of a dam or other public works so floods lands belonging to an individual as to *substantially destroy their value* there is a taking within the scope of the 5th Amendment.”²⁴

In *United States v. Cress*,²⁵ the plaintiff’s property was subjected to intermittent, but inevitably recurring, government-induced overflows from the Cumberland River. The Supreme Court held, for the first time, that a physical invasion of a property interest less than a fee could constitute a compensable taking.²⁶ In response to the federal government’s argument that a compensable taking required complete destruction of a fee’s value, the *Cress* Court held that “it is the character of the invasion, not the amount of damage resulting from it, *so long as the damage is substantial*, that determines the question whether it is a taking.”²⁷ Thus, under the *Cress* standard, the government could be found liable for having taken an easement,²⁸ rather than a fee interest in property, as long as the physical invasion was of the proper character. As Professor Costonis explains, “[t]he flooding cases consistently stress the severity of the trespass by object, whether the interest found to have been taken is a fee or an easement, continuous or otherwise.”²⁹ The plaintiffs in *Applegate* will try diligently to link the facts of their case to *Cress* because of the intermittent nature of the injury in that case. This will not be an easy task.³⁰ As the following discussion illustrates, the facts in *Applegate*

24. *Lynah*, 188 U.S. at 470 (emphasis added). Though the resolution of the “value” issue in *Lynah* remains good law, the case was partially overruled by *United States v. Chicago, M., St. P. & P. R.R.*, 312 U.S. 592 (1941), because a large portion of the flooded property in *Lynah* fell below the mean high water mark, and was thus, non-compensable under the navigational servitude doctrine. *Chicago, M., St. P. & P. R.R.*, 312 U.S. at 598. For a discussion of the development of the navigational servitude doctrine, see *infra* notes 62-76 and accompanying text.

25. 243 U.S. 316 (1917) (finding a taking of property as result of locks and dams along the Kentucky River).

26. *Id.* at 328.

27. *Id.* (emphasis added).

28. *United States v. Cress*, 243 U.S. 316 (1917), and *United States v. Causby*, 328 U.S. 256 (1946), are both examples of compensable “partial takings” cases where the government acquired an “easement” in private property, and therefore, must compensate the property owner for the value of the easement rather than for the value of the fee as a whole. John J. Costonis, *Presumptive and Per Se Takings: A Decisional Model for the Taking Issue*, 58 N.Y.U. L. REV. 465, 546 (1983).

29. Costonis, *supra* note 28, at 547.

30. One critical difference between *Cress* and *Applegate* is that the government caused no physical invasion of land in *Applegate*. It merely interrupted the southerly flow of alluvial sand, so there was no “trespass by object” as there was in *Cress*. See *infra* note 132 and accompanying text.

are more closely aligned with cases in which the Supreme Court has found no compensable taking.

After deciding *Pumpelly*, the Supreme Court exercised great caution in declaring physical takings, finding takings only when required by principles of fundamental fairness.³¹ In particular, the Supreme Court refused to find a taking where physical damage to property was not closely linked to a government project in space and time³² or when flooding was an unforeseeable consequence.³³ For example, in *Bedford v. United States*,³⁴ property owners downstream from a newly constructed revetment in the Mississippi River sued the United States for a taking after the river began eroding their property. The Supreme Court refused to compel compensation, reasoning that:

[i]n the case at bar the damage was strictly consequential. It was the result of the action of the river through a course of years. The case at bar, therefore, is distinguishable from the *Lynah* Case in the cause and manner of the injury. In the *Lynah* Case the works were constructed in the bed of the river, obstructed the natural flow of its water, and were held to have caused, as a direct consequence, the overflow of *Lynah's* plantation. In the case at bar the works were constructed along the banks of the river, and their effect was to resist erosion of the banks by the waters of the river. There was no other interference with natural conditions. Therefore, the damage to appellants' land, if it can be assigned to the works at all, was but an incidental consequence of them.³⁵

In *Sanguinetti v. United States*,³⁶ the plaintiff argued that the destruction of his property by a flood resulted from a nearby canal constructed by the United States.³⁷ The Court, after considering

31. *Cf.* *United States v. Dickinson*, 331 U.S. 745, 748 (1947) ("The Fifth Amendment expresses a principle of fairness and not a technical rule of procedure."). *Pumpelly*, *Cress* and *Lynah* were cases where fundamental fairness mandated compensation. *Pumpelly v. Green Bay Co.*, 80 U.S. 166 (1871); *Cress*, 243 U.S. at 316; *United States v. Lynah*, 188 U.S. 445 (1903), *overruled in part* *United States v. Chicago, M., St. P. & P. R.R. Co.*, 312 U.S. 592 (1941). In all three cases, the plaintiffs, with no reasonable expectation, experienced extensive damage to their respective properties. *Pumpelly*, 80 U.S. at 166-67; *Cress*, 243 U.S. at 318; *Lynah*, 188 U.S. at 467-68. The damage was proven to have been directly caused by a physical invasion resulting from federal public works. *Pumpelly*, 80 U.S. at 177-78; *Cress*, 243 U.S. at 327-28; *Lynah*, 188 U.S. at 468. In essence, these property owners had experienced a de facto ouster from possession, which invoked a right to compensation. See *Gibson v. United States*, 166 U.S. 269, 276 (1897).

32. *Bedford v. United States*, 192 U.S. 217 (1904).

33. *Sanguinetti v. United States*, 264 U.S. 146 (1924).

34. 192 U.S. 217 (1904) (finding that navigation improvements which consequentially caused erosion of private lands were incidental and therefore did not constitute a compensable taking).

35. *Id.* at 225 (emphasis added).

36. 264 U.S. 146 (1924).

37. *Id.*

Pumpelly, Lynah and *Cress*, determined that the facts of *Sanguinetti* were more closely aligned with the *Bedford* scenario and held there was no taking.³⁸ In reaching its decision, the Court found persuasive that:

[i]t was not shown, either directly or inferentially, that the government or any of its officers, in the preparation of the plans or in the construction of the canal, had any intention to thereby flood any of the land here involved, or had any reason to expect that such a result would follow.³⁹

The *Sanguinetti* Court was also persuaded by the plaintiff's inability to show that "the overflow was the direct or necessary result of the structure."⁴⁰

Though the early physical takings cases are difficult to reconcile⁴¹ and may lead to conflicting results, the Court in *Sanguinetti* expressed the most commonly agreed upon standard for physical invasion cases.⁴² "[I]n order to create an enforceable liability against the government, it is at least necessary that the overflow be the direct result of the [navigational] structure, and constitute an actual, permanent invasion of the land, amounting to an appropriation of and not merely an injury to the property."⁴³

38. *Id.* at 149-50.

39. *Id.* at 147-48. Thus, foreseeability appeared to be a concern to the Court in determining if fundamental fairness required compensation. *Cf.* Michelman, *supra* note 13, at 1228-29 n.10.

40. *Sanguinetti*, 264 U.S. at 149-50. Similarly, in *Southern Pacific Co. v. United States*, 266 U.S. 586 (1924), the Supreme Court, relying on *Sanguinetti*, adopted and affirmed the opinion of the Court of Claims, 58 Ct. Cl. 428 (1923), which had held that beach erosion damages emanating from the building of a jetty were unrecoverable because any damages were consequential and removed in time and space from any government action. *Southern Pacific* may carry significant weight in *Applegate* vis-à-vis the issue of causation. *See Southern Pacific*, 58 Ct. Cl. at 428 (discussion on erosion causation).

41. *See Franklin v. United States*, 101 F.2d 459, 463 (6th Cir.) (Simons, J., concurring), *aff'd*, 308 U.S. 516 (1939) ("It is clear, however, from the analysis of the authorities . . . that there is conflict between the holdings in *Pumpelly* and *Lynah* Cases on the one hand and the *Gibson*, *Bedford* and *Jackson* Cases on the other . . .").

42. *See Owen v. United States*, 20 Cl. Ct. 574, 583 (1990) (*Owen II*).

43. *Sanguinetti*, 264 U.S. at 149. *But see* Skip Kirchdorfer v. United States, 6 F.3d 1573 (Fed. Cir. 1993) (holding that a permanent physical taking was established where the United States Navy seized an abandoned warehouse for a period of days).

B. Modern Physical Takings Jurisprudence: A Per Se Rule, But Little Explanation

Prior to 1982 and *Loretto v. Teleprompter Manhattan CATV Corp.*,⁴⁴ all takings cases, whether physical or regulatory, were subject to an ad hoc inquiry to determine whether government action placed unreasonable burdens on a particular landowner for the benefit of the public.⁴⁵ In seeking the proper balance of burden allocation between public and private interests, the United States Supreme Court in *Penn Central Transportation Co. v. New York City*⁴⁶ established three factors for consideration in determining when government action has gone too far so as to constitute a taking: (1) the economic impact of the regulation on the property owner; (2) the degree that the regulation interferes with the property owner's "distinct investment-backed expectations;" and (3) the character of the governmental action.⁴⁷

With regard to the third factor, the character of the governmental action, the *Penn Central* Court instructed that "[a] 'taking' may more readily be found when the interference with property can be characterized as a physical invasion by government," rather than mere economic regulation of private property.⁴⁸ *Penn Central's* "physical invasion" dicta led to the formulation of the Supreme Court's first per se taking rule in *Loretto*.⁴⁹

Loretto involved a claim for compensation against the State of New York by a New York City landlord. The plaintiff's building was subjected to a de minimis physical invasion, specifically, the affixing of cable wire, boxes, plates and screws to the side of the plaintiff's building.⁵⁰ Though acknowledging that the size of the physical

44. 458 U.S. 419 (1982) (holding that legislation requiring landlords to permit cable television companies to install equipment in rental buildings is permanent physical occupation, requiring constitutional compensation).

45. See generally *Pumpelly v. Green Bay Co.*, 80 U.S. 166 (1872); *Northern Transp. Co. v. Chicago*, 99 U.S. 635 (1879).

46. 438 U.S. 104 (1978). The plaintiffs in *Penn Central* were the owners of Grand Central Terminal, which had been designated a historic landmark under a New York City landmark preservation law. *Id.* at 109. The City denied the plaintiffs' request to build a skyscraper on top of Grand Central Terminal because the structure would overwhelm the original design of the terminal and take away from the public's enjoyment of the historic landmark. *Id.* at 117-19. The plaintiffs brought suit, alleging a taking of their property rights above the railroad terminal. *Id.* at 119.

47. *Id.* at 124.

48. *Id.*

49. See *id.* Four years later, the Court cited to *Penn Central's* three-part test in its analysis in *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982). The *Loretto* Court concluded that a physical invasion of private property authorized by the government constituted a per se taking. "[W]e have long considered a physical intrusion by government to be a property restriction of an unusually serious character for purposes of the Takings Clause." *Id.*

50. *Id.* at 438.

invasion was minimal and the public benefits of the cable installation significant, the Supreme Court nevertheless found that a compensable taking had occurred.⁵¹ In reaching this conclusion, the Court reasoned that government authorization of a permanent physical occupation of private property constituted a compensable taking, regardless of the public interests furthered by the governmental action.⁵² The Court found that "permanent" physical takings are different from other types of governmental actions affecting property because they do "not simply take a single 'strand' from the 'bundle' of property rights: [they] chop through the bundle, taking a slice of every strand."⁵³ Five years later, in *Nollan v. California Coastal Commission*,⁵⁴ the Supreme Court reaffirmed the rule that a permanent physical occupation of land by the government creates an impermissible per se taking requiring just compensation.⁵⁵

Nevertheless, the seemingly simple rule of *Loretto* has raised difficult questions. For example, *Loretto* did not define what constitutes protected "property" for purposes of determining the existence and extent of a physical taking.⁵⁶ *Loretto* did not determine whether a physical taking occurs when the government intermittently and incidentally causes injury to private property in the lawful exercise of its police powers.⁵⁷ Moreover, *Loretto* did not delineate the takings

51. *Id.*

52. *Id.* at 426.

53. *Id.* at 435; accord Michelman, *supra* note 13, at 1184.

The one incontestable case for compensation (short of formal expropriations) seems to occur when the government *deliberately brings it about* that its agents, or the public at large, 'regularly' use or 'permanently' occupy, space or a thing which theretofore was understood to be under private ownership.

Id. (emphasis added).

54. 483 U.S. 825 (1987).

55. *Id.* at 832.

56. Since *Loretto*, the lower federal courts have addressed this issue by borrowing from Supreme Court regulatory takings jurisprudence. See *M & J Coal Co. v. United States*, 47 F.3d 1148, 1154 (Fed. Cir. 1995) (using the *Lucas* approach for analyzing a takings claim involving governmental action); accord *Avenal v. United States*, 33 Cl. Ct. 778, 785 (1995); cf. *Lucas v. South Carolina Coastal Council*, 105 U.S. 1003, 1030-31 (1992) (holding, in the context of a regulatory taking, that protectable property expectancies are defined by "existing rules or understandings that stem from an independent source such as state law to define the range of interests that qualify for protection as property under the Fifth and Fourteenth Amendments").

57. *Loretto v. Manhattan Teleprompter CATV Corp.*, 458 U.S. 414, 435 n.12 (1982) ("Not every physical invasion is a taking. As . . . the intermittent flooding cases reveal, such temporary [takings] are subject to a more complex balancing process to determine whether they are a taking."). As the above language in *Loretto* indicates, *Loretto* does not purport to limit or overrule the holdings in *Bedford* and *Sanguinetti* that consequential injuries to property are generally non-compensable under the Fifth Amendment.

But see *Owen v. United States*, 851 F.2d 1404, 1412 (Fed. Cir. 1988) (*Owen I*) (holding that navigational improvements which changed a river current and allegedly caused a house to topple into the river through erosion could be the basis for a takings claim). The *Owen I* court

analysis that should be applied when a physical invasion amounts to something less than a permanent physical invasion. Is it a per se taking anyway⁵⁸ or is the three-prong *Penn Central* test the appropriate mode for determining compensability?⁵⁹

The physical taking analysis is particularly difficult where the government is not the sole cause of the physical intrusion.⁶⁰ Consider Professor Michelman's analysis of "consequential invasion" cases such as *Bedford* and *Sanguinetti*:

The only generalization deducible from the welter of doctrines variously used to determine compensability in 'consequential invasion' cases is that compensation is owing in some, but not all, such cases. . . . It is clear . . . that although the 'invasion' element is indubitably present in these cases, such accidental, 'unintended' governmental trespasses do not automatically trigger a 'taking.'⁶¹

C. The Primary Defense to Physical Takings: The Navigational Servitude Doctrine

The majority of the early takings cases after *Pumpelly* were resolved not on the basis of *Sanguinetti* (that damage was only consequential), but rather on the basis of the "navigational servitude

stated that "it is 'the permanence of the consequences of the Government act [that] is controlling, and there is no additional requirement that the instrumentality of the consequence be purely a governmental one." *Id.* (quoting *Tri-State Materials Corp. v. United States*, 550 F.2d 1 (Ct. Cl. 1977)). *Owen I* arguably conflicts with *Bedford*, *Sanguinetti* and *Union Pacific*. See *infra* note 181 and accompanying text.

58. Judge Plager of the Federal Circuit appears to take this position. Plager, *supra* note 10, at 163-64.

59. See *infra* notes 217-31 for an analysis of this issue.

60. As one commentator has correctly observed, "[t]hrough the physical invasion rule is said to be a per se rule . . . uncertainty exists about what constitutes a physical invasion." James P. Karp, *An Alternative to the United States Supreme Court's Economic-Based Rationale in Takings Analysis*, 2 VILL. ENVTL. L.J. 253, 261 (1991). Compare *United States v. Cress*, 243 U.S. 316 (1917) (finding a taking of property as a result of locks and dams along the Kentucky River) and *Coates v. United States*, 93 F. Supp. 637 (Ct. Cl. 1950) (holding that the United States was liable for improvements to the Missouri River which incidentally damaged the plaintiff's farmland) with *Sanguinetti v. United States*, 264 U.S. 146, 149-50 (1924) (holding that to recover on a takings claim, the plaintiff must show that flooding damage is the "direct or necessary result" of a navigational improvement) ("[T]he [flooding] injury was in its nature indirect and consequential, for which no implied obligation on the part of the government can arise.") and *Bedford v. United States*, 192 U.S. 217 (1904) (holding that physical invasion which occurred as an indirect consequence of a federal public works project was not a compensable taking) and *Southern Pac. Co. v. United States*, 58 Ct. Cl. 428 (1923) (finding that where the ocean erodes private land as the result of jetty or breakwater, injury is consequential and the government is not liable for damages).

61. Michelman, *supra* note 13, at 1228-29 n.110. Professor Michelman explains that such ambiguity exists with respect to consequential physical invasions because "[t]he sense of moral outrage probably is not so easily kindled when physical invasions appear to be accidents." *Id.*

doctrine.”⁶² The navigational servitude doctrine asserts that property rights in navigable waters and submerged lands are vested in the government of the United States.⁶³ The doctrine, which is nearly as old as the United States itself, developed as an adjunct to the federal commerce power.⁶⁴ The United States’ ownership of navigable waterways helped to fulfill the country’s obligation to provide for commerce among the states.⁶⁵

The navigational servitude doctrine was historically “an interest which permit[ed] the federal government to displace or destroy state-recognized property rights in navigable waters . . . without having to pay compensation.”⁶⁶ The Supreme Court reasoned that the failure to compensate for such property interests is not unfair because “[t]here . . . has been ample notice over the years that such property is subject to a dominant public interest.”⁶⁷ Thus, landowners never have had a compensable expectancy in economic interests preempted by the navigational servitude doctrine.

Since the navigational servitude was a “dominant servitude” over other private property rights in navigable waters, riparian and littoral property historically contested the boundaries of the servitude. The Supreme Court firmly resolved this issue in *United States v. Chicago, Milwaukee, St. Paul & Pacific Railroad*,⁶⁸ holding that the navigational servitude extended to all lands in a navigable stream, submerged or

62. See, e.g., *United States v. Chicago, M., St. P. & P. R.R.*, 312 U.S. 592 (1941); *Lewis Blue Point Oyster Cultivation Co. v. Briggs*, 229 U.S. 82 (1913); *Scranton v. Wheeler*, 179 U.S. 141 (1900); *Gibson v. United States*, 166 U.S. 269 (1897).

63. *Gibson*, 166 U.S. at 271.

64. See *Gilman v. Philadelphia*, 70 U.S. 713, 724-25 (1865) (“Commerce includes navigation. The power to regulate commerce comprehends the control for that purpose, and to the extent necessary, of all the navigable waters of the United States For this purpose they are the public property of the nation.”) (emphasis added).

65. See *Chicago, M., St. P. & P. R.R.*, 312 U.S. at 596 (addressing the wide scope of Congress’ power to improve navigation below the high water mark).

66. David B. Hunter, *An Ecological Perspective on Property: A Call for Judicial Protection of the Public’s Interest in Environmentally Critical Resources*, 12 HARV. ENVTL. L. REV. 311, 360 (1988) (quoting JOSEPH L. SAX, *LEGAL CONTROL OF WATER RESOURCES* 96 (1986)); accord *Gibson*, 166 U.S. at 275.

[R]iparian ownership is subject to the obligation to suffer the consequences of the improvement of navigation in the exercise of the dominant right of the government The legislative authority for [public] works consisted simply in an appropriation for their construction, but this was an assertion of a right belonging to the government, to which riparian property was subject.

Gibson, 166 U.S. at 276.

67. *United States v. Kansas City Life Ins. Co.*, 339 U.S. 799, 808 (1950).

68. 312 U.S. 592 (1941) (holding that in an eminent domain proceeding against land owned by a railroad, the federal government was not required to compensate for lands located between the high and low water marks of the river); see also David Guest, *The Ordinary High Water Boundary on Freshwater Lakes and Streams: Origin, Theory, and Constitutional Restrictions*, 6 J. LAND USE & ENVTL. L. 205 (1990).

otherwise, falling below the ordinary high water mark.⁶⁹ The Court further elaborated that no taking of lands can occur below the high water mark of a navigable stream because “[t]he damage sustained [would result] not from a taking of the riparian owner’s property in the stream bed, but from the lawful exercise of a power to which that property [had] always been subject.”⁷⁰

The navigational servitude doctrine has vested significant power in the United States to improve commerce, including the building of structures within the bed of navigable waters. The doctrine allows the federal government to avoid incurring an obligation to compensate for damages caused below the high water mark.⁷¹ For example, the Supreme Court has held that no taking occurred when the United States dredged a channel, destroying privately owned oyster beds,⁷² altered a river, depriving a landowner of access to deep water for a boat landing,⁷³ and ended a stream’s navigability outright.⁷⁴

The Supreme Court has extended the navigational servitude doctrine to hold that value inherent in the flow of a stream is vested in the government pursuant to the navigational servitude.⁷⁵ Thus, when a

69. *Chicago, M., St. P. R.R.*, 312 U.S. at 597. Of course, by making the high water mark the boundary, the Supreme Court raised new questions about how the high water mark would be determined. See generally John A. Humbach & Jane A. Gale, *Tidal Title and the Boundaries of the Bay: The Case of the Submerged “High Water” Mark*, 4 FORDHAM URB. L.J. 91 (1975) (discussing divergence of opinion from jurisdiction to jurisdiction on the proper setting of the high water mark).

The United States must pay compensation for damages it causes to property above the high water mark. *United States v. Willow River Power Co.*, 324 U.S. 499, 509 (1945) (“High-water mark bounds the bed of the river. Lands above it are fast lands and to flood them is a taking for which compensation must be paid.”).

70. *Chicago, M., St. P. & P. R.R.*, 312 U.S. at 597.

71. See, e.g., *Scranton v. Wheeler*, 179 U.S. 141 (1900); *Gibson v. United States*, 166 U.S. 269, 272 (1897).

It is not, however, to be conceded that congress has [sic] not power to order obstructions to be placed in the navigable waters of the United States, either to assist navigation or to change its direction . . . *It may construct jetties*. It may require all navigators to pass along a prescribed channel, and may close any other channel to their passage.

Id. (citations omitted) (emphasis added). In the context of the *Applegate* litigation, *Gibson* specifically recognizes the construction of jetties as a valid aspect of the navigational servitude power. *Id.*

72. *Lewis Blue Point Oyster Cultivation Co. v. Briggs*, 229 U.S. 82 (1913).

73. *Gibson v. United States*, 166 U.S. 269 (1897).

74. *United States v. Commodore Park, Inc.*, 324 U.S. 386 (1945); accord *Owen v. United States*, 851 F.2d 1404, 1410 (Fed. Cir. 1988).

75. *United States v. Twin City Power Co.*, 350 U.S. 222, 225-26 (1956).

It is argued . . . that the special water-rights value should be awarded the owners of this land since it lies not in the bed of the river nor below high water but above and beyond the ordinary high-water mark. An effort is made by this argument to establish that this private land is not burdened with the Government’s servitude. *The flaw in that reasoning is that the landowner here seeks a value in the flow of the*

governmental action withholds sand or any other commodity that would not otherwise inhere in adjacent riparian lands “but for” the flow of the navigable water, no compensation obligation is created.⁷⁶

III. APPELATE V. UNITED STATES: ONE SMALL STEP FORWARD FOR THE LIBERTARIAN, ONE GIANT STEP BACKWARD FOR THE FEDERAL TAXPAYER

A. *From Godsend to Goat: The Story of the Canaveral Harbor Project*

In 1950, an economic windfall befell the residents of what is now the “Space Coast” of Florida.⁷⁷ The construction of a large harbor at Cape Canaveral pleased the business interests in largely rural and undeveloped Brevard County.⁷⁸ Commerce was expected to significantly improve and transportation costs to decrease because citrus and agricultural producers would no longer have to ship their products by rail to the nearest deep water ports in Jacksonville and Ft. Pierce.⁷⁹ In addition, the government added a military component to the harbor, promising increased jobs and business opportunities.⁸⁰ Tourism revenues were expected to increase in response to the new possibilities for commercial fishing and recreational boating.⁸¹ Things were looking good.

Then, in 1956, things got even better. That year the National Aeronautics and Space Agency (NASA) decided to locate its first space center on lands adjacent to Canaveral Harbor as a result of the construction and improvement of Canaveral Harbor⁸² and the largely

stream, a value that inheres in the Government's servitude and one that under our decisions the Government can grant or withhold as it chooses. It is no answer to say that payment is sought only for the location value of the fast lands. That special location value is due to the flow of the stream; and if the United States were required to pay the judgments below, it would be compensating the landowner for the increment of value added to the fast lands if the flow of the stream were taken into account.

Id. (emphasis added).

76. See *Owen I*, 851 F.2d at 1413; *Pitman v. United States*, 457 F.2d 975, 978 (Ct. Cl. 1972), *overruled in part Owen I*, 851 F.2d at 1404; *cf. Lambert Gravel Co. v. J.A. Jones Constr. Co.*, 835 F.2d 1105 (5th Cir. 1988) (holding that the government can assert a navigational servitude to prevent a contractor from using a sand bar located below the high water mark of river as borrow material).

77. The term “Space Coast” refers primarily to Brevard County, Florida, where the Kennedy Space Center is located, and also to Flagler, Volusia, and Indian River counties.

78. See REPORT OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, SUBJECT: CANAVERAL HARBOR, FLORIDA 3-5 (July 6, 1962).

79. *Id.*

80. *Id.*

81. *Id.* at 5.

82. The rocket booster for the space crafts, namely the Apollo space crafts, had to be transported to the Spaceport by barge. Telephone Interview with Lisa Malone, Chief of the

undeveloped nature of coastal Brevard County.⁸³ With the successful implementation of NASA, Brevard and adjacent counties experienced population explosions.⁸⁴ High-tech defense industries, drawn by the proximity of NASA and Patrick Air Force Base, soon relocated to Brevard County.⁸⁵ But growth was not occurring everywhere. Some beaches south of Port Canaveral began to erode.⁸⁶

In the mid 1960s, previously rural coastal areas first experienced large-scale beach development.⁸⁷ People began building on coastal properties, often without observing prudent set-back provisions. And the erosion continued.⁸⁸ The United States Army Corps of Engineers

Media Services Office, NASA (April 5, 1996). Today the Space Shuttle's external tank is transported by barge to the Spaceport. *Id.* Hence, the special construction of the port was likely critical to NASA's location in Brevard County because of the need to transport equipment by barge. In this way, the harbor was essential to Brevard County's growth and high-tech employment opportunities. *See also* Letter from confidential source on file with author ("... [T]he presence of NASA was dependent upon the development of the port facilities within the Space Coast area.").

83. NASA PUBLIC AFFAIRS, THE KENNEDY SPACE CENTER STORY 1-2 (1991). Brevard County was predominantly undeveloped prior to a population explosion in the early 1960s. In 1950 Brevard County's population was 23,653. 1990 FLORIDA CENSUS HANDBOOK 3 (1994). In 1970, Brevard County's population had grown to 230,006. *Id.* Between 1950 and 1960, Brevard's 371 percent increase in population was greater than the growth of any other county in Florida. *Id.* "The increase [in the 1980s] matched the migration to Brevard in the 1960s, when thousands came to the Space Coast to work for NASA in the early years of the space program." John J. Glisch, *Census Figures Really Add Up in Brevard County a Diversified Economy Created Plenty of Jobs, and Growth Surged in the 1980s by 126,000 Residents to 398,978*, ORLANDO SENTINEL, April 3, 1992, at D1. Therefore, at the time of Canaveral Harbor's construction in 1951, the Brevard County coastline was known as "mosquito county," but not much else. David Ballingrud, *NASA Cutbacks Pull Space Coast Down to Earth*, ST. PETERSBURG TIMES, July 23, 1995 ("Once known as Mosquito County, Brevard became the fastest growing county in the nation during the early days of the space program."). After the construction of the Harbor and subsequent location of the space program, population soared. *Id.* The rural nature of Cape Canaveral and the adjacent coastal areas was critical to NASA's location in Brevard County. NASA PUBLIC AFFAIRS *supra*. Logically, the possibility of aeronautic catastrophes precluded NASA's location in a more populous coastal area. *Cf.* Appendix A (delineating dates when *Applegate* plaintiffs took title to their respective properties).

84. *See* FLORIDA CENSUS HANDBOOK, *supra* note 83, at 3.

85. *See, e.g.*, Richard Burnett, *On the Offensive High-Tech Harris Stays Strong by Moving Away from Defense*, ORLANDO SENTINEL, Feb. 13, 1995 (discussing the history of Automatic Press Co. and noting that "[i]n the late 1960s and the 1970s, Harris expanded into aerospace and . . . moved its headquarters to Brevard County in 1977 to be closer to NASA and Kennedy Space Center").

86. Most objective experts agree that the jetties and other navigational improvements constructed to protect Port Canaveral were at least one of several factors causing the erosion. *See, e.g.*, ORRIN H. PILKEY, JR., ET AL., *LIVING WITH THE EAST FLORIDA SHORE* 14-15, 93-95 (1984) (discussing barrier island migration and the history of beach erosion in Brevard County); *see also infra* notes 198-216 and accompanying text.

87. Between 1960 and 1969 a total of 43,174 homes were built in Brevard County. FLORIDA CENSUS HANDBOOK, *supra* note 83, at 154. This is in comparison to the small total of 5894 homes built in Brevard County at any time prior to 1950. *Id.*

88. Ironically, even the plaintiffs in *Applegate* concede that by the mid-1960s, when most of the beach construction was occurring in Brevard County, the public was "aware that the

studied proposals for reversing the erosion, but the unusual currents created by the flow of the Atlantic around Cape Canaveral, caused the Corps to repeatedly scrap ineffective plans for implementing erosion control mechanisms.⁸⁹

In 1970, the first takings lawsuit concerning the Canaveral Harbor Project, *Pitman v. United States*,⁹⁰ was filed against the federal government, seeking damages for the erosion of beach-front property in Brevard County.⁹¹ The Court of Claims granted summary judgment to the United States on the merits, in part because property damages were consequential to the Canaveral Harbor Project.⁹² More importantly, the court granted summary judgment on the basis of *United States v. Twin City Power Co.*,⁹³ because the plaintiff had no

Canaveral Harbor Project was the cause of significant erosion to Brevard County's sandy beaches." Complaint for Inverse Condemnation, *supra* note 3, at 9. Moreover, few would dispute that NASA was the catalyst behind the population boom and subsequent demand for coastal land in Brevard County during the 1960s. Lynne Bumpus, *Apollo 11, 25th Anniversary: Launch Bought Exciting Days, Bulging Cities*, ORLANDO SENTINEL, July 16, 1994. As one commentator noted:

The engineers, technicians and assorted other workers who dribbled into the area just west of Cape Canaveral in the late 1950s and early 1960s were entering a county where the population had topped out at a little more than 20,000 people. Today, Brevard County's population exceeds 400,000. Titusville had only one gas station and only 4,500 people living in what were actually three towns—Titusville, Indian River City and Whispering Hills. Within three decades, the area had grown to more than 45,000 people [O]nce President John F. Kennedy made the commitment in May 1961 to put an astronaut on the moon by the end of the decade, people poured in.

Id.

As NASA and its supporting high tech industries grew, so too did the value of coastal property in Brevard County. Ballingrud, *supra* note 83, at 1B ("What's been good for NASA over the years has been good for Florida's space coast."). Hence, much of the appreciation in the value of coastal lands was a direct result of the presence of NASA, which could not have located in Brevard County but for the Canaveral Harbor Project. See *supra* note 82. Those that bought coastal land in Brevard County may have been burdened by erosion as of the 1960s. Nevertheless, the burden of erosion was significantly outweighed by the economic benefits bestowed on Brevard County landowners by virtue of the Canaveral Harbor Project and NASA. See *infra* notes 226-30 and accompanying text.

89. See Defendant's Consolidated Cross-Motion for Summary Judgment and Response to Plaintiff's Motions for Partial Summary Judgment at Exhibit B, p.6, *Applegate v. United States*, No. 92-832-L (Fed. Cir. 1996).

90. 457 F.2d 975 (Ct. Cl. 1972), *overruled in part Owen I*, 851 F.2d 1404 (Fed. Cir. 1988).

91. *Id.* Mr. Pitman is a plaintiff in the *Applegate* litigation as well. *Applegate v. United States*, 28 Cl. Ct. 554, 563 (1993), *rev'd*, 25 F.3d 1579 (Fed. Cir. 1994).

92. *Pitman*, 457 F.2d at 977. *Accord Sanguinetti v. United States*, 264 U.S. 146, 149 (1924) (holding that the government was not liable for damages where overflow was not the direct result of canal construction and where there was no permanent physical invasion amounting to more than mere injury to the property); *Southern Pac. Co. v. United States*, 58 Ct. Cl. 428 (Fed. Cir. 1923), *aff'd*, 266 U.S. 586 (1924) (holding that where the ocean eroded private land as the result of a jetty or breakwater, injury was consequential and the government was not liable for damages).

93. 350 U.S. 222, 224-25 (1956).

property interest in floating sand, the value of which inhered in the federal government's navigational servitude.⁹⁴ In 1988, however, the Federal Circuit partially overruled *Pitman* in *Owen v. United States (Owen I)*.⁹⁵

With *Pitman* no longer in full effect, suit was commenced in 1992 against the United States Army Corps of Engineers for exactly the same claim that was rejected in 1972. Hence, *Applegate v. United States*⁹⁶ was born.

B. The Statute of Limitations Issue

The *Applegate* plaintiffs⁹⁷ filed their complaint in the Court of Federal Claims in late 1992 seeking hundreds of millions of dollars for the taken sand and for the cost of building a sand transfer facility to replenish eroded sand.⁹⁸ Shortly thereafter, the United States Department of Justice, representing the United States and the Army Corps of Engineers, filed a motion to dismiss the complaint for lack of jurisdiction and for untimely filing under the six year statute of limitations.⁹⁹

The plaintiffs, relying on the "stabilization doctrine" of *United States v. Dickinson*,¹⁰⁰ argued that the statute of limitations should be

94. *Pitman*, 457 F.2d at 978.

95. 851 F.2d 1404, 1412-14 (Fed. Cir. 1988). As will be discussed later, the part of *Pitman* that remained good law after *Owen I* should still bar most recovery in *Applegate*. See *infra* notes 180-83 and accompanying text.

96. 28 Cl. Ct. 554 (1993), *rev'd*, 25 F.3d 1579 (Fed. Cir. 1994).

97. There are now 320 plaintiffs in the litigation and the number appears to be growing by the day. See Defendant's Proposed Protocol for the Selection of Test Cases/Plaintiffs at 2-3, *Applegate v. United States*, 28 Cl. Ct. 554 (1993), (No. 92-832-L) [hereinafter Defendant's Proposed Protocol].

98. *Applegate v. United States*, 28 Cl. Ct. 554, 557 (1993), *rev'd*, 25 F.3d 1579 (Fed. Cir. 1994).

99. *Applegate v. United States*, 25 F.3d 1579, 1581 (Fed. Cir. 1994). Takings claims against the federal government for damages must generally be brought within six years in the Court of Federal Claims. 28 U.S.C. § 2501 (1994). The pleader may make a motion to dismiss for lack of subject matter jurisdiction under FED. R. CIV. P. 12 (b)(1).

When the United States does not provide compensation through eminent domain procedures, the Tucker Act, 28 U.S.C. § 1491 (1988), operates to enforce landowner's compensatory right. Thus, the landowners' claim properly lies within the jurisdiction of the Court of Federal Claims under the Tucker Act.

Applegate, 25 F.3d at 1581 (citations omitted).

100. 331 U.S. 745, 749 (1947) (holding that recurrent flooding of property as the result of dam backwater was a taking, and that the statute of limitations did not bar the claim because property owner could wait until recurrent damage stabilized before filing takings claim). The doctrine announced in *Dickinson* essentially posits that in cases of recurrent flooding and erosion, a plaintiff is not required to resort to piecemeal litigation to avoid being barred by the statute of limitations. *Id.*

When the degree of damage is difficult to assess, the statute of limitations is tolled because:

tollled.¹⁰¹ The Court of Federal Claims rejected the plaintiffs' arguments and granted the motion,¹⁰² reasoning that plaintiffs knew or should have known of the erosion damage by the mid-1960s and should have recognized that their injury would only continue.¹⁰³

The Federal Circuit reversed, holding that the *Dickinson* stabilization doctrine was properly invoked by the plaintiffs.¹⁰⁴ Specifically, the Federal Circuit observed: "In this case . . . the continuous physical taking process is very gradual. The shoreline is slowly receding over a period of years. Moreover, the almost imperceptible physical process has delayed detection of the full extent of the destruction—a necessary precondition of striking a final account."¹⁰⁵ The Federal Circuit also found that alleged representations made by the Corps of Engineers further prohibited the government from asserting the statute of limitations.¹⁰⁶ Potentially more ominous for the government was the dicta utilized by Judge Rader in remanding the case to the district court. In his concluding statement, Judge Rader opined that "[t]hese landowners, suffering an ongoing gradual, physical taking, need not risk premature litigation."¹⁰⁷

[i]f suit must be brought . . . as soon as . . . land is invaded, other contingencies would be running against [the landowner]—for instance, the uncertainty of the damage and the risk of res judicata against recovering later for damage as yet uncertain An owner of land flooded by the Government would not unnaturally postpone bringing a suit against the Government for the flooding until the consequences of inundation have so manifested themselves that a final account may be struck.

Id.

101. *Applegate*, 28 Cl. Ct. at 565.

102. *Id.*

103. *Id.* at 563. The court found particularly persuasive the fact that one of the *Applegate* plaintiffs, Robert Pitman, had himself sued the federal government for the same cause of action in 1970. *Id.*

104. *Applegate*, 25 F.3d at 1584.

105. *Id.* at 1582.

106. *Id.* ("The Corps itself has held forth the promise of a sand transfer plant for years. Authorized in 1962 and proposed again in 1988, the sand transfer plant would reverse the continuous erosion process.")

107. *Id.* at 1584. It is not difficult to see what result Judge Rader is expecting on remand. Fortunately for the Justice Department, if *Applegate* comes back to the Federal Circuit on its merits, the case will probably not be reviewed by the same panel as that which heard the statute of limitations issue. Compare *Applegate*, 25 F.3d at 1580 (Judges Michel, Plager, and Rader) with *Applegate v. United States*, 1996 WL 34821 (Fed. Cir. 1996) (Judges Newman, Clevenger, and Rader).

C. *The First Step Down the Slippery Slope*

The Federal Circuit truly stretched to invoke the *Dickinson* stabilization doctrine in *Applegate*.¹⁰⁸ If *Dickinson* only requires that a property owner be allowed to wait until “consequences of inundation have so manifested themselves that a final account may be struck,”¹⁰⁹ then it is difficult to see how this manifestation did not occur in 1970, when Robert Pitman filed suit against the federal government for an identical claim.¹¹⁰ Mr. Pitman’s claim was ripe when he filed it. Indeed, evidence of erosion was significant in 1970.¹¹¹ Nothing changed so dramatically between 1970 and 1992 that the consequences of the governmental action became ascertainable. The property damage that occurred between 1970 and 1992 was of the same type that the plaintiffs and Mr. Pitman claimed to have noticed by the mid-1960s.¹¹² If, as the Federal Circuit’s dicta in *Applegate* indicates,¹¹³ *Dickinson* requires beach erosion to completely “stabilize” before plaintiffs can settle a “final account” with the government, then the *Applegate* plaintiffs’ claim merits dismissal as unripe.¹¹⁴

Moreover, statements that the Corps of Engineers may have made regarding potential construction of a sand-transfer plant are irrelevant to the accrual of the statute of limitations because the plaintiffs had knowledge of their claim.¹¹⁵ The statute of limitations should not have been tolled because “[m]isstatements, opinions, and even outright fabrications do not toll a claim where plaintiff is on notice or the alleged injury is not inherently unknowable.”¹¹⁶

Under the Federal Circuit’s interpretation of the statute of limitations in *Applegate*, the federal government is unlikely to gain repose

108. Diligent research has not produced a case in any jurisdiction where a court was willing to toll an inverse condemnation statute of limitations for anything approaching forty years.

109. *United States v. Dickinson*, 331 U.S. 745, 749 (1947).

110. *Pitman v. United States*, 457 F.2d 975 (Ct. Cl. 1972), *overruled in part Owen I*, 851 F.2d 1404 (Fed. Cir. 1988).

111. *Pitman*, 457 F.2d at 978.

112. *Applegate v. United States*, 28 Cl. Ct. 554, 563 (1993), *rev’d*, 25 F.3d 1579 (Fed. Cir. 1994).

113. *Applegate v. United States*, 25 F.3d 1579, 1582-83 (Fed. Cir. 1994).

114. The *Applegate* plaintiffs know no more now about the “permanent” extent of their injury than they did in 1970. If stabilization of the plaintiffs’ injury has not yet occurred, then their action is not yet ripe for adjudication. See Defendant’s Proposed Protocol, *supra* note 97, at 9; cf. *Fallini v. United States*, 56 F.3d 1378, 1381 (Fed. Cir. 1995) (refusing to broaden the *Dickinson* doctrine where an unending conflict with the statute of limitations would result).

115. *Applegate v. United States*, 28 Cl. Ct. 554, 563 n.9 (1993), *rev’d*, 25 F.3d 1579 (Fed. Cir. 1994). See *United States v. Kubrick*, 444 U.S. 111, 123 (1979) (holding that the accrual of claim was not postponed where the plaintiff knew of the injury, but had only to discover whether injury was negligently inflicted by the government agency).

116. *Kubrick*, 444 U.S. at 123.

from claims of takings by beach erosion. Presumably, plaintiffs could wait an infinite period, or until every piece of sand has eroded from their beach, before filing a claim for compensation. Taking the *Applegate* court's evaluation of the statute of limitations issue to its logical extreme, any landowner throughout the United States with an eroding beach, which could conceivably be linked to federal government action, could bring an action for compensation against federal taxpayers.¹¹⁷ The time that the government action occurred, whether during the 1930s, the American Civil War, or beyond, would be irrelevant.¹¹⁸ Congress created the six year Tucker Act limitations period to prevent these exact scenarios.¹¹⁹

Over the past two hundred years, the federal government, the individual states, and local communities have constructed numerous jetties, groins and sea walls to aid navigation.¹²⁰ Such navigational improvements have caused erosion similar to the erosion affecting the plaintiffs in *Applegate* around the country.¹²¹ If the resolution of the statute of limitations issue in *Applegate* is interpreted literally, the courts will soon be overflowing, and "inverse condemnation" will become a household term for the federal taxpayer.¹²²

D. Towards Trial on the Merits

Applegate is expected to go to trial on its merits during the Fall of 1996.¹²³ Setting the Federal Circuit's dicta aside, the *Applegate* plaintiffs must prove a great deal to prevail on the merits of their physical takings claim. The plaintiffs essentially must prove three

117. See *Applegate*, 28 Cl. Ct. at 565 ("A decision from [this] court countenancing plaintiffs' theory would open [this] court to a deluge of stale claims. Of course, this is precisely what the congressionally mandated limitations period seeks to prevent.").

118. See generally discussion *supra* pp. 1-3.

119. *Kubrick*, 444 U.S. at 117 (stating that statutes of limitations "represent a pervasive legislative judgment that it is unjust to fail to put the adversary on notice to defend within a specified period of time and that 'the right to be free of stale claims in time comes to prevail over the right to prosecute them'" (citations omitted)).

120. See generally WALLACE KAUFMAN & ORRIN H. PILKEY, JR., *THE BEACHES ARE MOVING: THE DROWNING OF AMERICA'S SHORELINE 195-205* (1983); Tony Boylan, *Homeowners Blame Port Canaveral Jetties for Problem*, FLA. TODAY (Melbourne, Fla.), Sept. 24, 1995, at 8A.

121. See generally PILKEY, *supra* note 86, at 42-45 for a discussion of the extensive use of jetties and other erosion causing coastal engineering on the East Coast of Florida.

122. The Federal Circuit may have recognized that it implicitly eviscerated the Tucker Act statute of limitations in *Applegate*, and accordingly, may narrow *Applegate* to its facts. See, e.g., *Fallini v. United States*, 56 F.3d 1378 (Fed. Cir. 1995) (where wild horses had been drinking plaintiffs' water continuously since 1972, *Applegate* did not apply because plaintiffs were aware of the permanent nature of the damage many years before filing their claim); *Alaska v. United States*, 32 Cl. Ct. 689, 700 (1995) (in the absence of a gradual physical encroachment caused by the government, *Applegate* does not apply).

123. Boylan, *supra* note 4, at 9A.

things. First, they must demonstrate that they have a property interest (compensable expectancy) in the littoral drift sand for which they allege the government has deprived them.¹²⁴ Then they must face the difficult burden of proving that the Canaveral Harbor Project was the direct and proximate cause of their taken compensable expectancy.¹²⁵ If the plaintiffs satisfy these two steps, then the plaintiffs then must convince the court that a permanent physical occupation has occurred before they can take advantage of the *Loretto* per se taking rule.¹²⁶ If the court finds that a temporary taking, instead of a permanent physical taking, has occurred, then the plaintiffs may not fall within the per se rule of *Loretto*.¹²⁷

IV. A PROPERTY INTEREST IN SAND

To state a takings claim under the Fifth Amendment, a claimant must "demonstrate ownership or title" in an economic expectancy "at the time of the taking."¹²⁸ A property interest must be demonstrated whether the claim is characterized as a physical or regulatory taking.¹²⁹

The *Applegate* plaintiffs' property injury is beach erosion allegedly caused by the federal government. However, even the plaintiffs would concede that the federal government did not physically inundate the plaintiffs' beaches, washing away their sand. To have precipitated a traditionally defined physical invasion, as contemplated by *Cress*¹³⁰ and *Dickinson*,¹³¹ the federal government would have to have raised the ocean level or altered the course of beach waters causing flooding of the plaintiffs' beaches.¹³² This dramatic oceanic

124. See *Avenal v. United States*, 33 Cl. Ct. 778, 785 (1995); *Fallini v. United States*, 31 Cl. Ct. 53, 57 (1994), *vacated on other grounds* 56 F.3d 1378 (Fed. Cir. 1995).

125. See *Owen II*, 20 Cl. Ct. 574, 583 (1990).

126. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982). Judge Rader's dicta in *Applegate* indicates that he may consider this case to be a temporary taking. *Applegate*, 25 F.3d 1579, 1582-83 (Fed. Cir. 1994) ("With a sand transfer plant in place, the landowners would encounter little, if any, permanent destruction of their shoreline property Of course, installation of the sand transfer plant will not eliminate the Government's obligation to compensate the landowners if the erosion amounts to a temporary physical taking.").

127. See *infra* notes 220-25 and accompanying text.

128. *Fallini*, 31 Cl. Ct. at 57 (holding that there is no ownership right in water on public land where a landowner sued for a taking caused by wild horses drinking water on grazing allotment).

129. *Avenal v. United States*, 33 Cl. Ct. 778, 784-85 (1995).

130. 243 U.S. 316 (1917).

131. 331 U.S. 745 (1947).

132. See *Pitman v. United States*, 457 F.2d 975, 977 (Ct. Cl. 1972), *overruled in part Owen I*, 851 F.2d 1404 (Fed. Cir. 1988). At a minimum, to recover for a direct taking of part of their fee interest, plaintiffs would have to prove that the federal government redirected the ocean current so that it artificially fell with particular force against their properties. See *Southern Pac.*

effect did not happen, and the *Applegate* plaintiffs do not contend that it did. Thus, in the traditional sense, none of the plaintiffs' fee ownership was literally "taken" by the federal government.

This does not end the inquiry, however. The plaintiffs allege a taking of littoral "river of sand," arguing that their beaches would have been replenished with sand "but for" the navigational improvements constructed by the Corps of Engineers.¹³³ Thus, the plaintiffs never possessed the property interest that they alleged was taken. This lack of physical possession does not preclude the plaintiffs from having a protectable property interest, but the plaintiffs' burden is significantly more difficult. The plaintiffs must prove a "compensable expectancy"¹³⁴ in the obstructed beach sand that never reached them.

The plaintiffs argue that as beach-front property owners, they have an economic expectancy in receiving the allegedly obstructed river of sand.¹³⁵ Case law clarifies, however, that not every economic expectancy is a constitutionally protected property interest.¹³⁶ Only those economic interests that have the law to back them are compen-

Co. v. United States, 58 Ct. Cl. 428 (1923), *aff'd*, 266 U.S. 586 (1924) (holding that where the ocean erodes private land as the result of jetty or breakwater, the injury is consequential and the government is not liable for damages). If such a showing were made, their chances of compensation would be uncertain. *Id.* See also *Paty v. Town of Palm Beach*, 29 So. 2d 363 (Fla. 1947) (finding no compensable taking where erosion of plaintiff's property was directly caused by the City of Palm Beach's construction of a groin).

133. See *Applegate v. United States*, 28 Cl. Ct. 554, 556-57 (1993), *rev'd*, 25 F.3d 1579 (Fed. Cir. 1994).

134. The United States Claims Court in *Broughton Lumber Co. v. United States*, 30 Cl. Ct. 239, 243 (1994) explained what a "compensable expectancy" is. Specifically, "[o]ne who claims a taking of an expectancy rooted in a property right must show that the expectancy is reasonable in order to receive compensation. The expectancy must be fortified by law" *Id.* See also *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 161 (1980) ("A mere unilateral expectation or an abstract need is not a property interest entitled to protection."); JEREMY BENTHAM, *THE THEORY OF LEGISLATION* 68, 69 (C.K. Ogden ed., Richard Hildreth Trans., 1975).

The idea of property consists in an established expectation; in the persuasion of being able to draw such or such an advantage from the thing possessed, according to the nature of the case. Now this expectation . . . can only be the work of law. I cannot count upon the enjoyment of that which I regard as mine, except through the promise of the law which guarantees it to me.

Id.

135. *Applegate*, 28 Cl. Ct. at 556.

136. See *United States v. Willow River Power Co.*, 324 U.S. 499, 502 (1945) ("[N]ot all economic interests are 'property rights'; only those economic advantages are 'rights' which have the law [sic] back of them, and only when they are so recognized may courts compel others to forbear from interfering with them or to compensate for their invasion."). See also *Kaiser Aetna v. United States*, 100 S. Ct. 383, 392 (1979); *Atlas Corp. v. United States*, 895 F.2d 745, 756 (Fed. Cir.), *cert. denied*, 498 U.S. 811 (1990); *Ballam v. United States*, 806 F.2d 1017, 1020 (Fed. Cir. 1986), *cert. denied*, 481 U.S. 1014 (1987), *overruled on other grounds Owen I*, 851 F.2d 1404 (Fed. Cir. 1988); *Acton v. United States*, 401 F.2d 896, 900 (9th Cir. 1968), *cert. denied*, 895 S. Ct. 1003 (1969).

sable property interests that will support a takings claim.¹³⁷ To determine which economic expectations have the “law in back of them,” the Supreme Court in *Lucas v. South Carolina Coastal Council*¹³⁸ directed that courts examine “existing rules or understandings that stem from an independent source such as state law” to define the various interests that demand for protection as property.¹³⁹ *Lucas* further elaborated that courts must consider pre-existing limitations on property, whether grounded in state or federal law, when determining property expectations.¹⁴⁰ Hence, the navigational servitude doctrine must be considered in conjunction with state law in determining the extent, if any, of the *Applegate* plaintiffs’ compensable expectancies.¹⁴¹

The time when the property is acquired must also be considered in evaluating the scope of a compensable expectancy attached to property. A landowner’s compensable ownership interest inheres in property on the date when the landowner’s title is granted.¹⁴² Thus, to prove a compensable expectancy in the obstructed river of sand, the *Applegate* plaintiffs must demonstrate a reasonable expectation, supported by both state and federal law, to continuously receive the river of sand from the time they took title to their beach-front properties.¹⁴³

As *Lucas* directs, the *Applegate* plaintiffs must rely on Florida law to demonstrate a property interest in the allegedly taken beach sand.¹⁴⁴ This inquiry invokes an analysis of the “public trust doctrine”¹⁴⁵ and its scope under Florida law.

137. *Id.* cf. BENTHAM, *supra* note 134, at 69 (“Property and law are born together, and die together. Before laws were made there was no property; take away laws, and property ceases.”); Frank I. Michelman, *Property, Federalism, and Jurisprudence: A Comment on Lucas and Judicial Conservatism*, 35 WM. & MARY L. REV. 301, 308-11 (1993).

138. 505 U.S. 1003 (1992).

139. *Id.* at 1030.

140. *Id.* at 1028-29. (“[W]e assuredly would permit the government to assert a permanent easement that was a pre-existing limitation upon the landowner’s title.”) (citing *Scranton v. Wheeler*, 179 U.S. 141, 163 (1900), where a riparian owner’s interest in lands juxtaposed to public navigable water was held subject to the government’s navigable servitude).

141. *See id.* at 1029.

142. *See Loveladies Harbor, Inc. v. United States*, 28 F.3d 1171, 1183 (1994).

143. *See id.* at 1178-79.

144. *See Lucas*, 505 U.S. at 1027-29.

145. “The public trust doctrine is a state doctrine somewhat analogous to the federal navigation servitude in that it recognizes public rights in private property—most often property underlying navigable waters.” Hunter, *supra* note 66, at 367.

A. *Florida Law and the Public Trust Doctrine: Who Owns the Sand in Florida?*

Article X, section 11 of the Florida Constitution provides that “[t]he title to lands under navigable waters, within the boundaries of the state, which have not been alienated, including beaches below mean high water lines, is held by the state, by virtue of its sovereignty, in trust for all the people.”¹⁴⁶

Before the adoption of the 1968 Florida Constitution, article X, section 11 was not codified, but was nevertheless the law of the state per the Florida Supreme Court and common law.¹⁴⁷ Hence, Florida, since statehood, has owned all land, including sand, drifting or otherwise, up to the mean high water line, unless the land was specifically leased or sold to private interests.¹⁴⁸ Thus, plaintiffs’ river of sand, which exists below the mean high water line, is clearly in the public trust.

Under limited circumstances, Florida has recognized property rights in littoral sand against the government in the context of accretions.¹⁴⁹ In *Trustees of the Internal Improvement Trust Fund v. Sand Key Associates*, the court argues that “he who sustains the burden of losses and of repairs, imposed by the contiguity of waters, ought to receive whatever benefits they may bring by accretion,” thus describing one of the public policy justifications behind vesting accretions in upland owners.¹⁵⁰ The upland owner will always gain title to accretions in Florida, as long as that owner did not artificially cause the accretion.¹⁵¹

Sand Key Associates illustrates the extent of the *Applegate* plaintiffs’ property interests in drift sand under Florida law, and indicates that drifting sand is strictly a public good to be maintained in the public

146. FLA. CONST. art. X, § 11.

147. *Hayes v. Bowman*, 91 So. 2d 795, 799 (Fla. 1957) (“[I]t is well settled in Florida that the State holds title to lands under tidal navigable waters and the foreshore thereof (land between high and low water marks). As at common law, this title is held in trust for the people for purposes of navigation, fishing, bathing and similar uses.”).

148. *Id.* There is no indication that any pertinent lease or sale of state sovereignty lands occurred prior to *Applegate*.

149. *Trustees of the Internal Improvement Trust Fund v. Sand Key Assoc.*, 512 So. 2d 934 (Fla. 1987). The court held that:

[T]he riparian or littoral owner has a vested right to new lands formed as a result of . . . accretion[s] The fact that such accretions . . . occurred in part because of artificial improvements does not affect the owner’s title to those lands provided the owner has not constructed the improvements which caused the accretions.

Id. at 938.

150. *Id.* at 937 (quoting *Banks v. Ogden*, 69 U.S. 57, 67 (1864)).

151. *Id.* at 938. Upland owners do not gain title under such circumstances because “to permit the riparian owner to cause accretion himself would be tantamount to *allowing him to take state land.*” *Id.* (quoting *Trustees of the Internal Improvement Trust Fund v. Medeira Beach Nominee, Inc.*, 272 So. 2d 209, 212 (Fla. 2d DCA 1973)) (emphasis added).

trust. If this were not true, then the court would not consider self-created accretions a taking of state lands. Moreover, vesting the accretion in the upland owner implicitly compensates the owner for the erosion that might occur in the future, perhaps as a result of governmental action.¹⁵²

A property right in drift sand is inconsistent with the rule that accretions vest in the upland property owner. In *Trustees of the Internal Improvement Trust Fund v. Medeira Beach Nominee, Inc.*,¹⁵³ as in *Applegate*, a public works project obstructed drifting sand, causing an accretion on one side of a public work and erosion on the other.¹⁵⁴ The court held that the upland property owner gained title to the accretion caused by the public work.¹⁵⁵ If Florida recognized a property interest in drift sand, this holding would not have been possible. Under such an approach, the owners of the accreted sand would be those downstream littoral owners suffering erosion because they would have received the sand "but for" the obstruction by the public work. If vested rights existed in drift sand, arguably the state would owe compensation to upland owners every time it prevented an accretion from forming. This is clearly not the law in Florida.

Unfortunately for the *Applegate* plaintiffs, Florida is one of only a few states to adopt the "common enemy" doctrine vis-à-vis governmentally-induced erosion.¹⁵⁶ In *Paty v. Town of Palm Beach*,¹⁵⁷ a case similar to *Applegate*, the town of Palm Beach erected a groin and seawall to prevent the ocean from washing out city property.¹⁵⁸ The Florida Supreme Court recognized that the groin changed "the natural action and the currents of the ocean so as to cause them to whip around to the south of the groin and to beat against and to excessively wash away plaintiff's land"¹⁵⁹ Nevertheless, the court held that

152. See *Medeira Beach Nominee*, 272 So. 2d at 213.

153. *Id.* at 209.

154. *Id.* at 211.

155. *Id.* at 209.

156. *Paty v. Town of Palm Beach*, 29 So. 2d 363 (Fla. 1947) ("The waters of the sea are usually considered a common enemy."). The "Common Enemy Doctrine" is a creation of the common law which recognizes that the ocean is a common enemy to all landowners, be it the government or private owner. See *The King v. Commissioners of Sewers for the Levels of Pagham*, 8 B. & C. 355, 360 (1828). Accordingly, the doctrine posits that any littoral "landowner may use every precaution not unreasonable to avert damage to his land." *Katenkamp v. Union Realty*, 93 P.2d 1035, 1039 (Cal. 2d Dist. Ct. App. 1939) (reviewing the common law background of the common enemy doctrine but holding the doctrine inapplicable where the defendant was found to be in bad faith).

157. 29 So. 2d 363 (Fla. 1947).

158. *Paty*, 29 So. 2d at 363.

159. *Id.*

the plaintiff had stated no claim for a taking.¹⁶⁰ “The waters of the sea are usually considered a common enemy.”¹⁶¹ Therefore,

Any injury or damage which is occasioned by the [government's] doing of a lawful act . . . in the authorized way, is *damnum absque injuria* [a non-compensable injury]. Damage resulting from such an act, to be actionable, must be coupled with some negligence or misconduct, or the act must have been done at a time, or in a manner . . . which render the [state] actor chargeable with want of proper regard for the rights of others. In doing a lawful thing in a lawful way no legal right is invaded, although the act may result in damage to another.¹⁶²

Paty's holding, that damages suffered by littoral owners as a result of public works are generally unrecoverable, and *Paty's* implicit adoption of the common enemy doctrine, bring doubt upon any claim by the *Applegate* plaintiffs that Florida law recognizes a property interest in drift sand against the compelling needs of the government. If under *Paty* the government can alter the current of the ocean, resulting in the liability-free destruction of a privately owned beach, then it is illogical to argue that the government cannot protect public works by the erection of jetties that inadvertently block littoral sand drift and cause a slow process of erosion. Thus, *Paty* indicates that the *Applegate* plaintiffs do not have a compensable expectation of continued sand drift under Florida law.¹⁶³

Moreover, recognizing a private expectation in a public good, like drift sand, would undermine the very foundation of the public trust doctrine. Consider an analogy to another public good, fish populations in Florida waters. The state owns both drifting sand and fish as public goods in trust for the people.¹⁶⁴ Making a certain quantity of drifting sand a protectable property interest under Florida law would be the functional equivalent of granting fishers a property interest in the number of fish they can catch. In both scenarios, littoral

160. *Id.* at 363-64.

161. *Id.* at 364.

162. *Id.*

163. Even if one argues that *Paty* is in conflict with decisions like *Pumpelly*, the compensable expectancy analysis remains unchanged. Since *Paty* is good law, and none of the plaintiffs took title to their land before 1947, see Appendix A, all of the *Applegate* plaintiffs took title to their respective properties during a time when *Paty* was the law of the state. Hence, plaintiffs' compensable expectancies in their properties were limited by *Paty* on the day they took title. See *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1029 (1992). Accordingly, whether *Paty* will remain good law in the future is inapposite to the question of compensable expectancy.

164. See *Foster-Fountain Packing Co. v. Haydel*, 278 U.S. 1, 11 (1928) (affirming the proposition that marine animals are the property of the several states, as sovereigns of the people).

owners and fishers would have come to expect a certain quantity of the public good over time. If property interests were recognized in public goods, like fish and sand, the owners (fishers and littoral owners) of the "property interests" could sue to prevent the state from changing the supply of the public good without providing compensation.¹⁶⁵ The government would be forced to protect the interests of these pseudo "property owners," even if such interests conflicted with the needs of the public. This, of course, indirectly contravenes "the purposes of the [public] trust [doctrine], to wit: the service of the people."¹⁶⁶ The law clearly states that where an economic interest falls within the public trust doctrine, ownership of that economic interest is "that of the people in their united sovereignty,"¹⁶⁷ and such ownership is not to be exercised for the benefit of private individuals as distinguished from the public good.¹⁶⁸

B. Principles of Federal Law: The Navigational Servitude Doctrine

Lucas, and the cases that have interpreted it, direct that the federal navigational servitude is a pre-existing limitation on littoral property requiring consideration when determining the extent of beach-front property rights.¹⁶⁹ The navigational servitude, as previously discussed, vests in the federal government a right to use all lands below the high water mark (or mean high tide line).¹⁷⁰ Assuming, *arguendo*, that the *Applegate* plaintiffs could demonstrate a Florida law property right in the "river of sand," unobstructed by the public trust doctrine, they would still need to prove that the federal government's "dominant servitude" in navigable waters had not preempted the state property right.¹⁷¹

165. Hence, the state could not build a jetty without providing compensation for the consequent decrease in littoral drift sand, nor pass a regulation which restricted the number of fish that could be caught, without providing compensation for the decrease in fish.

166. *Hayes v. Bowman*, 91 So. 2d 795, 799 (Fla. 1957).

167. *Foster Fountain*, 278 U.S. at 11 (citing *Geer v. Connecticut*, 161 U.S. 519, 529 (1896)).

168. *Id.*

169. *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1028-29 (1992) (citing *Scranton v. Wheeler*, 179 U.S. 141 (1900)). See also *United States v. Twin City Power Co.*, 350 U.S. 222, 224-25 (1956) ("[T]he power [of the servitude] is a dominant one which can be asserted to the exclusion of any competing or conflicting one."); *Scranton*, 179 U.S. at 145 (holding that in the context of lands subject to the navigational servitude, "[t]he plaintiff holds the naked legal title, and with it he takes such proprietary rights as are consistent with the public right of navigation and the control of Congress over that right").

170. *United States v. Chicago, M., St. P. & P. R.R.*, 312 U.S. 592, 596-97 (1941).

171. See, e.g., *Lewis Blue Point Oyster Cultivation Co. v. Briggs*, 229 U.S. 82, 89 (1913) (holding that a landowner may, pursuant to state law, hold title to submerged lands under navigable waters, but title is qualified because it is subordinate to the federal right of navigation); *Scranton v. Wheeler*, 179 U.S. 141, 144 (1900).

A case with similar facts to *Applegate, Pitman v. United States*, assessed the extent of the navigational servitude doctrine.¹⁷² The holding in *Pitman* is essentially two-pronged. First, *Pitman*, relying on cases like *Southern Pacific Co. v. United States*,¹⁷³ held that any interruption of littoral flow below the high water mark that causes damage to lands above the high water mark, without entry on the land by the federal government, yields a strictly consequential and thus non-compensable injury.¹⁷⁴ Second, *Pitman* relied on the Supreme Court's decision in *United States v. Twin City Power Co.*¹⁷⁵ to reject recovery on the grounds that littoral drift sand was present solely due to the uninterrupted "flow" of the ocean and was thus non-compensable if taken away by the government.¹⁷⁶ The consequential damage ground was *Pitman's* first justification, and was later overruled in *Owen I*.¹⁷⁷

Owen I arose in a very different context than *Pitman*. In *Owen I*, the federal government conducted substantial dredging and widening of the Tombigbee River. Shortly after the navigational changes to the river were made, the plaintiff's home tumbled into the river, allegedly a victim of erosion below the high water mark.¹⁷⁸ The plaintiff brought suit alleging inverse condemnation. The Court of Claims dismissed the complaint on the basis of *Pitman*, reasoning that any damaging erosion would have occurred below the high water mark, and was thus consequential and non-compensable under *Pitman*.¹⁷⁹

The Federal Circuit reversed, holding that governmentally-induced erosion below the high water mark, which consequentially results in damage to fast lands, can be recoverable.¹⁸⁰ Hence, *Owen I* overruled *Pitman* only as to the issue of consequential damages above the high water mark.¹⁸¹ Moreover, *Owen I* specifically acknowledged

172. 457 F.2d 975 (Ct. Cl. 1972), *overruled in part Owen I*, 851 F.2d 1404 (Fed. Cir. 1988).

173. 58 Ct. Cl. 428 (1923), *aff'd*, 266 U.S. 586 (1924).

174. *Pitman*, 457 F.2d at 977.

175. 350 U.S. 222, 225-26 (1956).

176. *Pitman*, 457 F.2d at 978.

177. 851 F.2d 1404 (Fed. Cir. 1988).

178. *Id.* at 1406.

179. *Id.*

180. *Id.* at 1411-12.

181. See Brief for Appellee at 28 n.6, *Applegate v. United States*, 25 F.3d 1579 (Fed. Cir. 1994) (No. 93-5180). Arguably, the holding in *Owen I* directly contravened Supreme Court precedent. See generally *Sanguinetti v. United States*, 264 U.S. 146, 149 (1924); *Bedford v. United States*, 192 U.S. 217 (1904), *Southern Pac. Co. v. United States*, 58 Ct. Cl. 428 (1923), *aff'd*, 266 U.S. 586 (1924); see also Reply to Plaintiffs' Response to Motion to Dismiss at 17 n.3, *Applegate v. United States*, 28 Ct. Cl. 554 (Fed. Cir. 1994) (No. 93-5180) ("*Owen* is contrary to weight of Supreme Court authority, and any further review in *Owen* was mooted by the inability of the plaintiff there to establish damages caused by the government.").

that the second basis for the *Pitman* decision was still good law as it applied to the facts of *Pitman*.¹⁸²

Thus, after *Owen I*, the law remains clear that the compensable expectancies of littoral property owners do not include economic values that are inherent in the navigational servitude.¹⁸³ Hence, the *Applegate* plaintiffs cannot demonstrate a property interest in the obstructed drift sand, because without the flow of a navigable water, the Atlantic Ocean, *no sand* would ever reach the plaintiffs' beaches.

The United States Supreme Court cases forming the bedrock of the navigational servitude doctrine best illustrate the plaintiff's inability to demonstrate a property interest. Cases such as *Scranton v. Wheeler*,¹⁸⁴ *Gibson v. United States*,¹⁸⁵ *Transportation Co. v. Chicago*¹⁸⁶ and *United States v. Commodore Park, Inc.*¹⁸⁷ stand for the proposition that the United States, pursuant to its navigational servitude, may not only alter the flow of a navigable stream without incurring liability,¹⁸⁸ but may cut off access to the navigable stream outright without owing compensation.¹⁸⁹ Thus, under this precedent, if the United States needed to do so, it could theoretically cut off the flow of the Atlantic Ocean to the *Applegate* plaintiffs without owing compensation for the loss of access to navigable waters and the values inherent in the flow.

182. *Owen I*, 851 F.2d at 1413 (“[T]he Court of Claims in *Pitman* was not incorrect in relying on the Supreme Court’s decision in *United States v. Twin City Power Co.* to reject recovery since the shoreland sand was present solely due to the uninterrupted ‘flow’ of the ocean . . .”).

183. *See id.* *See also* *United States v. Twin City Power Co.*, 350 U.S. 222, 225-26 (1956); *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 424 (1940) (“The flow of a navigable stream is in no sense private property”); *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 70-76 (1913) (“The Government . . . cannot be required to pay any hypothetical additional value to a riparian owner who had no right to appropriate the current to his own commercial use.”)

184. 179 U.S. 141 (1900) (holding that the federal government may build a pier cutting off riparian owner’s access to navigable water without incurring liability).

185. 166 U.S. 269 (1897) (holding that the United States altering channel so as to cut off navigable landing to riparian owner was non-compensable).

It is not, however to be conceded that Congress has no power to order obstructions to be placed in the navigable waters of the United States, either to assist navigation or to change its direction *It may construct jetties. It may require all navigators to pass along a prescribed channel, and may close any other channel to their passage.*

Id. at 272 (citations omitted) (emphasis added).

186. 99 U.S. 635 (1878) (holding that the United States may completely block the flow of a navigable stream without incurring compensation liability).

187. 324 U.S. 386 (1945) (holding that the United States may destroy navigability of a formerly navigable stream outright without owing compensation).

188. *But see Owen I*, 851 F.2d 1404, 1411-12 (Fed. Cir. 1988) (United States may owe compensation if alteration of flow below high water mark directly and proximately causes damage to fast lands above the high water mark).

189. *See Scranton v. Wheeler*, 179 U.S. 141, 164-65 (1900); *United States v. Commodore Park*, 324 U.S. 386, 393 (1945); *Gibson v. United States*, 166 U.S. 269, 269 (1897); *Northern Transp. Co. v. Chicago*, 99 U.S. 635, 643 (1879).

For example, under *Scranton*, the United States could presumably construct a sea wall adjacent to the plaintiffs' properties, but below the high water mark, completely cutting off plaintiffs' access to the ocean, without owing compensation.¹⁹⁰ Likewise, under *Gibson*, the United States could construct an artificial reef fifty feet off of the plaintiff's property transforming plaintiffs' former "beach front property" into "salt marsh front" property without owing compensation.¹⁹¹ Considering these possible situations, allowing compensation for the loss of value inherent in the flow of navigable water, such as sand, would be absurd. This is especially true because the United States could constitutionally take the far more draconian measure of removing access to the navigable water outright without owing compensation. Thus, even if the *Applegate* plaintiffs could demonstrate a compensable expectancy for drift sand under state law, the manifest weight of authority indicates that the United States would owe no compensation for the obstruction of the sand.¹⁹²

Nevertheless, dicta in *Owen I* adds another factor to the equation and may provide the *Applegate* plaintiffs with their best chance of receiving partial compensation for their alleged losses.¹⁹³ *Owen I* instructed that the *Pitman* reliance on *Twin City Power* was appropriate *only to the extent that the loss of drift sand did not consequentially damage property above the mean high tide line*.¹⁹⁴ The *Owen I* decision appears to indicate that if the obstruction of replacement sand directly and proximately causes damage to non-sand property above the high water mark, such as damage to a house,¹⁹⁵ then the federal government might be liable for compensation.¹⁹⁶ However, no compensation can be demanded for erosion of the dry sand beach, regardless of the total reduction in dry sand, because the natural replacement of beach sand would not occur but for the flow of sand within the navigational servitude.¹⁹⁷

190. See *Scranton*, 179 U.S. at 141.

191. See *Gibson*, 166 U.S. at 269.

192. See *Owen I*, 851 F.2d at 1413; *United States v. Twin City Power Co.*, 350 U.S. 222, 225-26 (1956).

193. That is, of course, if the plaintiffs can demonstrate a state property interest in sand, and direct and proximate causation of their alleged injuries by the Canaveral Harbor Project.

194. *Owen I*, 851 F.2d at 1413.

195. There is evidence that at least a few of the 320 plus plaintiffs in *Applegate* sustained such damage above the high water mark. See Boylan, *supra* note 120, at 1A. If such damage is proximately caused by federal improvements in navigation, it is compensable. *Owen II*, 20 Cl. Ct. 574, 582-83 (1990).

196. *Owen II*, 20 Cl. Ct. at 583.

197. *Owen I*, 851 F.2d at 1413 ("Since the sand comprising the lost shorefront was continually being deposited and moved by the ocean's action, it necessarily lay below the ocean's high-water mark and within the bed of the ocean. As such, its loss would not entitle the riparian

V. DYNAMIC SYSTEMS AND DIRECT CAUSATION: A WEIGHTY BURDEN OF PROOF

Direct causation is the second element the plaintiffs in *Applegate* must satisfy. Plaintiffs must prove that the navigational improvements to Canaveral Harbor “were the direct and proximate cause of damage” to their alleged compensable property interests.¹⁹⁸ Showing a direct and proximate cause will not be an easy task for many of the *Applegate* plaintiffs. To demonstrate sufficient causation, they must show that their property would have been damaged but for the navigational improvements to Canaveral Harbor.¹⁹⁹ This causation prong was fatal on remand for the plaintiff in *Owen II*,²⁰⁰ and may be for some of the plaintiffs in *Applegate* as well.

The ocean is an extremely dynamic system, and on the *Applegate* plaintiffs’ properties, “the sand comprising [the] shorefront property is in a constant state of flux.”²⁰¹ The *Applegate* plaintiffs are a class of 320 property owners spanning a forty-one mile stretch of beach south of the Canaveral Harbor Project.²⁰² For those properties within a few miles of the Canaveral Harbor Project, proof of the Project’s erosion causation may be significant; for more distant properties, evidence of causation will be tenuous or non-existent.²⁰³ As was the case in *Owen II*, many interrelated factors may have contributed to the plaintiffs’ injuries in *Applegate*.

Although an observer would never guess it from the *Applegate* plaintiffs’ arguments, the drifting “river of sand,” which plaintiffs allege is obstructed by the Canaveral Harbor Project, only flows south for part of the year, during the winter and spring months²⁰⁴ During the summer, littoral drift is to the north.²⁰⁵ Because littoral drift flows

owner to compensation under any of the relevant caselaw.”) (emphasis added). *Accord*, U.S. v. Twin City Power Co., 350 U.S. 222, 225-26 (1956).

198. *See also Owen I*, 851 F.2d at 1418; *Sanguinetti*, 264 U.S. at 149-50.

199. *See Owen II*, 20 Cl. Ct. at 583 (following *Tri-State Materials Corp. v. United States*, 550 F.2d 1 (Ct. Cl. 1977)).

200. After the Federal Circuit held in *Owen I* that consequential damages to land above the high water mark were compensable if caused by government action, the Federal Circuit remanded the case to the Claims Court for an adjudication of the causation issue. *Owen I*, 851 F.2d at 1418. On remand the Claims Court concluded that the government had “established other forces and developments that [were] independently sufficient to explain the damage,” and therefore held that no compensable taking existed. *Owen II*, 20 Cl. Ct. at 588.

201. *Owen I*, 851 F.2d at 1413.

202. *See Applegate v. United States*, 25 F.3d 1579, 1580 (Fed. Cir. 1994); Defendant’s Proposed Protocol, *supra* note 97, at 2.

203. *See Boylan, supra* note 120, at 8A; Defendant’s Proposed Protocol, *supra* note 97, at 17-19.

204. PILKEY, *supra* note 86, at 94.

205. *Id.* Net littoral drift, however, is to the south. *Id.*

north and south, depending on the season, the Canaveral Harbor Project cannot physically be the sole cause of the damaging erosion.²⁰⁶

Some of the same factors which led to a finding of non-causation in *Owen II* are present in *Applegate*. For example, Brevard and adjacent counties have been the subject of numerous natural disasters since the construction of the Canaveral Harbor Project. Hurricanes and winter storms have been particularly vexatious for Brevard County beaches over the last fifty years.²⁰⁷ Consider the account of Professor Pilkey:

The March and November 1962 storms caused extensive erosion along all Brevard beaches. The Lincoln's Birthday storm in February 1973 caused dune overtopping and 5 to 25 feet of horizontal beach retreat along the county beaches accompanied by tides 4 to 6 feet above normal. The October 1974 storm caused severe flooding and beach erosion because of tides 3 to 5 feet above normal and gale-force winds. Finally, the winter storms of 1981 and 1983 caused continuing severe beach and dune retreat.²⁰⁸

Moreover, Brevard County beaches have been hit with a series of severe summer storms in the last two years, including direct hits from Hurricane Erin and Tropical Storms Jerry and Gordon.²⁰⁹ These summer storms have been a significant factor in the damage of property belonging to some of the *Applegate* plaintiffs.²¹⁰

Other factors which appear to have contributed to the erosion of the *Applegate* plaintiffs' properties include: the continued steepening of the inner continental shelf adjacent to Brevard County beaches,²¹¹ rising sea levels,²¹² and the destruction of protective dunes during the construction process.²¹³ In addition, privately constructed revetments

206. A showing of sole causation, however, is not a *sine qua non* for recovery of just compensation under the Fifth Amendment. *Tri-State Materials Corp. v. United States*, 550 F.2d 1, 4 (Ct. Cl. 1977).

207. PILKEY, *supra* note 86, at 95.

208. *Id.*

209. Boylan, *supra* note 120, at A1; see Lou Misselhorn, *Hope Washed Away with Beaches: Storm Sets Scene for Serious Erosion Damage*, FLA. TODAY (Melbourne, Fla.), Dec. 1, 1994, at 1A.

210. See Boylan, *supra* note 120, at A1; Misselhorn, *supra* note 209, at 1A. This fact may be of significance if, as *Owen I* directs, only consequential damages distinct from the navigational servitude are recoverable.

211. PILKEY, *supra* note 86, at 106 ("Geologists do not completely understand why this steepening occurs, but it does make the beaches more vulnerable to erosion in the future."). Replacement sand comes primarily from two sources on the East Coast of Florida, littoral drift sand, for which the net drift is south, and sand that is pushed up from the continental shelf and taken ashore by waves. *Id.* at 23, 29. When the continental shelf becomes steeper, less sand is washed ashore by the waves. *Id.* at 106.

212. *Id.* at 29, 50.

213. *Id.* at 52-53.

and seawalls on neighboring properties may have exacerbated erosion on the properties of particular *Applegate* property owners as well.²¹⁴

The foregoing analysis indicates that although some *Applegate* plaintiffs may demonstrate that the Canaveral Harbor Project was a factor in increased erosion,²¹⁵ many will have difficulty in establishing that the erosion on their individual piece of property was the “direct and necessary result” of the Canaveral Harbor Project.²¹⁶

VI. REVISITING *PENN CENTRAL*: TEMPORARY, PERMANENT AND PER SE TAKINGS

Even if the *Applegate* plaintiffs can demonstrate a compensable expectancy in obstructed sand drift and show that the obstructed sand directly and proximately caused property damage, they still may not have successfully stated a compensable claim for a per se taking.

As previously discussed, one unanswered question in physical takings jurisprudence is whether those physical takings that do not rise to the level of a permanent physical invasion may still be regarded as per se takings requiring automatic compensation.²¹⁷ Language in *Loretto* appears to indicate that a balancing approach is appropriate in the context of physical invasion by flooding and erosion.²¹⁸ Specifically, “[n]ot every physical invasion is a taking As . . . *intermittent flooding cases reveal*, such temporary limitations are subject to a more complex balancing process to determine whether they are a taking.”²¹⁹

214. *Id.* at 46-50.

215. *Cf.* *Pitman v. United States*, 457 F.2d 975, 978 (Fed. Cir. 1972), *overruled in part Owen I*, 851 F.2d 1404 (Fed. Cir. 1988) (“There is no doubt that plaintiff has sustained damages and that a substantial portion of the damages he claims are due to the construction and maintenance of the Canaveral Harbor Project.”).

216. In finding *no evidence* of government causation, *Owen II* never was required to determine the quantum of evidence necessary to show proximate causation, though the court did cite *Sanguinetti* for the traditional rule that compensable erosion damage must be the “direct and necessary result” of government action. *Owen II*, 20 Ct. Cl. at 583 (citing *Sanguinetti v. United States*, 264 U.S. 146, 149-50 (1924)).

Dicta in *Owen I*, however, may indicate that the Federal Circuit is setting the foundation for applying a more plaintiff-favorable causation standard. *Owen I*, 851 F.2d at 1418 (“On remand the government . . . will be free to prove that the alleged destruction *was either not the result of its action or was such an indirect consequence of it as not to be a compensable taking.*”) (emphasis added). Thus, the degree of causation that will be demanded in *Applegate* remains an open question. If the Federal Circuit invokes the “such an indirect consequence” dicta from *Owen I*, the *Applegate* plaintiffs will likely prevail on the causation issue. If the plaintiffs are required to show that their damages were the “direct and necessary result” of the Canaveral Harbor Project, the result will likely be similar to the result reached in *Owen II*; i.e., interrelated non-government factors negating inference of direct and proximate causation.

217. *See supra* notes 58-60 and accompanying text.

218. *Loretto v. Manhattan Teleprompter CATV Corp.*, 458 U.S. 419, 436 n.12 (1982).

219. *Id.* (emphasis added).

The Court of Federal Claims has followed *Loretto* to hold that a non-permanent physical invasion, or “temporary taking,” invokes the three-prong *Penn Central* ad hoc analysis normally applied in the context of regulatory takings.²²⁰ If the taking of plaintiffs’ beach sand is only temporary, which dicta by Judge Rader indicates is the case in *Applegate*,²²¹ then according to *Loretto*, no per se taking has occurred.²²² If a taking is not per se, then an ad hoc inquiry must be conducted to determine if a compensable taking has occurred.²²³ Thus, the *Applegate* plaintiffs may not have the benefit of the *Loretto* per se taking rule for permanent physical invasions even if they satisfy the other requirements necessary to state a physical takings claim.

Utilization of *Penn Central*, rather than *Loretto*, means that the plaintiffs may be denied compensation if it is shown that governmental action in *Applegate* has not gone “too far” so as to require compensation.²²⁴ This distinction could be critical in *Applegate* because of the economic prosperity that the Canaveral Harbor Project and NASA brought to previously rural and undeveloped Brevard County.²²⁵

Arguably, without the presence of NASA, which would not have located in Brevard County without the presence of Canaveral Harbor,²²⁶ and the high-tech job base that NASA spawned,²²⁷ the *Applegate* plaintiffs’ property values at their 1951 sizes would be lower than their values today at their smaller 1996 sizes. NASA was the primary catalyst for the Brevard County real estate development explosion of the 1960s²²⁸ and caused the rapid growth of commerce

220. *Preseault v. United States*, 27 Cl. Ct. 69, 95 (1992), *aff’d in part, vacated in part*, 66 F.3d 1167 (Fed. Cir. 1995) (holding that where the government had taken reversionary interest for term of years lease no permanent physical occupation had occurred) (“Unless a taking is deemed per se, the court examines three factors set out in *Penn Central* to ascertain if public action works a taking.”) (citation omitted), *withdrawn*, 66 F.3d 1190 (1995). *But cf.* *Skip Kirchdorfer, Inc. v. United States*, 6 F.3d 1573, 1583 (Fed. Cir. 1993); *Hendler v. United States*, 952 F.2d 1364, 1376 (Fed. Cir. 1992); *Plager*, *supra* note 10, at 203-04.

221. 25 F.3d 1579, 1582-83 (Fed. Cir. 1994)

With a sand transfer plant in place, the [Plaintiffs] would encounter little, if any, permanent destruction of their shoreline property Of course, installation of the sand transfer plant will not eliminate the Government’s obligation to compensate the landowners if the erosion amounts to a temporary physical taking.

Id.

222. *Loretto*, 458 U.S. at 436 n.12.

223. *Id.*

224. *See generally Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978); *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

225. *See supra* notes 75-87 and accompanying text.

226. *See supra* note 82 and accompanying text.

227. *See supra* notes 82-85 and accompanying text.

228. *Id.*

and tourism in Brevard County.²²⁹ Without NASA, the *Applegate* plaintiffs would likely own rural ocean front property; certainly valuable, but probably worth considerably less than the present day value of property on Florida's famous "Space Coast."²³⁰

Given the direct economic benefit that the Canaveral Harbor Project has bestowed on plaintiffs' properties,²³¹ in an ad hoc *Penn Central* balancing inquiry, a court would likely find no compensable taking because a "reciprocity of advantage" would arguably exist, negating plaintiffs' economic harm from the erosion.²³²

229. See *supra* notes 77-89 and accompanying text.

230. *Id.*

231. The federal government has substantially increased the value of the *Applegate* plaintiffs' properties in one other significant way. The federal government operates the National Flood Insurance Program, 42 U.S.C. § 4011 et. seq. (1989 and Supp. V 1993), which subsidizes flood insurance for coastal property owners. See 42 U.S.C. § 4017 (1989 & Supp. V 1993). The National Flood Insurance Program makes it possible for coastal property owners to insure beachfront homes from acts of nature such as hurricanes and floods. For many beachfront homeowners, private insurance would be unobtainable or prohibitively expensive in the absence of the National Flood Insurance Program. See generally *Revitz v. Terrell*, 572 So. 2d 996, 997 (Fla. 3d DCA 1990) (noting that homeowner's insurance for house located in coastal flood zone would cost \$350 per year when eligible for federally subsidized flood insurance, but \$36,000 per year to insure when ineligible for federal program).

Affordable homeowner's insurance would not be available to many of the *Applegate* plaintiffs absent the intervention of the federal government in facilitating flood insurance. The inability to obtain such insurance would substantially diminish the value of the *Applegate* plaintiffs' properties. Interview with Sandra P. Stockwell, Board Certified Specialist in Florida Real Estate Law (March 3, 1996) [hereinafter Stockwell Interview].

Diminution in value would primarily occur for two reasons. First, many potential coastal residents would eschew purchasing coastal property because of the extreme cost of protecting their investment through unsubsidized flood insurance. Compare *Revitz*, 572 So. 2d at 997-98, with 42 U.S.C. § 4001 (b) (1989 & Supp. V 1993). Second, institutional lenders would be unwilling to issue mortgages on property where flood insurance is unobtainable or prohibitively expensive because lenders would have little means of protecting their collateral from flood hazards and hurricanes. Stockwell Interview, *supra*. Accordingly, in the absence of the National Flood Insurance Program, most prospective buyers of coastal property would be ineligible for bank financing. *Id.* This would drastically reduce the demand for, and value of, coastal property because it would effectively eliminate sophisticated buyers from the coastal real estate market. *Id.*

Given the foregoing, it would be manifestly unjust to require the federal government to compensate the *Applegate* plaintiffs for erosion induced diminution in property value; much of that value would not exist in the first instance were it not for federally subsidized flood insurance.

232. See *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978) (identifying economic impact on property owner as a relevant factor in determining if a taking has occurred); cf. *Laughlin v. United States*, 22 Cl. Ct. 85, 113 (1990), *aff'd on other grounds*, 975 F.2d 869 (Fed. Cir. 1992) (finding no taking on basis of "doctrine of relative benefits").

Moreover, under the *Penn Central* approach, plaintiffs' takings claim would likely be rejected because almost all plaintiffs took title to their respective properties with the reasonable investment-backed expectation that their property was eroding, and that the erosion was likely to continue. See *Penn Central*, 438 U.S. at 124; see also *infra* notes 246-50, accompanying text, and Appendix A.

VII. PUBLIC POLICY AGAINST FINDING A TAKING IN APPLGATE: A HARD LOOK BEFORE OPENING THE PROVERBIAL FLOODGATE

If the United States Claims Court and the Federal Circuit agree that the Corps of Engineers has created a per se physical taking in *Applegate*, many of the public policy arguments against compensation in future cases will become inapposite.²³³ Thus, the United States Claims Court and the Federal Circuit should carefully weigh public policy and Supreme Court precedent before declaring that the facts of *Applegate* create a new variety of per se physical taking.²³⁴ If a per se physical taking is found in *Applegate*, the United States Claims Court would lose the flexibility to consider the facts of each individual case in determining the government's liability.²³⁵ Due to this loss of control, the plaintiffs' victory in *Applegate* would be the catalyst for a flood of similar litigation from around the country.²³⁶ In any event, the Federal Circuit and the United States Claims Court should consider the following policy issues before declaring a per se taking in *Applegate*.

A. Reasonable Investment-Backed Expectations

Any damages awarded in *Applegate* must correspond to the *Applegate* plaintiffs' reasonable investment-backed expectations.²³⁷ "Reasonable investment-backed expectations," or what a property owner can reasonably expect his property rights to encompass, are formed on the date that title to land is taken.²³⁸ As Professor Mandelker explains, "[i]nvestment-backed expectations held by

233. See Plager, *supra* note 10, at 163-64 ("Just compensation is demanded by the Fifth Amendment if you have a physical taking; it does not matter how big, how small, or what the underlying public policy, how important, or how unimportant. If you have a physical taking by government, you get paid. That is what the Fifth Amendment says; that is what *Loretto v. Teleprompter Manhattan CATV Corp.* says . . ."). One public policy argument that would not be disregarded, however, would be that of reasonable investment-backed expectations because the determination of such expectations are critical to ascertaining the extent of a property interest. See *infra* notes 236-50 and accompanying text.

234. Because of the harshness of *Loretto's* rule of per se takings, the Supreme Court has been loathe to extend the physical takings doctrine outside the context of a direct and permanent invasion of private property by the government. See sources cited *supra* note 10.

235. See Plager, *supra* note 10, at 163-64.

236. Cf. Quintana, *supra* note 11, at B1 ("[T]he Army Corps of Engineers is going to be accountable for things they've done all over the country.") (quoting *Applegate* plaintiffs' lead attorney Gordon "Stumpy" Harris).

237. Investment-backed expectations are critical in determining the extent of a property interest, regardless of whether the takings claim is characterized as a per se physical taking or a regulatory taking. *Avenal v. United States*, 33 Cl. Ct. 778, 785 (1995).

238. See *M & J Coal v. United States*, 47 F.3d 1148, 1153-54 (Fed. Cir. 1995). This is also true regardless of whether the property owner later alleges a physical or regulatory taking of property. *Id.*

property owners arise at the time of purchase and the information they have then about their property gives them meaning.²³⁹ Thus, the objective facts that landowners know or should know about their property at the time title is taken are imperative in determining the amount of property value that has been physically taken by government action.²⁴⁰

If a landowner “knows” upon purchase of property that the property is eroding, then the landowner is aware that the property has a restraint, causing it to have less value. Presumably, the landowner pays less for the land due to the erosion.²⁴¹ Thus, a loss of property occasioned by further erosion, if reasonably contemplated at the time of purchase, has inflicted no compensable injury on the landowner because “[i]n economic terms, it could be said that the market had already discounted” for the erosion of the land.²⁴² A physical taking should be compensable only when erosion continues and surpasses the reasonable expectations of the property owner when the property was purchased.

Even if the *Applegate* plaintiffs could demonstrate that they had a property interest which was taken as a direct result of the Canaveral Harbor Project, compensation would be appropriate only to the extent of their reasonable investment-backed expectations.²⁴³ Thus, only plaintiffs who suffered more erosion than they could have reasonably expected to suffer at the time of purchase should be awarded compensation.²⁴⁴

Under this premise, the time the *Applegate* plaintiffs acquired their respective properties and how much damage befell the properties

239. Daniel R. Mandelker, *Investment-Backed Expectations in Takings Law*, 27 URB. LAW. 215, 227 (1995).

240. See *M & J Coal*, 47 F.3d at 1153-54.

241. See *Loveladies Harbor, Inc. v. United States*, 28 F.3d 1171, 1177 (Fed. Cir. 1994). Whether a plaintiff lacks *actual knowledge* of a limitation on purchased property, and accordingly pays a higher price than he should have, is irrelevant because purchasers of land are held to constructive knowledge of reasonably ascertainable property conditions. See *M & J Coal*, 47 F.3d at 1154.

242. *Loveladies*, 28 F.3d at 1177. Assuming that the loss of value occasioned by erosion could constitute a cognizable taking claim, the person with the right to bring suit for a taking would be the person who owned the land when the erosion first began, and not the subsequent purchaser who paid a lower price. *Id.*

In legal terms, the owner who bought with knowledge of the restraint could be said to have no reliance interest. In economic terms, it could be said that the market had already discounted for the restraint, so that a purchaser could not show a loss in his investment attributable to it.

Id.

243. See generally Mandelker, *supra* note 238, at 227.

244. Such a result would be fair because the lower purchase price paid would cease to “implicitly compensate” the landowner at the point where erosion damages exceeded reasonable expectations of future erosion damage.

subsequent to the time of purchase must be determined. Plaintiffs allege that the Canaveral Harbor Project first began causing erosion in October of 1951.²⁴⁵ Accordingly, they have demanded damages for the loss of all sand *on every piece of property* in the litigation since October 1951.²⁴⁶

Ironically, plaintiffs also allege that the general public in Brevard County was aware of the continuing erosion by 1966.²⁴⁷ By the plaintiffs' own admission, all of the plaintiffs who purchased their properties after 1966 had actual or constructive knowledge of the continuing erosion. Thus, they would have paid less money for their respective properties. Documents filed with the Court of Federal Claims disclose some revealing statistics. Of the 320 plaintiffs in the *Applegate* litigation, only one owned property in October of 1951 when the erosion first began, and only twenty-one owned their properties prior to 1966.²⁴⁸ Eighty of the 320 plaintiffs purchased their respective properties within the last six years.²⁴⁹

Several conclusions can be drawn regarding plaintiffs' reasonable investment-backed expectations as they relate to stating a physical takings claim in *Applegate*. First, the law is clear that no plaintiff may seek compensation for the loss of an economic value that predates any interest in the affected property.²⁵⁰ Thus, no plaintiff may recover for damages dating back to 1951, unless the plaintiff took title to the property in 1951. Second, many of the plaintiffs have already implicitly received full compensation for any taking, by paying a lower price for their respective properties.²⁵¹ Third, there will be a few plaintiffs, particularly those that took title prior to 1966, whose reasonable investment-backed expectations permit them to receive compensation for the drift sand loss.

One conclusion is inescapable: Awarding all *Applegate* plaintiffs total damages sought since 1951 would result in the single greatest case of unjust enrichment in American jurisprudence. Many plaintiffs would realize a tremendous profit on their land in a very short period of time, in some circumstances, the profit possibly exceeding the present value of the properties themselves. And of course, the federal

245. Defendant's Proposed Protocol, *supra* note 97, at 5-6.

246. *Id.*

247. Complaint for Inverse Condemnation, *supra* note 3, at 9.

248. See Appendix A.

249. *Id.* At least five particularly ambitious Plaintiffs joined the lawsuit less than one year after purchasing their property. *Id.*

250. See *Cooper v. United States*, 8 Cl. Ct. 253, 255 (1985).

251. *Loveladies Harbor, Inc. v. United States*, 28 F.3d 1171, 1177 (Fed. Cir. 1994).

taxpayer would pay the bill, and receive no tangible, nor theoretical benefit in return.

B. Societal Efficiency

Compensating most of the plaintiffs in *Applegate* for the alleged injuries to their properties would be societally inefficient and contrary to fundamental principles of fairness. Before deciding to broaden the scope of physical takings doctrine to encompass the facts of *Applegate*, the Claims Court and the Federal Circuit must cautiously weigh the costs and benefits of rendering such a decision. In the context of physical takings claims, Professor Michelman suggests that conflicting claims between public and private rights to land can be resolved by focusing on the efficient use of societal resources.²⁵² Professor Michelman defines efficiency as the “augmentation of the gross social product where it has been determined that a change in the use of certain resources will increase the net payoff of goods (however defined or perceived) to society ‘as a whole.’”²⁵³ Such efficiency can be reached through government action that “maximiz[es] . . . the output of the entire resource base upon which competing claims of right are dependent.”²⁵⁴ When the government maximizes the benefits of natural resources, such as the ocean, through public works projects, like navigational improvements, private landowners often suffer incidental burdens as a result of the government’s wealth maximization.²⁵⁵ Under circumstances where a public works project has led to greater societal efficiency, Professor Michelman would grant compensation to incidentally burdened property owners only when the public work’s overall cost to affected property owners is greater than the overall benefit yielded to society from the project.²⁵⁶

252. Michelman, *supra* note 13, at 1173.

253. *Id.*

254. Joseph L. Sax, *Takings, Private Property and Public Rights*, 81 YALE L.J. 149, 172 (1971).

255. This was clearly the case in *Applegate*. See *Applegate v. United States*, 28 Cl. Ct. 554 (1993), *rev'd*, 25 F.3d 1579 (Fed. Cir. 1994).

256. Michelman, *supra* note 13, at 1177-78. No compensation is required where societal benefits outweigh incidental costs because:

to insist on full compensation to every interest which is disproportionately burdened by a social measure dictated by efficiency would be to call a halt to the collective pursuit of efficiency. It would require a tracing of all impacts, no matter how remote, speculative, or arguable, and a valuation of all burdens, no matter how idiosyncratic or imponderable. If satisfactory performance of such an obligation is not absolutely impossible, at least it is clear that in many situations its costs would be prohibitive.

Id. at 1178-79; see also Michael L. Gold, Note, *Loretto v. Teleprompter Manhattan CATV Corp.: The Propriety of a Per Se Rule in Takings Claims*, 16 J. MARSHALL L. REV. 419, 431 (1983).

Professor Michelman's economic analysis would seem to help explain the reasoning behind the parameters of the navigational servitude doctrine.²⁵⁷ The Supreme Court recognized early that the benefits of improved navigation would yield great societal benefits in increased commerce, energy production and flood prevention.²⁵⁸ The potentially prohibitive cost of compensating every owner whose riparian property was incidentally affected by water flow adjustments would negate the social benefits of implementing important public works. The Supreme Court, having completed an informal cost benefit analysis, appears to have set the navigational servitude doctrine at parameters which would allow for compensation only when the costs of compensation would not outweigh the societal benefit of navigational improvements. Hence, the Court invoked the modern rule that property damage from navigational improvements is compensable only if the damage is directly caused by the government, and occurs above the high water mark.²⁵⁹

In *Applegate*, the federal government improved local commerce and national defense by building a harbor in largely rural Brevard County.²⁶⁰ The government, even if it could have predicted the extent of future erosion, could not have predicted with any certainty where future erosion might occur,²⁶¹ and thus, any attempt to compensate landowners would ultimately have lead to unjust enrichment of some and inadequate compensation of others. For the federal government to now face potentially open-ended liability forty years after constructing navigational improvements, would contravene societal efficiency and simple common sense.²⁶²

The benefits of the Canaveral jetty, allegedly the main culprit in obstructing the sand flow, are significant. The jetty protects commercial vessels, many of which are owned and operated by local

257. The navigational servitude doctrine has repeatedly barred claims that would have otherwise qualified as physical takings, if not for the geographic location of the injury below the high water mark. See, e.g., *United States v. Cherokee Nation of Oklahoma*, 480 U.S. 700, 704 (1987).

258. See *United States v. Chicago, M., St. P. & P. R.R.*, 312 U.S. 592 (1941); *Gibson v. United States*, 166 U.S. 269 (1897); *Gilman v. Philadelphia*, 70 U.S. 713 (1865).

259. See *Chicago, M., St. P. & P. R.R.*, 312 U.S. at 597 (addressing the wide scope of Congress' power to improve navigation below the high water mark); *Owen v. United States*, 851 F.2d 1404, 1408 (Fed. Cir. 1988).

260. See *supra* notes 77-89 and accompanying text.

261. See PILKEY, *supra* note 86, at 106-07. To this day, experts disagree on exactly how far along the coast Port Canaveral affects littoral sand flow. Estimates range from three miles to eighteen miles. Boylan, *supra* note 120, at 9A.

262. Compensation in *Applegate* is particularly inappropriate given that the Army Corps of Engineers constructed the Canaveral Harbor Project without any expectation of owing compensation for indirect beach erosion. How could the Corps have anticipated owing such compensation with cases like *Southern Pacific*, *Sanguinetti*, and *Twin City Power* on the books?

interests, from damaging waves. Nevertheless, the cost of compensating all incidentally affected landowners for lost sand would be prohibitive, potentially reaching hundreds of millions of dollars.²⁶³

The potential for disproportionate cost becomes particularly apparent when one considers the hundreds of navigational jetties that have been constructed along America's coastline over the last 150 years.²⁶⁴ Some researchers estimate that "a jetty can deprive beaches of sand for as far as fifty miles if other conditions are right."²⁶⁵ One can only imagine the cost to taxpayers if every ocean jetty in the United States created an obligation to compensate every incidentally affected property owner for fifty miles on the eroding side of every jetty.²⁶⁶ The cost of actual compensation would not include the enormous transaction costs that would accompany litigating the actual damage to each piece of allegedly affected property. Moreover, costs to society could be exacerbated because the federal government might refuse to undertake universally supported public works projects for fear of strategic behavior by local residents and the inability to avoid future litigation.²⁶⁷

Thus, from an economic perspective, the allegations of takings in *Applegate* are exactly the types of claims which should be barred as economically inefficient.²⁶⁸ The costs of adjudicating and compensating the claims of every incidentally injured property owner, many of whom would have acquired their property long after most erosion

263. See Quintana, *supra* note 11, at B1. The exorbitant damages sought by the *Applegate* Plaintiffs could easily turn to unjust enrichment if sand renourishment projects are successful. Under such circumstances, the benefit to society of compensating property owners would be much decreased because the funding would be allocated to those who had suffered little or no permanent injury. Cf. *Applegate v. United States*, 25 F.3d 1579, 1582 (Fed. Cir. 1994) ("With a sand transfer plant in place, the landowners would encounter little, if any, permanent destruction of their shoreline property.").

264. KAUFMAN & PILKEY, *supra* note 120, at 195-205.

265. Boylan, *supra* note 120, at 9A.

266. Cf. Michelman, *supra* note 13, at 1179 ("[T]he possibility should be noted that the outlay which the social treasury would have to make to cover compensation claims occasioned by an obviously net-positive measure might be prohibitive simply because the amount could not be raised by taxation without destabilizing the economy.").

267. *Id.*

[I]t may be quite impracticable to identify in advance all the losses which may flow from [government action], or to predict the values which a compensation settlement would assign to them. If it were the accepted practice to entertain all plausible claims to be compensated for losses disproportionately imposed by public measures, public decision-makers probably would reject some proposals for no better reason than that they could not be sure of net gain after all the compensation returns were in.

Id.

268. See *id.*; Sax, *supra* note 253.

had occurred,²⁶⁹ would negate any aggregate societal benefit acquired from the presence of navigational jetties in the protection of commerce.

C. The Proper Role of the Judiciary, Separation of Powers and Deference to the Elected Branches

Congress made a legislative choice that the social welfare would be served by creating a deep water harbor on the east coast of Florida.²⁷⁰ As a direct consequence, substantial economic opportunity was created in Cape Canaveral and adjacent coastal towns. As an indirect consequence, sand belonging to no one, except perhaps the state of Florida,²⁷¹ allegedly ceased replenishing the plaintiffs' beaches at the same volume. No property of the plaintiffs was taken, no governmentally-induced incursions of water flooded plaintiffs' beaches. A judicial decree awarding the plaintiffs hundreds of millions of dollars over forty years after the construction of the Canaveral Harbor Project would overstep the judicial role, tantamount to awarding damages for a "constitutional tort" rather than a traditionally defined physical taking.²⁷² Perhaps, in retrospect, Congress or the Army Corps of Engineers should have allocated more funds towards beach renourishment projects in Brevard County, but this was a choice for the elected branches of government to make.²⁷³

269. See Appendix A.

270. Cf. *United States v. Twin City Power*, 350 U.S. 222, 224 (1956) ("It is not for courts . . . to substitute their judgments for congressional decisions on what is or is not necessary for the improvement or protection of navigation.").

271. See *Hayes v. Bowman*, 91 So. 2d 795, 799 (Fla. 1957). For a discussion of littoral sand ownership under Florida law, see *supra* notes 128-68 and accompanying text.

272. See Blumm, *supra* note 7, at 192-93. Unfortunately, recent opinions of the Federal Circuit appear to fully bear out Professor Blumm's concerns. It would now appear that any colorable common law tort committed by the federal government is the equivalent of a constitutional violation. For a somewhat unsettling opinion, see *Skip Kirchdorfer, Inc. v. United States*, 6 F.3d 1573, 1583 (Fed. Cir. 1993) ("[B]reaking and entering without permission constitutes a taking . . . requiring compensation under the Fifth Amendment.").

273. See Note, *Taking a Step Back: A Reconsideration of the Takings Test of Nollan v. California Coastal Commission*, 102 HARV. L. REV. 448, 461 (1989) ("Absent a flaw in the elective or legislative process, the legislature—a representative body—is presumably better suited than an appointed judiciary to assess accurately the costs and benefits to its constituents of any given regulation.").

The building of a sand-transfer plant, as the *Applegate* plaintiffs request, is exactly the kind of political decision that gets made with sufficient political pressure. Wealthy beach-front property owners can hardly be seen as politically powerless. See, e.g., *Brevard County Beach Renourishment Authorization, March 21, 1996: Hearings Before the Subcomm. on Water Resources of the House Comm. on Transportation and Infrastructure*, 1996 WL 5510374 (1996) (statement of Congressman Dave Weldon) (requesting that subcommittee authorize \$69 million towards further beach renourishment projects for Brevard County in 1996). Further evidence of political clout is readily apparent. In response to political pressure, the Corps implemented a sand bypass project in 1994 designed to "mitigate future erosion impacts from the inlet." *Id.* Since the 1994

The federal courts should not impose on the United States a constitutional obligation to compensate for the loss of drifting beach sand, a public good.²⁷⁴

VIII. CONCLUSION

A takings declaration in *Applegate* would be in direct contravention of well-settled Supreme Court precedent, as well as simple common sense. Beaches are dynamic creatures. It is absurd for littoral property owners to expect that beaches will remain static over time, particularly when title is taken during a period of visible erosion. If one accepts the benefits of living on the ocean, one must likewise be willing to shoulder the burdens that may arise.²⁷⁵

A declaration of taking in *Applegate*, combined with the Federal Circuit's previous evisceration of the Tucker Act statute of limitations,²⁷⁶ would open the federal courts to a flood of stale and champertous litigation, potentially dating back hundreds of years. The truly deserving would escape compensation in favor of the litigious, and the federal taxpayer would pay a potentially open-ended bill.

The Federal Circuit has, with increasing frequency, chosen to ignore the teachings of *Pennsylvania Coal* and *Penn Central* which instruct courts to find takings only when a government action goes "too far" or when "justice and fairness require that economic injuries caused by public action be compensated by the government, rather

implementation of the sand bypass project, the Corps has placed approximately 1.25 million cubic yards of beach quality sand on the eroded beaches south of Canaveral Harbor. See Defendant's Consolidated Cross-Motion for Summary Judgment and Response to Plaintiff's Motions for Partial Summary Judgment at Exhibit B, p.p.8-10, *Applegate v. United States*, 25 F.3d 1579, 1581 (Fed. Cir. 1994). Moreover, the Corps of Engineers has placed nearly 6 million cubic yards of beach quality sand on the beaches south of Canaveral Harbor since 1972. *Id.* With continued political pressure, it is likely that the *Applegate* Plaintiffs will get the full panoply of erosion control measures they desire, and thus, presumably their erosion injury will disappear through the political process. *Cf.* *Applegate v. United States*, 25 F.3d 1579, 1581 (Fed. Cir. 1994) ("[T]he sand transfer plant would reverse the continuous erosion process. With a sand transfer plant in place, the landowners would encounter little, if any, permanent destruction of their shoreline property.").

274. *Cf.* *United States v. Willow River Power Co.*, 324 U.S. 499 (1945).

The Fifth Amendment . . . does not undertake . . . to socialize all losses, but those only which result from a taking of property. If damages from any other cause are to be absorbed by the public, they must be assumed by act of Congress and may not be awarded by the courts merely by implication from the constitutional provision.

Id. (emphasis added).

275. *Cf.* *Board of Trustees of the Internal Improvement Trust Fund v. Sand Key Assoc.*, 512 So. 2d 934, 937 (Fla. 1987) ("[H]e who sustains the burden of losses and of repairs, imposed by the contiguity of waters, ought to receive whatever benefits they may bring by accretion . . .") (quoting *Banks v. Ogden*, 69 U.S. 57, 67 (1864)).

276. *Applegate v. United States*, 25 F.3d 1579, 1581 (Fed. Cir. 1994).

than remain disproportionately concentrated on a few persons.”²⁷⁷ Presumably, permanent physical takings, as traditionally defined, always go “too far.” However, can it be said that justice is truly served when compensation is required for every physical injury to private property, no matter how peripheral, and regardless of reasonable investment-backed expectations and societal cost? The Federal Circuit’s recent opinion in *Applegate* appears to answer the question affirmatively. We should all share the hope of Justice Stevens in *Dolan* that the recent attempts at expansion of physical takings doctrine in the Federal Circuit do not signal a return to the “superlegislative power the Court exercised during the *Lochner* era.”²⁷⁸

277. *Penn Central Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

278. *Dolan v. City of Tigard*, 114 S. Ct. 2309, 2329 (1994) (Stevens, J., dissenting).

APPENDIX 1

Dates Plaintiffs Acquired Interest in Claimed Properties

DATE	PLAINTIFF #	DATE	PLAINTIFF #	DATE	PLAINTIFF #
UNKNOWN	288	10/12/72	123	03/19/79	189
UNKNOWN	270	12/28/72	179	03/28/79	61
UNKNOWN	28	01/01/73	50	03/29/79	155
08/11/50	112	01/08/73	184	03/29/79	150
12/26/51	8	02/16/73	183	04/02/79	145
06/26/52	112	04/03/73	222	04/25/79	193
07/12/57	277	05/18/73	14	04/29/79	2
08/01/57	297	06/04/73	217	04/30/79	193
08/03/57	288	08/00/73	184	05/07/79	281
08/07/57	95	02/15/74	14	06/29/79	30
09/29/58	69	05/15/74	14	07/02/79	160
01/01/59	47	05/15/74	137	07/03/79	33
05/08/59	131	06/05/74	51	08/01/79	18
06/24/60	323	06/21/74	213	08/09/79	18
04/19/62	75	01/01/75	175	08/28/79	136
01/01/63	113	01/01/75	283	11/14/79	273
05/16/63	176	02/21/75	80	12/31/79	11
12/19/63	226	03/24/75	14	00/00/80	319
12/27/63	272	06/20/75	221	01/10/80	115
08/23/64	218	08/11/75	192	02/06/80	280
08/23/64	260	11/17/75	237	06/04/80	202
08/03/65	17	12/20/75	19	06/20/80	37
11/03/65	298	05/20/76	251	07/07/80	206
12/10/65	4	09/23/76	299	08/08/80	114
10/08/66	119	10/29/76	12	08/13/80	234
11/15/66	60	12/28/76	157	08/13/80	278
07/21/67	224	12/28/76	287	08/29/80	76
7/31/67	308	01/01/77	10	09/04/880	36
08/18/67	22	03/01/77	159	09/05/80	82
11/27/67	279	05/06/77	89	09/26/80	100
12/08/67	128	05/16/77	162	09/30/80	121
04/26/68	215	05/31/77	214	10/10/80	254
08/27/68	223	10/03/77	166	12/01/80	55
01/01/69	272	02/01/78	46	01/11/81	41
04/24/69	86	04/07/78	52	01/27/81	179
06/27/69	163	04/11/78	52	01/30/81	66
12/31/69	139	05/15/78	148	03/16/81	121
03/17/70	93	06/01/78	311	03/31/81	141
07/01/70	25	07/29/78	44	05/01/81	165
12/14/70	295	08/31/78	214	05/03/81	207
03/23/71	248	09/01/78	85	05/24/81	142
06/14/71	43	10/10/78	230	07/14/81	101
12/02/71	97	11/27/78	210	07/23/81	274
01/01/72	65	12/15/78	62	08/14/81	1
01/01/72	21	01/01/79	172	09/01/81	158
04/14/72	98	01/02/79	42	10/01/81	165
05/24/72	198	01/31/79	209	10/20/81	83

DATE	PLAINTIFF #	DATE	PLAINTIFF #	DATE	PLAINTIFF #
11/12/81	241	05/23/85	72	08/21/88	91
12/30/81	188	06/26/85	187	09/01/88	144
01/04/82	249	07/12/85	29	09/01/88	284
04/01/82	87	08/15/85	125	09/13/88	6
04/09/82	40	08/26/85	135	10/12/88	276
04/21/82	78	09/04/85	261	10/15/88	118
05/03/82	13	10/07/85	77	10/31/88	79
05/14/82	262	10/16/85	267	11/30/88	132
06/04/82	288	10/30/85	266	01/01/89	181
09/02/82	63	10/30/85	266	01/16/89	185
09/02/92	203	01/01/86	134	02/01/89	38
10/14/82	211	02/07/86	200	03/15/89	219
11/04/82	288	05/21/86	275	03/16/89	9
11/14/82	262	07/07/86	201	03/27/89	164
12/01/82	16	09/15/86	45	033/28/89	288
12/31/82	39	10/15/86	235	05/04/89	23
00/00/83	236	10/20/86	271	05/11/89	56
01/09/83	294	12/01/86	152	05/19/89	24
04/11/83	106	12/15/86	64	05/24/89	103
04/15/83	117	12/17/86	231	07/27/89	147
09/00/83	294	12/24/86	54	07/28/89	252
10/07/83	111	12/29/86	288	08/31/89	265
11/18/83	168	00/00/87	225	09/01/89	179
01/01/84	143	04/10/87	182	10/10/89	122
01/03/84	120	04/15/87	288	10/26/89	208
01/03/84	242	04/15/87	126	11/15/89	70
02/15/84	154	06/09/87	256	11/15/89	70
03/20/84	194	06/15/87	45	01/06/90	263
03/22/84	88	07/10/87	156	01/09/90	216
04/16/84	296	07/29/87	285	01/09/90	216
05/22/84	247	08/01/87	303	01/19/90	286
06/08/84	49	08/11/87	57	01/21/90	26
06/24/84	35	09/02/87	53	04/26/90	149
06/29/84	107	09/25/87	104	05/04/90	108
07/01/84	68	09/29/87	90	05/22/90	129
07/01/84	68	10/01/87	209	05/30/90	255
07/01/84	68	11/02/87	67	06/01/90	263
09/28/84	48	12/14/87	178	06/04/90	239
11/09/84	94	12/29/87	288	06/25/90	292
01/01/85	204	12/31/87	138	08/15/90	71
01/21/85	161	01/01/88	181	09/14/90	170
01/25/85	205	01/04/88	301	10/05/90	3
02/14/85	5	02/09/88	173	10/26/90	165
02/19/85	153	03/11/88	73	11/01/90	232
03/01/85	146	03/31/88	288	12/31/90	169
03/01/85	177	04/22/88	140	12/31/90	7
03/25/85	199	04/28/88	269	01/11/91	186
03/26/85	180	05/24/88	244	01/17/91	109
03/28/85	197	06/13/88	110	03/06/91	305
04/05/85	177	06/29/88	74	03/14/91	133
05/01/85	58	08/02/88	151	03/28/91	116

DATE	PLAINTIFF #	DATE	PLAINTIFF #
03/29/91	81	12/16/94	96
04/12/91	220	12/19/94	310
04/15/91	174	12/28/94	64
05/24/91	130	01/07/95	304
07/12/91	105	01/12/95	313
08/02/91	99	02/17/95	102
08/09/91	258	02/28/95	318
09/01/91	212	03/16/95	122
09/15/91	245	04/26/95	307
10/28/91	233		
10/31/91	167		
11/00/91	186		
11/11/91	32		
11/29/91	92		
12/15/92	321		
12/16/91	306		
12/24/91	259		
01/01/92	179		
01/17/92	34		
03/05/92	171		
04/14/92	27		
04/27/92	149		
04/27/92	253		
05/27/92	13		
05/27/92	13		
06/09/92	31		
06/19/92	293		
06/19/92	191		
07/17/92	127		
08/05/92	20		
10/16/92	291		
11/23/92	196		
01/11/92	257		
03/01/92	84		
03/01/93	289		
04/24/93	310		
05/14/93	228		
05/17/93	229		
06/22/93	238		
11/00/93	257		
01/07/94	300		
03/31/94	264		
03/31/94	290		
05/13/94	317		
08/29/94	307		
10/04/94	302		
10/10/94	312		
10/17/94	322		
10/31/94	314		
11/10/94	315		
11/30/94	309		

BOOK REVIEW

RONALD A. CHRISTALDI*

DYING FROM DIOXIN: A CITIZEN'S GUIDE TO RECLAIMING OUR HEALTH AND REBUILDING DEMOCRACY. By Lois Marie Gibbs¹ and the Citizens Clearinghouse for Hazardous Waste. South End Press, Boston: 1995, Pp. 361. \$20.00.

The environmental justice movement has rapidly gained momentum over the past few years.² This movement challenges the decisions, often made by corporations, "of *who* gets *what* kind of environmental quality."³ Although this movement focuses primarily on the treatment of minority and disadvantaged communities, it is part of a larger effort to reform society's valuation of human health and the environment.⁴ In *Dying from Dioxin: A Citizen's Guide to Reclaiming Our Health and Rebuilding Democracy*, Lois Marie Gibbs challenges the current system which has enabled corporations to exert their influence and power to promote their own self-interest at the expense of human lives and the environment.

In 1978 the people of Love Canal, New York found out that thousands of tons of toxic chemicals had been buried under their homes and that these toxic pollutants were poisoning them and their children.⁵ On August third of that year, the residents of Love Canal

* J.D., Florida State University College of Law, expected May 1996; M.A. in International Affairs, Florida State University, expected May 1996; B.A. in History, New College, 1993; Editor-in-Chief, *Journal of Land Use & Environmental Law*. Upon graduation will join the firm of de la Parte, Gilbert & Bales, Tampa, Florida, as an associate.

1. Lois Marie Gibbs was the 1996 Spring Distinguished Lecturer of the *Journal of Land Use and Environmental Law* at the Florida State University College of Law. This lecture was co-sponsored with the Legal Environmental Assistance Foundation (LEAF).

2. See Robert D. Bullard, *Conclusion: Environmentalism with Justice*, in CONFRONTING ENVIRONMENTAL RACISM, VOICES FROM THE GRASS ROOTS 195 (Robert D. Bullard ed., 1993); Vicki Been, *Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?*, 103 YALE L.J. 1383 (1994); Richard J. Lazarus, *The Meaning and Promotion of Environmental Justice*, 5 MD. J. CONTEMP. LEGAL ISSUES 1 (1994).

3. Vicki Been, *Analyzing Evidence of Environmental Justice*, 11 J. LAND USE & ENVTL. L. 1 (1995) (emphasis in original).

4. See, e.g., Heather Fisher Lindsay, *Balancing Community Needs Against Individual Desires*, 10 J. LAND USE & ENVTL. L. 371 (1995) (presenting a radical challenge to traditional views on property and questioning the current level of significance placed on human health and the environment where profits are concerned).

5. MICHAEL H. BROWN, THE POISONING OF AMERICA BY TOXIC CHEMICALS 25-27 (1980). To be precise, 21,800 tons of toxic chemicals were buried at Love Canal. LOIS MARIE GIBBS, DYING FROM DIOXIN: A CITIZEN'S GUIDE TO RECLAIMING OUR HEALTH AND REBUILDING DEMOCRACY xvii (1995). For the history of Love Canal see *id.* at 64-67.

formed the Love Canal Homeowners Association and elected twenty-seven year old resident Lois Marie Gibbs as their president.⁶ For the past eighteen years Gibbs has played a major role in raising awareness of toxic chemicals, working to reduce their production and organizing a grass-roots campaign to empower communities to fight the reckless destruction of their neighborhoods by corporations. *Dying from Dioxin* is Gibbs' latest contribution to this effort.

The introduction explains the politics behind the poisoning of America's communities. It serves the dual purpose of outlining the historic denial, by both the government and industry, of the problems associated with dioxin and presenting a preparatory framework for those planning to organize within their own communities. The main body of the book is divided into two parts. Part One is predominantly a synopsis of the 2400-page EPA draft report on dioxin, released in September 1994.⁷ This part uses scientific principles to examine toxic pollution, offering a technical explanation of what dioxin is and why it is dangerous. Additionally, this part explains how most of society has unknowingly been exposed to dangerously high levels of dioxin. Lastly, Part One chronicles dioxin's effects on the immune and reproductive systems, its propensity to cause cancer and the other numerous health effects of exposure. Although Part One deals with some fairly complex scientific information, it is written in "plain English," so that any reader can understand.

Part Two deals primarily with empowerment and grass-roots organization. This part offers detailed advice on how to organize, build a coalition, fight industry and reclaim individual communities. Although these two parts focus on quite different subjects, they represent the steps people can take to end pollution in their communities. Accordingly, this review examines these parts in turn and discusses the over-arching theme of the book.

PART ONE: THE SCIENCE OF DIOXIN

Although many people have heard the word dioxin before, few are aware of its exact nature or the dangers associated with it. Gibbs offers a simple and straightforward explanation of dioxin:

Dioxins are a family of chemicals with related properties and toxicity. There are 75 different forms of dioxin Dioxin is not manufactured or used. Instead, it is formed unintentionally in two

6. BROWN, *supra* note 5, at 32.

7. Becka Oliver, *New Dioxin Books Make a Tough Subject Real for Non-Scientists*, PRO EARTH TIMES, Jan. 1996, at 10 (reviewing Gibbs' book and DOW BRAND DIOXIN: DOW MAKES YOU POISON GREAT THINGS (Jack Weinberg ed., 1995)).

ways: (1) as a chemical contaminant of industrial processes involving chlorine or bromine, or (2) by burning organic matter in the presence of chlorine Dioxin itself has no practical use.⁸

Although dioxins are not generally soluble in water, they do attach to particulate matter (dust) in the air and water and are soluble in fat. These properties lead dioxins to bioconcentrate or build up in the bodies of animals as well as humans. Hence, dioxins can accumulate in the cows, chickens, pigs and fish that humans eat, thereby directly transferring the poison to humans. Accordingly, a person who lives in the northern state of Maine could be poisoned by dioxins produced in Florida, via food produced in Florida that is subsequently consumed in Maine.

Dioxin is often released into the air and settles on nearby soil.⁹ Because dioxin is not soluble in water, it will not be carried into the groundwater by rain and can remain in the ground, close to the surface, for years. Although exposure to sunlight can help dissipate dioxins that are directly on the soil's surface, unexposed dioxins, which lie mere centimeters below the surface, can remain an imposing threat for generations.

Dioxin does not break down easily, and is not metabolized by bacteria. These factors combine to make dioxin very persistent in the environment. Because dioxin is passed to humans through the food chain and stays with us for a substantial period of time, it can accumulate to dangerous levels.

Dioxin, a byproduct formed during industrial processes involving chlorine or the combined burning of chlorine and organic matter, comes mostly from one of four sources. These sources are: (1) incinerators; (2) paper and pulp mills; (3) chemical manufacturing of commercial products that contain chlorine; and (4) industrial plants, such as metal smelters and cement kilns. Since chlorine is necessary for the production of dioxin, Gibbs suggests a simple strategy: "reduce the amount of chlorine and the amount of dioxin generated will be reduced."¹⁰

The book also addresses what is called "mass balancing." This process checks the numerical accuracy of dioxin reporting. The mass balancing method compares the amount of dioxin deposited on the ground from the air with the amount of known emissions from

8. Gibbs, *supra* note 5, at 35.

9. Some studies have shown that dioxin can travel as far as 300 miles from its place of production before finding a resting place. *Id.*

10. *Id.* at 51. Gibbs does note that some dioxin is produced naturally. Although Gibbs downplays this fact, a debate does exist regarding the significance of industrial dioxin production in proportion to the total amount of dioxin in the environment.

various sources. In this discussion, Gibbs notes several mass balancing calculations done in Europe and the United States. The result of these calculations indicates that the amount of dioxin deposited in the environment in a given year is far greater than the known amount produced. While the book posits several theories for this discrepancy, and does admit that without further study the exact reason for the discrepancies will remain uncertain, Gibbs concludes that “[w]hat is certain is that levels of dioxin present in the environment are even higher—and more dangerous—than the emissions reports suggest.”¹¹

Gibbs stresses several times in her work that dioxin levels in humans in the United States, as per a report of the EPA, “are at or near the levels known to cause harm.”¹² This point underscores the book’s urgent tone. Gibbs stresses that action must be taken now or harm will occur.

A logical question that arises from the EPA reports is what exactly are the harmful effects of dioxin. Gibbs does an excellent job of discussing, in an easily understandable manner, the health risks associated with dioxins, including problems with cancer, the reproductive system, skin conditions, diabetes, lung disease and gastrointestinal, nervous and circulatory disorders. In regard to cancer, Gibbs explains that dioxin is a “promoter” rather than a direct carcinogen. Simply put, instead of creating cancer causing changes in DNA, dioxin facilitates the growth or spread of cancer by “accelerating cell growth, by suppressing the immune system, or by affecting hormone function.”¹³ Although this seems less threatening than the presence of a direct carcinogen, promoters often cause the reproduction and spread of cancer from a single cancerous cell. Without the presence of promoters, the mutated cell would likely die before it divides.

After discussing the grave problems with dioxins, Gibbs offers a two-fold plan for combating the poison. On an individual level, Gibbs explains that humans must reduce their dioxin intake. Since dioxin is not water soluble, but is soluble in fat and is passed to humans through the food chain, reduction of dioxin intake can be accomplished by consuming less fat. This means eating less meat and more lower-fat foods like skim milk and skinless chicken. However, Gibbs concludes that “there is no way for us . . . to completely

11. *Id.* at 62. The possibility exists that the difference represents natural dioxin production or the relocation of previously produced dioxin.

12. *Id.* at 75 (quoting EPA report). Gibbs does not report how these figures were determined.

13. *Id.* at 93.

eliminate dioxin from our food Steps must be taken to stop dioxin exposure by stopping the production and release of dioxin."¹⁴ The second part of the book focuses on how to organize to fight the production of dioxin.

PART TWO: ORGANIZING

Part Two of the book begins by stating that "[t]he truth won't stop the poisoning. But organization will."¹⁵ Certainly the aim of the first part of the work was to provide readers with the "truth." Yet as Gibbs states, the truth is not enough; Part Two is therefore a plan for action. This is the strength of Gibbs' work. Rather than merely drawing societal attention to the facts derived from dioxin tests, she provides these facts as the basis to plan a strategy for reducing their presence in society. Gibbs offers a detailed blueprint explaining how to organize and fight back against dioxin poisoning. She outlines several fundamental organizing principles carefully designed to limit or eliminate dioxin pollution.¹⁶

The book is not only a blueprint for fighting dioxin pollution, it also serves as a research tool. In short, Gibbs not only teaches about the effects of dioxin and calls citizens to organize, she also offers the necessary tools to do so. This is exemplified in her discussion of "how to be a dioxin detective."¹⁷ In this discussion, Gibbs offers several avenues to explore in searching for information, including information made available by Gibbs' group, the Citizens Clearinghouse for Hazardous Waste, and information published by the Federal Government's Right-to-Know network. The Right-to-Know computer database holds the toxic release inventory (TRI) reports which toxic substance producers, handlers, storers and transporters must file each year under the Emergency Planning and Community Right-to-Know Act (EPCRA).¹⁸ This TRI data has proven very successful in raising community awareness.¹⁹ Gibbs then lists each potential source of dioxin; e.g., incinerators, pulp and paper mills, etc., with United States maps indicating the locations of each source.²⁰

14. *Id.* at 83.

15. *Id.* at 143.

16. Gibbs acknowledges that some of the ideas for these principles of organization came from *K. Bobo et al., Organizing for Social Change: A Manual for Activists in the 1990s* (1991).

17. Gibbs, *supra* note 5, at 205-36.

18. 42 U.S.C. §§ 11001-11050 (1988 & Supp. V 1993).

19. For a discussion of the success of EPCRA and TRI reporting see Sidney M. Wolf, *Fear and Loathing About the Public Right to Know: The Surprising Success of the Emergency Planning and Community Right-to-Know Act*, 11 J. LAND USE & ENVTL. L. 217 (1996).

20. Gibbs also identifies and discusses specific examples and locations of dioxin pollution. For instance, she discusses the tragic toxic poisoning that is a continuing problem in Pensacola,

Gibbs also offers a discussion of "indirect strategies" for stopping dioxin pollution. These strategies are meant to complement efforts that target point-source dioxin pollution. This section discusses consumer products, such as bleached paper and PVC products, that contribute significantly to the level of dioxin produced and offers alternative products for consumers.

Lastly, Gibbs offers potential industry rejoinders to this crisis and dispels their ill-formed arguments. As in any debate, it is critical to be well versed in the arguments, and this final discussion prepares citizens for the retorts of an industry in denial.

This work is an excellent tool for grass roots activism. While Gibbs argues strongly from one viewpoint, she does acknowledge opposing viewpoints. However, *Dying from Dioxin* is not meant to be an objective presentation. Rather it is a call to action and a resource for grass roots organization. In it Gibbs, who was first introduced to dioxins as a resident of Love Canal, draws upon her personal experience and that of her peers, as well as information provided by the EPA and other independent studies, to inform, educate and mobilize people at the local level. In this age when elected officials and government bureaucrats have all but forgotten the plight of the commoners, communities have been left to their own devices to protect themselves against such threats as mass scale poisoning from dioxin. It is only through the dedication and courage of individuals such as Gibbs that those communities will be able to reclaim the initiative and fight against corporate America for their health, safety and welfare. Gibbs has provided the necessary tools to fight back and win; it is now up to us to respond to the call and demand justice.

Florida. GIBBS, *supra* note 5, at 252-54. See also Bill Kaczor, *Residents Live and Die Under the Shadow of Mount Dioxin*, TALLAHASSEE DEMOCRAT, Feb. 18, 1996, at 10B (discussing the widespread health problems in Pensacola attributable to the toxic pollutants, including dioxin, that are present in large quantities).