Rhode Island's Environment at risk

The Local Impacts of the Bush Administration's Environmental Policies

April 2004

Rhode Island PIRG
ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

On April 22, 1970, America celebrated its first Earth Day, demonstrating a national and truly bipartisan outpouring of concern for cleaning up the environment. According to some recollections of that day, “So many politicians were on the stump on Earth Day that Congress was forced to close down. The oratory, one of the wire services observed, was ‘as thick as smog at rush hour.’”¹ In the decade that followed, Congress passed the Clean Air Act, Clean Water Act, Endangered Species Act, Safe Drinking Water Act, and other laws that form the cornerstone of our country’s commitment to protect the environment and public health.

While we have seen measurable progress in environmental quality since 1970, we are far from achieving the original vision laid out by the authors of these landmarks laws. Approximately 146 million Americans – or half of the population – live in areas where the air is unhealthy to breathe. More than 40 percent of our nation’s waterways are too polluted for safe fishing or swimming. Logging, drilling, mining, road-building and other development continue to take their toll on our forests, fragile coastlines and last wild places.

In a country that takes great pride in its entrepreneurial spirit, these problems should inspire our leaders to look for immediate solutions. Instead, the Bush administration has taken the opposite course—looking for opportunities to weaken, not strengthen, our environmental laws and placate its allies in the oil, timber, electric utility, mining and other polluting industries.

Over the last three years, the Bush administration has proposed numerous policies to allow more pollution in our air and water, more logging in our national forests, and more drilling on sensitive public lands, while ignoring the pressing need to address global warming pollution, rapidly clean up toxic waste sites, and reduce our dependence on foreign oil. Although many of these proposals have been finalized, several remain pending—offering the administration another chance to reinforce, rather than undermine, the foundation of America’s environmental laws.

These national policies have a profound effect on residents of Rhode Island.

Air pollution
The Environmental Protection Agency (EPA) has finalized two rules that eliminate the teeth of the Clean Air Act’s New Source Review program and the primary means to cut soot and smog pollution from the nation’s dirtiest power plants. In December 2003, EPA also proposed a new plan to weaken and delay efforts to clean up mercury emissions from the nation’s 1,100 coal-fired power plants; this proposal is still pending. These policies will only exacerbate Rhode Island’s air quality problems. In 2002, Rhode Island’s residents breathed unhealthy air on 17 days; that same year, all of Rhode Island’s rivers, lakes and coastal waters were under a fish consumption advisory for mercury pollution.

On a different note, in April 2004 EPA plans to finalize a promising proposal to clean up dirty diesel construction, farm, and industrial equipment. The rule would reduce pollution from these engines by more than 90 percent, preventing an...
estimated 360 asthma attacks each year in Rhode Island.

**Global warming**
EPA has taken no meaningful action to address global warming emissions from the nation’s power plants, disavowing its authority to regulate carbon dioxide as a pollutant in August 2003. The agency has supported only voluntary measures to slow the rate of increase in carbon dioxide emissions. Global warming could have profound effects on Rhode Island’s environment and public health, including more frequent heat waves and extreme weather events. In 2002, Rhode Island recorded almost $10 million in losses due to weather-related disasters.

**Water pollution**
The Bush administration has proposed or enacted several policies to allow more pollution to enter our waterways. In January 2003, EPA signaled its intention to remove Clean Water Act protections for so-called “isolated” waterways; EPA rescinded this proposed rule in December 2003, but has yet to recall a guidance issued to EPA and Army Corps staff directing them to immediately stop protecting these waters. The administration also has weakened enforcement of the Clean Water Act; drafted plans to allow states to delay cleaning up polluted waters; and proposed new rules to allow inadequately treated sewage to enter our waterways. Already, 158 waterways in Rhode Island are listed as too impaired for safe fishing or swimming.

**Rhode Island’s coast**
The National Oceanic and Atmospheric Administration (NOAA) is quietly rewriting the federal rules that grant states the authority to protect their coastlines from harmful federal activities. In July 2003, NOAA proposed changes to the Coastal Zone Management Act that would weaken the voice of state agencies in determining the environmental impacts of offshore federal activities and give greater weight to the opinions of federal agencies. These changes could undercut the right of Rhode Island to protect its 420 miles of valuable coastline from harmful activities, including oil and gas development.

**Dependence on foreign oil**
In December 2003, the National Highway Traffic Safety Administration (NHTSA) proposed changes to the Corporate Average Fuel Economy standard that could make it easier for auto companies to qualify gas-guzzling SUVs and other light trucks for weaker fuel economy standards. The best way to cut our dependence on oil is to make vehicles go farther on a gallon of gas. In Rhode Island, raising fuel economy standards to 40 miles per gallon would save consumers up to $270 million annually at the gas pump and conserve 154 million gallons of oil by 2020.

**Toxic waste cleanups**
Superfund is the nation’s preeminent law for making polluters clean up the country’s most contaminated toxic waste sites, such as the 12 sites on the National Priority List in Rhode Island. Unfortunately, EPA has failed to reinstate the “polluter pays” fees that help fund cleanup of abandoned sites, slowed the pace of cleanups, and forced taxpayers to pick up more of the bill for the cleanups that are happening. Taxpayers in Rhode Island paid more than $1 million to clean up abandoned toxic waste sites in 1995, the year the polluter pays fees expired; in 2004, taxpayers will pay approximately $4.4 million, an increase of 315 percent.

**Exempting the Department of Defense**
The Department of Defense (DoD) is one of the most prolific polluters in the United States. The Pentagon, capitalizing on increased public sympathy for the military and desire for homeland security, has
requested blanket exemptions from several environmental laws. Having already won exemption from the Endangered Species Act and Marine Mammal Protection Act, the DoD now wants amnesty from cornerstone laws designed to protect people living on and near military sites from exposure to toxic waste and air pollution. The DoD is responsible for two Superfund toxic waste sites in Rhode Island—the Davisville Naval Construction Battalion Center and Newport Naval Education and Training Center.

Each state in the Union will share the burden of the Bush administration’s policies to weaken environmental protections; this report, by no means exhaustive, details some of the administration’s harmful proposals and reveals how communities in Rhode Island will experience the very real, very local effects of these actions.
The Bush administration has enacted and proposed several policies that will let the country's dirtiest power plants pump more toxic mercury and smog- and soot-forming pollution into the air. Rhode Island already has more air pollution problems than it needs. These proposals will trigger more asthma attacks, cause more smoggy days, and pollute Rhode Island's waterways with more toxic mercury—making the fish unsafe to eat. At the same time, EPA is poised to finalize a promising proposal to clean up dirty diesel engines.

Smog and soot in our air, acid rain destroying our lakes and forests, mercury pollution in our fish, and global warming threatening our future—all of these are among the serious public health and environmental problems caused by pollution from the electric power sector. Regulators and utilities could eliminate much of this pollution by installing modern pollution control technologies, tightening energy efficiency, and increasing electricity generation from renewable energy sources. Instead, lobbyists from the electric utilities, oil refineries, and pulp and paper mills are working with the Environmental Protection Agency (EPA) to weaken the Clean Air Act’s most important safeguards for public health and the environment.

At the same time, EPA is poised to finalize a promising proposal to clean up dirty diesel engines. Barring last minute concessions to the oil industry, the rule would reduce pollution from dirty diesel construction, farm, and industrial equipment by more than 90 percent.

Much of Rhode Island's air pollution drifts in from neighboring states with large, dirty power plants. As such, national policy that would allow these power plants to pollute more directly affects Rhode Island's air quality, public health and environment.

Darkening our Skies: The “Clear Skies” Proposal

The Bush administration first unveiled its long-awaited principles for reducing pollution from the electricity sector in February 2002. The crux of the Bush administration's “Clear Skies” plan is to replace current Clean Air Act programs with national caps on electric sector emissions of smog-forming nitrogen oxides, soot-forming sulfur dioxide, and mercury, allowing sources to meet these obligations by either reducing emissions or purchasing “credits” from other sources that reduce emissions by more than required.

As originally written, the Bush administration’s “Clear Skies” air pollution plan would:

- Delay current deadlines for meeting cuts in power plant pollution, allowing violations of
Weakening Air Pollution Standards for the Dirtiest Power Plants

In December 2002 and August 2003, EPA finalized two rule changes to the Clean Air Act’s New Source Review program, breaking a decades-old promise codified in the Clean Air Act itself – that old power plants, when making other life-prolonging modifications that increase air pollution, would be required to install modern pollution controls. This policy change promises to increase emissions of soot and smog-forming pollutants and the health effects that accompany them.

The country’s coal-fired power plants release smog-forming nitrogen oxides and soot-forming sulfur dioxide, powerful pollutants that cause severe health problems, including asthma attacks, chronic bronchitis, heart attacks, lung cancer, and premature mortality. In addition, coal-fired power plants release toxic mercury and carbon dioxide, the primary global warming gas. (Refer to the discussion about the administration’s proposed mercury rule for more information on the health effects of mercury; refer to the next section on global warming for an overview of the administration’s approach to carbon dioxide emissions.)

‘Grandfathering’ of Old, Dirty Power Plants

In 1977, while amending the original 1970 Clean Air Act, Congress adopted the “New Source Review” (NSR) program to ensure that major sources of pollution, both new and existing, would use modern pollution control technologies. At that time, Congress required major new sources to use the “best available control technologies” if they were located in areas with clean air and more aggressive controls, termed “lowest achievable emission rates,” if located in an area not meeting national health standards.

For the existing plants – the old, dirty power plants – Congress decided to require that new pollution controls be installed when the facility made a modification, defined as “any physical change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which
results in the emission of any air pollutant not previously emitted.” The reason was logical: it would be less costly to install pollution controls when a plant was already undergoing construction.\textsuperscript{5}

The National Academy of Public Administrators (NAPA), an independent, nonpartisan organization chartered by Congress, concluded in its April 2003 analysis of the NSR program that given the “breadth of the statutory language as it applies to existing sources and the legislative history of NSR, the Panel believes that Congress clearly did not intend for grandfathering of existing sources to continue indefinitely. Rather, Congress envisioned that sources already planned or existing by 1977 would either be upgraded or replaced over time and that, whenever changes were made later, existing facilities would install cleaner technologies to minimize air pollution.” \textsuperscript{6}

Notwithstanding, many power plants have avoided the New Source Review program’s requirements. In some instances, plant owners have claimed that their modifications are simply “routine maintenance,” which EPA, not Congress, exempted from triggering New Source Review.

As a result, today two distinct types of power plants are operating – older dirty plants and newer clean plants. Twenty-six years after enactment of the NSR program, the vast majority of pre-1977 facilities have ancient or no pollution controls at all. These plants account for most of the emissions in the U.S.

The NSR program, if enforced, could dramatically improve air quality. According to the Department of Energy’s Energy Information Administration, full implementation of the NSR program to existing power plants would lower sulfur dioxide emissions from these plants from more than 10 million tons per year to just under two million tons per year. Similarly, nitrogen oxide emissions would fall from more than 4.5 million tons per year to just 1.6 million tons per year.\textsuperscript{7}

In 1999, after a three-year investigation of compliance with the NSR program, the Clinton administration’s EPA concluded that violations of the NSR rules were common, finding that plant owners were making enormous modifications without applying for or obtaining NSR permits. As a result, the administration initiated enforcement actions against eight utilities for NSR violations at more than 50 power plants that had resulted in hundreds of millions of tons of illegal pollution. By early 2000, utilities were beginning to settle the enforcement actions, agreeing to install emissions control equipment and make other environmental improvements.\textsuperscript{8}

However, the Bush administration’s changes to the NSR program have stymied additional enforcement actions.

**Backtracking on the Clean Air Act’s Promise to Clean Up Power Plants**

EPA has finalized two rules that eliminate the teeth of New Source Review program and the primary means to cut pollution from the nation’s dirtiest power plants. The decision about whether these rules are inconsistent with the Clean Air Act now rests with the courts.

In 2001, Vice President Cheney’s industry-led National Energy Policy Development Group issued a paper instructing EPA to conduct an analysis of the NSR program’s impact on energy supplies. In response, EPA reversed its previous position and stated that NSR needed to be reformed to ensure reliable electricity and oil refining capacity.
In the last weeks of 2002, EPA finalized one set of changes to the New Source Review program creating new exemptions to allow plants to refurbish without installing modern pollution controls. Former EPA Administrator Carole Browner joined hundreds of doctors and hundreds of thousands of Americans in denouncing this move, stating:

“The Bush Administration’s announcement retreats from the promise of the Clean Air Act – fresh and healthy air for all Americans. The rollback in the law will permit thousands of the oldest, dirtiest smokestacks to continue spewing out pollution rather than installing state of the art pollution controls. It is nothing but a special deal for the special interests. It comes at the expense of all who breathe and most particularly our children.”

In August 2003, EPA issued a second rule change expanding the definition of “equipment replacement” for the purposes of exempting even more modifications from New Source Review’s cleanup requirements. The New York Times called this second rule change a “reckless and insupportable decision to eviscerate a central provision of the Clean Air Act and allow power plants, refineries and other industrial sites to spew millions of tons of unhealthy pollutants into the air.”

On December 24, 2003, the U.S. Court of Appeals for the District of Columbia blocked EPA from implementing the second, more extensive NSR rollback while the court hears the case.

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**Rhode Island: Soot, Smog and Public Health**

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<th>Value</th>
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<td>17</td>
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<tr>
<td>Number of children with asthma:</td>
<td>21,500</td>
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<tr>
<td>Number of adults with asthma:</td>
<td>76,000</td>
</tr>
</tbody>
</table>

Health and economic effects of soot pollution from power plants:

- Number of asthma attacks each year: 1,660
- Number of lost work days each year: 14,300

**Public Health and Environmental Effects of Soot and Smog Pollution**

Approximately 146 million Americans – or half of the population – live in areas where the air is unhealthy to breathe. Three counties in Rhode Island, including Ken, Providence, and Washington Counties, received an “F” grade from the American Lung Association for unhealthy levels of smog between 1999 and 2001.

*Fine Particle ‘Soot’*

Power plants emit sulfur dioxide (SO₂) and nitrogen oxides (NOₓ), which are converted in the atmosphere into fine particle aerosols. When inhaled, these aerosols are extremely hazardous to our health. In the last decade, extensive research has linked these particles to dozens of health problems, including asthma attacks, chronic bronchitis, heart attacks, lung cancer, and premature mortality.

Fine particles are especially harmful to children, senior citizens, and people with preexisting lung or heart problems:
A 2004 follow-up analysis of one of the most extensive studies of the long-term effects of air pollution on human health found a strong link between chronic exposure to fine particle air pollution and increased risk of death from cardiovascular disease in the United States. The increased risk was comparable to that associated with being a former smoker.\(^\text{16}\)

Studies by the Harvard School of Public Health, the Health Effects Institute, and others have confirmed that tens of thousands of people each year die prematurely due to fine particle pollution.\(^\text{17}\)

A 2000 study estimated that 30,000 people die prematurely each year due to particles from power plants alone. Of these deaths, an estimated 18,000 could be prevented if power plants were required to install modern pollution controls.\(^\text{18}\)

**Ozone ‘Smog’**

Like fine-particle soot, ozone damages our respiratory systems. Ozone can cause chest pain and cough, aggravate asthma, reduce lung function, increase emergency room visits and hospital admissions for respiratory problems, and lead to irreversible lung damage.\(^\text{19}\) Recent studies link ozone to the onset of asthma, birth defects, and mortality from strokes.\(^\text{20}\)

Smog is formed when nitrogen oxides from power plants and cars mix with other chemicals in the air in the presence of sunlight. Power plants are the largest industrial source of nitrogen oxides in the nation.

Ozone is a severe lung irritant for anyone chronically exposed, including healthy adults who exercise outdoors in the summertime. For vulnerable populations, including children, senior citizens, and people with asthma or other respiratory disease, smoggy days often mean staying indoors, missing work or school, and even hospitalization. Smog triggers an estimated six million asthma attacks each year and sends 150,000 Americans to hospital emergency rooms just in the eastern half of the nation alone.\(^\text{21}\)

**Haze in Our National Parks**

Poor air quality in some national parks and wilderness areas rivals that in major U.S. cities. According to the National Park Service, in 2002 16 air monitors at 11 parks, including such treasured places as Acadia in Maine, the Great Smoky Mountains in Tennessee, and Yosemite in California, recorded +18 exceedances of the federal health standard for ozone.\(^\text{22}\)

Regional haze has reduced annual average visibility in our national parks and wilderness areas to about one-third (western U.S.) to one-quarter (eastern U.S.) of natural conditions.\(^\text{23}\)

- Recently published research suggests that between 1988 and 1998, visibility on the haziest days worsened in some parks due to regional increases in sulfur emissions. For example, visibility is declining on the haziest days at Big Bend National Park (TX), Great Smoky Mountains National Park (TN, NC), Badlands National Park (SD), Bryce Canyon (UT), Yosemite National Park (CA), and Mesa Verde National Park (CO).\(^\text{24}\)

- The average natural visual range in Virginia’s Shenandoah National Park is about 80-90 miles. The average summertime visibility in this park, as well as Mammoth Cave National Park, the southern Appalachians, and national wilderness areas such as Dolly Sods Wilderness and James River Face Wilderness in Virginia, has been reduced to a paltry 12 miles. On any given day, visibility can be just a few miles or less.\(^\text{25}\)
According to park visitors, visibility and clear air are among the most important attributes of parks. At some parks, as many as 80 percent of respondents to a recent poll felt clear air and visibility were “very” to “extremely” important to their recreational experience. Take away the clear view, and you remove vacationers’ primary reason for visiting the parks.26

Haze comes at no small cost to our national parks. A report by Abt Associates, commissioned by the Clean Air Task Force for Clear the Air, estimates that the economic impact of power plant emissions on visibility in parks and wilderness areas is $4.3 billion a year.27

**Acid Rain**

The sulfur and nitrogen emissions that form soot and smog also cause acid rain. These pollutants combine with water to form acids called sulfates and nitrates, which fall to earth in rain, snow, and fog, destroying sensitive ecosystems. In many eastern states, the rain is often as acidic as orange juice.28

Aquatic life is extremely vulnerable to the effects of acid rain. Twenty-five percent of lakes in the Adirondack region of New York cannot support any fish at all due to acidity.29 Similarly, 30 percent of trout streams in Virginia are either marginal or unsuitable for brook trout.30 Acid rain has compromised water bodies as far south as Georgia and as far west as Indiana.

Forests also are severely affected by acid deposition. In the Adirondacks, more than half of the red spruce trees have died since the 1960s; the red spruce in the Southern Appalachians are showing signs of damage as well.31 New England’s famous sugar maples are in decline due to the loss of nutrients in the soil caused by acid rain.

Recent studies show that power plants will need to reduce sulfur and nitrogen emissions by up to 80 percent to allow these lakes and forests to recover.32

**Sulfur and Nitrogen Emissions from the Dirtiest Power Plants**

The country’s 548 dirtiest power plants emitted 10.1 million tons of sulfur dioxide in 2002. Each of these plants emitted at least 20 tons of “excess” sulfur dioxide or nitrogen oxides – emissions that could be eliminated if the plant were to install modern pollution control equipment.33 This is about 64 percent of total sulfur dioxide emissions (about 15.8 million tons) from all sources in the U.S. in 2001.34 Of this pollution, 70 percent (7.1 million tons) was “excess,” or could be eliminated if the plants met modern emissions standards.35

The country’s 548 dirtiest power plants also emitted 4.4 million tons of nitrogen oxides in 2002, nearly 20 percent of total nitrogen oxide emissions (about 22 million tons) from all sources in the U.S. in 2001.36 Of this pollution, 62 percent (2.7 million tons) was “excess,” or could be eliminated if the plants met modern nitrogen oxide emission standards.37

Enforcing—rather than weakening—the New Source Review rules would reduce sulfur dioxide and nitrogen oxide emissions by at least this excess amount.38

Although Rhode Island does not have any power plants that emit excess sulfur dioxide and nitrogen oxides, the state still has a stake in national policy governing power plant pollution. Much of Rhode Island’s air pollution drifts in from neighboring states with large, dirty power plants that will be able to continue polluting under the administration’s plan.
Allowing More Mercury Emissions from Power Plants

In January 2004, EPA issued a proposed rule to govern mercury emissions from power plants, the largest unregulated source of mercury pollution. EPA’s proposal would expose pregnant women and children to far more mercury for a decade longer than what is achievable and required by the Clean Air Act.

Rhode Island’s power plants do not emit mercury; most of the mercury pollution in the state likely comes from dirty power plants in neighboring states.

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**Rhode Island: Mercury pollution and public health**

Fish consumption advisories for mercury in 2002: 39
- Number of lake acres under mercury advisory: **Statewide**
- Number of river miles under mercury advisory: **Statewide**
- Number of coastal miles under mercury advisory: **Statewide**

Number of women of child-bearing age in Rhode Island: 40 212,500

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**Public Health and Environmental Effects of Mercury Pollution**

Mercury is a toxic heavy metal, which, when ingested, can cause serious neurological damage, particularly to developing fetuses, infants, and children. People are exposed to mercury when they eat fish that have been contaminated by methylmercury, the organic and most dangerous form of mercury. The neurotoxic effects of low-level mercury exposure are similar to the effects of lead toxicity in children and include delayed development and cognitive deficits, language difficulties, and problems with motor function, attention, and memory. 41

Mercury exposure is widespread. In 2002, 43 states issued fish consumption advisories covering more than 12 million acres of lakes and 400,000 miles of rivers. 42 These warnings advise people to avoid or limit fish consumption due to mercury. Because mercury is bioaccumulative, increasing in concentration as it moves up the food chain, large predator fish such as largemouth bass, walleye, shark, tuna, and swordfish have higher levels of mercury than species lower in the food chain. 43 In March 2004, the Food and Drug Administration (FDA) and EPA recommended that pregnant women, nursing mothers and young children eat no more than six ounces of albacore tuna, or about one meal’s worth, each week. Albacore tuna, often sold as canned white tuna, accounts for more than five percent of all seafood consumed in the United States. 44

Despite these warnings, in January 2004, EPA reported that 1 in 6 women of childbearing age in the U.S. has levels of mercury in her blood that is unsafe for a fetus; this means that 630,000 of the four million babies born each year in the U.S. already have been exposed to enough mercury to cause serious health problems. 45
Mercury contamination also is a threat to the recreational fishing industry—a vital component of our national and state economies. Recreational fishing is a multi-billion dollar industry. In 2001, the most recent year for which data are available, approximately 34.1 million Americans took a total of 437 million fishing trips. In 2001, recreational fishing in Rhode Island generated almost $106 million in spending on food, lodging, and transportation for fishing trips, fishing and auxiliary equipment, and other items. Nationally, in 2001 recreational fishing:

- Generated more than $35.6 billion in spending;\textsuperscript{47}
- Generated more than $116 billion in total economic output;\textsuperscript{48}
- Supported more than one million jobs;\textsuperscript{49}
- Created more than $30.1 billion in household income (salaries and wages);\textsuperscript{50}
- Added more than $1.9 billion in sales tax revenues;\textsuperscript{51}
- Added more than $470 million in state income tax revenues;\textsuperscript{52} and
- Generated $4.88 billion in federal income tax revenues.\textsuperscript{53}

Even a small dent in the recreational industry could mean large economic losses. As Jim Martin, conservation director for Pure Fishing, the nation's largest manufacturer of fishing tackle put it, “there is no question the mercury issue is having a dampening effect on angling because of all these fish advisories throughout the country.”\textsuperscript{54}

Regulating Mercury Emissions from Power Plants

Rhode Island's power plants do not emit mercury; most of the mercury pollution in the state likely comes from dirty power plants in neighboring states.

Power plants are the largest source of mercury emissions nationwide, responsible for 41 percent of total mercury emissions.\textsuperscript{55} In its 1998 Report to Congress, EPA estimated that 60 percent of mercury deposited in the U.S. is emitted by U.S. anthropogenic air emission sources.\textsuperscript{56} Mercury is emitted from power plant smokestacks and falls in rain and snow onto the land and into water bodies. EPA has yet to set any standards for mercury emissions, allowing power plant operators to emit mercury without limits, unlike other sources of mercury emissions in the U.S.

The Clean Air Act Amendments of 1990 required EPA to complete two studies on mercury pollution from power plants and report their findings to Congress. In a pair of legal settlements, EPA agreed on revised deadlines to complete these studies and also agreed to determine whether it is “appropriate and necessary” to regulate hazardous air pollution from power plants using the standard of “maximum achievable control technology” (MACT) and, if “appropriate and necessary”, propose a MACT standard. In December 2000, EPA announced that it was in fact “appropriate and necessary” to regulate utility hazardous air emissions using the MACT standard provisions under Section 112 of the Clean Air Act.\textsuperscript{57} EPA committed to proposing new regulations by December 15, 2003 and finalizing regulations by December 15, 2004.

In 2001, EPA estimated that under a MACT standard, 90 percent mercury reductions were achievable from the electricity generating industry using
existing technologies, bringing mercury emissions down to roughly five tons per year by 2008.58

**EPA's Proposal: More Mercury for Longer**

In January 2004, EPA proposed to weaken and delay efforts to clean up mercury emissions from the nation’s 1,100 coal-fired power plants.59 Essentially, the agency’s plan treats mercury as if it were a traditional air pollutant instead of a hazardous air pollutant, allowing EPA to avoid requiring power plants to reduce emissions by the maximum amount technologically achievable. Mercury has been a regulated air toxic for almost 35 years; in fact, it was one of only eight toxic air pollutants for which EPA had developed pollutant-based rules prior to the 1990 Clean Air Act Amendments.

EPA’s proposed rule contains several options for a final regulation. EPA’s preferred option rescinds its prior determination that power plants must be regulated according to MACT levels and instead proposes a far weaker standard. In effect, this approach treats power plants mercury emissions as non-hazardous air pollution. Under this approach, instead of using the best technology to limit mercury emissions by 2008, existing power plants will be able to emit six to seven times more mercury between 2010 and 2018 and three times more mercury after 2018. Moreover, this proposal would not require power companies to limit emissions at each and every plant to a degree that reflects the maximum pollution controls. Instead, some plants would be able to purchase mercury pollution credits from other plants. This “cap-and-trade” system increases the likelihood of toxic “hot spots,” or communities where mercury deposition is more prevalent.

The other two EPA proposed options continue to treat mercury from power plants as an air toxic but allow mercury pollution to continue at levels that are far higher than required by the Clean Air Act to protect public health.

**Politics Over Science**

After EPA released its mercury proposal, prominent scientists, former EPA officials, and others stepped forward to challenge how the agency crafted the proposed rule, charging that it discarded science in favor of politics.

As early as January 26, 2004, EPA’s own Children’s Health Protection Advisory Committee, a body of researchers, academicians, health care providers, children’s advocates, professionals, government employees, and members of the public who advise EPA on regulations and research relevant to children, expressed its concerns in a letter to EPA Administrator Leavitt. The letter stated that the proposal “does not go as far as is feasible to reduce mercury emissions from power plants, and thereby does not sufficiently protect our nation’s children.”60

Soon thereafter, on January 31, 2004, the *Washington Post* reported that a “side-by-side comparison of one of the three proposed rules and the memorandums prepared by Latham & Watkins—one of Washington's premier corporate environmental law firms—shows that at least a dozen paragraphs were lifted, sometimes verbatim, from the industry suggestions.”61 Notably, important language arguing why mercury should be regulated using a cap-and-trade scheme came directly from the Latham & Watkins memos. Another report found that EPA copied verbatim some language from a recommendation by West Associates, a utility trade association, regarding “possible mercury emission reduction scenarios.”62
Most recently, in March 2004, several longtime EPA officials charged that the Bush administration bypassed the agency’s technical experts and a federal advisory panel to craft a mercury rule friendly to the electric utility industry. A 21-member federal advisory panel on mercury had requested comparative modeling of proposals to reduce mercury emissions. Agency officials use these types of studies to weigh policy alternatives and arrive at a sound decision; EPA promised the panel the comparative data by March 2003. The EPA staffers claim that in late spring of 2003, Jeffrey Holmstead, assistant EPA administrator for air and radiation, told them that these studies were postponed indefinitely. John Paul, Ohio’s top air quality official who co-chaired the EPA-appointed advisory panel on mercury, said that the administration chose a process “that would support the conclusion they wanted to reach” and charged that the panel’s 21 months of work on mercury was ignored.63

Under fire for not conducting the required analyses, EPA Administrator Mike Leavitt announced in March 2004 that the Bush administration would conduct additional modeling of its mercury rule because he wants it “done right.”64 However, EPA now says it will focus solely on the cap-and-trade approach it favors, again bypassing a more comprehensive analysis of stronger alternatives, including a policy to require all power plants to install mercury pollution controls.

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Promising Rule to Clean Up Diesel Engines

Health Effects of Diesel Pollution
Diesel pollution is a major part of the country’s air pollution problem. Diesel exhaust is a likely human carcinogen. The average cancer risk from air pollution in Rhode Island exceeds EPA’s health-protective threshold for cancer by about 470 times, with 90 percent of the risk from diesel pollution alone.65 Diesel exhaust also includes more than three dozen toxic chemicals, such as arsenic, benzene, and formaldehyde, which can cause cancer, birth defects, neurological damage, and other serious health effects.

In addition to toxics, diesel engines emit large amounts of soot and smog. Diesel-powered equipment — construction equipment such as backhoes, farm equipment such as tractors, material handling equipment such as heavy forklifts, industrial equipment such as airport service vehicles, and utility equipment such as generators and pumps — produce 44 percent of diesel particulate matter (PM or “soot”) emissions and 12 percent of smog-forming nitrogen oxide emissions from mobile sources nationwide. In addition, marine diesel engines — used in ferries, fishing boats, tug and towboats, dredgers, and coastal and ocean-going vessels — and locomotives contribute about 14 percent of diesel soot emissions and 15 percent of nitrogen oxide emissions from mobile sources. These proportions are even higher in urban areas, rail yards, rail corridors, and near commercial ports.

In Rhode Island, diesel-powered equipment produces 25 percent of soot emissions and eight percent of smog-forming nitrogen oxide emissions from mobile sources; diesel trains, ships, and boats contribute an additional 10 percent of soot emissions and
eight percent of smog-forming nitrogen oxide emissions from mobile sources.

**EPA’s Diesel Proposal**

### Rhode Island: Annual health and economic benefits of EPA’s diesel proposal

- **# of asthma attacks prevented:** 360
- **Monetary benefits to state:** $135,000,000

Since the early 1970s, EPA has set increasingly tough fuel and emission standards for cars and trucks. In 2000, EPA adopted standards that will reduce pollution from new diesel trucks by 90 percent by the end of the decade. In contrast, EPA issued the first emission standards for new diesel equipment in the mid-1990s; as a result, these engines are among the dirtiest in the nation.

Under current emission standards, a piece of diesel equipment manufactured in 2007 (50 horsepower or greater) will emit 15 to 30 times more soot and about 15 times more smog-forming pollutants than a new truck or bus. EPA does not yet regulate the fuel used in these engines, which contains extraordinarily high levels of sulfur. Sulfur clogs emission controls for diesel engines just as lead in gasoline disabled catalytic converters in cars.

To reduce diesel pollution, we need tough federal fuel and emission standards for all diesel engines. In April 2003, EPA took a big step in the right direction by proposing to extend the fuel and emission standards on the books for diesel trucks to diesel equipment.

EPA’s proposal would require oil refiners to reduce the poisonous sulfur in “non-road” diesel fuel from its current uncontrolled level of 3,400 parts per million (ppm) to 500 ppm in 2007 and 15 ppm in 2010. After the sulfur is reduced to minimal levels, the rule would require pollution controls that reduce soot by at least 95 percent and smog by at least 90 percent for engines used in new diesel equipment. The pollution controls would phase in from 2008 to 2014.

The rule would prevent an estimated 360 asthma attacks each year in Rhode Island, according to state and local air officials. Nationwide, EPA estimates that – each year – the rule would prevent 9,600 premature deaths, 8,300 hospitalizations, 16,000 heart attacks, 5,700 children’s asthma-related emergency room visits, 260,000 respiratory problems in children, and nearly a million work days lost due to illness each year.

In terms of cost, EPA estimates that cleaner diesel fuel will cost an additional 4.8 cents per gallon, although engines running on the fuel will have reduced maintenance expenses. Requiring pollution controls on new diesel equipment will add roughly one to two percent to the typical retail price of the equipment. All told, EPA estimates that the rule would cost $1.5 billion annually while saving more than $80 billion each year – mostly in averted health care costs. Rhode Island would enjoy approximately $138 million in annual economic benefits from a strong rule.

Unfortunately, the new standards would not be fully in place for a decade, and the proposal all but ignores diesel-powered trains, boats, and ships, which contribute more than one quarter – 28 percent – of dangerous fine particle soot from all non-road diesel sources. EPA estimates that by 2020 marine and locomotive engines will account for about 50 percent of diesel soot emissions and 30 percent of smog-forming...
nitrogen oxide emissions from all mobile sources. Also, the proposal includes “alternative” and “sensitivity” cost-benefit analyses that reduce the value attached to the lives of seniors and other Americans, apparently in an effort to erode the case for future public health and environmental regulations.

EPA asked for public comment on whether the agency should clean up marine and locomotive diesel fuel. Many of the 150,000 Americans who wrote to EPA about the proposal urged the agency to require marine and locomotive diesel fuel to meet the same standard – and on the same timeline – as other non-road diesel fuel. EPA appeared set to do so until an eleventh-hour lobbying effort by the oil industry. Rather than creating a special loophole for diesel trains, boats, and ships, EPA should cap the poisonous sulfur in marine and locomotive fuel at 15 parts per million by 2010, consistent with other non-road diesel fuel, and commit to adopting strong and timely standards for the engines in a separate rulemaking.
GLOBAL WARMING

EPA has taken no meaningful action to address the nation's global warming emissions, even though the U.S. is responsible for a quarter of the global emissions of carbon dioxide. The agency has disavowed its authority to regulate carbon dioxide as a pollutant and supported only voluntary measures to slow the rate of increase in global warming emissions. Global warming could have profound effects on Rhode Island's environment and public health.

Perhaps the most serious environmental challenge we face in the coming decade and century is global warming. The world's most respected climate scientists have concluded that our planet is warming as a result of manmade pollution. Fortunately, there are solutions. We can reduce emissions of carbon dioxide by shifting investment away from fossil fuels, such as coal and oil, to renewable energy and energy efficiency; increasing fuel economy standards for cars and light trucks; and cutting carbon dioxide emissions from the country's dirtiest coal-fired power plants. But our window of opportunity is closing. The longer we wait, the greater the risk that the consequences will be irreversible.

**Rhode Island: Carbon dioxide emissions**

Carbon dioxide emissions from power plants, 2001 (tons): 1,775,894

**Sources of Global Warming Pollution**

Burning dirty fossil fuels (oil, coal, and gas) to power cars and homes releases heat-trapping global warming pollution into the atmosphere, which alters the climate of the planet and throws weather systems out of balance. In the U.S., electricity generation accounts for 33 percent of total global warming emissions, transportation activities for 27 percent, and industrial activities for 19 percent. The remaining 21 percent of global warming emissions in the U.S. are due to residential, agricultural, and commercial activities.

Power plants in the U.S. are responsible for upwards of 40 percent of all domestic emissions of carbon dioxide, the leading cause of global warming. Burning coal results in more carbon dioxide emissions than any other method of generating electricity, yet we continue to rely on coal for more than half of our electricity generation.

U.S. global warming emissions continue to climb, increasing 15.8 percent since 1990 and growing by an annual average of 1.2 percent. The Energy Information Administration projects that carbon dioxide...
emissions will continue to increase on this trajectory, by 1.5 percent per year, through 2025.\textsuperscript{76} In Rhode Island, power plants emitted almost 1.8 million tons of carbon dioxide in 2001.\textsuperscript{77}

**Backtracking on Pledge to Curb Global Warming Emissions**

On March 13, 2001, just 60 days after taking office, President Bush wrote a letter to Senator Chuck Hagel (R-NE) stating that he would not support mandatory controls on carbon dioxide emissions from power plants. He then denounced the international process to reduce global warming, claiming that the temporary exemption of developing nations from emissions reductions made the Kyoto Protocol a “fatally flawed” treaty.

The letter contradicted statements made by the new EPA Administrator, former New Jersey Governor Christine Todd Whitman, who had just reasserted the administration’s campaign pledge in a series of public appearances. In a February 26, 2001 CNN interview, Administrator Whitman said, “George Bush was very clear during the course of the campaign that he believed in a multi-pollutant strategy, and that includes CO\textsubscript{2}, and I have spoken to that.... He has also been very clear that the science is good on global warming. It does exist.”\textsuperscript{78} Just three days before President Bush’s letter to Senator Hagel, the *New York Times* reported on the front page that the Bush administration would live up to its carbon commitment, based on statements made by Administrator Whitman at an international gathering of the Group of 8, the leading economic powers of the world.\textsuperscript{79}

About a year later, in February 2003, the Bush administration announced a plan to reduce the “emissions intensity” of global warming pollution by 18 percent by 2012. This plan would allow global warming emissions to continue to increase, but called for voluntary action to slow the rate of increase. The General Accounting Office (GAO) reviewed this plan in October 2003.\textsuperscript{80} GAO found that the rate of increase would already decline by 14 percent without any additional action on the part of the federal government. Moreover, the administration did not provide enough concrete information to support the weak four percent additional reduction in the rate of increase.

Even if the Bush administration succeeded through voluntary measures, this plan would put the U.S. global warming emissions at 32 percent above 1990 levels or about 10 percent higher than they are today.\textsuperscript{81} The Kyoto Protocol calls for U.S. global warming emissions to be seven percent below 1990 levels by 2010. This plan not only fails in comparison to the Kyoto treaty, but also could put the United States in breach of our existing legal commitments under the 1992 Rio Climate Convention signed in Rio de Janeiro by then-President George H. W. Bush.

In August 2003, EPA announced that it lacks the authority to regulate carbon dioxide as a pollutant under the Clean Air Act, arguing that Congress must provide it with explicit legal authority.\textsuperscript{82} The ruling came in response to a petition by the International Center for Technology Assessment, Greenpeace and other environmental organizations asking EPA to comply with the law, which requires the agency to protect Americans against all harmful pollutants, including emissions that damage the climate. In October, Rhode Island and 11 other states, several cities, and more than a dozen environmental groups joined forces to challenge EPA’s decision, filing a lawsuit in the Court of Appeals for the D.C. Circuit.\textsuperscript{a}

\textsuperscript{a} States challenging EPA’s decision are California, Connecticut, Illinois, Maine, Massachusetts, New
EPA’s stance could sabotage the strongest state law enacted to address global warming thus far—a California law passed in 2002 to cut global warming emissions from automobiles. The law requires automakers to reduce emissions as much as possible according to rules that the California Air Resources Board is scheduled to release in 2005. The rules would take effect in 2009. Several other states also are considering laws or regulations to require industries to reduce global warming emissions, mainly from power plants.

State Action in Response to Federal Inaction

At the Conference of Parties negotiations in Milan in December 2003, chief administration climate negotiator Dr. Harlan Watson noted that states are “laboratories where new and creative ideas and methods can be applied and shared with others and inform federal policy — a truly bottom-up approach to addressing global climate change.”

Dr. Watson’s statement, intended to demonstrate America’s resolve on climate change to the international community, is misleading; in fact, states are taking action precisely because of the dearth of federal leadership on climate change. Governor Gary Locke of Washington noted that the administration’s praise on states’ leadership “is just an excuse to delay and procrastinate. We are limited in what the states can do. We need a national policy to address global warming.”

Ironically, Dr. Watson lauded the 13 states that have enacted renewable portfolio standards—even though the Bush administration has fought successfully to ensure that a similar federal standard is not part of a federal energy bill. Similarly, he highlighted none of the measures enacted by several states to mandate reductions in global warming pollution. Instead, he mentioned the 40 states that have created databases of their global warming emissions and the eight states that have established voluntary global warming pollution goals.

Politics Over Science

In late July 2003, the administration announced plans to spend at least two more years and another $103 million studying what it calls the “uncertainty” of the science behind global warming. The Bush administration’s policies on global warming to date, however, reflect a clear preference for politics over science. In June 2003, EPA released its annual “State of the Environment Report,” after having deleted the entire section on global warming. An internal EPA memo noted that before the section was ultimately deleted from the final report, the White House had made such substantial edits to the text that it “no longer accurately represents scientific consensus on climate change.”

In addition, the Bush administration delayed analyzing a proposal by Senators Lieberman (D-CT) and McCain (R-AZ) to


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Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington.
limit emissions of carbon dioxide, the main pollutant implicated in global warming. The McCain-Lieberman Climate Stewardship Act of 2003, which garnered bipartisan support from 44 Senators, requires a reduction in global warming pollution by 2010 to the levels recorded in 2000. Although EPA prepared a preliminary analysis of the climate change legislation in May, the agency informed the bill’s two Senate sponsors three weeks later that “EPA will not be conducting an analysis” as they had requested.87

In the end, the administration issued a Statement of Administration Policy opposing the bill, stating, “The Administration is acting aggressively to address the issue of global climate change, and does not believe further legislation is necessary.”88

The Public Health and Environmental Effects of Global Warming
The most authoritative source of scientific information has been the United Nations' International Panel on Climate Change (IPCC), which came out with a three-part series of reports concluding that:89

- The Earth warmed more in the 20th century than in any century in the past 1,000 years;
- The Earth could warm by another 2.5-10.4 degrees Fahrenheit over the course of this century, a warming rate not seen in the last 10,000 years; and
- The most likely cause of the warming is the emission of greenhouse gases from the burning of fossil fuels.

Dr. Thomas Karl of the National Atmospheric and Oceanic Administration and Dr. Kevin Trenberth of the National Center for Atmospheric Research published a paper in the December 5, 2003 Science warning that on our current course, “the likely result is more frequent heat waves, droughts, extreme precipitation events and related impacts [such as] wildfires, heat stress, vegetation changes and sea-level rise.”90 According to a report compiled by 26 scientists from eight countries, 2002 rang in as the second-warmest on record, second only to 1998. The report also described 2002 as a year marking the worst flooding in Europe in 100 years and a record drought for parts of the United States. In fact, scientists found that 2002 drought patterns in the southwest match Dust Bowl records from the 1930s.91 Other potential consequences include changes in agricultural productivity; fluctuating water supplies; and an increase in the number of deaths and illness due to excessive heat, air pollution, water-borne diseases, and diseases carried by mosquitoes, ticks and other pests.

In February 2004, a controversial report commissioned by the Pentagon to assess the national security threats under a worst-case global warming scenario made headlines. The report states that a scenario of catastrophic climate change is “plausible and would challenge United States national security in ways that should be considered immediately.” The report does not purport to be a forecast, but it identifies a plausible scenario in which global warming causes a 5°F drop in parts of North America by 2020 and a 6°F drop in Northern Europe. It says global warming “should be elevated beyond a scientific debate to a U.S. national security concern.”92
The Economic Costs of Global Warming

Rhode Island: Cost of extreme weather events in 2002

Total insured losses and government expenditures on disaster assistance, 2002: $\textbf{9,951,318}$

In addition to threatening human health and the environment, extreme weather events cause massive property damage, placing a huge financial burden on the U.S. taxpayer and insurance industry. According to data from the Federal Emergency Management Agency, the National Flood Insurance Program, Army Corps of Engineers, Small Business Administration, Farm Service Agency, and the Property Claims Service, extreme weather-related spending in the U.S. in 2002 totaled nearly $20 billion nationally. In Rhode Island, government expenditures on weather-related disaster assistance and insurance company payments for insured losses totaled almost $10 million.

Another potential consequence of climate change in the United States—a rise in sea level—could have far-reaching effects on tourism-dependent coastal communities across the country as well as delicate coastal ecosystems. The U.S. coastal areas that are most vulnerable to future increases in sea level are those with low relief and those that are already experiencing rapid erosion rates, such as the Southeast, Northeast and Gulf Coast (Figure A).

Figure A. Projected Rates of Annual Erosion along U.S. Shorelines

![Projected Rates of Annual Erosion along U.S. Shorelines](image)
While the Clean Water Act has made strides in cleaning up some waterways, we are far from realizing this landmark legislation’s original vision. Rather than working with state agencies to repair our ailing waterways, the Bush administration has introduced or enacted a series of policies that strike at the heart of the Clean Water Act and has proposed cutting funding for important enforcement activities. These actions threaten the health and viability of waterbodies in Rhode Island, many of which are already too polluted for safe fishing and swimming.

Rhode Island’s Troubled Waterways

Number of rivers, lakes, and other waterways impaired: 158
Miles of rivers and streams impaired: 217
Percent of rivers and streams impaired: 33%
Acres of lakes, reservoirs, and ponds impaired: 2807.5
Percent of lakes/reservoirs/ponds impaired: 17%
Total toxic releases to waterways, 2001 (pounds): 10,171
Number of beach days affected by closings or advisories, 2002: 103

When drafting the Clean Water Act in 1972, legislators declared their primary objective as restoring and maintaining “the chemical, physical, and biological integrity of the Nation's waters.” In order to achieve this objective, the Act set out the goals of eliminating the discharge of pollutants and making all waterways fishable and swimmable.

While the Clean Water Act has made strides in cleaning up some waterways, the original vision of the Act remains the unmet benchmark of water quality in the United States.

- Although the precise number is not known, EPA believes that more than 25,000 bodies of water throughout the country are too polluted to meet basic water quality standards.
  - Approximately 39 percent of our rivers, 45 percent of our lakes and 51 percent of the nation’s estuaries are too polluted for safe fishing or swimming.
  - Beach closings and advisories in 2002 reached the second highest level in 13 years. Across the country, pollution caused more than 12,000 closings and advisories in 2002 at ocean, bay, Great Lakes and surveyed freshwater beaches.
At a time when it should be working with the states to make all of our waterways fishable and swimmable, the Bush administration has suggested, proposed, or enacted numerous policies that would weaken the Clean Water Act and threaten the future of America’s rivers, lakes, streams, and oceans.

Allowing More Pollution in Waterways

In January 2001, in *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers*, the Supreme Court ruled that the Army Corps of Engineers had exceeded its authority by blocking construction of a landfill that would have destroyed 17 acres of seasonal ponds. The Court determined that the seasonal ponds were “isolated, non-navigable, intrastate” waters not protected under the Clean Water Act as “waters of the United States.” The Supreme Court ruling did not include a definition of “isolated, non-navigable, intrastate” waters or delineate explicitly between these waters and “waters of the United States” protected by the Clean Water Act. This left EPA and the Bush administration with the authority to determine which waters and wetlands fit the definition of “isolated, non-navigable, and intrastate” and therefore fall outside of the purview of the Clean Water Act.

In January 2003, the Bush administration issued an Advanced Notice of Proposed Rulemaking, signaling its intentions to eliminate protection for a significant number of waterways under the Clean Water Act, including non-navigable tributaries of navigable waters, intermittent and ephemeral streams, man-made watercourses connecting these waters, and wetlands adjacent to these waters. At a press conference announcing the proposed rule, the administration acknowledged that the proposed rule could remove protection from 20 million acres of wetlands alone, or about 20 percent of U.S. wetlands in the lower 48 states.

Simultaneously, EPA and the Army Corps of Engineers directed staff to immediately stop implementing the Clean Water Act with regards to so-called “isolated” waters. This guidance suggests that all “isolated” waters are no longer protected and advises field staff to seek “formal project-specific approval” from Army Corps or EPA headquarters if they plan to use the Clean Water Act to protect these waters. This guidance could allow developers, mining companies, and other polluters seeking exemption from the Clean Water Act to argue that specific wetlands, small streams, non-navigable ponds or other waters are “isolated” and therefore fall outside of the Clean Water Act’s jurisdiction.

In written comments to EPA and Army Corps of Engineers about the proposed rule, an overwhelming majority of states – 39 of the 42 states that commented – objected to the idea of limiting the scope of the Clean Water Act. States raised concerns about clean drinking water, the inadequacy of local protections to keep waters free of pollution, having adequate state funds to keep waters clean, and the specious notion of an “isolated waterway.” The Rhode Island Department of Environmental Management Rhode Island Department of Environmental Management (DEM) urged EPA to abandon the proposal, noting that the “business of protecting and restoring the quality of our nation’s waters requires broad application of the Clean Water Act and a continued strong partnership between federal agencies and the states to get the job done.”
DEM also commented on the sweeping effects the rule change could have on Rhode Island’s waterways, stating that small non-navigable tributaries “comprise about 85 percent of the total stream miles in the state. Any action to remove this extensive portion of the surface water resource from the jurisdiction of the Clean Water Act would have serious consequences.”

On December 16, 2003, EPA announced that it would not go forward with the proposed rulemaking to redefine many wetlands, streams, and other waters “out” of the Clean Water Act. However, the guidance directing EPA and Army Corps of Engineers staff remains in place, effectively threatening waterways across the country.

Leaving Dirty Waters Dirty

Section 303(d) of the Clean Water Act requires states to identify waterways that remain impaired by pollution despite technology controls installed on sewage plants and factories. This program of the Clean Water Act—called the total maximum daily load, or TMDL, program—requires that states identify rivers, lakes, and coastal waters that remain polluted, rank them for priority attention, and then develop pollution limits for each body of water. If the state fails to do this, EPA is required to develop a priority waterway list for the state and issue its own pollution limit determination. States and EPA enforce the TMDL program by revising existing permits, including the pollutant limits and schedule for compliance.

In July 2001, EPA and the Bush administration announced an extensive “redesign” of the Clean Water Act’s TMDL program. The administration’s draft proposed rule to guide the TMDL program, if promulgated, would:

- Allow states to avoid doing cleanup plans for many polluted waters;
- Make cleanup plans less effective by not assigning responsibility to specific sources;
- Fail to protect waters that are in danger of becoming polluted;
- Attempt to allow EPA to escape its responsibility for ensuring watershed plans are designed to clean up polluted waters; and
- Allow states to drop polluted waters from cleanup lists.

Polluting Coastal Waters and Threatening Public Health

Sanitary sewers carry wastes from buildings to sewage treatment plants. When these sewers are overloaded, inadequately maintained, or obstructed, they often overflow, dumping raw and inadequately treated sewage into basements, streets, and waterways. EPA estimates that at least 40,000 sanitary sewer overflows occur nationally each year. Because sewer overflows contain raw sewage, they can carry bacteria, viruses, protozoa (parasitic organisms), helminthes (intestinal worms), borroughs (inhaled molds and fungi), and a host of other organisms that cause beach closings and kill fish. Sewage-contaminated waters can cause illness ranging in severity from mild gastroenteritis to life-threatening ailments.
such as cholera, dysentery, infectious hepatitis, and severe gastroenteritis.  

In January 2001, EPA proposed to clarify and expand permit requirements for 19,000 municipal sanitary sewer collection systems in order to reduce sewer overflows. The proposed Sanitary Sewer Overflow Rule, the product of a federal advisory committee that met for five years, would help communities improve some sanitary sewer systems by requiring facilities to develop and implement new capacity, management, operations, maintenance, and public notification programs. This rule would, among other things, require sewer operators to monitor sewers and notify health authorities and the public when overflows could potentially harm public health.

The Bush administration has blocked these regulations ever since it assumed office.

In addition, on November 7, 2003 the Bush administration issued a draft guidance that would allow publicly owned sewage treatment facilities to divert sewage around secondary treatment units and then combine the filtered but untreated sewage with fully treated wastewater before discharge, in a process called “blending.” The effect of this guidance would be to authorize the removal of the crucial second step in the process of secondary treatment during wet weather, specifically the biological treatment of the sewage. Currently, this sort of bypass is prohibited. Because the biological treatment component of the process removes most of the pathogens from the wastewater, this guidance could lead to beach closings, algal blooms, and increased incidences of pfisteria, giardia, and hepatitis A outbreaks.

The East Coast Shellfish Growers Association, representing the east coast shellfish industry, submitted comments to EPA about the proposed “blending” rule. In its comments, the Association wrote that the proposed policy “would most certainly have a significant negative impact upon the shellfish growers represented by our group. The shellfish that we grow depend on a healthy environment, and high water quality standards are imperative to the marketability and food safety of our products.” The Association urged EPA to scrap the proposed rule changes, “which would increase contamination in our coastal waters, and endanger the livelihoods of those in the shellfish industry.”
Undercutting Enforcement

Rhode Island: Clean Water Act compliance

Percentage of facilities exceeding their Clean Water Act permits at least once, January 2002-June 2003: 88%

The Bush administration’s fiscal year 2005 budget proposal would cut funding for EPA by $606 million, or seven percent below this year's enacted level. This would take environmental cops off the beat, reducing the number of inspections to detect violations of the Clean Air Act, Clean Water Act, and other key environmental laws. The proposed budget also cuts funding for the states’ clean water revolving loan funds, which help improve wastewater treatment facilities, by $492 million – a 37 percent decrease.

Already, inadequate funding for upgrades to wastewater treatment facilities and enforcement activities has hurt water quality. In the 18-month period between January 2002 and June 2003, 88 percent of major facilities in Rhode Island, including many municipal wastewater treatment facilities, exceeded their Clean Water Act permits at least once, often for more than one pollutant.

Moreover, the Bush administration’s poor track record on environmental enforcement is well-documented. A recent Knight Ridder analysis of 15 years of environmental enforcement records found that the Bush administration is catching and punishing far fewer polluters than the two previous administrations. Knight Ridder examined EPA data in 17 categories and subcategories of civil enforcement since January 1989 and compared the records of the past three administrations. The monthly average of violation notices against polluters, a critical enforcement tool, has dropped 58 percent since January 2001 compared with the Clinton administration's monthly average; notices of water pollution violations are down 74 percent. The study also found that administrative fines since January 2001 are down 28 percent, when adjusted for inflation, from Clinton administration levels.

A March 2004 study by Public Employees for Environmental Responsibility (PEER) found that EPA Administrator Michael Leavitt also has de-emphasized criminal enforcement. According to 2003 Justice Department figures, EPA has the lowest rate of prosecution for any major federal agency, with fully two-thirds of its criminal cases rejected. In addition, the Assistant Administrator for Enforcement and Compliance Assurance, a position requiring Senate confirmation, has been vacant since early January 2004.
The Bush administration is quietly rewriting the federal rules that grant states the authority to protect their coastlines from harmful federal activities. In July 2003, the administration proposed changes to the Coastal Zone Management Act that would weaken the voice of state agencies in determining the environmental impacts of offshore federal activities and give greater weight to the opinions of federal agencies. These changes could undercut the right of Rhode Island to protect its 420 miles of valuable coastline from harmful activities, including oil and gas development.

Rhode Island's Valuable Coastline

Miles of coastline: 420

The landmark federal Coastal Zone Management Act (CZMA) of 1972 is the only land and water use planning and management law at the national level. CZMA created the Coastal Zone Management Program, which is a federal-state partnership “dedicated to comprehensive management of the nation's coastal resources, ensuring their protection for future generations while balancing competing national economic, cultural and environmental interests.” This program represents a unique and carefully crafted partnership between coastal states and the federal government. Through this voluntary partnership, CZMA has given local coastal governments a meaningful voice in federal actions and decisions that directly affect their environment and quality of life.

The Bush administration was an early proponent of increasing offshore oil and gas development and exploration, particularly on 36 undeveloped oil leases off the coast of California. In January 2002, the administration appealed a federal district judge's ruling that the federal Minerals Management Service (MMS) had violated the CZMA when it extended 36 undeveloped oil leases off California's central coast. The federal district judge determined that the federal government denied California a voice in deciding to extend the leases. In December 2002, a federal appeals court upheld the lower court's ruling, writing that that the lease extensions "represent a significant decision to extend the life of oil exploration and production off of California's coast, with all of the far reaching effects and perils that go along with offshore oil production." Rather than appealing to the Supreme Court, Interior Secretary Gale Norton announced in April 2003 that the administration was dropping its case against the state of California.

Having lost in the courts, the Bush administration looked to regulatory channels to gain access to the leases in California and potentially the coastal areas of other states. In June 2003, the National Oceanic and Atmospheric Administration...
(NOAA), part of the Department of Commerce, proposed revisions to the Coastal Zone Management Act’s Federal Consistency Regulations.126

The Coastal Zone Management Program is a voluntary program for states (see Figure B for the states participating in the program.) If a state elects to participate, it must develop and implement a comprehensive management plan (CMP) describing the boundaries of the state’s coastal zone, the uses subject to the management program, the authorities and enforceable policies of the management program, the organization of the management program, and other state coastal management concerns. The states develop their CMPs in coordination with federal agencies, industry, other interested groups and the public. Once NOAA approves a state's CMP, then CZMA's Federal Consistency provision applies. “Federal Consistency” is a limited waiver of federal supremacy and authority. Federal agency activities that have coastal effects must be consistent with the federally approved policies of the state's CMP. The Federal Consistency provision is a cornerstone of CZMA and a primary incentive for states to participate.127

NOAA’s proposed changes to the Coastal Zone Management Act strike at the heart of this consistency provision and would limit states’ ability to participate in coastal planning decisions for federal agency activities or federally permitted or regulated activities. In a letter to Commerce Secretary Donald Evans, Representative Lois Capps and 100 others called the proposed changes “a pernicious assault on states’ rights” and wrote that these changes “would endanger the ‘equal-footing’ basis of the federal-state partnership that has ensured the protection of coastal resources and communities for nearly 30 years.” For example, the proposed regulatory changes would limit the information a state could obtain regarding a proposed activity and impose arbitrary deadlines that could constrain adequate and fair state review.128

Figure B. States participating in the Coastal Zone Management Program

Source: National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management
http://wwc.ocrm.nos.noaa.gov/czm/czmsitelist.html
Additionally, the published rule proposes to potentially exempt from state review activities that could result in direct coastal impacts, such as offshore oil and gas development, even if such activities contradict the federally-approved state coastal management plan. As stated in the Capps letter to Secretary Evans, “[t]his change would relegate all participating states to second-class status by eliminating the federal government’s obligation to defer to states’ judgments on the impacts of federal projects to state coastal resources.” Moreover, the proposed rule could facilitate development off our nation’s coasts, regardless of a state’s existing coastal protection policies, by reversing court opinions that have affirmed states’ rights, including states’ authority to review certain federal offshore oil drilling decisions.

This proposed rule is a product of Vice President Cheney’s National Energy Policy Development Group. In its May 2001 report, the energy task force recommended that the Secretaries of Commerce and Interior “re-examine the current federal legal and policy regime (statutes, regulations, and Executive Orders) to determine if changes are needed regarding energy-related activities and the siting of energy facilities in the coastal zone and on the Outer Continental Shelf (OCS).” The report complained that “businesses must comply with a variety of federal and state statutes, regulations, and executive orders. Aspects of these, under the Coastal Zone Management Act and the Outer Continental Shelf Lands Act and their regulations, attempt to provide for responsible development while considering important environmental resources. However, effectiveness is sometimes lost through a lack of clearly defined requirements and information needs from federal and state entities, as well as uncertain deadlines during the process. These delays and uncertainties can hinder proper energy exploration and production projects.”

The administration’s proposed changes to the Coastal Zone Management Act could undercut the right of Rhode Island to protect its 420 miles of valuable coastline from harmful activities, including oil and gas development.
Dependence on Foreign Oil

Since cars and light trucks account for 40 percent of all petroleum use in the U.S., the best way to cut our dependence on oil is to make vehicles go farther on a gallon of gas. The Bush administration has proposed overhauling the nation’s fuel economy system in a way that could make it easier for auto companies to qualify gas-guzzling SUVs and other light trucks for weaker fuel economy standards. This could actually increase our dependence on foreign sources of oil rather than reduce consumption.

We cannot drill our way out of reliance on unstable sources of oil. The Persian Gulf holds 65 percent of the world’s oil reserves, the U.S. only 3 percent. In order to curb our dependence on foreign oil, we must reduce our consumption overall.

In 1975, President Ford and a bipartisan vote in Congress enacted Corporate Average Fuel Economy (CAFE) standards. These standards required that the average fuel economy of all cars and trucks meet specific targets. They required that cars achieve an average of 27.5 miles per gallon (mpg) and light trucks, including SUVs, pickups, and minivans, achieve an average of 20.7 mpg. These standards doubled the fuel economy of new American cars and continue to save the United States 2.8 million barrels of oil per day.

Almost 30 years later, despite advances in vehicle technology, the federal government has failed to update these fuel economy standards in any meaningful way. In fact, average fuel economy is at a 23-year low.

The main reason why average fuel economy has trended downward is the SUV. Since the first CAFE standards were implemented, carmakers have exploited a loophole that allows light trucks to meet a lower efficiency standard by developing and marketing a whole new class of vehicles – the SUV for non-commercial use as a family car. As a result, light trucks have become an increasingly larger portion of new vehicle sales.

On April 1, 2003, the National Highway Traffic Safety Administration (NHTSA) finalized a paltry 1.5 mpg increase in the fuel economy of SUVs and light-trucks, phased in over the next five years and topping off at 22.2 mpg by 2007. The mileage requirement for other passenger cars will remain at 27.5 mpg, the standard set in the 1970s.

On December 22, 2003, NHTSA proposed overhauling the entire fuel economy system, noting that the current standards apply to vehicle classes created in 1972 that bear “little resemblance to today’s motor vehicle market or the current and emerging vehicle fleet.” The proposal would scrap the current CAFE standards for a new system that would establish separate standards for a new series of vehicle weight classes.
categories. The new system would close a loophole that exempts 8,500 pound to 10,000 pound trucks from CAFE standards, but it would create more truck weight classes, with different fuel economy standards for each classification. This could encourage automakers to add weight to their vehicles to allow them to qualify for weaker standards. In fact, NHTSA’s December notice of proposed rulemaking even states that the new criteria could decrease fuel economy.\textsuperscript{137}

In addition, the Bush administration has supported efforts by Congress to enact an energy policy that would actually increase U.S. oil consumption by adding new loopholes in current fuel economy standards.\textsuperscript{138} According to a recent analysis by the Energy Information Administration, by 2025, U.S. imports of petroleum would have increased by 82.9 percent under the energy policy rejected by the Senate in November 2003, only slightly less than business as usual.\textsuperscript{139}

Instead, the Bush administration should propose fuel economy standards that use available technology to dramatically increase the gas mileage of cars and trucks. Recent research by the National Academy of Sciences (NAS) found that automakers could use existing technology to increase the fuel economy of their fleets to 40 miles per gallon over the next decade while improving safety and maintaining performance.\textsuperscript{140} Specifically, the report found that increasing fuel economy standards to 40 miles per gallon by 2014 would:\textsuperscript{141}

- Reduce the oil used by cars and trucks by one-third in 2020;
- Save four million barrels of oil each day by 2020; this is 10 times the projected daily yield from the Arctic National Wildlife Refuge in the same year;
- Save consumers $16 billion at the gas pump;
- Cut global warming emissions from vehicles by 20 percent.

In 2001, residents of Rhode Island consumed 409 million gallons of oil. A 40 mpg fuel economy standard would save consumers in Rhode Island up to $270 million annually at the gas pump and conserve 154 million gallons of oil by 2020 (Table 1).

<table>
<thead>
<tr>
<th>Table 1. Rhode Island’s Savings with a 40 mpg Fleet-Wide Corporate Average Fuel Economy Standard</th>
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<tbody>
<tr>
<td><strong>Annual Oil Savings</strong> (millions of gallons)</td>
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<tr>
<td>Annual oil usage (2001)</td>
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<tr>
<td>% of total consumption (2001)</td>
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<td>By 2015</td>
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<td>By 2020</td>
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<tr>
<td>By 2015 at $1.40/gallon</td>
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<td>By 2020 at $1.40/gallon</td>
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* Assumes that usage does not change from 2001 levels.

Superfund is the nation's preeminent law for making polluters clean up the country's most contaminated toxic waste sites. Unfortunately, EPA has failed to reinstate the “polluter pays” fees that help fund cleanup of abandoned sites, slowed the pace of cleanups, and forced taxpayers to pick up more of the bill for the cleanups that are happening. Funding shortfalls and delays increase the likelihood that people living and working near these contaminated sites will be exposed to toxic chemicals.

In 1980, in response to the massive contamination of Love Canal, a New York town built on top of an abandoned toxic waste site, Congress passed the Superfund law to clean up the nation's worst toxic waste sites. Superfund embodies the belief that innocent people and taxpayers should not bear the public health and financial burdens caused by toxic waste sites. Rather, Superfund makes polluters, industries that purchase and use toxic chemicals and petroleum, and other corporations pay to clean up these public health threats.

Underfunding the Superfund Program

Rhode Island: Superfund toxic waste sites

Number of sites on the National Priority List: 14

Superfund makes polluters pay to clean up contaminated sites for which they are directly responsible and also assesses “polluter pays fees” that fill a trust fund intended to clean up abandoned toxic waste sites. In 1995, Superfund's polluter pays fees expired.

The Bush administration opposes reinstating Superfund's fees, taking a position that is contrary to former Presidents Reagan, George H.W. Bush, and Clinton, who all supported Superfund's critical funding mechanism. Superfund's trust fund is now bankrupt. The President's FY2005 budget shows that there was no money left in the trust fund at the end of FY2003, even including cost recoveries and interest. A July 2003 report by the General Accounting Office (GAO) stated that “unless EPA receives additional funds from revenue sources such as cost recoveries, the balance of the trust fund available for future appropriations will be negative at the end of FY2003....” There is currently no money going into the trust fund from the polluter pays fees.

In addition to opposing the polluter pays fees, the administration has simultaneously underfunded the program and increased the amount that taxpayers contribute to cover the cost of cleanups. Between 2001 and 2004, annual appropriations for Superfund...
have fallen short by $1.6-$2.6 billion. In FY2004, Superfund appropriations were $1.257 billion, all coming from general revenues, letting polluters off the hook for the cost of cleaning up all abandoned toxic waste sites. The President’s FY2005 budget requests a small increase for Superfund; however, the money would all come from general revenues, and Congress may not honor that request given the competition for scarce government funds.

A 2002 EPA Inspector General’s report showed that 78 Superfund sites that requested funding in FY 2002 received no or only partial funding. Forty-seven (47) of these sites had requested funding for remedial actions, with 16 receiving no funding at all; 31 sites had requested funding for long-term operation, maintenance, or cleanup activities such as groundwater treatment systems that run years after major site cleanup is complete, with 11 receiving no funding at all. Although EPA regions requested approximately $510 million for remedial action cleanups, EPA headquarters obligated approximately $281 million, a funding shortfall of approximately $229 million, or 45 percent.

Similarly, a 2004 EPA Inspector General’s report found that EPA insufficiently funded 29 cleanup projects in FY2003. The report also noted that EPA regional offices have begun to ask for less money for cleanups, knowing that adequate funding may not be available. In response to the Inspector General’s questions about how EPA develops site cleanup cost estimates, some regional officials admitted to taking budget limitations into consideration and stated that the agency conducts cleanup work differently now than when full funding was available.

### Making Taxpayers Pay More

#### Shifting the Cost from Polluters to Rhode Island’s Taxpayers

| Amount taxpayers paid to clean up sites, 1995 | $1,070,930 |
| Amount taxpayers will pay to clean up sites, 2004 | $4,442,770 |
| Percent increase | 315% |

The administration’s policies mark a dramatic reversal of the standards that have guided the cleanup of toxic waste sites in this country for more than twenty years; the Bush administration is making taxpayers pay more and asking polluters to pay less.

The ratio of trust fund to general revenue inputs has changed dramatically since 1995, when the trust fund contained more than $3.5 billion. In 1995, the year Superfund’s polluter pays fees expired, 82 percent of the Congressional appropriation for the Superfund program came from the trust fund, and only 18 percent came from general revenues. Since the expiration of the fees, more and more of the Superfund appropriation must come from general revenues. Now that the trust fund is bankrupt, 100 percent of the Congressional appropriation for the Superfund program in 2004, and in future years unless the fees are reinstated, will come from general revenues. Taxpayers now must fill the hole.
left by the expiration of the polluter pays fees.

In 1995, the year Superfund's polluter pays fees expired, taxpayers paid for only 18 percent of abandoned Superfund cleanups, or $303 million. In 2004, American taxpayers are paying all costs for abandoned Superfund cleanups, or about $1.257 billion. Taxpayers in Rhode Island paid more than $1 million to clean up abandoned toxic waste sites in 1995; in 2004, taxpayers will pay approximately $4.4 million, an increase of 315 percent. This is a price tag that should be borne by large polluters, not the average taxpayer.

**Slowing the Pace of Toxic Waste Cleanups and Site Listings**

By under-funding the Superfund program, the Bush administration has slowed or halted the cleanup of the nation's most dangerous toxic waste sites, threatening neighboring communities with groundwater contamination and other toxic exposure.

EPA had steadily increased the pace of cleanups, to a peak of 87 cleanups a year on average during the late 1990s. However, the Bush administration has dramatically decreased the pace of cleanups. The number of cleanups completed has dropped by 50 percent in the last three years (Figure C). EPA cleaned up 47 toxic waste sites in 2001, 42 in 2002 and 40 in 2003; EPA had predicted it would clean up 75 sites in 2001 and 65 in 2002. EPA projects that it will clean up only 40 sites in 2004.149

![Figure C. Superfund Cleanups Completed by EPA, By Year](image)

Source: Environmental Protection Agency. *Figure for 2004 is an estimate.

EPA continues to identify sites for cleanup; however, the Bush administration has listed fewer Superfund sites to the National Priority List (NPL) on average in the last three years than the previous administration. From 1993 to 2000, EPA listed an average of 30 sites to the NPL, with the number of sites listed increasing to 43 sites in 1999 and 39 in 2000. In FY2003, the Bush administration listed only 20 sites and has averaged 23 sites per year for the last three years—a 23 percent decline from the 1993-2000 average.150

In March 2004, EPA proposed to list only 11 new toxic waste sites to the Superfund National Priority List; the agency did not officially add any sites to the list.151
EXEMPTIONS FOR THE DEPARTMENT OF DEFENSE

The Department of Defense is one of the most prolific polluters in the United States. Attempting to capitalize on increased public sympathy for the military, the Department of Defense is pushing for blanket exemptions from cornerstone laws designed to protect people living on and near military sites from exposure to toxic waste and air pollution.

For years, the Department of Defense (DoD) has claimed that complying with environmental laws hampers military training and readiness. In 2003, the Pentagon unveiled the “Readiness and Range Preservation Initiative,” which sought immunity for the DoD from the country’s cornerstone environmental laws. Congress granted some of the Pentagon’s requests, exempting the DoD from the requirements of the Endangered Species Act, Marine Mammal Protection Act, and the Migratory Bird Treaty Act. Now, the Pentagon has indicated that it wants formal exemption from several environmental laws that protect communities from toxic waste and air pollution: the Resource Conservation & Recovery Act (RCRA); Comprehensive Environmental Response, Compensation, and Liability Act (Superfund); and Clean Air Act.

Current law already allows case-by-case exemptions and permits the President to waive environmental rules in specific situations when national security is at stake. However, DoD’s proposal would take the drastic step of giving the military an across-the-board exemption from key provisions under these environmental laws.

Underlying this petition is the claim that these environmental laws hinder military readiness, despite evidence to the contrary. In June 2002, the General Accounting Office (GAO) said the DoD has failed to produce any evidence showing that environmental laws or other “encroachments” have significantly affected military readiness. Christine Whitman, former head of the U.S. Environmental Protection Agency, testified before the Senate that she had “been working very closely with the Department of Defense and I don’t believe that there is a training mission anywhere in the country that is being held up or not taking place because of environmental protection regulation.”
Exemptions from the Endangered Species Act

In November 2003, a provision tucked away in a defense authorization bill exempted the Department of Defense from the Endangered Species Act, the cornerstone law designed to protect and recover species poised on the brink of extinction. This prevents the U.S. Fish and Wildlife Service or National Marine Fisheries Service (now NOAA Fisheries) from designating critical habitat for endangered species on any lands owned or controlled by DoD if an Integrated Natural Resources Management Plan has been developed pursuant to the Sikes Act that “addresses special management consideration or protection.” Section 7(j) of the Endangered Species Act already provides an exemption for any agency action, including actions that would affect critical habitat, if the Secretary of Defense finds that the exemption is necessary for national security.

Critical habitat is an essential part of the law’s safety net for imperiled species. More than 425 military installations provide sanctuary to 300 species listed as endangered or threatened. For example, nearly a quarter of the remaining red-cockaded woodpecker population resides on 16 military installations in the southeastern United States.155

Ironically, DoD has a long history of successful compliance with the Endangered Species Act on its numerous installations. Although species conservation challenges have arisen in a handful of locations, local DoD and federal wildlife officials have consistently met those challenges and developed strategies for achieving training objectives while complying with the Endangered Species Act.

Exemptions from the Marine Mammal Protection Act

In November 2003, as part of the defense authorization bill, the Department of Defense also won exemption from the Marine Mammal Protection Act (MMPA). The heart of the MMPA – our nation’s leading instrument for the conservation of whales, dolphins, sea otters, manatees, and other marine mammals – is its general moratorium on the takingb of these species in U.S. waters. Under the moratorium, wildlife agencies are required to review government activities that have the potential to harass or kill these animals in the wild.

The Pentagon now does not have to comply with the MMPA in three significant ways. First, the provision opened a major loophole into the statutory definition of “harassment,” exempting from review a range of Pentagon activities that potentially harm marine mammals by causing physical injury or impairing their ability to breed, nurse, feed, or migrate. Secondly, it eliminated the requirement that the taking (harassing and killing) of marine mammals be limited to “small numbers” of animals in a “specified geographic region,” opening the door to activities that could injure or kill thousands of marine mammals across the world’s oceans. And, finally, it created broad exemptions that allow the Pentagon to bypass the review process entirely. Unlike such provisions in other statutes,

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b The term "take" is statutorily defined to mean "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture or kill any marine mammal."
the exemption for the MMPA applies not only to any single action “undertaken by the Department of Defense or its components,” but to any “category of actions” as well. This language allows for sweeping application.

Department of Defense activities along our coasts affect a vast expanse of marine mammal habitat. Its operations areas and ranges, which lie off Washington, California, Massachusetts, and other coastal states, extend across 700,000 square miles of ocean—an area roughly three times the size of Texas.\textsuperscript{156} DoD has received permission under MMPA for missile firings, which cause seals resting on nearby rocks and beaches to stampede, killing their pups, and ship-shock tests, which involve detonations of thousands of pounds of high explosives.

Figure D. Department of Defense Operation Areas and Ranges in Coastal Waters

\begin{figure}
\centering
\includegraphics[width=\textwidth]{map.png}
\caption{Department of Defense Operation Areas and Ranges in Coastal Waters}
\end{figure}

\textit{Map created by Natural Resources Defense Council}
Proposed Exemptions from Superfund and RCRA

Department of Defense: Polluting Rhode Island’s Environment

DoD toxic waste sites on National Priority List: Davisville Naval Construction Battalion Center, Newport Naval Education and Training Center

The Department of Defense is responsible for 130 Superfund toxic waste sites – more than any other polluting party – including two sites in Rhode Island, the Davisville Naval Construction Battalion Center and the Newport Naval Education and Training Center. Now, the Pentagon is now asking to be exempted from laws that would prevent this pollution or require DoD to clean it up.

The Department of Defense is attempting to weaken the ability of states, EPA, and citizens to protect public health and environmental quality from toxic waste. DoD is seeking broad exemptions from the Comprehensive Environmental Response Compensation and Liability Act (“Superfund”), the law that facilitates cleanups at the nation’s worst toxic waste sites and holds polluters responsible for the release of hazardous materials, and the Resource Conservation and Recovery Act (RCRA).

Superfund’s cleanup provisions are triggered by a “release” of a toxic substance. DoD’s proposal would exempt “explosives, unexploded ordnance, munitions, munition fragments, or constituents thereof” that are on “operational ranges”—a term that is not defined and could be broadly interpreted—

from Superfund’s definition of a toxic “release,” unless the military closes the range or if the substances migrate off the range and require cleanup.

In effect, DoD’s proposal could eliminate EPA’s authority to clean up a release or respond to a substantial threat of a release of hazardous substances on munitions ranges until the contamination seeps beyond range boundaries. This would delay critical remediation of toxic pollution by years, making cleanup more complex and more expensive and increasing the risk of human health effects from toxic exposure.

In letters to congressional leaders, the American Water Works Association, Association of Metropolitan Water Agencies, the National Association of Water Companies, and the Association of California Water Agencies voiced strong objections to DoD’s proposed exemption from CERCLA, noting that it might threaten local drinking water supplies and force consumers “to bear the costs of cleaning up DOD-related contamination and securing alternative water supplies.” The agencies further noted that the DoD proposal “would require human health and environmental effects to occur beyond the boundaries of an operational range before action could be taken. Acting only after the damage has been done will incur unnecessary public health risks, unacceptable losses of water resources and
high costs to clean up water supplies and/or secure alternative sources.” 159

In addition, the DoD proposal undermines RCRA, which establishes a cradle-to-grave management system for handling hazardous wastes. DoD’s proposal would exempt “explosives, unexploded ordnance, munitions, munition fragments, or constituents thereof” from the definition of “solid waste” in numerous circumstances, including the training of personnel and the handling of hazardous wastes on-range. In effect, the Department of Defense would be allowed to leave munitions lying on the ground, where they could leach toxic chemicals into the environment.

In addition to leaving the term “operational range” vague, this proposal also seems to broaden the exemption to sites other than training ranges. The proposal exempts facilities that conduct “research, development, testing, and evaluation of military munitions, weapons, or weapon systems” from RCRA’s regulations, which could apply to private businesses as well as DoD facilities.

**Local Implications for the Environment and Public Health**

According to the Military Toxics Project, 25 million acres of land on closed, transferred, and transferring ranges are contaminated with unexploded ordnance, chemical munitions, toxic explosive compounds, toxic propellants and heavy metals. The Department of Defense estimates that it will cost at least $100 billion to clean up unexploded ordnance and an additional $40-$140 billion to clean up closed, transferred or transferring training ranges. 160

Military munitions pose environmental and human health threats from the point of production to disposal. Small arms ammunition has contaminated training ranges across the country with lead. Unexploded ordnance poses an immediate safety risk and also leaches toxic chemicals into the environment. Facilities that dispose of unwanted munitions by burning or detonating them in the open release large amounts of heavy metals, explosives and other toxic chemicals into the air, often traveling for miles. 161

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**Davisville Naval Construction Battalion Center, North Kingstown, Rhode Island**

The former Davisville Naval Construction Battalion Center (NCBC), located 18 miles south of Providence in North Kingstown, covers approximately 900 acres.

Narragansett Bay is located just 600 feet from the site. Approximately 27,000 people get their drinking water from public wells located within three miles of the site.

Heavy metals including lead, cadmium, silver, mercury, and chromium have been found in the sediments and on the shoreline of Allen Harbor. Other contaminants in Allen Harbor include polycyclic aromatic hydrocarbons (PAHs), polynuclear aromatic hydrocarbons (PNAs), solvents, and PCBs. Groundwater is shallow, 2 to 4 feet in some areas, and the soil is permeable, conditions that facilitate movement of contaminants into the groundwater and toward Narragansett Bay. In addition, a number of salt marshes that could be affected by contamination from the site have been identified in the Allen Harbor, Calf Pasture Point, and Narragansett Bay areas.

DoD is seeking broad exemptions from Superfund in order to limit its liability for pollution at sites like the Davisville Naval Construction Battalion Center.

*Source: EPA, Davisville Naval Construction Battalion Center fact sheet*
In the wake of the Cold War, the Department of Defense left a trail of military sites polluted with explosives and unexploded ordnance. Over the last two decades, the Superfund and RCRA programs have spent billions cleaning up these sites and removing toxic waste in order to protect the health of the military employees and surrounding communities. Exempting “operational” ranges, broadly defined, from Superfund and RCRA only serves to jeopardize the men and women working and training at these sites and military communities surrounding the ranges by exposing them to toxic pollution.

Perchlorate pollution from DoD sites is of particular concern. Perchlorate is used in solid rocket and missile fuel, flares and spotting charges; as an explosive, it would fall under the list of materials exempt under Superfund’s definition of a toxic “release.”

Recent studies show that perchlorate can cause harmful health effects in minute doses. Perchlorate is a powerful thyroid toxin that can affect the thyroid’s ability to absorb the essential nutrient iodide and make thyroid hormones. Since the thyroid regulates metabolism, an under-active thyroid gland in adults can lead to fatigue, depression, anxiety, weight gain, hair loss, and other side effects. In children, the thyroid also plays a role in proper development. Small disruptions in a woman’s thyroid hormone levels during pregnancy can cause decreased learning capacity and delayed development in children; larger disruptions cause mental retardation, loss of hearing and speech, or deficits in motor skills.

Perchlorate from military ranges has found its way into the drinking water for millions of Americans. Sites involved in the development, production, testing, storage, maintenance, or disposal of rockets, missiles or munitions can leach perchlorate into groundwater and threaten public drinking water supplies. The Readiness and Range Preservation Initiative would make it difficult, if not impossible, to address perchlorate contamination on operational military ranges—the nature of which is not defined in the proposal—until the pollution migrates or moves off-range.

Proposed Exemptions from the Clean Air Act

The Readiness and Range Preservation Initiative’s proposed revisions to the Clean Air Act are designed to exempt the Department of Defense from having to comply with our national public health air quality standards, called national ambient air quality standards (NAAQS). The proposed revisions would give DoD a three-year extension on its conformity analysis—an analysis of emissions to determine a certain activity’s impact on air quality—and allow the federal government to proceed with its activities while analyzing those same activities’ effects on air quality. Although the proposal contains language requiring DoD to cooperate with a state to ensure compliance within three years of the date of new activities, it subsequently removes all the hammers for ensuring that they do so and preempts states from taking action to require reductions from the DoD. In addition, the proposal allows EPA to “approve” non-attainment areas as if they had attained the Clean Air Act’s health-based standards, if the reason for violation is military pollution.
The State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO) have formally opposed the DoD’s proposal. In a letter to the House Armed Services Committee, STAPPA and ALAPCO wrote that the exemptions are “unjustified and would improperly compromise the [Clean Air Act’s] mission and the responsibilities of state and local officials to protect public health and safeguard air quality.” STAPPA also argued the DoD proposal would “serve only to allow routine, non-emergency activities...to skirt important environmental requirements. The significant adverse air quality impacts that could result from such exemptions could unnecessarily place the health of our nation’s citizens at risk.”

Local Implications for the Environment and Public Health

DoD’s proposal would subject those living on or near military bases to dirtier air, which could result in more premature deaths, asthma attacks, cardiopulmonary problems, and other adverse health effects.

Military personnel exercising and training outdoors would be particularly vulnerable to the harmful effects of increased air pollution. According to the American Lung Association, people breathe more air during exercise or strenuous work, drawing air more deeply into the lungs. And when exercising heavily, people breathe mostly through the mouth, bypassing the body’s first line of defense against pollution, the nose.

Children living near these military bases also would be at increased risk for respiratory problems, as they are far more susceptible than adults to the adverse health effects of air pollution, for several reasons. Not only are children more active than adults, children also spend more time outdoors where air pollution levels are higher. This combination of exercise and severe air pollution increases the penetration of pollutants into the lungs. Children also breathe more air pound-for-pound than adults. As a result, cases of adolescent asthma have rapidly increased, more than doubling in the last two decades.

According to the U.S. Army, Camp Fogarty in Kent County, Rhode Island was in serious non-attainment for ozone as of the end of 2002. Under DoD’s proposal, this and other installations may be exempt from complying with these health-based air quality standards.
“Earth Day is a time to celebrate. We, the American public, have accomplished so much. Gone are the days when air pollution could turn noon to night, when rivers caught fire, and toxic waste was poured down drains.” These words, written by EPA Administrator Leavitt in his 2004 Earth Day message, are true. Our cornerstone environmental laws have made measurable progress in restoring the health of our environment.

But, we cannot declare success yet. Too many people still breathe unhealthy air, too many of our waterways remain polluted, and we continue to face new environmental challenges everyday. Certainly, we cannot say that it is time to weaken protections.

Many of the policies outlined in this report are still pending, with final decisions due over the next few months. This offers the Bush administration an opportunity to reverse course on these policies and recognize the importance of the Clean Water Act, Clean Air Act and other environmental laws in maintaining the health and quality of life for all Americans.


4 42 U.S.C. 7411.

5 H.R. Rept. 95-294, 185; and 1977 CRS Legislative History, 2652.


8 In February 2000, Tampa Electric Company settled with EPA, agreeing to install emissions control equipment and pay civil penalties for NSR violations. Later that year two other agreements were announced, but were not finalized, and talks between those parties have not proceeded under the Bush administration.


16 C.A. Pope III et al, “Cardiovascular Mortality and Long-Term Exposure to Particulate Air Pollution: Epidemiological Evidence of General Pathophysiologica Pathways of Disease,” *Circulation* (109), 71-77, 2004. Published online before print at www.circulationaha.org, DOI: 10.1161/01.CIR.0000108927.80044.7F.


35. For sulfur dioxide emissions, we assumed that 0.30 pounds/mmBTU is the best emissions rate achievable using sulfur scrubbers. That this standard is being met routinely can be verified in EPA’s RACT/BACT/LAER clearinghouse, http://cfpub1.epa.gov/rblc/htm/bl02.cfm. To calculate “excess” emissions for each pollutant for each plant, we multiplied the optimal emissions rate by the heat input and subtracted the product from the actual emissions in 2002.
37. For nitrogen oxide emissions, we assumed that .15 pounds/mmBTU is the best emissions rate achievable using selective catalytic reduction to reduce NOx emissions from conventional coal plants. That this standard is being met routinely can be verified in EPA’s RACT/BACT/LAER clearinghouse, http://cfpub1.epa.gov/rblc/htm/bl02.cfm. To calculate “excess” emissions for each pollutant for each plant, we multiplied the optimal emissions rate by the heat input and subtracted the product from the actual emissions in 2002.
38. U.S. Energy Information Administration, Analysis of Strategies for Reducing Multiple Emissions from Power Plants Sulfur Dioxide, Nitrogen Oxides and Carbon Dioxide, December 2000. The EIA study projects that full application of the New Source Review program would cut power plant SO2 emissions to just 1.9 million tons nationally, eliminating 8.2 million tons, and cut power plant NOx emissions to just 1.6 million tons, eliminating 2.8 million tons. EIA’s numbers reflect an assumption that some sources would repower or retire rather than install new pollution controls.


59 69 FR 4652. The text of the rule is available at http://www.epa.gov/air/mercuryrule/.


109 EPA Docket OW-2002-0050.


115 68 FR 63042, “National Pollutant Discharge Elimination System (NPDES) Permit Requirements for Municipal Wastewater Treatment Discharges During Wet Weather Conditions.”


117 Excerpts from publicly-filed comments on EPA’s proposed sewage blending policy (68 Fed. Reg. 63042), compiled by NRDC.


139 The EIA report focused on provisions that, in EIA's estimation, have the “potential to affect energy consumption, supply, prices or imports.” http://www.eia.doe.gov/oiaf/servicerpt/pcebf/pdf/sroiaf(2004)02.pdf.


141 Based on an analysis by the Union of Concerned Scientists.


We compared budget appropriations for Superfund with Superfund’s funding needs, as outlined in Katherine N. Probst and David M. Konisky with Robert Hersh, Michael B. Batz, and Katherine D. Walker, Resources for the Future. Superfund’s Future: What Will It Cost? July 2001. Numbers have been adjusted for inflation (to 2003 dollars).


145 Based on an analysis compiled by the National Wildlife Federation from the U.S. EPA Superfund database.

146 See GAO, Military Training: DOD Lacks a Comprehensive Plan To Manage Encroachment on Training Ranges, GAO-02-614 (June 2, 2002). The GAO report further points out that each major branch of the armed forces – Army, Navy, Air Force, Marines – conducts training exercises separately and without collaboration, thereby unnecessarily duplicating costs and environmental impacts. In the case of Camp Pendleton in California, habitat conflicts could be minimized if the Marines would conduct their desert training at nearby Edwards Air Force Base.


148 Natural Resources Defense Council analysis.


150 Based on analysis compiled by the National Wildlife Federation from the U.S. EPA Superfund database.