

**STAGNANT WATERS:
THE LEGACY OF THE BUSH
ADMINISTRATION ON THE CLEAN
WATER ACT**

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EXECUTIVE SUMMARY

October 18th marks the 36th anniversary of the modern Clean Water Act. This landmark environmental statute established a national commitment to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

The Clean Water Act is the main reason the nation's waterways have shown dramatic improvement in water quality, even as the population has increased by close to 50 percent. It has been instrumental in improving the health of rivers, lakes, and coastal waters. It has stopped billions of pounds of pollution from fouling the water and significantly increased the number of waters that are safe for swimming, fishing, or use as a drinking water source.

The successes and failures of the Clean Water Act can be succinctly stated. In 1972, only one-third of the nation's waters met water quality goals. Today, two-thirds of those waters meet water quality goals.

As a result of Congressional action, the nation has doubled the waters that meet water quality goals, but there is still much work to be done: over one-third of our nation's waters still fail to meet the water quality goals established under the Clean Water Act over three decades ago.

While progress thus far is laudable, disturbing recent trends indicate that these efforts have reached a plateau, and that so-called "improvements" to water quality merely maintain, but do not increase, the percentage of waters, including wetlands, meeting fishable and swimmable standards. Unfortunately, there is also anecdotal evidence of declining water quality conditions throughout the nation, reversing progress toward meeting the goals of the Clean Water Act.

To finish the task, the Federal Government must renew its commitment to have all waters in the United States meet the fishable and swimmable standard.

Unfortunately, over the past eight years, the Bush administration has slowed the progress in cleaning up the nation's waters, and has taken steps to undermine the successes already achieved – to virtually eliminate any Federal "safety-net" in protecting the nation's water-related environment.

The Bush administration has presided over the slow, but steady, dismantling of the Clean Water Act. However, unlike earlier overt attempts by Republicans in Congress, the Bush administration's weakening of the Act has been subtle – eliminating Federal clean water protections in favor of market-based, pro-industry philosophies that will result in dirtier water throughout the United States.

Whether through internal administrative actions to undermine, withdraw, or weaken environmentally protective rules and regulations, through efforts to restrict or eliminate

funding for Federal agencies charged with the responsibility of implementing or enforcing the nation's environmental laws, or through outright reversals of important programs and policies that maintain water quality protection, the Bush administration has spent the last eight years undermining efforts to protect the nation's waters.

For example, during the last eight years:

- The Bush administration has utilized the regulatory uncertainty created by the U.S. Supreme Court as an opportunity to eviscerate Clean Water Act protection over millions of rivers, streams, lakes, and wetlands – converting the “no net loss” policy to a “*pro* net loss” policy;
- The Bush administration has walked away from the Federal commitment towards improving, repairing, and replacing the nation's crumbling wastewater infrastructure;
- The Bush administration has ignored the growing scientific consensus on global warming, leaving Americans more vulnerable to droughts, coastal and river flooding, and other climate-related impacts;
- The Bush administration has embraced the wishes of special-interest polluters, such as the oil and gas industry, chemical manufacturers, and large-scale factory farmers, in weakening Clean Water Act protections over the nation's waters;
- The Bush administration has proposed to relax decades old Clean Water Act standards to prevent the discharge of raw or partially-treated sewage into the nation's rivers and streams;
- The Bush administration has reversed the “no net loss” policy of President George H.W. Bush's administration, and has allowed for wetlands to be drained or filled without proper mitigation; and
- The Bush administration has rejected and withdrawn proposals of prior Presidential administrations that would have improved the overall quality of its waters.

Congress made a commitment more than 30 years ago to restore and protect the nation's water quality, and we should stand ready to uphold this commitment. Taken as a whole, the modern Clean Water Act has been a tremendous success. Yet, the past 36 years have also provided us with significant insight on where the Clean Water Act has failed – most notably in controlling various nonpoint sources of pollution.

Even with the knowledge of how far the nation has come, and how close it is to finally achieving the fishable and swimmable goals of the Act, the United States stands on the threshold of throwing all of these successes away and reverting to the days of rivers that burn, lakes that are dead, and waterways that serve as sewers.

The actions of the Bush administration clearly demonstrate how easy it is to turn the clock back on protecting our nation's waters. In just under eight years, the Bush administration has shown that the decisions, priorities, and policy choices made by the Executive Branch can mean the difference between concerted efforts to restore and protect our most vital natural resource from pollution, and efforts to undermine and reverse these protections.

During the last few years, we have witnessed a dramatic reversal in water quality trends, with States reporting greater numbers of rivers, lakes, and coastal areas that fail to meet water quality standards.

We have learned that the misguided interpretation of four members of the Supreme Court, when endorsed by the Executive Branch, exposes untold waters and wetlands to limitless levels of pollution and development and threatens the drinking water sources of millions of American citizens.

We see documents from the Environmental Protection Agency ("EPA") that a failure to make significant, immediate investments in water infrastructure will lead to waters more polluted than existed prior to the enactment of the Clean Water Act, even while the administration cuts such funding.

We see the reemergence of massive "dead-zones" in the Great Lakes and the Gulf of Mexico, indicating that local water quality conditions are on the "tipping point" of ecological collapse, and we see the potential threat to the nation's food supply from the improper disposal of human and animal wastes.

Clearly, the nation has a choice – the final chapters on the Clean Water Act have yet to be written. The questions remain – which paths will be followed? Should we be satisfied with the progress that has been made, and resign ourselves to the fact that we have already witnessed the peak in water quality even as conditions worsen? Or should we demand that next steps be taken to clean America's waterways?

The answer depends as much on our own commitment to finishing the job that began with passage of the Clean Water Act 36 years ago, as on ensuring that our elected officials share our views. Now, more than ever, we must reaffirm our commitment to restoring and protecting our nation's greatest natural resources – our rivers, lakes, streams, coastal areas, and wetlands.

We owe future generations no less.

SUCCESSSES OF THE CLEAN WATER ACT

The Clean Water Act is commonly viewed as one of the most successful environmental laws in America.

The Act established a national commitment to restore and maintain the chemical, physical, and biological integrity of the nation's waters. It is the main reason the nation's waterways have shown dramatic improvement in water quality over the past three decades, even as the population has increased by close to 50 percent.

Measures of the nation's progress since its enactment include the following:

In 1972, most estimates were that only 30 to 40 percent of the assessed waters in the United States met water quality goals such as being safe for fishing, swimming, or as a drinking water source. Today, States report that between 60 to 70 percent of assessed waters meet State water quality goals – an increase of 100 percent.¹

In 1968, sewage treatment facilities served approximately 140 million people in this country, many at a primary treatment level.² Today, after Federal investments of more than \$82 billion in wastewater assistance since the passage of the Clean Water Act, 207.8 million people, representing more than 71 percent of the total population, are serviced by more than 16,000 publicly owned treatment works providing secondary or more advanced treatment.³

In 1968, about 39 percent (54.2 million) of the 140 million people served by publicly owned treatment works received less than secondary treatment (raw and primary). By 2000, the last year data are available, this percentage was reduced to less than two percent (2.8 million) of the 207.8 million people served by publicly owned treatment works.⁴ In addition, the U.S. population served by publicly owned treatment works with secondary or greater treatment more than doubled between 1968 and 1996.⁵

In 1972, the country was losing wetlands at the rate of 450,000 acres a year. During the latter 1990s, annual wetland losses were estimated to be less than one-fourth that rate,⁶ although the potential loss of Federally-protected wetlands has increased dramatically following the United States Supreme Court decisions in the *SWANCC*⁷ and *Rapanos*⁸ cases.

THE GOALS OF THE CLEAN WATER ACT REMAIN UNMET

Despite some important successes, there is still a long way to go in order to achieve the goals of the Clean Water Act.

The State of the Nation's Waters

Today, approximately 40 percent of assessed rivers, lakes, and coastal waters still do not meet State water quality standards. States, Tribes, territories, and other jurisdictions report that poor water quality continues to affect aquatic life, fish consumption, swimming, and sources of drinking water in all types of waterbodies.

In the most recent report on the National Water Quality Inventory, States, Tribes, territories, and interstate commissions report that they monitor only 33 percent of the nation’s waters. Of those waters, about 49 percent of streams, 52 percent of lakes, and 34 percent of estuaries were not clean enough to support their designated uses (e.g., fishing and swimming).⁹

Table: Percentage of Assessed Waters that are Impaired¹

<i>Percentage of Impaired Assessed Waters</i>	1998 National Water Quality Inventory	2000 National Water Quality Inventory	2002 National Water Quality Inventory
Rivers and Streams	35%	39%	45%
Lakes and Ponds	45%	45%	47%
Estuaries and Shoreline Waters	44%	51%	32%
Great Lakes	96%	78%	91%

While these numbers highlight the remaining need to improve the quality of the nation’s waters, they also demonstrate how this country’s record on improving water quality is slipping – demonstrating a slight, but significant reversal of efforts to clean up the nation’s waters over the past 30 years.

For example, in the 1996 National Water Quality Inventory report, States reported that of the 3.6 million miles of rivers and streams that were assessed, 64 percent were either fully supporting all designated uses or were threatened for one or more of those uses.¹⁰ In the 1998 report, this percentage improved to 65 percent of assessed rivers and streams.¹¹ However, in the 2000 National Water Quality Inventory report, this percentage slipped to only 61 percent of assessed rivers and streams either meeting water quality standards or being threatened for one or more the waterbody’s designated uses.¹² In the 2002 report, this percentage slipped, again, to 55 percent of rivers and streams fully supporting their designated uses – a significant reversal in the trend toward meeting the goals of the Clean Water Act.¹³

This disturbing fact was reiterated in EPA’s 2006 Wadeable Streams Assessment, which revealed that only 28 percent of the nation’s stream miles are in “good condition,” compared with 42 percent that EPA classifies as in “poor condition.”¹⁴

Similar reversals have been reported for the condition of the nation’s lakes – with the number of impaired lakes increasing from 45 percent in 2000 to 47 percent in 2002.¹⁵ Efforts to address the contamination and declining water quality in the country’s 40 million

¹ A waterbody is considered impaired if it does not meet one or more of the designated uses for the waterbody, including support of aquatic life, fish consumption advisories, primary contact – swimming, secondary contact, drinking water supply, and agriculture.

acres of lakes has stagnated, effectively stopping the dramatic improvement in lake water quality achieved in the latter half of the 1990s.

Even in the Great Lakes, which had shown some improvement in the 2000 National Water Quality Inventory, progress in improving waters has slipped from 78 percent of shoreline waters being impaired in 2000 to 91 percent being impaired in the 2002 report. For the open waters of the Great Lakes, 84 percent (or 60,546 square miles in the United States) are currently rated as impaired.¹⁶ In addition, according to EPA reports, no waters within the Great Lakes are completely safe for fishing and swimming. In a 2007 report, EPA announced that 100 percent of the Great Lakes and their connecting waters are currently under a fish consumption advisory, meaning that the waters of the Great Lakes are so contaminated, that consumption of fish from the Lakes poses a human health risk.¹⁷ When read together, these two reports make it clear that no waters within the Great Lakes are completely safe for fishing and swimming – *absolutely none*.

While it is true that EPA's National Water Quality Inventory reports do not provide information on the health of 100 percent of U.S. waters, they represent the best, if not the only, available means of assessing trends in nationwide efforts to improve the waters of the United States. Given the fact that the true condition of all the nation's waters could, in fact, only be worse than the reports reveal – any reversal of improvement in water quality is troublesome.

Needed Wastewater Infrastructure Improvements

To a great extent, the successes of the Clean Water Act resulted from a significant Federal investment in wastewater infrastructure improvements throughout the country. Since 1972, the Federal Government has provided more than \$82 billion for wastewater infrastructure and other assistance, which has dramatically increased the number of Americans enjoying better water quality and improved the health of the environment.

Treating, and in many cases eliminating, the flow of direct discharges of untreated sewage into the nation's waters has been one of the best investments the American people have ever made. First through the Federal construction grants program, and now the Clean Water State Revolving Loan Fund ("Clean Water SRF") program, the Federal investment in water infrastructure has been integral to improving the quality of the nation's waters.

However, progress made in cleaning up the nation's waters is now at risk.

According to a 2000 EPA report, entitled *Progress in Water Quality*, "without continued improvements in wastewater treatment infrastructure, future population growth will erode away many of the Clean Water Act achievements in effluent loading reduction."¹⁸ For example, EPA projects that, given the expansion of the U.S. population forecast over the next 20 years,¹⁹ even with expected increases in wastewater treatment efficiencies, by 2016, wastewater treatment plants will be forced to discharge partially-treated effluent into U.S. waters at levels similar to those that existed in the mid-1970s – only a few years after the enactment of the Clean Water Act.²⁰ Even more troublesome, if these population forecasts are projected further to the year 2025, without significant investment in additional treatment capacity, the level of partially-treated effluent being discharged into the nation's waters

would reach rates not seen since 1968 – four years before the enactment of the Act – when such pollution reached the maximum level ever recorded.²¹

Without increased investment in wastewater infrastructure, in less than a generation, the U.S. could lose much of the gains it made thus far in improving water quality and experience dirtier water than existed prior to the enactment of the Clean Water Act.

Of additional concern is the growing awareness that much of the wastewater infrastructure in this country is rapidly approaching or has already exceeded its projected useful life. Many cities and communities throughout the United States are currently facing a critical juncture in the age and reliability of their water infrastructure. For example, pipes installed at the beginning of the 20th century that had an expected useful life of 100 years are deteriorating next to pipes installed in the 1940s and 1960s, that, unfortunately have an expected life of approximately 60 years and 40 years, respectively. In addition, many of the wastewater treatment facilities constructed soon after enactment of the Act are now reaching the end of their expected useful life and are in need of repair or replacement.²²

This concern was highlighted in a 2004 report of the U.S. Government Accountability Office, which found that the integrity of the nation's wastewater infrastructure is at risk of failure if there is no significant effort to improve the management of key assets, such as pipelines and wastewater treatment plants, as well as a significant investment made in maintaining, rehabilitating, and replacing these assets.²³

Another looming need centers on upgrading aging infrastructure to control and eliminate combined sewer overflows. Combined sewer systems were among the earliest sewers built in the United States and continued to be built into the middle of the 20th century. These systems were designed to carry both domestic and industrial sewage, along with stormwater, to treatment facilities before being discharged downstream. However, during precipitation events, such as heavy rainfall or snowmelt, the volume of stormwater and sewage entering the combined sewer system often exceeds its conveying capacity. To prevent damage to the infrastructure, combined sewer systems were designed to overflow directly to surface waters when their capacity is exceeded – discharging large volumes of untreated or partially treated sewage wastes – an estimated 850 billion gallons annually²⁴ – directly into local waters.²⁵ Because combined sewer overflows contain raw sewage and contribute pathogens, solids, debris, and toxic pollutants to receiving waters, they create serious public health and water quality concerns. In addition, combined sewer overflows are often the direct cause of (or significantly contribute to) beach closures, shellfish bed closures, contamination of drinking water supplies, and other environmental and public health problems.²⁶

Combined sewers are found in 33 States across the U.S. and the District of Columbia.²⁷ The majority of combined sewers are located in communities in the Northeast or Great Lakes regions – where much of the oldest water infrastructure in the nation is found. However, combined sewer overflows have also occurred in the West, such as in the States of Washington and California. To eliminate combined sewer overflows, communities must redesign their sewer systems to separate sewage flows from stormwater flows or provide significant additional capacity to eliminate the possibility that combined flows will

exceed the limits of the infrastructure. Either way, this will be a massive undertaking – estimated by EPA to cost more than \$50 billion.²⁸

In the next few years, many communities will need to replace large portions of their wastewater infrastructure or face the likelihood of increased failures in their wastewater treatment capacity – posing a significant threat to the country’s quality of life, economic prosperity, and the health and safety of both human populations and the environment.

The Clean Water Act requires EPA to report to Congress every two years with a detailed estimate of the costs of needed water infrastructure in each State. This report, which is compiled through a survey of the States, includes estimates of needed projects for improvement of U.S. waters, including publicly owned municipal wastewater collection and treatment facilities, facilities for the control of combined sewer overflows, activities to control stormwater runoff and nonpoint source pollution, and programs designed to protect the nation’s estuaries.

EPA’s most recent assessments of wastewater infrastructure needs – the Clean Watersheds Needs Survey 2004: Report to Congress and the Clean Water and Drinking Water Infrastructure Gap Analysis – estimate that today’s total *documented* needs for the nation are \$202.5 billion, and between \$300 billion and \$400 billion in capital investment is needed for restoration and replacement of the nation’s aging wastewater infrastructure over the next 20 years.²⁹ Considering that the average annual investment by EPA over the past few years has declined from approximately \$1.35 billion to \$680 million this year, the level of investment to address needs requires a renewed and expanded Federal commitment.

Loss of the Nation’s Wetlands

Wetlands are those areas where the flow of water, the cycling of nutrients, and the energy of the sun produce specially adapted communities of plants and animals. Wetlands contribute to the environment in ways that parallel rain forests in more tropical climates and perform many functions that are important to the nation’s economy and quality of life.

As waters flow across watersheds through wetlands, chemicals that otherwise would contaminate surface waterways are removed through natural processes that assimilate pollution. When heavy rains fall and deep snowpacks melt, wetlands store and slow down the release of floodwaters, thereby reducing potential damage to downstream farms and communities. Wetlands can also recharge groundwater aquifers and sustain the yield of water for human use, as well as provide dry-season flows to rivers and streams.

Many plants and animals depend upon wetlands, which are essential for maintaining biodiversity. Wetland species are the base of commercial and recreational enterprises that provide jobs and income important to thousands of communities around the country. Three-quarters of the country’s commercial fish and shellfish, which provide approximately \$2 billion of revenue annually, are dependent upon coastal bays and their wetlands for some portion of their life-cycle.³⁰ Trees that grow in southeast forested swamps are harvested for timber, and ducks, geese, and other migratory birds in all flyways use wetlands for feeding, nesting, and resting during migration.³¹

Yet, because the importance of wetlands was poorly understood in the past, more than one-half of the wetlands that were in existence throughout the conterminous States at the time of European settlement no longer exist.³² The distribution of wetland losses throughout the States is not uniform;³³ in some States and many watersheds, less than 10 percent of the original acreage of wetlands still exists.³⁴

In recognition of this enormous loss, as well as the importance of wetlands in achieving the goals of the Clean Water Act, in 1990, under the leadership of President George H.W. Bush, the U.S. Army Corps of Engineers (“Corps”) signed a Memorandum of Agreement with the EPA establishing “a goal of no overall net loss of [wetland] values and functions.” From that time until the current Bush administration, both Republican and Democratic administrations have enthusiastically defended the goal of “no net loss” as an effective tool in implementing the broader goals of the Clean Water Act.

Unfortunately, the all too common practice of draining, filling, and eliminating wetlands continues today, and threatens to expand dramatically as millions of acres of U.S. waters, including wetlands, lose Clean Water Act protections under the leadership of the current administration, in spite of the President’s pledge to move beyond the “no net loss” policy.³⁵

Presumably, for President George W. Bush, the commitment to move beyond the “no net loss” policy means to let the policy fade into history, hope that market-based incentives and pro-industry policies are sufficient to protect the nation’s waters,³⁶ and to do nothing while Federal wetland protections in this country are eliminated. If the lessons learned during the past two years continue, the “*pro* net loss” policy of the current Bush administration will result in a level of wetlands destruction not seen since before the enactment of the modern Clean Water Act.

Uncontrolled Nonpoint Source Pollution

Over the past 30 years, the Clean Water Act has made great advances in improving the quality of U.S. waters and controlling various sources of pollution, with one large exception – nonpoint sources of pollution.

Nonpoint source pollution refers to the polluting of water by diffuse sources rather than single identifiable “point” sources. These diffuse sources are usually associated with land use activities as opposed to end-of-pipe discharges. Examples of common nonpoint source pollution include: sediments, fertilizers, and pesticides from rural farms and urban lawns; bacteria and viruses from livestock and pet waste; sediments and soil from improperly managed construction sites and timber harvesting; oil and chemicals from urban runoff flowing over streets, parking lots, and industrial facilities; and a variety of pollutants being blown along airborne pathways.³⁷

After 36 years of Federal and state efforts to protect water quality, the single-largest contributor of pollutants to the nation’s waters is from nonpoint sources. In fact, EPA has estimated that 90 percent of the nation’s impaired waters are contaminated, in part, by nonpoint sources of pollution.³⁸

For example, in its *2002 National Water Quality Inventory* report, EPA summarized that 40 percent of the nation's impaired rivers and streams could trace the source of pollution to agricultural activities, such as crop production, grazing, and animal feeding operations.³⁹ States also reported that 30 percent of impaired lakes, ponds, and reservoirs were polluted by agricultural sources, and an additional 25 percent were polluted by atmospheric deposition of pollutants.⁴⁰ Finally, States reported that 30 percent of impaired bays and estuaries could trace the sources of the impairment to urban-related stormwater runoff.⁴¹

Over the past 36 years, the Clean Water Act has been unable to replicate its successes in controlling point sources of pollution in addressing the problem of nonpoint sources. The lack of an effective national program to address nonpoint source pollution is a serious impediment to restoring and maintaining the health of U.S. waters.⁴² The limited existing authority of the Clean Water Act (Section 319) required States to prepare nonpoint source pollution programs, but did not require that such programs be implemented or achieve particular results. In addition, unlike the mandatory technology-based controls imposed on point source discharges, the Act does not require the implementation or enforcement of any nonpoint source management plans, such as buffer strips or nutrient management plans, to fight polluted runoff. Finally, although nonpoint sources of pollution now cause more than 60 percent of water quality impairments, only three percent of Clean Water Act funds have been devoted to this problem.

If this country ever expects to achieve the goals of fishable and swimmable waters, Congress must significantly increase efforts, through both financial incentives and effective mechanisms, to control the largest remaining source of impairment to U.S. waters. The incentives and mechanisms necessary to reduce nonpoint source pollution are known – they have not changed significantly for decades. Congress must rise above the rhetoric of controlling nonpoint sources of pollution and implement the necessary and cost-effective actions to reduce the largest continuing source of pollution to this nation's waters.

Beach Water Quality

As a nation, we are fortunate to have nearly 23,000 miles of ocean shoreline along the continental United States, more than 5,500 miles of Great Lakes shoreline, and 3.6 million miles of rivers and streams. Beaches are an important part of the complex and dynamic coastal watershed, providing numerous recreational opportunities for millions of people including boating, fishing, swimming, surfing, bird-watching, and sunbathing.

Lake, river, and ocean beaches are among America's favorite vacation destinations. At least one-third of all Americans visit coastal and Great Lakes counties and their beaches each year, generating tens of billions of dollars in goods and services, and supporting tens of millions of jobs. However, as the national population is rapidly increasing, more people are moving to coastal areas, increasing human demands and impacts on coastal and ocean resources.⁴³ These changes have serious and deleterious effects on the health of estuaries, coastal waters, and oceans.

The good news is that America's waters are generally cleaner than they were 30 years ago, when rivers were burning and lakes were declared dead. The bad news is that far too many beaches are still unsafe for swimming due to pollution.

In 2007, there were 22,571 days of closing and advisory for possible contamination at 3,500 coastal, bay, and Great Lakes beaches. This is the second highest number of closings and advisories in the 18 years that the National Resources Defense Council (“NRDC”) has been tracking these data, putting the number of closings and advisories at above 20,000 for the third year in a row.⁴⁴ The number of closings and advisory days due to sewage spills more than tripled to 4,097 days compared to 2006. However, the largest known source of pollution continues to be contamination from stormwater runoff, which caused more than 10,000 closing and advisory days in 2007.⁴⁵

Most beach closings and advisories are based on monitoring that detects elevated levels of bacteria, but not other contaminants, such as chemical pollutants. The bacteria indicate the presence of disease-causing organisms from human and animal wastes in the water. Bacteria and wastes enter coastal waters primarily from polluted runoff and storm water, which come from combined sewer overflows, discharges of untreated or partially treated wastes from sewage-treatment plants and sanitary sewers, septic system failures, and storm water runoff from urban, suburban, and rural areas.⁴⁶ To a great degree, beach closings tend to follow rainstorms, largely as a result of improperly designed or maintained sewer systems and drainage areas. For example, in many coastal cities, when it rains even as little as one-quarter of an inch, the volume in local storm sewers becomes too great for the treatment plants to handle. In these situations, the flow is diverted to nearby outfall points that discharge pollutants, including raw sewage, garbage, toxic industrial wastes, and contaminated stormwater, into the nearest stream, bay, or coastal recreational area. These untreated discharges can often be as potent as direct sewer emissions.⁴⁷

There have been limited efforts, by individual States and localities, for better monitoring and prevention of beach water pollution. New Jersey is one of several States participating in a pilot program to evaluate a rapid testing method that would provide results of beachwater monitoring tests within several hours. Beachgoers often do not know for days after testing is completed whether the water has harmful bacteria, because the current testing method can take 24 hours to show results, and some areas even require a second test before officials decide to post a warning or close a beach. In April 2007, the U.S. House of Representatives approved the Beach Protection Act⁴⁸ to increase the overall authorization for coastal water quality monitoring and notification programs, and to accelerate the approval of a rapid testing methodology, as well as to encourage States to develop and implement programs to track sources of water pollution.

Fish Advisories and Migratory Bird Populations

One of the best indicators on the health of the environment, including the nation’s waters and wetlands, is the health of the fish and wildlife that depend on these waters for their survival. Unfortunately for many species, recent trends are headed in the wrong direction.

In July 2007, EPA released its biennial listing of fish advisories (the *2005/2006 National Listing of Fish Advisories*), a compilation of consumption advisories and safe-eating guidelines for fish caught in U.S. waters. Fish consumption advisories warn people about the risk of eating contaminated fish. The object of the advisory is to provide information

about the chemical contaminants in fish, such as PCBs, dioxin, chlordane, mercury, and DDT, to educate consumers about the waterbodies and fish species that are of concern and to inform individuals about ways that they can reduce their exposure.

The *National Listing* reported that, in 2005, there were a total of 3,373 active fish advisories in the United States. These advisories covered 38 percent of the nation's total lake acreage, a three percent increase of lake acreage since 2004, and 26 percent of the total river miles, a two percent increase since 2004. In 2006, the total number of active fish advisories increased further to 3,852, but this did not represent a percentage increase in the affected lake acreage or river miles.⁴⁹ This continues the alarming trend of annual increases in the number of fish advisories in effect throughout the United States each year.

Currently, there are U.S. fish advisories for 44 chemical contaminants, but 88 percent of all advisories in effect in 2006 involved five primary contaminants: mercury, PCBs, chlordane, dioxins, and DDT.⁵⁰ These chemical contaminants accumulate in the tissue of aquatic organisms at concentrations many times higher than concentrations in the water. In a process called biomagnification, contaminants that cannot be broken down move up the food chain, causing increasing concentrations of contaminants. As a result, the fish at top of the food chain, including many species popular for human consumption, have concentrations of toxic chemicals in their tissue up to a million times higher than the concentrations in the water. It is this heavy concentration of toxic chemicals that poses a threat to human health through the consumption of contaminated fish.

Consumption of contaminated fish can cause harm to the human immune system, reproductive system, and brain functions, as well as increase the risk of cancer. Pregnant woman and children are especially vulnerable to the toxics found in fish because overexposure to these chemicals have caused the development of physical, mental, or behavioral problems in children.⁵¹ Due to these harmful toxic substances, the Great Lakes Basin, which is home to more than one-tenth of the U.S. population and one-quarter of the Canadian population, has fish consumption advisories in 100 percent of near-shore waters, putting consumers at risk with few signs of improvement.

Over the past few years, there have been some gains made in total duck population throughout the continental United States. For example, in 2008, the U.S. Fish and Wildlife Service and the Canadian Wildlife Service reported that the duck population increased slightly to more than 41 million birds, 14 percent higher than in 2006 and 24 percent higher than the 1955-2006 average.⁵² However, conditions of the available breeding and nesting areas such as wetlands and the water quality along migratory bird flyways are crucial factors for the success of duck populations. In 2007, these conditions improved slightly from 2006, but partly due to drought and intensive agricultural practices, the overall habitat conditions again declined in 2008, and the number of ponds was estimated at 37 percent below the 2007 average and 10 percent below the 1955-2007 average.⁵³

As agricultural practices and development pressures expand, there is a correlating decrease in the availability of suitable habitat for fish and wildlife, including migratory birds. In the continental U.S., nowhere is this more apparent than along the Mississippi River flyway – the area that runs from approximately the Great Lakes to the Gulf of Mexico, and

serves as a major migration route for millions of birds each year. Along this route, which roughly follows the path of the Mississippi River, development and agricultural conversions have taken a huge toll on the amount of land suitable for habitat – accounting for roughly one-third of all the wetlands lost to the nation.⁵⁴ Now, as suitable habitat becomes increasingly scarce, smaller fluctuations in rainfall and development practices are likely to have greater impacts on fish and wildlife populations.

As a result, it has become increasingly important to retain Federal protection of the remaining habitat, such as the prairie pothole region of the Upper Midwest, otherwise we may see more dramatic declines in waterfowl populations in the years to come.

THE BUSH ADMINISTRATION'S ASSAULT ON THE CLEAN WATER ACT

Protection of the Nation's Waters, including Wetlands

The Clean Water Act: Comprehensive Protection of the Nation's Waters

As noted earlier, Congress enacted the Clean Water Act to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” In this Act, Congress established a strong national commitment towards improving and protecting the quality of the nation’s surface waters, including wetlands.

At its core, the Clean Water Act establishes a Federal-State partnership for restoring and protecting water quality primarily instituted through a national permit system to reduce discharges of pollutants into the nation’s waters. However, unlike earlier, unsuccessful efforts, the Clean Water Act establishes a clear “Federal floor” for the protection of water quality and wetlands, and allows States to administer their own programs (including the establishment of stricter standards than the Federal standard) should States apply for and have such programs approved by the Administrator of EPA.⁵⁵

By establishing a uniform baseline for the protection of the nation’s waters, including wetlands, the Clean Water Act guaranteed that all States and communities would start with the same minimum level of protection for their local waters. This constant for water quality protection is critical for avoiding potential conflicts between upstream and downstream States with conflicting water standards for the same waterbody, as well as the potential for States with more protective standards being placed at a competitive disadvantage for encouraging new businesses or economic growth.

For more than 30 years, the Clean Water Act served as a model for restoring and protecting the nation’s waters. The Act’s strong Federal-State partnership has been integral both in doubling the number of rivers, streams, and lakes that were safe for fishing and swimming, as well as slowing the destruction of the nation’s wetlands. In fact, the basic structure of the Clean Water Act to restore and protect the nation’s waters was virtually unchallenged for close to three decades, and uniformly supported by Republican and Democratic administrations since the 1970s.

Unfortunately, however, many of the advances in cleaning up the nation’s waters have been undermined or eliminated by the conservative musings of a few justices of the U.S. Supreme Court, and the complicity of the administration of President George W. Bush.

The SWANCC and Rapanos Decisions : Judicial Activism Erodes the Clean Water Act

In recent years, the U.S. Supreme Court issued two rulings that called into question Federal authority to protect the nation’s waters under the Federal Clean Water Act.

In 2001, the Court issued a ruling in *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*⁵⁶ (“SWANCC”) – a 5-to-4 decision that overturned the authority of the Corps of Engineers to regulate intrastate, isolated waters, including wetlands, based solely

upon the presence of migratory birds (i.e., the Migratory Bird Rule). While the holding of the *SWANCC* case was very narrow, ruling that the Corps could not use the presence of migratory birds as the sole basis for protecting the waterbody under the Clean Water Act, this decision marked the first time in history that the Supreme Court called into question Federal authority over U.S. waters under the Clean Water Act.

In 2006, the Court issued a second decision, entitled *Rapanos v. United States and Carabell v. U.S. Army Corps of Engineers*⁵⁷ (hereinafter collectively referred to as “*Rapanos*”). In *Rapanos*, the Court created a far-reaching, yet entirely confusing, reading of the status of Federal protections over the nation’s waters. While the Court reached a majority opinion only on the decision to vacate a lower court decision and remand for further consideration, the Court failed to produce a clear standard on the scope of Federal protections of the nation’s rivers, streams, lakes, and wetlands. To the contrary, the *Rapanos* decision produced three distinct opinions on the appropriate scope of Federal authorities under the Clean Water Act: (1) the Scalia “relatively permanent/flowing waters” test, supported by four justices; (2) the Kennedy “significant nexus” test, and (3) the Stevens dissenting opinion, supported by the remaining four justices, advocating for maintenance of existing EPA and Corps authority over waters and wetlands.⁵⁸

As a result, the entirety of the Clean Water Act has been thrown into chaos, undermining the successes made over the first three decades in improving water quality, reversing course on the nation’s commitment to “no net loss” of wetlands, and creating undue delay and confusion for States, communities, regulated interests, and the public, without a single, demonstrable benefit to ecological or human health. Failure to correct the errors of the *SWANCC* and *Rapanos* decisions will result in increased frequency and amounts of unregulated pollution being discharged into our nation’s rivers, streams, lakes, and wetlands, as a result, a reversal of gains in water quality made over the last 36 years.

Administrative Implementation of the Rapanos Decision

In spite of these predictable consequences, the Bush administration has opposed Congressional efforts to restore the protections of the Clean Water Act, and has issued administrative guidance to further perpetuate the confusion and retrenchment of Clean Water Act protections espoused by the conservative justices of the Supreme Court.

In June 2007, the Bush administration issued a regulatory guidance document⁵⁹ that embraces the errors of the Supreme Court, and establishes a regulatory process for determining Federal protections over waters and wetlands that is inconsistent with the goals of the Clean Water Act “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

First, the Bush guidance shifts the presumption of harm, effectively endorsing a right to pollute, and forces Federal and State governments to expend significant resources to demonstrate actual harm before it can take formal regulatory or enforcement action to prevent the polluters from discharging into the nation’s waters. This seemingly minor administrative change is having significant impacts on Federal and State efforts to protect

water quality because it shifts the focus from a presumption for protection to an assumption for pollution.

An effective and robust enforcement regime is central to protecting the nation's waters and fulfilling the goals of the Clean Water Act. Yet, according to the head of EPA's Office for Enforcement and Compliance Assurance, the *Rapanos* decision and the Bush guidance are having a "significant impact on enforcement" of Clean Water Act cases and "have created uncertainty about EPA's ability to maintain an effective enforcement program with respect to other [Clean Water Act] obligations."⁶⁰ In fact, the *Rapanos* decision and the Bush guidance "negatively affected approximately 500 enforcement cases" in just nine months – or roughly one-half of all civil administrative or judicial enforcement cases under the Clean Water Act in one year.⁶¹

Second, under the Bush guidance, polluters are virtually free to discharge pollutants into the nation's waters, including wetlands, unless the Federal government can affirmatively demonstrate that the pollution will affect one of the "traditionally-navigable waterways" of the United States, which, in many cases, can be hundreds of miles away from the point of the discharge. This is a complete reversal of more than three-decades of Federal and State efforts to improve water quality throughout the nation, and one that reaffirms the failed water policies of the past – and resulted in the fabled "death" of Lake Erie and the burning of the Cuyahoga River.

Under the Bush guidance, and its misplaced reliance on the century-old "traditionally-navigable waterways" concept, EPA estimates that close to 60 percent of the nation's waters, including headwater, intermittent, and ephemeral streams, would lose the Federal protections that have existed since the Clean Water Act became law. What this is likely to mean, in practice, is that a polluter could contaminate a stream segment from which local drinking water supplies are withdrawn provided that the stream segment, itself, is not suitable for navigation and whatever contamination is released cannot be definitely linked to an impairment in a navigable segment of the same waterbody, farther downstream.⁶²

Finally, the Bush guidance adopts a policy that could eliminate requirements that currently regulated point source dischargers be required to comply with existing Federal discharge limits or State discharge limits, should the discharge be located in a non-jurisdictional water. For example, EPA estimates that between 53 to 59 percent of the total length of streams in the United States (excluding Alaska) would be considered non-navigable waters or which Clean Water Act jurisdiction is uncertain under the *Rapanos* decision and the Bush guidance.⁶³ According to EPA, at a minimum, 16,730 individual Clean Water Act permitted facilities, or approximately 40 percent of all existing permitted facilities, are located in headwater, intermittent, or ephemeral streams that, prior to the *Rapanos* decision, were clearly within the jurisdictional reach of the Clean Water Act.⁶⁴ This number includes approximately 4,600 permits for publicly-owned treatment works, 1,500 permits for other sewerage systems (not publicly owned), 64 permits for petroleum facilities, and 55 industrial chemical facilities.

This is only a summary of the implications of the *SWANCC* and *Rapanos* decisions and the Bush guidance document on the nation's efforts to protect clean water. Numerous individual States and other stakeholders have raised other concerns about the Supreme

Court decisions and the Bush guidance, including how the decisions and the Bush guidance will result in: inconsistent judicial tests for determining Clean Water Act jurisdiction, uncertainty and delay in State and local construction projects, legal barriers for States to protect waters dropped by the *SWANCC* and *Rapanos* decisions, and the potential for States to lose State Clean Water Act funding.⁶⁵

The Clean Water Restoration Act: A Legislative Priority to Protect the Nation's Waters

Not surprisingly, the level of support for overturning the Bush guidance and the Supreme Court's decisions in *SWANCC* and *Rapanos* is growing. Several individual States⁶⁶ and State regulatory agencies, as well as countless conservation, environmental, and hunting and fishing groups have called on the administration and Congress to restore the decades-old protections provided by the Clean Water Act, including enactment of the Clean Water Restoration Act.⁶⁷ The Clean Water Restoration Act would simply restore Federal protections over those waters, including wetlands, which existed prior to the *SWANCC* and *Rapanos* decisions, and the Bush guidance.

Unfortunately, these calls have fallen on deaf ears within the Bush administration. Congress will continue to work on this issue with the next administration, and seek enactment of the Clean Water Restoration Act in the 111th Congress to restore the protections of the Clean Water Act that existed prior to the *SWANCC* and *Rapanos* decisions and the Bush guidance.

Investment in the Nation's Clean Water Infrastructure

As noted earlier, the county's water and wastewater infrastructure is getting old, and falling into disrepair. Many of the wastewater treatment facilities constructed soon after enactment of the 1972 Act are now reaching the end of their expected useful life, and are in significant need of replacement or rehabilitation. Without renewing our attention to and investment in water infrastructure, this nation risks losing many of the gains made over the past 30 years in improving water quality.

Unfortunately, the Bush administration failed to recognize the need for increased Federal investment in water infrastructure. Since his election in 2001, President Bush continuously proposed to slash funding for the Clean Water State Revolving Fund – proposing annual cuts of 40 percent or greater to the program.⁶⁸ In fact, the Bush administration has the dubious honor of recommending the lowest Presidential request *ever* for the Clean Water State Revolving Fund in his fiscal year 2009 budget proposal -- \$555 million. Yet, during the last eight years of the Bush administration, EPA has publicly acknowledged the significant funding gap for wastewater infrastructure over the next 20 years – estimated to be between \$4 to \$9 billion *per year*. Numerous sources, including EPA, have calculated significant needs for water infrastructure investment over the next 20 years (ranging from \$300 billion to \$400 billion).

At a time when many communities, throughout the nation, are facing the likely prospect of replacing large portions of their wastewater infrastructure in the near future,

President Bush promised to veto Congressional efforts to significantly increase the available funding for wastewater infrastructure projects.⁶⁹

At a time when the President's own advisors suggest that a failure to reinvest in the nation's wastewater infrastructure will result in waters polluted to levels not seen since *before* the enactment of the Clean Water Act, President Bush's proposes to back out of the Federal-State partnership⁷⁰ for investment in the nation's Clean Water infrastructure – leaving States and localities on their own to protect the nation's waters, and overall economic, ecological, and human health.

Fortunately, the era of the Bush administration is coming to a close, and the nation can get back to the important business of investing in its essential Clean Water-related infrastructure. However, the last eight years have clearly demonstrated the danger of allowing our nation's infrastructure spending to remain flat or to decline. Congress needs to work with the next Presidential administration to reinvigorate the nation's investment in our infrastructure, and to renew the Federal commitment to meeting the Clean Water Act needs of our cities, towns, and communities.

Clearly, the current level of Federal spending is grossly inadequate to maintain and improve the quality of the nation's waters and the health of the environment. What remains is the choice to make necessary investments in water infrastructure today, or to risk the achievements in public and environmental health to date, and pass along the job to future generations.

The Challenges of Global Climate Change on the Nation's Water Environment

The agenda of the 110th Congress, under a Democratic majority, was remarkably different from that of the previous 12 years. One example was the efforts by the Democratic majority to hold hearings and move legislation to address the impending threat of global climate change on the planet, both in terms of prevention of future harm, as well as adaptation to the current threats of global warming to our economic, ecological, and human health that can be observed today.

In February, 2007 the Intergovernmental Panel on Climate Change (“IPCC”) declared that evidence of atmospheric warming is “unequivocal.” The IPCC also stated with “very high confidence” that this warming is a result of human activities. This warming will likely result in significant changes to the nation's water resources, including sea level rise, increased hurricane and storm intensity and activity, changed precipitation patterns resulting in more frequent floods and droughts, overwhelmed water infrastructure, and a wider dispersion of water-borne diseases.

While the 2007 IPCC report provided the imprimatur of the mainstream scientific community, it also served to cement a public consensus that had been coming together for over a decade that climate change was indeed occurring. This position stands in marked contrast to the Bush administration's failure both to take climate change seriously, as well as take any tangible policy action on adapting to climate impacts or reducing greenhouse gas emissions.

For example, in 2008, the Bush administration's advisors at EPA⁷¹ announced that the United States, as a result of climate change, can expect:

- Shorelines to retreat as a result of sea level rise;
- Changes in ocean chemistry to alter aquatic habitat and fisheries;
- Increases in water pollution problems;
- Changes to the availability of drinking water supplies; and
- More intense storms that threaten water infrastructure and increase polluted storm water runoff.

In September 2008, the EPA's Office of Water released a strategic framework document outlining potential responses that could be undertaken by EPA to mitigate greenhouse gas emissions, adapt to climate change, and improve climate change research. While EPA's Office of Water staff should be praised for producing this serious and thoughtful document, the fact remains that the Bush administration has the capability to undertake these policy recommendations on their own accord. Instead, the Bush administration has chosen to sit on its hands, equivocate on the existence of global warming, and mask real progress with platitudes.

Over the last eight years, the Bush administration has done very little to address global warming – even when presented with clear scientific evidence of climate change impacts, such as Hurricanes Katrina, Rita, and Ike that have occurred during the last decade.

During his 2000 presidential election campaign, then-Republican candidate Bush stated that he would regulate carbon dioxide emissions. Yet, not long after he was elected, he reversed that pledge and promptly renounced the Kyoto Accord – effectively ending the United States becoming a signatory.

Since then, the Bush administration has pursued strategies that are, in effect, a carbon shell game. The administration has promoted greenhouse gas emission reporting standards. However, these are voluntary and participation has been wanting. President Bush did commit the nation to a greenhouse gas intensity target of 18 percent by 2012. However, because this scheme is based on a ratio of emissions to gross domestic product, this target could actually be achieved with an emissions increase – only resulting in a further exacerbation of the climate crisis.

While the Bush administration has continued to provide basic research funding for climate change issues, it has been matched with a decided lack of action. Given the scientific consensus on the sources of climate change, and the growing consensus on impacts, this research funding should have been matched with policy actions that could be adapted as further research results were assessed. Instead, the Bush administration has seemed to pursue a tack of withholding any actions until absolute certainty is achieved – a nearly-impossible standard.

The commitment to addressing climate change by the Bush administration has not been matched to the threat to the water-related environment that climate change poses. In its September 2008 report, EPA's Office of Water suggested several targeted policy

recommendations to focus climate change research, mitigate sources of greenhouse gases, and adapt to impacts, including:

- Promotion of water-related energy conservation, including energy conservation at water and wastewater utilities;
- Promotion of water conservation by the public and private-sector and individual citizens, to reduce energy use;
- Provide assurance that that commercial scale geologic sequestration of carbon adequately safeguards drinking water and the ocean environment through the development of protective regulations;
- Assessing the need for revised Clean Water Act authorities to address emerging challenges caused by climate change, including the increased risks for waterborne diseases or pollutant loadings as a result of climate change;
- Evaluation of the potential loss of estuarine habitat or wetlands as a result of climate change and sea-level rise;
- Development of a Climate Change Policy memo that promotes the incorporation of responses to climate change into EPA core programs; and
- Development of a sustainability and vulnerability handbook for climate change impacts for use by State and local decision-makers.

It cannot be stressed enough, however, that all of these actions could have been adopted through existing administrative authority. In other words, action by Congress is not needed to implement most of these recommendations. While EPA should be commended for finally producing recommendations to address the threats of global warming, it is unfortunate that these recommendations were released in September 2008 – nearly eight years into this administration. There is no legal reason why EPA could not have proposed and implemented many of these recommendations earlier in the Bush administration. One can only surmise that the politics of doubt seemingly spread by conservative opponents of action forced this administration to delay any policy recommendations until it would be too late to take action.

Given the central importance of water to life and a successful economy, in combination with the demonstrated impacts of climate change on water resources that are already taking place, it would seem incumbent on the Bush administration and the EPA to begin the immediate implementation of these recommendations.

This process has, unfortunately, not yet even begun.

In the 111th Congress, Members of the Committee on Transportation and Infrastructure of the U.S. House of Representatives, under the leadership of Chairman James L. Oberstar, will work with the next Presidential administration to renew discussions and

take serious action to prevent further harm to the planet, as well as to ensure that the American people are adequately prepared for any ongoing or forecast changes to the global climate that may already have taken place.

Bush Administration Efforts to Dismantle the Clean Water Act

While the Bush administration's failures on defending Clean Water Act protections for the nation's rivers and streams, investing in necessary wastewater infrastructure, and global warming highlight its disastrous record on protecting the nation's waters, these actions or inactions are only part of the story.

From day one, the Bush administration has taken steps to systematically undermine, weaken, or eliminate many of the safeguards to protect the nation's waters. Whether through internal administrative actions to withhold, withdraw, or suspend environmentally-protective rules and regulations of the previous administration, to budgetary cuts that weaken Clean Water Act protections and enforcement, to outright reversals of important programs and policies that maintain water quality protection, the Bush administration has spent the last eight years undermining efforts to protect the nation's waters. As noted by one conservation organization, "[taken] together, these actions constitute the most concerted effort to dismantle the Clean Water Act since the law was enacted over three decades ago."⁷²

The following is a brief summary of *other actions or inactions* taken over the last eight years to undermine the nation's leading environmental statute for protecting the nation's waters.

- In October 2008, the Bush administration is expected to finalize a regulation that would exempt currently-regulated concentrated animal feeding operations ("CAFOs") from the Clean Water Act permitting requirements, despite their demonstrable connection to water quality impairments throughout the nation;
- In June 2008, the Bush administration finalized a regulation that allows polluted water to be discharged into a clean waterbody without treatment and without concern for the harm to the clean waterbody and without a Clean Water Act permit;
- In August 2007, the Bush administration proposed removing the Reagan-era "stream buffer zone rule" that prohibits coal-mining activities from impacting areas within 100 feet of streams and rivers;
- In June 2006, the Bush administration issued a regulation exempting most pollutants that are discharged from oil and gas construction sites from the Clean Water Act permitting requirements;
- In November 2006, the Bush administration finalized a rule to exclude pesticide applications to rivers, lakes, and streams from Clean Water Act protections;

- In November 2003, the Bush administration released a draft “blending” guidance that would have relaxed restrictions on discharging raw or partially treated sewage into the nation’s waters during significant rain (or snowfall) events;
- In January 2003, the Bush administration released a Water Quality Trading policy that would increase concentrations of pollutants, including toxic chemicals, without providing adequate safeguards to ensure that pollution reduction requirements of the Clean Water Act are met before trades can be made;
- In October 2001, the Bush administration issued new regulatory guidance that reversed the “no net loss” wetlands policy of President George H.W. Bush by dramatically weakening standards for wetland mitigation, and allowing wetlands to be traded for dry upland areas that are not wetlands and do not serve the same functions as wetlands;
- In January 2001, the Bush administration blocked a Clinton-era proposed rule that would have reduced raw sewage discharges from sanitary sewers, and would have required public notification when such overflows did occur; and
- In January 2001, the Bush administration withdrew a Clinton-era regulation that would have required States to identify impaired waters within their individual boundaries, to identify the pollutants (and the sources of pollutants) causing the waters to be impaired, and to assign responsibility for reducing those pollutants.

CONCLUSION

For the most part, the 36-year history of the modern Clean Water Act has been a tremendous success. In this period, the nation's waterways have shown dramatic improvement while there have been significant increases in population and growth in the overall economy. In just over a generation, the number of assessed waters currently meeting water quality standards has doubled. However, the Clean Water Act has not achieved its goals or objectives. There is still much work to be done.

These years have provided us with significant insight on where the Clean Water Act has failed – most notably in controlling nonpoint sources of pollution from a variety of urban, suburban, and rural sources. Now, even when armed with the knowledge of how far the nation has come, and how much progress has been made to finally achieving the fishable and swimmable goals of the Act, the United States stands on the threshold of throwing all these successes away, and reverting to the days of dying lakes, rivers that burn, and waterways that are sewers.

The actions of the Bush administration demonstrate how easy it is to turn the clock back on protecting our nation's waters, and to virtually eliminate any Federal "safety-net" in protecting the nation's water-related environment. In just under a decade, the Bush administration has shown that the decisions, priorities, and policy choices made by the Executive Branch can mean the difference between restoring and protecting our most vital natural resource from pollution, and bringing these protections to a stand-still.

During the last few years, we have started to see evidence of declining water quality conditions throughout the nation, mostly as a result of neglect and underfunding of Clean Water Act priorities. However, if the Supreme Court decisions on the scope of Federal protections remain unaddressed, the loss of Clean Water Act protections for a majority of our waters will result in dramatic, negative impacts on water quality throughout the nation.

Clearly, the nation has a choice – the final chapters on the Clean Water Act have yet to be written. The questions remain – which paths will be followed? Should we be satisfied with the progress that has been made, and resign ourselves to the fact that we have already witnessed the peak in water quality even as conditions worsen? Or should we demand that next steps be taken to clean America's waterways?

The answer depends as much on our own commitment to finishing the job that began with passage of the Clean Water Act 36 years ago, as on ensuring that our elected officials share our views. Now, more than ever, we must reaffirm our commitment to restoring and protecting our nation's greatest natural resources – our rivers, lakes, coastal areas, streams, and wetlands.

We owe future generations no less.

ENDNOTES

- ¹ U.S. EPA. “National Water Quality Inventory: 2002 Report.” September 2002.
- ² U.S. EPA. “Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment.” June 2000. Primary treatment is the first stage of wastewater treatment. It removes floating solids only. It generally removes 40 percent of the suspended solids and 30 to 40 percent of the BOD (biological or biochemical oxygen demand) in the wastewater.
- ³ U.S. EPA. “Clean Watersheds Needs Survey 2000: Report to Congress.” August 2003. Secondary treatment is the second stage of wastewater treatment. It converts dissolved and suspended pollutants into a form that can be removed, producing a relatively highly treated effluent. Secondary treatment normally utilizes biological treatment processes (activated sludge, trickling filters, etc.), followed by settling tanks. It removes approximately 85 percent of the BOD and total suspended solids in wastewater. Secondary treatment is the minimum level of treatment required under the Clean Water Act for municipal wastewater. *See* U.S. EPA. “Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment.” June 2000.
- ⁴ *See* U.S. EPA. “Clean Watersheds Needs Survey 2004: Report to Congress.” January 2008, and U.S. EPA. “Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment.” June 2000.
- ⁵ U.S. EPA. “Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment.” June 2000.
- ⁶ U.S. EPA and USDA. “Clean Water Action Plan.” February 1998.
- ⁷ *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*, 531 U.S. 159 (2001).
- ⁸ *Rapanos et ux., et al. v. United States*, 126 S. Ct. 2208 (2006).
- ⁹ U.S. EPA. “National Water Quality Inventory: Report to Congress, 2002 Reporting Cycle.” October 2007.
- ¹⁰ A threatened waterbody is a waterbody for which current water quality data supports its meeting a certain designated use, however recent data trends show a diminishing level of water quality such that it is likely that in the next listing cycle the waterbody will no longer be meeting its designated use. U.S. EPA. “National Water Quality Inventory: 1996 Report to Congress.” April 1998.
- ¹¹ U.S. EPA. “National Water Quality Inventory: 1998 Report to Congress.” June 2000.
- ¹² U.S. EPA. “Water Quality Conditions in the United States: A Profile from the 2000 National Water Quality Inventory.” September 2002.
- ¹³ U.S. EPA. “National Water Quality Inventory: Report to Congress, 2002 Reporting Cycle.” October 2007.
- ¹⁴ U.S. EPA. “Draft Wadeable Streams Assessment: A Collaborative Survey of the Nation’s Streams.” May 2006. The Wadeable Streams Assessment is a new report issued by EPA which the agency describes as the “first-ever, statistically-valid survey of the biological condition of streams throughout the U.S.”
- ¹⁵ *Compare* U.S. EPA. “National Water Quality Inventory: 1996 Report to Congress.” April 1998, *and* U.S. EPA. “National Water Quality Inventory: 1998 Report to Congress.” June 2000, *and* U.S. EPA. “National Water Quality Inventory: 2000 Report.” September 2002 *and* “National Water Quality Inventory: Report to Congress, 2002 Reporting Cycle.” October 2007.
- ¹⁶ *See id.*
- ¹⁷ *See* U.S. EPA, “2005/2006 National Listing of Fish Advisories.” July 2007.
- ¹⁸ U.S. EPA. “Progress in Water Quality: An Evaluation of the National Investment in Municipal Wastewater Treatment.” June 2000.
- ¹⁹ *See id.* The Census Bureau has projected that in the next 20 years, the proportion of the U.S. population served by publicly owned treatment works will increase to an estimated 275 million people.
- ²⁰ *See id.* EPA has estimated that, by the year 2016, the expansion in population will likely result in a 45 percent increase in influent biochemical oxygen demand (BOD) loading to treatment works (68,030 metric tons per day) and a 20 percent increase in BOD discharges to surface waters (19,606 metric tons per day). BOD is a measure of the oxygen-consuming organic matter and ammonia-nitrogen in wastewater. The higher the BOD loading, the greater the depletion of oxygen in the waterway.
- ²¹ *See id.* By the year 2025, EPA estimates that the amount of BOD loadings to the nation’s waters would reach 21,280 metric tons per day.
- ²² U.S. EPA. “The Clean Water and Drinking Water Infrastructure Gap Analysis.” September 2002.
- ²³ GAO, “Wastewater Infrastructure: Comprehensive Asset Management has Potential to Help Utilities Better Identify Needs.” March 2004.

- ²⁴ U.S. EPA “Report to Congress: Impacts and Control of CSOs and SSOs.” August 2004.
- ²⁵ U.S. EPA “Report to Congress: Implementation and Enforcement of the Combined Sewer Overflow Control Policy.” January 2002.
- ²⁶ *See id.*
- ²⁷ U.S. EPA. “Clean Watersheds Needs Survey 2000: Report to Congress.” August 2003.
- ²⁸ *See id.*
- ²⁹ U.S. EPA. “Clean Watersheds Needs Survey 2004: Report to Congress.” January, 2008, *and* U.S. EPA. “The Clean Water and Drinking Water Infrastructure Gap Analysis.” September 2002.
- ³⁰ U.S. EPA and USDA. “Clean Water Action Plan.” February 1998.
- ³¹ Stewart, Robert E. “United States Geological Survey Water Supply Paper 2425, Technical Aspects of Wetlands, Wetlands as Bird Habitat.” U.S. Geological Survey.
- ³² Dahl, T.E. “Wetlands Losses in the United States 1780s to 1980’s.” U.S. Department of the Interior, Fish and Wildlife Service. 1990.
- ³³ *See id.* Ten States have lost 70 percent or more of their wetland acreage, and 22 States have lost more than 50 percent. Only three States – Alaska, New Hampshire, and Hawaii – have lost less than 20 percent of their original wetlands.
- ³⁴ U.S. EPA and USDA. “Clean Water Action Plan.” February 1998.
- ³⁵ Dahl, T.E., “Status and trends of wetlands in the conterminous United States 1998 to 2004.” U.S. Department of the Interior, Fish and Wildlife Service, 2006. *See also* U.S. EPA. “National Water Quality Inventory: 2000 Report.” September 2002.
- ³⁶ The conservation organization, Ducks Unlimited, estimates that incentive-based wetland protection programs, such as the U.S. Department of Agriculture’s Conservation Reserve Program, stand to lose close to 6 million acres of currently enrolled wetlands in the prairie pothole region of the United States, based, in part, on continued high commodity prices (corn), declining rental rates, and expiring leases.
- ³⁷ U.S. Commission on Coastal Policy, “An Ocean Blueprint for the 21st Century,” 2004.
- ³⁸ *See id.*
- ³⁹ U.S. EPA. “National Water Quality Inventory: 2002 Report.” October 2007.
- ⁴⁰ *See id.*
- ⁴¹ *See id.* *See also*, U.S. Commission on Ocean Policy. “Developing a National Ocean Policy, Mid-Term Report of the U.S. Ocean Commission on Ocean Policy.” September 2002.
- ⁴² Association of Metropolitan Sewerage Agencies: “Water...We’ve Got the Point. Now Let’s Get to the Nonpoint...”
- ⁴³ U.S. Commission on Ocean Policy. “Developing a National Ocean Policy, Mid-Term Report of the U.S. Ocean Commission on Ocean Policy.” September 2002.
- ⁴⁴ Natural Resources Defense Council. “Testing the Waters 2006: A Guide to Water Quality at Vacation Beaches.” August 2008.
- ⁴⁵ *See id.*
- ⁴⁶ *See id.*
- ⁴⁷ *See id.*
- ⁴⁸ H.R. 2537, 110th Cong. (2007).
- ⁴⁹ *Cf.* U.S. EPA, “2005/2006 National Listing of Fish Advisories,” July 2007.
- ⁵⁰ U.S. EPA, “National Listing of Fish Advisories,” July 2007.
- ⁵¹ MDCH Division of Environmental Health. “2008 Michigan Family Fish Consumption Guide” <http://www.michigan.gov/documents/FishAdvisory03_67354_7.pdf>
- ⁵² U.S. Fish and Wildlife Service, “Waterfowl Population Status, 2008,” July 24, 2008.
- ⁵³ *See id.*
- ⁵⁴ Dahl, T.E. “Wetlands Losses in the United States 1780s to 1980’s,” U.S. Department of the Interior, Fish and Wildlife Service, 1990, at 10. Between the 1780s and the 1980s, approximately 36 million acres of wetlands have been developed along the Upper Mississippi and Missouri Rivers.
- ⁵⁵ To date, 45 individual states have approved NPDES programs under section 402 of the Clean Water Act; the States of Alaska, Idaho, Massachusetts, New Hampshire, and New Mexico (and the District of Columbia) do not have approved NPDES programs, and such programs are administered by EPA. To date, 2 individual states have approved dredge and fill permit programs under section 404 of the Clean Water Act; these states are Michigan and New Jersey.
- ⁵⁶ *See* 531 U.S. 159 (2001).

⁵⁷ The Supreme Court granted *certiorari* in both *Rapanos v. United States*, No. 04-1034, and *Carabell v. Army Corps of Engineers*, No. 04-1384, and consolidated the cases for review. *Rapanos v. United States*, 126 S.Ct. 2208 (June 19, 2006).

⁵⁸ According to a Congressional Research Service Report on the *Rapanos* decision, “scientists contend that there are no discrete, scientifically supportable boundaries or criteria along the continuum of waters/wetlands to separate them into meaningful ecological or hydrological compartments. . . . [Terms] such as “isolated waters” and “adjacent wetlands” are artificial legal or regulatory constructs, not valid scientific classifications.” See Meltz, Robert and Copeland, Claudia. CRS Report for Congress: The Wetlands Coverage of the Clean Water Act is Revisited by the Supreme Court: *Rapanos v. United States* (Updated March 17, 2008) (*hereinafter* “CRS report”).

⁵⁹ U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. 2007. “Clean Water Act Jurisdiction: Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States*” (June 5, 2007)

⁶⁰ See U.S. Environmental Protection Agency, Memorandum from Granta Y. Nakayama, EPA’s Assistant Administrator for Enforcement and Compliance Assurance, to Benjamin Grumbles, EPA’s Assistant Administrator for Water (Mar. 4, 2008) (*hereinafter* Nakayama memo).

⁶¹ See Nakayama memo.

⁶² According to the Environmental Protection Agency, more than 90 percent of drinking water intakes, serving 110 million people, are located in headwaters streams, for which the *Rapanos* case questions Federal authority to regulate. See Letter from Benjamin H. Grumbles, Assistant Administrator, U.S. EPA, to Jeanne Christie, Association of State Wetland Managers, at 2 (Jan. 9, 2006) (*hereinafter* Christie letter)

⁶³ See Christie letter.

⁶⁴ See Letter from Linda Boornazian, Environmental Protection Agency to Joan Mulhern, Earthjustice, dated May 18, 2007 (FOIA No. HQ-RIN-00684-07)

⁶⁵ For more information, see “Summary of Subject Matter, Hearing on the Clean Water Restoration Act,” located at <http://transportation.house.gov/Media/File/Full%20Committee/20080416/SSM_WR_04-16-08.pdf>.

⁶⁶ The following States publicly endorsed enactment of the Clean Water Restoration Act: the States of Arizona, Maine (Department of Environmental Protection), Michigan, Montana, New Mexico, New York, Ohio, Oregon (Department of State Lands), Tennessee, Vermont, and Wisconsin, and the Commonwealth of Pennsylvania.

⁶⁷ H.R. 2421, 110th Cong. (2007).

⁶⁸ In fiscal year 2002, President Bush proposed to cut the Clean Water SRF program from an appropriation of \$1.35 billion in fiscal year 2001 to \$850 million in fiscal year 2002. In fiscal year 2003, the President proposed to cut the program from an appropriation of \$1.35 billion in fiscal year 2002 to \$1.212 billion in fiscal year 2003. In fiscal year 2004, the President proposed only \$850 million for the program, down from an appropriation of \$1.34 billion in fiscal year 2003. In fiscal year 2005, the President proposed to cut the program from an appropriation of \$1.34 billion in fiscal year 2004 to \$850 million in fiscal year 2005. In fiscal year 2006, the President proposed to cut the program from an appropriation of \$1.091 billion in fiscal year 2005 to \$730 million in fiscal year 2006. In fiscal year 2007, the President proposed to cut the program from an appropriation of \$886.8 million to \$687.6 million in fiscal year 2007. In fiscal year 2008, the President proposed to cut the program from an appropriation of \$1.083 billion to \$687.6 million in fiscal year 2008. In fiscal year 2009, the President proposed to cut the program from an appropriation of \$689 million to \$555 million in fiscal year 2009.

⁶⁹ See Executive Office of the President, Office of Management and Budget “Statement of Administration Policy: H.R. 720, Water Quality Financing Act of 2007” (March 8, 2007)..

⁷⁰ In the President’s Budget Request for Fiscal Year 2004, the Bush administration committed to fund the Clean Water State Revolving Fund at \$850 million through fiscal year 2011. At this point, the Clean Water State Revolving Fund was expected to have available approximately \$2.8 billion annually to additional loans to communities for Clean Water related needs. All expectations suggested that, at this point, the Bush administration would recommend the elimination of all additional Federal contributions to the Clean Water State Revolving Fund

⁷¹ U.S. EPA, 2008. *National Water Program Strategy: Response to Climate Change*.

⁷² See “Bush Administration Efforts to Dismantle the Clean Water Act.”

http://www.earthjustice.org/our_work/policy/2004/bush_administration_efforts_to_repeal_clean_water_act_safeguards.html.