OUR NATIONAL PARKS -- OVERCROWDED, UNDERFUNDED, AND BESIEGED WITH A MYRIAD OF VEXING PROBLEMS: HOW CAN WE BEST FUND OUR IMPERILED NATIONAL PARK SYSTEM?

RICHARD J. ANSSON, JR.[*]

Copyright © 1996 Journal of Land Use & Environmental Law

I. INTRODUCTION

One hundred and twenty-six years ago, Congress established Yellowstone as this country's first national park.[1] By 1916, thirty-seven national parks had been established, and in that same year, Congress created the National Park Service to supervise and maintain these parks.[2] Congress mandated that the Park Service preserve each park's scenery, natural and historic objects, and wildlife for both present and future generations.[3] Since 1916, the national park system has grown to include over 376 units.[4] The National Park Service's holdings are remarkably diverse and include wilderness preserves, wild rivers, seashores, archaeological ruins, and historic sites.[5]

Throughout this century, our national parks have come to embody and symbolize our country's rich cultural heritage. Our park system protects and preserves our historic and natural treasures. These parks encompass historic battlefields such as Gettysburg National Military Park and archaeological treasures such as Mesa Verde National Park. They encompass wild rivers such as the Buffalo National River and pristine seashores such as Gulf Islands National Seashore. In essence, our national parks have come to represent who we are as a nation and whence we came. Indeed, from the grandeur of El Capitan in Yosemite to the vastness of the Grand Canyon to the splendor of the Grand Tetons, our national parks epitomize the character of our nation and have come to embody the raw, unencumbered spirit of our youthful nation.

However, the grandeur of our national parks—and the character of our nation—is currently at stake as our parks have been subjected to a myriad of vexing problems. The National Park Service presently has a cumulative monetary shortfall of approximately $11.1 billion.[6] This shortfall, which has accumulated over the years, has arisen from a backlog of unfunded operations, construction projects, land acquisitions, and resource protection projects.[7] Because of this monetary shortfall, the Park Service is presently impoverished, mired in political squabbling, and beset with troubles from both within and without.

Throughout the park system, the monetary shortfall has thwarted the Park Service's ability to prevent the steady deterioration of roads, buildings, sewers, and other infrastructure.[8] Additionally, the park system has been forced to close campgrounds, shorten operating hours, eliminate many interpretive programs, and lay off many seasonal rangers.[9] The lack of funds has also hampered the Park Service's ability to adequately care for its priceless natural, cultural, and historical assets.[10] Finally, the funding shortage has forced the Park Service to eliminate many of the parks' scientific studies programs.[11]

If our nation is to preserve and maintain our national parks for this generation and future generations, the Park Service must obtain appropriate levels of funding. The Park Service has traditionally relied upon congressional appropriations. However, Congress has not allocated the Park Service enough funds to adequately care for our national parks.[12] This article, after analyzing the numerous problems confronting the Park Service, examines the many supplemental funding measures that Congress is currently considering.

Section II discusses the National Park Service and its congressional mandate. Section III details the Park Service's recent monetary problems and documents the myriad of vexing problems confronting the national park system. Section IV analyzes the many supplemental funding options currently being considered by Congress. Section V concludes by advocating that Congress must embrace unique funding initiatives and, in so doing, must also ensure that any newly adopted funding initiatives do not compromise the integrity of the national parks.

II. OUR NATIONAL PARKS
Many proponents of America's national parks have often stated that their creation must have been the best idea the United States Congress has ever had. Congress, in part, created individual national parks in the late-19th and early-20th centuries to preserve our natural wonders' splendid grandeur and to protect these wonders from the type of commercial exploitation that had beset Niagara Falls by the 1830s. Indeed, as one commentator aptly noted, Congress, in part, set aside these lands to serve as "America's answer to the great antiquities of the Old World [because they] provid[ed] the cultural validation needed, at least in the minds of its citizens, to put the fledgling country on a par with its European rivals."

Although initial park efforts were opposed by logging and mining interests, support for the creation of national parks came largely from preservationists and great rail barons. The preservationists wanted to preserve the natural beauty of the land. The barons wanted to set aside this land because they saw the parks as profitable endeavors in which their westward bound rail lines would carry Eastern tourists. Indeed, Yellowstone National Park—the first park established by Congress—was created as a result of lobbying by preservationists who wanted to preserve the land and railroad owners who were eager to transport tourists. Establishment of national parks might not have been possible without the tourist industry, and this informal alliance between the preservationists and the tourist industry has endured ever since.

By 1900, Congress had established five more national parks, and in 1906, Congress passed legislation that empowered the President to designate areas as national monuments. In most circumstances, national park creation had become popular with local constituencies because those citizens realized that park designation usually resulted in increased economic activity near the park area. However, preservationists and tourist enthusiasts were unable to prevent legislation that adversely affected a park when the land was seen as too valuable to be set aside.

For example, in 1913, Congress passed legislation that allowed for the Yosemite's Hetch Hetchy Valley to be dammed to provide power and water to the City of San Francisco. The supporters of the bill had argued that only a few thousand people visited Hetch Hetchy each year while in San Francisco nearly 500,000 needed the water the Valley could provide. After this loss, preservationists understood that they had to increase public support for the parks by increasing the number of people that used these parks for recreational use. Indeed, preservationists realized that "add[itional] roads, hotels, and other visitor facilities seemed more tolerable than dams or aqueducts." As a result, preservationists concluded that aesthetic preservation had to be compromised to counter the Hetch Hetchy argument.

Following the Hetch Hetchy incident, many park supporters also lobbied for the creation of a comprehensive park management scheme to help facilitate the parks' ability to adequately attract more visitors. Shortly thereafter, Congress created the National Park Service in 1916 and empowered it to promote and regulate national park lands. The Act further provided that the National Park Service must "conserve the scenery and the natural and historic objects and the wild life therein and [must] provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." Hence, the mission of the Park Service, as declared by the 1916 Act, is to ensure that present generations enjoy and have access to National Park Service holdings as long as such access does not impair the park's natural and historic resources for the enjoyment of future generations.

From 1916 through WWII, park directors aggressively sought to increase tourism in the parks as the Park Service continued to be "persuaded that the economics of tourism gained for the parks more support than their pristine beauty . . . " This aggressive push to increase tourism succeeded beyond all expectations. As a result, early park preservationists began to encounter the classic dilemma that still bedevils the Park Service today: "To exclude people, whatever the means, risked loss of support for the national park idea; to accept more people as the price of support jeopardized the parks themselves."

After WWII, the number of tourists visiting the parks dramatically increased, and the Park Service was unable to adequately accommodate all the tourists because the parks lacked an adequate number of campground facilities, food services, and parking facilities. During the 1950s and 1960s, Congress provided the Park Service over $1 billion to provide for the increased number of visitors. By 1965, Congress had stated that the Park Service should only allow accommodations and concessions within parks if they were consistent with preservation of park values.
National Park System Concessions Policy Act of 1965, Congress stated:

Congress hereby finds that the preservation of park values requires that such public accommodations, facilities, and services as have to be provided . . . should be provided only under carefully controlled safeguards against unregulated and indiscriminate use . . . It is the policy of Congress that such development shall be limited to those that are necessary and appropriate for public use and enjoyment . . . and that are consistent to the highest practicable degree with the preservation and conservation of the areas.[37]

Since 1965, the number of tourists visiting our national parks has continued to escalate.[38] Many of our most popular national parks have become flooded with restaurants, shops, campgrounds, boat docks, ski areas, roads, and lodges. Visitors have also increasingly sought to use these parks for outdoor recreational use.[39] The recreational use of our national parks has long-term management implications because preservation of our parks for future generations may be jeopardized if recreational use is allowed to adversely impact a park's well-being.[40]

Over the past twenty years, our parks have also been beset by numerous other problems caused by increased visitation. Such problems include: increased pollution; encroaching commercial development both within and outside the parks' borders; and excessive visitation to many of our fragile natural, historical, and cultural treasures.[41] Unfortunately, the Park Service has been unable to adequately confront these problems because it has either failed to receive enough funding or it has mismanaged the funding that it has received.[42] As a result, the Park Service once again faces the critical dilemma which bedeviled it since its inception: "To exclude people, whatever the means, risk[s] loss of support for the national park idea; to accept more people as the price of support jeopardize[s] the parks themselves."[43] Hence, the Park Service—to prevent the loss of support for the national park idea and to properly preserve the parks for present and future generations—must receive appropriate levels of funding from traditional sources, must properly manage the funding it receives, and must find supplemental funding sources which do not compromise the integrity of the park system.

III. OUR NATIONAL PARKS AND THEIR FINANCIAL QUANDARY

Virtually all of the park system's units have either failed to receive an appropriate level of funding or have mismanaged the funds that they have received. As such, the Park Service has been unable to adequately preserve our parks for present and future generations. Additionally, our national parks have faced a barrage of well-documented threats on issues ranging from high levels of pollution to an excessive number of visitors. For example, Yellowstone National Park—which has an estimated $600 million backlog in infrastructure[44]—does not have enough funding to repair a leaky sewage treatment plant that threatens Old Faithful.[45] At Mesa Verde National Park, the cliff dwellings are slowly deteriorating. Sagging roofs, eroding masonry, and missing plaster currently threatens to destroy the 585 pre-Columbian cliff dwellings of the Anasazi.[46] Unfortunately, Mesa Verde National Park, which was established to protect and preserve the Anasazi's dwellings,[47] has been unable to carry out its mission, and at the current rate, the Park Service will be unable to properly preserve these ancient ruins for future generations.

The 250 archaeological, cultural, and historic sites within the purview of the Park Service have also come under siege.[48] Many of our most important prehistoric treasures have gone unprotected.[49] For instance, at Chaco Cultural National Historic Park, nine of the thirteen major pre-Columbian Anasazi Puebloan ruins are collapsing—including the 35-foot tall ancient Indian great house.[50] Further, many of these ruins have succumbed to overvisitation.[52]

Numerous examples of neglect can also be found at our national historic and military sites. The Park Service has indicated that of the 17,436 historic structures surveyed, more than 53.9 percent of them were in fair or poor condition.[53] For instance, three wooden landmark boats are rotting at San Francisco Maritime National Historic Park, and it will cost the Park Service at least $10.3 million to restore these boats.[54] Thousands of wax cylinder recordings are cracking and crumbling at Thomas Edison National Historic Site in New Jersey.[55] While at Gettysburg National Military Park, the largest collection of Civil War memorabilia is being destroyed by a leaking roof on the archives building.[56] Additionally, over 350,000 documents—including battlefield reports, maps, and photographs—have been housed in a storage room with no humidity controls or sprinkler system.[57]
The Park Service has also estimated that sixteen percent of the National Historic Landmarks across the country are endangered or threatened. In all, the Park Service's units are in grave danger, and the National Park Service has been unable to properly preserve our natural, cultural, and historical treasures. First, the Park Service has not received an adequate level of funding. Second, the Park Service has mismanaged the funds it has received. Third, the Park Service has continued to gain more and more units. Finally, the Park Service has been overwhelmed by an ever-rising number of visitors.

Without proper funding, the Park Service has been unable to maintain our parks and has also been unable to confront the many vexing problems before it. The next several subsections document the problems confronting the Park Service. The following section details the current supplemental funding proposals before Congress and advocates that we must properly fund our parks so that we can preserve our nation's natural, cultural, and historic treasures for our generation and future generations.

A. More People and Less Money

In the last thirty years, the number of people visiting our national parks has doubled from 133 million to 269 million. Yet, since 1977, the Park Service has seen a $202 million decline in revenue when counted in constant dollars. This monetary shortfall has led to approximately a fourteen percent decline in revenue. Such a decline in revenue, coupled with a rise in visitors, has had an adverse affect on our parks.

For instance, in the last five years, staff has been cut by more than ten percent. Additionally, the parks have been unable to provide visitors with all of the services their respective parks have to offer. For example, at Great Smoky Mountains National Park, several campgrounds and picnic areas have been closed, and at Arches National Park, interpretive programs have been reduced.

Even Yellowstone National Park—the crown jewel of the national parks system—has experienced conditions similar to those at the Great Smoky Mountains and Arches national parks. Three million people visit Yellowstone each year. These tourists see the world's finest geothermal activity, the nation's most varied and abundant wildlife, and scenery that leaves one breathless. However, they also encounter an overcrowded park that has reduced many of its services due to funding cuts. Indeed, Yellowstone's annual budget of $20 million has been cut over the past two years by $2.2 million in 1996 and by $3 million in 1997. As a result, Yellowstone has had to shut down a 116-space campground, close Norris History Museum, and discontinue many of the parks' information programs.

Many additional problems also confront Yellowstone National Park as a result of the funding shortage—problems that visitors might not readily detect. One such problem includes the park's decision to discontinue several research programs. First, the park decided to cancel a research program which studied how to prevent the infiltration of damaging species. The cancellation of this research program endangers the well-being of the park's grizzlies, bald eagles, and bison. Without this program, voracious lake trout threaten to wipe out native cutthroat trout, which are a vital seasonal subsistence for grizzlies, bald eagles, and white pelicans. Second, the park discontinued several research programs that monitored geothermal activity and tracked the condition of wildlife and vegetation.

B. More Problems and Less Money

1. Gateway Communities and the National Parks

The growth of communities surrounding many of our national parks has also contributed to the rising number of tourists. These gateway communities include towns like Jackson, Estes Park, Cody, Red Lodge, Gatlinburg, St. George, Kalispell, Crescent City, Port Angeles, Tusayan and Hood River. Over the years, these communities have served as places for tourists to purchase basic supplies for seasonally-related tourism activities. However, within the past thirty years, these communities have grown at unprecedented rates and have come to serve as full time homes for groups as diverse as computer moguls, movie stars, trust-fund cowboys, and well-off retirees.
I visited many of these communities throughout the 1980s and 1990s with my adventuring family, and I have witnessed first-hand their unprecedented growth. For instance, when I first visited Jackson in 1981, the town was confined within a rather small geographic location. Today, the town has sprawled along U.S. Highway 89/189/191 to the north and south and along State Highway 22 to the west as subdivisions and ranchettes have popped up on just about every available private landholding.

Like Jackson, many other gateway communities are booming, and their growth has likewise contributed to the number of tourists that visit our national parks. Many additional problems also face our parks as a result of the gateway communities' rapid growth. These communities bring smog, pollution, and other urban problems right to a park's doorstep. For example, air pollution in many of our parks is extremely high as automobiles, snowmobiles, jet skis, terrain vehicles, and airplane/helicopter oversights emit nitrous oxide and hydrocarbons. Air pollution in some of the western parks have reached levels as high as those experienced in Los Angeles.

Such pollution has impaired the scenic beauty of the parks and disrupted animal and plant life. As a result, if the Park Service is to maintain and preserve our parks for this generation and future generations, it must study the impacts of pollution, and it must facilitate plans that will eliminate or lessen the impact of the pollution. To do such, the Park Service must have appropriate levels of funding—funding they do not currently have.

Recently, the Park Service, in an effort to prevent continued air pollution, decided to ban cars completely from Grand Canyon, Zion, and Yellowstone national parks by 2002. In so doing, the Park Service appropriated enough funds to implement a new transportation system which will allow tourists to visit these parks via light rail, buses powered by natural gas or electricity, natural trails, or bicycle paths. The Park Service's decision will drastically reduce the air pollution emitted at these parks. However, the decision will also shift the pollution problems to the gateway communities and help facilitate their continued growth.

Indeed, at Grand Canyon National Park, the park's 4.5 million visitors would leave their cars near the southern entrance at Tusayan and ride the shuttles into the park. Since this announcement, Canyon Forest Village Company has actively sought to develop land on the north side of Tusayan near the proposed rail/bus terminal. This development, if approved, may include 3,000 hotel rooms, 425,000 square feet of retail space, and 2,600 homes. Even if this particular development is not approved, Grand Canyon's new transportation plan, in time, will greatly contribute to Tusayan's growth.

Acadia National Park has also decided to ban cars from its park as early as next year. Roughly three million people visit the 41,000 acre park per year, making it the second most visited national park per acre. To alleviate pollution problems and traffic congestion, the park has decided to implement a shuttle bus system.

The Great Smoky Mountain National Park has also considered implementing a shuttle bus system to prevent traffic congestion and to alleviate pollution problems. In the summer, pollution generated in the area generally reduces the summer visibility from sixty-five miles to twelve miles. More than nine million tourists visit the park and surrounding attractions—such as Dolly Parton's Dollyworld theme park. The Park Service expects that number to rise after Harrah's new $82 million casino opens near Gatlinburg on the Cherokee Indian Reservation.

The encroaching developments surrounding Great Smoky Mountain National Park may also signal a further urbanization of the gateway communities. Indeed, gateway communities are prone to additional resort-oriented developments such as theme parks, casinos, and live entertainment. For instance, in Cedar City, Utah—which is approximately sixty miles from Zion National Park and within 150 miles of many other national parks—a company intends to build a 20,000 acre international airport, an Old West-style theme park, and a commerce center. It is thought that these attractions would bring approximately 17,000 visitors a day and the FAA has stated that the airport would handle approximately two million people per year starting in the fall of 2000.

2. The Gateway Communities and Yellowstone

Gateway communities do not simply beset our parks with more visitors and more problems. On the contrary, parks rely on gateway communities to provide many—if not most—of the tourists with lodging, food, and other general conveniences. Likewise, gateway communities rely on the park to provide tourists with the services the park
customarily affords its visitors. In many ways, the national parks and their gateway communities have been wed by
time and necessity, and the importance of their relationship should not be underestimated.

Like other national parks and their respective gateway communities, Yellowstone and its gateway communities have
developed an integral relationship over the years. Indeed, after years of coexistence, the communities and the park have
developed an ebb and flow relationship—with each entity's decisions affecting the other. The gateway communities
surrounding Yellowstone, like those surrounding other national parks, have experienced rapid and largely uncontrolled
development in the past fifteen years. Within the 18 million-acre Greater Yellowstone Ecosystem, the population has increased by over twelve percent since 1990 to more than 322,000 people. In all, these communities
have become urban in nature and now include commercial strips, motels, golf courses, galleries, state-of-the-art
recreational centers, and high-priced ranchettes.

With these developments, the Yellowstone region has obviously encountered numerous problems associated with
urbanization such as pollution, smog, crime, and overcrowded conditions. The developments have had an adverse
impact on the park's wildlife and have also posed a long-term threat to the geothermal activity in the region. However,
due to a lack of funding, the park has been unable to adequately address these problems because it eliminated
scientific programs that had monitored geothermal, wildlife and vegetation activity.

The gateway communities within the Yellowstone region have also affected the park's internal environmental planning
decisions. For example, the park decided to close snowmobiling and snowcoach roads within Yellowstone as a result of
a court settlement. Biodiversity Legal Foundation and Fund for Animals brought suit against the park to effectuate
closure of the roads. The groups wanted the roads closed to reduce the movement of bison outside of the Park and
thereby curtail the number of buffaloes that could potentially be slaughtered by Montana riflemen.

The closure of roads caused many to cancel their plans to travel to the gateway communities. Gateway community
members worried that the continued closure of the park's roads would have a devastating impact on the local economy
during the winter season. Because of these fears, members of the federal government, state government, and
gateway communities met with Yellowstone officials, and, after their meeting, the Park Service decided it would
reopen the roads.

With the roads reopened, the park has decided to study the effects of winter use over the next two winters and then
develop a comprehensive plan. It has been estimated that as many as 1,000 snowmobiles enter the park each day
and emit nitrous oxide and hydrocarbons equivalent to the tailpipe emissions of 1.7 million cars. It will cost the
park approximately $1.5 million over a three-to-five year period to expand research and monitoring of wildlife
movements and collect information on weather patterns, snow conditions, and visitor-use patterns; after two years of
research and monitoring, the results will be analyzed and a determination made on whether the park will limit any
winter use activities.

In response to the entanglement between the Park Service and gateway communities in Yellowstone, Senator Craig
Thomas (R-WY) has emphasized that both groups communicate because such communication helps to both "plan for
the future and address local issues before they become large scale problems;" Thomas feels the national parks cannot
function as islands because the economics, the jobs, and the culture of our national parks and their gateway
communities are intertwined. Indeed, our parks are not islands, and the Park Service will have to work with these
communities to address the problems that confront their respective regions.

This presents our underfunded national parks with two problems. First, studies will have to be funded to determine how
each national park is being affected by increased visitation or increased pollution; second, the parks will have to
implement and fund a plan to correct or alleviate the problem. As a result, the Park Service and Congress will have to
find a way to properly fund our parks before their essence is jeopardized and their treasures are forever lost.

3. City Growth and The National Parks

In other areas, city growth is gradually encroaching our parks' borders. These communities include cities like
Albuquerque, Miami, and New Orleans. However, these cities differ from the gateway communities in that these cities
have grown to the parks' borders due to suburban sprawl associated with business growth. By contrast, gateway
Suburban sprawl presents our parks with many unique problems—some of which may not be curable. For example, a new airport is being built near the Everglades and Biscayne national parks. The noise and pollution from the planes will obviously have an adverse impact on the parks, and the Park Service will be forced to fund studies and develop programs that best mitigate the adverse impacts caused by the development. Likewise, in Albuquerque, a six-lane highway is proposed to be built through Petroglyph National Monument. This highway, which is expected to carry 24,000 vehicles a day, will have an adverse effect on the park's serenity and will obviously increase the pollution in the park. Once again, the Park Service will be faced with expending money to remedy a problem caused by suburban sprawl.

In New Orleans, housing developments encroach Jean Lafitte National Historical Park on its northeastern and eastern boundaries. Lafitte was created in 1978 and includes a 20,000-acre wetlands preserve near Marrero, Louisiana. I am particularly familiar with this park because I lived in Marrero from 1974 through 1993. I not only witnessed the creation of the park, but I observed its development. Indeed, I watched as the Park Service built a visitor's center and numerous trails throughout the park during the mid-1980s.

When the park was completed, I visited it quite often and walked on the trails and boardwalks that twist and turn through the swamplands of southern Louisiana. The park has approximately eight miles of boardwalk and hard-surfaced trails that meander through maple forests, cypress swamps, and fresh water marshes. The easiest place to observe the park's natural beauty is on the Palmetto Trail, which starts at the visitor center.

The Palmetto Trail, which is about a mile in length, is shaded by swamp maple and bald cypress. As visitors walk along the trail, they see wide, flat fronds of bushy palmetto plants. At the end of the Palmetto Trail, visitors can continue hiking on the mile-long Bayou Coquille Trail. This trail takes visitors on boardwalks to the Kenta Canal, where they can view alligators, nutria, pelicans, snakes, and other swamp wildlife.

During the 1980s and 1990s, housing developments gradually grew to the park's northeastern and eastern boundaries. In 1980, the subdivision in which I lived was the second-to-last development on Louisiana Highway 45 (LA 45) before the park entrance. The town of Lafitte, a sleepy little trawling community of 5,000, was more than twenty miles to the south. Between the two lay nothing but swamp land. The park is located on the west side of LA 45, and the land along the east side is primarily privately owned.

Throughout the 1980s, developers gradually began draining the swamps and developing land on the northeast side of the park. Developers have recently begun developing all the land east of LA 45—approximately 31,800 acres. Urban planners estimate that in future years, the area's population will probably more than double.

As the population grows in the region, the number of people visiting the park will increase, and the amount of pollution affecting the park will increase. Additional development in the area will also reduce the number of alligators, nutria, pelicans, and other swamp wildlife that reside in the park. The park rangers will have a difficult time maintaining the natural beauty of the park without adequate funding. This park annually operates on a shoestring budget, and without additional funds, park rangers will be unable to protect the park for this generation or future generations.

C. More Parks and Less Money

In the last thirty years, the number of park sites under the control of the National Park Service has risen from 259 to 374. The vast majority of these new parks have been established at the insistence of Congress members who have wanted to procure a national park for their home districts. For example, Representative Ralph Regula (R-OH), who recently had $20 million appropriated for Cuyahoga Valley Park, stated that it is every Congress member's responsibility to support and pass projects for their home district's benefit. Indeed, with national parks currently pumping $10 billion annually into local economies, many Congress members view procuring a park for their home district as important as procuring a government facility or installation.

By and large, the Park Service has deemed that many of these "park pork" projects are either unnecessary or too expensive. For instance, Senator Robert Byrd (D-WV) recently had the National Park Service renovate a train...
station and establish a visitor's center for $2.5 million in an old mining boomtown in Thurmond, West Virginia.[127] However, the train does not even stop at Thurmond because it only has seven residents.[128] Nevertheless, Senator Byrd wanted to restore the town to its glory days and plans to appropriate more money so the Park Service can renovate the downtown area.[129] The Park Service also deemed that the creation of Boston Harbor Islands National Recreation Area for $40 million was unnecessary and too expensive.[130] This project was enacted by the Massachusetts delegation as a farewell tribute to retiring Congressman Gerry Studds (D-MA).[131]

Other Congress members appropriate funds for construction projects in parks that lie in their home district. These Congress members usually want to appropriate an excessive amount of money to build, for example, a new visitor's center.[132] On other occasions, Congress members want to play park ranger and appropriate money for construction projects that run counter to the Park Service's management plans. For instance, Senator Frank Murkowski (R-AK) recently proposed that Denali National Park should build a $100 million, 80-mile gravel road along the park's northern rim.[133] Park ranger Murkowski sought this funding because he believes automobiles should be allowed in the park.[134] The park has never allowed automobiles within its borders and has successfully transported its visitors into the park via shuttles and tour buses.[135]

Park officials have been reluctant to oppose many of these projects because they do not want to bite the congressional hands that feed them, and Congress has taken advantage of the situation.[136] In the past twelve years, Congress has approved two pet congressional projects for every one Park Service project—which has amounted to $1.7 billion appropriated for congressional projects and $800 million appropriated for Park Service projects.[137] For example, in 1985, the National Park Service requested $61.7 million for sixteen projects, and Congress appropriated nearly $93 million for thirty projects.[138]

Over the past thirty years, the appropriation of funding for pet congressional parks and construction projects has diminished the Park Service's ability to adequately care for its parks. Congress must not foolishly waste limited appropriations on pet congressional parks or construction projects. Instead, Congress must appropriate the necessary funds to preserve the parks we presently have for this generation and future generations. Only after our current parks have been properly funded should Congress consider appropriating funding for additional parks or for useful construction projects.

D. Park Service Mismanagement and Less Money

Congress, however, has not been the only branch of government that has foolishly spent limited funding on construction projects. Unfortunately, the Park Service itself has misused many of the funds appropriated to it. Indeed, the Park Service annually spends over ninety percent of its funds on construction projects and less than ten percent of its budget on resource management—which is supposed to be the primary purpose of the National Park Service.[139] This has led to increased deterioration or degradation of our natural, historic, and cultural treasures. For example, at Casa Grande Ruins National Monument in New Mexico, the Park Service recently funded the construction of a new interpretive center and maintenance building but failed to fund the maintenance projects needed to preserve and protect Casa Grande ruin—a massive four-story building constructed more than 600 years ago by Native Americans.[140]

The Park Service has also foolishly wasted its funds on overpriced construction projects. For instance, at Delaware Gap National Recreation Area in Pennsylvania, the Park Service recently built a state-of-the-art $333,000 outhouse.[141] The two-toilet outhouse has a gabled roof made of Vermont slate, a cobblestone foundation built to withstand earthquakes, and porch railings made from quarried Indiana limestone.[142] Moreover, the two toilets have been deemed environmentally friendly as they can work without running water and produce compost, which the park can later use for fertilizer.[143] Elsewhere, the Park Service built a $1 million outhouse in Glacier Park, constructed an $8 million civic center in tiny Seward, Alaska,[144] and built numerous new employee housing units in Yosemite at $584,000 per unit.[145]

After the Delaware Gap National Recreation Area debacle, the Park Service adopted a value analysis program.[146] Under this program, each park construction project will be scrutinized by the Park Service.[147] Further, the Park Service has complied with Representative Regula's request to have an outside contractor review the agency's planning, design and construction operations at the agency's Denver Service Center.[148] The center employs a staff of more than
NATIONAL PARKS

500 and has operating costs that range between 25 and 30 percent of total Park Service construction costs.[149] By contrast, the Bureau of Land Management and the Fish and Wildlife Service each employ a staff of about fifty at similar centers, they usually contract out construction work, and they have much lower construction costs than the Park Service.[150]

The Park Service has also failed to compile information that accurately reflects the maintenance needs of the park system. Instead, the Park Service has been relying on information compiled by the service four years ago.[151] Recently, new accounting and management standards have been imposed on federal agencies by the Government Performance and Results Act, which could help the Park Service accurately detail its maintenance backlog.[152]

Further, Senator Michael Enzi (R-WY), who is also a licensed accountant, has advocated that the Park Service should use a financing technique known as capital budgeting to ensure that money is spent more efficiently.[153] Under the current system, our parks have failed to develop sufficient plans and clear goals on how to appropriately manage funding for large capital expenditures. For example, Yellowstone National Park needed $5 million for a sewer facility; however, the park failed to request the money in a timely manner.[154] If the park had employed capital budgeting, it would have developed sufficient plans and clear goals so that it could appropriately budget for large capital expenditures.[155] Under this system, each park would be able to appropriately budget for large capital projects and prepare for the future by setting "aside money for capital needs, tangible assets an agency must purchase (i.e. vehicles, buildings) on an irregular basis, and using a strategic plan of measurable goals as a guide ..."[156]

Using capital budgeting, the Park Service could have taken full advantage of the highway funds provided to it under the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA). The Park Service received $84 million a year for five years through the federal highway budget under ISTEA to repair its roads or to create alternative transportation modes such as visitor transport systems and trails.[157] The parks are also able to receive funding under ISTEA to repair any existing roads that pass through parks that have been deemed to possess outstanding scenic, recreational, historic, and cultural value.[158] However, because the parks have failed to develop sufficient plans and clear goals, many have not requested funding for road repairs. The parks must rectify this problem because they will be eligible to receive more funding under ISTEA-2.[159]

IV. FUNDING OUR NATIONAL PARKS: FROM WHERE WILL THE FUNDS COME?

Congress must find supplemental revenue sources to assist the National Park Service in protecting our parks. Last year Congress approved a three-year pilot program designed to raise fees at one hundred parks. This program is expected to generate over $48 million.[160] Congress, under the leadership of Senator John McCain (R-AZ) and Senator Ted Stevens (R-AK), established the National Parks and Environmental Improvement Fund.[161] The fund would contain $800 million.[162] and the Park Service would receive approximately $10 million per year in interest from the fund.[163] But much more money is needed to alleviate the current problems in the parks, and new revenue sources like these must be secured in order to assist our national parks in fulfilling their congressionally-mandated mission of protecting our parks for this generation and future generations. Consequently, it is incumbent upon Congress to enact legislation that can provide additional funding to supplement current congressional appropriations.

Senator Thomas has recently proposed a host of supplemental funding initiatives in his bill for the Vision 2020 National Parks Restoration Act.[164] This bill incorporates numerous funding proposals that have been evaluated by Congress over the past several years. Under Senator Thomas' bill, our national parks would receive supplemental funding from higher entrance fees, the issuance of bonds, private donations, corporate partnerships, and higher fees on larger concessionaires.[165] These proposals, many of which have been hotly debated in Congress, would provide needed supplemental funding for our national parks. The next several subsections will discuss and critique these supplemental funding proposals.

A. Funds Raised from Higher User Fees

Our national parks were originally allowed to keep the profits derived from the fees they charged.[166] In 1918, however, Congress required that any profits derived from park fees revert to the federal treasury.[167] With fee proceeds flowing into the federal treasury, revenue generated from the fees does not revert back to the park of origin, and, in many instances, the fees collected do not return to any national park because funds in the general treasury can
Beginning in 1997, Congress enacted a three-year fee demonstration program to allow 100 out of the 375 parks to charge higher fees and keep eighty percent of the revenues. This program was adopted to provide supplemental funding to our national parks. Under the bill proposed by Senator Thomas, the pilot program would be extended through 2004, would allow more parks to participate, and would allow the parks to retain one-hundred percent of the revenues collected.

The current funding program has generated tens of millions of dollars for the parks. Under the program, many parks have instituted new fees while others have doubled or tripled existing fees. In all, such hikes have increased revenue by fifty-seven percent for participating parks and have helped the parks fund many necessary maintenance and renovation plans. For example, at Colorado's Rocky Mountain National Park, the park doubled entrance fees from $5 to $10; as a result, the park will receive an additional $6.5 million in revenues during the life of the three-year program. Park officials have stated that the extra funds will be used entirely for projects that directly benefit the visiting public, including a major overhaul of Trail Ridge Road.

The recreational fee demonstration program has also successfully alleviated backlogged projects at other parks. For instance, at Yellowstone, the Park Service has used the funds to rehabilitate deteriorated electronic infrastructure, repair utility systems, replace deteriorated docks, restore Turbid Lake roads, rehabilitate trails and campsites, repair overviews, and restore interpretive exhibits. In Alaska, the Park Service has used fees to make major repairs and improvements at all of Alaska's national parks. In Denali National Park, the park, which has received an additional $2 million in fee money, will use the funds to repair Riley Creek Campground, replace broken and outdated audio-visual equipment in the park auditorium, repair three trails, paint visitor centers near the park entrance, and repair deteriorated interpretive displays along the park road and entrance trails. In addition to work at Denali, Glacier Bay National Park will use the $3 million it has received from fees to finance several projects—including several marine resource studies.

The fee demonstration program has proved so successful in alleviating backlogged construction and maintenance repairs that Congress members from Tennessee and North Carolina have recently sought to have legislation enacted which would allow Great Smoky Mountain National Park to charge entrance fees. The park is one of only two that have not been permitted to charge entrance fees. Congress members and park officials maintain that allowing the park to assess access fees would better help it repair aging resources and accommodate the ten million people who visit the park each year.

Additionally, even with higher fee rates, visitation to the parks has remained high. For example, at Rocky Mountain National Park, visitors increased by 18,000 to a total of 3,133,000 visitors. Further, park officials at Rocky Mountain noted that they had not received many complaints regarding the fee increases. Indeed, a park-wide survey found that eighty-three percent of national park visitors were either satisfied with the fees they paid or thought the fees were too low.

Due to the success of the fee demonstration programs and the need for supplemental funding, Senator Thomas has proposed extending the fee demonstration program through 2004; and the vast majority of Congress members, park advocates, and interested parties have supported the fee demonstration program and favor extending it through 2004. Most of the park advocates and interested parties have maintained that the current fee program has been very successful because it has allowed revenues to stay in their park of origin, because the fees have not been used to offset congressional appropriations, and because the parks have used the fees to fund backlogged maintenance projects.

However, before new legislation is enacted, park advocates and interested parties have headed some observations and warnings based on the lessons learned from the current fee program. These groups have all specified that the fees must be equitable; the fee system must be efficient; the fees must be convenient for the recreationalist; the fees must continue to be used for on-site backlogged maintenance; and the fee system must be coherent, flexible, and integrated, so that overlapping charges are minimized and federal, state, and local fees are integrated where appropriate.
Additionally, park advocates and interested parties insist that the parks be careful not to raise fees so high as to eliminate or discourage access for Americans with lower incomes. Since the advent of the our national park system, fees and charges have generally been held down by a widespread feeling that parks should serve all classes of people, including those at the lowest socioeconomic levels who are too poor to pay for many other forms of entertainment. However, under the current fee program, multiple layers of fees and per-head, per-day fees may discourage lower-income Americans from visiting our national parks. To ensure fees enacted by our national parks do not eliminate or discourage access for lower income Americans, Congress, the agencies, and the public must work collaboratively to determine what portion of the burden visitors can equitably bear.

Finally, the fees assessed by our parks must only be used as a supplemental means of funding. Presently, the national parks raise less than ten percent of their revenue from fees and charges. Many state parks during the 1980s, feeling the same financial crunch that our national parks are currently bearing, chose to rely on fees as a general means of obtaining new revenue. Prior to the 1980s, relatively few state park systems charged entrance fees; however, by 1984, thirty-three state parks charged entrance fees, and by the early 1990s, more than thirty-nine state parks charged entrance fees. During this time, more than sixteen state park systems have come to rely on fees to generate more than half of their operating costs. However, the focus on raising revenue by internal means has caused many state parks to charge relatively high fees and has also forced many state parks to focus on the parks' recreational opportunities. If our national park system were to do this, it would prevent many lower-income Americans from visiting our parks, and it would compromise the duty to preserve our parks for current and future generations.

For example, Texas State parks enacted the entrepreneurial budgeting system, or EBS, in 1991. Under EBS, the park manager must meet certain performance standards, including a pending-limit goal; in return, if the manager spends less than the goal, department officials will allot the park those savings for the next year. To achieve this, many park officials raised their fees to extremely high levels. For instance, a $50 pass is required for back-country hiking or camping.

In California, the state park system had a $181 million operating budget for the 1996-97 fiscal year, and thirty-five percent of this total came from user fees. Tax-based support for California's parks has diminished from nearly eighty percent in the early 1980s to thirty-six percent this past year. As a result, California has had to raise their entrance fees drastically, and its state parks currently charge per-vehicle, per-person, and even per-dog fees.

Parks elsewhere, in addition to having user fees, have had to rely upon private entities and corporations to supply the funding state legislatures no longer provide. For example, New Hampshire mandated that its park system be self-supporting and its parks finance all of its nearly $5 million operating budget from visitor fees. The Park Service charges between $12 and $30 for campsites and an entry fee of $2.50 per person. The current backlog of maintenance costs has averaged $330,000 per park and is growing. Consequently, the park system has turned to corporate partnerships and private donors in an attempt to make ends meet.

Additionally, parks forced to raise revenue have increasingly relied on offering visitors recreational opportunities within the park. For instance, Alabama state parks earn most of their money from golf courses and lodges built in state parks. Oklahoma's most popular and profitable state park—Lake Texoma State Park—does the same. Nearly all of the park directors have acknowledged that heightened reliance on internal revenue generation increases the potential for greater emphasis on recreation, with the degree of recreational emphasis hinged on the degree of dependence upon internal revenue generation. Thus, these parks have moved away from preservation and conservation and moved toward a recreational focus.

Congress adopted the 1965 Concession Policy Act to entice business entities to locate to our national parks and provide the growing number of visitors with needed services and accommodations. At the time, businesses viewed such a proposition as a substantial business risk because the business community still considered the national parks as remote outposts not readily accessible either by road or plane. In passing the Concession Policy Act, Congress sought to lure businesses to the parks by offsetting the substantial risk of locating to the park with very generous contractual terms. Indeed, Congress offered these businesses exclusivity, long contract terms, preferential right of
renewal. Not surprisingly, with these incentives, many businesses located to our national parks.

Today, the business climate in our national parks is very different than it was in 1965. In 1997 alone, these businesses had the opportunity to provide more than 279 million visitors with food, lodging, transportation, recreation, merchandise, outfitting, and guided services. The concessions business has become an extremely profitable industry, and in 1996, concessionaires grossed more than $714 million, with the Park Service receiving an average two percent return.

An industry that was once speculative and risky has developed into one of pure profit. However, due to the 1965 Concessions Act, the concessionaires in the parks still have generous contractual terms, even though the risk of doing business in our national parks is no longer speculative or risky. This has led many to repeatedly implore Congress to reform the 1965 Concessions Policy.

Senator Thomas, in his Vision 2020: The National Park Restoration Plan, has proposed reforming the 1965 Concessions Policy Act. Several of the changes proposed in the bill would increase the amount of revenue concessionaires would provide to our national parks. Under Senator Thomas' bill, concessionaires would have to enter into a competitive bidding process if their business grossed over $2 million, would have shorter contract terms, and would pay royalty fees to their respective parks.

Numerous park advocates and interested parties have sought the implementation of such legislation. When the Concessions Act was passed in 1965, the Park Service was attempting to lure companies to the parks. However, now that the concession business in our parks has become so lucrative and the initial investors have profited immensely, park advocates and interested parties have argued that it is time that the initial Act be reformed to allow the parks to collect more royalties from the concession business.

Park advocates and interested parties have maintained that competitive contracting must be allowed for concessionaires grossing over $2 million and that the contracting period must be reduced from 30 years to 10 or 15 years. The current federal laws give so much protection to existing concessionaires that they create an anti-competitive climate for two reasons. First, when a concessions contract comes up for bid, the current concessions operator has the right to match any proposals. Second, the subsequent concessions operator would have to reimburse their predecessor for the building improvements and investments made over the years. As a result of these two conditions, few concessions contracts have been won by competing concessionaires, which has allowed the percentage of royalties paid to the Park Service to remain at two percent.

Other governments have received much higher rates of return when they have not given preferential treatment to their concessionaires and when they have required their concessionaires to undergo more frequent contract negotiations. For example, Canada, California, Maryland, Michigan, and Missouri receive approximately a 12.7 percent return on their concessions contracts. In the past fiscal year, California state parks renegotiated contracts and received approximately $2 million in higher payments over the previous year. In Ohio, the state parks completed a deal with a concessionaire for a twenty-two percent return on concessions. This same concessionaire services Sequoia/Kings Canyon National Park and pays only 5.75 percent to the Park Service.

With the current legislation in place, the national parks have obviously lost out on a viable means of gaining additional funds. When the National Park Service has had the opportunity, it too has reduced the length of contracting terms and has allowed competitive bidding. For instance, Delaware North Companies, Inc. was awarded the concessions contract at Yosemite National Park in 1992 after the previous concessionaire, Yosemite Park and Curry Company, was bought out by a foreign firm and was summarily disqualified from operating its concession business. Due to this disqualification, the park contract was offered on a competitive basis, and Delaware North won the contract. Delaware North beat out four other companies by pledging to pay 4.5 percent of its gross sales into a capital improvement fund for the park, by buying out Yosemite Park and Curry Company for $60 million, and by agreeing to clean up twenty-seven leaking underground fuel tanks for $12 million. In all, the company paid between seventeen percent and twenty percent of its revenues for fees, rights and park improvements. Additionally, Delaware North has agreed to compete head-to-head with other interested parties at the end of its 15-year contractual
In contrast, Yosemite Park and Curry Company had provided the government with less than one percent of their $100 million annual gross revenues, had preferential treatment when their contract came up for renewal, and had a long term contract.\[^{240}\]

Since winning the concessions contract at Yosemite, Delaware North has paid more than $13 million into the capital improvement fund.\[^{241}\] The funds have been used to renovate the once-grand Alwahnee Hotel for $1.5 million, tear down temporary buildings and clean the remains of a burned hotel for $2.6 million, and, most recently, restore and renovate the scenic Glacier Point overlook for $3.2 million.\[^{242}\] The National Park Service presented its highest award to the company for its restoration and renovation of Glacier Point,\[^{243}\] and officials hope it stimulates a trend in other concessions partnerships.\[^{244}\]

When it has had the opportunity, the National Park Service has sought to enter into concessions contracts similar to Delaware North's contract. In the past five years, Delaware North has also won contracts at Sequoia National Park,\[^{245}\] the Kennedy Space Center,\[^{246}\] and the United States mint in Denver and Philadelphia.\[^{247}\] By awarding contracts to firms like Delaware North, the Park Service has increased the amount of supplemental funds that our parks receive. However, without legislative reform, concessions agreements like that made with Delaware North will not always be possible due to the preferential right enjoyed by prior concessionaires.\[^{248}\]

C. Funding from Bonds

Currently, the National Park Service has over $5 billion in unfunded projects that involve construction and large scale resource undertakings.\[^{249}\] Congress has recently begun to discuss how some of these projects might be funded through the issuance of bonds, and Senator Thomas' bill has provided for a limited program allowing parks to issue revenue bonds to fund large scale construction projects.\[^{250}\] Bonding proposals of this type can be compared to a small town's issuance of bonds to fund long-term projects such as hospitals, libraries, and sewers.\[^{251}\] For example, without bonding, local taxpayers would have to raise $10 million to build a school.\[^{252}\] However, with bonding, taxes are not raised, and the $10 million is spread over time between current and future taxpayers.\[^{253}\] State and local taxpayers' taxes then go to pay for the accrued interest on the outstanding debt and the repayment of the money borrowed.\[^{254}\] As a result, bonds spread the costs of major long-term projects among present and future generations of citizens who will use and benefit from these facilities, thus preventing the tax burden from being carried solely by current taxpayers.\[^{255}\]

Bonding does not provide national parks more money to meet capital needs.\[^{256}\] However, it does allow parks to move money across time, and this can be very useful under certain conditions.\[^{257}\] For example, Senator John McCain (R-AZ), in testimony before Congress, noted how helpful bonding would be at Grand Canyon National Park. Grand Canyon National Park has over $350 million in capital improvements and has received only $15 million for its operations and maintenance.\[^{258}\] Senator McCain advocated using $2 from each park entrance fee to secure a 20-year bond issue.\[^{259}\] The 20-year bond would immediately raise over $100 million for the park, enabling the park to fund critically-needed projects.\[^{260}\]

The National Parks and Conservation Association (NPCA) has actively supported Congress in its attempt to supplement national park funding with a revenue bond program because NPCA views bonding as a method of providing our parks with significant up-front capital without substantially impacting their budgets.\[^{261}\] The NPCA has recommended that bond proceeds be used for priority projects as identified in the general management plans of each park.\[^{262}\] The NPCA has advocated that funds generated by bonding "should be targeted to natural, historical, and cultural resources protection projects, such as historic preservation, pollution control, transportation facilities designed to reduce auto impacts, habitat restoration, protection of collections, and other such projects that are directly related to the visitor experience and the integrity of the parks."\[^{263}\]

Some commentators have expressed concern with financing park bonds by using a $2 entrance fee because they fear that the new revenue would flow into the budget over a considerable period of years, thereby constraining the amount of construction that could be immediately undertaken.\[^{264}\] However, such fears may be unfounded because several states have successfully financed park bonds through revenues obtained from entrance fees. For example, Oklahoma state parks have issued bonds financed from revenue generated at all parks, from revenue generated at specific parks,\[^{265}\] and are benefiting from increased revenues generated at the parks as a result of improved facilities.\[^{266}\]
and from revenue generated from particular projects.\[265\] In so doing, Oklahoma state parks have raised sufficient levels of funding to immediately finance construction projects.\[266\]

Other commentators have complained that using entrance fees to pay off bonds would divert money now used for operating the parks.\[267\] This argument is also unfounded. Prior to 1997, all fees collected by our national parks flowed to the federal treasury. As a result, our parks were forced to rely solely on congressional appropriations. Since 1997, one hundred of our parks receive eighty percent of the fees they assess, and these fees serve as a supplemental means of revenue. The parks, in an attempt to raise large amounts of supplemental revenue quickly, could obviously use a portion of this revenue—for instance $2—to secure a bond.

If Congress allows the parks to use a portion of their entrance fees to secure bonds, it must next determine who should be allowed to issue the bonds.\[268\] Senator Thomas has advocated allowing the National Park Service or an affiliated entity to issue bonds.\[269\] The NPCA has suggested that bonds should be publicly placed through a separately-designated, federally-chartered, private non-profit organization.\[270\] The Natural Resources Defense Council and the National Trust for Historic Preservation have advocated allowing the Park Service to borrow money for financing construction under a newly-created National Park Authority.\[271\] Former Speaker of the House Newt Gingrich (R-GA) and Senator Thomas have voiced support for this type of endeavor. Such an authority would have the power to issue debt for construction and maintenance projects, much like the Federal Housing Administration or the Tennessee Valley Authority.\[272\]

However, some have been critical of giving one agency the authority to borrow money for all of the parks. These critics worry that well-connected legislators in Congress could exploit the fund and appropriate monies to finance their own pork-barrel projects.\[273\] Instead of giving one agency the authority to borrow money for all of the parks, these commentators have suggested that each park be allowed to "establish a separate endowment fund for capital improvements, seeded by individual contributions, foundation grants or corporate sponsors."\[274\]

Finally, the Treasury Department has advised Congress that the Department would object to any bill that allowed private bonds to be issued on behalf of the national parks.\[275\] The Department explained that long-standing federal financial policy requires that financing for all purposes be undertaken through the Treasury because it is the most efficient market in the world, which results in better borrowing rates to the Treasury and the taxpayers.\[276\] By contrast, any private market bond proposals devised by Congress would be more expensive than financing the bonds through the Interior Department or Treasury Department.\[277\] Additionally, federal financial policy also requires that the Treasury Department avoid having competing Federal securities in the market because these bonds could be viewed as having essentially the same credit quality as Treasury securities.\[278\]

**D. Funding from the Private Sector**

Under the bill proposed by Senator Thomas, our national parks would receive supplemental funding from a provision that would allow the inclusion of a private donation check-off box on tax forms and from a provision that would allow increased low-profile corporate sponsorship.\[279\] Through the years, park officials have welcomed additional funds from private donations, private foundations, and public-private partnerships, as long as those donations or partnerships did not compromise the integrity of our national parks. This section will discuss Senator Thomas' proposals as well as other partnerships our national parks have undertaken or are seeking to undertake to raise additional funds.

**1. Private Donations**

Americans donate $160 billion a year to schools, universities, charities, hospitals, and churches.\[280\] Over the years, many Americans have found various ways to donate to national parks. For instance, the Rockefeller family donated land from the 1920s through the 1950s to the National Park Service for the establishment of Grand Teton, Acadia, and Virgin Islands national parks.\[281\] More recently, David and Lucile Packard of Packard Industries have pledged $175 million over the next five years to protect and preserve undeveloped land in California.\[282\] The National Park Service has stated the foundation hopes to have 250,000 acres protected by 2002.\[283\] Private groups also donate land and money to our national parks. For example, Friends of the National Parks at Gettysburg recently bought and donated to the park six wooded acres from a private landowner whose land was inside the boundaries of the park.\[284\]
Philanthropic donations from private individuals and groups have always been welcomed by the National Park Service. Senator Thomas has proposed, in his Vision 2020: The National Park Restoration Plan, that the Internal Revenue Code be amended to require federal income tax forms to contain a line which would allow taxpayers to voluntarily contribute even dollar amounts—such as $1, $5, $10, or more—to the park system. It has been estimated that this fund could generate in excess of $75 million per year. A similar provision now on the federal income tax forms—the "Presidential Check-Off"—has generated over $200 million in three years, or, approximately 66.5 million per year. Finally, all funds generated by this provision would be supplemental and not used to offset annual congressional appropriations.

2. Initiatives Advanced by the Parks

The Park Service has also begun to recruit private funding for specific problems unique to two groups of parks within the national park system. First, the Park Service, through the National Historic Landmark Assistance program, has sought to find private funding sources for the ninety-four landmarks it owns in whole or in part. The Park Service has had a difficult time managing these properties and guarding them from deterioration. Additionally, the Park Service has attempted to find private funding for national landmarks it does not own. If the Park Service is not successful in finding funding for these private landmarks, these unfunded and unmaintained properties inevitably get placed in the Park Service's hands.

Second, the Park Service, through the Vanishing Treasures Initiative, has sought funding from Congress and private sources for a ten-year program designed to restore forty one cultural and historic parks—which contain over 2,000 prehistoric and historic ruins—in the desert in the Southwest. Congress has provided $1 million in funding for Fiscal Year 1998 and $3.5 million in funding for Fiscal Year 1999. The Vanishing Treasure Initiative was initially formulated to detect and prevent the deterioration inflicted upon the Anasazi and other Native American sites in the South west. Since then, the Vanishing Treasures Initiative has grown to include both cultural and historical sites.

Sun, wind, rain, and millions of trampling feet have battered our historic and archeological treasures—which range from 800-year-old pueblos to 300-year-old missions to 200-year-old forts. The Vanishing Treasures Initiative began with the efforts of several individuals to preserve the Salinas Pueblo Missions National Monument in New Mexico. The monument, which had not received any significant funding for decades, was in terrible condition as wind and rain had eroded the bases of numerous walls. Moreover, unstable walls and leaking roofs were also threatening to destroy four 17th-century Spanish mission churches. These individuals, with the help of the regional Park Service office, designed a strategic plan to restore cultural sites in the area. They hope to restore the cultural sites well enough so that they will be protected by cyclical maintenance in the future.

Prior to the efforts at Salinas, the Park Service had never effectively identified the preservation needs and priorities of the various cultural and historical treasures in the region. Since then, dozens of Park Service personnel have begun cataloging the problems of everything from Anasazi Pueblos to Spanish colonial churches to historic forts. Moreover, the Park Service had never identified the resources it would need to adequately preserve their holdings in the region. Since then, the needed resources have been identified and secured, and at Native American sites, a mentoring program has been established in which the parks' experienced Native American preservationists can train another generation to properly repair Native American structures.

3. Funding from Non-Profit Organizations and Foundations

Many of our parks receive donations from non-profit organizations. These organizations raise funds for various park projects. For instance, at Saguaro National Park, Friends of Saguaro National Park—a non-profit, volunteer organization—has raised over $11,000 in individual and corporate donations since it was formed in late 1996. Funds raised by the organization have been used for trail maintenance and construction.

Many non-profit organizations have provided our parks with generous donations over the years. These donations have enabled our parks to reserve their resources and provide more services to visitors. For example, the Yosemite Fund, a non-profit foundation, has raised more than $8.5 million for Yosemite National Park since 1988. The National Park Service recently presented the Yosemite Fund its highest award for donating over $600,000 to help restore and
renovate Glacier Point. Yosemite used the funds to pay for vegetation replacement and trail construction.

The restoration of the Statue of Liberty is another successful endeavor made possible through a foundation mechanism. The Ellis Island Foundation was created to help renovate the Statue of Liberty and Ellis Island and has successfully raised over $440 million in the last thirteen years. To date, $425 million has been spent on restoration. During this time, the Foundation and Park Service identified projects and planned the scope of the construction projects. Together, the Park Service and Foundation restored the Statue of Liberty, Liberty Island, and four of the thirty-five buildings on Ellis Island. Further, the Foundation has paid for a new museum to be built on the base. The Foundation's current goal is to raise $15 million to develop an electronic database that will document the journeys taken by the 20 million immigrants who arrived at Ellis Island between 1892 and 1924, and the Foundation has to date raised $7.8 million toward that goal.

4. "Low Profile" Non-Profit Foundations and Management

In an effort to properly fund and maintain some low-profile park holdings, the Park Service has allowed several nonprofit corporations to manage Park Service holdings. For example, Fort Mason, which is located within the Golden Gate Recreation Area, has been managed for twenty years by the Fort Mason Foundation. This Foundation was formed to convert a military base into a cultural center and has been self-supporting since its fourth year. The Foundation successfully funded this endeavor by leasing out 350,000 square feet of office space on thirteen acres. The Foundation earns enough money to manage Fort Mason, to accommodate its annual 1.6 million visitors, and to donate funds to the Golden Gate Recreation Area for other capital projects.

Recently, the Park Service created a foundation to manage and preserve the Presidio, also located within Golden Gate Recreation Area. The Presidio was transferred to the Park Service in 1995 when the military closed the base. To adequately maintain the Presidio, the Park Service determined that it would cost $24 million per year and an additional $11.5 million for renovations and replacements. The following year Congress adopted legislation proposed by Representative Nancy Pelosi (D-CA), which allowed the National Park Service to relinquish eighty percent of the Presidio to a nonprofit foundation. The director of the new foundation has stated it will rent out 4.2 million square feet for office space, think tanks, foundation centers, residences, and concessions. The money generated from rent will adequately pay for annual operating costs and renovations.

5. "High Profile" Non-Profit Foundations and Management

Gettysburg National Military Park was established in 1895 to preserve and protect the hallowed ground upon which the battle of Gettysburg was fought. But after years of a lack of funding, misuse of park lands, and private exploitation, the Park Service has decided to protect and preserve Gettysburg National Military Park by allowing a nonprofit foundation to manage and construct several facilities within the park. If the foundation is successful, the national park system is likely to allow more nonprofit foundation endeavors in the future.

The park has expressed concern that it has been unable to maintain its aging facilities and properly preserve artifacts. Indeed, the largest collection of Civil War memorabilia is being ruined by rain leaking through the roof of the archives building. Additionally, the artifact collection and documentary history of the Battle of Gettysburg is stored in a complex that lacks a sprinkler system and humidity controls. Finally, exterior attractions are succumbing to Mother Nature as the park's 400 cannons are rusting and the 1,300 stone and metal monuments are corroding.

The National Park Service has decided to remedy these problems by entering into a partnership with a private developer. Robert Kinsley of Kinsley Equities and National Geographic Television has been selected to build a $40 million complex. Kinsley has said that the new complex will have a 'new visitors' center, a museum, a bookstore, food shops, a large-format theater, a National Geographic shop, park offices, archives, and the Cyclorama gallery on a 45-acre privately owned site in the park. To build this complex, Kinsley has decided to form a nonprofit corporation. The corporation will operate the facilities until the debt is retired and then give them to the Park Service. Kinsley estimated that the total projected cost of $40.4 million will be raised through grants, public donations, and commercial loans, while maintenance expenses will be funded through the rents received from the tenants leasing in the complex.
6. Funding From Corporations

a. Corporate Sponsors

Senator Thomas' bill would also allow the Park Service to develop a corporate sponsorship program. The Park Service would not allow purely unfettered commercial exploitation of our parks because that would impede the integrity of our national parks; as a result, there is no chance that a corporation could become the official sponsor of a national park—such as McDonald's Grand Canyon National Park or Microsoft's Mount Rainier National Park.

However, the Park Service might decide to allow a limited form of commercial sponsorship. Last year, legislation allowing a limited form of commercial sponsorship was proposed in Congress, and this legislation has received cautious support from the National Parks and Conservation Association (NPCA). This bill would allow corporations to pay a set fee to become officially-licensed sponsors of the Park Service, and the revenues generated by the program would be deposited in the National Park Foundation. The National Park Foundation was formed by Congress in 1967 to raise money for the nation's parks. Since 1990, the Foundation has raised more than $15 million in grants from corporations such as American Eagle, Canon U.S.A., and Target Stores. The bill's sponsors estimated that an elite group of ten sponsors could generate an additional $8 to $10 million for the parks each year.

In supporting this legislation, the NPCA warned that if a corporate sponsorship program were adopted, the legislation must ensure that funds received from the program would not be used to offset congressional appropriations. Additionally, the corporate sponsorship program must not infringe on the integrity and image of the national parks. In all, the NPCA asked that any legislation authorizing corporate sponsorship should:

1. Make clear that private funds are not intended to reduce federal funding for parks;
2. Protect the image and management practices of the National Park Service by prohibiting commercial advertising in parks, prohibiting the designation of "official" products or services, and allowing the Secretary of Interior to approve all sponsor advertisements to assure that they are consistent with park policies and standards;
3. Include specific criteria about how corporate sponsors are to be selected;
4. Protect existing trademarks and logos associated with national parks;
5. Specify that sponsorship revenues be expended in accordance with National Park Service policies and priorities;
6. Allow other corporate funding relationships to continue so as not to hamper the efforts of park support groups by limiting their ability to solicit support from local businesses; and
7. Have a five-year sunset provision to allow the program to be terminated or revised if abuses occur.

Recently, corporations have also begun to sponsor projects within our state and national parks. For instance, Yosemite National Park has allowed corporations to sponsor trees, with their corporate names on nearby plaques. California state parks are considering trying something similar. In New Hampshire, the state park system allowed PepsiCo to sell its products in their parks for five years in exchange for funding and educational materials. Finally, in Maryland, corporations have been allowed to sponsor beaches and trail heads.

b. Corporate Donors

Some corporations have also helped our national parks by donating funds and materials. For instance, Georgia-Pacific Corporation and the National Parks and Conservation Association recently announced that their organizations would team up for the third consecutive year to fund improvement projects at national parks around the country. Under the "Partnership for Parks" plan, Georgia-Pacific Corporation will donate more than $200,000 in cash grants and construction materials for improvement projects at national parks in California, Arkansas, Virginia, Georgia, and Washington, D.C. Robert Stanton, director of the National Park Service, stated that "our national parks benefit from the power of partnerships such as this one. By combining the resources of the private sector, the Park Service, local park support groups, and national citizen groups like NPCA, we can make our national parks better places for everyone."

At Cumberland Island National Seashore, the park has received $50,000 in cash and construction materials from Georgia-Pacific to construct a new salt marsh boardwalk that will open the biologically-diverse ecosystem to park visitors. The park was asked to submit a one-paragraph proposal and was fortunately chosen as one of the six
projects that received funding. The boardwalk will be nearly a third of a mile long and will have exhibits placed along the boardwalk explaining the seashore's features. Cumberland Island officials are currently seeking $30,000 from the Park Service's Challenge Cost Sharing Program to pay for equipment and maintenance labor for the boardwalk project. This program was created to help pay for projects partially funded by corporate donations.

Georgia-Pacific awarded the grant to a "friends-of-the-park" group—Eastern Parks and History Association—under the Partnership for Parks program, which is a joint effort undertaken by the NCPA and Georgia-Pacific. NPCA has stated that friends groups usually lack the financial resources to undertake major projects; however, with the help of Georgia-Pacific, friends groups have the opportunity to help parks in a substantial way.

V. CONCLUSION

Our national parks are gradually deteriorating due to a lack of funding, mismanagement of current funding, and an increase in users. The national park system has an annual monetary shortfall of $653 million and it has a cumulative monetary shortfall of $11.1 billion. These shortfalls have resulted from a backlog of under-funded general operations, construction, land acquisitions, and resource protection projects. This backlog of unmet capital needs compromises the Park Service's duty under the National Park Organic Act to protect our precious park resources for future generations and fails to allow it to adequately accommodate the needs of current visitors. Congress must find new and creative ways to fund our national parks so that the Park Service can fulfill its stewardship responsibilities.

To its credit, Congress has been exploring new sources of revenue necessary to supplement the embattled park system. For example, Congress established an oil and gas leasing trust fund, which is expected to provide the Park Service with approximately $10 million per year earmarked for priority capital projects. Additionally, Congress allowed parks to increase entrance fees at nearly one hundred parks and keep eighty percent of the proceeds derived therefrom. The experimental fee program has raised annual fee revenues from $77.69 million to more than $128 million. However, to adequately fund the park system, Congress will have to do much, much more, and the longer Congress waits, the more expensive it will be to remedy the problems.

Congress is currently exploring funding through commercial sponsorship, revenue bonds, entrance fees, and concessions fees. But will this be enough? Congress must continue to find creative methods to supplement the level of funding appropriated to our national parks because more money will be needed in the future as our parks accommodate more visitors, conduct additional scientific studies, and construct additional facilities.

Our parks must actively embrace these new initiatives and actively pursue the different funding mechanisms made available to them. For instance, in Jean Lafitte National Historic Park, many of the trails come to an abrupt end because the park did not have sufficient funds to complete the trails. If the park wanted to have the trails completed, the park could currently pursue numerous supplemental funding venues. For example, the park could solicit funds from Friends of Jean Lafitte National Historic Park. The park could seek corporate donations from companies in the New Orleans metropolitan area. Further, the park could seek donations of cash grants and construction materials from several of the large lumber companies in the region. In the future, our parks must explore all of their supplemental funding opportunities so they can properly preserve and protect our natural, historic, and cultural treasures, and so our parks can also accommodate those who wish to visit them.

If our national parks do not receive proper funding or do not take advantage of supplemental funding venues, their future seems bleak. Our parks will be dirtier, noisier, and more crowded. The Park Service will be severely restricted in its ability to properly accommodate its visitors. More importantly, the Park Service will be unable to adequately protect and preserve its parks. Our national parks are our cultural treasures. We must protect and preserve our parks. If we do not, our national parks will be ruined, and many of our famed treasures lost forever. To prevent this, it is incumbent upon Congress and the American people to provide the funds necessary to ensure that our grand cultural assets are not lost forever.

[*] Adjunct Professor of Law, University of Missouri-Kansas City School of Law; L.L.M., 1998, University of
Missouri-Kansas City School of Law; J.D., 1997, University of Oklahoma Law Center; B.A., 1994, University of Oklahoma. Return to text.


[9] See Leal & Fretwell, supra note 8. For instance, in Yellowstone, the Park Service closed Norris Historic Museum and a major campground. See NBC Nightly News: *United States National Parks Overcrowded and Lacking Services Due to a Lack of Funding* (NBC television broadcast, May 27, 1996), available in 1996 WL 10301785 [hereinafter National Parks Overcrowded]. These shutdowns came just as a recent Consumer Report survey found that the most common visitor complaints about Yellowstone were its overcrowded conditions and its lack of adequate visitor facilities. See Leal & Fretwell, supra note 8. Return to text.

[10] See Carol Estes, *A Culture in Ruins: Across the Nation, Thousands of Historic Sites and Objects are Succumbing to Inadequate Funding and Misplaced Priorities*, 71 NAT'L PARKS 34, May 1, 1997, available in 1997 WL 9300292. For example, at Mesa Verde, the Park Service has not had enough money to repair fallen roofs and collapsed walls. See Christoper Smith, *New Hope for the Ancient Sites of the West; Ruins in Need of a Rescue*, SALT LAKE TRIB., Mar. 28, 1997, at A1, available in 1997 WL 3398376. At Chaco Canyon National Historic Park, the Park Service has had to deal with overvisitation and abuse to the Indian ruins. See NRDC Pro: Reclaiming Our Heritage—Chaco Culture National Historical Park (visited Feb. 2, 1998) [hereinafter NRDC Pro: Reclaiming Our Heritage].

Today, when new Indian ruins are found, the National Park Service keeps their locations secret to protect the sites from unwanted degradation. Although keeping the sites safe, this plan also denies everyone the opportunity to view these treasures. See NBC Nightly News: *Increase in Vandalism in National Parks Continuing Problem as Government has no Funds to Control the Problem* (NBC television broadcast, Aug. 25, 1997), available in 1997 WL 11357789. Return to text.

program that studied endangered species at Yellowstone National Park was eliminated, and such cuts directly threaten the well-being of Yellow stone's grizzlies and bald eagles. See id. Return to text.


[15] Id. Return to text.


[17] See Herman, supra note 14; see also Coggins & Glicksman, supra note 16, at 731. Return to text.


[22] See id. Return to text.

[23] See Mantell, supra note 20, at 11-12. Return to text.


[25] See Herman, supra note 14, at 7. See also Mantell, supra note 20, at 12. Return to text.


[27] See id. Return to text.

[28] See id. Return to text.

[29] For a thorough discussion on the history of the Act, see Winks, supra note 2, at 583-616. Return to text.


[33] See Herman, supra note 14, at 8. Return to text.
[34] Id. Return to text.


[37] Id. Return to text.

[38] See, e.g., Herman, supra note 14, at 9. Return to text.


[40] See id. Return to text.

[41] See id. Return to text.

[42] See id. Return to text.

[43] Herman, supra note 14, at 8. Return to text.


[51] See Satchell, supra note 6; Park Project Financing, supra note 7. Return to text.


[53] See Park Project Financing, supra note 7. Return to text.


[55] See Satchell, supra note 6; see also Park Project Financing, supra note 7. Return to text.

[56] See Satchell, supra note 6. Return to text.

[57] See Park Project Financing, supra note 7. Return to text.


[59] See id. The overwhelming majority of landmarks are privately owned—such as the Empire State Building and
George Washington's estate at Mount Vernon. See id. Return to text.

[60] See id. Return to text.

[61] See Satchell, supra note 6. Return to text.


[63] See id. Return to text.


[65] See United States National Parks Overcrowded, supra note 9. Return to text.

[66] See id. Return to text.

[67] See id. Return to text.


[70] See National Parks Overcrowded, supra note 9. Return to text.

[71] It should also be noted that timber harvesting and mineral extraction threaten the Park's well-being. For example, in national forests around Yellowstone, the Forest Service has leased 2.7 million national forest acres for oil and gas development. See Satchell, supra note 6. Recently, the park's well-being was spared when a company intending to mine gold on Yellowstone’s northern border at Montana's Henderson Mountain was bought by the United States government. The mine had the potential to pollute the scenic rivers in Yellowstone. See NBC Nightly News: President Clinton Announces a Stop to Gold Mine to be Built in Yellowstone Park (NBC television broadcast, Aug. 12, 1996), available in 1996 WL 10302768. Return to text.


[73] See Satchell, supra note 6. Return to text.

[74] See id. Return to text.


[76] See id. at 295-97. Return to text.

[77] See id. at 294. Return to text.

[78] See Park Project Financing, supra note 7. Return to text.

[79] See National Parks: From member station KNAU in Arizona, Mike Lamp reports cars and buses will soon be banned from national parks such as the Grand Canyon (National Public Radio broadcast, Dec. 23, 1997), available in 1997 WL 12824267 [hereinafter National Parks: From member station KNAU in Arizona].

Senator Paul Sarbanes (D-MD) has recently proposed appropriating $250 million over the next five years to buy shuttle
buses and build light-rail systems at popular parks and historic areas. See National Resources National Parks: Bill Seeks to Improve Parks for Visitors (American Political Network Greenwire, May 1, 1998). Return to text.

[80] See National Parks: From member station KNAU in Arizona, supra note 77. Return to text.

[81] See id. It should also be noted that the banning of automobiles drives existing tour companies out of business—one such company transports 60,000 people to the park each year. See id. Return to text.


As illustrated by Canyon Forest's proposed land exchange deal, land exchanges and planning have become an important method of securing land for private concerns in gateway communities. For a good discussion on land exchanges and planning in gateway communities, see Kurt Culbertson, National Park or Bust: Gateway Communities Cope with Crowds, 63 PLANNING No. 11, Nov. 1, 1997, at 4, available in 1997 WL 10256092 (includes related article on park planning). Return to text.

[83] See Satchell, supra note 6; Signs Protest Babbitt, supra note 82. This project has come under exacting scrutiny from local Tusayan businessmen and from the Havasupai Indian Tribe. The businessmen have opposed the development and complained that Secretary of Interior Babbitt will benefit if the plan is approved because Babbitt's family business is a partner in the project and because he has lobbied on behalf of Canyon Forest Village. See Signs Protest Babbitt, supra note 82. The Havasupai Indian tribe has also expressed concern that groundwater pumped by the new development will reduce the flow of water and disrupt a waterfall that is sacred to the tribe. See Gordon Smith, National Park at a Cross Roads; Curbing Grand Canyon's Traffic, SAN DIEGO UNION-TRIBUNE, Apr. 26, 1998, at A1, available in 1998 WL 4005524. Return to text.

[84] See National Parks: From member station KNAU in Arizona, supra note 79. Return to text.


[86] See id. The park has already received eight 28-passenger propane-powered buses from the state of Maine. The park expects to transport 2,600 passengers a day. The Maine Transportation Department paid $870,000 for the buses. See id. Return to text.


[89] See id. Other national parks have also experienced resort-oriented development encroaching their borders. See infra note 338. Return to text.

[90] See Satchell, supra note 6. The casino is anticipating four million gamblers each year. See id. Return to text.


[93] See Dillon & Campbell, supra note 91. Return to text.


[95] See id. The Yellowstone buffer zone region "includes Grand Teton National Park, seven national forests, three national wildlife refuges, and more than 3 million acres of private land." Id. Return to text.

[96] See id. This area will continue to grow as eight ski resorts surrounding the park are currently expanding their facilities. See id. Return to text.

[97] See Ragsdale, supra note 75, at 294. Return to text.


[99] See id. With increased development comes increased water usage. If the water table is lowered by increased water usage, the geysers could dry up. See id. Return to text.

[100] See supra note 11 and accompanying text. Return to text.


[102] See id. Return to text.

[103] See id. Since the mid-1980s, Montana ranchers, afraid of the diseases buffalo may carry, have herded up and shot any buffalo that wander out of Yellowstone. See, e.g., *Buffalo of Yellowstone National Park Face Mass Slaughter by Montana Ranchers Afraid of Disease; Indian Tribes Vow to Save Them* (NBC television broadcast, Jan. 22, 1997), available in 1997 WL 5385237; *Bison in Yellowstone May now be Allowed to Roam out of the Park and be Subject to a Hunting Season* (NBC television broadcast, Jul. 23, 1997), available in 1997 WL 11357392. Return to text.


[105] See id. Return to text.

[106] See id. Return to text.

[107] Winter use includes snowmobiling, cross-country skiing, snowshoe hiking, snowcoach riding, and any other winter-related activities. See *NPCA Supports Yellowstone Postponement of Road Closing*, supra note 101. Return to text.

[108] See id. Return to text.


[110] See NPCA Supports Yellowstone Postponement of Road Closing, supra note 101. Return to text.


[112] See Ragsdale, supra note 75, at 295. In reviewing a book discussing gateway communities, Ragsdale adeptly took the book's authors to task for their inaccurate portrayal of what constituted a gateway city. The authors had identified such established urban centers as Denver, Tucson, and Reno as gateway communities. Ragsdale concisely explained that "[t]hese places do have the common denominator of rapid growth, but the immediate presence of national parks,
national forests, or wildlife areas is a secondary reason for the existence, economic focus, and expansion of the communities." *Id.* at 295. Return to text.


[115] See Johnson, supra note 114. Return to text.


[117] For boating enthusiasts, the park has over thirty miles of available waterways. The park also offers canoe tours of the swamp. Most are conducted during the day, but the park offers night tours on the eve of, and on the night of, a full moon. Return to text.


[120] For example, many of the trails in the park come to an abrupt end, and this is not by design. In most circumstances, the park simply ran out of money and was unable to complete the trail. The Bayou Coquille Trail—the parks' most popular trail—is one such example; it comes to an end after the massive bridge that crosses Kenta Canal. The trail was supposed to continue on for another three miles, cross back over Kenta Canal, and end at the visitor's center. However, due lack of funding, the trail remains uncompleted. Return to text.

[121] See Estes, supra note 10. Return to text.


[123] See Park-service Projects Cost Taxpayers, supra note 45. Return to text.


[125] For example, one congressman was able to secure $66 million to create Steamtown National Historic Site in Scranton, Pennsylvania. *See id.* Although the park was supposed to attract up to 500,000 visitors per year and revitalize the rust belt, only 200,000 people visited the site last year. *See id.* Return to text.

[126] See Clarke, supra note 62; Satchell, supra note 6. Return to text.

[127] See Park-Service Projects Cost Taxpayers, supra note 45. Return to text.

[128] See id. Return to text.

[129] See id. Return to text.

[131] See id. Return to text.


[133] See Senator Proposes Road for Denali: Alaskan Park Project Could Cost $100 Million, ST. LOUIS POST-DISPATCH, Nov. 2, 1997, at 7A, available in 1997 WL 3375523. The Park Service noted that the cost of the new project is equal to the amount the Park Service had planned to spend for improvements at all of Alaska's national parks over the next fifteen years. See id. Return to text.

[134] See id. Return to text.

[135] See id. Further, this legislation is in stark contrast to the Park Service's recent initiatives to ban automobiles in our national parks. See id. Return to text.


[137] See Park-Service Projects Cost Taxpayers, supra note 45. Return to text.

[138] See Clarke, supra note 62. The biggest disparity came in fiscal year 1992 when $84 million was requested for twenty-two projects, and Congress appropriated $217 million for eighty-seven projects. See id. Return to text.

[139] See id. Return to text.


[142] See id. Return to text.

[143] See id. Return to text.

[144] See Park-Service Projects Cost Taxpayers, supra note 45. Return to text.


[147] See Id. Return to text.


[149] See id. Return to text.

[150] See id. Return to text.

[151] See FY99 Interior Appropriations, supra note 4. In January 1997, the Park Service estimated that its maintenance backlog was about $6.1 billion. See id. Of this amount, about ninety-two percent were construction projects, and of that amount, over twenty-one percent reflected the construction costs of new facilities. See id. Some examples are $16.6 million for a new visitor center and park entrance at Acadia National Park and $24 million for a bike path at Colonial National Historic Park in Virginia. See id. Including the new construction costs in the overall figure of backlog costs is
not appropriate because it goes beyond what could reasonably be seen as maintenance costs. See id. Return to text.

[152] See id. Return to text.


[154] See id. Return to text.

[155] See id. Return to text.

[156] Id. Return to text.


[158] See id. Scenic byways that have received over $80 million in repairs include the Blue Ridge Parkway in Virginia and North Carolina, Trail Ridge Road in Rocky Mountain National Park in Colorado, Going to the Sun Road in Glacier National Park in Montana, and the Beartooth Scenic Byway in Montana and Wyoming leading into Yellowstone National Park. See id. Return to text.

[159] See Edwin Chen, Senate Fattens Its 'Ice Tea' With Porky Politics, LOS ANGELES TIMES, Mar. 10, 1998, at A1, available in 1998 WL 2406541; Tom Ichniowski, Panel Adds $26 Billion to ISTEA-2, 240 ENGINEERING NEWS-RECORD 16, Mar. 9, 1998, available in 1998 WL 8134751. Persuaded by Senators Phil Gramm (R-Tex.) and Robert C. Byrd (D-W.Va.), the current ISTEA bill was written to include $850 million for five years for roads through national parks, Indian reservations, and wildlife refuges. See id. In all, Gramm and Byrd, who have been commonly called the two legendary practitioners of pork-barrel politics, persuaded the Senate to add $26 billion to ISTEA-2, including an extra $1.7 billion for Texas roads and $1.8 billion for roads in West Virginia. See Chen, supra Return to text.


[162] See id. The Federal Treasury received the $800 million from oil and gas revenue awarded to the federal government by the United States Supreme Court earlier this year. See id. The oil lease revenue was derived from wells on lands underlying tidal waters off Alaska's North Slope. See id. Ownership of the lands had been the subject of dispute between the federal government and the State of Alaska. See id. Return to text.

[163] See id. The Fund will generate $50 million per year. $40 million will be equally divided between the national parks, fish and wildlife refuges, national forests, and the Bureau of Land Management. See id. $10 million will be used for marine research in the North Pacific Arctic Ocean and Bering Sea. See id. Return to text.


[165] See Spotlight Story National Parks, supra note 164. The bill would also allow the Park Service to charge fees for the use of parks in filming movies or television. See id. Return to text.

[166] See Leal & Fretwell, supra note 8. Parks such as Yellowstone and Yosemite were operationally self-sufficient by 1916. See id. In 1916, at least seven parks charged seasonal auto fees, which in today's dollars would range between $26 and $135. See Impact of Entrance Fees on National Parks: Statement for the Subcommittee on Parks and Public

[167] See Impact of Entrance Fees (statement of Fretwell), supra note 166. Return to text.


[170] See id. Return to text.

[171] See id. Return to text.


[173] See also Lee Davidson, Raises in Park Entrance Fees May Soon Become Permanent, DESERET NEWS, Feb. 27, 1998, at A12, available in 1998 WL 2940937. In Utah, entrance prices doubled at Bryce Canyon, Arches, Canyonlands, and Zion national parks from $5 a car to $10. See id. At Hovenweep National Monument, the park began charging a $6 fee per car, and at Natural Bridges National Monument, the park raised fees from $4 to $6 per car. See id. Glen Canyon National Recreation Area has also begun charging $5 per car and $5 per boat. See id. Return to text.

[174] See id. Return to text.

[175] See Romano, supra note 172. Vehicle fees have also risen from $5 to $10 at other national parks in Colorado, including Mesa Verde National Park and Dinosaur National Monument. See id. Return to text.

[176] See id. Return to text.


[178] See Trails, Campground Repairs Top Denali Fee Spending; Glacier Bay Research, Trail Work and Utility Improvements Set (Department of the Interior, Dec. 17, 1997), available in 1997 WL 779153. Denali charges entrance fees of $5 per person or $10 per family. See id. Glacier Bay charges $5 per cruise ship or tour boat. See id. At Klondike Gold Rush, visitors touring the historic Moore house pay $2, and in Sitka, visitors touring the Russian Bishop's House exhibits pay $2. See id. Finally, visitors to Brooks Camp pay $10 per day, per person, in Katmai. See id. Return to text.

[179] See id. Return to text.

[180] See id. Return to text.


[182] See id. Return to text.

[183] See id. Return to text.

[184] See Davidson, supra note 173. Increased fees may also have contributed to a reduction of crime at parks that raised their fees. See id. For example, at Lake Powell's Lone Rock Campground, assaults dropped by seventy-one percent and disorderly conduct by eighty-eight percent in one year. See id. Additionally, park officials maintained that littering decreased, quiet hours were quiet, and more families used the campground. See id. Return to text.
See Romano, supra note 172. Rocky Mountain National Park, which is approximately one-eighth the size of Yellowstone, attracts about the same number of visitors as Yellowstone. See id. Return to text.

See id. Return to text.

See Impact of Entrance Fees, supra note 177. Return to text.

Several Congress members and government officials have even advocated making the experimental fees permanent because they feel the recreational fee program is the most fair and realistic way of addressing our parks' maintenance and repair backlog. See Davidson, supra note 173. However, several have expressed displeasure with the fee demonstration. See id. For instance, Rep. Peter DeFazio (D-OR), unhappy with a newly imposed $3 parking fee at Oregon Dunes National Recreation Area, introduced legislation that would repeal the new recreational fee program. See Defazio Bill Replaces New Park Fee with Mining Royalty (Government Press Release of Rep. Peter DeFazio), Nov. 5, 1997, available in 1997 WL 12104709. DeFazio's bill would replace the recreational fee with a five percent royalty on minerals mined on public land. See id. The Congressional Budget Office estimates this royalty would generate at least $50 million annually. See id.

Federal lands are currently governed by an arcane 1872 mining law, which allows miners to claim public land for as little as $2.50 an acre. See id. Between January 1995 and April 1997, the federal government validated gold claims on 3,200 acres of federal land, containing an estimated $5.9 billion in gold reserves, for only $12,183. See id. Most agree that the mining law should be changed; however, since 1970, Congress has unsuccessfully tried to rewrite the mining law more than twenty times—primarily due to wrangling over how much miners should have to pay for minerals they take. See NBC Nightly News: Mining Companies Get Good Deals at Taxpayers' Expense (NBC television broadcast, Jul. 19, 1995), available in 1995 WL 8690942. Return to text.


See Davidson, supra note 173. Return to text.


See, e.g., Romano, supra note 172 (stating the National Parks and Conservation Association wants Congress to study the effect of fees on the poor); Impact of Entrance Fees (statement of Sloan), supra note 189; Impact of Entrance Fees on National Parks: Hearing before Subcommittee on National Parks and Public Lands Committee on Resources, 105th Cong. (1998) (statement of Craig W. Mackey, Public Policy Liaison, Outward Bound USA), available in 1998 WL 8993629. Return to text.


See Impact of Entrance Fees (statement of Sloan), supra note 189; Impact of Entrance Fees (statement of Mackey), supra note 192. Return to text.

See Impact of Entrance Fees (statement of Mackey), supra note 190. Several commentators have advocated various programs that might offset per-day, per-person fees and multiple layers of fees. For example, Derrick Crandall, president of the American Recreation Association, has asserted that our parks should experiment with "free days' to ensure access for the poor; us[e] different fees for peak and non-peak periods; and encourage certain activities—such as ranger hikes—by offering fee discounts for attendance." Davidson, supra note 173. Return to text.

[185] See Romano, supra note 172. Rocky Mountain National Park, which is approximately one-eighth the size of Yellowstone, attracts about the same number of visitors as Yellowstone. See id. Return to text.

[186] See id. Return to text.


[188] See id. Several Congress members and government officials have even advocated making the experimental fees permanent because they feel the recreational fee program is the most fair and realistic way of addressing our parks' maintenance and repair backlog. See Davidson, supra note 173. However, several have expressed displeasure with the fee demonstration. See id. For instance, Rep. Peter DeFazio (D-OR), unhappy with a newly imposed $3 parking fee at Oregon Dunes National Recreation Area, introduced legislation that would repeal the new recreational fee program. See Defazio Bill Replaces New Park Fee with Mining Royalty (Government Press Release of Rep. Peter DeFazio), Nov. 5, 1997, available in 1997 WL 12104709. DeFazio's bill would replace the recreational fee with a five percent royalty on minerals mined on public land. See id. The Congressional Budget Office estimates this royalty would generate at least $50 million annually. See id.

Federal lands are currently governed by an arcane 1872 mining law, which allows miners to claim public land for as little as $2.50 an acre. See id. Between January 1995 and April 1997, the federal government validated gold claims on 3,200 acres of federal land, containing an estimated $5.9 billion in gold reserves, for only $12,183. See id. Most agree that the mining law should be changed; however, since 1970, Congress has unsuccessfully tried to rewrite the mining law more than twenty times—primarily due to wrangling over how much miners should have to pay for minerals they take. See NBC Nightly News: Mining Companies Get Good Deals at Taxpayers' Expense (NBC television broadcast, Jul. 19, 1995), available in 1995 WL 8690942. Return to text.


See Davidson, supra note 173. Return to text.


See, e.g., Romano, supra note 172 (stating the National Parks and Conservation Association wants Congress to study the effect of fees on the poor); Impact of Entrance Fees (statement of Sloan), supra note 189; Impact of Entrance Fees on National Parks: Hearing before Subcommittee on National Parks and Public Lands Committee on Resources, 105th Cong. (1998) (statement of Craig W. Mackey, Public Policy Liaison, Outward Bound USA), available in 1998 WL 8993629. Return to text.


See Impact of Entrance Fees (statement of Sloan), supra note 189; Impact of Entrance Fees (statement of Mackey), supra note 192. Return to text.

See Impact of Entrance Fees (statement of Mackey), supra note 190. Several commentators have advocated various programs that might offset per-day, per-person fees and multiple layers of fees. For example, Derrick Crandall, president of the American Recreation Association, has asserted that our parks should experiment with "free days' to ensure access for the poor; us[e] different fees for peak and non-peak periods; and encourage certain activities—such as ranger hikes—by offering fee discounts for attendance." Davidson, supra note 173. Return to text.

[197] See Leal & Fretwell, supra note 8. Return to text.

[198] See Lowry, supra note 168. Most recently, Alaska began charging entrance fees. In all, Alaska will now collect less than forty percent of its park revenue through fees and charges. See Senkowsky, supra note 193. Return to text.

[199] See Impact of Entrance Fees (statement of Fretwell), supra note 166. These states now include New Hampshire, Alabama, Arkansas, Colorado, Kentucky, Michigan, Nebraska, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Indiana, West Virginia, Wisconsin, and Vermont. See Donald R. Leal & Holly Lippke Fretwell, Users Must Pay to Save Our National Parks, 80 CONSUMERS' RES. MAG. No. 8, Aug. 1, 1997, at 16, available in 1997 WL 10128590 [hereinafter Users Must Pay]. In all, reliance on user fees collected by all state parks has risen from $181.7 million, or seventeen percent of funding, in 1980 to $637.9 million, or thirty-three percent, in 1994. See id. Return to text.

[200] See, e.g., Lowry, supra note 168; Senkowsky, supra note 193. Return to text.

[201] See Impact of Entrance Fees (statement of Fretwell), supra note 166. Texas parks did not receive any other state funding except for a small tax on recreation equipment sales designated for state parks. See id. Prior to 1991, state appropriations constituted sixty percent of the system's operating budget. See id. Return to text.


[203] See Senkowsky, supra note 193. See also Leal & Fretwell, supra note 8. The state deemed the program highly successful, and in Fiscal Year 1995, park systems achieved a cost-savings of $685,000. See id. Return to text.

[204] See Jurisdiction Over Park Management Oversight Hearing Before House Committee on Resources; Subcommittee on National Parks and Public Lands, 105th Cong. (1997) (statement of Kenneth B. Jones, Deputy Director for Park Stewardship, California Department of Parks and Recreation), available in 1997 WL 11234624. California's state park system manages 264 parks on 1.3 million acres. See id. These parks receive seventy million visitors per year and have over 3,000 miles of trails, 280 miles of coastline, 17,500 campsites, and 11,000 picnic sites. See id. The parks are also diverse, spanning from beaches to redwood forests to deserts. See id. Return to text.

[205] See id. Additionally, the parks have recently adopted a five-year initiative to decrease their dependence on the general fund by $19 million by embracing corporate partnerships and privatization of park services. See id. Return to text.


[207] See id. Return to text.

[208] See Users Must Pay, supra note 197. New Hampshire, which operates eighty-nine state parks covering 75,000 acres, receives 1.2 million visitors per year. See id. Return to text.

[209] See id. An annual pass costs $35. See id. Further, children under twelve and adults over sixty-five are admitted for free. See id. New Hampshire was the first park system to charge per person and was the first park system to implement different prices for different campsites. See id. Return to text.

[210] See id. Return to text.

[211] See id. Return to text.

[212] See Lowry, supra note 168. Return to text.

[214] The state park caters to visitors from the Dallas-Fort Worth metropolitan area, which is only sixty miles away and has become a recreational paradise. The park has a renowned golf course, luxurious lodging, and a variety of boating activities. See id. Return to text.


[216] See Mantell, supra note 20, at 28-29. Return to text.

[217] See Oversight of National Park Service Concessions Management: Hearing Before the Senate Subcommittee on Parks, Historic Preservation and Recreation, 105th Cong. (1997) (statement of Philip H. Voorhees, Associate Director for Policy Development, National Parks and Conservation Association), available in 1997 WL 11235475. At this time, the interstate highway system was far from complete, and the airline industry was in its infancy. See id. Return to text.

[218] See Mantell, supra note 20, at 28-29. Return to text.


[220] See Oversight of National Park Service Concessions Management (statement of Voorhees), supra note 217. Return to text.


[224] All concessionaires earning under $2 million would still have non-competitive contracts—eighty-five percent of the mom-pop concessionaires. Thus, the bill sponsored by Senator Thomas targets large concessionaires. See Spotlight Story National Parks, supra note 164. Return to text.

[225] See id. Senator Thomas has also proposed creating a single concessions manager to oversee all commercial contracts in the park system. See id. Additionally, the bill would require the Park Service and new concessionaires to pay inflated prices to outgoing contractors for equipment and other investments. See id. Return to text.

[226] See supra note 223. Not surprisingly, numerous concessionaires—those that currently have sweetheart deals—have sought to temper the need for such drastic change. See, e.g., Land Bills: Oversight Hearings on National Park Concession Policies, House of Representatives Committee on Resources, Subcommittee on National Parks and Public Lands, 105th Cong. (1998) (statement of Robert Dale Scott, President, Glacier Park, Inc.), available in 1998 WL
NATIONAL PARKS

8993973. Return to text.


[228] See id. Return to text.


[230] See id. Return to text.


[232] See Jurisdiction Over Park Management (statement of Jones), supra note 204. Return to text.


[234] See id. Return to text.


[236] See id. Return to text.

[237] See Robinson, supra note 229. The capital improvement fund was established to circumvent existing laws. Under the concessions act, concession returns are deposited directly into the federal treasury. See Oversight of National Park Service Concessions Management (statement of Voorhees), supra note 217. Under Senator Thomas' bill, concessionaires would pay their return to their respective parks. See supra note 223 and accompanying text. Return to text.


[240] See id. Return to text.


[243] See Robinson, supra note 229. The award was also presented to the park and to the non-profit Yosemite Fund. See id. The Yosemite Fund, a private organization, donated $600,000, which was used to pay for vegetation replacement, trail work, and other various jobs. See Grossi, supra note 242. National Parks Service Director Robert Stanton stated that the partnership between the park, non-profit Yosemite Fund, and Delaware North was a "model for the kind of cutting edge problem solving I want to see at work in parks nationwide." Robinson, supra note 229. This restoration project is the largest project undertaken by a concessionaire, a park, and a non-profit organization. See Grossi, supra note 240. (For more on non-profit organizations, see infra notes 309-21 and accompanying text.) Return to text.

[244] See Grossi, supra note 242. Return to text.

[246] Delaware North has spent $42 million to expand and improve facilities. These improvements include: a reconstructed Saturn V rocket, movies on the space shuttle and Apollo missions, a walk through mock-up of the planned international space station, and a viewing room to watch NASA workers assembling the space craft. See id. Return to text.

[247] See id. Delaware North also operates Niagara Reservation State Park in Niagara Falls and three New York state parks on Long Island. In all, Delaware North, with its 3,700 employees, expects more than $200 million in sales this year from its 1,950 hotel rooms, 30 restaurants, and 37 gift shops. See id. Return to text.

[248] For example, the Park Service has considered allowing bidding on concession contracts for Grand Canyon National Park and Wahweap Lodge in Glen Canyon national recreation area. The two parks have a combined revenue of $100 million. See Oversight Hearing On Concessions Reform (statement of Bissett), supra note 219. The current concessionaires will probably not be bid against. See id. As a result, Grand Canyon and Glen Canyon will lose a substantial amount of supplemental funds. See id. Return to text.


[250] See id.; NPCA Praises Intent, supra note 164. Return to text.


[253] See id. Return to text.

[254] See id. It is interesting to note that the interest income on these bonds is exempt from federal income tax. See id. The federal government allows such a subsidy in order to reduce the financing costs of state and local capital facilities. See id. Return to text.


[257] See id. Return to text.


[259] See id. Some state park systems have issued bonds financed by park revenue. See Park Project Financing, supra note 7. State park systems have also financed their park bonds through state lotteries (Oregon and West Virginia), a sales tax on sporting goods (Texas), and a sales tax on cigarettes (Alabama). See id. Another commentator has suggested that the national park system finance bonds by placing a surcharge on all concessionaires. See id. Return to text.
See Park Project Financing, supra note 259. Return to text.

See Park Project Financing, supra note 7. In enacting a bonding program, NPCA has suggested that the revenue bond program be cost-effective and efficient. See id. It is estimated that over $1.2 billion would be generated through bonding. See Henderson, supra note 12. Return to text.

See Park Project Financing, supra note 7. The NPCA warned that these bonding proceeds should not be used for routine operations or maintenance. See id. Return to text.

Id. Return to text.

See id. Return to text.

See id. Return to text.

See Park Project Financing, supra note 7. The NPCA warned that these bonding proceeds should not be used for routine operations or maintenance. See id. Return to text.

Id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

Private donations were used to finance the first Audubon Society wildlife preserves. These commentators have also suggested that the national park endowment funds could be expanded by investing in stocks, bonds or mutual funds. Universities and museums have used their endowment funds in this manner. See id. Return to text.


See id. Return to text.

See id. Return to text.

See id. Return to text.

See Spotlight Story National Parks, supra note 164. Return to text.

See Frazier, supra note 161. Return to text.

[282] See id. The Packard family wanted to preserve open land in California because the state's population is expected to grow from today's 33 million to 47.5 million by 2020 (according to state estimates). See id. Return to text.

[283] See id. The Foundation will purchase properties along the central coast from San Francisco to Santa Barbara, in the Central Valley, and in the Sierra Nevada. See id. Return to text.

[284] See Jim Strader, Gettysburg Park Given Round Top Acreage: Mainers Held Off Enemy at Famous Battle Site, BANGOR DAILY NEWS, Apr. 27, 1998, available in 1998 WL 3123816. This six-acre site was a crucial part of the Battle of Gettysburg. At this site, Union troops had held off the Confederates and, by so doing, were able to maintain a strategic view of much of the battlefield. See id. Return to text.


[286] See Government Press Release, supra note 285. Surveys have indicated that eight out of ten people would contribute $1 to our national parks. See id. Return to text.

[287] See id. Return to text.

[288] See id. Return to text.


[290] See id. Return to text.

[291] See id. For instance, the Park Service is currently trying to find funding for Seton Village, a privately owned national landmark outside of Santa Fe. Seton Village is considered to be severely damaged. It consists of a forty-five-room stucco castle, a Pueblo kiva, and a Navajo hogan. Currently, the castle roof leaks, threatening a book and picture collection, and the hogan does not have a roof. See id. Return to text.

[292] See id. The Park Service usually receives properties that have serious problems. For example, it recently received three landmark boats in extremis at the San Francisco Maritime National Historic Park that need $10.3 million worth of repairs. See id. Return to text.

[293] The parks include: Arizona—Canyon de Chelly NM, Casa Grande Ruins NM, Chiricahua NM, Coronado NM, Fort Bowie NHS, Grand Canyon NP, Hubble Trading Post NHS, Montezuma Castle NM, Navajo NM, Organ Pipe Cactus NM, Petrified Forest NP, Tonto NM, Tumacacori NHP, Tuzigoot NM, Walnut Canyon NM, Wupatki NM; Colorado—Bent's Old Fort HS, Colorado NM, Dinosaur NM, Mesa Verde NP; New Mexico—Aztec Ruins NM, Bandelier NM, Chaco Culture NHP, El Malpais NM, El Morro NM, Fort Union NM, Gila Cliff Dwellings NM, Pecos NHP, Salinas Pueblo Missions NM; Texas—Big Bend NP, Fort Davis NHS, San Antonio Missions NHP; Utah—Arches NP, Canyonlands NP, Capitol Reef NP, Glen Canyon NRA, Golden Spike NHS, Hovenweep NM, Natural Bridges NM, Zion NP; Wyoming—Fort Laramie NHS. See Vanishing Treasures Initiative: 3.5 Million for Ruins Preservation in National Park Service FY 1998 Budget Proposal (News Release: Department of Interior), Feb. 1997, available in 1997 WL 76549 [hereinafter Vanishing Treasures Initiative]. Return to text.


For instance, at Aztec Ruins National Monument in Aztec, N.M., the Park Service needs $75,000 to fix ten leaking roofs covering 12th-century pueblos. If they do not receive the funds, the largest collection of pre-colonial wood beams will be ruined by rain. At Wupatki National Monument near Flagstaff, Ariz, 800-year-old ancient village sites are being trampled by tourists climbing and leaning on walls and climbing through the ruins. A real quandary exists at Fort Laramie National Historic Site, Wyo., where bat colonies are roosting in guardhouses. The bat manure and urine are corroding the aging limestone walls, but rangers are unable to remove the bats because they are an endangered species. See id. Return to text.

Salinas Pueblo Mission National Monument is one of three units based in Mountainair, sixty miles southeast of Albuquerque. See James Abarr, *Miracle in the Wilderness*, ALBUQUERQUE J., Jun. 1, 1997, at 11, available in 1997 WL 18386445. The three units of the park are the Abo mission and its surrounding pueblo, the unexcavated pueblo of Quarai, and Gran Quiviria and its partially excavated pueblo. See id. Perhaps as early as 800 years ago, Abo, Quarai, and Gran Quiviria served as major areas of Indian culture and may have been the most populated region in the pueblo world, with over 10,000 people. See id. The area boasted such a large population due to the fact that the area lay between two great Indian civilizations—the Mogollon to the south and the Anasazi to the north. See id. Additionally, the Rio Grande Pueblos lay to the west, and the Kiowa, Comanche, and Apache tribes to the east. See id.

In the late-16th century, this cultural trading center was changed by the arrival of Fray Augustin Rodriguez, a Franciscan priest, and Francisco Sanchez Chamuscado, the commander of a small unit of the Spanish entrada. See id. Within fifty years of this arrival, Spanish friars would return to build the great Salinas missions. See id. Return to text.

One part of the plan includes an apprenticeship program to teach younger generations how to do the specialized repairs since most of the people who had done intermittent repairs are Native American or Hispanic craftspeople over the age of 50. See id. Return to text.

Future projects that the organization plans to undertake include adding benches along trails and building...
trails. See id. Return to text.


[312] See Robinson, supra note 229; Grossi, supra note 242. See also supra notes 241-43 and accompanying text. Return to text.

[313] See id. Return to text.


[315] See id. Return to text.


[318] See id. Still more work needs to be done. To restore the last of the five buildings on the north side of Ellis Island, approximately $60 million is needed. See Pomerantz, supra note 316. Additionally, twenty-four buildings on the south side of Ellis Island—including a hospital complex with a contagious-disease ward—needs to be restored. See id. The southern portion of Ellis Island is in such a state of disrepair that the National Trust For Historic Preservation recently named it one of "America's 11 Most Endangered Places." See James Toedtman, $1 Entry Urged to Aid Ellis I./Fee to Stabilize Rotting Buildings is Hotly Debated, NEWSDAY, Nov. 30, 1997, at A30, available in 1997 WL 2720189. Return to text.


[321] See id. Return to text.


[324] See id. 550 groups rent office space at Fort Mason, and approximately ninety percent of them are nonprofit organizations. See id. Return to text.

[325] See id. For instance, the Foundation raised $1.2 million to create an exhibition hall in the Presidio, which is also under the control of Golden Gate National Recreation Area. See id. Return to text.


[327] See id. The Presidio served as the northernmost military post for Spain in the 18th century. For the next 220 years, the Presidio was home to the Spanish Expeditionary Forces, then the Mexican government, and ultimately the 6th U.S. Army division. See id. Return to text.

[328] See id. Return to text.

[329] See A Time for Trust: The 15-Year Plan for a Self-Sustaining Presidio Operation will Preserve Wherry Housing

[330] See id. The Presidio will be a city within a city as it becomes a place where 4,800 people work, 1,600 people live, and millions visit. See Housing Plan for Presidio Under Fire, supra note 326. Return to text.


[332] Since its inception, the park has had profiteers wanting to exploit it for monetary gains. See Edward T. Pound, Battle of Gettysburg: Profit vs. Preservation; Proposal for Private Development has Critics Up in Arms, Salt Lake Trib., Oct. 5, 1997, at A4, available in 1997 WL 3428540. Over the years, the park has had a huge complex of shops, museums, and restaurants develop around its entrance. Further, private land within the park has been developed for tourism purposes. Currently, preservationists are trying to prevent three large retail developments from being built. One of the proposals includes plans to build a 60,000-square-foot retail development on an eight-acre tract that was part of Camp Letterman. Camp Letterman was the largest general hospital ever established during the Civil War and is the only pristine area left. The park has been viewed by developers as a gold mine because, each year, 1.7 million tourists visit the battlefield and spend about $105 million. See id. Return to text.

[333] See id. Preservationists have not just been battling with profiteers but have also been battling with the Park Service's lack of vision. For instance, preservationists were angered when the park entered into a land swap deal with Gettysburg College, which allowed the college to have 7.5 acres of park land on the northern portion of Cemetery Ridge. The College transformed this grassy tree-lined hillside into a rail spur lined by a retaining wall of mesh wire and rocks. See id. Return to text.

[334] See id. Return to text.


[337] See Satchell, supra note 6. The collection includes 350,000 maps, photographs, military orders, battle reports, letters, and newspaper clippings. These documents are not cataloged, and many are faded and torn. See id. Return to text.

[338] See id. This collection—which contains flags, banners, uniforms, swords, pistols, long guns, and other items—is worth over $25 million. Less than ten percent of the artifacts are placed on display at one time. See id. Return to text.

[339] See id. Return to text.

[340] See Ellen Lyon, Private-public Gettysburg Proposal Selected // Planned Park Complex to have Stores, Museum, Cinema, Harrisburg Patriot, Nov. 8, 1997, at A1, available in 1997 WL 7537448. The Park National Service took four bids and rejected the most controversial one, which was proposed by Robert Monahan, a Gettysburg developer who initially approached the Park Service with the idea. See id. Robert Monahan proposed a visitor's center at no cost to the government if the government was willing to allow him to build a seven-story IMAX movie theater and a Civil War theme village off the site in order to recoup his investment. See Edward T. Pound, Visitors Center Plan to get Senate Scrutiny, USA Today, Feb. 16, 1998, at A4, available in 1998 WL 5716113. Even after rejection, Monahan has stated he will go ahead with his IMAX theater and Civil War theme village on the 288 acres he purchased outside the eastern boundaries of the battlefield. See id. Return to text.

[342] See id. Return to text.

[343] See id. Return to text.

[344] See id. Return to text.


[346] See NPCA Praises Intent, supra note 164. Return to text.


[348] See Corporate Sponsorship Program for National Parks Must Maintain Park Integrity, Says NPCA: Park Funding Proposal Must be Tightened to Prevent Commercial Intrusions (visited Jan. 15, 1998) [hereinafter Corporate Sponsorship Program]. The bill before Congress was S. 1703. See id. Return to text.

[349] See id. Return to text.


[351] See id. Return to text.


[354] See id. Return to text.

[355] See id. Return to text.

[356] See id. Return to text.


[358] See id. Return to text.

[359] See id. Return to text.

[360] See Lowry, supra note 168. Return to text.


[362] See Forest Products, supra note 361. Parks receiving donations are: (1) New Columbia Audubon Society/Kenilworth Park, Washington, D.C.—funds have been pledged, contingent on full government support, to help construct the Kenilworth Marsh Interpretive Boardwalk; (2) Association for the Preservation of Virginia Antiquities
Freeman Branch/Richmond National Battlefield Park—funds/materials for a new pedestrian bridge and trail system that will cross Beaver Dam Creek and join both sides of the battlefield; (3) Eastern Parks and History Association Inc./Cumberland Island National Seashore, Ga.—grant of money/supplies will allow for construction of a new salt marsh boardwalk; (4) Friends of the Fordyce and Hot Springs National Park/Hot Springs National Park, Ark.—resurface and restore the Tufa Terrace Trail and Fountain Walk, the two most heavily used trails; (5) Redwood Natural History Association/Redwood National Park, Calif.—grant of funds and material to construct a new bridge with an observation deck to link the national park with Prairie Creek Redwoods State Park; (6) Sequoia and Kings Canyon National Parks Foundation/Kings Canyon National Park, Calif.—construction of a rail fence along the General Grant Tree Trail to preserve and protect a threatened grove of Giant Sequoia trees, including General Grant Sequoia, the third largest tree in the world. See id. Return to text.

[363] Id. Return to text.


[366] See id. Return to text.

[367] See id. Return to text.

[368] See id. Return to text.


[370] See Forest Products, supra note 361. Return to text.


[373] See id. Return to text.

[374] See Park Project Financing, supra note 256. Return to text.

[375] See id. Return to text.


[377] See id. Return to text.

[378] See id. Return to text.


[380] See supra note 118. Return to text.
Imagine that you live twenty miles away from a chemical waste dump that receives and stores various types of toxic waste from around the country. Your home is situated in the county and you are unable to get your drinking water from the city water service. Therefore, you have to draw your water from an underground aquifer that feeds your well.

Now imagine that after about a year of drinking from your well, you and your family begin to experience nausea, headaches, rashes and other unexplained maladies. Concerned that your drinking water may be causing your unexplained symptoms, you have your water tested and find that it contains several industrial toxins not typically found in the natural environment. After seeking medical attention, your family doctor tells you that your symptoms are consistent with several possible causes, including the ingestion of various toxic chemicals. The doctor is not certain, but believes that chemical exposure has caused your condition. She refers you for further testing and suggests that you speak to an attorney.

Following the doctor's advice, you tell your story to an attorney. The attorney, concerned with bringing any potential causes of action before the statute of limitations runs on your claims, does as thorough an investigation as possible in the short time that he has. The attorney determines that the chemicals found in your water are also present at the toxic waste site. He then talks to a few experts and finds that the experts' initial opinions are that chemicals from the waste plant have leaked into the groundwater and are the likely cause of your injuries. With a good faith belief that the evidence found during the attorney's investigation points to the dump as the culprit, you file suit against the chemical waste dump to recover for your injuries.

Thus far, this hypothetical situation seems to be nothing more than an unremarkable toxic tort case. However, when a Lone Pine order is added to the hypothetical, this garden-variety toxic tort case is transformed into an issue of great concern and controversy.

To continue with the hypothetical from above, now imagine that a case management conference is called soon after the lawsuit is filed. The judge presiding over the case is leery of toxic tort plaintiffs due to her past experience with frivolous toxic tort claims. At the case management conference, the judge issues a Lone Pine case management order requiring you to file affidavits that establish the following:

1. The identity and amount of each chemical to which you were exposed;
2. The precise disease or illness from which you suffer; and
3. Evidence, to a reasonable degree of medical certainty, that exposure to the defendant's chemicals caused the injuries in question.

Given the inherent difficulty with complying with such an order at a pre-discovery stage of a toxic tort case, your attorney protests to the judge that the Lone Pine order is no more than a court initiated, premature summary judgment motion. Despite your attorney's protest, the court informs you that failure to comply with the order will result in dismissal of the lawsuit with prejudice.

With such a burden placed on you at so early a stage of the litigation, the conclusion of this hypothetical is evident. You are unable to provide cause in fact causation since the only evidence available is statistical epidemiological studies. You are also not able to establish exactly which chemical caused your illness since several different chemicals, all capable of causing your injuries, were mixed together in a chemical soup at the defendant's waste storage facility. In
fact, with the long latency periods of many diseases caused by toxic exposure, you are not even sure what disease or illness is causing your symptoms. As a result, the trial judge dismisses your case, not affording you the protections provided for in a summary judgment proceeding.

At first blush, this hypothetical may seem far-fetched and unrealistic. However, if you are a plaintiff in a jurisdiction that uses *Lone Pine* type case management orders, this hypothetical could be a reality to the litigation of a toxic tort case.

Part II of this Note will explain the *Lone Pine* order by examining its elements, factors that prompt its use, and how the courts use *Lone Pine* orders. Part II will also discuss and analyze how both federal and state courts have used the *Lone Pine* order to deal with environmental and toxic tort cases. Part III will introduce the basic features of toxic tort cases which distinguish them from the average tort litigation and will discuss how these differences make *Lone Pine* orders nearly impossible to fulfill in most toxic tort actions. Part IV will explore the controversy surrounding the use of *Lone Pine* orders, discussing the issues on each side of the controversy. Part V will propose that *Lone Pine* orders should not be used and that the existing legal system can deal with the problems that the *Lone Pine* order is thought to remedy. Finally, Part VI will conclude this Note.

II. THE *LONE PINE* ORDER

The *Lone Pine* order gets its name from the case of *Lore v. Lone Pine Corp.* In *Lore*, 464 defendants initiated a suit against the Lone Pine landfill in New Jersey for loss of property value and personal injury caused by pollution from the Lone Pine site. After a case management conference on January 31, 1986, the plaintiffs were ordered to submit the following to the court on or before June 1, 1986:

1. The facts of each individual plaintiff's exposure to alleged toxic substances at or from the Lone Pine Landfill;
2. Reports of treating physicians and medical or other experts, supporting each individual plaintiff's claim of injury and causation by substances from the Lone Pine landfill; and
3. Reports of real estate or other experts supporting each individual plaintiff's claim of diminution of property value, including the timing and degree of such diminution and its causes.

The court considered these facts and information essential to support the plaintiff's claims.

In response to the court's order, the *Lore* plaintiffs filed a letter from a real estate expert, and a list of several illnesses that they were experiencing. However, the plaintiffs' real estate expert stated that he only had thirty days to review the plaintiffs' claims and that he was unable to render an opinion without further investigation. Further, the plaintiffs' doctors and treating physicians were unwilling to commit to a causal connection between the plaintiffs' symptoms and toxic exposure.

The court found the plaintiffs' response to the case management order to be "unbelievable and unreal." The court stated that the plaintiffs' evidence of property diminution and personal injuries did not support a valid cause of action. Therefore, the court dismissed the action with prejudice stating that "prior to the institution of such a cause of action, attorneys for plaintiffs must be prepared to substantiate, to a reasonable degree, the allegations of personal injury, property damage and proximate cause." In justifying the dismissal of the plaintiffs' case, the court relied on its discretionary authority to dismiss cases due to lack of compliance with discovery orders and other court rules.

A. Elements of the *Lone Pine* Order

As seen in the original *Lone Pine* order, the fundamental elements that plaintiffs must show are (1) the identity of the chemical or substance causing the injury; (2) the specific disease, illness, or injury caused by the substance; and (3) a causal link between exposure to the substance in question and the plaintiff's injury. As a general rule, these three requirements are present in most *Lone Pine* orders. In addition to these three requirements, some *Lone Pine* orders require plaintiffs to provide the amount of the substance or chemical to which they were exposed.
opinions that rule out other causes,[20] and specific dates of exposure to the toxic substance in question.[21]

Typically, *Lone Pine* orders are issued as case management orders under a court's authority to govern and manage the trial process.[22] However, courts that use *Lone Pine* orders typically assert an array of various rule authorities and procedural devices which, arguably, give them the authority to issues such orders.[23]

In theory, *Lone Pine* orders can be issued at any time after a court has held a case management conference.[24] Under a court's case management authority, such an order could be issued well before any substantial discovery has taken place.[25] However, most courts will probably give plaintiffs some time to conduct discovery before issuing a *Lone Pine* order since appellate courts are more likely to affirm the order if the plaintiff has been given adequate time to propound and receive discovery.[26]

Because the authority to issue *Lone Pine* orders typically does not come from a specific source, but instead is interpreted through a penumbra of rules and other authorities,[27] each *Lone Pine* order may be different due to varying jurisdictional rules of civil procedure and various state statutes. However, the reasons that *Lone Pine* orders are issued are usually quite similar throughout jurisdictions.[28]

**B. Factors that Prompt Courts to Issue Lone Pine Orders**

In the original *Lone Pine* order in *Lore v. Lone Pine Corp.*, the court gave several reasons to justify the need for such an order. Among these reasons were:

1. The number of defendants involved in the suit;[29]
2. A report issued by the Environmental Protection Agency that was contrary to plaintiffs' claims;[30]
3. Lack of notice of the substance of plaintiffs' claims to the defendants;[31]
4. The expense and complexity of the litigation;[32] and
5. The fear that the plaintiffs had brought their cause of action to intimidate the defendants into settling.[33]

Typically, however, the reason most often given for issuing *Lone Pine* orders is that they are necessary to protect defendants from the undue and unwarranted expense of litigating complex toxic tort issues.[34]

Whatever reasons courts give for issuing *Lone Pine* orders, three consistent factors seem to subconsciously motivate courts to issue such orders. These factors are (1) the complexity of toxic tort actions; (2) the inordinate amount of repeat players;[35] and (3) the departure of toxic tort cases from normal civil litigation.[36]

1. **The Complexity of Toxic Tort Actions**

Labeling toxic tort cases as disfavored among courts, is no stretch of the imagination. Toxic tort cases can take several years to litigate, and a jury trial alone can often take up to nine months to complete.[37] As a result, a judge with little patience and a full docket is probably not thrilled to receive a toxic tort case. This time factor alone can be enough to move a judge toward issuing a *Lone Pine* order whether one is warranted or not.

Similarly, the sheer financial magnitude of toxic tort cases can be overwhelming. Some toxic tort cases can create attorney's fees in the range of millions of dollars.[38] Also, the total amount in controversy in some toxic tort cases can be in excess of a billion dollars.[39] With so much money at stake, courts are on guard for plaintiffs who bring cases with the hope that the defendants will settle the case to avoid further delay and expense.[40] If a judge suspects that such an improper motive is afoot, a *Lone Pine* order is an easy, albeit not always proper, way to expose the motive.

Finally, the complexities of the issues in some toxic tort cases virtually require the court and the parties to become semi-experts in toxicology, epidemiology, statistics, and medicine. An army of experts may be necessary just to
explain such concepts as relative risk, multiple regression statistics, dose-response relationships, and other scientific issues to the jury and the court. Thus, judges may be wary of dealing with such complex information and wish to avoid it by issuing a *Lone Pine* order early in the litigation. Although not all judges issue unwarranted *Lone Pine* orders to avoid the complexity of toxic tort cases, these various factors probably play a significant role in the decision making process of many judges.

2. Repeat Players

Another factor that seems to contribute to a judge's willingness to issue *Lone Pine* orders is the "repeat player." In toxic tort litigation, the same attorney and same defendant may appear before a court several times litigating essentially the same case. When courts see the same faces over and over, they may come to expect higher standards from the repeat plaintiff's attorneys and begin to be somewhat sympathetic with the repeat defendants.

For example, in the case of *In re Love Canal Actions*, the plaintiffs' attorney had been involved in similar Love Canal cases for almost ten years. Due to this fact, the court stated that "having been involved in these Love Canal cases for nearly 10 years, with the knowledge that expert's opinion is a necessary concomitant to proof of causation, [plaintiffs' counsel] cannot now claim prejudice or hardship if such evidence of causation must be produced prior to the time of trial." Although the *Love Canal* court's statement may seem justified given the circumstances of that case, the court's generalizations regarding proof and evidence of causation can create a slippery slope. Since no two toxic tort cases are exactly alike, expecting a plaintiff not to be prejudiced by *Lone Pine* orders simply because the plaintiff's attorney has litigated similar cases in the past is not entirely reasonable.

Courts may also be prompted to issue unwarranted *Lone Pine* orders because they feel somewhat sympathetic for a repeat defendant. In *Hembree v. Litton Industries, Inc.*, the court justified issuing a *Lone Pine* order because Litton Industries, Inc. was litigating a related case in the same court. In justifying its order, the court stated:

> While placing such a burden on plaintiffs is exceptional, the history of related litigation, involving the same counsel, mandates implementation of procedural safeguards. Litton [Industries], Inc., has already expended enormous resources defending [the related case]. While this court does not eschew work it has been delegated, its resources are finite and have, at times, been unduly taxed through the admitted failure of plaintiffs' counsel to conduct adequate prefiling investigation in companion litigation.

Similarly, in *Atwood v. Warner Electric Brake & Clutch Co.*, where approximately 120 plaintiffs sued Warner Electric Brake & Clutch Company for damages sustained by exposure to trichlorethylene, the court consolidated these independent cases for the purposes of discovery. Due to the "tremendous task discovery posed in the case and the delays which ensued," the court entered an order requiring the plaintiffs to certify that each plaintiff had been examined by a medical professional who evaluated the plaintiff's claim; that each plaintiff had identified all of his or her medical or personal injuries caused by defendant's activity since any non-identified injury would be barred; and that each plaintiff was ready to be deposed. As a result of the court's order, several of the plaintiffs' claims were dismissed with prejudice for failure to provide an adequate response.

In upholding the trial court's dismissal of some of the plaintiffs' claims, the appellate court stated that "[i]n a case such as this, where the issues are as numerous and complex as the parties are plentiful, it is important to grant the trial court flexibility in managing the discovery process." Although the appellate court recognized that typically a sanction as drastic as dismissal is only used when a party willfully disregards a court's discovery order, it justified the trial court's actions by finding that "[w]hile it is true that the record does not reveal plaintiffs acted in willful disregard of the trial court's authority, considering the complex nature of the case and the large number of parties involved" the trial court did not abuse its discretion. Such justification makes one wonder whether or not the appellate court would have been so eager to uphold a dismissal if the defendant had only been sued one time rather than 120 times.

3. Departure from Normal Civil Litigation

Another factor common to all toxic tort cases is the departure of such actions from the norms of civil litigation. When compared to a typical slip-and-fall tort case, toxic cases involve different and more difficult standards of causation; require expensive and highly technical expert evidence; and require the expenditure of mass amounts of resources and
time from all parties involved, including the court. [59]

Furthermore, toxic cases often involve hundreds of plaintiffs who have several different individual causes of action. [60] For example, a single incidence of a toxic substance leaking into an aquifer that supplies water for a sub-division of 200 families could potentially lead to 200 suits for trespass, public or private nuisance, strict liability, and actions under CERCLA. [61]

Additionally, in some toxic tort cases, the plaintiff may not even know the identity of the defendant. A toxic waste dump may receive waste from several defendants. All of this waste may be stored in a single location with no indication of whose waste belongs to whom. Also, two types of waste may combine to form a single toxic substance. Thus, a plaintiff may have to sue everyone who has contributed waste to the dump to weed out the real defendant by using discovery devices such as depositions and requests for document production.

With all of the troubling features characteristic of these toxic tort cases, it is not surprising that courts have adopted Lone Pine orders as a way to rid themselves of these troublesome civil cases. Under the color of their discretionary powers, courts may dispense with evaluating such cases under a summary judgment or a sanctions proceeding and thus avoid dealing with the complex issues of a toxic tort case. [62]

C. How Courts Use Lone Pine Orders

The specific motivation and reasoning prompting courts to issue Lone Pine orders varies from case to case. Courts also use Lone Pine orders in a variety of conditions and circumstances that also vary from case to case.

Most Lone Pine orders are issued pursuant to a court's case management authority and are styled as case management orders. [63] Since the courts typically have wide discretion in case management issues, [64] the courts use that authority to justify the issuance of Lone Pine orders. Appellate courts usually afford trial courts plenary power in their case management orders and will rarely overturn them absent a clear abuse of discretion. [65] Therefore, Lone Pine orders issued as a case management order have a presumption of validity for all practical purposes.

Another popular way that courts issue Lone Pine orders is through their authority to manage discovery. [66] Much like its case management authority, courts are typically given wide latitude when dealing with the management of discovery, especially when the case before the court involves multiple parties or complex issues. [68] Under the federal discovery rules and state rules crafted in their image, courts even have the power to dismiss an action for failure to comply with a discovery order. [69] Naturally, if a court uses its discovery management power to issue a Lone Pine-type order, the order must relate somehow to discovery. However, this is usually not a problem for a court because defendants will almost always propound discovery related to causation, identification of the toxic substance, and the extent of the damages. [70] Thus, once the defendants have opened the door to discovery of the issues most commonly addressed in Lone Pine orders, the trial court has the ability to issue such orders under its discovery management powers.

A third way the courts justify using Lone Pine orders is the "shotgun approach."[71] With this approach, courts cite every authority that even remotely gives them the ability to issue a Lone Pine-type order. [72] For example, in Hembree v. Litton Industries, Inc., [73] the court based its authority to issue a Lone Pine order on Rules 1, 11 and 16 of the Federal Rules of Civil Procedure. [74] In doing so, the court reasoned that responding to a Lone Pine order would be a minimal burden "inasmuch as Rule 11, Federal Rules of Civil Procedure provides: 'The signature of an attorney or party constitutes a certificate by the signer that . . . to the best of the signer's knowledge, information and belief formed after reasonable inquiry is well grounded in fact and is warranted by existing law.'" [75] The court also found that Rule 1's provision that aspires for a "just, speedy, and inexpensive determination of every action," and Rule 16's allowance of the court to "take early control of the litigation" furthered its power to issue a Lone Pine case management order. [76]

Another case that typifies the shotgun justification approach is Cottle v. Superior Court. [77] In affirming the issuance of a Lone Pine order by the trial court, the Court of Appeals for the Second District of California justified the order by relying on the lower court's case management authority given by the state rules of civil procedure; the court's equitable power to make rules for its own government; the court's power to create new rules in the absence of any previously established rules; the court's authority to exclude evidence from trials; and a county-initiated trial reduction
III. TOXIC TORT CASES AND THE LONE PINE ORDER

If compliance with a Lone Pine-type order in a normal tort case can be labeled as difficult, compliance with one in the typical toxic tort case can be deemed nearly impossible. Not only do toxic tort cases typically push the envelope in areas such as causation and damages, but their unique qualities differentiate them from the average tort case.

A. Features of a Typical Toxic Tort Case

A typical toxic tort case will have at least five major features that distinguish it from the average tort case. Those five features are:

1. Multiple theories of recovery;
2. Long latency periods;
3. Unique causation issues;
4. An inordinate amount of expert scientific or medical testimony; and
5. An overlapping relationship with statutory environmental law.

1. Multiple Theories of Recovery

A single release of a toxic substance from a site may expose the site owner to claims for negligence, strict liability, trespass, both public and private nuisance, and potentially an action under CERCLA. Thus, a single incident of toxic exposure may force a plaintiff to develop evidence to support several different types and levels of causation and damages. Although the typical tort case may also give rise to several different avenues of recovery, the toxic tort case seems inordinately fertile for multiple causes of action due to the serious nature of exposure to toxic substances.

For example, if a production plant emits a tremendous amount of noise, the plant owner may be held liable for a private nuisance for disturbing the residents of a nearby neighborhood. Under these facts, the neighborhood residents could not maintain a strict liability, trespass, or negligence action in many jurisdictions. However, if the hypothetical plant emits chlorine gas instead of noise, then the same neighborhood residents may have causes of action for negligence due to physical symptoms, strict liability due to abnormally dangerous activity, and trespass due to the actual invasion of particulate matter. The serious nature of most toxic torts inevitably produces a wide array of possible causes of action.

2. Long Latency Periods

Another feature of a toxic tort case that set it apart from a typical slip-and-fall-type tort are the long latency periods involved with toxic exposure injuries. A good description and explanation of the long latency characteristics of toxic tort injuries is as follows:

Environmental or toxic torts often involve injury or damage that remains undiscovered for years after the exposure or contamination. A shipyard worker’s exposure to respirable asbestos fibers may result in asbestos-related disease only years later. An electro plating plant's contamination of its property, surrounding property, or subterranean aquifers may only be discovered when a successor owner of the property wishes to sell it years later. The Vietnam veteran or the agricultural worker exposed to a chemical herbicide may only be diagnosed with neurological disease or other illness many years thereafter.

Because environmental and toxic tort claims almost always involve injury or damage that has a long latency period before the harm manifests itself, toxic torts are distinguishable from the sporadic accident cases that were the staple of the basic torts course.
The long latency period distinguishes toxic torts from the average tort and gives rise to many problems such as the statute of limitations and other time-sensitive procedural matters. Therefore, such a case can easily become a procedural nightmare for a court.

3. Unique Causation Issues

Using the traditional slip-and-fall tort as an example, causation is a relatively straightforward issue. A jury that hears such a case can simply ask, "But for the employee's failure to mop up water on the floor, would the plaintiff have fallen and injured herself?" However, in toxic tort cases, causation is rarely that simple. The foundation of most toxic tort causation is probabilistic evidence. Therefore, in a judicial system that all but demands "but for" causation, the idea of deciding legal responsibility with probabilistic evidence may seem quite foreign or unfair to some judges or juries.

Two major causation questions must be determined in most toxic tort cases. First, is the toxic substance in question capable of causing the harm of which the plaintiff complains? Second, did that toxic substance actually cause the plaintiff's harm? These two questions are usually answered by the use of toxicology and epidemiology. In fact, probabilistic evidence such as toxicology and epidemiology will sometimes be the only evidence of causation that a plaintiff can provide.

A toxicologist usually examines how certain substances affect animals or cellular tissue. The toxicologist will typically determine a dose-response relationship with the toxic substance and the affect it has on the test subject. The toxicologist then attempts to make an extrapolative model that can be compared to the human population.

Epidemiology deals with human subjects, and epidemiological tests usually consist of either case control studies or cohort studies. A case control study is where injured humans are compared with non-injured humans to establish commonalities within the injured group that are not present in the control group. These commonalities can often point to the cause of the injury in question. A cohort study is where a group of humans who have been exposed to a toxic substance are compared prospectively with a group of non-exposed humans over time. The epidemiologist then compares any abnormalities in the exposed group with the control group. The comparison is usually done by examining a relative risk factor, which shows the chance of the exposed group to contract a particular disease or injury in relation to any other non-exposed person. Relative risk attempts to factor out any risk of contracting a given disease that may exist in the general population due to factors unassociated with the defendant's toxic substance.

When dealing with causal relationships developed by such studies, other factors have to be considered before a solid causal link can be established. Factors such as the strength of the association, consistency of the association, specificity, temporality, dose-response relationships, biological plausibility, and coherence should be considered when determining the veracity of epidemiological evidence. Given that this brief description of toxicology and epidemiology could be confusing to the layperson, one can clearly see how toxic tort causation is distinguished from garden-variety causation.

Furthermore, causation in a toxic tort case may not be limited to one single incidence of causation. Causation may exist in a sort of causal web or constellation of causes when dealing with exposure to a toxic substance, whether the injury is to land or to people. For example, an average smoker may have a one in fifty chance of developing lung cancer. If that smoker is exposed to asbestos fibers, then that chance may rise to a forty in fifty chance. If the smoker develops lung cancer, the cause could be the smoking, the asbestos fibers, or both. Determining the actual cause of the smoker's cancer may be almost impossible since it could have been the result of more than one factor.

Stubbs v. City of Rochester illustrates the difficulty of pinpointing an exact cause of injuries due to toxic substances. In Stubbs, the plaintiff brought a suit against the city claiming that the city water system had been contaminated with sewage and had caused the plaintiff to contract typhoid fever. In defense of the city, an expert witness testified that there were at least eight other plausible causes of typhoid fever that could have caused the plaintiff's illness. These causes included impure raw fruits and vegetables, infected milk, certain flies, and contact with an infected person. Proving that the city water was the proximate cause of the plaintiff's injuries was a difficult task, which resulted in the plaintiff appealing the lower court's verdict against him.
4. The Role of Scientific and Medical Testimony

As noted above, probabilistic scientific and medical evidence usually forms the backbone of toxic tort causation. As a result, sometimes an army of experts will be needed to put such evidence into understandable terms that can be presented to the court or to the jury. While most simple tort cases can be tried without expert testimony, "expert opinion is a necessary concomitant to proof of causation" in toxic tort cases.\[105\]

Whether dealing with contamination of land or with illness caused by toxic substance exposure, expert's testimony must establish that the toxic substance in question is capable of causing the alleged harm, did cause the alleged harm, and that other background factors in the environment did not cause the harm.\[106\] Expert medical testimony is also a typical requirement in cases where plaintiffs allege physical injury from toxic substance exposure.\[107\]

With this inordinate need for expert testimony, courts that hear toxic tort cases are forced to deal with great amounts of collateral procedural issues that are inherent with expert testimony. For example, depending on the jurisdiction, a court hearing a toxic tort case may have to deal with several Frye\[108\] or Daubert\[109\] evaluations of an expert's opinion.\[110\] Also, given the amount of expert testimony that may be used in a toxic tort case, simple issues of discovery may require several pre-trial motions and hearings.\[111\] With the exceptional nature of toxic tort cases, it becomes apparent to see why expert testimony is the rule and not the exception in most environmental and toxic tort cases.

5. Overlapping Relationship with Statutory Environmental Law

Not only is a typical toxic tort defendant subject to an array of common law causes of action, but the average toxic tort will also expose the defendant to several statutory environmental laws. Depending on the circumstances, a single incidence of a toxic discharge from a defendant's property may expose him to actions under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"),\[112\] the Toxic Substances Control Act ("TSCA"),\[113\] the National Environmental Policy Act ("NEPA"),\[114\] the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"),\[115\] the Occupational Safety and Health Act ("OSHA"),\[116\] or the Federal Water Pollution Control Act ("FWPCA").\[117\],\[118\] Not only will the court have to deal with the claims brought against the defendant by various plaintiffs, the court may also have to address statutory enforcement or penalty actions brought in related actions by the government or private citizens under federal or state environmental law.\[119\] As a result, the potential for multiple avenues of liability in both the common law and statutory realm distinguish the toxic tort case from the run-of-the-mill tort.

B. How the Distinct Features of a Toxic Tort Case Make Compliance with a Lone Pine Order Difficult

As discussed, Lone Pine-type orders typically require (1) the identity of the chemical or substance causing the injury; (2) the specific disease, illness, or injury caused by the substance; and (3) a causal link between exposure to the substance in question and the plaintiff's injury.\[120\] In addition to these three requirements, some Lone Pine orders require plaintiffs to provide the amount of the substance or chemical to which they were exposed,\[121\] expert medical opinions that rule out other causes,\[122\] and specific dates of exposure to the toxic substance in question.\[123\] Lone Pine orders may be issued as case management orders early in the litigation before the plaintiff has had the opportunity to propose any significant discovery. Given the unique features of the typical toxic tort case, compliance with such orders is sometimes next to impossible.

1. Identity of the Substance

Again, in the hypothetical slip-and-fall case, identification of the substance that caused the harm is elementary. Obviously, the water, which was negligently left on the floor, would be the substance that caused the plaintiff to slip and fall. However, in a toxic tort case, exact identification of the culprit substance may be impossible.

In New York v. Schenectady Chemicals, Inc.\[124\] the defendant, Schenectady Chemicals, manufactured paints, alkyl phenols, and other chemicals.\[125\] As a by-product, the Schenectady plant was left with waste including "phenol, benzene, toluene, xylene, formaldehyde, vinyl chloride, chlorobenzene, dichlorobenzene, trichloroethylene, chloroform, ethyl benzene, nethylene chloride, dichloroethane, lead, copper, chromium, selenium, and arsenic."\[126\]
The plant hired an independent contractor, Dewey Loeffel, to remove this waste and dispose of it. [127] From the 1950's until the mid-1960's, Loeffel basically dumped all these waste products together in a thirteen acre area which happened to be a lagoon that fed the local fresh water aquifer. [128] In essence, Loeffel created a toxic soup of dangerous waste products that caused a serious threat to the local residents. [129]

If the plaintiffs in Schenectady were forced to identify the exact toxic substance that caused their harm before any substantial discovery had been done, compliance with that order would have been impossible. Not only were all the offending chemicals mixed together, but some of the chemicals may have even combined to produce new waste that was not even present at the Schenectady plant. To make the situation even more severe, imagine if the court ordered the Schenectady plaintiffs to identify the amount of each chemical they were exposed to or the dates on which they were exposed. [130]

Another factor to consider is whether the Loeffel site contained waste from other plants as well as from Schenectady. A mixture of wastes would make the plaintiff's job of identifying the proper defendant and the exact culprit chemical even more difficult. Such considerations illustrate why compliance with a seemingly reasonable Lone Pine order may be next to impossible in toxic cases.

2. Identity of the Specific Injury

If a hypothetical plaintiff falls and hurts her leg, the injury that follows is usually easily diagnosed. Any family doctor can probably narrow the plaintiff's potential injuries from the fall in a matter of minutes. Now consider a situation where the same plaintiff mysteriously becomes ill with symptoms that can be attributed to several different causes. For instance, the inhalation of asbestos fibers can produce at least four different types of lung and breathing related diseases. [131] The early symptoms of each of these maladies, such as shortness of breath and dry coughing, may be the same. [132] A plaintiff who is in the early stages of lung cancer may not be able to say for certain that he is not suffering from asbestosis or another lung related disease caused by asbestos exposure. Therefore, identification of the plaintiff's exact disease may be difficult if not impossible until the plaintiff has fully developed a specific asbestos-related disease.

Some Lone Pine orders require plaintiffs to come forward with expert medical testimony that rules out other causes of their symptoms. [133] With some illnesses such as lung-related diseases, it may be impossible to rule out non-asbestos related causes of the plaintiff's symptoms without undertaking serious medical procedures or even surgery. [134] For example, some later symptoms of emphysema are identical to early symptoms of asbestosis. [135] Therefore, it may be impossible to get a medical expert to commit to one specific cause of symptoms when such diseases are in their early stages, thus making compliance with a Lone Pine order impossible. [136]

3. Causation Between the Toxic Substance and the Injury

As previously discussed, proving causation in a toxic tort case is very different from proving causation in an average tort case. [137] In the early stages of a toxic tort case, the plaintiff may only have sparse bits of epidemiological data showing a causal link between the toxic substance and his injury. Although the data and causal evidence the plaintiff has in the early stages of litigation may be enough to fulfill the good faith pleading requirement imposed by most jurisdiction's rules of civil procedure, [138] it may not be enough to satisfy a Lone Pine order issued before the plaintiff has had an opportunity for reasonable discovery. Furthermore, if the judge who issues a Lone Pine order rebukes the validity of circumstantial causation evidence such as toxicological and epidemiological studies and requires evidence of traditional but for causation, no amount of causation evidence could fulfill the court's order in some types of toxic cases. Therefore, Lone Pine orders can be incompatible with the principles of toxic tort causation.

IV. THE PROS AND CONS OF THE LONE PINE ORDER

As with any subject, the use of Lone Pine orders has both positive and negative ramifications. Proponents of Lone Pine orders may see them as an efficient case management tool that allows courts to nip frivolous cases in the proverbial bud. Others may see Lone Pine orders as an abuse of judicial discretion and a tool by which judges may bypass legally mandated procedural safeguards. Regardless of one's views, both sides of the Lone Pine argument warrant discussion.
A. The Pro Side of the Lone Pine Argument

One of the major justifications for using the *Lone Pine* order is that it provides a "simpler, more expeditious means" of dealing with complex litigation.[139] Toxic tort cases can take several years to litigate, and a jury trial alone can take up to nine months to complete.[140] Thus, judges may feel that case management orders like the *Lone Pine* order can work to streamline the issues of complex litigation.

In most cases, efficiency and case management are the primary justifications for the issuance of *Lone Pine* orders.[141] As a general rule, courts are usually afforded great latitude in controlling the litigation before them.[142] Courts are also afforded much discretion when dealing with the admission of evidence and discovery matters.[143] In fact, when dealing with complex litigation, some courts are vested with the power to fashion new procedure to manage and control the case before it.[144] With all this discretionary power, courts may find *Lone Pine* orders to be a wonderful way of moving the docket along.

*Lone Pine* orders can also be used to weed out claims that judges may consider to be frivolous or unsupported by fact.[145] In fact, some courts go so far as to issue omnibus *Lone Pine* orders that apply to all toxic tort cases of a given type that are brought under the court's jurisdiction.[146] In essence, some courts find *Lone Pine* orders to be convenient prophylactic devices to get rid of bad cases.[147]

Finally, some courts feel that *Lone Pine* orders can be used to promote fairness and to administer justice evenhandedly.[148] If a court feels that the defendant in a toxic case has not been provided with adequate information to form a defense, it may enter a *Lone Pine* order to make the plaintiff come forward with the information that the court feels is missing.[149] In summary, the three major justifications for *Lone Pine* orders are, (1) efficiency, (2) the elimination of frivolous claims, and (3) fairness.

B. The Con Side of the Lone Pine Argument

Two major criticisms of *Lone Pine* orders are that, (1) they allow courts to ignore existing procedural rules and safeguards; and (2) they lack consistency in their use and application, and are thus not equally applied.

1. Ignoring Existing Procedural Rules and Safeguards

One of the major benefits to having a system of justice like the one used in this country is that parties to litigation can go before the court with the knowledge that the court has to follow certain rules and principles to guide its rulings and decisions. For the most part, devices such as rules of civil procedure, rules of evidence, and principles such as stare decisis prevent courts from making arbitrary decisions and from making rulings inflamed with personal ideology and prejudice. In many cases, rules that govern the courts are promulgated by the legislature and act to uphold the system of checks and balances that is the backbone of our American government. In the absence of such rules and principles, our court system would lack consistency and validity.[150]

In almost every case cited within this Note, courts that have used *Lone Pine* orders have interpreted their right to do so from procedural rules that do not specifically grant the authority for the courts to issue such an order.[151] Thus, almost all *Lone Pine* orders are derived from other procedural rules which, as the issuing court will claim, give the court inherent authority to issue such orders.[152] Rather than resorting to amorphous concepts such as inherent case management authority, courts, when faced with a *Lone Pine* situation, must first look to existing procedural devices to resolve the problem. In other words, courts can not simply ignore existing procedural rules and safeguards merely because toxic tort cases are different from normal tort cases and tend to be more time-consuming. *Lone Pine* orders allow courts to ignore existing procedural rules, and are thus subject to criticism.

2. Lack of Consistency and Equal Application

For rules and regulations to have validity, they must be applied equally to all people under their purview.[153] If those who administer the rules make exceptions every time a rule becomes uncomfortable or laborious to apply, then the rules, in reality, have no purpose. Therefore, procedural devices such as summary judgment, motions to dismiss, motions for sanctions, and other similar rules must be used consistently by the courts rather than resorting to inherent
LONE PINE ORDERS

Lone Pine orders are created under a court's inherent case management authority as opposed to hard and fast procedural rules. As a result, courts could interpret such inherent powers very differently from case to case. With no real guidelines to control the parameters and scope of Lone Pine orders, they are fertile grounds for inconsistency, personal prejudice, and ultra vires activity. This criticism of Lone Pine orders is not meant to suggest that courts act improperly every time they issue Lone Pine orders. Nor is it meant to suggest that courts should not have discretion and latitude in certain matters that require the perspective that a trial court has with issues such as the admissibility of evidence and the like. However, when dealing with the issues that are usually addressed in Lone Pine orders, a court's subjective authority must yield to the consistency of mandated rules and procedures.

An excellent example illustrating both of the Lone Pine order's two major criticisms can be found in Cottle v. Superior Court. In Cottle, approximately 175 owners and renters of residential property sued various defendants due to injuries sustained from a site that had been used as a dumping ground for hazardous waste for many years. After some discovery, the court issued a case management order requiring the plaintiffs to present evidence of:

1. The toxic substance to which the plaintiff was exposed;
2. The dates and place of the exposure;
3. The method of exposure;
4. The nature of the plaintiff's injury; and
5. The identity of each medical expert who would support the claim.

The plaintiffs responded that given the nature of the toxic exposure of which they complained, any evidence they could submit would be insufficient and compliance with the court's order would be "virtually impossible." The court responded by stating that the plaintiff's evidence failed to establish a prima facie case and dismissed all of the plaintiffs' personal injury claims.

On appeal, the plaintiffs sought to have the trial court's order vacated on the grounds that the trial judge essentially had abused his discretionary powers by granting a motion for summary judgment without following summary judgment rules or formal procedures. The appellate court disagreed, stating that the lower court's action was an "order excluding evidence" and not a summary judgment order. Relying on the trial court's power to "make rules for its own government" and other "inherent power" arguments, the appellate court upheld the lower court's order. Oddly enough, the appellate court seemed to second-guess its ruling throughout the opinion as if it was not sure it had made the right decision. In fact, at one point, the appellate court even concedes that part of the lower court's order was based on the fact that there was no factual issue for the jury to decide. By making such a statement, the appellate court all but confirms the plaintiffs' assertion that the lower court used a summary judgment standard in ruling on its order.

The appellate court's tenuous majority opinion was followed by a strong dissent from Associate Justice Johnson. Justice Johnson summarized the majority's error: "California standards do not confer authority to terminate causes of action for lack of proof before trial without complying with the summary judgment procedure the Legislature specifically enacted for that purpose." Justice Johnson quickly recognized that the trial court's attempt to classify its order as an "order excluding evidence" was a legal fiction, stating that "[n]othing in the Evidence Code or otherwise authorizes a trial court to terminate a cause of action in limine by excluding any and all evidence that might be offered to prove that cause of action." Furthermore, the dissent recognized that a "trial court's inherent authority to craft new rules of civil procedure" is based on the predicate fact that there is an "absence of any statute or rule governing the situation." Justice Johnson illustrates the inherent danger in the lower court's order by stating:

Had the procedural guidelines for summary judgment been followed, the defendants would have had to have initiated the process and have supplied evidence [that] causation could not be proved. Strictly construing these moving papers and liberally construing plaintiffs' documents in opposition to the motion, the court would have then decided whether there remained any triable issues of material fact as to causation. However, the trial court here did not employ the statutory provision for
summary judgment with its built-in procedural safeguards. In its place the trial court substituted a bastardized process which had the purpose and effect of summary judgment but avoided the very procedures and protections the Legislature deemed essential.[170]

In summary, the Cottle example illustrates the Lone Pine order's two major criticisms. Cottle shows how a court can abuse its inherent authority to sidestep procedural safeguards set forth by the legislature as a check and balance on the judicial system. Cottle also shows how the validity and integrity of procedural rules can be put to question when they are used selectively by the courts. Despite these facts, Cottle does give rise to the question of whether the existing system of procedural rules and devices can accommodate the unique features of toxic tort litigation.

V. WHY LONE PINE ORDERS SHOULD NOT BE USED

A. Existing Procedural Rules can Adequately Address any Problems Lone Pine Orders are Thought to Remedy

Keeping in mind the problems discussed, courts should not use Lone Pine orders because existing procedural devices can effectively deal with any problems that Lone Pine orders are thought to remedy without the dangers that Lone Pine orders bring. The original Lone Pine court gave several reasons to justify the need for such an order. These reasons were (1) the number of defendants involved in the suit;[171] (2) a report issued by the Environmental Protection Agency that was contrary to plaintiffs' claims;[172] (3) lack of notice of the substance of plaintiffs' claims to the defendants;[173] (4) the expense and complexity of the litigation;[174] and (5) the fear that the plaintiffs had brought their cause of action to intimidate the defendants into settling.[175] If each of these concerns can be addressed with existing procedural devices, it becomes apparent that Lone Pine orders are unnecessary.

1. The Number of Defendants in a Suit

A single toxic exposure event may give hundreds of plaintiffs a right to sue one or several defendants.[176] Each one of the hundreds of plaintiffs may have specific facts or circumstances that distinguish his cause of action from another plaintiff's.[177] Thus, whether toxic tort cases are brought as consolidated or class actions or individual suits, courts may feel legitimate concern over the sheer number of parties involved against one or a few defendants. With this in mind, courts may issue Lone Pine orders in an attempt to deal with the issue of numerosity.

The original Lone Pine order required that the plaintiffs produce facts of each plaintiff's exposure, proof of medical causation of injuries, plaintiffs' exact amount of damages, and reports from real estate experts.[178] However, it is questionable what the information required by the original Lone Pine order does to help the court or the defendant better deal with the large number of plaintiffs involved in the case. If all the Lone Pine plaintiffs produced the requested information to the court's satisfaction, all of them would have remained in the case and the court and defendant would have had to contend with the exact same number of plaintiffs. If some or all of the plaintiffs failed to comply adequately with the court's order, then those plaintiffs would have been dismissed. Therefore, the only way the original Lone Pine order could have dealt with the problem of numerosity is if some or all of the plaintiffs could not have complied with the order.

The most realistic reason why some of the plaintiffs did not comply with the order is that the Lone Pine plaintiffs simply did not have the information the court wanted.[179] With this in mind, the court and the defendants could have used several existing procedural devices to deal with the plaintiffs' deficiency. For example, if the court felt that the plaintiffs' had violated a discovery request proposed by the defendant, the court could have used discovery sanction rules, such as Rule 37 of the Federal Rules or its state counterparts, to deal with the problem.[180] By doing so, the court would have had to follow the procedural safeguards that attach to the use of such rules.[181] Also, the defendant could have moved for summary judgment if it felt that there was no disputed issue of material fact for the jury to decide.[182] By using the summary judgment process, the court and the parties would be bound by the procedural safeguards built-in to most summary judgment rules.[183] In either case, existing procedural devices could have easily dealt with the true problem at issue—the plaintiff's lack of factual proof. Therefore, when the numerosity justification is examined and removed from the list of the Lone Pine order's miracle cures, it is evident that such orders can do no more to ease the burden of numerosity than any other existing procedural device. When used to remedy the problem of numerosity, the Lone Pine order provides no advantage over existing procedural devices and allows the court and the defendant to dispense with mandated procedural devices that are found in existing procedural rules.
2. Evidence Contrary to the Plaintiff’s Claims

The original Lone Pine court also supported its Lone Pine order by stating that one of the plaintiffs' expert's assertions was "completely contrary" to EPA studies.[184] Thus, the court can be understood to say that because other evidence contradicted the plaintiffs' evidence, the plaintiffs' claims should be dismissed. Given the nature of our adversarial system of jurisprudence, such a provision hardly seems supportable.

If a court is faced with a situation where a party resisting a motion for summary judgment has such weak evidence that no reasonable jury could find for that party, the court should enter summary judgment against that party.[185] However, if a reasonable jury could find for either the moving or the non-moving party, neither party's claims should be summarily dismissed.[186] At least under a summary judgment standard, the only way the Lone Pine court's order can be supported by the fact that plaintiffs' evidence conflicted with an EPA study is if no reasonable jury could have found for the plaintiffs given that the conflict existed. Therefore, if the Lone Pine court is given the benefit of the doubt, it must be assumed that the court found that no reasonable jury could have found for the plaintiffs. If not, then the Lone Pine court effectively said that since it preferred the EPA's evidence, it could dismiss the plaintiffs' cause of action. Needless to say, such an assertion raises serious questions about the role of a jury and the court's inherent authority.

Even if the Lone Pine court did find that the plaintiffs' evidence was a mere scintilla against the EPA study, one must wonder why the court addressed this issue outside of the legislatively mandated procedure of summary judgment.[187]

3. Lack of Notice of the Substance of Plaintiffs' Claims to the Defendant

To use the federal system as an example, Rule 8(a) of the Federal Rules of Civil Procedure requires that a complaint set forth a "short and plain statement of the claim showing that the pleader is entitled to relief."[188] This sort of pleading has been called "notice pleading" as it puts the defendant on notice of the claims against it.[189] If a complaint fails to give such notice, a defendant may move to dismiss for failure to state a cause of action,[190] move for a more definite statement,[191] or move to strike portions of the pleading.[192] Thus, if a toxic tort defendant is sued in federal court, and in most state courts, that defendant has several procedural options at its disposal to deal with insufficient notice from the time the plaintiff's complaint is filed and served. A toxic tort defendant's procedural options could include having a plaintiff's improperly plead claim modified or dismissed before the court even has an opportunity to issue a Lone Pine order. Taking this into account, it is difficult to understand how Lone Pine orders would be superior or even adequate ways of dealing with lack of notice of the substance of a plaintiff's claim.

In the original Lone Pine case, the court stated that "defense counsel required sufficient information to provide defenses" and that the defendants "were no better off at the end of the seven months allowed plaintiffs to substantiate their cases than when the suit was instituted."[193] However, if the plaintiffs were unable to substantiate their cases and if the defendants did not have sufficient information to provide defenses, then it is curious why the plaintiffs' claims were dismissed for failing to comply with a case management order rather than under a motion to dismiss or a motion for summary judgment. The Lone Pine court stated that plaintiffs' claims were dismissed, inter alia, for "fail[ing] to plead a claim upon which relief may be granted."[194] Yet, if the plaintiffs plead a claim upon which relief could not have been granted, the plaintiffs should not have been given seven months to substantiate their cases. Furthermore, if the plaintiffs truly failed to plead a cause of action, their complaints should have been dismissed on a motion to dismiss initiated by the defendant. If there were a problem with the substance of plaintiffs' claims as opposed to the way the claims were actually plead, then the substance issues should have been addressed by a motion for summary judgment initiated by the defendant.

Basically, there is no reason for a court to issue a subjective case management order, evaluate the adequacy of substance and pleading by that order's standards, and then dismiss claims due to non-compliance with that order. Hopefully, such freedom of action is not contemplated in a court's inherent case management authority. If notice of the substance of a plaintiff's claim is a true concern, then the concerned party should move to dismiss or modify the claim against it. Current procedural rules exist to accomplish this task and the use of Lone Pine orders to deal with lack of notice is both unnecessary and inefficient.[195]

4. The Expense and Complexity of the Litigation
No doubt exists that toxic tort cases can be complex and expensive. The total amount in controversy in some toxic tort cases can be in excess of one billion dollars.\[196] and some toxic tort cases can take several years to litigate.\[197] A toxic tort jury trial itself can often take up to nine months to complete.\[198] Therefore, sometimes courts will have to find new and inventive ways to deal with the special expense and complexity of toxic cases. In fact, some jurisdictions allow courts to "create new forms of procedure in particular pending cases . . . where, in the absence of any previously established procedural rule, rights would be lost or the court would be unable to function."\[199] However, when courts are given the power to create new forms of procedure, they must first look to existing procedural rules to solve the problem at hand.\[200] Courts should not be afforded the ability to ignore existing procedural rules and create new ones just because the use of the existing rule may lead to a different result than the court wants. Therefore, before a court relies on inherent power devices such as Lone Pine orders to deal with the expense and complexity of toxic cases, the court should first exhaust any existing procedural devices at its disposal.

Secondly, as noted above, Lone Pine orders typically ask plaintiffs to come forward with facts and proof of specific elements of their claim. If the plaintiff can comply with the order, the defendant is provided the information and proof the court deemed necessary, and no extra time and expense is needed to compel the plaintiff to come forward with that information. If the plaintiff fails to comply with the order, the plaintiff's claim is dismissed, and the defendant no longer has to spend time and money defending the claim. Similarly, if a plaintiff complies with the standards set forth in a motion for summary judgment, the plaintiff comes forth with facts and proof that there is still a material controversy for the jury to decide. Thus, no extra time and expense is needed to compel the plaintiff to come forth with that information. If the plaintiff fails to comply with the summary judgment standard of proof, then its case is dismissed and the defendant no longer has to defend against the case. Comparing the differences between the procedures of a Lone Pine order and existing procedural rules shows that a Lone Pine order can do nothing more to save time and money than a motion for summary judgment. The only difference is that a Lone Pine order does not have the inherent procedural safeguards that a summary judgment procedure has and the court is free to arbitrarily dismiss the plaintiff's claims.

5. The Fear of Bad Faith Litigation

A final fear expressed by the original Lone Pine court was that the plaintiffs had brought their claims "with the hope that the defendants eventually will capitulate and give a sum of money to satisfy the plaintiffs."\[201] Thus, the court implicitly suggests that the plaintiffs' claims were brought in bad faith to pressure the defendants into settling. However, rather than addressing this concern of bad faith with a procedural rule designed to deal with bad faith claims, the court dismissed the plaintiffs' claims with prejudice for failing to comply with a case management order.\[202]

To use the federal system as an example again, Rule 11(b)(1) of the Federal Rules of Civil Procedure requires parties to sign pleadings, motions, and other papers put before the court to certify that "it is not being presented for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of litigation."\[203] Rule 11 also goes on to state that a sanctions proceeding may be brought on motion by a party or on the court's initiative if there is reason to believe a violation has occurred.\[204] Thus, if the court or a defendant believes that a plaintiff has brought a claim in bad faith, either one can bring forth sanctions proceedings against the plaintiff. Therefore, there is no need for courts to use Lone Pine orders to deal with problems for which procedural remedies already exist. Once again, the use of Lone Pine orders to deal with bad faith claims does nothing more than bypass procedural safeguards and allow courts to have unbridled discretion.\[205]

B. Modern Toxic Tort Cases Demonstrate that Lone Pine Orders are Unnecessary

The best evidence that Lone Pine orders are unnecessary can be found in toxic tort cases where courts have relied on conventional rules of procedure to resolve any Lone Pine type concerns. Such cases show that there is no need or justification for courts to resort to inherent power devices such as Lone Pine orders.

In Serrano-Perez v. FMC Power Corp.\[206] the plaintiffs filed suit against the FMC Corporation claiming that their son had been exposed to unknown chemicals manufactured by FMC, and that as a result of that contact, he died of aplastic anemia.\[207] FMC moved for summary judgment after discovery had been conducted, and the trial court granted FMC's motion finding that:
Plaintiffs in this case have offered no evidence, no expert testimony, and no epidemiological data that would prove that defendants' insecticides caused [the decedent's] aplastic anemia. Nor have they submitted evidence that defendants' insecticides can cause aplastic anemia at all. Plaintiffs have failed to set forth any specific facts that show a genuine triable issue as to the causation of [the decedent's] illness.\[208]\n
On appeal, the lower court's order was upheld.\[209]\n
The Serrano-Perez case is a prime example of how courts can achieve the same results that Lone Pine orders produce by complying with mandated rules of procedure. Whether there had been two or two hundred plaintiffs in Serrano-Perez, the bottom line was that the plaintiffs failed to produce sufficient evidence to show a disputed material issue for the jury to decide. The defendants saw this deficiency and moved for summary judgment. The court applied the protections inherent in the summary judgment procedure and still found that the plaintiffs had not fulfilled their burden of production. Thus, the plaintiffs' case was dismissed.\[210]\n
If the Serrano-Perez court had issued a Lone Pine case management order requiring the plaintiffs to produce specific evidence of causation, the court would have relieved the defendants of their summary judgment burden to come forth and show that no issue of material disputed fact remained. In other words, the court would have automatically assumed that the plaintiffs' case was deficient without any action on the part of the defendant.

Further, depending on how harsh the court was, the plaintiffs may or may not have been given the same amount of time to propound discovery if the court used a Lone Pine order. In the absence of a motion for summary judgment initiated by the defendants, discovery may have continued for years before the plaintiffs were forced to come forward with causation evidence.\[211]\n
However, under the court's case management order, the plaintiffs would surely have been given a specific date by which they had to present their causation evidence.

Additionally, once the plaintiffs had presented their evidence to the court in an attempt to comply with the Lone Pine order, the court would have unbridled discretion to decide whether the plaintiffs had made a sufficient showing. Unlike summary judgment, a court using a Lone Pine order would not be compelled to assume the plaintiffs' facts as true and construe all evidence in a light most favorable to the plaintiffs. In fact, other than abuse of discretion, the court would not be bound to any evaluation standards at all.

Ironically, if the Serrano-Perez court had used a Lone Pine order, the end result would have been the same as if the court had used summary judgment. The plaintiffs' case would have been dismissed. As previously noted, the only real difference would have been that under summary judgment the court would have obeyed procedural rules.

In Renaud v. Martin Marietta Corp.,\[212\] twelve plaintiffs brought suit against the Martin Marietta Corporation claiming that water contaminated by Martin Marietta caused various injuries ranging from cancer to birth defects of the heart.\[213\] The court estimated that a full jury trial would take between six to nine months.\[214\] The court found that the most efficient way to deal with such an arduous case was to hold a series of summary judgment hearings where the plaintiffs would present causation evidence as if they were presenting it at trial.\[215\] This method was adopted from a suggestion made by the defendant.\[216\] Before the summary judgment mini-trials took place, defendants were required to move formally for summary judgment.\[217\] Before ruling on the motions, the court noted that "[b]ecause [summary judgment] is a drastic remedy, defendants must establish beyond a reasonable doubt that they are entitled to summary judgment."\[218\] With this standard in mind, the court evaluated evidence put forth from both sides and determined that the plaintiffs had failed to present a prima facie case of causation.\[219\]

The Renaud case is an excellent example of how a court can deal with complex litigation by being creative with existing procedural rules. The Renaud court used the procedurally mandated summary judgment standard to streamline a trial that could have taken months to complete. In doing so, the court did not depart from any established rules or statutes and maintained the validity and integrity of the legal process. Where it would have been easy to issue a Lone Pine order, the court chose instead to follow the mandated procedural rules. Even though the Renaud court was innovative in its application of the summary judgment device, it still required the defendants to file formal summary judgment motions and evaluated those motions by the strict summary judgment standard. The court heard evidence from both parties and made an informed and procedurally sound decision in dismissing the plaintiffs' claims. Thus,
VI. CONCLUSION

There is no doubt that as society becomes more complex, litigation will follow suit. As technology increases and populations grow, environmental and toxic tort cases may begin to increase exponentially. However, complex litigation does not afford a court free reign to disregard mandated procedural rules under the guise of inherent case management authority. When courts depart from mandated rules and use devices such as Lone Pine orders, they diminish the legitimacy of the legal process by adding uncertainty and inconsistency to an otherwise regimented system. Furthermore, courts that use Lone Pine orders negate the checks and balances and safeguards that are inherent in properly promulgated rules of procedure. Although courts may dress Lone Pine orders in the sheep's clothing of their inherent case management authority, one must look beyond and see the wolf that lies within. Lone Pine orders are insufficient to deal with the complex and unique features of toxic tort litigation, and they ignore the fundamental precepts of the adversarial system. Therefore, before courts choose to rely on their inherent case management powers, they should examine the effectiveness of existing procedural rules and not let justice fall prey to convenience.

[*] J.D. expected May 1999, Florida State University College of Law. The author would like to thank Dr. Anthony Conte for his good advice. Return to text.


[2] This is an example of an actual Lone Pine-type order issued in Hembree v. Litton Indus., Inc., No. B-C-90-6, at 9.18 (W.D.N.C. Aug. 16, 1990). Although not all Lone Pine orders are exactly alike, the one issued in Hembree is illustrative of the typical elements of a Lone Pine-type order. See discussion infra Part II.A. Return to text.


[4] For example, symptoms from exposure to asbestos can often take several years to manifest and can lead to progressive stages of disease. See Celotex Corp. v. Copeland, 471 So. 2d 533, 536 (Fla. 1985). Return to text.


[8] See id. at *3-4. Return to text.

[9] See id. at *4. Return to text.

[10] See id. at *5-6. Return to text.


[13] Id. at *6. Return to text.


[15] Id. at *9. Return to text.
[16] See id. at *7-8. Return to text.

[17] See discussion supra Part I. Return to text.


[22] See id. at 1376, 1380. Return to text.

[23] See id. Return to text.


[26] See Cottle, 3 Cal. App. 4th at 1380 (reviewing the issuance of a Lone Pine order, the appellate court stated "[h]ad the order been made earlier in the proceedings, we would be more inclined to hold that the order was an abuse of the court's discretion"). Return to text.

[27] See id. (justifying the issuance of a Lone Pine order by relying on the court's case management authority, the court's equitable powers, the court's power to create new procedural rules, and a county trial reduction program). Return to text.

[28] See discussion infra Part II.B. Return to text.


[31] See id. at *7. Return to text.


[33] See id. at *10. Return to text.

[34] See, e.g., Lore, 1986 N.J. Super. LEXIS 1626, at *9 (stating "[w]ith the hundreds of thousands of dollars expended to date in this case . . . [t]his court is not willing to continue the instant action with the hope that the defendants eventually will capitulate"); Hembree v. Litton Indus., Inc. No. B-C-90-6, at 9.16 (W.D.N.C. Aug. 16, 1990) (stating "W[h]ile placing such a burden on plaintiffs is exceptional . . . Litton [Industries], Inc. has already expended enormous resources defending [a related] matter."); Grant v. E.I. DuPont De Nemours & Co., 1993 WL 146634, at *1 (E.D.N.C. Feb. 17, 1993), aff'd, 1993 WL 146638 (E.D.N.C. Mar. 26, 1993) (stating "[i]n light of the magnitude of this litigation the Court finds that entry of the following case management order is appropriate.") Return to text.


[37] See Renaud v. Martin Marietta Corp., 749 F. Supp. 1545, 1547 (D. Colo. 1990), aff'd, 972 F.2d 304 (10th Cir. 1992) (stating that the full jury trial would take six to nine months to complete). Return to text.

[38] See In re Agent Orange Prod. Liab. Litig., 818 F.2d 145, 151 (2d Cir. 1987) (stating that continued litigation would cost millions of dollars in attorney's fees). Return to text.


[41] Detailed explanations of the scientific terms used here are beyond the purview of this Note; however, they will be briefly explained in Part III. Return to text.


[43] See infra text accompanying note 47. Return to text.

[44] See id. Return to text.


[46] See id. at 177. Return to text.

[47] Id. Return to text.


[50] Id. Return to text.


[52] See id. at 1034. Return to text.

[53] Id. at 1035. Return to text.

[54] See id. at 1035-36. Return to text.

[55] See id. at 1036. Return to text.

[56] Id. at 1037. Return to text.

[57] Id. at 1038. Return to text.

[58] See supra text accompanying note 52. Return to text.

[59] See discussion infra Part III. Return to text.

N.E.2d 1032, 1034 (Ill. App.2d 1992) (stating that approximately 120 separate plaintiffs had brought suit against the defendant). Return to text.


[62] See discussion infra Part II.C. Return to text.


[64] See FED. R. CIV. P. 16(c)(16) (stating "At any conference under this rule consideration may be given, and the court may take appropriate action, with respect to . . . such other matters as may facilitate the just, speedy, and inexpensive disposition of the action"). Return to text.


[67] See, e.g., Amoco Oil Co. v. Segall, 455 N.E.2d 876, 883 (Ill. App. Ct. 1983) (stating that trial courts have broad powers to supervise the discovery process); Mistler v. Mancini, 443 N.E.2d 1125, 1128 (Ill. App. Ct. 1982) (stating that discovery rules were designed to be flexible and adaptable). Return to text.

[68] See supra text accompanying note 57. Return to text.


[70] See Atwood, 605 N.E.2d at 1037; In re Love Canal Actions, 547 N.Y.S. 2d at 176. Return to text.

[71] The "shotgun approach" is the author's term used to describe a process by which a court expresses every possible justification to issue a Lone Pine order. Return to text.


[75] Id. at 9.16. Return to text.

[76] Id. at 9.17-9.18. Return to text.


[78] See id. at 1376-79. Return to text.


[80] See id. Return to text.

[81] See, e.g., Renaud v. Martin Marietta Corp., 749 F. Supp. 1545, 1547 (D. Colo. 1990), aff'd, 972 F.2d 304 (10th Cir.)

[82] See BOSTON, supra note 79, at 57. Return to text.


[84] BOSTON, supra note 79, at 7. Return to text.

[85] A more detailed discussion of these problems is found infra Part III.B. Return to text.


[87] See Brock v. Merrell Dow Pharms., Inc., 874 F.2d 307, 311 (5th Cir. 1989) (stating that scientific evidence such as epidemiology is the most useful and conclusive type of evidence in a toxic tort case). Return to text.


[89] See id. at 349. Return to text.


[91] See BOSTON, supra note 90 (containing an excellent discussion of toxicology and epidemiology). Return to text.

[92] See BOSTON, supra note 79, at 351. Return to text.

[93] See id. at 352. Return to text.

[94] See id. at 352-53. Return to text.

[95] See id. Return to text.

[96] See id. at 354. Return to text.

[97] See id. Return to text.

[98] See id. at 355-357. Return to text.

[99] See id. at 342-43 (stating that part of the causation inquiry in a toxic tort case is to determine whether the plaintiff’s harm was caused by the defendant's toxic substance or by another source). Return to text.


[101] See id. at 138. Return to text.

[102] See id. Return to text.

[103] See id. Return to text.

[104] See id. at 137. Return to text.

See, e.g., Brock v. Merrell Dow Pharms., Inc., 874 F.2d 307 (5th Cir. 1989); Stubbs v. City of Rochester, 124 N.E. 137 (N.Y. 1919); In re Love Canal Actions, 547 N.Y.S. 2d at 174.

Ayers v. Township of Jackson, 525 A.2d 287, 312 (N.J. 1987) (stating that expert medical testimony was not only essential to prove plaintiffs' injuries but was necessary to prove the need for future medical surveillance).

Ayers v. Township of Jackson, 525 A.2d 287, 312 (N.J. 1987) (stating that expert medical testimony was not only essential to prove plaintiffs' injuries but was necessary to prove the need for future medical surveillance).

For example, FED. R. CIV. P. 26(b)(4) makes a distinction between experts retained for trial preparation and experts who will testify at trial. Given the fact that in many cases each side will attempt to retain several experts on a single subject, pre-trial issues under Rule 26(b)(4)(B) may come into play.


See BOSTON, supra note 79, at 9.

See BOSTON, supra note 79, at 497 (stating that many landowners institute private cost recovery actions under CERCLA to help them obtain contribution).

See discussion supra Part II.A.


Id. at 974.

Id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See id. Return to text.

See Hembree v. Litton Indus., Inc., No. B-C-90-6, at 9.18 (W.D.N.C. Aug. 16, 1990) (requiring plaintiffs to
identify the amount of each chemical they were exposed to and the dates of exposure); Cottle v. Superior Court, 3 Cal. App. 4th 1367, 1372 (Cal. Ct. App. 1992) (requiring plaintiffs to state date or dates of chemical exposure). Return to text.


[132] See id. Return to text.


[134] See C. EVERETT KOOP, M.D. ET AL., DR. KOOP'S SELF-CARE ADVISOR: THE ESSENTIAL HOME HEALTH GUIDE FOR YOU AND YOUR FAMILY 88-89 (1996). "By the time [emphysema] is diagnosed, most people have lost 50 to 70 percent of their lung capacity." Id. Return to text.

[135] See id. Return to text.


[138] See FED. R. CIV. P. 11 (requiring all allegations to have factual support or to have a likelihood of having evidentiary support after a reasonable opportunity for further investigation). Return to text.


[142] See, e.g., FED. R. CIV. P. 16; Cottle, 3 Cal. App. 4th at 1376. Return to text.


[144] See id. at 1379. Return to text.

[145] See Gallagher v. FibreBoard Corp., 641 So. 2d 953, 954 (Fla. 3d DCA 1994) (stating that potential asbestos plaintiffs are required to fill out "exposure sheets" listing the identification of the product causing their illness, the dates on which they were exposed, and the names of witnesses to such exposure). Return to text.

[146] See id. (stating that an omnibus order is in effect in Dade County, Florida that applies to all asbestos litigation). Return to text.

[147] See discussion supra Part II.B.3. Return to text.


See Turpin v. Merrell Dow Pharms., Inc., 959 F.2d 1349, 1349 (6th Cir. 1992) (stating that our judicial system is "founded on the premise that justice and consistency are related ideas"). Return to text.

See discussion supra Part II.B. Return to text.

See discussion supra Part II.B. Return to text.

See United States v. Browner, 937 F.2d 165, 172 (5th Cir. 1991) (stating that "[l]egal rules must be applied equally to all parties"). Return to text.

Ultra vires is defined as "[a]n act performed without any authority to act on a subject." BLACK'S LAW DICTIONARY 1057 (6th ed. 1991). Return to text.


See id. at 1371. Return to text.

See id. at 1373. Return to text.

Id. Apparently, plaintiffs expressed many of the problems discussed in Part III.B. Return to text.

See id. at 1374-75. Return to text.

See id. at 1376. Return to text.

Id. Return to text.

Id. at 1367-80. Return to text.

For example, the court states "Had the order been made earlier in the proceedings, we would be more inclined to hold that the order was an abuse of the court's discretion." Id. at 1380. "Although given the caldron of chemicals present at the Dunes, the initial order of the court may have been too demanding." Id. at 1384. Return to text.

See id. at 1386. Return to text.

According to the dissent, California's summary judgment standard adheres to the same basic premise as Rule 56 of the Federal Rules of Civil Procedure that summary judgment is proper when there is not a genuine issue of material fact for trial. See id. at 1393. Return to text.

See id. at 1389-1406. Return to text.

Id. at 1389. Return to text.

Id. at 1390. Return to text.

Id. at 1391. Return to text.

Id. at 1393. Return to text.


See id. at *5. Return to text.

See id. at *7. Return to text.
See id. at *9.  

See id. at *10.  

See discussion supra Part II.  

See discussion supra Part II.  


See id. at *6-7 (stating plaintiffs could not obtain real estate reports and medical affidavits).  

Arguably, the Lone Pine court did rely on a discovery violation rule to dismiss plaintiffs' claims, but had the court not issued its order in the first place, there would have been no order to violate. See id. at *7. The example noted contemplates a normal civil action where the court's case management discovery orders are limited more to when and how as opposed to what.  

It is interesting to note that the Lone Pine court chose to impose the most drastic discovery sanction of dismissal. See id. at *10. Other more reasonable courts only employ such a drastic sanction if a plaintiff has willfully disregarded a discovery order or has engaged in obstinate behavior. See Belflower v. Cushman & Wakefield, Inc., 510 So. 2d 1130, 1131 (Fla. 2d DCA 1987) (stating that a discovery sanction as severe as a default should only be imposed in extreme circumstances such as deliberate and obstinate disregard of the trial court's authority).  


Such as construing all evidence in a light most favorable to the non-moving party and accepting the non-moving party's factual allegations as true. See Serrano-Perez v. FMC Power Corp., 985 F.2d 625, 626-27 (1st Cir. 1993).  


See id.  

As Justice Johnson stated in Cottle, "the trial court substituted a bastardized process which had the purpose and effect of summary judgment but avoided the very procedures and protections the Legislature deemed essential." Cottle v. Superior Court, 3 Cal. App. 4th 1367, 1393 (Cal. Ct. App. 1992).  


Id. at *1 (emphasis added).

See Renaud v. Martin Marietta Corp., 749 F. Supp. 1545, 1547 (D. Colo. 1990), aff'd, 972 F.2d 304 (10th Cir. 1992) (stating that the full jury trial alone would take six to nine months to complete).

See id. (stating that courts have this power only in the absence of existing procedural rules).

See id. at *7.

See id. at *10 (N.J. Sup. Ct. Nov. 18, 1986).

See id. at 626.

See id. at 627.

See id. at 629.

In fact, the Serrano-Perez plaintiffs were apparently afforded almost two years worth of discovery before the defendants moved for summary judgment. See id. at 626. It is noteworthy to mention that the defendants could have brought a motion for summary judgment any time after the commencement of the action. See Fed. R. Civ. P. 56(b).
[218] *Id.* at 1551. Return to text.

[219] See *id.* at 1555. Return to text.
I. INTRODUCTION

The word "segregation" is used while describing the contentious changes of the 1960s, the Civil Rights movement, and the America of the past. It is also a word that is now gone from the American social and political landscape. In actuality, however, the word segregation continues to characterize the present lives of many minorities in America. Segregation is the link to understanding the perpetuation of urban poverty in America and is attributable to the present lack of affordable housing in safe and economically prosperous suburban communities. The existence of isolated and racially segregated housing has preserved racial mistrust, furthering ignorant stereotypes that inhibit our society from attaining true racial equality. As Thomas Petigrew stated: "Residential segregation has proven to be the most resistant to change of all realms - perhaps because it is so critical to racial change in general."

This comment discusses the history and effects of residential racial segregation in America and offers specific remedies that have already been implemented effectively in a few U.S. cities. First, the comment examines the history of residential racial segregation in America by exploring the role of federal and state governments, exclusionary zoning legislation, and private discrimination in creating and perpetuating the problems associated with segregated housing. Next, the comment addresses the harmful social and economic costs to minorities, particularly African Americans, from decades of segregationist and discriminatory housing policies. Additionally, this section analyzes the prospects of improving race relations given the existence of predominately homogenous white suburban communities and low-income minority inner-city neighborhoods. The third section elucidates policy reasons to support housing integration, and analyzes the costs of segregation on white-Americans. Further, the third section details the economic and social benefits not only to minorities, but also to our entire population. Finally, the fourth section discusses remedies to eliminate housing segregation, specifically by facilitating an increase in affordable housing prospects in suburban communities. This first part examines inclusionary zoning techniques, including the use of mandatory set-asides, affordable housing appeals legislation, and state inclusionary laws. Concrete examples of successful inclusionary zoning techniques are offered from a number of U.S. cities. The second part then analyzes the importance and effectiveness of mobility programs. Additionally, a detailed review is offered, delineating the strengths of individual mobility programs, existing obstacles, and the successes of mobility programs in creating affordable housing for minorities in previously white suburban enclaves.

II. HISTORICAL SEGREGATION OF HOUSING IN AMERICA

A. Development of Housing Segregation—The Urban Ghetto

Housing segregation in the United States developed slowly and deliberately. In fact, prior to 1900, African Americans were scattered widely throughout white neighborhoods. In southern cities in the United States, for example, African American servants and laborers lived side by side with their white employers, and in northern urban areas, African Americans were more likely to share a neighborhood with whites than to live in racially segregated communities. Although the evils of discrimination continued after the Civil War, African Americans were generally residentially integrated with whites in the North. The two racial groups regularly interacted in a common social world, sharing cultural traits and values through personal and frequent interaction.

However, as African Americans moved north into industrial communities after World War I and II, the picture of the urban ghetto began to develop. At the turn of the century, methods such as public improvement projects, redevelopment projects, public housing programs, and urban renewal policies were utilized to accomplish racial segregation. Other factors also contributed to the formation of the urban ghetto. Manufacturing jobs were lured away from the inner city with cheap land and low taxes. Industry moving from the city to the suburbs resulted in the creation of all-white suburban towns. Segregationist zoning ordinances, which divided city streets by race, coupled with racially
restrictive covenants between private individuals became the common method of legally enforcing racial segregation.[12]

Racial segregation soon became the de facto policy of local governments and standard operating procedure for individual landowners. The emergence of the black ghetto did not happen by chance, but was the result of the deliberate housing policies of the federal, state, and local governments and the intentional actions of individual American citizens.[13] As a result, the creation of the urban ghetto has had a lasting impact on America. The consequences include: a lack of capital in inner city communities, segregated minority neighborhoods, and minority families unable to find affordable housing in the suburbs due to government sponsored racism.

B. The Role of Government in Creating Housing Segregation

The role of federal and state government in creating and maintaining residential racial segregation must be understood, without excuse, as a reality of American history. On the federal level, the United States government reinforced discriminatory norms through various public policies. The Federal Housing Administration (FHA) adopted the practice of "red-lining," a discriminatory rating system used by FHA to evaluate the risks associated with loans made to borrowers in specific urban neighborhoods.[14] The vast majority of the loans went to the two top categories of the rating system, the highest of which included areas that were "new, homogenous, and in demand in good times and bad."[15] The second highest category was comprised of mostly stable areas that were still desirable. The third category, and the level at which discriminatory "red-lining" began, consisted of working class neighborhoods near black residences that were "within such a low price or rent range as to attract an undesirable element."[16] Black areas were placed in the fourth category. Mortgage funds were channeled away from fourth category African American neighborhoods and were typically redirected from communities that were located near a black settlement or an area expected to contain black residences in the future.[17] As a result of these policies, the vast majority of FHA mortgage loans went to borrowers in white middle-class neighborhoods, and very few were awarded to black neighborhoods in central cities.[18] Between 1930 and 1950, three out of five homes purchased in the United States were financed by FHA, yet less than two percent of the FHA loans were made to non-white home buyers.[19] The FHA thus became the first federal agency to openly counsel and support segregation.[20]

The FHA was operated in a racially discriminatory manner since its inception in 1937 and set itself up as the "protector of all white neighborhoods," using its field agents to "keep Negroes and other minorities from buying houses in white neighborhoods."[21] Evidence also indicates that the federal government used interstate highway and urban renewal programs to segregate those blacks that had previously lived in more racially diverse communities.[22] Consequently, these schemes increased the concentration of poverty where it has festered ever since and has caused the federal government to be labeled as "most influential in creating and maintaining residential segregation."[23]

Examples of discrimination in federal housing policy persist today, and they are as numerous as they are disturbing. For instance, most minorities in public housing live in communities largely populated by poor minorities; in contrast, public housing for elderly whites is typically situated in areas with large numbers of whites who are not poor.[24] The Department of Housing and Urban Development (HUD) has played a significant role in reinforcing the problems of housing segregation by allowing intentional discrimination and courts have found HUD liable on many occasions for their overt racist policies in site selection and tenant housing procedures.[25]

The combined efforts of the federal and state agencies have had disastrous effects on the creation and maintenance of housing segregation. The policies and practices of the agencies have led to the notable isolation of minority communities. On both national and local levels, HUD has been found liable for the discriminatory implementation of the Section Eight Housing Assistance Program.[26] For instance, Section Eight subsidy holders living in Yonkers, New York brought a class action lawsuit against a local Section Eight program and the state and federal programs.[27] The tenants alleged that the Section Eight office had steered minority Section Eight holders into apartments in segregated and crumbling neighborhoods. The tenants also contended that they were improperly informed that they could use their subsidies in other neighborhoods and never told about the availability of rent exceptions.[28] Consequently, the court held that the plaintiff-tenants were limited in their ability to move into integrated neighborhoods.[29] Under a consent decree issued in 1993, the defendants agreed to fund the Enhanced Section Eight Outreach Office to redress the grievances of the plaintiff tenants.[30] Unquestionably, the federal government,
RESIDENTIAL RACIAL SEGREGATION

including HUD, has historically supported and sustained housing discrimination, a fact acknowledged even by the White House.[32] Past and present racially discriminatory policies obligate federal, state, and local governments to address their prejudicial tactics with meaningful legislative initiatives to promote racial integration in housing.

C. Exclusionary Zoning and the Perpetuation of Housing Segregation

As African Americans poured into America's cities, the white community fled to the suburbs, using judicial means to exclude the "undesirables."[33] In 1926, the Supreme Court approved the use of municipal zoning in Village of Euclid v. Ambler Realty Company,[34] and the use of distinct zoning districts in all areas of land use planning—residential, commercial, and industrial—and subcategorizes within each.[35] The Court's holding in Euclid sought to preserve the quality of residential environments, but in doing so, caused hardship to those black or poor families who may have wanted to live in suburbia. Although the Supreme Court has since held that race-based zoning violates the Equal Protection Clause, non-exclusionary zoning restrictions still create de facto residential segregation.[36] Moreover, such facially neutral non-exclusionary zoning regulations, based on economic considerations of property devaluation, have still resulted in perpetuating the existence of segregated neighborhoods. The reality of such "neutral" zoning ordinances is the exclusion of American society's most vulnerable population, poor minorities.[37]

Exclusionary zoning practices were explained in the famous New Jersey Mount Laurel decision where local zoning regulations were used to maintain "enclaves of affluence or of social homogeneity."[38] Not surprisingly, exclusionary zoning has been attractive to local governments because a town could zone out whatever housing it did not want without having to pay a price.[39] While no single factor can fully explain racial segregation, many legal scholars, as well as Justice Hall and Chief Justice Wilentz of the New Jersey Supreme Court, have agreed that exclusionary zoning is the most pervasive legal structure perpetuating racial segregation.[40]

The growth of suburban communities expanded the growth of local governments who used their power to regulate and control neighborhood land use. Zoning ordinances, including restrictions for single families, the exclusion of apartment buildings from residential classification, minimum lot and floor space requirements, maximum density limitations, and other land use controls have functioned as gates of homogeneity.[41] Even considering proponents' contentions that zoning regulations create and sustain economically and socially viable communities, the fact remains that because of these restrictions, the poor and minorities are de facto excluded and their needs sacrificed to nurture the growth of suburbia.[42] While zoning ordinances may be facially neutral, the effect of many of these regulations is to keep out minorities and low-income persons even when the intent is obscured.

Zoning regulations have resulted in the dramatic increase in housing prices, exacerbating the problem of housing segregation. Land costs represent a notable portion of housing costs, and zoning practices that affect the price of land increase the cost of housing built on that land.[43] The construction of affordable housing thereby becomes costly and more limited, effectively excluding many low-income minorities. These minorities, in turn, are excluded from the educational and employment opportunities of suburban areas.[44] Hence, the cycle of oppression is perpetuated.

In May 1991, the Census Bureau reported that 57% of American families could not afford a median-priced home in the area in which they lived.[45] This percentage disproportionately affects both African Americans and Hispanics who make-up 75% of these families.[46] The discriminatory housing practices of federal and state governments, coupled with the tremendous rise in housing costs, have resulted in whites, blacks, Hispanics, and other minorities being increasingly isolated from each other.[47] The 1990 census shows that 30% of African Americans live in neighborhoods which are 90% or more black, while the remaining percentage of African Americans still live in predominantly black areas.[48] In fact, 62% of African Americans live in areas that are at least 60% black. As for the Hispanic population, 40% live in communities that are 60% or more Hispanic. While 86% of suburban whites, on the other hand, live in communities that are less than 1% black.[49]

Finally, even though the 1980s witnessed an economic gap between the black poor and the black middle-class, the relocation of middle-class blacks from the urban ghetto was not into integrated communities, but rather into the segregated areas within middle-class neighborhoods.[50] A study of New York City suburbs identifies the reality of American segregation, concluding that blacks and Hispanics of the same socioeconomic class as whites typically live in communities with less tax wealth, lower ownership rates, and higher poverty crime rates.[51] Thus, increased housing
costs generated by the practices of exclusionary zoning disproportionately affect African Americans and other minorities, virtually ensuring the continued patterns of racial segregation in American cities and suburbs. Despite the legal ban against discrimination in housing, an increasing black middle-class with the means to integrate, and a series of court decisions prohibiting racially motivated ordinances, our neighborhoods persist in remaining racially separate and unequal.

D. Private Discrimination

Racially segregated housing patterns in the United States exist to a large degree as a result of intentional discrimination against minorities. Opponents argue that patterns of housing segregation exist because of personal choice and economic disparity, yet income differences alone account for only 10% to 35% of the racial segregation actually observed. Moreover, the myth that African Americans want to live amongst other African Americans is unfounded. In a sociological study of the underlying attitudes of whites and blacks toward integrated housing, for example, blacks overwhelmingly chose to live in integrated neighborhoods. Among the blacks surveyed, only 17% indicated that they would like to live in a completely black community as their first or second choice. Only a small number of blacks indicated that their unwillingness to move to an all-white neighborhood was based on a desire to live with other blacks. Approximately 82% of the black respondents chose a racially mixed community, described as being comprised of 45% African Americans.

Of African Americans willing to move into predominantly white areas, however, about 90% feared that they would be unwelcome by whites. Additionally, 17% of the African American respondents were concerned about physical retaliation from white residents if they moved into a white community. The evidence of pervasive intentional housing discrimination illustrates that the fears of African Americans have not been unfounded.

One common method of discrimination is "steering," a practice whereby minority home purchasers are systematically offered houses in different neighborhoods than interested white homebuyers. A 1991 Housing Discrimination Study reported that when houses are shown or recommended to black and Hispanic homebuyers, the probability of steering by realtors is 21%. Typically, landlords who do not want to rent to minority tenants may tell prospective minority renters that the apartment has been taken off the market; demand an unreasonably large deposit; or promise to put their name on a waiting list that never ends. Local banks also play a role by refusing to approve mortgages for minorities. Unfavorable treatment regarding credit assistance measured at 39% for black homebuyers and 37% for Hispanics. Thus, private housing discrimination takes various forms: from realtors discouraging minority homebuyers from seeking out white communities, to landlords unfairly levying additional costs upon minorities when renting property, to the absolute denial of housing for racially motivated reasons in all housing markets.

Discrimination in the private housing market is an unfortunate reality that continues to burden society, and contradicts the American cultural ideals of fairness and justice for all. An analysis of the data from the Home Mortgage Disclosure Act (1990) shows that African Americans and Hispanics applying for home mortgage loans are more likely than whites to be denied credit. A 1989 Housing Discrimination Study for HUD showed pervasive, continual housing discrimination based on minority status. This study showed that African Americans and Hispanics who responded to newspaper advertisements to either rent or purchase a home experienced discrimination roughly 50% of the time. Consequently, African American and Hispanic households pay what is commonly referred to as a "discrimination tax" of about $3,000 every time they search for a house to buy. The total cost of such prejudicial tactics to these minorities totals $4.1 billion per year. The Housing Discrimination Study concludes that such discriminatory practices seriously limit housing choices for minority homebuyers, and continue to be a major obstacle confronting blacks and Hispanics in search of housing.

Regional examples of housing discrimination emphasize the scope and severity of the problem. In Los Angeles alone, HUD received nearly 800 complaints of housing discrimination in 1987. The Fair Housing Congress reported an additional 700 cases of alleged racial discrimination. The problem is a persistent one, as more recent examples indicate. In a suburb south of Chicago, the owners and managers of Town and Country Villas Apartments were ordered to pay $308,200 in damages for refusing to rent apartments to blacks. In Toledo, Ohio a married couple sought to finalize a lease arrangement when the homeowners became flustered by the fact the couple was interracial. The homeowners would not relinquish the property as agreed and a subsequent Fair Housing complaint resulted in the
couple receiving $11,500 in compensatory damages and $23,500 in punitive damages. In Georgia, a real estate broker was ordered to pay almost $75,000 in damages and fines for violating the Federal Fair Housing Act because the broker backed out of a property sales contract after learning the prospective buyers were a black couple. Finally, in New York City, a white couple was denied the opportunity to sublet their apartment to an interested black couple. The owners were required to pay the white renters $35,000 for loss of income when the deposit was returned to the black couple and the original renters were left without a sublessee.

Non-intentional or societal discrimination is an equally serious problem contributing to the racial imbalance in housing patterns. Even though non-intentional discrimination is not based on evil motives, minorities are still harmed, both economically and socially. A prime example of societal discrimination and its injurious effect on minorities is the phenomenon of "white flight." White flight specifically refers to the migration of white residents out of a community in response to blacks moving into the community. Whites will tolerate black entry up to a certain level, known as the "tipping point," at which time whites begin to move out of the neighborhood, leaving an all-black community behind.

In a sociological study done in Detroit, Michigan, a large percentage of whites surveyed indicated they would feel uncomfortable living in communities populated by equal numbers of blacks and whites. More specifically, 84% of white respondents stated they would not move into a community composed of 60% black residents, and 64% of whites indicated they would definitely move to another neighborhood. Perhaps more disturbing is that greater than 50% of whites said that they would not move into a community consisting of only 20% black residents. It is also disconcerting that 40% of the whites surveyed indicated that they would move out of an area that became integrated, fearing a decline in property value.

Some argue, as many of the respondents suggest, that residents who leave integrated neighborhoods do so only for economic considerations, such as a decline in property values, as opposed to dislike of minorities. Such non-intentional discrimination still assumes that African Americans are somehow inferior, as numbers of whites view interracial neighborhoods as less desirable communities to live in. Property purchased by incoming blacks eventually decreases in value as the whites move out and the tipping point is reached, leaving deteriorating community services and inferior schools as the lasting consequences. Consequently, white flight perpetuates existing racial stereotypes as whites and blacks become more isolated, rendering the task of eradicating housing segregation and societal racism nearly insurmountable.

III. RESIDENTIAL SEGREGATION AND ITS HARMFUL EFFECTS ON MINORITIES

A. Freedom of Choice in Housing—Minorities Need Not Apply

The right to choose where one wants to live is an historical American concept that is entrenched in our history of early westward expansion and modern suburbanization. Throughout the major part of the twentieth century, hundreds of thousands of white families made the move from city life to suburban sprawlings. The mass exodus to the suburbs left minority families behind. As discussed earlier, this homogeneous suburban picture was not adventitious but was an outgrowth of direct and intentional government policies and private discrimination. Moreover, with the assistance of exclusionary zoning practices, minorities have been prevented from moving into suburban municipalities through the establishment of economic and racial barriers designed to keep suburbs homogeneous and affluent. Therefore, the freedom to choose where one wishes to live is not a concept which has resonated for a significant portion of non-white Americans.

The lack of housing choices for minorities, particularly African Americans, has meant that the quality of suburbanization that they have achieved is distinctly different than that achieved by white Americans. For African Americans, and to a lesser degree for Hispanics and Asians, the freedom to choose where they wish to live is simply not a reality. Typically, black suburbanization is characterized by expansion of the urban ghetto population to areas just outside city limits. African Americans are the most residentially segregated racial or ethnic group in America. Regardless of their socioeconomic status, they are forced to persevere without the same equal housing opportunities as white Americans.

The inability of middle-class African Americans to move into suburban neighborhoods has resulted in a
disproportionate number of middle-income blacks now living in poor neighborhoods. While 23% of black families earn a middle-class income, only 4% of these blacks live in a predominantly white or racially mixed neighborhood. Hence, these middle income blacks endure living conditions below those of whites at comparable income levels. Racial prejudice contributes to the inability of African Americans to translate their economic earnings into middle-class housing, particularly considering that, as discussed in the previous section, statistics show that African Americans prefer to live in neighborhoods that are racially integrated. In fact, more than one-third of all blacks live under conditions of profound racial segregation. As two prominent sociologists noted, African Americans are "unambiguously among the nation's most spatially isolated and geographically secluded people, suffering extreme segregation across multiple dimensions simultaneously." Consequently, many African Americans live in densely populated areas in common urban centers; in plain terms, many African Americans live in ghettos.

**B. The Economic and Social Costs of Racial Segregation on Minorities**

The concentration of poverty in urban ghettos is a direct consequence of residential racial segregation. Problems associated with urban poverty become exacerbated by the isolating effect of residential segregation. Educational and employment disadvantages, housing dilapidation, loss of commercial facilities and businesses, crime and social disorder, welfare dependency, and unwed parenthood are only some of the social problems found in the urban ghetto.

Ghetto poverty imposes costs on all residents of an urban region. The social ills of gang life, drug abuse, teenage pregnancy, and school dropout have left minority families with a sense of powerlessness, as they are stranded without considerable opportunity for change. In terms of housing facilities, low-income blacks face poor or non-existent security measures, roach and rat infestation, high incidence of lead-paint poisoning, crumbling stairwells and leaking ceilings, structural deficiencies, and no heat or hot water.

The isolation of the urban ghetto also inflicts severe hardship on poor minority children. Removing young people from concentrated ghettos and its ill social effects has proven beneficial and underscores the existent inadequacies in racially segregated areas. A research team from Northwestern University, for example, compared low-income black students from families assigned to live in scattered site housing in white suburbs with students from families assigned to public housing in Chicago's ghetto. Although the two groups were initially statistically identical, once removed from ghetto high schools, black students achieved higher grades and better academic preparation, sustained lower dropout rates, and maintained higher rates of college attendance compared with those who remained in ghetto institutions.

Similarly, in a nationwide study, northern blacks who attended racially mixed schools were more likely to attend college than those who went to all-black high schools. Another investigative study revealed that black and white students who went to high schools in affluent neighborhoods were considerably less likely to drop out than those who attended schools in poor neighborhoods, and that girls in affluent schools were much less likely to become teen mothers. Notably, the most important factor bearing on student success rates was school affluence and not the race of the student body. On the California Achievement Test, 17% of Philadelphia students enrolled in racially mixed schools scored above the eighty-fifth percentile, while only 4% of the students enrolled in all-black schools achieved such a score. Comparably, while only 19% of the students enrolled in racially mixed schools scored below the fifteenth percentile on that exam, 39% of the students in all-black schools had such low scores. Finally, the disparities in school quality between racially mixed schools and all-black schools were shown to increase at higher levels of education. Thus, it is argued that without the spatial isolation of minorities, many of the social ills, characteristic of urban poverty in America today, would not exist.

Minorities who live in racially segregated neighborhoods typically are exposed to greater health risks. In a study comparing the health care, mortality rates, and general well-being of people living in communities of various racial compositions, African Americans living in established black communities were found to face a far higher mortality rate than those in integrated or white areas. Disadvantages in health care were found to increase for African Americans living in predominantly black neighborhoods, partially attributable to unequal access to medical care. Moreover, African Americans, with a shorter life expectancy, are statistically underrepresented in clinical trials for new drugs in treating diseases that disproportionately afflict them.
Community safety is also a significant problem in racially segregated neighborhoods. In 1988, the Los Angeles Police Department conducted a study researching 911 response times. The study revealed that police procedures appeared biased against minorities as response times to emergency calls were substantially slower in predominantly minority neighborhoods.[118] Although the police department argued that bias was unintended, critics accused the police department of practicing "systematic and unconscionable racial discrimination in the assignment of . . . police officers."[119] This study, examining the practices of a law enforcement agency in one of the largest metropolitan areas in the United States, suggests that discriminatory practices exist throughout the country and serve as evidence of one of the deleterious consequences of residential segregation.

C. Racial Segregation—Maintaining Racial Divisions

As residential racial segregation further permeates our society, the prospects of improving race relations in America continue to dwindle, thus preserving the existence of negative racial stereotypes. It is also logical to conclude that physical distance between different racial communities perpetuates social distance.[120] The segregated ghetto sustains and nourishes the racial identifications, fears, and attitudes of blacks and whites.[121] As the media perpetuates stereotypes, whites learn to avoid black neighborhoods and middle-class blacks learn that they are "safer from white suspicion and hostility if they stay in black neighborhoods."[122] Residential segregation, in turn, becomes both the point of origin of discrimination and the perpetuating cause of racial distrust and ignorance.

Integration has proven an effective tool to combat historical racial prejudice. One study found that residents in a white suburban community became more tolerant of black neighbors over time, even without any significant interaction with their minority neighbors.[123] Whites found that their fears about black entry into their community were not realized.[124] However, it remains undisputed that the majority of America still remains physically divided along racial lines. Thus, Spike Lee's classic 1989 film Do The Right Thing, which depicted a scene where a number of racial and ethnic groups flailed derogatory epithets, continues to symbolize the reality of many residential neighborhoods in America, beleaguered by false stereotypes and plagued by ethnic and racial mistrust.[125] Social consequences of racial isolation intertwine with grim economic realities for minorities. Due to the lack of interaction between racial groups, African Americans are unprepared to work and socialize in a white majority society, while conversely, whites are not relating to, working with, or living with blacks.[126] Prospects for African-American children raised in such communities are greatly diminished because of the lack of interaction between blacks and whites. Moreover, minority possibilities for advancement consequently decline from the lower quality of education afforded to them in ghetto schools, precluding them from competing for high-income employment.[127] Although these inequalities are not always directly caused by intentional discrimination, residential racial segregation perpetuates these inequalities.[128] Thus, minorities who live in racially homogeneous communities are faced with disadvantages beyond the present economic and social inequalities associated with minority neighborhoods.

IV. POLICY REASONS TO SUPPORT HOUSING INTEGRATION

Undoubtedly, deliberate state and local government policies helped create residential racial segregation. Therefore, municipal policy-makers, politicians, and judges should work towards dismantling the still existing barriers of housing segregation through a policy of integration. This "integrationist" ideology is not new; it was advocated by leaders such as W.E.B. Dubois, Paul Robeson, and Martin Luther King Jr., who all sought to integrate African Americans into the white socioeconomic and political social order to correct the harmful effects of discrimination.[129] Since the passage of the Fair Housing Act in 1968, housing programs have been developed seeking to integrate affordable housing projects into suburban neighborhoods. Yet many of these policies to create integrated and lower-income housing have met resistance with the "Not In My Back Yard" (NIMBY) syndrome.[130]

Today, the struggle for fair housing continues. However, effective integrationist policies being implemented nationwide have begun to help African Americans and other minorities obtain more affordable and quality housing characteristic of housing traditionally found in white communities. The problems caused by the perpetuation of residential racial segregation, and the benefits achieved by integration reinforce the significance of implementing and enforcing a practical and successful integrationist policy.

A. The Benefits of Integration on Minorities
The classical advantages of integration were illuminated by sociologist Kenneth Clark who stated: "Housing is no abstract social and political problem, but an extension of man's personality. If the Negro has to identify with a rat-infested tenement, his sense of personal inadequacy and inferiority, already aggravated by job discrimination and other forms of humiliations, is reinforced by the physical reality around him."[131] It appears that Kenneth Clark's assessment was not an aberration, since sociological studies have indicated that when integrated into middle-class suburban communities, poor minority families experience a dramatic improvement in their quality of life.[132] Accessible affordable housing in mixed-income communities gives lower economic classes better educational opportunities, discourages economic segregation, and avoids the concentration of affordable housing in already dilapidated sections of cities and counties.[133]

In the well-publicized Gautreaux housing mobility experiment, a few thousand low-income, female-headed, African-American public assistance families in Chicago moved out of segregated, financially constrained neighborhoods.[134] These families used Section Eight vouchers to move into economically prosperous settings in middle-class white areas, while others remained in cities.[135] The evidence concluded that the lives of the mothers and their children who moved to the wealthier suburban communities improved, especially with respect to employment and education.[136] Among the study's families, many of the participating adults had jobs for the first time ever.[137] In contrast to the study control group who remained in the city, the children who moved into the suburbs were more likely to remain in school, take college-track classes, to attend four-year colleges, and to work in jobs with higher pay and benefits.[138] Although more than half of the study participants experienced some discrimination when they first entered the suburban neighborhoods, most adapted well to their new communities and experienced a desire to never return to the projects.[139] Quite simply, the benefits afforded to low-income minorities were both considerable and tangible, suggesting that employment and educational opportunities are determined by a community's financial health rather than by its racial composition.

A recent study of another inclusionary program in Hartford, Connecticut indicates that the evidence from the Gautreaux study is convincing, as their research found that the "differences are not only statistically significant but of such magnitude as to show important practical effects on youths' lives "[140] Other studies have found similar advantages for African Americans families who moved from impoverished areas into racially integrated suburban communities.[141] Inclusionary housing increases chances for minorities to gain and sustain employment, in that employment is nearer to housing, decreasing travel time and transportation problems.[142] Without such inclusionary policies, many suburban communities would continue to offer little opportunity for their low-income employees to find affordable housing.

Inclusionary techniques not only provide housing for employees close to where jobs are located, but also save employees valuable time and energy, thereby reducing absenteeism and travel costs.[143] Other benefits that have been cited include improved air quality, less traffic congestion, an increased labor market, and shorter commutes.[144] The significant advantages of integration for minorities from economically deprived areas are meaningful, and attest to the importance of demanding fair and pragmatic inclusionary policies.

B. The Hidden Costs of Segregation

The toll society has paid for years of residential racial segregation is less clear, but no less relevant to why inclusionary housing is necessary. The abandonment of the inner city by commerce and industry has devastated more than the segregated areas they left behind. Safety and educational concerns caused white workers to move from the city years ago. Consequently, workers then had to commute daily, paying the high price of increased transportation costs (carfare, tolls and multiple car ownership), housing in suburbia, and restricted access to the cultural and recreational opportunities in the city.[145] The concentration of poverty in the inner city does not isolate its resultant crime, disease, and gang activity there, but increases its presence in all communities.[146] These problems have become societal, particularly in the past decade, no longer trapped within the confines of the inner cities.

Inclusionary housing programs are necessary to remedy the socioeconomic ills that have befallen society due to decades of residential racial segregation. Recently, a study showed unemployment problems existed mainly in cities where a great disparity existed between wages paid to city workers as opposed to suburban employees.[147] The per
capita income ratio between the city and its surrounding suburbs is the most important indicator of an urban area's social well being. Research indicates that tolerating racial discrimination has cost Americans a higher price for their prejudices than ever imagined.[148]

C. Advantages of Integration for America

The principle of equal opportunity is a symbol enshrined in American history and in the politics of a nation that espouses its democratic principles throughout the world. As a nation, accepting our racial diversity and embracing cultural differences is merely an extension of the past opportunities that America ultimately provided for white minorities and European immigrants. Embracing inclusionary housing practices expounds the ideals of what America should represent to all citizens - fairness, opportunity, and justice.

In Gladstone, Realtors v. Village of Bellwood,[149] the Supreme Court articulated the benefits of a racially diverse community.[150] Justice Powell reasoned "[t]here can be no question about the importance to a community of promoting stable, racially integrated housing."[151] The Court's historical view underscored the critical message for the new American century, the importance of racial diversity to create better communities and more tolerant and educated citizens. Therefore, the benefits of eliminating residential racial segregation through inclusionary measures move beyond only those households living in economically deprived communities.

Increasing racial diversity is clearly not the sole answer to eliminating housing or societal discrimination against racial minorities. However, when a community is racially diverse, the people who live there have an opportunity to learn tolerance, which in turn may lessen the extent to which minorities are subject to all forms of prejudice. Residential segregation and the resulting historical and cultural ignorance foster racial stereotypes and myths that minorities are less intelligent, lazy, and inferior.[152] Moreover, such social separation reinforces perceptions among whites associating minorities with crime, drugs, gangs, and poverty.[153] The only way to combat these misconceptions, fears, and stereotypes is through increased association between blacks, whites, and other minorities, leading to a better understanding between racial groups and greater racial equality.

In Regents of the University of California v. Bakke,[154] where the court faced the issue of race-conscious admissions policies, Justice Powell remarked that a qualified, diverse student population may enliven the university community by bringing to it "experiences, outlooks, and ideas that enrich the training of its student body."[155] Racial integration is not only a valuable component of a quality education; it is also a priceless component of community housing for the same reasons Justice Powell described. Just as diversity in academia promotes cooperation, communication and understanding among different cultures, integrated residential communities likewise benefit from greater understanding among its residents.[156] The importance of racial integration through inclusionary housing practices will help foster tolerance and understanding in our diverse and growing multicultural population. Thus, racial integration will benefit all people, and if applied democratically, will inevitably be embraced by all people. It is believed that once the fear of the unknown is conquered and citizens in recently integrated communities adjust to the changes in their lives brought on by participating in inclusionary housing programs, they will begin to see society emerge as they have always wished society to be.[157]

V. INCLUSIONARY REMEDIES TO ELIMINATE HOUSING SEGREGATION

The scope and seriousness of the problem of residential racial segregation requires practical and effective inclusionary techniques. Federal policy laws and the courts support integrated housing, yet the dilemma of successfully implementing inclusionary housing programs on local levels nationwide remains.[158] Several state and local governments have recognized that by ensuring that all racial and economic groups have adequate housing, the entire community will benefit. These governments have adopted inclusionary zoning techniques, which, together with the application of land use regulations, secure the development of low and moderate-income residences. This section analyzes various inclusionary methods that have been utilized by state and local governments, with an emphasis on those most effective in promoting long-term residential racial integration.[159]

A. Inclusionary Zoning Techniques

1. Montgomery County Initiative—Mandatory Set-Asides
A viable way of achieving racial and economic integration has been pioneered in Montgomery County, Maryland, one of the nation's most affluent counties. The County Council enacted the Moderately Priced Dwelling Unit ("MPDU") Ordinance to combat the severe housing problem that existed within the county for low and moderate-income residents. The basis of the ordinance requires that all new housing developments of fifty or more units consist of 12.5% to 15% MDPUs. The ordinance specifies maximum income levels for the occupants of MDPUs, which are subject to periodic adjustment. Further, the inclusionary regulation guarantees affordability since rent and price controls remain in place for ten years. Consistent with the demographics of the county, the majority of the people who move into these units are low-income African American families.

The Montgomery County ordinance offers developers density bonus awards to have a reasonable prospect of realizing a profit on these units. The ordinance also permits the developers to build an additional market rate unit for every two MDPUs, up to a 20% total increase in density. These bonuses maintain the economic viability of the land affected by the ordinance, protecting these mandatory set-asides from potential takings challenges by disgruntled developers. More importantly, the concessions in relaxed zoning requirements encourage the production of housing developments, which in turn, benefit low-income residents who are apportioned a percentage of the constructed units. As of 1992, the Montgomery County MPDU ordinance has produced 8,442 MDPUs. As a result, mandatory set-asides have proven to be an efficient method of increasing the availability of affordable housing, an important step towards integration.

2. Affordable Housing Appeals Laws

Zoning appeals legislation provides the courts or state agencies with the opportunity to override the exclusionary effect of local zoning ordinances. If affordable housing is rejected or limited with varying restrictions that have a substantial adverse impact on its viability, the traditional deference given to the local board's decision is eliminated. Consequently, the municipality has the burden to justify its decision in favor of public interests in health, safety, and other legal matters. This justification must substantially outweigh the affordable housing needs of the community.

The Connecticut Affordable Appeals Act created an appeals process to be used when local planning authorities reject affordable housing projects. In its first appeal, the Connecticut Supreme Court affirmed the trial court's decision, which reversed a denial of an affordable housing development application, and concluded that the law applies to legislative zoning changes. This judgment paved the way for later decisions that have held that a court can approve an affordable housing application even though it does not comply with local zoning, and that traffic and environmental problems do not justify denial of an affordable housing application.

Massachusetts has similar zoning appeals legislation, but it is limited to federal or state subsidized low or moderate-income housing projects. The legislation allows a housing agency or organization proposing to construct affordable housing to forego the separate and arduous application process and apply for a comprehensive zoning permit. If a local zoning board denies a comprehensive permit or substantially restricts a housing project, a state housing appeals committee reviews the denial to determine whether it was reasonable and "consistent with local needs." A balancing test weighs the regional need for low and moderate-income housing with the municipalities' need for health, safety, design, and open space regulations. If the committee reverses a denial, it directs the local board to issue a permit to the applicant.

Although the Massachusetts legislation has been criticized because it only applies to government subsidized housing developed by specified agencies and organizations, over 20,000 affordable housing units have been developed under its auspices. Therefore, it is clear from these examples that zoning appeals legislation on the local level is a critical element towards integration as it seeks to eliminate discriminatory municipal zoning decisions and remedies the exclusionary effects of local land use ordinances.

3. State Inclusionary Legislation

Several states have adopted extensive legislation to implement inclusionary housing objectives. The typical comprehensive planning statute requires that local communities develop policies, standards, or goals that will assist in the development of low and moderate-income housing. The intent of this type of legislation is to ensure affordable housing for low and moderate-income residents while also promoting economic integration.
housing opportunities in localities across the state. The statutes require state agencies to review local plans in order to comply with statutory goals, but the effectiveness of these statutes is dependent upon the agency's enforcement powers. These statutes on their face, coupled with pragmatic local comprehensive plans, are effective tools in the development of affordable housing.

In Oregon, the state housing goals require local plans to encourage the availability of adequate housing at affordable prices and rents. State legislation employs stringent enforcement mechanisms, which ensures that the Land Conservation and Development Commission (LCDC) reviews all local planning decisions to determine if they are consistent with the state's housing goals. The LCDC is further authorized to require local government approval of land use or development applications. The LCDC may force a local board to comply with the housing goals of the state, although the decision of the LCDC is subject to judicial review. The review of the local board's plans must be clear and objective and most importantly, it must prevent discouragement of necessary housing through unreasonable delay or cost.

In the state of Washington, legislation requires that a local municipality notify the State Department of Community Development when it intends to adopt a comprehensive housing plan. Several growth planning boards may hear challenges to the local plan and determine if it is in compliance with the statutory requirements; however, the locality may still adopt its proposed plan. The legislation presumes the comprehensive plans to be valid and will be accepted unless the planning board determines that the action taken by the state agency, county, or city is clearly erroneous. Additionally, the state may withhold certain local tax revenues from the municipality or locality if the board finds that the local housing strategy does not comply with the statute.

In California, legislation has been enacted with the specific goal of developing affordable housing. The goal of the legislation is to reduce the concentration of lower-income households in areas where the number of lower income households are disproportionately high. Each locality submits its housing proposals to the State Department of Housing and Community Development, which determines if the assessment of housing needs complies with statutory requirements. Further, any interested party may bring a judicial action to review the conformity of the housing element with the state's statute. However, the department is not empowered to require a town to incorporate changes, much less construct new units.

The department's lack of authority to compel municipal compliance with affordable housing obligations has weakened the effectiveness of the California legislation. For example, in the town of San Marino, a wealthy suburban community in California, eighteen affordable housing units were to be provided by 1994 pursuant to the state's fair housing law. San Marino was to design a plan specifying how they planned to provide the housing, but did not go so far as to require the town to build the housing. Despite the legislation, San Marino officials indicated that they did not plan to permit the construction of the low-income units. This example demonstrates that without effective methods of enforcement, low-income families will continue to be closed out of affordable suburban housing opportunities, perpetuating the existence of housing segregation in American cities and suburbs.

Each of the states' statutory schemes contains specific provisions to promote integrated and affordable housing in areas with sparse low and middle-income residences. These legislative initiatives help provide mostly minority families with an opportunity for better housing and consequently, improved economic opportunities. The most critical statutory elements necessary to encourage the fruition of affordable housing in integrated neighborhoods are: the presumption of validity of municipal low- and moderate-income housing plans, the establishment of non-municipal oversight of the allocation of affordable housing, and strict enforcement mechanisms to ensure compliance with the housing goals of the state. Consequently, state regulations that are enforceable and efficient provide a crucial step towards breaking the barriers of exclusionary housing policies and opening the doors of affordable housing in the suburbs.

4. The Effects and Importance of Inclusionary Zoning Ordinances

The various inclusionary methods discussed above represent some of the options for state and local governments. The effective use of mandatory set-asides, affordable housing appeals laws, and inclusionary legislation are proven mechanisms to combat the perpetuation of residential segregation and to ensure the construction of affordable housing in racially and economically diverse communities. Therefore, each state must follow their own constitutional
framework in implementing these policies. Some inclusionary techniques may not work with an individual state's legislative agenda. However, it is the role of state and local governments to create both incentives for residential integration through these or similar inclusionary policies, and disincentives for non-compliance. Exclusionary zoning practices have played a significant role in causing deleterious effects upon minorities. Thus, the involvement and participation of each branch of government is essential to work towards implementing inclusionary methods to create affordable housing opportunities.

Judicial intervention in eliminating exclusionary housing practices and enforcing inclusionary ordinances is one of enormous importance, particularly given the reluctance of many state and local authorities to enact and implement affordable housing measures. The effect of the "not in my back yard" syndrome, as expressed by local municipal boards and community residents, poses the greatest threat to affordable housing. While courts are regarded as a last resort for articulating public policy, judges must promote the goals of a democratic society amongst the persistent discriminatory boundaries put up by state and local authorities. Beyond this comment's proscribed inclusionary tactics and detailed remedies, lies the concept of "fundamental fairness," wherein the courts must restore the goal of equality in dealing with the rights of minorities to access the American dream of a suburban home.

B. Mobility Programs

One of the most important components of a successful integration strategy is the use of mobility programs. Mobility relief refers to programs to provide housing available for minority individuals and families who have faced discrimination in their search for affordable housing. Mobility programs have two forms:

1. interdevelopment or interproject transfers, which provide a tenant with the opportunity to move into a new or vacant unit in a development, in which the tenant's race does not predominate; and
2. provision of Section Eight certificates or vouchers, which provide a tenant with an opportunity to secure federally assisted housing in nonracially impacted areas.

Mobility relief serves as a remedy to historical and modern housing segregation, and through the program's efforts, seeks to move minority victims of discrimination closer to better schools, better jobs, increased economic opportunities, and safer neighborhoods.

The following sections discuss the most effective mobility programs throughout America by examining their plans for integration and their success rate in creating affordable housing.

1. Chicago, Illinois

As a result of the Court's decision in Hills v. Gautreaux, which initiated Chicago's mobility program, approximately 5,000 families had relocated as of 1993, slightly more than half to the suburbs. HUD statistics show that 84% of those who moved to non-concentrated areas felt that their quality of life had improved. In terms of limitations, the mobility plan is restricted to plaintiff class members and contains certain constraints on housing choices. The housing subsidies provided were limited to areas of Chicago and the surrounding suburbs with an African American population of 30 percent or less.

In addition, the Chicago Housing Authority is under mandate to construct public housing in predominantly white neighborhoods. As of 1993, 591 units had been built or rehabilitated, 357 of which were new units. Half of the families in these new units are minorities. The other half are required to come from the neighborhood in which the buildings are located.

In addition, the Chicago Housing Authority is under mandate to construct public housing in predominantly white neighborhoods. As of 1993, 591 units had been built or rehabilitated, 357 of which were new units. Half of the families in these new units are minorities. The other half are required to come from the neighborhood in which the buildings are located.

However, reluctant landlords, who do not want to participate in the program, and the limited quantity of affordable housing has curbed the effectiveness of the program. Despite the fact that 40,000 plaintiff-class families were entitled to relief after Gautreaux, only 4500 were placed in improved affordable housing. Nevertheless, for the families who have integrated into more economically viable communities, it is abundantly clear that their quality of life is greatly improved.
2. Cincinnati, Ohio

In 1984, a consent decree required the Cincinnati Metropolitan Housing Authority to set aside forty Section eight certificates each year for any family that desired to move to an area where their race was represented by less than forty percent of the population.[208] Housing Opportunities Made Equal, a fair housing organization operates the mobility program, and provides transportation and counseling to tenants, marketing to prospective tenants, and recruitment of landlords.[209] The decree has also created additional residential opportunities for minorities in integrated neighborhoods through scattered-site housing.[210]

The success of the Cincinnati mobility program has been significant and a prime example of an effective integration program. Between 1984 and 1993, over 600 families used mobility vouchers.[211] As a result, black suburban residents reported a 57% employment rate, compared with a 24% rate from those still living in public housing. Of the employed residents, 71% received medical benefits, compared with 36% of those in public housing.[212] The general reaction of these minority families has been overwhelmingly positive. Families reported that they did not experience racist behavior from their new neighbors, liked the schools in their new neighborhoods better than those in the city, and worked at more prestigious jobs with higher pay and increased benefits.[213]

3. Milwaukee, Wisconsin

The Milwaukee mobility program, created as a result of a school desegregation lawsuit settlement in 1987, was funded by the Wisconsin Housing and Economic Development Authority (WHEDA) and operated by the Center for Integrated Living (CIL).[214] Between 1989 and 1991, CIL helped clients find apartments, created community profiles, and distributed information to potential residents regarding available suburban housing.[215] WHEDA also worked to promote integration by agreeing to provide $5 million for home mortgages, with low interest rates and reduced down payments for those families desiring to move into integrated communities.[216]

As a result of these policies, 812 households participated in the mobility program, of which 91% were minority families.[217] Before the mobility program was implemented, 67% of all minority families lived in areas where the minority concentration was 85% or more.[218] Sixty-one percent of the families moving within the city under the program chose housing within more racially diverse neighborhoods.[219] Although a significant number of minorities have benefited from this program, it has unfortunately been drastically limited due to funding cuts.[220]

4. Hartford, Connecticut

Contrary to federal law, Hartford housing authorities were not allowing eligible families to use their Section Eight certificates outside city limits.[221] The Hartford Section Eight Mobility Program was created after housing advocates challenged the city's administration of its Section Eight voucher program.[222] Consequently, the City of Hartford, through its own department of housing, began assisting Section Eight voucher holders in moving to the suburbs. This program requires that the city notify Section Eight voucher recipients, participating landlords, and area public housing authorities of the mobility program.[223] Moreover, the Hartford Plan requires its administrators to conduct outreach to encourage suburban landlords to accept certificate holders as residents.[224]

Overall, the most significant effect on minority families who moved to these suburban communities was their renewed sense of safety.[225] In fact, after employment opportunities, safety was the next most motivating factor in making a move away from the city.[226] As such, mobility participants find that suburban neighborhoods improve the quality of life for parents and their children. These neighborhoods are typically associated with less crime and a greater sense of overall security.[227] Thus, it is this core safety element that is the foundation of the improvement in the lives of minority families who choose to move to integrated communities.

5. The Effects and Importance of Mobility Programs

The success of these mobility programs represents the potential for American communities to implement effective integrated affordable housing policies. However, there are significant obstacles to any successful mobility program. Communication between landlords, community leaders and developers may often break down, due to reluctance on the part of developers to create low- and moderate-income residences.[228] Moreover, the problem is exacerbated by the
failure of some legislatures to outlaw specific discriminatory housing practices of landlords who refuse to rent to Section Eight subsidy holders.[229] Also, the number of eligible participants for these programs far outweigh the percentage of those families actually placed in suburban integrated communities.[230] In fact, due to recent budget cuts at HUD, the total number of certificates available to eligible families may likely decline in the near future.[231]

The significant resistance to the numbers of black residents in white neighborhoods is still widespread, hampering the potential of mobility programs. Opposition efforts to integrative development plans argue that "[i]ntegration and increased heterogeneity . . . would spoil the hard-won 'sanctuary' of the middle class."[232] Thus, white residents' reluctance to live with blacks is connected with their belief that to do so would endanger their lifestyles, communities, and standards of living. Nevertheless, studies suggest that there is an increase in white support[233] for residential integration, exemplifying not only a change in racial perceptions, but also the important role of mobility programs in remedying housing segregation and diminishing racial intolerance. Individual racism and discriminatory rhetoric is entrenched in American history, yet that alone should not hinder America's progress towards integration.

Mobility programs are pragmatic and fair solutions that provide minority participants with better employment opportunities, better schools, safer neighborhoods, and increased civil services. Mobility programs should assist clients, work with community members, and utilize mobility specialists throughout the nation to overcome the obstacles to successful implementation.[234] Therefore, state and local communities must take a proactive approach similar to those cities discussed in this section, and make integrated affordable housing a real and viable alternative to impoverished racially segregated neighborhoods.

VI. CONCLUSION

Residential racial segregation is an institution that was developed through discriminatory American policies and local acts of racism. Federal and local government housing discrimination, private discrimination, and exclusionary zoning practices have resulted in the continuation of intentional discrimination against minorities, many of whom still remain disenfranchised members of society. The devastating effects of residential racial discrimination on the quality of life for minority families and for our culture at large, represent the importance of initiating policies to integrate residential neighborhoods. Without the efforts of integration, the negative effects of decades of bigoted housing policies will be exacerbated, therefore perpetuating the existence of segregation and racial division.

The dismantling of impoverished minority neighborhoods is an essential prerequisite to improving housing opportunities for all Americans and ameliorating historical and modern racist policies and stereotypes. Minorities must have an opportunity to seek affordable housing in neighborhoods whose doors were traditionally closed. The inclusionary zoning techniques and mobility programs outlined in this comment are effective tools to integrate communities and important tactics to combat housing inequalities. These methods feasibly and efficiently encourage the development of affordable housing. In fact, the enactment of any other progressive state or local remedy to eliminate the perpetuation of residential racial segregation and improve the quality of life of discriminated minority families serves the American principles of equality and justice.

America is a land that was born out of individuality and cultural diversity. The freedom associated with choosing a home should apply to all without limits based upon skin color. As this country moves into the next century, the differences of people must be celebrated and respected, and the continued efforts toward true integrative housing will be a step in the right direction. It is time that America finally acknowledge and appreciate its diversity, recognize its discriminatory past, and remedy its ensuing segregation. For as Kenneth Clark said, "Racial segregation, like all other forms of cruelty and tyranny, debases all human beings—those who are its victims, those who victimize, and in quite subtle ways those who are mere accessories."[235]


[5] See AMERICAN APARTHEID, supra note 1, at 17. As black families were released from slavery, many migrated North. See GEORGE R. METCALF, FAIR HOUSING COMES OF AGE 149 (1988). The majority of black families moved into industrial communities during and after World War I and II, living in the same neighborhoods as their white counterparts. See id. Return to text.


[12] See Kenn, supra note 9, at 85. Return to text.


[14] See AMERICAN APARTHEID, supra note 1, at 51. The Federal Home Owners Loan Corporation actually created the practices of "red-lining." See id. FHA followed suit and created four categories of neighborhood quality based upon a color scheme. The lowest of those categories was the code color red, hence the term "red-lining." See id. Return to text.

[15] Id. at 51. Return to text.


[17] See AMERICAN APARTHEID, supra note 1, at 52. Return to text.

[18] See id. Per capita FHA spending in Nassau County, Long Island (a largely white suburban county in New York)
was eleven times that in Kings County (Brooklyn) and sixty times that in Bronx County (the Bronx), largely minority-populated boroughs of New York City. See id. St. Louis County, a suburban area that surrounds the city of St. Louis, received five times as many FHA mortgages as did the city, and nearly six times as much loan money. See KENNETH T. JACKSON, CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES 211 (1985).


[20] Roisman, supra note 9, at 491 (citing CHARLES ABRAMS, FORBIDDEN NEIGHBORS: A STUDY OF PREJUDICE IN HOUSING 234 (1955)).


[22] See Roisman, supra note 9, at 492.


[25] See, e.g., ClientsR Coun cil v. Pierce, 778 F.2d 518, 52 0-21 (8th Cir. 1985) (holding HUD liable for intentional racial segregation in public housing in Texarkana, Arkansas); Gautreaux v. Romney, 448 F.2d 731, 737-40 (7th Cir. 1971) (holding that the significant role played by HUD in the segregation of housing in Chicago violated the Due Process Clause); Young v. Pierce, 628 F. Supp. 1037, 1045-57 (E.D. Tex. 1985) (holding HUD liable for intentional racial discrimination in 36 counties in East Texas and reviewing the history of public housing discrimination).

[26] Section Eight is a federal rent subsidy program operated by the Department of Housing and Urban Development. Section Eight, (visited March 7, 1998), . HUD channels funds to states who distribute the funds to housing authorities at the county, state, and local levels. See id. Those agencies award the funds to people who apply and demonstrate that they qualify based on need and household income. See id. A person who qualifies can be issued a certificate or voucher which is evidence that the housing authority has found the subsidy holder eligible and that it will guarantee a large portion of the rent due on any acceptable apartment the participant chooses to rent. See id.

[27] See Roisman, supra note 9, at 492-93.


[29] See id.


[31] See id.


[33] METCALF, supra note 5, at 150. "Undesirables" has been used as a euphemism for racial minorities or the poor. Id.

[34] 272 U.S. 365 (1926).
Exclusionary measures included restrictions such as minimum building lots (1 ½ to 3 acres), minimum floor space (to increase housing costs), and in the matter of rental apartments, one or two bedroom structures (to exclude families with school-age children). Metcalf, supra note 5, at 150. See id. at 380-81. Exclusionary measures included restrictions such as minimum building lots (1 ½ to 3 acres), minimum floor space (to increase housing costs), and in the matter of rental apartments, one or two bedroom structures (to exclude families with school-age children). Metcalf, supra note 5, at 150.


See American Apartheid, supra note 1, at 36. See American Apartheid, supra note 1, at 36.

See id. at 82. See id. at 82.

See id. at 82. See id. at 82.

A 1989 Housing Discrimination Study performed by the Urban Institute and Syracuse University for the U.S. Department of Housing and Urban Development aggregated the overall incidence of discrimination for black and Hispanic renters and homebuyers. Margery Austin Turner et al, Housing Discrimination Study: Synthesis I, 42 (1991). The estimated overall incidence of discrimination was 53% for black renters, 46% for Hispanic renters, 59% for black home buyers, and 56% for Hispanic home buyers. See id. See id. at 82. See id. at 82.

See id. at 82. See id. at 82.

RESIDENTIAL RACIAL SEGREGATION

[56] The sociological study surveyed 734 white families and 400 black households in Detroit, Michigan, on the willingness of each racial group to live in communities of varying racial compositions. Farley, Schuman, Bianci, Colasanto, & Hatchett, "Chocolate City. Vanilla Suburbs:" Will the Trend Toward Racially Separate Communities Continue?, 7 SOC. SCI. RES. 319, 322 (1978) [hereinafter Chocolate City]. Black respondents were asked to provide reasons for their choices, while white residents were questioned as to their willingness to remain in their present community or a new community once it has become racially integrated. See id. Return to text.

[57] See id. at 328-31. Return to text.

[58] See id. Return to text.

[59] See id. Return to text.

[60] See id. Return to text.

[61] See id. Return to text.


[63] See id.; see also Sam Roberts, Shift in 80's Failed to Ease Segregation, N.Y. TIMES, July 15, 1992, at B1, B4 (reporting incidents where real-estate companies and private homeowners who attempt to sell homes to minorities in exclusively white neighborhoods were threatened or attacked by white residents). Return to text.

[64] See Cheryl W. Thompson, 'Innovator' Paved the Way for Fair Housing in Chicago, CHI. TRI.B., Dec. 30, 1992, at 1; see also Hartnett, supra note 45, fn. 82. ("[As an employee of Hamlet Estates] I was advised . . . that if a black person came in to apply for an apartment, I was . . . to immediately tell the black applicant that there were no apartments available. This was a pat response given to all black applicants. It was also false."). The Housing Discrimination Study reported that both African Americans and Hispanics had a 24% chance of being quoted less favorable terms than similarly situated whites in one of the following areas: (1) the monthly rent of the unit; (2) whether the rent included extras like parking, pool, or laundry facilities; (3) the amount of the security deposit; (4) the availability of special incentives for signing the lease; (5) the requirement of an application fee. See TURNER, supra note 54, at 17. Return to text.


[66] See Roisman, supra note 9, at 498. Return to text.


[69] See TURNER, supra note 54, at vii. Return to text.

[70] See id. Return to text.


[74] See id. The Fair Housing Congress is an umbrella group composed of seven nonprofit organizations in greater Los Angeles. Id. Return to text.


[76] See id. Return to text.

[77] See id. Return to text.

[78] See id. Return to text.

[79] See Potter See Potter, supra note 73, at 1173-4. Return to text.

[80] See id. at 1174. Return to text.

[81] See id. Return to text.

[82] See id. Return to text.

[83] See Chocolate City, supra note 56, at 333-60. Return to text.

[84] See id. Return to text.

[85] See id. Return to text.

[86] See id. Return to text.

[87] See Potter, supra note 73, at 1174. Return to text.

[88] See id. Return to text.

[89] See id. at 1175. Return to text.


[91] See id. at 425. Return to text.


[93] See Adams, supra note 90, at 425-6. Return to text.

[94] See Reynolds Farley & William H. Frey, Changes in the Segregation of Whites from Blacks During the 1980's: Small Steps to an Integrated Society, 59 AM. SOC. REV. 23, 23 (1994) (finding that even though levels of segregation decreased somewhat during the 1980's, residential segregation between blacks and whites will "remain well-above that for Hispanics or Asians"). Return to text.

[95] See AMERICAN APARTHEID, supra note 1, at 70. Return to text.

[96] See id at 77. Return to text.

[97] See Potter, supra note 73, at 1179. Return to text.

[98] See Massey, Condran & Denton, The Effect of Residential Segregation on Black Social and Economic Well-Being,

[99] See id. Return to text.


[101] See Chocolate City, supra note 56, at 322. Return to text.

[102] See James, supra note 100, at 427. Return to text.

[103] AMERICAN APARTHEID, supra note 1, at 77. Douglas S. Massey and Nancy A. Denton are sociologists who have focused on the intersection of race, poverty, and residence in United States cities, the first lengthy study of residential segregation pattern since the 1960's. See Roisman, supra note 9, at 479-80. The authors conclude that residential racial segregation is a principal cause of the harmful effects associated with the underclass concept. See id. Return to text.

[104] See AMERICA APARTHEID, supra note 1, at 77. Return to text.

[105] See Roisman, supra note 9, at 499. Return to text.

[106] See Adams, supra note 90, at 429. Return to text.


[108] See id. Return to text.


[112] See id. Return to text.

[113] See id. at 40. Return to text.


[115] See id. at 37. Return to text.

[116] See id. Return to text.

[117] See Potter, supra note 73, at 1178. Return to text.

[118] See id. at 1177. Return to text.

[119] Id. at 1177-8. Return to text.

[120] Id. at 1179. Return to text.

[121] James, supra note 100, at 427. Return to text.
[122] Id. at 428. Return to text.


[124] See id. Return to text.


[127] See id. Return to text.

[128] See id. at 1181-82. Return to text.

[129] See id. The integrationist ideology was primarily based on the contact hypothesis, which finds that increased societal contact among members of separate racial groups results in an increase of racial understanding and tolerance, concluding with the elimination of racial prejudice. See W. Scott Ford, *Interracial Public Housing in a Border City: Another Look at the Contact Hypothesis*, 78 AM. J. SOC. 1426-47 (1973). Return to text.


[132] Hartnett, *supra* note 45, at 108. Studies have indicated that a "lack of employment opportunities in the inner-city creates a tremendous barrier to economic equality—a barrier that may only be overcome by encouraging inner-city residents to relocate to where the job opportunities are, i.e., the suburbs." See Rosenbaum, *infra* note 134, at 15-22. Return to text.


[135] See id. Return to text.

[136] See id. Return to text.

[137] See id. at 1528-30. Return to text.

[138] See id. at 1553. Return to text.


[143] See id. Return to text.

[144] See id. at 570. Return to text.
RESIDENTIAL RACIAL SEGREGATION

[145] Roisman, supra note 9, at 511. Return to text.

[146] See id. at 511-12. Return to text.

[147] See id. at 512. Return to text.


[150] See id. Return to text.

[151] Id. (citing Linmark Assoc. v. Willingboro Township, 431 U.S. 85, 94 (1977)). The Court found that the plaintiffs' injuries were due to the "the transformation of their neighborhood from an integrated to a predominantly Negro community [thereby] depriving them of the social and professional benefits of living in an integrated community." Id. Return to text.

[152] See Potter, supra note 73, at 1186. Return to text.

[153] See id. Return to text.


[155] Id. at 314. The plaintiff in Bakke alleged that the University's admission policy, which set aside a mandatory number of slots for minority students, violated his rights to equal protection under the Fourteenth Amendment. See id. The Court held that the University's special admission policy was invalid, but that a policy of using race as a factor in its admissions process was permissible as a tool to diversify the student body. See id. Return to text.

[156] See Potter, supra note 73, at 1187. Return to text.

[157] See Kushner, supra note 9, at 682. Return to text.


[159] The author acknowledges the importance of improving affordable housing in economically impoverished neighborhoods and making cities equally as desirable as the suburbs. However, for the purpose of this paper, the author will focus upon the most effective integrative methods utilized by state and local governments to ameliorate the economically and socially discriminatory consequences of residential racial segregation. Return to text.


[161] See id. Return to text.

[162] See id. at 87; See also Jennifer M. Morgan, Comment, Zoning for All: Using Inclusionary Zoning Techniques to Promote Affordable Housing, 44 EMORY L. J. 359, 380 (1995). Return to text.


See id. at 380. A land use regulation must substantially advance a legitimate state interest, providing a clear nexus between the state interest and the regulation. See Nollan v. California Coastal Comm'n, 483 U.S. 825, 834 (1987). Mandatory set-asides for affordable housing units usually meet the first prong of this test by serving a legitimate state interest in providing fair housing opportunities, and satisfy the second prong by requiring the development of affordable housing units, a clear nexus between the state interest and the actual ordinance. Since these ordinances allow for the development of land and often provide developers with relaxed zoning requirements, the land in question remains economically viable. See Morgan, supra note 162, at 380-81. Return to text.

See Morgan, supra note 162, at 380. Return to text.

See id. at 380. Return to text.

See id. at 370. Return to text.

See id at 371. Return to text.

See West Hartford Interfaith Coalition, Inc. v. Town Council, 636 A.2d 1342, 1356 (Conn. 1994). Return to text.


See Morgan, supra note 162, at 381. Return to text.

See id. at 370. Return to text.

See id. at 371. Return to text.

See id. at 370. Return to text.


See Morgan, supra note 162, at 370. Return to text.


See Morgan, supra note 162, at 374. Return to text.

See 1000 Friends of Or. v. Land Conservation & Dev. Comm'n, 711 P.2d 134, 136 (Or. App. 1985) (determining that the LCDC has an affirmative obligation to review local comprehensive plans and regulations to comply with housing goals). Return to text.


See id. § 197.335(2). Return to text.

See Morgan, supra note 162, at 376. Return to text.


See id. § 36.70A.320. Return to text.

See id. § 36.70A.320. Return to text.

See id. § 36.70A.340 Return to text.

See CAL. GOV'T CODE § 65583 (West 1997). Return to text.

See id. § 65584. Return to text.
One assessment found that "[b]ecause planning was at the local rather than at the state level, the problems of opportunism and avoidance which characterized the suburban response in New Jersey under Mount Laurel I were very much evident in California . . . . In some cases, suburban municipalities met the letter of the law in their planning and implementation procedures, but . . . . took advantage of the ambiguities in data projections in order to avoid their obligations for lower-income housing." Harold A. McDougall, From Litigation to Legislation in Exclusionary Zoning, 22 Harv. C.R.-C.L. L. Rev 623, 644-45 (1987). Return to text.

See Morgan, supra note 162, at 384. Return to text.

See Kushner, supra note 9, at 680. Return to text.

See Williams, supra note 160, at 104. Return to text.


See Adams, supra note 90, at 447. Return to text.

See id. (footnotes omitted); See also Hills v. Gautreaux, 425 U.S. 284, 305 (1976) (affirming remedial order requiring Section Eight assistance beyond metropolitan boundaries); NAACP v. Kemp, No. 78-850-s (D. Mass. Mar. 8, 1991) (requiring HUD to provide 500 additional Section Eight certificates in the Boston area). The intent of mobility relief is to include effective marketing efforts at suburban housing providers to allow victims of discriminatory conduct to find homes outside of segregated and impoverished neighborhoods. See Adams, supra note 90, at 447-57. Return to text.


See Housing Mobility, supra note 163, at 336. Return to text.


See Housing Mobility, supra note 163, at 340. Return to text.

See id. at 346. Return to text.

See id. Return to text.


See Carey, supra note 203, at 97. Return to text.

See id. Return to text.
In 1987, Congress passed a law allowing Section Eight certificate and voucher holders to use such rental assistance either in their own or in a connected metropolitan area. See U.S.C. § 1347(f)(1)(1994). This section states, in pertinent part:

Any family assisted . . . . may receive such assistance to rent an eligible dwelling unit if the dwelling unit to which the family moves is within the same, or a contiguous, metropolitan statistical area as the metropolitan statistical area within which is located the area of jurisdiction of the public housing agency approving such assistance.

Id. Return to text.

Policies and practices in the suburb of Parma outside of Cleveland, Ohio excluded blacks from residing in Parma in sizable numbers. See id. Even after HUD determined almost 3,000 units of low-income housing would be needed to remedy these prior discriminatory tactics. See id. However, the legislature failed to support this effort, and any meaningful integration in Parma has been stymied. See id. at 100. Return to text.

HUD has made only a limited number of mobility certificates available to more than the 40,000 families entitled to participate in the Gautreaux program. See id. As of 1992, only 4,500 families have moved out of the projects. See id. Return to text.
See Carey, supra note 203, at 103. Return to text.

Stockman, supra note 176, at 561 (footnote omitted). Return to text.


Carey, supra note 203, at 103. Return to text.

AMERICAN APARTEID, supra note 1, at xi. Return to text.
AN ANALYSIS OF A GLOBAL CO2 EMISSIONS TRADING PROGRAM

HOONG N. YOUNG[*]

Copyright © 1996 Journal of Land Use & Environmental Law

I. INTRODUCTION

With the recent conclusion of the global warming conference in Kyoto, Japan, the greenhouse effect and its impact on global warming has again emerged as a major issue.[1] The resulting treaty, the Kyoto Protocol, hails as a historic first step in the battle against global warming.[2] The Kyoto Protocol commits the European Union to reducing its greenhouse gas emissions below 1990 levels by 8%, the United States by 7%, and Japan by 6%.[3] As part of the plan which President Clinton said "plays to our strengths" of innovation, creativity, and entrepreneurship, emissions trading will have a role in reducing greenhouse gases.[4]

This comment analyzes two of the emissions trading programs that are currently used in the United States and the lessons we can learn from them for implementing a global carbon dioxide (CO2) emissions trading program. Part II details the effect of increased levels of greenhouse gas emissions on the greenhouse effect, leading to warnings of global warming. Part III compares and contrasts the three approaches currently used to reduce pollution emissions—traditional command and control, emission taxes, and emissions trading. Part IV describes two major existing emissions trading programs in the United States: the Sulfur Dioxide (SO2) Program and RECLAIM. Part V critiques the strengths and weaknesses of these two programs. This comment also highlights some of the problems a global CO2 emissions trading program will face and suggests some possible solutions to these problems.

II. GREENHOUSE EFFECT AND GLOBAL WARMING

Much talk now focuses on the "greenhouse effect" and its impact on the world's climate. Put simply, the atmospheric greenhouse works by allowing shortwave radiation from the sun to enter the earth's atmosphere, thereby warming the earth's land and water surfaces.[5] As the earth releases some of this heat in longwave radiation, the energy is blocked from escaping the earth's atmosphere by greenhouse gases.[6] This greenhouse effect has kept the earth considerably warmer than otherwise possible. The increase in the amount of carbon dioxide, one of the primary gases causing the greenhouse effect, has sparked both alarm and debate.

Burning fossil fuels like coal and oil is the main cause for the increase in CO2 levels.[7] In 1996, the United States accounted for approximately 23% of the world's total of six billion tons.[8] Europe accounted for 14% while China accounted for about 12% of global carbon emissions.[9] Though currently at about half of the United States' current emissions, China is projected to surpass the United States within twenty years.[10]

Since the 1970's, scientists have been warning the world about the possibility of a rise in average global temperature due to the increased greenhouse gases concentration in the atmosphere.[11] Scientists now believe the concentration of CO2 in the atmosphere has increased 30% since the start of the Industrial Revolution, from 280 to 360 parts per million.[12] If left unchecked, scientists expect CO2 concentrations to increase to 550 parts per million by the middle of the next century.[13] In 1995, a United Nations-sponsored panel of 2000 scientists found a "discernible human influence" on the global climate and declared that the doubling of greenhouse gases could warm the average global temperature "by 2 to 6 degrees Fahrenheit over the next 100 years."[14] The panel believes the average sea level will rise between six and thirty-seven inches by the year 2100 due to the melting of polar ice caps.[15]

Critics of global warming argue that predictions are made based on crude computer simulations.[16] However, evidence exists of the current impact from global warming. A study from the World Wide Fund for Nature pointed out that 1997 was predicted to be the second hottest year in history.[17] The study also predicted that the world is experiencing its biggest thaw since the ice age, and that since 1850 Europe's glaciers have lost about half of their volume.[18] Though the debate on global warming continues, President Clinton joins many world leaders in expressing the need to reduce CO2 emissions.[19]
In 1992, the United States joined the Framework Convention on Climate Change (FCCC) at an international "Earth Summit" in Rio de Janeiro. The FCCC is an international agreement that calls for substantial reductions in the release of man-made greenhouse gases. Unfortunately, that standard was not legally binding upon the signatories. In 1996, the United States shifted positions at an international conference in Geneva. Undersecretary of State Timothy Wirth announced that voluntary compliance with the goals of the FCCC was a failure and that legally binding emission standards should be created. Subsequent international meetings were held in Geneva and in Bonn during February, 1997. These meetings led to negotiations on a binding agreement that was finalized in December, 1997, in Japan.

In addition to the gas emissions reductions to which the United States, Japan, and the European Union have committed, twenty-one other industrialized countries must meet similar reductions under the Kyoto Protocol between 2008 and 2012. All are committed to further reductions in the future. The inclusion of an emissions trading program was a major victory for the United States. Though details have yet to be worked out, the trading program would allow a country that cannot meet its emissions target to purchase quotas from a country that has reduced emissions below its target.

III. TRADITIONAL COMMAND AND CONTROL, EMISSION TAXES, & EMISSIONS TRADING

The Kyoto Protocol introduces a fairly new approach for reducing CO2 emissions. Traditionally, the United States has applied a "command and control" method to deal with pollution. For example, with air pollution, the Clean Air Act (CAA) authorizes the Environmental Protection Agency (EPA) to set national ambient air quality standards (NAAQS). The EPA and states then establish a source specific technology-based emissions limit to assist individual polluters in meeting the NAAQS. Many economists and scholars argue that the command and control method unnecessarily increases cleanup costs. For example, the 1977 Amendments to the CAA required all utilities to install expensive scrubbers to remove sulfur dioxide (SO2) from emissions even though many utilities could have reduced SO2 emissions by switching to low sulfur coal. Many also believe that command and control discourages innovative pollution control technology. Since the EPA sets cleanup goals based on currently available technology, little incentive exists for firms to spend money on research and development of new pollution control methods.

An alternative to the command and control system is taxing producers for each unit of pollution they emit. The tax would force producers to take into account the cost of pollution. Without the tax and without command and control, the emitted pollution and its effects on the environment are only externalities that are not included when producers analyze costs. In theory, the efficient firm would try to reduce pollution until the incremental cost of reducing pollution equals the incremental benefits of further pollution reduction. This would result in a socially optimal level of pollution at the lowest cost. However, there are extreme difficulties with implementing an emissions tax. It is often difficult to assess the social costs of pollution. Many costs are measured in terms of aesthetic damage or damage to a person's health. In many cases, it is not possible to foresee all the damages polluting can cause. Even if costs could be estimated, regulators would have to constantly update the taxes to include changes in economic activity, inflation, or other changes in the level or impact of that particular source's pollution. Finally, it will be politically difficult to implement a tax-based pollution control since the tax would mean higher costs to producers which would probably be passed on to the consumers.

A transferable pollution permitting system, or emissions trading system, is an alternative to the emissions tax. Under an emission trading system, regulators establish the allowable pollution level for a given area and grant permits to existing producers so that emissions do not exceed prescribed pollution levels. Each producer is allocated permits based on the "producer's past pollution levels or through a competitive bidding auction." Firms that reduce their pollution emissions below their allocated level can sell their surplus permits to other firms or individuals. Firms that cannot reduce their pollution emissions to meet their allocated level can purchase more permits. Under this system, firms can choose the most cost-effective way to stay within their allocated emissions level. The ability to profit from the selling of emission credits encourages firms to develop innovative pollution control devices.

The emissions trading system has several advantages over the emissions tax system. First, an emissions trading system
fits well with current regulatory schemes such as the CAA, which establishes allowable pollution levels. Regulators set allowable pollution levels while the market decides the price of the tradable permits. Under the emissions tax system, regulators must somehow calculate the price of the emissions tax and make the tax high enough so that the desired level of pollution reduction can be achieved. Second, under the emissions trading system, regulators will not have to worry about adjusting prices for inflation or changes in economic activity because the market would make these adjustments automatically. Third, while both programs would reduce emissions, a tax imposes additional financial burdens on industry. Not only would firms have to pay for the cost of reducing emissions, firms would also have to pay for the tax liability of remaining emissions.

Proponents for emissions trading markets have determined four requirements for a successful program. First, there must be enough participants in the market; both to sell and to buy emissions credits. Without enough participants, price information would be difficult to establish and prices for credit might not accurately reflect actual supply and demand. Second, transaction costs must be kept low. Otherwise, buyers and sellers will be discouraged from trading in a market that could have been beneficial to both. Robert Hahn and Gordon Hester identified high transaction costs as the single most important obstacle to the success of pollution markets. Third, in order for a market-based program to work, there must be effective enforcement. Both monitoring and sanctions are needed for effective enforcement to exist. Without effective enforcement, the market will become distorted and inefficient. Finally, the regulatory system must engender confidence in market participants of its stability. In a market system, there will be tension between the participants' need for stability and the regulators' need to change the rules as new information becomes available. Though this problem exists for most markets, it is particularly important in the area of pollution control because the commodity, pollution credits, only retain their value if the government maintains the market.

IV. EXISTING U.S. EMISSIONS TRADING PROGRAMS

In recent decades, the United States has gained valuable experience from implemented emissions trading programs. Two programs, the SO2 program and the RECLAIM program, can provide insights to the types of problems that a global CO2 emissions trading program would face.

A. SO2 Trading Program

The SO2 emissions allowance trading program was enacted through Title IV of the 1990 Clean Air Act Amendments (CAA), ushering in the largest-ever nationwide emissions trading program. Title IV of the CAAA was passed to combat the problem of acid rain. Title IV was "designed to achieve a 10 million-ton annual reduction in SO2 emissions from 1980 levels by the year 2010. Of this reduction, 8.5 million tons is to come from electric utilities, the nation's major source of SO2 emissions."

Sulfur dioxide emissions reduction will consist of two phases. Phase I requires 110 of the nation's largest electric utility plants to reduce their emissions by 3.5 million tons a year, beginning January 1, 1995. Phase II requires almost all utilities to reduce annual emissions by another five million tons beginning January 1, 2000.

Utilities were given freedom in deciding how to meet the required emission reductions. Each utility in the program was assigned an emissions allowance based largely on its emissions between the years of 1985-1987, plus bonus allowances available under a variety of special provisions. Each allowance gives the right to emit one ton of SO2. At the end of each year, each utility must prove to the EPA that it holds at least as many allowances for SO2 emissions as it emitted that year as measured by devices at the end of stacks called continuous emission monitors (CEM). The EPA grants each utility thirty days to obtain the allowances necessary to cover its actual emissions during the previous year. If a utility emits more than its specified emissions allowance, the utility will be fined $2,000 for each ton that exceeds its limit and the utility will be required to offset the excess amount the following year.

In order to meet these allowance limits, the utility could switch to low sulfur coal, install new scrubbers, or shut down some plants. The utilities also had the option of trading emission allowances. Utilities that did not emit as much SO2 as their allowance limits were given emission credits. These credits could then be banked for future use by these utilities or they could be sold for profit. For those utilities that could not meet their emissions allowances, they had the option of purchasing emission credits. Credits could be purchased at the annual EPA auction or they could be purchased through private transactions.
The EPA has effectively monitored the utilities with the CEM equipment by requiring utilities to report on their emissions regularly. The EPA also has an automated allowance tracking system (ATS) that monitors all deductions of allowances, as well as the issuance, transfer, and tracking of allowances. The ATS allows the EPA to ensure that actual emissions do not exceed available allowances.

B. RECLAIM Program

As the only area in the United States classified as "severe nonattainment," the South Coast Air Quality Management District (SCAQMD) in the Los Angeles basin introduced the Regional Clean Air Incentives Market (RECLAIM) in 1994. RECLAIM is a regional market designed to improve air quality through the reduction of two pollutants, nitrogen oxides (NOx) and SO2. The RECLAIM Program would include stationary facilities emitting four or more tons of NOx or SO2 per year. This meant 390 facilities, representing approximately 65% of the permitted stationary NOx emissions in the Los Angeles basin were included, and forty-one facilities, representing 85% of total emissions from permitted stationary SO2 sources. Facilities could voluntarily join the program even if they did not meet the emission standards, however, a facility could not leave RECLAIM after it joined. Sources not participating in RECLAIM are still subject to existing command and control regulations. Like the national SO2 emissions trading program, participants of RECLAIM were each assigned a specific emissions allowance. Each facility was given an allocation of credits to cover all emission sources, such as furnaces and boilers.

The "cap and trade" market is also incorporated into RECLAIM. It sets an area-wide total emissions cap that declines over time. Each facility's emissions allowance is also reduced according to a schedule until the year 2003. SCAQMD hopes RECLAIM will reduce total NOx emissions from the 390 participating facilities by 75% of the starting emission levels. Facilities registered in the RECLAIM program must reconcile their pollution accounts once a year. If a facility pollutes more than its allocated limit, it must purchase pollution credits at one of the Pacific Exchange's emissions credit auctions. If a facility reduces emissions below what it was allocated, it may sell its excess credits.

The monitoring, reporting, and record keeping (MRR) for RECLAIM is quite complex. Sulfur dioxide emitters fall into two categories: major sources and process units. Major sources must install CEM systems to monitor emissions, and they must install a device that reports total daily mass emissions electronically, via modem, to the District. Process units must elect to measure either their fuel usage or their operating time and production/processing/ feed rate. Process units must also use an emission factor to determine mass emissions. Both major sources and process units must report emissions to the District on a quarterly basis.

The MRR requirements are even more complex for NOx emitters. These emitters are classified either as major sources, large sources, or process units. "Major sources face the most stringent requirements, while process units face the least." The requirements for major sources of NOx are similar to those for major sources of SO2. Facilities that are considered large sources can choose to comply with MRR requirements for major sources or the more relaxed requirements for large sources. Large sources are required to "operate a totalizing fuel meter and any other device that the Executive Officer considers necessary for measuring fuel usage." A large source must also calculate mass emissions using either an emissions factor or an equipment-specific emission rate or concentration limit. In addition, a large source must report mass emissions to the District on a monthly basis. Process units can comply with MRR requirements by complying with major source or large source regulations, or process units can choose to comply with less restrictive requirements specifically for process units. Under the less restrictive requirements, process units must install totalizing fuel meters and/or timers, or any other devices that the Executive Officer specifies as being functionally equivalent. Like all the other NOx sources, process units must report mass emissions to the District on a quarterly basis.

V. ANALYSIS OF EXISTING PROGRAMS

The United States' two major existing emissions trading programs should be examined to determine their strengths and weaknesses. The strengths of the SO2 and RECLAIM programs can assist in constructing an efficient CO2 emissions trading program. Additionally, weaknesses in the SO2 and RECLAIM programs can pinpoint potential problem areas in a similar type emissions program.
A. SO2 Program

Since the first phase of the program began in January 1995, there have been some pleasant surprises. To begin with, significant emission reductions have been met early on in the program. After January 1995, utilities have been aggressively reducing emissions and taking advantage of the opportunity to bank the allowances earned. The volume of banked allowances in 1995 and 1996, and the projected amounts through 2000, is much larger than predicted. Many utilities are banking these credits for use during Phase II of the program. This has resulted in a win-win situation for both the environment and the industry. The environment is benefiting from the earlier reduction in SO2 emissions because it can now start to recover from the effects of lower SO2 emissions and improve public health earlier than would otherwise be possible. The utility industry will benefit from banking allowances because the overall cost of compliance with the more stringent Phase II requirements will be lowered. The lowering of overall costs will help facilitate a smoother transition to Phase II standards.

Allowance prices have also been much lower than originally predicted. While the CAAA were being debated in Congress in 1990, experts predicted the cost of each allowance could be as high as $1,500, with a common guess of $750. Since trading began, the price has fallen from $250-$300 in 1992, $110-$140 in 1995, to $70 in 1996. However, the price rebounded to around $100 in 1997.

Not all would consider the fact that prices have been lower than expected as proof of the market system working efficiently. Critics are blaming the set-up of the EPA auction for the low prices. Currently, every buyer pays what he bids, but the seller with the lowest asking price gets the highest bid. This mismatch occurs because the "lower asking prices increase the probability that a seller trades with high-bidding buyers." Because more than one seller exists in the market, sellers have under-stated the value of their allowances to start the bidding.

Another surprise is that the marginal cost of emissions reductions has been dramatically less than projected. Experts had predicted the cost of compliance using traditional methods at $1,500 per ton. They had expected marginal costs to be close to $525 per ton under the market system. So far, recent studies suggest marginal costs to be less than $350 per ton. However, the $350 per ton cost of compliance is still more than three times higher than what allowances are currently selling for ($100 in 1997). This is probably due to a number of factors. One major factor is that, as mentioned previously, utilities are banking a larger amount of emission allowances than expected. The probability that meeting the stringent Phase II standards will be more costly may account for this. The Phase I bank of allowances will delay the full effect of the 8.95 million-ton-cap on SO2 until 2010. This "delay until 2010 for the most expensive compliance options means that allowance prices today, measured at a discount rate of 8%, should have a value of about one-third that of the cost of these compliance options." In fact, the current market price of allowances ($100) is about one third of the econometric estimates of long-run marginal cost ($350).

The program's administrative costs have also been low compared to traditional pollution controls. The approximate cost of the program on a yearly basis was $12 million. This would come out to be about $1.50 per ton of pollution reduced. For the first five years, the government spent only $60 million to set up the SO2 trading program though the estimated cost of the program had been up to $3.5 billion.

Despite all the benefits of the SO2 trading program since it went into effect, there have been some problems. First, there has been a lower than expected volume of inter-utility trading and trading between economically distinct entities. According to the EPA's Allowance Tracking System (ATS), from 1994 to the end of the first quarter in 1997, more than 38 million private allowances were transferred in 2,400 transactions. The majority of these transactions were intra-firm or reallocations. Together, they represented 50% of all transfers and 75% of all allowances transferred. Trading between economically distinct entities amounted to 8.9 million allowances in more than 1,100 trades. Utilities acquired approximately 3.5 million of these allowances.

Several explanations have been given as to why the utilities have not done much trading. One reason is that state commissions run most electric companies and regulate what the companies can do. For example, the state commissions regulate "acceptable rates of return, recoverable costs, the distribution of financial risks and returns between ratepayers and shareholders." Some state commissions have required the utilities to pass on the savings
they make on trades to their customers, taking away the incentive to trade in order to make a profit. Many state commissions have not issued any rules on the regulatory treatment of allowance transactions. Because the utility industry is risk-averse by nature, most utilities have not been willing to trade until their state commissions enact new regulations. Finally, in order to protect local, high-sulfur coal production, some state commissions have insisted that their utilities meet the CAAA emissions standards by installing scrubbers.

Another problem the SO2 trading program has run into is though total national emissions have been lowered, regional or local emissions might not have improved. New York State, for example, is unhappy that utilities in New York can profit from selling emission allowances to Midwestern states whose extra emissions might rain back down on the Adirondacks. Critics are also unhappy with the fact that a utility can pollute as much as it can purchase in emission credits. They argue that, from the limited data available, often it is economically efficient to dump pollutants on economically disadvantaged people.

However, defenders of the SO2 emissions trading program would argue that "under Title IV, sources also must comply with source-specific emission reductions set by states to ensure attainment of ambient standards." Therefore, some of the local concerns can be addressed on the state level by having the state set more stringent emissions standards, thereby lowering pollution levels. Even if the problem cannot be alleviated on the state level, proponents of trading programs will point out that in time, even hot spots will eventually be cleaned. As time progresses, the cost of emissions credits will rise as cheaper pollution control methods become available. This will cause even utilities located in "hot spots" to reduce emissions.

One final issue challenging the success of the SO2 program is the lack of property rights associated with the tradable allowances. In order to leave room for further regulations and to protect the EPA from future Fifth Amendment "takings" claims, "the CAA explicitly states that allowances are not real property rights." Without the security of knowing that what they own has property rights, a trader in the SO2 market lacks the rights that most traders on regular markets have.

B. RECLAIM Program

Several points about RECLAIM distinguish it from the SO2 trading program. First, instead of setting up a single market, RECLAIM set up two distinct zones, a western and eastern trading zone, within the RECLAIM region for trading. This was done because the predominating winds blew the pollution from west to east. Facilities in the western zone can only purchase credits in the western zone, whereas facilities in the eastern zone can purchase credits from either, or both, trading zones.

Second, RECLAIM allows any person to generate trading credits by scrapping old, high-polluting vehicles. Only passenger cars made in 1981 or earlier that are operable and registered in the Basin can qualify. A limit of 30,000 vehicles can be scrapped each year to create trading credits. The inclusion of mobile source credits in the stationary scheme of RECLAIM is quite innovative.

Finally, on April 11, 1997, SCAQMD approved Rule 2506. This rule allows equipment and products, known as area sources which include producers of NOx and SO2 but do not require a SCAQMD permit, to be eligible for RECLAIM credits as these sources are replaced by cleaner burning equipment. Utilities participating in RECLAIM are excited about this addition to RECLAIM because of the increased economic benefits companies can enjoy when they convert equipment, such as boilers, internal combustion engines, and water heaters, to more energy-efficient models.

Early studies indicate that the trading program is off to a good, but slow start. Market participation was only 50% in 1995. This figure appears low considering that emissions credits cannot be banked. However, the high annual baseline set early on in the program probably explains the market participation rate. Regulators wanted to make sure that the annual emissions limits reflected average production levels for each facility and were not being distorted by special conditions, such as a lower production level brought about by a recession. In the end, SCAQMD allowed each firm to choose their baseline level based on actual emissions for one year between 1989-1992. As a result, the total allocation for 1993 was higher than actual emissions. There is evidence that the surplus allowances built into the annual targets during the early years are disappearing. In the first quarter of 1997, the dollar value of...
emissions trading exceeded the "annual amounts for the first three years of the RECLAIM program." [187]

The structure of RECLAIM's open market trading has created a buyer-beware market. [188] Unlike the SO2 program where facilities start with allowances that can be used as currency, any facility wanting to sell credits needs to assert to the EPA that it has already reduced its emissions and earned credits. [189] The EPA will then acknowledge the credits, but it will not verify them. [190] The buyer is responsible for verifying that the purchased credits are good. [191]

VI. GLOBAL CO2 EMISSIONS TRADING PROGRAM

Experience with the SO2 emissions program and the RECLAIM program can be useful in developing a global CO2 emissions trading program. Past results from both programs indicate that a CO2 trading program on a global scale is possible. However, it is important that the world community learn from the problems of the past programs.

A global CO2 emissions trading program would allocate allowable CO2 emissions level for each country. Countries that curb emissions below their allowance would be able to sell their credits. Countries that cannot or will not meet their allowance would have to buy credits. One major obstacle facing a global program is that sources of CO2 are more varied than the sources of SO2. [192] In RECLAIM, the restricted geographic size of the program kept the participants within a workable range. [193] In the SO2 program, the main culprits were the utility plants who attributed 70% of SO2 emissions. [194] In the United States alone, utilities account for only 36% of CO2 emissions. [195] Mobile sources, such as automobiles, trucks, and airplanes, account for approximately 32% of CO2 emissions in the United States. [196]

A suggestion for dealing with emissions from mobile sources would be to regulate the carbon content of fuels. [197] Refineries that produce fuel would be given allowances according to the desired reduction in CO2 levels. [198] The market would determine the price of these allowances; consumers (users of mobile sources) would then pay for the increase cost. [199] However, opponents of this plan fear that targeting only producers would create a market that is too small. [200] Also, they fear that distributing all the CO2 rights to this relatively small group would create a windfall for these firms as the value of these rights increase with time. [201] "An EPA consultant estimated that the CFC permit allocation system would produce $1.8 to $7.2 billion in windfall profits for producers." [202] Though the profits would be spread over a much larger number of firms, a fossil fuel offset program would also result in windfall profits for the producers. [203]

An alternative suggestion for dealing with emissions from mobile sources would be to hold manufacturers of mobile sources (automobile, truck, and airline manufacturers) responsible for the CO2 producing potential their products emit. [204] Because CO2 emissions can be calculated with relative ease from fossil fuel consumption and emission factors, it would be feasible to require manufacturers to calculate the CO2 producing potential of their products. [205] If a manufacturer's annual CO2 producing potential is higher than its allowance, the manufacturer would need to purchase additional emissions credits. [206]

In anticipation of a global program, Costa Rica is preparing to issue tradable credits to people who invest in a program that protects portions of Costa Rica's rain forest that would otherwise be logged. [207] However, extending the program to include such activities is probably reaching too far. Though biodiversity is important, too many kinds of land use, such as forest clearing for agriculture or urban and industrial projects, can lead to increased levels of CO2. [208] "Data on releases of CO2 by forest degradation through logging, shifting cultivation, erosion, lowering of groundwater tables, and desertification are of poor quality or unavailable." [209] Also, it would be nearly impossible to develop an accurate system to monitor, for example, whether a particular forest area is really being protected from logging. [210] For this reason, some have suggested the inclusion of these sources would be unworkable in a global program. [211]

Another area of concern with the Kyoto Protocol is the fact that, like the SO2 program, there will be at least two phases in the global program. Currently, the Kyoto Protocol requires compliance by the developed countries. [212] Developing countries like China and Mexico are against an emissions limit because they fear it would impede their economic growth. [213] Therefore, the plan proposes a program for developing countries to be drafted at a later time. [214] This two-phase program could lead to some of the same problems as the SO2 program. In the SO2 program, the two-phase approach led to the situation where many potential sellers of allowances had to achieve emissions reductions before potential buyers of any allowances needed them. [215] This has led to lower trading levels than expected. With the
global program, it is uncertain what the results of excluding developing countries from the market will be. In order to
stimulate an active market, the program must set the targeted reduction levels low enough so that the participating
countries will be forced to consider trading as an option for controlling their emissions. A predetermined time schedule
for all regulated sources is also likely to stimulate more trading than the SO2 program.[216]

Monitoring emissions by participants will be another challenge to the program. The United States is currently in a
better position to deal with the task of monitoring CO2 emissions.[217] The CEM, already installed in most utility
plants to monitor SO2 emissions, can be used to measure CO2 emissions as well.[218] In fact, the EPA has already
been receiving information about CO2 emissions from most sources of emissions covered under Title IV.[219] The
Director of EPA's Acid Rain Division also believes that "this technology can apply to other large combustion
sources."[220]

For many countries, however, effective monitoring would be a major problem. Most countries do not have a system
of CEM established.[221] The need for monitoring will require countries to spend money setting up a system to monitor
emissions.[222] However, the problem with monitoring will exist whether the world adopts a command and control
program or an emissions trading program to reduce CO2. Both programs will require the monitoring of emissions.
Therefore, the argument against an emissions program based on monitoring costs is not very sound because monitoring
costs cannot be avoided. In addition, an argument can be made that a CO2 emission trading program will encourage
participants to monitor each other to ensure fairness.

As previously mentioned, it is fairly easy to calculate CO2 emissions based on fossil fuel consumption and emission
factors.[223] Therefore, it would not be necessary to force all participating countries to install CEM. Instead, a self-
reporting program could be set up based on experience from the lead-trading program.[224] In the lead-trading program,
"the total amount of lead put in gasoline by a particular refiner could be easily determined by the amount of lead
additives the refiner purchased."[225] Refiners were required to calculate the amount of lead they used and to keep
track of all trades.[226] The EPA required refiners to submit quarterly reports detailing the amount of lead rights used
or traded.[227] Verification of each refiner's reports is available by examining sales reports of lead manufac
turers.[228] Therefore, utilities and other major sources of CO2 can be required to submit reports. These reports could
be verified by the sales reports of producers of fossil fuels.[229]

World leaders also need to decide whether or not to allow the banking of credits. Allowing firms to receive credits for
emission rights not used in a particular year would result in increased emission in future years. Also, the banking of
credits could result in less trading in the market as firms hold on to their credits for future use. On the other hand, by
not allowing the banking of credits, a firm that did not use all of its emissions allowance, whether by actual emissions
or trading, would lose those particular excess allowances. The environment would benefit from these allowances never
being emitted.

However, the advantages of allowing credits outweigh the disadvantages. First, even though future emissions will be
higher if banking is allowed, total global emissions will still be reduced because the forgone emissions were included in
the global quota in the first place. Second, allowing the banking of credits could help firms lower overall costs of
reducing pollution. As the total emissions allowance gets more stringent with time, firms will benefit from the cost
savings of having extra emissions credits to use in the future. Finally, there were higher than expected reductions in the
SO2 emissions early in the program because firms were allowed to bank their credits.[230] If the same occurs in the
CO2 program, the early reductions in CO2 emissions would also be a win-win situation for everyone.

In RECLAIM, two trading zones were set up because of the movement of the pollution by atmospheric winds.[231] In
the SO2 program, states like New York are challenging the open trading policy because it continues to allow
Midwestern states to pollute and cause the fall of acid rain on New York.[232] These localized problems will be less of
an issue with the CO2 program. Unlike the other two pollutants which caused problems on regional basis, CO2 poses a
global threat.[233] Carbon dioxide's climate-warming effects are independent of where it is emitted.[234] Allowing
some countries to continue their rate of emissions by purchasing credits will not lead to problems for their neighboring
countries. As long as global emissions are reduced, the effects of global warming will eventually be lessened. This fact
should facilitate trading because it enhances the worth of emissions credits.[235]
The setting of the baseline and the emissions cap have always been highly debated issues in developing an emission trading program. In the SO2 program, utilities pushed hard for the earliest baselines they could while environmentalists fought hard for later baselines. In the end, levels from the year of 1980 were chosen as the baseline. In RECLAIM, a similar debate occurred in setting baselines. In the end, SCAQMD decided to allow each firm to choose their baseline level based on actual emissions for one year between 1989-1992. Participants could choose from a range of 4 years because SCAQMD recognized that many industries were suffering from the effects of a recession and thus were producing at a lower level. Unlike the SO2 program, where Congress chose to set the goal of reducing SO2 emissions by 10 million tons from 1980 levels without much debate, RECLAIM's goal was based more on environmental concerns. What SCAQMD hopes is to have the air quality in its region meet the EPA's national ambient air quality standards.

During the negotiations at the Kyoto Conference, the United States pushed for a reduction in global CO2 emissions to 1990 levels by the years 2008-2012. The European Union, backed by many Third World countries, pushed for a 15% reduction from 1990 levels by the year 2010, while Japan had hoped for a 5% reduction from 1990 levels by the year 2012. In the end, a compromise position was agreed upon by the world leaders. Unfortunately, the emissions reduction targets set by the Kyoto Protocol appear to have followed the path of the SO2 Program—that is, they seem to have been decided based on compromises between nations rather than being environmentally based.

VII. CONCLUSION

The time has come for the world to address the possible global warming effects greenhouse gases are having on this planet. With experiences from the SO2 emissions trading program, RECLAIM, and four other trading programs, the United States should lead the world in developing a global CO2 emissions trading program. By utilizing the strengths and learning from the weaknesses of past emissions trading programs, a CO2 emissions trading program on a global scale is possible.

[1] Diplomats from 160 nations negotiated for 10 days in Kyoto, Japan. See A. Adam Glenn, A Deal Is Struck in Kyoto (Dec. 11, 1997).


[8] See id.

[9] See id. The Kyoto Protocol does not affect developing countries, like China, so their emissions are not restricted. See Glenn, supra note 1. "All the initiatives are aimed only at developed countries even though greenhouse gas emissions are growing at much faster rates in many of the developing countries." See Lawson, supra note 5.
GLOBAL EMISSIONS TRADING


[14] Id. Return to text.


[16] See id. Return to text.


[18] See id. Return to text.


[20] See Lawson, supra note 5. Return to text.


[22] See Lawson, supra note 5. Return to text.

[23] See id. Return to text.


[26] See id. Return to text.

[27] See id. Return to text.

[28] See Glenn, supra note 1. Return to text.

[29] See id. Return to text.


[31] See id. Return to text.


[34] See id. § 7409. Return to text.
GLOBAL EMISSIONS TRADING


[40] See Naughton, supra note 35, at 201. Return to text.

[41] See id. Return to text.

[42] See id. Return to text.

[43] See id. Return to text.

[44] See id. Return to text.

[45] See id. Return to text.

[46] See id. Return to text.


[48] See id. Return to text.

[49] See id. Return to text.

[50] See id. Return to text.

[51] Id. Return to text.

[52] See id. Return to text.

[53] See id. Return to text.

[54] See id. Return to text.

[55] See id. Return to text.

[56] See id. Return to text.

[57] See id. at 203. Return to text.


[59] See Naughton, supra note 35, at 203. Return to text.
[60] See Marchant, supra note 58, at 633. Return to text.

[61] See id. Return to text.


[63] See id. Return to text.

[64] See id. Return to text.

[65] See id. Return to text.

[66] See id. at 372-73. Return to text.

[67] See id. at 372. Return to text.

[68] See id. at 373. Return to text.

[69] See id. at 372. Return to text.

[70] See id. at 374. Return to text.

[71] See id. at 373-74. Return to text.


[75] Id. Return to text.

[76] See id. Return to text.

[77] See id. Return to text.

[78] See id. Return to text.

[79] See Doherty, supra note 73, at 34. Return to text.

[80] See id. Return to text.

[81] See id. Return to text.

[82] See id. Return to text.

[83] See id. Return to text.


[85] See id. Return to text.

[86] See id. Return to text.
GLOBAL EMISSIONS TRADING

[87] See Doherty, supra note 73, at 35. Return to text.

[88] See id. Return to text.

[89] See id. Return to text.


[91] See id. Return to text.

[92] See id. Return to text.


[94] See Thomas H. Klier et al., What can the Midwest Learn from California About Emissions Trading?, CHI. FED. LETTER (Fed. Reserve Bank of Chi., Chicago, Ill.), Aug. 1997, at 1. The program seeks to reduce the emissions of sulfur oxides (SOx); however, under the RECLAIM Program rules, the term SOx refers to sulfur dioxide. See Johnson, supra note 93, at 277 n.1. Return to text.

[95] See Klier et al., supra note 94, at 1. Return to text.

[96] See id. Return to text.

[97] See id. Return to text.

[98] See id. Return to text.

[99] See Polesetsky, supra note 62, at 372. Return to text.

[100] See Klier et al., supra note 94, at 1. Return to text.

[101] See id. Return to text.

[102] See id. Return to text.

[103] See id. Return to text.

[104] See id. Return to text.

[105] See id. Return to text.


[107] See id. Return to text.

[108] See id. Return to text.


[110] See id. Return to text.

[111] See id. at 403. Return to text.

[112] See id. Return to text.
"This curious system was written into the act by Congress, emulating the structure of Treasury auctions. But unlike the Treasury bills market, the emissions market has more than one seller, which leaves room for unnaturally low sale prices." Id., at 36-37.
[141] See id. Return to text.

[142] See id. Return to text.

[143] See id. Return to text.

[144] See id. Return to text.

[145] See id. Return to text.


[147] See id. Return to text.


[149] See id. Return to text.

[150] See id. Return to text.

[151] See id. Return to text.

[152] See id. Return to text.

[153] See id. Return to text.

[154] See id. Return to text.

[155] See id. Return to text.


[157] Id. Return to text.

[158] See id. at 46. Return to text.

[159] See id. at 45. Return to text.

[160] See id. at 45-46. Return to text.

[161] See id. at 57. Return to text.

[162] "The Adirondack Council, an Albany-based environmental group, and the Natural Resources Defense Council are suing the EPA to set standards dictating how much SO2 can fall on specific regions, not just a cap for the whole nation." Doherty, supra note 73, at 35. Return to text.

[163] See id. Return to text.

[164] See id. Return to text.


[167] See id. Return to text.

[168] Prices for emissions credits will increase with time as the cap on SO2 emissions decreases. Eventually, utilities will find it cheaper to install new technology, such as Scrubbers, to meet their emissions limits than for them to purchase emissions credits. See id. Return to text.

[169] Doherty, supra note 73, at 36. Return to text.

[170] See id. Return to text.

[171] Initially, RECLAIM forced all participants to sell their emissions credits. However, a SCAQMD rule change now allows companies to hang "on to these credits as insurance to protect against being short when SCAQMD 'trues up' emission levels at the end of the cycle." Ace 'Reclaim' Auction Indicates Rising Prices, More Interest in SO2 Credits, UTIL. ENV'T REP., Mar. 1, 1996, § Emissions Trading, at 8. Return to text.


[173] See id. Return to text.

[174] See id. Return to text.

[175] See id. at 397. Return to text.

[176] See id. Return to text.

[177] See id. Return to text.

[178] See id. Return to text.


[180] See id. Return to text.

[181] See id. Return to text.


[183] See id. Return to text.

[184] See id. at 1. Return to text.

[185] See id. Return to text.

[186] See id. Return to text.


[188] See Doherty, supra note 73, at 37. Return to text.

[189] See id. Return to text.
Phase I only covered the most polluting plants—which should have the lowest pollution reduction costs and are the most likely sellers. See Doherty, supra note 73, at 37. Higher-cost reducers do not have to concern themselves with the program until Phase II which begins in the year 2000. See id. This has lead to a separation of likely sellers and buyers. See id.
GLOBAL EMISSIONS TRADING


[219] See *id.*  *Return to text.*

[220] *Id.*  *Return to text.*

[221] See *id.* at 67.  *Return to text.*

[222] See *id.*  *Return to text.*

[223] See *supra* note 205 and accompanying text.  *Return to text.*


[225] *Id.*  at 648.  *Return to text.*

[226] See *id.*  *Return to text.*

[227] See *id.*  *Return to text.*

[228] See *id.*  *Return to text.*

[229] See *id.* at 648-49.  *Return to text.*


[235] See *id.*  *Return to text.*


[237] See *id.*  *Return to text.*


[239] See *id.*  *Return to text.*


INTRODUCTION

From the moment I decided to write a book review of Property Rights: Understanding Government Takings and Environmental Regulation, I questioned how I could write it "objectively."[1] Admittedly, I have an agenda quite different from the Marzullas, and one of my purposes in writing this book review is to identify alternative sources of information on these issues for the purpose of generating creative thinking about how property rights are defined and valued. I also write to illustrate the necessity of regulating land use decisions to avoid disruption of the cycles that make life possible on this planet. This review is, of course, an incomplete exploration of the many significant issues raised by the Marzullas' book.

Over the past five years I have been watching the Property Rights Movement, and I have believed that it is about nothing more than greed, despite protests from its proponents on the importance of individual liberties and the presumed necessity to political independence of owning private property unburdened by governmental regulation. Reading Property Rights and crafting a review of it has led me to appreciate more fully the association between private property rights and freedom, a concept we seem to be struggling to define and understand even after over 200 years of what was supposed to be a system of government based in freedom. Different understandings of freedom and the limits of liberty seem to be at the heart of the disputes over how to define and protect property rights. To me it seems plain that "[i]ndividual liberty and interdependence are both essential for life in society,"[2] and therefore, we must have a tool for balancing interests[3] in property, even if that tool is an imperfect regulatory system for environmental and land use decision-making. Unfortunately, for property owners confronted with unwanted limitations on the use of property, this tool may represent the demolition of the barrier enjoyed by property owners against a government ruled by a tyrannical majority,[4] with compensation for governmental regulation as the required pay off.[5]

The freedom to exploit privately-owned property, however, should not be idealized as a critical source of individuality. Tension is spawned in that zone where government, acting as the voice of the majority, limits the liberties of those who wish to use property in a way that results in harm as the government has defined harm. Nevertheless, humans are incapable of survival without functioning in relation to other life forms, and this basic truth serves as a justification for rights and responsibilities to be balanced accordingly. Advocates for the position taken in Property Rights seem to have assumed that buying property means buying unlimited liberty to exploit that parcel for the sole gratification of the owner. If we were more isolated as a society, if it were possible for humans to live without depending on other life forms, then this assumption might be appropriate. Property Rights appears to rely on this faulty assumption because the analysis assumes that buying property secures rights to exploit resources for profit maximization.

If the interests of all humans and other life forms were more apparent to those advocating the position illustrated in Property Rights, perhaps we could think more about solutions rather than attacking the various positions that could be taken on these critical issues. The passionate desire for freedom characterizing the struggles of Patrick Henry during the American Revolution and Harriet Tubman during the Civil War is a desire I share, but if the property rights movement is simply about the desire of real estate developers and of corporations to secure more power to exploit for maximum profit our (and I emphasize "our") natural resources, then I feel no motivation to negotiate with them. On the other hand, as the Marzullas illustrate, small property owners may legitimately feel exploited in their struggles to find solutions to the challenges presented by the regulatory systems on land use and environmental decisions. [6] Property Rights is a book that reflects zealous advocacy for small property owners faced with complex governmental regulation, and as a lawyer who has advocated for the less powerful in society, I admire that. Nevertheless, focusing the debate on these individuals, as Property Rights does, inappropriately detracts[7] from how the wealthy are served by increased protection of private property rights at the expense of public health and welfare, which translates into our parents, children, partners, friends, and the communities we call home.
A persuasively written book, PROPERTY RIGHTS appears to have been written to generate interest in developing solutions to the perceived lack of protection and undue burden that property owners currently experience. The authors are well experienced for this task. Nancie Marzulla is described as "the nationally recognized leader of the property rights movement."[8] She heads the organization Defenders of Property Rights, which she founded, and litigates on behalf of "small property owners who have been unfairly singled out to bear the cost of achieving public good."[9] Her foundation also assists wealthy property owners like Mr. Lucas, whose million dollar purchases of South Carolina barrier island property led ultimately to litigation because of South Carolina Coastal Council's regulation of that property.[10] Roger Marzulla, as Assistant Attorney General with the Justice Department, led the government's participation[11] in Nollan v. California Coastal Commission[12] and First English Evangelical Lutheran Church v. County of Los Angeles.[13] Currently a partner at Akin, Gump, Strauss, Hauer & Feld in Washington D.C., he represents real estate developers and "aerospace, chemical[], manufacturing, mining, timber, oil and gas" companies in his practice as head of the Environmental Law section of the firm.[14] In other words, he represents virtually all of the polluting industries with the exception of the military.[15]

Property Rights addresses traditional understandings of the definition of property,[16] regulatory takings jurisprudence,[17] the specific regulations as to wetlands,[18] the Endangered Species Act,[19] Superfund,[20] mining regulations,[21] land use and zoning law,[22] due process issues and forfeiture,[23] the practical difficulties of litigating takings cases,[24] and developing solutions[25] to the problems they describe. As it is, Property Rights is only 177 pages not including the appendices. Accordingly, the discussion of the many issues cannot be considered complete because a more thorough analysis of all the issues touched on in this book would require numerous treatises. Property Rights may be read as a springboard towards getting more completely informed on specific issues because the breadth of the Marzullas' scope precluded a thorough treatment of the environmental and land use systems at work in our society today. The book is easy to read and includes a series of appendices that will aid lay persons as well as lawyers using this source.

Property Rights attempts to show, as Senator Orrin Hatch suggests in the Foreword, that "the America of the twentieth century has witnessed an explosion of federal regulation of society that has jeopardized the private ownership of property with the consequent loss of individual liberty."[26] Senator Hatch asserts that "[u]nder current federal regulations, thousands of Americans have been denied the right to the quiet use and enjoyment of their private property," without illustrating this bold statement.[27] He does acknowledge the "very real need for prudent ecological practices," but he suggests that such practices result in "forfeited" property rights.[28] He also asserts that the government currently has a "practice" of "singling out private property owners to bear the costs of regulation."[29] Property Rights echoes[30] and supports with examples these assertions, although I for one am not convinced that regulatory action necessarily results in a taking or that members of the government are acting with specific intent to single people out to bear costs that should properly be borne by taxpayers generally.

In Property Rights, as Judge Loren Smith describes in the Introduction, the authors approach the "fundamental human right to property . . . as part of the fundamental integrity and dignity of the human being."[31] He states that the twentieth century has shown us that "totalitarian" ideologies, which include socialism in his opinion, have the "overriding objective of destroying the fundamental human rights of life, liberty, and property. Their reasoning was that only by destroying these fundamental rights in individuals could their utopias arise—giving all power to the mystical volk, proletariat, people, or masses."[32] Property, he states, is the "practical foundation" of life and liberty and has the function of restraining tyranny.[33] If this is true, however, how do the many people who do not own any interest in real property maintain "integrity and dignity" against the government or enjoy life and liberty without their "practical foundation" of property interests? If we as a society redefine property interests so that each person, regardless of property ownership, may be "independent" from government, would we have a society that successfully balances the interests of so many? Or must we reorient ourselves so that, rather than property, we have another symbol entirely for that barrier between the individual and majority rule?

PART I - THE HISTORICAL VALUE OF PROPERTY OWNERSHIP

The Marzullas begin with some theoretical discussion grounded in what the authors describe as "classical notions of legal rights and individual liberty."[34] So-called "classical notions," however, are a reflection of the writers' adoption of European norms[35] that cannot entirely or even mostly account for democratic values.[36] The Marzullas attribute
BOOK REVIEW

the source of our development of legal rights and liberties only to "the Justinian Code, Magna Carta, and the Two Treatises of John Locke,"[37] without mentioning, for example, the rich tradition of the political ideas of the Iroquois that influenced the founders.[38] The Marzullas also mention only James Madison's views on property,[39] but if one founder's view is significant, then we must examine other founders' views as well. Their narrow approach is consistent, however, with the neo-Lockean view that fuels the property rights movement. The inappropriate focus on John Locke as a source of the theoretical underpinnings of property is part of the inadequacy of the property rights movement's position in today's world.[40] Assuming that humans can own any aspect of the planet,[41] an inappropriate model for property ownership, drives our legal theory and practice: land.[42] Because property ownership no longer can be considered some sort of sacred right, no boundary exists at property lines between governmental authority and the individual.[43]

A. An Overlooked Source of American Norms

Property Rights seems to follow from the principle that right holders should be able to "do with their land as they damn well please."[44] Actually, even if the sources relied on by the authors would support such a principle, the origins of our constitutional freedoms cannot be so simplistically categorized as growing only out of the documents named by the authors. This is in part because our system of government structurally reflects the federal system of the Iroquois.[45] Interestingly, property use regulation in England, the colonies, and the early United States[46] indicates the propriety of the very regulation the Marzullas claim effects takings. Colonial legislatures "routinely physically appropriated land, usually for road building, without paying compensation."[47] Additionally, in the first half of the nineteenth century, legal discourse drew from sources other than Locke and illustrated the individual's duties to the community.[48] This makes common sense: with every right comes a corresponding responsibility.

Benjamin Franklin greatly admired Indian society generally,[49] and being dissatisfied with European models of government, took heed of the political system of the League of the Iroquois,[50] which involved checks and balances on centralized power.[51] Thomas Jefferson also "freely acknowledged his debt to the conceptions of liberty held by American Indians . . . . "[52] Jefferson, in writing the Declaration of Independence, welcomed editorial input from Benjamin Franklin,[53] and the "self-evident truths" Jefferson listed reflected Indian culture,[54] though not perfectly.[55]

As to property rights specifically, both Jefferson and Franklin identified property as a civil right,[56] not as a natural right:

Private property . . . is a Creature of Society, and is subject to the Calls of that Society, whenever its Necessities shall require it, even to its last Farthing, its contributors therefore to the public Exingencies are not to be considered a Benefit on the Public, entitling the Contributors to the Distinctions of Honor and Power, but as the Return of an Obligation previously received, or as payment for a just Debt.[57]

Jefferson wrote that "no one has, of natural right, a separate property in an acre of land. . . . Stable ownership is the gift of social law, and is given late in the progress of society."[58] This certainly cuts against the Marzullas' theory of property as "God-given,"[59] and well it should, because any theory springing from a premise in a particular religion must stand or fall without reliance on that religion unless we are willing to compromise the First Amendment freedom of religion.

Interestingly, if we are willing to acknowledge the Iroquois basis of our government, then egalitarian norms of property, as represented by government's protection of the public interest, would be less controversial. If egalitarian norms from Iroquois society were a part of our economic system, concentration of wealth in the few would be unacceptable.[60] Owning land itself would be unacceptable: "I never said the land was mine to do with as I chose. The one who has the right to dispose of it is the one who created it."[61]

B. The Misguided Neo-Lockean Perspective

Even if we solely consider John Locke's theories, they must be understood in the context of the mechanistic and atomistic thought of the seventeenth century that produced Locke.[62] who could not help but be influenced by the scientific revolution engineered by Sir Isaac Newton, Francis Bacon, and Rene Descartes. This period promoted the
exploitative relationship with Earth we have today[63] because of the paradigm shift in that period from an organic view of the universe to a view of nature as a machine and therefore inanimate. Without a view of the universe as living, domination of nature was not objectionable and was possible with an understanding of those mechanical rules explaining the operation of the universe.[64] This dominion perspective was rooted in Western religion, which was used by thinkers of the period who theorized the framework for dominating nature.[65]

This tradition continues though outdated by current science, which is based in the interdependence of all life forms.[66] Relying on Locke's theory of property feeds this destructive cycle because Locke himself theorized from the premise that:

God, when he gave the world in common to all mankind, commanded man also to labor, and the penury of his condition required it of him. God and his reason commanded him to subdue the earth, i.e., improve it for the benefit of life. . . . God, by commanding to subdue, gave authority so far to appropriate; and the condition of human life which requires labor and material to work on necessarily introduces private possessions.[67]

First of all, his theory assumes a creative, organizational force of the universe, an assumption agonistics and atheists would not make. His theory further assumes a monistic force, and not every religion assumes this either. This premise is important to examine because in American society we should be wary of relying on theories that may stand or fall on a religious assumption.[68] Further, his understanding reflects a concept of Earth as a thing to be improved or as an uncooperative entity to be dominated for the benefit of humankind. Worse, failure to subdue nature was "waste": "[L]and that is left wholly to nature, that has no improvement of pasturage, tillage or planting, is called, as indeed it is, 'waste'; and we shall find the benefit of it amount to little more than nothing."[69] This notion has no validity in science and only makes sense from the perspective of our limited market that puts no price on ecological value, but instead values profit maximization.

Locke's analysis of sufficiency[70] and spoilage[71] was a property theory "based on exploitation that fit neatly into the seventeenth century's conception of nature."[72] Politically, as persons could not take away each other's property without consent, so too was the state limited from taking property without consent.[73] Aside from the value of a system that organizes property relationships and expectations, the paradigm fails in that its premise of "mastering" or "commanding" nature is as absurd as Locke characterized the loss of property as a price of gaining society to be.[74] In our efforts to control nature, we disrupt the very cycles that make continued life possible. The more we attempt to exploit Earth, the more we will experience the negative consequences, which impact our very survival. An obvious example is the use of the atomic bomb—we discovered how to manipulate the power of the atom, but the costs are extraordinary: the loss of lives and communities and ecological balance.[75]

Economically, regulations are appropriate corrective measures because the market does not account for the value of land lying idle.[76] Although wasteful to Locke, a parcel that is "unimproved" may be functioning to balance ecological needs that the market does not recognize in price terms. The Marzullas would argue that the use of a regulation to protect this public interest would still require compensation, but as Professor Butler explains:

By imposing a legal obligation on private landowners to cooperate in preserving common resources, the law would be following some basic principles of economics. . . . [T]his obligation would require landowners to recognize the legitimacy and significance of the public interest in preserving common resources. . . . Recognition of the public interest would, in turn, mean accepting reasonable land use restrictions designed to internalize private land use costs, minimize inefficient land value discounting, and readjust land use practices to reflect present resource conditions and existence and other environmental values. As a general matter, landowners bearing this duty to cooperate should not be able to successfully raise takings challenges to well-tailored and broad-based restrictions when the restrictions leave the landowner with economically viable use and help to preserve common resources that are available for public use either because of the impracticality of recognizing private rights or because of the importance of the resources to the public's survival and well-being.[77]

These concepts are easier to integrate when we relinquish the dominion perspective on Earth and non-human species.
This is ethically necessary because when humans attempt to "master" Earth, which is the source of our continued existence, we reject life-honoring values. Instead, we have to make a good faith effort to value land, water, and air for their life-sustaining characteristics, not just for their use in producing wealth in a capitalist economy.

PART II - USE AND ABUSE OF PROPERTY RIGHTS: ACCUMULATION OF WEALTH IN THE FEW

Although the Marzullas do not question that environmental regulation serves a useful purpose, they do not explain why. For their purposes, this is not necessary because the inquiry is only whether the regulation impacts the economic use of the property, not how much the regulation benefits the property owner as a member of the public. The damage done to the planet as a result of supporting the use of resources to their highest economic use, however, is extraordinary. Also extraordinary are the lengths to which supporters of polluting industries will go to have us believe that people worried about environmental degradation are alarmists without sufficient information.

The level of toxic waste in our land, water, and air is more astounding than one may think. The public relations campaign of polluting industries discredits valuable information and responsible activists. Some newspapers, not coincidentally financially connected to polluting industries, have contributed to this attempt to discredit those who would speak against environmental degradation. Unfortunately, this smoke screen distracts us from a problem as pervasive as "[c]arcinogenic PCBs detectable in mother's milk throughout the world." This poisoning results from dioxin, produced through any processes that burn organic matter in the presence of chlorine or processes where chlorine or bromine are simultaneously present, notably pulp and paper mills so frequently discharging "effluents" into the sources of our drinking water.

Of course, the regulatory system is not perfect and because of our dependence on a market economy, government does participate in the reductionist view that permits life to come with a price tag. Just as prices (heavily discounted) are attached to our rights to a healthy environment, our very own DNA is considered fungible in the course of the Human Genome Project, designed to identify each gene and its function in humans, corporations have applied for patents on "cell lines in women who are genetically engineered to produce lucrative biochemicals in their mammary glands." Attempting to patent the cells of living beings represents the ultimate arrogance of accumulation of what can be considered property, and this kind of exploitation of people is just another reflection of the same arrogance that characterizes fee holders who presume that their liberty to exploit for profit outweighs the interests of others to live in a healthy environment.

Those who wish to ignore the issues of pollution should remember Silicon Valley, number 23 on the Superfund list of sites to clean. In Santa Clara, the groundwater is contaminated with trichloroethylene (TCE) as well as other toxic waste from the computer industry. Computer industry workers' experiences of miscarriages and birth defects as well as Silicon Valley "cancer clusters" cannot be coincidental. Additionally, we should not ignore that we are reaping what we have sown in our excessive consumption of resources in the form of global warming and its far-reaching effects: "[e]ight of the hottest years ever recorded have come since 1980." The undeniable ozone depletion has resulted in the loss of much plankton, for example, which is the "base of the entire marine food chain and a critical supplier of oxygen to the global atmosphere." Furthermore, non-human species suffer for our excesses. The nation's symbol, the bald eagle, is not reproducing well along the coast of Maine, the Great Lakes area, and other shoreline areas because of pollutants present in the eagles' eggs, a result of the poisoned food the eagle consumes. Similarly, here in Florida's third largest freshwater lake, Lake Apopka, chemical contamination from a Superfund site on the shoreline has led to hormonal dysfunction that threatens reproduction of alligators. Since the 1970s, the alligator population in this lake has declined 90 percent. Lake Apopka eggs produced twice as many females as males, which, combined with the evidence of abnormal sexual development and decreased testosterone levels in the males, is consistent with the EPA findings that DDE, a contaminant of Lake Apopka, blocks male hormones by binding to androgen receptors.

Naturally, as all ecologically aware persons know, this is not just affecting reptiles in Lake Apopka. Humans should remember that these high concentrations of chemical contaminants, responsible for abnormal sexual development, are in our food chain, detectable in women's breast milk. This is not simply a matter of protecting animals we humans have some affection for, such as dolphins and bald eagles. This is a matter of recognizing that each species benefits and harms other species, and we must all be educated on how to remain in a balanced and harmonious set of relationships.
Another abuse often overlooked is the issue of who gets to make the land use decisions and whether they are the ones most affected by these decisions. Considering the apparent interest of advocates in the property rights movement in protecting individual freedom, they must recognize the necessity of respecting the individual freedom of others. At the First National People of Color Environmental Leadership Summit in 1991, the participants adopted principles of individual freedom, including that "[e]nvironmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things," and that "[e]nvironmental justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care." If members of the property rights movement do not recognize the freedom of individuals from environmental injustices, then it is fair to question whether hypocrisy marks their movement. Recognizing either of these principles of individual freedom would require fee holders to consider their freedom in relation to the freedom of others. If they want to be paid each time a regulation requires them to refrain from exploiting in particular ways the resources, then are they willing to pay victims of environmental injustice full compensation and reparations for damages as well as quality health care? So far, the environmental and land use disputes in this nation indicate that the answer is no.

The Marzullas are concerned about the burden on the small property owner to fight regulation, but what they do not examine is the difficulty of the average citizen to lobby for or against policies that denigrate the environment. The economic disparities in the United States are stark, an issue almost exclusively ignored in the balancing of burdens in land use and environmental regulation. American households of a net worth of $2.3 million or more have control of almost 40 percent of the nation's wealth; similarly, 20 percent of Americans hold 80 percent of the country's wealth. These are higher percentages than in other industrial nations and point to the hypocrisy of our land of equal opportunity. For the majority of Americans, earning a living wage requires working longer and harder so that people "have less free time for community involvement and grassroots citizen action." Unfortunately, although a majority of us are aware of human's degradation of the planet, industry public relations campaigns have been based in the false assumption that we are "disconnected" from environmental reality. In other words, we are all hallucinating. Even if we have the resources to organize, then, we are distracted by public relations campaigns that minimize who is responsible (and therefore who should bear the financial burden) for environmental problems.

An entire "movement" is an example of one such tactic to distract the public from genuine environmental and land use problems. The so-called "Wise Use Movement" employs Hill & Knowlton public relations to object to environmental and land use regulation while also discrediting environmentalists. To illustrate that this movement is by no means based in any wise use of resources, on the Wise Use agenda at its inception in 1988 were the following:

- rewriting the Endangered Species Act to remove protection from 'non-adaptive species' like the California Condor;
- immediate oil drilling in the Arctic National Wildlife Refuge;
- opening up all public lands to mineral and energy production, including national parks and wilderness areas;
- turning the development of national parks over to 'private firms with expertise in people moving, such as Walt Disney';
- imposing civil penalties against anyone who legally challenges 'economic action or development on federal lands.'

Of most concern should be the last item, which indicates a motive to punish legally-instituted objections to uses of land owned by the government—not privately owned property. The agenda of course represents a view that ignores the public interest in ecologically sound decision making and instead supports profit maximization.

Revealing as well are conference seminars such as those on "Suing Environmental Organizations," reflecting the intent to, according to Ron Arnold, a creator of the Wise Use agenda, sue environmental groups whenever there is a legal reason to do so," such as when an environmental group tells a "lie" causing "economic harm," which Arnold characterizes as a "civil tort." If this is not enough to show how extreme the members of this movement are, at the Wise Use Leadership Conference of 1992, the winner of the "best newcomer" award characterized the Humane Society as a "radical animal rights cult . . . a front for a neo-pagan cult that is attacking science, health, and reason." At the same time, the public relations strategy included fabricating a memorandum on Earth First! letterhead that called for acts of violence against the "mega machine."
Corporate America claims that destruction is a cost of doing business to provide the public with the style of living to which we are accustomed. I find this insulting. We simply have not used the creativity that makes this species special when we claim that the most cost efficient alternatives must involve environmental degradation. For example, instead of using nylon, we could develop a means to use spider's silk or to emulate a spider's silk, which is "stronger than steel and more durable than nylon" according to extensive studies. Many other innovations in technology can mitigate destruction of resources, but unless the public demands that these changes be made, corporations will continue to profit at the expense of health and welfare. The property rights movement exacerbates this dilemma because obtaining compensation for any regulation bearing on economic uses of property discourages regulation that would otherwise promote the health and welfare of the public. Even if more regulation is not the answer, and it may not be, the property rights movement distracts the public debate from generating solutions to the underlying problem: how do we continue to support our economy and society without poisoning ourselves and destroying our habitat? Instead, we are caught up in a debate that simply attacks government and ecological values without acknowledging the valid public interests at issue.

**PART III - HOW PROPERTY RIGHTS CHARACTERS THE PROBLEM**

Many have attempted to explain takings law both as to the theoretical underpinnings as well as to the various approaches of the case law as it has developed. Although the Marzullas seem to be arguing from the premise of equality of opportunity among fee holders, "norms of equality do not help solve increasing pressures on environmental resources; in fact, they can hurt very drastically when what is needed is not equal access but rationing, however rations may be allocated." Additionally, not everyone is entitled under the norms of equality: equal opportunity to acquire rights in land ownership was theoretically achievable for United States' businesses, citizens, and immigrants through government-assisted theft of resources of Indian nations during the pioneer era, but today equal opportunity translates to the wealthy having the opportunity to accumulate more wealth. Fairness must also incorporate consideration of what is fair to communities and the legislative solutions aimed at confronting "changing patterns of resource use." The trouble is, for a norms based rationale, we have to decide what is a "normal" use. Normal should be informed by ecologically sound science, regardless of the impact on profit margins, and the impact on profit margins should not be alleviated by compromising the job security of people of the United States.

*Property Rights* addresses the struggle of the Supreme Court to define when regulatory action will effect a taking in Chapter 3, beginning with the classic *Pennsylvania Coal Co. v. Mahon*, where Justice Holmes stated that "while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking." The Marzullas then survey the cases that have followed to show the various approaches the Court has taken over the years. The authors emphasize the importance of the *Lucas* decision as clarifying a per se rule that "where regulation denies all economically beneficial or productive use of land," then that regulatory action "require[s] compensation without the usual case-specific inquiry into the public interest advanced in support of the restraint." The authors approve of the "tenor" of the decision, which indicated heavy reliance on the "roots of traditional Anglo-American property law and values," but the *Lucas* decision has been ably criticized, which was not alluded to in *Property Rights*.

The Marzullas briefly describe in Chapter 10 several issues that they theorize amount to regulatory takings. For example, un reasonable delay may cause economic harm and impact human health and welfare negatively. Although several cases are cited, no analysis is provided as to how unreasonable delay might effect a taking. *Property Rights* also touches on the ripeness hurdle for property owners in attempting to prove a taking.

Partial takings are defined as "instances where the government takes less than the entire bundle of ownership rights." The authors assert that "[n]o matter how the basic entitlements contained within the bundle of ownership rights are divided and no matter how many times the division takes place, if property rights are taken, then the duty to compensate the owner is triggered." Another partial takings idea evolves from the focus on the question of the "relevant" parcel, which permits a more favorable takings analysis for the property owner since the owner's loss is not spread over the entire parcel owned but magnified with the microscope of the relevant parcel.

*Loveladies Harbor* is an example of this, where the investors owned 250 acres of land in New Jersey for the purpose of developing residential property. After developing 199 acres, the state government, in the wake of the
environmental regulations of the 1970s, denied permits to develop the remaining 51 acres. As a compromise, the state and the property owners agreed that 12.5 acres could be developed if the property owners "created" 12.5 acres of wetland elsewhere. The United States Army Corps of Engineers rejected the plan, and the court later held that the government had deprived the owners of "all economically beneficial use" of the 12.5 acres so that compensation had to be paid. The court found that the 12.5 acres had a value of $2,658,000 as use for residential lots, but that the effect of the regulation and permit denial rendered the value to a mere $12,500 for recreation and conservation uses, so that the government had "virtually . . . eradicated" the value of the 12.5 acres—to Loveladies.

No criticism of environmental regulation would be complete without a consideration of the much-maligned Endangered Species Act. In Chapter 5, the Marzullas question the wisdom of the Endangered Species Act by illustrating some of the burdens placed on property owners by virtue of the regulations. Along with a brief discussion of the Sweet Home decision, the authors characterize federal agencies as interpreting the ESA as an "ecosystem protection program," used by the Fish and Wildlife Service, for example, to "impose[] upon property owners extensive duties to avoid habitat modification which might injure the 'population' of the species. . . . Just how far this federal power may reach—and how it inevitably conflicts with constitutionally guaranteed property rights—may be best understood through a few examples." This language and the examples that follow contribute to what could be considered an alarmist picture of the use of governmental power in the United States because of the inherent assumptions that the property uses discussed are constitutionally guaranteed under the circumstances of each case illustrated. Our takings jurisprudence does not necessarily support these assumptions.

The Marzullas implicitly criticize the criminal provision in the Endangered Species Act, which provides for a general intent requirement that does not require, for example, that a person recognize what he or she shoots, only that the person intended to shoot the animal. The Marzullas raise the example in United States v. St. Onge, where the court rejected the defense of a man who claimed he thought he was shooting a non-endangered elk when in fact he shot a grizzly bear. They then describe the results of 71 of the 86 criminal actions brought by the government between 1988 and 1993:

[F]ines ranging from $25 to $50,000 were levied in fifty nine instances; in twenty one instances, fines were 1,000 or more; fines were suspended in two instances; jail sentences ranging from 10 days to 1,170 days were given in eighteen instances; jail sentences were suspended in two instances; probation ranging from 182 days to 1,825 days was given in thirty three instances.

The Marzullas claim that "a substantial number [of actual prosecutions] arose from habitat modification without any injury to actual plants or animals." This lacks persuasive power in part because of the failure to provide sufficient citation to their claims and because of the omission of contextual information. For example, the statistics on endangered wildlife are omitted. The statistics on the fines levied and jail time imposed are inherently misleading because the reasons for the fines or jail sentences are markedly absent.

Nevertheless, the authors do use interesting examples to highlight their view that the government, by "verbal sleight of hand" is inappropriately restricting "habitat modification" that does not result in a "take" as defined by the statute. In particular, the authors describe the plight of a Florida rancher who was clearing his land and was informed by the Fish and Wildlife Service that he must stop clearing the land because it could result in an incidental take of the Florida scrub jay, although the agency had apparently not indicated whether the scrub jay actually inhabited the rancher's property. Also described is the plight of Chinese immigrant Tuang Ming-Lin, who plowed a field he bought for the purpose of growing Chinese vegetables and was criminally prosecuted under the ESA for destroying holes of the Tipton kangaroo rat, an endangered species. Unfortunately, this kangaroo rat is indistinguishable without DNA testing from the common kangaroo rat, characterized as a pest routinely exterminated. Ultimately, the government dropped its prosecution, but the process exhausted Tuang's funds.

Rather than attack the regulatory scheme as entirely without merit, if we accept the interdependence of all species, working together to preserve diversity has value. Instead, Property Rights highlights the perceived danger of non-domesticated species on the property of humans: without any support, the authors assert that the introduction of timber and gray wolves into the wilderness areas in Idaho, Montana, and Wyoming is causing "a marked increase in predation upon cattle and sheep," but the favored prey of the wolf is deer. Typically, what remains unexamined is the burden
Although the authors criticize the Fish and Wildlife Service for recognizing that encroaching urbanization may and does result in the killing or injuring of an individual belonging to an endangered species, any development of real property, which involves usually the clearing of trees, shrubs, and other various plants, as well as the use of concrete, the residue from paint in the soil, and other impacts on the earth, most certainly affects many specific animals. Protecting species from extinction will require accountability from property owners, specifically, wealthy owners responsible for pollution and irresponsible development.

Also treated in *Property Rights* is a critique of wetlands protection. The authors focus in part on the flexibility of the definition of wetlands, but "scientists and government agencies generally identify wetlands by reference to hydrology (inundated or saturated for at least part of the year), soil types (hydric, i.e. exhibiting anaerobic characteristics consistent with inundation or saturation), and vegetation (hydrophytic, i.e., characteristically growing in wet areas)." Certainly we might assume that inland property is not a wetland, but that property could be within the group of lands that are critical to "flood control, erosion control, freshwater storage, groundwater recharge, nutrient cycling, and water filtering and cleansing functions," as well as supporting the life and reproduction of endangered plants and animals. Yet, wetlands are a classic source of the debate of property protection because private property owners hold as much as seventy five percent of wetlands on the continent. Water's propensity to seek its lowest level creates wetlands, and accordingly the definition is not only flexible, but the area designated as wetland is subject to change.

For example, the authors take issue with the scope of the definition of "navigable waters" as perhaps beyond constitutional limits and rely on the Seventh Circuit's illogical statement that "isolated wetlands" have Sno hydrological connection to any body of water. The Marzullas demonstrate concern about the Army Corps of Engineers having too much power to "exert its authority over isolated wetlands which are both within private property boundaries and have no discernible impact on interstate commerce." The Marzullas also criticize the lack of a clear definition of wetland, which is partly a result of so many agencies having some kind of jurisdiction over protecting wetlands. According to the authors, the lack of a precise definition has the added effect of "inconsistent wetland policies under the Clean Water Act" because "the different statutes seek varying ends and are not integrated to create a harmonious and cohesive wetlands policy." They then go on to describe the difficulties the permitting process presents for individuals because of the "inexact science of defining a wetland and the many conflicting formulas created by the agencies." The Marzullas contend that no justification exists for the Clean Water Act's regulatory burdens where "the activity and its impacts are confined to the boundary lines of the property itself, with no discharge of pollutants or fill material leaving that property." The ecological evidence from scientists suggests that the interconnectedness of our resources would prevent the practical existence of such a hypothetical discharge.

The authors criticize placement of the "square peg of wetlands regulation into the round hole of pollution control," but the authors do not admit to the body of evidence for protecting wetlands and for the consequent importance of protecting all property that serves to clean the groundwater and preserve our potable water sources. Simply put, the wetlands issue illustrates the "Cleopatra's Bathwater" principle: what you drink today could have been Cleopatra's bathwater centuries ago because water is always in motion and interacts with other water sources through rivers, oceans, aquifers, evaporation, and rainfall.

**PART IV - FAILURE OF THE PROPERTY ARCHETYPE**

The Marzullas state that because "a government could easily abuse these civil rights if a citizen's property and livelihood were not guaranteed, the United States Constitution also imposes a duty on government to protect private property rights." I find interesting the lumping in of "livelihood," which enjoys no constitutional protection. If it did, employment at will would be a foreign concept in our law. Of course, characterizing the protection of private property rights as a protection of one's livelihood is part of the claim that it is necessary to the independence of the individual. This kind of analysis can apply only to a small group in our society. Perhaps a concept of property that resonates for each of us, even those of us who do not own real property, can serve as an effective metaphor for the barrier that protects individuals from oppression by the majority.
In discussing what property is, the authors begin with land and mention trade secrets, intellectual property, contracts, money, pension plans, causes of action, business interests, and billboards, with new forms of property being security interests, mortgages, lottery tickets, derivatives, technological discoveries, software and applications, and professional practices. As to water rights, we may have the right to use the water rather than the outright ownership of water, which remains with the government. Nevertheless, "if such rights to use water are condemned, physically appropriated, or destroyed through regulation, the owner of the water rights is protected by the Constitution just as any other property owner."

The authors explain that property is "buildings, machines, retirement funds, savings accounts, and even ideas. In short, property is the fruit of one's labor." Unfortunately, "where the fruits of citizens' labors are owned by the state and not individuals, nothing is safe from being taken by a majority or a tyrant." The Marzullas are concerned that the state will own natural resources to the extent that individuals will not be able to oppose "any infringement on their rights."

If the property rights argument is based in the notion that protection is necessary for the sake of individual autonomy from government, then history again is not necessarily supportive. The creation of property rights itself was not necessarily to serve the autonomy of the individual. As the Anti-federalists recognized, the creation of property rights served to protect mercantilist control, just as the history on the European continent suggests. Property rights cannot successfully insulate the individual in any case because regardless of how much "land" a person owns, one must depend on another at some time:

A proper conception of autonomy must begin with the recognition that relationship, not separation makes autonomy possible. . . . Dependence is no longer the antithesis of autonomy, but a precondition in the relationships—between parent and child, student and teacher, state and citizen—which provide the security, education, nurturing, and support that make the development of autonomy possible.

The interdependence of humans should be uncontroversial, and once we take full account of the scientific evidence supporting the interdependence of humans with all life forms, then the necessity of regulation to limit the inevitable harms associated with exploitation of resources should be self-evident, and taxpayers should not have to pay property owners to recognize this.

If water were the central symbol of property for us rather than land, then what would our society be like? Could we be protecting community as well as individuality? "Water, after all, is in fact the subject of important and valuable property rights, and indeed, concerns about water can substantially modify the rules about land." If the symbol for property were based in water rights rather than land rights, the tendency towards "fixed, stable, absolutist notions" about private property rights very likely would not exist. Because of the "fluid and mobile physical nature" of water, "accommodation and compromise" are more likely where interests conflict.

Where the relevant parcel is beachfront, flood plain, or wetland property, the "collision between private expectations and environmental protection is further exacerbated," however, because land, having stronger rights associated with it, remains the governing metaphor. The emphasis on physical invasions and disruptions of investment backed expectations are functions of our focus on land as the archetype of what property means to us:

There is just something about land that makes you think that when you own it, it is really, really yours. Land stands still and lets you poke a fence into it, and hence it is easier to stake out ownership claims in land than in messier, more communal substances like water. On land we can exclude everybody else and stroll around like lords of the manor.

Because we cannot retain our rights and move to avoid limitations on use of real property, land becomes the object of what is perceived as "confiscatory" regulation.

The more powerful metaphor would be water because we substantially are made of water and we are born into water. Water detracts from the stability valued in land because water's nature is to move and change land. Water is more pervasive than land. Using special photography techniques, Jennifer Greene has shown that a drop of water contains within it multiple layers of waves and that, if peeled like an onion, that drop of water would cover half an acre of
lind.htm

BOOK REVIEW

The water metaphor, however, would not solve the problem of the barrier between the individual and government authority. Water's nature is to connect rather than stand as a barrier. Similarly, air would also not represent in a metaphorical way the barrier that land has come to represent. Nevertheless, a more holistic view of our environment requires that we examine the relationship of land with water and air. Continued reliance on the land metaphor for stability in property rights ignores the scientific reality of the interconnectedness of the elements and species.

PART V - PRACTICAL DIFFICULTIES AND SOLUTIONS

The Marzullas discuss legislative remedies as a means of correcting for the failure of the judiciary to sufficiently restrain agency abuses in regulation by focusing on attempts in 1995 of the Congress to pass legislation on property rights. They additionally suggest that although some states have passed planning bills to promote property rights protection, this legislation does not correct the perceived abuses inherent in the ad hoc approach of the judiciary towards takings law, which renders liability planning a "shot in the dark." The compensation bills attempt to improve the ability to plan for liability by providing bright line rules as to the exact diminution of value required to effect a taking; nevertheless, compensation bills may "disparate the rights of property owners who are the victims of takings that fail to meet the threshold." Property Rights presents the problem in extremes: either to require "condemnation proceedings for any diminution of value at all (even a fraction of a cent), or to permit the government to take everything without compensation." Accordingly, the authors reason that a bright line rule is better than the current state of the law, which is apparently perceived as "no limit on takings at all."

The Marzullas would probably approve of Florida's Private Property Rights Protection Act, which creates a cause of action for property owners where takings law has not expanded enough to provide a remedy to protect a landowner's existing use or a vested right to a specific use of land. This law may be of particular interest to the Marzullas because the Act "compels the parties to pursue settlements quickly because of the Act's ripeness provision." The illustrations of small property owners experiencing harsh economic consequences of regulation indicate a concern on the part of the Marzullas for the fee holder without a litigation fund for these matters. The Act's provision for settlement would mitigate the depletion of funds of fee holders in litigation, but it would also create costs for the tax paying public in the form of compensation where the Constitution does not require it as well as of reticent regulators dropping the ball on land use and environmental issues. The Marzullas respond to the National Wildlife Federation, raising that very issue of the burden on taxpayers, with criticism, however: "[t]heir solution is to refuse to compensate these individuals for takings, concentrating these same millions of dollars of costs upon the few whose property is actually physically taken."

As the Marzullas admit, "a price cannot be placed upon civil rights," yet this begs the question of whether we can place a price on soil or water or human cells. We cannot put a correct number on any of these concepts, but we do in this society where costs and benefits of decisions are measured and corporations budget for liability. Unfortunately, the point of the Marzullas that some are singled out to pay costs inappropriately is not so persuasive. Their point requires the result that no matter what it costs all taxpayers, the government must bear the cost of providing property rights protection that promotes for the few the liberty to exploit. Although not every exploitative use of property creates toxic waste, the logic of the Marzullas' position requires that we compensate even where regulation prohibits toxins entering the environment. Surely there is another means to protect individuals from overbearing government authority than to classify as confiscatory a regulation designed to protect us from carcinogenic toxins.

Unfortunately for small property owners, the cost of litigating a takings claim can range from $50,000 to $500,000- too great for the average citizen to bear without the help of an organization like Ms. Marzulla's. The high cost of litigation may explain why the developments in favor of property rights appear to favor corporate interests. Even if the
BOOK REVIEW

property owner prevails, it is only after years of litigation and then comes the difficulty of collecting.[199] The Marzullas describe the ripeness obstacle for property owners as the courts "rigidly" applying Williamson County[200] so that many cases are dismissed as unripe.[201] This requirement that the property owner start all over again in state court "plays right into the governmental defendant's litigation gamesmanship."[202] The Marzullas explained one creative attempt around the requirement to file in state court as using an allegation of a Sconspiracy” of regulators to take property rather than alleging an actual taking.[203]

The use of regulations to protect all life forms, including human, in the United States should not be likened to an abuse of power in a totalitarian regime, which is starkly different from our society.[204] However, this is precisely what the Marzullas do in the course of this book. The Marzullas assert that "our federal, state, and local governments are regulating property and, in turn, destroying private property rights. As a result, countless individuals all across the country are being singled out to bear the cost of implementing policies that the government is unwilling or unable to bear itself."[205] The use of regulatory schemes to balance burdens among resource users is portrayed as an abuse of power: "the scales of justice are also unfairly tipped in favor of the government when citizens are faced with the threat of losing their property because of regulatory burdens."[206] Although I agree that no regulatory system is perfect and we have much still to do to improve our bureaucracies, property rights activists often reason from a misconception of the meaning of liberty: "[l]iberty never meant the license to do anything at will."[207] This is reflected in Franklin's characterization of private property as "a Creature of Society," where he reasoned that when "public Exingencies" require contributions, such "are not to be considered a Benefit on the Public, entitling the Contributors to the Distinctions of Honor and Power, but as the Return of an Obligation previously received, or as payment for a just Debt."[208]

We in the United States make up only 5% of the world population, but we enjoy the privilege of consuming 40% of the world's produced resources while half of the people living on this planet are undernourished and a fifth of the world population lives in extreme poverty.[209] We Americans have also provided an example of wealth and excess that leads the rest of the world into polluting practices that can do nothing but exacerbate the problems we are experiencing today. The solution lies in moving from "selfish ego-centered behavior to behavior that is eco-centered."[210] We must reinvent ourselves in harmony with the majestic web of nature, and the environmental and land use regulations that are ecologically based are steps in the direction of this reinvention. The attempts of the property rights movement to distract us from this process push us—not just the snail darter and the spotted owl—towards extinction. A holistic view of the world turns on the understanding that "the whole affects the parts as the parts affect the whole."[211] Diversity is not to be underrated: "[a]ny smart banker will recommend a diversified portfolio to hedge against risk."[212] I heartily agree that protecting individual rights against the tyranny of a majority is critical to the manifestation of the dream of a democracy. At the same time, the centralized accumulation of resources in the small wealthy group whose goal is the bloating of the bottom line has degraded our environment and inappropriately directed our land use decisions to such an extent that regulation has provided a useful response. Appropriate regulation properly enforced would have precluded a disaster like Love Canal from occurring, and I should think all property rights activists would agree that such a result has value. The fact of regulation is not the evil to be addressed—the question is whether regulation furthers life-honoring values that strike a balance between community and individual needs.

____________________________________

[1] I use quotes because being objective is an impossible task in any purist sense of the word. We are a product of our culture, and as such, we bring with us various assumptions to any analysis. Accordingly, I believe we each must be forthright about our own biases, which requires an honest and thorough examination of the premises from which we reason. I operate from a bias in favor of both the conservation as well as preservation of life, which I define broadly to include life forms otherwise known as "resources," balanced in relation to human health (physical, mental, emotional, and spiritual) needs. See Heather Fisher Lindsay, Balancing Community Needs Against Individual Desires, 10 J. LAND USE & ENVTL. L. 371 (1995). This may not be controversial in itself, but of course the standards to be applied to the balance become the source of much disagreement among those who call themselves environmentalists as well as between those persons and the persons who would not so identify themselves. Accordingly, what some may call "wise"
development, I might call exploitative of people as well as other life forms. Return to text.


[3] This includes the individual's interest in living in a healthy environment, regardless of whether the individual has ownership rights in real property. Appreciating this consideration requires that we recognize that such an interest cannot be protected by an individual alone because one would have to control all property for full protection of the interest. A community effort is necessary. Where the regulatory system fails, just as the Marzullas suggest, lobbying for legislative solutions may be appropriate. On the other hand, the answer may not be more rules. See Sam Smith, How Not to Repair America, UTNE READER, Sept.-Oct. 1997, at 65, 66 ("Laws and regulations should be handled like prescription drugs—they are useful, sometimes life-saving, treatments that should be administered sparingly because of numerous unforeseen side effects."). Return to text.

[4] This notion follows from the work of James Madison, whose plantation home is featured on the cover of PROPERTY RIGHTS. As summarized by one scholar, Madison emphasized the protection of property rights because he reasoned that:

The free exercise of men's different and unequal faculties for acquiring property was a basic part of their liberty. From the right to exercise these faculties followed the right to unequal amounts of property acquired, and the "rules of justice" required the protection of these, as all, individual rights. The majority had the final power in a republic, but wise policy would be made according to the rules of justice and consideration of the public good, not according to the "interests" of the majority. . . . The majority must be prevented from misguided attempts to oppress the minority on the grounds of liberty as well as justice: a society which could not secure individual rights would destroy its own liberty. Finally, the rights the majority were most likely to attack, and which were central both to man's liberty and to the stability of society, were the rights of property. It followed that the first object of republican government was to protect the rights of property.

JENNIFER NEDELSKY, PRIVATE PROPERTY AND THE LIMITS OF AMERICAN CONSTITUTIONALISM: THE MADISONIAN FRAMEWORK AND ITS LEGACY 38 (1990). Although "Madison did not use the term property to stand for all individual rights (as in the Lockean sense of life, liberty, and estate), . . . when Madison spoke of individual rights, it was property he had in mind." Id. at 23. The Marzullas are no doubt influenced by the Madisonian legacy of the concept of property: "Understandably, where the fruits of citizens' labors are owned by the state and not by individuals, nothing is safe from being taken by a majority or a tyrant." NANCIE & ROGER MARZULLA, PROPERTY RIGHTS: UNDERSTANDING GOVERNMENT TAKINGS AND ENVIRONMENTAL REGULATION 2 (1997). The Marzullas quote Noah Webster as stating: "Let the people have property and they will have power—a power that will forever be exerted to prevent the restriction of the press, the abolition of trial by jury, or the abridgment of many other privileges." Id. at 3. I question whether property, a limited power source, can effectively accomplish these admirable goals; if so, is it in fact used for these admirable ends; further, why do we not fashion another means to accomplish the protection necessary to the dream of freedom many of us have yet to see manifest. Return to text.

[5] Jennifer Nedelsky, commenting on the scholarly work on takings jurisprudence, has stated that:

The literature is concerned not with limits to governmental power, but with the calculation and rationale for compensation. . . . The question "What is such a serious interference with property rights that it constitutes a taking?" (and thus requires compensation) becomes converted to "What sort of thing do we think should be compensated and hence called a taking?" This inversion reflects the fact that the sole issue has become compensation, not limits on governmental power.

NEDELSKY, supra note 4, at 233-34. This dynamic is apparent in the Marzullas' work: "[t]hrough its ability to regulate, government 'takes' these uses and benefits to property it needs, but because title to the property stays with the owner, the government often refuses to pay for it on the grounds that no taking has occurred." MARZULLA & MARZULLA, supra note 4, at 163. This frustration is a recurring theme in the book and indicates that no matter what regulation a government attempts to devise for the purpose of balancing many competing interests and needs, those who have purchased private property rights will have the right to compensation under the Marzullas' theory. Although concern
over the lack of bright line rules is understandable, see id. at 24, employing such an extreme interpretation of the Takings Clause compromises the government's duty to protect the health and welfare of the citizens. Return to text.

[6] For example, the Marzullas present such a scenario with the story of Tuang Ming-Lin. See MARZULLA & MARZULLA, supra note 4, at 84. Return to text.

[7] I appreciate that small property owners suffer harsh effects when they are without sufficient funds to manage the complicated regulatory and litigation processes. Also important is addressing the actions of the frequently disguised moneyed interests that drive the public relations and lobbying on these issues. Return to text.


[9] Id. Return to text.


[15] A significant exception, the military's excesses have had a devastating effect world wide on civilian health, the health of the planet, and on the health of the very soldiers themselves, as seen in the Agent Orange litigation by Vietnam veterans and their families, for example. See JONI SEAGER, EARTH FOLLIES 14-69 (1993), for a number of examples nationwide and world wide in addition to Agent Orange effects; see also Lindsay, supra note 1, at 392-95. Return to text.


[17] See id. at 23-41. Return to text.

[18] See id. at 43-69. Return to text.


[20] See id. at 94-98. Return to text.


[22] See id. at 111-24. Return to text.

[23] See id. at 125-41. Return to text.


[25] See id. at 163-77. Return to text.

[26] See id. at ix. Return to text.

[27] Id. Return to text.

[28] Id. at ix, x. Return to text.
BOOK REVIEW

[29] *Id.* at x. Perhaps this fear is shared by the fifty-two percent of Americans who responded affirmatively to a Gallup poll on whether the federal government is so "large and powerful that it poses a threat to the rights and freedoms of ordinary citizens." Smith, *supra* note 3, at 65. Return to text.


[31] *Id.* at xiii-xiv. Return to text.

[32] *Id.* at xiv. Return to text.

[33] *Id.* Return to text.

[34] *Id.* at 1. Return to text.


[36] The United States was shaped by the cultural heritage of Indian Nations as well as those of England and Europe. See, e.g., PAULA GUNN ALLEN, SACRED HOOP 216-17 (1992) (describing the American norms that are attributable in part if not in full to Indian influence, such as child-rearing practices, frequent bathing, sexual openness, sense of humor, and disdain of the authoritarian); see also BRUCE E. JOHANSEN, FORGOTTEN FOUNDERS 4-6 (diet, medicine, clothing, water transport, vocabulary, music, bathing), 37 (war tactics), 43 (oratory) (1982). Return to text.


[39] See MARZULLA & MARZULLA, *supra* note 4, at 11. The focus on Madison is also apparent in the cover of the Marzullas' book, which features an illustration of Madison's plantation. Return to text.


[41] This is a common assumption but not inevitable: "How can you buy or sell the sky, the warmth of the land? The idea is strange to us. If we do not own the freshness of the air and the sparkles of the water, how can you buy them?" ED MCGAA, EAGLE MAN, MOTHER EARTH SPIRITUALITY xi (1990) (quoting from Chief Seathl (Seattle) in response to President Franklin Pierce's desire to buy property of the Suwamish Tribe). We have a need to use land, water, and food sources, but the creation of property rights has no necessary relationship to these needs, which could be served by usufructuary rights. Beyond survival needs, we interact with Earth's "resources," such as rivers and mountain ranges, for spiritual enlightenment and emotional pleasure. Again, having use rights rather than strictly private property ownership rights would serve and do serve these needs (for example, we visit National Parks for prayer and pleasure, owned by the government, not by private parties). Even industry could continue with use-based rights, but financial planning would involve more risk because the rights in the property would not weigh as heavily as under our current system. Return to text.


[47] *Id.* at 1136. Return to text.
[48] See id. at nn.274-338 and accompanying text. Return to text.


[50] See id. at 11. Return to text.

[51] See id. at 11, 24. Return to text.

[52] Id. at 15. Return to text.

[53] See id. at 100. Return to text.

[54] See id. at 101. Return to text.

[55] The "self-evident truths" indicated that "men" are created equal; "if they are white" being so self evident as not to need mentioning. The female sex was excluded entirely from holding such rights, but in the Iroquois society, the checks and balances of political power included a balance between the sexes: the representatives were men, but they were nominated by their female relatives and could be removed by the female relatives for misconduct. See id. at 26-29; see also ALLEN, supra note 36, at 32-35. Allen also reports that in the Mohawk nation, a member tribe of the Iroquois confederacy, women made all political decisions although the chiefs (men) spoke for the women. See id. at 201-02. Return to text.

[56] See JOHANSEN, supra note 36, at 108. Return to text.

[57] Id. at 104 (quoting Franklin). Return to text.

[58] Id. at 108. Return to text.

[59] MARZULLA & MARZULLA, supra note 4, at 1. Return to text.

[60] Egalitarian distribution of property was the system of the Iroquois in that the women of each family held title to all goods for the purpose of allocating those goods among everyone; additionally, those holding the political power gave possessions away to other members of the tribe to avoid concentration of power, which would void approval by the governed. See JOHANSEN, supra note 36, at 29, 39. The property distribution system was considered egalitarian by both Franklin and Jefferson, who believed that the distribution of wealth as well as power based in public opinion precluded oppressive government among Indian societies. See id. at 103. Return to text.

[61] Donald W. Large, This Land is Whose Land? Changing Concepts of Land as Property, 1973 WIS. L. REV. 1039, 1041 n.13 (1973) (quoting Heinmot Tooyalatket (Chief Joseph)); see also id. at n.15 ("one does not sell the earth on which the people walk," Tashunka Witko (Crazy Horse)). Return to text.


[63] See Lindsay, supra note 1, 378-81; see also Duncan, supra note 40, at 1118-1120 (Baconian influence on Locke's development of property theory). Return to text.

[64] See Duncan, supra note 40, at 1118. Return to text.

[65] See Lindsay, supra note 1, at 374-78 (discussing how the Judeo-Christian tradition encourages an ecologically unsound dominion perspective); cf. Rose, supra note 35, at 341 (the Enlightenment was characterized by hierarchical views placing human above other life forms on Earth); cf. Duncan, supra note 40, at 1095 (humans asserting dominion since "biblical" times). Return to text.

American society traditionally viewed land as an economic resource—a commodity to be exchanged in the marketplace. Current scientific understandings of our ecosystem clearly indicate that this view is myopic. . . Proponents of economic theory generally recognize the need to consider costs and benefits in making resource allocation decisions. Yet, in applying this principle to private land use choices, many seem to focus only on traditional economic factors having an established exchange value in the marketplace. The ecological value of land is left out of the traditional land use equation.

Id. at 655-56. Return to text.


[68] This is not to say that there is no place for spirituality in our theories, but the spiritual concept must have a social utility: for example, refraining from murder. Of course, the debate does not end there as we will not all agree on what has social utility. Return to text.

[69] Id. at 1120-21 (quoting JOHN LOCKE, TWO TREATISES OF GOVERNMENT, ¶ 42 (Thomas I. Cook ed., Hafner Publishing Co. 1995)(1689)). Return to text.

[70] "[O]ne obtains property in an object, or in land, by investing labor and removing the property from the state of nature, 'at least where there is enough and as good left in common for others.'" Id. at 1121 (quoting John Locke, Two Treatises of Government P 27). Return to text.

[71] The owner of a good must use it before it spoils. Hoarding of goods that were not durable led to spoilage and therefore would not be protected property accumulation, but accumulating wealth in the form of a durable good, such as money, does not offend the spoilage principle. See id. at 1122. Return to text.

[72] Id. at 1123. Return to text.

[73] See id. at 1124. Return to text.

[74] See id. at 1124. See also id. at 1127. (Locke reasoned that preservation of property rights is the incentive for "men" to enter society; accordingly, it is absurd for societal existence to require a loss of property rights.) Return to text.

[75] See SEAGER, supra note 15, at 43-69. One of the most tragic examples of the cost of "controlling" nature comes in the form of "jelly-fish babies." These deformed infants, having no shape recognizable as human and possessing no eyes, are born on the Marshall Islands, where nuclear testing by the United States poisoned the environment. The infants do not survive more than a few hours. See id. at 65-66. Return to text.

[76] See Butler, supra note 66, at 648-51. Return to text.

[77] Id. at 651. Return to text.

[78] See Duncan, supra note 40, at 1113-15; see also Lindsay, supra note 1, nn.49-60 and accompanying text. Return to text.

[79] See Duncan, supra note 40, at 1118; see also Lindsay, supra note 1, at 378-79. Return to text.

[80] See LOIS MARIE GIBBS, DYING FROM DIOXIN 157 (1995) (describing the stereotypes used by industry to minimize the activists' efforts like Ms. Gibbs, a survivor of Love Canal and organizer for Citizens Clearinghouse for Hazardous Waste). Love Canal was a community in Niagara Falls that was a dumping site for Hooker Chemical and Plastics Corporation in 1947; the 20,000 tons of dumped carcinogens leaked and migrated in the 1970s, ultimately forcing the evacuation of the already poisoned residents. See RUSSELL MOHIBER, CORPORATE CRIME AND VIOLENCE 267-76 (1988). "One woman living in the area had three successive miscarriages before giving birth to a child. The baby was born with three ears." Id. at 273. Return to text.
[81] As an example, before Rachel Carson's book SILENT SPRING was published, Velsicol chemical company pressured the publisher to change the work or refuse to publish it; publication led to a PR campaign to discredit Carson. See JOHN C. STAUBER & SHELDON RAMPTON, TOXIC SLUDGE IS GOOD FOR YOU 124 (1995). The authors also describe "green washing," an attempt by polluters to paint the false image of themselves as responsible to the environment. See id. at 125-26. Return to text.

[82] See GIBBS, supra note 80, at 281-83 (focusing on journalist Keith Schneider for the New York Times, who admitted to fabricating the comparison that dioxin is "no more risky than spending a week sunbathing," which he had attributed to "experts" in one of his articles). The information came from Vicki Monks' American Journalism Review article in 1993, which also identified the Arizona Republic and Indianapolis Star, owned by Dan Quayle's family; the Times Mirror Company, owning the Los Angeles Times; the Chicago Tribune; the Washington Post; and the New York Times as connected to paper and timber companies that have taken editorial positions supporting "relaxed dioxin standards." Id. at 283. Return to text.


[84] GIBBS, supra note 80, at 35-36 (explaining the relationship between PCBs and dioxin). According to an EPA reassessment in 1994, dioxin is the leading cancer causing chemical for the general population; dioxin accumulates in biological tissues, with the average level of accumulation being "at or just below the levels that cause some adverse health effects," which include "suppression of the immune system; reduced testosterone levels, which affects fertility; and reduced glucose tolerance, which increases the risk of diabetes;" and the principle sources of dioxin are "combustion and incineration, chemical manufacturing, pulp and paper mills, metal refining and smelting," and soils and sediments contaminated by dioxin. Id. at 31. Return to text.

[85] As one commentator has stated, "Our policy approach has also been fragmented through a focus on individual species rather than on the matrix of relationships among species within ecosystems. . . . These fragmented approaches to preserving biodiversity have been ineffective because they reflect too sharp a distinction between public and private property, and unrealistic distinctions among species." Evan van Hook, The Ecocommons: A Plan for Com mon Property Management of Ecosystems, 11 YALE L. & POL'Y REV. 561, 567-68 (1993). Additionally, despite President Clinton's characterization of our environmental laws as a "tightly woven' web . . . to protect biodiversity," our regulatory system can be said to be a "patchwork of halfway measures, interstitial tinkering, and missed opportunities for conserving biodiversity." Bradley C. Karkkainen, Biodiversity and Land, 83 CORNELL L. REV. 1, 6 (1997). Return to text.

[86] For example, a member of a class action against a polluting industry might receive a check for several thousand dollars after years of litigation that does not end the pollution (because that has no economic utility) but instead puts a price on that person's priceless right to live in an area uncontaminated by carcinogens. Return to text.

[87] Of course, this is just a new variation on an old theme. African slavery is an example of not only human beings, but a living culture, reduced into monetary terms. Prostitution and pornography are examples of how sexuality has a price tag. Return to text.

[88] AUSUBEL, supra note 83, at 209. Return to text.

[89] See id. at 14. Return to text.

[90] See id. Return to text.

[91] Id. at 179. Return to text.

[92] Id. Return to text.

[93] See GIBBS, supra note 80, at 130. Return to text.
After studies of alligator eggs and young, scientists found that 72% of the embryos from Lake Apopka died as compared with a 48% rate of embryo death in eggs from an uncontaminated lake. See id. at 129. More striking was the infant death rate: 41% for Lake Apopka alligators as compared to 1% for the control group. See id. The baby alligators were studied through the six month period after hatching.

Turtles and other reptiles in the Lake Apopka also suffered abnormal sexual development compromising reproductive capacity. See id.

Illustrating this point is the fact that the title was a source of contention between the authors and representatives of the Water Environment Federation, which is dedicated to transforming the image of sewage sludge as nontoxic into the bland reality of mere "biosolids." See id. at 100. When the authors learned that Powell Tate, a "blue-chip" Washington-based PR/lobby firm that specializes in public relations around controversial high-tech, safety, and health issues, was managing the campaign for Water Environment Federation, the authors attempted to get some information from the taxpayer funded group. See id. at 101. Requested strategy documents, memos, and opinion surveys were unproduced despite the proper request under the Freedom of Information Act. See id.

Arnold is quoted as saying that "We intend to wipe out every environmental group, by replacing it with a Wise Use group." Id. at 141. Perhaps law suits won't be enough: "Former Interior Secretary James Watt (who in 1996 pleaded guilty to trying to influence a Federal grand jury) told a gathering of cattlemen in June 1990, '[I]f the troubles of environmentalists cannot be solved in the jury box or at the ballot box, perhaps the cartridge box should be used.'" Id. Perhaps the PR executives like Frank Mankiewicz, vice-chair of Hill & Knowlton, are correct that no violence is necessary from wealthy interests impacted by environmental policy: "The big corporations, our clients, are scared shitless of the environmental movement. . . . The corporations are wrong about that. I think the companies will have to give in only at insignificant levels. Because the companies are too strong, they're the establishment. The environmentalists are going to have to be like the mob in the square in Rumania before they prevail." Id. at 123.
See id. Return to text.

See Lindsay, supra note 1, at 388-92, for some examples of this claim in action. See generally MOKHIBER, supra note 80, for examples of corporate excesses that follow from the assumption that economic benefits from dangerous business practices outweigh the costs borne by our communities and families. Return to text.

AUSUBEL, supra note 83, at 236. Return to text.


See Lindsay, supra note 1, at 387-88 and sources cited therein. Return to text.

Rose, supra note 114, at 1149. Return to text.

See id. at 1129-30 (discussing normative thesis). Return to text.

I recognize that what I am suggesting is a redistribution of wealth, which is clearly contrary to James Madison's vision of the protection of property rights. Return to text.

MARZULLA & MARZULLA, supra note 4, at 23-41. Return to text.

260 U.S. 393 (1922). Return to text.

Id. at 415. Return to text.

MARZULLA & MARZULLA, supra note 4, at 23-41 (discussing per se takings, Penn Central's equitable factors, and temporary takings). Return to text.

Id. at 27 (quoting Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1015 (1992)). Return to text.

MARZULLA & MARZULLA, supra note 4, at 27. Return to text.


MARZULLA & MARZULLA, supra note 4, at 157-61. Return to text.

See id. at 157. Return to text.


[130] MARZULLA & MARZULLA, supra note 4, at 158. Return to text.

[131] Id. Return to text.


[133] Loveladies Harbor Inc. v. United States, 21 Cl. Ct. 153 (1990); see MARZULLA & MARZULLA, supra note 4, at 60. Return to text.

[134] I put this word in quotes to call attention to human arrogance in assuming we have the capability to replicate what took Earth multiple human lifetimes to generate. See Lindsay, supra note 1, at 381 and sources cited therein on the fallacy of human's ability to create water sources. Return to text.

[135] Loveladies Harbor, 21 Cl. Ct. at 160. Return to text.


[137] Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687 (1995). The impact of the Supreme Court's decision in March 1997 of Bennett v. Spear, 550 U.S. 154 (1997) is not analyzed in PROPERTY RIGHTS. The Spear decision has been characterized as something of a victory for the property rights movement. See Robert S. Nix, Bennett v. Spear, Justice Scalia Oversees the Latest "Battle" in the "War" Between Property Rights and Environmentalism, 70 TEMP. L. REV. 745, 775 (1997). Nix characterizes the decision as "a necessary outcome achieved purely by balancing the political interests," and a result driven by the effect of Sweet Home reinforcing a regulatory scheme that "imposes an unfairly high proportion of the cost of species protection on private landowners." Id. at 772. Return to text.

[138] Id. at 81. Return to text.

[139] See Lindsay, supra note 1, at 397-99. Return to text.


[141] See MARZULLA & MARZULLA, supra note 4, at 77. The tone of the passage indicates that the Marzulls view the result harsh, but they omit a full discussion of the case so it is difficult to judge whether the circumstances warranted conviction. Having grown up in a family of hunters, I gravely doubt the defendant could have honestly believed he was aiming at an elk, quite a different animal from the grizzly. In any case, if he was uncertain about his target, responsible hunters would have advised him to refrain from shooting. Return to text.

[142] Id. at 78. They do not provide citation to their source for this information. Return to text.

[143] Id. Return to text.

[144] Id. at 81-82 Return to text.

[145] See id. at 82. Return to text.

[146] See id. at 84. Return to text.

[147] Id. at 85. Return to text.

[148] Id. Return to text.

[149] See id. at 83-84. Return to text.

[150] See id. at 43-69. Return to text.


[153] See Karkkainen, supra note 85, at 63; see also Lazarus, supra note 113, at 192-93. Return to text.

[154] See Duncan, supra note 40, at 1131. Return to text.

[155] MARZULLA & MARZULLA, supra note 4, at 45. The Marzullas give the definition as "all interstate waters, including interstate wetlands; all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; all impoundments of water that fit these definitions; tributaries of any defined waters; the territorial seas; and wetlands adjacent to waters, other than those adjacent to other wetlands." Id. Return to text.

[156] See id. Return to text.

[157] Id. at 46 (quoting Hoffman Homes Inc v. EPA, 961 F.2d 1310, 1314, vacated 975 F.2d 1554 (7th Cir. 1992)). I describe this as illogical because of the inherent interconnectedness of all water and the land and air through which it moves. Return to text.

[158] Id. Return to text.

[159] See id. at 47-48 Return to text.

[160] Id. at 48. Return to text.

[161] Id. at 50. The trials of a Pennsylvania dairy farmer attempting to complete the permitting process is discussed to illustrate the point. See id. at 50-53. Return to text.

[162] Id. at 55. Return to text.

[163] Id. at 43. Return to text.


[165] MARZULLA & MARZULLA, supra note 4, at 2. Return to text.

[166] See id. at 11-21 Return to text.

[167] See id. at 13. Return to text.

[168] See id. at 18. Return to text.

[169] Id. Return to text.

[170] Id. at 2. If this is so, then why are employees not accorded property rights concerning the fruit of their labor—the product or the wages? Employees have no guarantee they will be working the next day. With "corporate downsizing" and the concomitant layoffs, people all over the United States have suffered job loss through no fault of their own. Should we raise unemployment compensation, make it available in a lump sum that is the value of what the person could have earned had they worked through retirement (the full economic use of their labor)? If we follow the logic of the Marzullas, we should also protect the fruit of people's labor even when that labor is not land, just as the Marzullas say that "property is more than just land." Id. I suspect that Mr. Marzulla's clients would object to this result. Return to
See Rose, supra note 35, at 335-38. Return to text.

Rose, supra note 35, at 351. Return to text.

Lazarus, supra note 113, at 192. Return to text.

Rose describes land as the "metaphor" for property. Id. Return to text.

See AUSUBEL, supra note 83, at 222. Return to text.

See id. at 214. This photography method is precise enough to show the extraordinary sensitivity of water to pollution. Comparing photographs of healthy water and polluted water revealed a "radiant mandala with tendrils extending like an exploding star or a sand dollar. It has the pattern of a rosette. The other picture is contracted and depressed, a shadow of the former. It lacks the rosette imprint." Id. at 220. The latter picture is of polluted water, and the technology has revealed that higher concentrations of pollution disrupts the surface tension of water to such a degree "that no patterning shows on the boundary surfaces, indicating lost vitality." Id. Use of this technology has led to drastic changes in the European soap industry because of the evidence that laundry detergent was destroying the vitality of water. See id. Return to text.

See id. at 214. Return to text.

See id. at 216. Return to text.

See MARZULLA & MARZULLA, supra note 4, at 170-74. Return to text.

These require assessments of whether state laws and regulations could result in taking of private property. See id. at 172. Return to text.

Id. at 172-73. Return to text.

See id. at 174-76. The Marzullas recognize the weakness of such legislation in that bright line rules are inherently arbitrary. See id. at 175-76. Return to text.

Id. at 175. Texas' property rights protection is discussed as the "most comprehensive property rights legislation to date." Id. at 173. Return to text.
[192] Id. Return to text.


[195] Id. at 271, 264-65 nn.150-53. Return to text.

[196] MARZULLA & MARZULLA, supra note 4, at 174. Return to text.

[197] Id. at 176. Return to text.

[198] See id. at 164. Naturally, the costs of litigating in favor of regulation or lobbying for more protection are also prohibitively high for the average citizen, but this cost is not factored into the Marzullas' analysis. Return to text.

[199] See id. at 143-44 (illustrating with examples). Return to text.

[200] Williamson County Reg'l Planning Comm'n v. Hamilton Bank, 473 U.S. 172 (1985) (holding that a claim is not ripe for federal court review if (1) the property owner had not obtained a "final decision" from the applicable administrative agency; and (2) the property owner had not first filed the claim in state court to challenge the government action). Return to text.

[201] See MARZULLA & MARZULLA, supra note 4, at 145. Return to text.

[202] Id. Return to text.


[205] MARZULLA & MARZULLA, supra note 4, at 163. Return to text.

[206] Id. at 164. Return to text.

[207] ATTENBOROUGH, supra note 2, at 38. Return to text.

[208] JOHANSEN, supra note 36, at 104. Return to text.


[210] Id. at 238. Return to text.

[211] Duncan, supra note 40, at 1130. Return to text.

[212] AUSUBEL, supra note 83, at 42. Return to text.
I. FEDERAL CASES


On May 18, 1998, the Supreme Court, in a unanimous decision written by Justice Breyer, ruled that the controversy raised by the Sierra Club, dealing with the U.S. Forest Service's Land and Resource Management Plan, was not yet ripe for judicial review and remanded it for dismissal.\[1\] In accordance with the National Forest Management Act of 1976 (NFMA), the U.S. Forest Service developed a Land and Resource Management Plan for Ohio's Wayne National Forest.\[2\] This plan sets logging goals, selects areas best suited for timber production, and determines which methods of timber harvest are appropriate for this area.\[3\] It does not, however, authorize the cutting of any trees.\[4\] The Sierra Club challenges this plan on the grounds that it permits too much logging and too much clearcutting in the forest.\[5\] The District Court granted summary judgment to the Forest Service, holding that the determinations made by the Forest Service were all arrived at lawfully.\[6\] The Sixth Circuit Court of Appeals reversed, finding the claim justicable and "ripe for review."\[7\]

The Supreme Court cited several reasons that this claim was not ripe for judicial review. First, the Court found that withholding review would not cause the plaintiffs significant "hardship" because the plan does not create adverse legal effects such as stripping plaintiffs of their right to object to trees being cut or creating a legal right to cut trees.\[8\] Also, delaying review does not cause the Sierra Club significant practical harm because the Sierra Club will still have the opportunity to bring action when the harm is more imminent and certain.\[9\] Second, court review at this time could interfere with the procedures Congress set forth for the Forest Service to arrive at logging decisions such as later plan revisions before and after implementation.\[10\] Third, the Court felt it would benefit from further factual development of the issues in question, including a more focused logging proposal for particular sites.\[11\] In addition, the Court noted the fact that Congress did not provide for pre-implementation judicial review of Forest Service's land resource management plans, but did instruct courts to review other environmental rules and impact statements before enforcement, giving the impression that any pre-implementation challenge of this plan would not be ripe for judicial review.\[12\]

Coastal Petroleum Co. v. Chiles, 118 S.Ct. 2369 (1998)

On June 28, 1998, the U.S. Supreme Court denied certiorari to Coastal Petroleum's challenge to a state law that could keep them from drilling for oil or natural gas off Florida's shores.\[13\] This company has been litigating for more than fifty years over leases it holds on submerged lands along approximately 425 miles of Florida's Gulf coast from Apalachicola to Naples and wants to force the state to either permit drilling or else pay royalties it expected to receive on oil Coastal believed it would find. This decision lets stand a ruling by the Florida First District Court of Appeal last year, which held that the state had no obligation to pay royalties to Coastal Petroleum.\[14\]

National Mining Association v. United States Army Corps of Engineers, 145 F.3d 1399 (D.C. Cir. 1998)

On June 19, 1998, the U.S. Court of Appeals for the D.C. Circuit, affirmed a district court ruling and held that the Army Corps of Engineers' Tulloch rule\[15\] subjecting any redeposit, including incidental fallback, during dredging operations to permit requirements of the Clean Water Act exceeded the Corps' authority under the Act to regulate discharge, defined as any "addition" of pollutant to navigable waters.\[16\] This was in light of the fact that incidental fallback was part of the net withdrawal of material from water rather than an "addition" and regardless of exemptions to the Act's permitting requirements for discharges of dredged material for specified activities.\[17\] The Army Corps' strongest here came from Rybachek v. EPA\[18\], which dealt with miners excavating dirt and gravel from waterways, extracting gold from it, and releasing the leftover material back into the water. The Ninth Circuit said this leftover
material was a pollutant and "its resuspension [in the stream] may be interpreted to be an addition of a pollutant under the Act."[19] However, the appellants identified the discharge here as the discrete act of dumping leftover material into the stream after processing rather than imperfect extraction and so the D.C. Circuit does not accept this argument.[20] The appeals court further held that a facial challenge to an administrative regulation as being inconsistent with governing statutory law was subject to the deferential Chevron test[21] as opposed to the tougher standard for facial challenges requiring a showing that no set of circumstances exists under which the rule would be within the agency's authority.[22] The D.C. Circuit noted that the Supreme Court has never adopted a "no set of circumstances" test to assess the validity of a facially inconsistent regulation and so neither would this court.[23] Finally, the D.C. Circuit held the district court was correct in giving nationwide application to the permanent injunction against enforcement of the Tulloch rule, after the court found it to be facially illegal, in order to avoid a flood of duplicate litigation.[24]

II. NOTABLE BILLS PASSED DURING THE 105TH U.S. CONGRESS[25]

H.R. 408 International Dolphin Conservation Program Act
Public Law 105-42

This bill was passed to amend the Marine Mammal Protection Act of 1972 to support the International Dolphin Conservation Program in the eastern tropical Pacific Ocean. The purpose of this Act was to give effect to the Declaration of Panama, signed on October 4, 1995, including the establishment of the International Dolphin Conservation Program relating to the protection of dolphins and other species, and the conservation and management of tuna in the eastern tropical Pacific Ocean. Also, this Act recognizes that nations fishing for tuna in this region have achieved significant reductions in dolphin mortality associated with that fishery and eliminates the ban on imports of tuna from those nations that are in compliance with the International Dolphin Conservation Program.

H.R. 449 Southern Nevada Public Land Management Act of 1998
Public Law 105-263

This Act provides for the orderly disposal of certain Federal lands in Clark County, Nevada and for the acquisition of environmentally sensitive lands in the State of Nevada. Congress found that the Bureau of Land Management had extensive land ownership in small and large parcels interspersed with or adjacent to private land in the Las Vegas Valley, Nevada, making many of these parcels difficult to manage and more appropriate for disposal. In order to promote responsible and orderly development in the Las Vegas Valley, the Federal Government, based on recommendations made by local government and the public, decided to sell certain of those Federal lands. Congress also understood that the Las Vegas metropolitan area is the fastest growing urban area in the United States, which is causing significant impacts upon the Lake Mead National Recreation Area, the Red Rock Canyon National Conservation Area, and the Spring Mountains National Recreation Area, which all surround the Las Vegas Valley. Because of this, the Act additionally provides for either Nevada or the local government with jurisdiction over a piece of land to obtain any parcel, before it goes up for disposal, to be used for public purposes under the Recreation and Public Purposes Act.

H.R. 629 Texas Low-Level Radioactive Waste Disposal Compact Consent Act
Public Law 105-236

Congress gave its consent to a waste disposal compact between Texas, Maine, and Vermont. The party states recognize a responsibility for each state to seek to manage low-level radioactive waste generated within its boundaries, pursuant to the Low-Level Radioactive Waste Policy Act, as amended by the Low-Level Radioactive Waste Policy Amendments Act of 1985. They also recognize that the United States Congress, by enacting the Act, has authorized and encouraged states to enter into compacts for the efficient management and disposal of low-level radioactive waste. It is the purpose of this compact to provide the framework for such a cooperative effort; to promote the health, safety, and welfare of the citizens and the environment of the party states; to limit the number of facilities needed to effectively, efficiently, and economically manage low-level radioactive waste and to encourage the reduction of the generation of that waste; and to distribute the costs, benefits, and obligations among the party states.

H.R. 1481 Great Lakes Fish and Wildlife Restoration Act of 1998
Public Law 105-265
RECENT DEVELOPMENTS

The Great Lakes Fishery Resources Restoration Study was a comprehensive study of the status, assessment, management, and restoration needs of the fishery resources of the Great Lakes Basin. It was conducted through the joint effort of the United States Fish and Wildlife Service, State fish and wildlife resource management agencies, Indian tribes, and the Great Lakes Fishery Commission. This study found that although the involved agencies had made significant progress toward the goal of restoring a healthy fish community to the Great Lakes Basin, additional actions and better coordination are needed to protect and effectively manage the fisheries and related resources. Congress, in this bill, repealed the Great Lakes Fish and Wildlife Restoration Act of 1990 and replaced it with this Act to provide for the implementation of recommendations of the U.S. Fish and Wildlife Service contained in the Restoration Study.

Public Law 105-267

With this Act, Congress directs the Secretary of Agriculture and the Secretary of the Interior to exchange land and other assets with Big Sky Lumber Co. and other entities. Congress found that the land north of Yellowstone National Park possesses outstanding natural characteristics and wildlife habitats that make the land a valuable addition to the National Forest System and that it is in the interest of the U.S. to establish a logical and effective ownership pattern for the Gallatin National Forest, reducing long-term costs for taxpayers and increasing and improving public access to the forest. Therefore Congress authorized the Secretary of Agriculture to enter into an Option Agreement for the acquisition of land owned by Big Sky Lumber Co., which in turn has led to the willingness of other private property owners to enter into exchanges that further the purposes of this Act.

Public Law 105-242

Congress found that the National Wildlife Refuge System plays an integral role in the protection of the natural resources of the United States and the National Wildlife Refuge System Improvement Act of 1997 significantly improved the law governing the System, although the financial resources for implementing this law and managing the System remain limited. By encouraging volunteer programs and donations, and facilitating non-Federal partnerships with refuges, Federal funding for the refuges can be supplemented and the System can fully benefit from the amendments made by the National Wildlife Refuge System Improvement Act of 1997. Also, by encouraging refuge educational programs, public awareness of the resources of the System and public participation in the conservation of those resources can be promoted. Therefore, Congress passed this Act to encourage the use of volunteers to assist the U.S. Fish and Wildlife Service in the management of refuges within the System, to facilitate partnerships between the System and non-Federal entities to promote public awareness of the resources of the System and their conservation, and to encourage donations and other contributions by persons and organizations to the System.

H.R. 2870 Amendment to the Foreign Assistance Act of 1961
Public Law 105-214

The purpose of this amendment is primarily to facilitate greater protection of tropical forests and to give priority to protecting tropical forests with the highest levels of biodiversity and most severe threat, by providing for the alleviation of debt in countries where tropical forests are located, thus allowing the use of additional resources to protect these critical areas and reduce economic pressures that have led to deforestation. Also, this amendment is meant to ensure that resources freed from debt in such countries are targeted to protection of tropical forests and their associated values and to rechannel existing resources to facilitate the protection of tropical forests. Congress understands that international negotiations and assistance programs to conserve forest resources have proliferated over the past decade, but the rapid rate of tropical deforestation continues unabated. Developing countries with urgent needs for investment and capital for development have allocated a significant amount of their forests to logging concessions. In addition, poverty and economic pressures on the populations of developing countries have, over time, resulted in the clearing of vast areas of forest for conversion to agriculture, which is often unsustainable in the poor soils underlying tropical forests. Congress, from this, concluded that debt reduction could reduce economic pressures on developing countries and result in increased protection for tropical forests as well as economic benefits to local communities from sustainable uses of these forests.
Congress passed this Act, based on several findings, to have the President appoint an advisory commission to provide advice and recommendations on the creation of an integrated, coordinated federal policy designed to prepare for, mitigate the impacts of, respond to, and recover from serious drought emergencies. The United States often suffers serious economic and environmental losses from severe regional droughts and there is no coordinated federal strategy to respond to such emergencies. Typically, drought is addressed mainly through special legislation and ad hoc action rather than through a systematic and permanent process as occurs with other natural disasters. Several federal agencies have a role in drought from predicting, forecasting and monitoring drought conditions to providing planning, technical, and financial assistance and, because of this, state, local, and tribal governments have had to deal individually with each agency involved in drought assistance. This Act will try to remedy this situation through the creation of this advisory commission.

H.R. 3042 Environmental Policy and Conflict Resolution Act of 1998
Public Law 105-156

This Act is an amendment to the Morris K. Udall Scholarship and Excellence in National Environmental and Native American Public Policy Act of 1992. It establishes as part of the Foundation created by the 1992 Act the United States Institute for Environmental Conflict Resolution to assist the federal government in implementing section 101 of the National Environmental Policy Act of 1969. It provides for assessment, mediation, and other related services to resolve environmental disputes involving agencies and instrumentalities of the United States and complements the direction established by the President in Executive Order No. 12988. This Act also creates the Environmental Dispute Resolution Fund, to be administered by the Foundation, in order to carry out the objectives of this Act.

H.J.Res. 91 Apalachicola-Chattahoochee-Flint River Basin Compact Consent Act
Public Law 105-104

Congress gave its consent to the Apalachicola-Chattahoochee-Flint (ACF) River Basin Compact between Alabama, Florida, Georgia and the United States. The purpose of this compact is to promote interstate comity, removing causes of present and future controversies, equitably apportioning the surface waters of the ACF, engaging in water planning, and developing and sharing common data bases. This compact extends to all of the waters arising within the drainage basin of the ACF in Alabama, Florida, and Georgia.

II. FLORIDA CASES

_**Southern States Utilities v. Florida Public Service Commission**, 714 So. 2d 1046 (Fla. 1st DCA 1998)_

In a unanimous en banc decision on June 10, 1998, the First District Court of Appeal overruled its decision in _Citrus County v. Southern States Utilities_ and held that the "functional relatedness" of utility facilities and land is purely a jurisdictional concept, not a part of the Public Service Commission's (PSC) statutory ratemaking criteria, and is irrelevant to the validity of capband rates on utility's water service areas grouped by cost of service. The case arose when Florida Water Services Corporation appealed an order in which the PSC denied Florida Water's request for uniform, utility-wide rates and instead set capband rates. These are rates set in specific service areas grouped together by cost rather than setting rates within each of Florida Water's different service areas based on the cost of service there. Florida Water urged reversal based on the novel method used by the PSC to determine used and useful percentages of various factors that determined rates.

The court further held that capband or stepped utility rates that are uniform across multiple systems are not unfairly discriminatory and are constitutional, even though they require offsetting increases and do not spread offsets perfectly evenly among households paying less than maximum rates. However, before setting rates for separate classes of customers, the utility must establish and the PSC must approve a determination of the utility's overall revenue requirements.

In addition, the court found that the Department of Environmental Protection's use of different language on the
operating permits for wastewater treatment plants was insufficient to support a departure from prior PSC policy and its adoption of new methodology for calculating used and useful percentages for distribution and transmission systems based on equivalent residential connections.[32]

_**Legal Environmental Assistance Foundation v. Department of Environmental Protection, 702 So. 2d 1352 (Fla. 1st DCA 1997)**_

On December 18, 1997, the First District Court of Appeal in a 2 to 1 decision affirmed an order issued by the Florida Department of Environmental Protection finding that foreign nonprofit corporations holding a certificate of authority to conduct business in Florida did not have standing to intervene in a administrative proceeding involving the environment.[33] This is in spite of the section 617.1505(2), Florida Statutes, which provides that a foreign corporation with a valid certificate "has the same but no greater rights and has the same but no greater privileges as a domestic corporation of like character." The court, however, stated that the rights, duties, and privileges of a foreign corporation holding a valid certificate of authority are not always identical to those of a Florida corporation.[34] _Legal Environmental Assistance Foundation (LEAF) further contended that it has standing under section 403.412(5), Florida Statutes, to intervene in an administrative proceeding claiming the action in question will injure the air, water, or other natural resource of the state._[35] Again the court disagreed with LEAF, finding that the Legislature enacted section 403.412, Florida Statutes, to extend standing to private and corporate citizens of Florida without any showing of special injury as required by the traditional rule of standing.[36] The court further remarked that it has no wish to broaden the scope of the legislation to include foreign parties not meant to be included.[37]

**IV. NOTABLE BILLS PASSED DURING FLORIDA’S 1998 LEGISLATIVE SESSION**[38]

**CS/HB 945 Environmental Equity and Justice**  
Chapter 98-304, _Florida Statutes_  
This bill, sponsored by Representative Eggelletion, creates the Center for Environmental Equity and Justice for the purpose of facilitating research, developing policies, and engaging in education, training, and community outreach with respect to environmental justice and equity issues. It also requires each state agency to include an environmental justice element in its functional plan that mirrors those of federal agencies required under Executive Order 12898 on environmental equity. A registry and tracking system is established by the Department of Health and each county health department as well to aid in data collection for research done by the new center regarding instances of adverse health effects among children and adults which may have occurred as the result of exposure to environmental hazards within the state. Finally, this bill requires each agency to provide notice to targeted population areas through specified media outlets of forthcoming actions by the agency. This bill was approved by the Governor and became effective immediately.

**CS/HB 3427 Beach Management Funding**  
Chapter 98-311, _Florida Statutes_  
This bill, sponsored by Representative Jones, recognizes the urgency of the problem of beach deterioration in Florida and how vital it is to the state's economy. In response, it provides for funding of a state comprehensive beach management plan for erosion control, beach preservation, restoration and renourishment, and storm and hurricane protection through the Ecosystem Management and Restoration Trust Fund. It directs designated funds be deposited in the trust fund be used to fully implement the beach management plan prior to being used for any other purpose. Further, it provides for the appropriation of certain documentary stamp tax revenues to the trust fund for purposes of beach preservation and repair. This bill was approved by the Governor and became effective on July 1, 1998.

**CS/HB 3673 Conservation/Plants and Animals**  
Chapter 98-333, _Florida Statutes_  
This bill, sponsored by Representative Bronson, has several provisions. First, it establishes wild harvest setbacks from shellfish leases to assist in protecting shellfish aquaculture products. It also provides for special activity licenses to be issued for the use of nonconforming gear or equipment to be used in harvesting saltwater species for scientific and
governmental purposes as well as for innovative fisheries. Special activity licenses can also be issued to permit the importation and possession of nonindigenous saltwater species for the production of marine aquaculture facilities along with providing specific management practices to prevent the release and escape of species. Further, the department may authorize any accredited person to harvest or possess indigenous or nonindigenous saltwater species for experimental, scientific, education, and exhibition purposes. This bill clarifies jurisdiction over aquaculture activities and provisions relating to aquaculture general permits. Finally, the Aquaculture Review Council must provide, by August 1 of each year, a list of prioritized research needs critical to development of the aquaculture industry. This bill became law without the Governor's signature and was effective July 1, 1998.

CS/HB 3771 Recreational Lands/Greenways/Trails
Chapter 98-336, Florida Statutes
This widely sponsored bill revises the "Florida Greenways and Trails Act" to provide certain rights and benefits to landowners who allow lands to be designated as greenways or trails, including certain protection from liability and the posting of trespass notices by the Department of Environmental Protection. It further revises the definition of "volunteer" to include persons who consent to the use of their lands as greenways or trails without compensation and requires the landowner's specific written consent for the designation of lands as a part of the statewide system. In addition, it authorizes the DEP to make rules, charge fees, negotiate with landowners, and provide incentives to certain landowners for their cooperation in the system and stipulates that mere identification of lands in planning materials shall not be construed as the designation of greenway or trail and shall not precipitate certain governmental regulations or actions. This bill became law without the Governor's signature and was effective on July 1, 1998.

CS/HB 4027 Water Resources Development
Chapter 98-402, Florida Statutes
This bill, sponsored by Representative Littlefield, provides for the implementation of minimum flows and levels in Hillsborough, Pasco, and Pinellas counties. It requires execution of a partnership plan between the governing body of the Southwest Florida Water Management District and the West Coast Regional Water Supply Authority and its member governments, by July 1, 1998. Further, it specifies minimum plan requirements including authority of the governing board to select the actions & control the allocations and expenditures necessary to implement the minimum flows and levels and to determine monetary amounts for certain mitigation. This bill also authorizes the Secretary of Environmental Protection to act on behalf of the governing board to execute the plan if it has not been executed by the above date and specifies additional considerations by the secretary in approving agreements creating water supply authorities. This bill was approved by the Governor and became effective immediately.

CS/SB 312 Water Resource Management
Chapter 98-88, Florida Statutes
This bill, sponsored by Senators Brown-Waite, Bronson, Williams, and Horne, amends section 373.223, Florida Statutes and simply provides criteria to be considered by water management districts and the Department of Environmental Protection in authorizing the transport of surface or ground water under a permit for the consumptive use of water. This bill hopes to further the goal of better water conservation within water management districts rather than transport water across districts. This bill became law without the Governor's signature and was effective October 1, 1998.

CS/SB 812 Clean Air
Chapter 98-193, Florida Statutes
This bill, sponsored by Senators Dyer, Latvala, Williams, Brown-Waite, Diaz-Balart, and Forman, creates the Florida Accidental Release Prevention and Risk Planning Act. Its purpose is to establish adequate state authorities to implement, fund, and enforce the requirements of the Accidental Release Prevention Program (ARPP) of the federal Clean Air Act Amendments of 1990. It directs the Department of Community Affairs to seek delegation from the U.S. Environmental Protection Agency to implement the ARPP and to avoid duplication whenever possible by multiple state agencies offering regulatory, inspection, or technical assistance to stationary sources. This bill requires any owner/operator of a stationary source in Florida to submit a Risk Management Plan to the U.S. EPA and pay a
registration fee to the state. The state may, at any reasonable time, inspect and audit any stationary source to monitor compliance with the ARPP. This bill became law without the Governor's signature.

This action, however, still awaits official delegation from the U.S. EPA in order to be fully effective.

CS/SB 1202 Brownfields Redevelopment
Chapter 98-75, Florida Statutes

This bill, sponsored by Senator Latvala, makes several corrections to the 1997 Brownfields Redevelopment Act. It provides that closed military bases may be designated as brownfields areas and clarifies job creation criteria for the designation of a brownfields area. It also revises eligibility criteria and liability protection provisions. Importantly, this bill creates the Brownfields Areas Bond and Loan Guarantee Program to provide limited loan guarantees along with a council to administer the program. The bill provides for the redevelopment of brownfields areas to be part of the declaration of findings for economic development and authorizes the Florida Development Finance Corporation to determine when a brownfields redevelopment area qualifies for a limited state guaranty of revenue bonds and/or loan guarantees.

Further, it directs the Board of Regents to create a Center for Brownfields Rehabilitation Assistance at the University of South Florida to conduct research and aid in brownfields site rehabilitation. Finally, it authorizes certain counties and municipalities to apply for designation of an enterprise zone if the zone encompasses a brownfields pilot program. This bill was approved by the Governor and became effective on July 1, 1998.

CS/SB 1458 Coastal Redevelopment
Chapter 98-201, Florida Statutes

This bill, sponsored by Senators Latvala, Burt, and Bankhead, creates the Coastal Resort Area Redevelopment Pilot Program to try and remedy the continued deterioration of some coastal resort and tourist areas. This pilot program is to determine the feasibility of encouraging redevelopment of economically underutilized coastal properties to allow full utilization of existing urban infrastructure such as roads and utility lines. It will be administered in the coastal areas of Florida's Atlantic Coast between the St. Johns River entrance and the Ponce de Leon inlet. To expedite permitting for redevelopment projects within pilot program areas, the Office of the Governor, DEP and the Department of Community Affairs are directed to provide technical assistance to those seeking permits to improve these areas. The specific allowances and exceptions to what improvements can be made are found within the bill. This pilot program is set to be in effect until December 31, 2002. This bill became law without the Governor's signature and was effective immediately.

[*] The recent developments section was researched and written by Amy Voigt, Research Editor, J.D., Florida State University College of Law (expected 2000). Return to text.


RECENT DEVELOPMENTS


[10] See id. at 1671. Return to text.


[12] See id. at 1672. Return to text.


[18] 904 F.2d 1276 (9th Cir. 1990). Return to text.

[19] See id. at 1285. Return to text.


[23] See National Mining Ass'n, 145 F.3d at 1407. Return to text.


[26] See Southern States, 714 So. 2d at 1049. Return to text.

[27] See id. at 1048. Return to text.

[28] See id. Return to text.

[29] See id. Return to text.


[31] See id. Return to text.

[32] See id. at 1056. Return to text.

[33] See LEAF, 702 So. 2d at 1353. Return to text.

[34] See id. Return to text.

[35] See id. at 1352. Return to text.
RECENT DEVELOPMENTS

[36] See id. at 1353. Return to text.

[37] See id. Return to text.

[38] The following bill summaries were adopted from the Florida Legislature's homepage, Florida Online Sunshine, which can be found at http://leg.state.fl.us. This website includes copies of all bills considered or passed during the 1998 Legislative Session along with other information on committee meetings and past Legislative Sessions. Return to text.