

Clean Water For All:

County Leaders Speak Out for Clean Water

Introduction



Great Egret
Photo Credit: Dave
Menke, USFWS

Most county officials know that we all need clean water and healthy watersheds to ensure clean and safe drinking water supplies and outdoor recreation, and to protect bridges, roads, hospitals, treatment plants, and other critical infrastructure. As county officials, we are on the front lines in protecting the health, safety, and welfare of our citizens, but we need help to address water pollution issues in our local area. Water flows downhill and across county and state lines. Counties need support from coordinated state and federal water quality programs to ensure that communities and industries upstream and downstream are working together, enforcing uniform water quality standards to keep the nation's waters clean and healthy for all.

This report tells the local stories of water pollution and destruction and the resulting harm and expense to communities. These stories remind us that to protect our local water supplies, property, infrastructure, and economies, we must look upstream to the many miles of trickling headwater and intermittently flowing streams and acres of wetlands that do most of the real work of storing and cleansing our waters. As these stories show us, we disregard at our peril these “non-navigable” workhorses of our watersheds. Unless we restore our commitment to their protection, their pollution and destruction over time will leave us with very costly reparations – and in some cases irreversible harm to our water resources.

In 1972, Congress passed the Clean Water Act “[t]o restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Congress understood that to achieve this goal it must broadly protect from pollution even the many small streams and wetlands that store and filter water and sediment upstream before sending waters downstream to larger, more permanently flowing, more typically “navigable” waters. Congress understood that it must prevent pollution at its source. Congress defined “navigable waters” in the Clean Water Act broadly as “waters of the United States.”

In 1977, on the Senate floor, Tennessee Senator Howard Baker reinforced the fundamental importance of Clean Water Act protections for waters large and small:

“It is important to understand that toxic substances threaten the aquatic environment when discharged into small streams or into major waterways. Similarly, pollutants are available to degrade water and attendant biota when discharged in marshes and swamps.... Continuation of the comprehensive coverage of this program is essential for the protection of the aquatic environment. The once seemingly separable types of aquatic systems are, we now know, interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource.”

For nearly 30 years, Clean Water Act regulations provided relative certainty that virtually all natural surface waters were “waters of the United States” and therefore subject to the Clean Water Act. Then, in 2001, in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC), and again in 2006 in *Rapanos v. United States*, a sharply divided Supreme Court gave new weight to the term “navigable” and questioned Clean Water Act protections extending to “waters of the United States” beyond the more permanently flowing, traditionally “navigable” rivers and their immediately adjacent streams and wetlands.

“Rightly celebrated as one of this country’s most important environmental statutes, the 1972 Clean Water Act has greatly improved the quality of America’s waters, turning contaminated rivers and lakes into swimmable, fishable and even drinkable waters.

But even its staunchest allies agree that the act has grown old and fallen well short of its goals, crippled by uneven and sometimes nonexistent enforcement by state and federal agencies – particularly during the Bush years, but even before . . . More than 40 percent of the country’s waters . . . remain dangerously polluted. Nearly 20 million Americans fall ill every year from drinking water contaminated with parasites, bacteria or viruses. Polluters – public and private, large and small – treat the law with contempt. Violations have jumped significantly. Penalties for noncompliance are small and rarely assessed.”

The New York Times, October 29, 2009

“When Congress passed the Clean Water Act in 1972, lawmakers clearly hoped to clean up polluted rivers and lakes, not promote the travel of boats.

Yet two Supreme Court rulings this decade, and the ensuing interpretations of those rulings by the Bush administration, have sabotaged the law’s intent.

Presently, Congress is considering the so-called “Clean Water Restoration Act” to repair the damage done over the last decade, and we wish them godspeed.

After the high court’s rulings in 2001 and 2006, the Clean Water Act has been narrowed to protect only “navigable waters,” leaving wetlands, isolated waters such as ponds and other habitat for waterfowl, and the intermittent creeks and streams that run throughout Colorado’s mountains without federal oversight and protection.

Another result of the court’s decisions . . . has been great confusion about regulation and protections of the country’s waters.”

The Denver Post, October 4, 2009

These Supreme Court decisions and subsequent agency guidance run counter to the fundamental water quality protection goal of the Clean Water Act and have significantly weakened the Clean Water Act’s ability to protect this nation’s waters. As these stories demonstrate, it has become clear to many county officials that America still needs the strong and broad Clean Water Act protections that were enacted in 1972.

How are counties and their communities harmed?



Photo credit: Mary Burke, USFWS

1. Martin County, FL
2. Clackamas County, OR
3. Calumet County, WI
4. Santa Barbara County, CA
5. St. Louis County, MN
6. Dane County, WI
7. Lane County, OR
8. St. Clair County, AL
9. Matthews County, VA

Counties across the nation are facing increased flooding, surface water pollution, toxic blue-green algae outbreaks, and problems caused by jurisdictional determinations—all related to the lack of enforcement of the original Clean Water Act of 1972. This report shows the need to enact stronger measures to protect our homes from floods, our drinking water from pollution, our beaches from dangerous algae and other pollution threats.

MARTIN COUNTY, FL: Florida's Florescent Green Toxic Algae

In 2005, the Florida Department of Health issued health advisories recommending people and their pets refrain from recreational use of waterways (such as swimming) or contact with blue-green algae blooms. These blooms, of *Microcystis*, affected approximately 11.1 square miles in the St. Lucie River Estuary (Martin and St. Lucie Counties from Lake Okeechobee to the St. Lucie Inlet). Portions of Lake Okeechobee and the entire estuary experienced a blue green algal bloom that turned the surface and subsurface waters a florescent green color that was toxic to human health.



Blue-green algae covered waterway in Martin County.

According to Gary Roderick, Martin County's Manager of the Division of Environmental Quality, "the blue-green algae bloom affected literally every residential property owner, business owner, visitor and potential visitor to Martin County."

Blue-green algae toxins can affect the liver, nervous system, and skin, and have been linked to increases in liver cancer, chronic fatigue illness, skin rashes, abdominal cramps, nausea, diarrhea and vomiting. Just touching it or inhaling vapors from it can cause problems. And as we will see from Dane County Wisconsin's experience, it can also lead to death.



Another example of an algae-choked waterway.

The bloom had negative economic impacts to the water-related industries of Martin and St. Lucie Counties, industries that total \$840 million annually. These industries count for sales at marinas, boat sales and repairs, fishing tackle/bait/charters of \$519 million/year; personal income of \$206 million/year, including 6,600 jobs in marine industries, guiding/commercial fishing and repair personnel; tourism of \$115 million/year, including 20,500 jobs in food/beverage services and hotel/motel personnel as well as visitation to beaches and hotels and recreational fishing and boating.

Martin County relies heavily on its tourism and marine industries including the commercial fishing industry. Martin County Commissioner Sarah Heard said, "Literally, all tourism, commercial fishing and other marine activity stopped completely for the summer, fall and winter seasons."



Sarah Heard

This is the first time in recent history there has been a *Microcystis* bloom throughout the entire St. Lucie River Estuary. Toxin levels in the St. Lucie River and estuary during an algae bloom in 2005 were 300 times above suggested drinking water limits and 60 times above suggested recreational limits. Warning signs had to be posted by local health authorities warning visitors and residents not to come into contact with the water.

Microcystis algae create spores that will lie dormant in the sediment until activated to bloom as a result of environmental factors such as high nutrient load, water clarity, temperature and the duration of sunlight. Where previously these spores did not exist in large numbers, they are now deposited in high numbers throughout the estuary and prompt higher frequencies of localized blooms. Lake Okeechobee, which is categorized as a drinking water source, is now subject to almost year-round blue-green algae blooms as a result of nutrient pollution.





Anabaena Algae Bloom in Caloosahatchee River at Franklin Lock, June 17, 2008; Photo Courtesy of John Cassani.

Roderick said that, “this bloom (in 2005) was a direct result of surface water discharges from urban and agricultural sources including Lake Okeechobee that turned the normally salt water brackish estuary completely fresh and deposited high nutrient loads of nitrogen and phosphorus into the estuary.”

Martin and St. Lucie Counties aren’t the only Florida counties which have been impacted by blue-green algae. In June 2008, Lee County had to shut down a water treatment plant serving 30,000 Florida residents after a toxic blue-green algae bloom on the Caloosahatchee River threatened the plant’s water supply. In a July 31, 2008 story, Fort Myers News-Press reporter Kevin Lollar quoted Lee County resource manager John Cassani explaining that, “[t]here are a bunch of contributing factors for the bloom. The obvious one is the big inflows we’ve had from recent heavy rain, which brings in a lot of nutrients.”

CLACKAMAS COUNTY, OR: New Year’s Day Flooding

Damaging flooding occurred in Estacada, a city in Clackamas County OR, on New Year’s Day 2009. After unusually heavy snow over Christmas, warm rains came that added melted snow to the volume of water pouring down Wade Creek. Commissioner Bob Austin reported that flooding of the joint city/county public library in Estacada, along with both the Middle and High Schools, and the Estacada City Wastewater Treatment Plant, was the result. Many washouts also were the result of runoff throughout the eastern portion of the County. Commissioner Austin went on to say that Wade Creek, a headwater stream which runs through Estacada, is channelized through much of its course through the developed community with continuing development in its upper reaches prior to entering the community. With only one very limited outflow point near the library, any significant runoff from parking lots and residential development generally causes the creek to overflow, although never to the degree observed on January 1, 2009.

The entire city of Estacada was impacted by the flooding. The victims included homeowners, whose basements flooded, business owners whose shops were harmed, as well as taxpayers needing to foot the clean up bills from the library and schools. The library was inundated with 1.5 feet of water; the waste water treatment plant with 5.33 feet. The Initial Damage Assessments for Public Assistance related work were \$1,401,850 for the city and \$280,000 for the school district. Many volunteers helped to dig out the library, including Commissioner Austin, who was the former mayor of Estacada.

“Heavy rains and melting snow turned Wade Creek into a river that gushed downhill . . . flooding the parking lot and front lawn at Estacada High School on Friday. The river of water continued flowing northwest of the high school, flooding the Estacada Public Library with more than 10 inches of water, and left behind a trail of mud and debris.”

Estacada is among several areas in Clackamas County that experienced significant flood damage. A section of Highway 224 east of town was closed last week after a mudslide, and some roads in Estacada were impassable for much of Friday before work crews could divert standing water.”

Estacada News

The threat of repeated flooding remains. Development continues, wetlands keep getting filled, more streets get paved. Commissioner Austin said that there are no inexpensive solutions. Those that were considered, he said, were an “additional overflow outlet at the pond, creation of wetland buffers upstream, using pervious surfaces for new development upstream, etc., and as always, no funding available at this time for any significant fixes to avoid future recurrences.”

“Clackamas County is concerned about the potential for future flooding and we support local governments exploring many different alternatives that would provide for improved watershed protection of riparian areas and wetlands. Full implementation of the 1972 Clean Water Act can only help us,” said Commissioner Austin.



Bob Austin

Restoring Wetlands One Solution

One inexpensive solution to avoid *increased* flooding is to protect remaining wetlands and stream buffers. Intact small streams reduce the intensity and frequency of floods by absorbing significant amounts of water and slowing the flow of water downstream. A single acre of wetland can store 1 to 1.5 million gallons of flood water, and just a 1% loss of a watershed's wetlands can increase total flood volume by almost 7% . For example, Illinois has already lost 85% of its wetlands and altered countless streams, including 30% to 40% of streams in the Kaskaskia River watershed. The Great Flood of 1993 devastated communities in Illinois and other Midwestern states, and was one of the nation's most costly natural disasters. Thousands of people were displaced, 48 people died, more than a 1,000 levees were over-topped or failed, and damages soared to an estimated \$21 billion. In 2002, record floods hit the Kaskaskia River watershed. In 2008, another disastrous flood hit the Midwest, killing 24 people, and causing more than \$15 billion in damages.

CALUMET COUNTY, WI: Wisconsin's First "Do Not Eat and Fish" Advisory

Partially funded by Calumet County, the Lakeshore Natural Resource Partnership has been actively working throughout the Lakeshore Basin since 2003. The Lakeshore Basin has 12 primary watersheds defined by the Niagara Escarpment, and the Basin's watersheds, with their many rivers, creeks and associated wetlands, are a primary focus of LNRP's conservation activities. They promote wise stewardship of their ground and surface waters, forests, soils, wildlife and habitat by engaging citizens in education and action. They work to foster community partnerships, provide funding, promote discussion and support activities that advocate a balance between land use and natural resource conservation and protection. The Lakeshore Natural Resource Partnership is the leading environmental advocate on the waters of Northeast Wisconsin, fostering stewardship in the planet's largest watershed, and taking action to champion the environment.

The approximately 8-mile stretch from the headwaters of Jordan and Pine Creek to Hayton Millpond is the second most polluted creek in the state, according to Calumet County Commissioner Don Schwobe, and the location of Wisconsin's first "Do Not Eat and Fish" advisory.



Don Schwobe

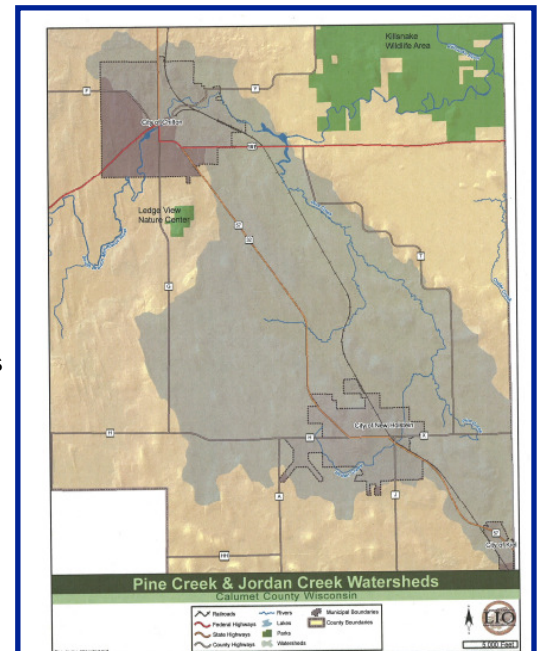
The area had been subjected to years of industrial use of polychlorinated biphenyls (PCBs) from making hermetic compressors for air conditioning and refrigeration products, starting in the 1960s.

The Wisconsin Department of Natural Resources (DNR) states that, "Some time in the late-1960s, PCBs were likely released into a New Holstein storm sewer that discharges to ditches connected to Jordan Creek. However, it wasn't until the late-1980s as part of a routine fish tissue survey that PCB contaminated fish were found in Hayton Millpond. As a result, the state's first "Do Not Eat and Fish" consumption advisory, the most stringent level advisory, was issued for these three waters.

Subsequent investigations traced the release back upstream to the storm sewer at the northeast end of New Holstein."

Jordan Creek, a non-continuous stream, is a 1.2 mile long tributary to Pine Creek in east central Wisconsin. Pine Creek, from its confluence with Jordan Creek, flows northwest for 7.4 miles to Hayton Millpond. Hayton Millpond is a very shallow 31-acre impoundment located at the confluence of Pine Creek with the South Branch of the Manitowoc River. This toxic pollution, which was first introduced into a storm sewer that discharged into ditches connected to the headwaters of a non-continuous stream, went on to impact the entire Pine Creek Watershed, according to Jim Kettler, Executive Director of the Lakeshore Natural Resource Partnership.

Kettler said that, "A fish consumption advisory has been posted for Pine Creek since 1991 due to the PCBs. The remediation plans for the project incorporate the restoration of the creek and adjoining floodplain to near pre-existing conditions."

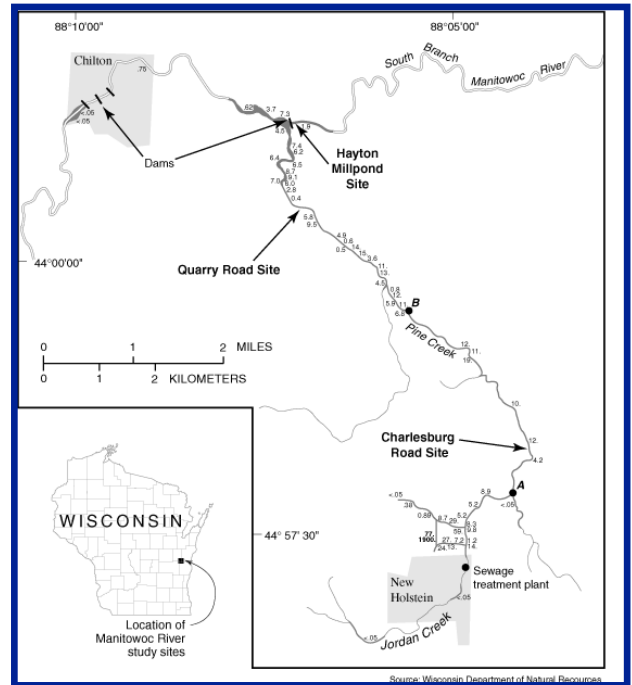


Kettler went on to say that, “Tecumseh [Products Company] was involved in a . . . settlement, the funds of which paid for a comprehensive clean-up . . . PCB-impacted sediment will be excavated from the creek and floodplain and disposed offsite to reduce bioconcentration of PCBs through the aquatic food chain. Restoration includes backfilling the floodplain to near pre-existing hydrological conditions, bank reconstruction, installation of woody debris, and the planting and seeding of native species.”

We heard that families, local businesses, farmers, both commercial and recreational fishermen, and county taxpayers have all been harmed by this pollution. Critical species that were severely impacted include the Red Horse, Bullhead, and Northern Pike. While the industrial practices that brought the PCBs to the watershed have stopped, the impacts of that toxic pollution remain. The two creeks and the Millpond were placed on the Clean Water Act “303(d)” impaired waters list in 2002 due to the presence of PCBs in fish tissue and in the sediment on the beds and floodplains. The “do not eat” fish advisory remains in place today.

The Wisconsin Department of Natural Resources states that, “In 2001, as part of a voluntary contaminated sediment cleanup, Tecumseh Products Company removed nearly 12,000 cubic yards of contaminated sediment from the drainage ditches tributary to Jordan Creek. The Department estimated that nearly 1000 kilograms of PCBs were removed; comprising 98 percent of the known mass in this segment. The PCB concentrations removed ranged up to 2,300 parts per million (ppm); with the post-removal concentrations averaging less than 1 ppm.”

In 2004, Tecumseh Products Company removed additional PCB deposits in and along the length of Jordan Creek and a portion of Pine Creek. The highest concentration removed was 1,600 ppm.”



Pine Creek after restoration.

Then came work in the wetlands. The objective was to remove all PCB deposits in the stream with concentrations of more than 1 ppm and on the floodplain of more than 5 ppm.

The work is ongoing, and approximately 40% of the overall contamination has been cleaned up to date. Kettler expects it to be another two years till completion.

Calumet County isn't the only Wisconsin county that has been contaminated by PCBs. Douglas County Commissioner Kay McKenzie remembers, “When Tommy Thompson—the soon-to-be governor of Wisconsin—was running for office, he stopped in at our local newspaper's office. I was waiting with a sign in front as he stepped out—it had a picture of a stinking fish and words to the effect “Clean up the Fox River and other Areas of Concern.” His retort was, ‘Fishing in the Fox is terrific!’ The Fox, like Waukegan's harbor, has a long legacy of being contaminated with PCBs.”

These stories of PCB fish contamination are an important reminder of the long-term harm and expense to downstream communities from unbridled dumping of toxic chemicals upstream. And it is a reminder of why Congress passed the Clean Water in the first place: to control pollution at its source . . . and to hold polluters accountable for cleaning up their chemical waste.



Kay McKenzie

SANTA BARBARA COUNTY, CA: Would You Like Some Oil with Your Water?



Greka oil spill into unnamed seasonal creek Photo: SBFDF

In March 2008, the Environmental Defense Council and Santa Barbara ChannelKeeper sent a letter to a local Santa Barbara newspaper: "On March 3, 2008, the *Independent* ran an article titled, 'Greka Spills Again Again.' This followed a series of articles with titles including: 'Greka Spills Oil Again' (December 8, 2007), or 'Greka Spills Again' (December 20, 2007), or 'Another Greka Leak' (December 24, 2007), or 'Another Spill at Greka' (January 3, 2008). Then there is our favorite - 'No Really, Greka Spills Again' (January 5, 2008)."

According to county officials, since 2003 Greka has spilled more than 450,000 gallons of oil and hazardous substances into Santa Barbara county's creeks and soil.

On January 5, 2008, the Greka Oil Company spilled more than 84,000 gallons of oil and hazardous materials into a creek in Santa Barbara County. The primary impacts of these spills have been felt in surface waters and in groundwater.

Yet with all this, Greka continues to operate onshore oil leases in Santa Barbara County. In fact, they have 939 oil wells in the county of which 254 are active. The remaining inactive wells aren't shut down and cleaned up, they just aren't currently in operation. Greka also operates 77 onshore production, processing and transportation facilities and four oil fields in the county. They spilled 10,767 barrels of oil between 2003-2007 and in fact were responsible for over 82% of all the oil spills from all operators. The county fire department reported that the county received over 400 response calls to Greka since 1999. Each hour of response time cost the county \$448.33 for a total of \$179,332. That figure does not include additional hours, compliance follow-up inspections, clean-up oversight, research hours, associated meetings nor management oversight costs. The county determined that the \$179,332 cost "can reasonably increase five to ten fold."



Two workers trying to contain Greka oil spill in creek Photo: SBFDF

In 2008, the Board of Supervisors adopted new ordinances and county staff provided more aggressive oversight, which started to reduce Greka's abysmal record of spill incidents. The threat of continued spills, however, is ongoing, because many of Greka's problems stem from aged and failing infrastructure (for example, pipes, tanks, etc.) and reportedly poor management.

A primary issue/sticking point was and still is the confusing overlap of federal, state and local jurisdictions. According to the Environmental Defense Council, the U.S. Environmental Protection Agency (EPA) has been forced into a limited role. County inspectors have limited authority and limited capacity. California's Central Coast Regional Water Quality Control Board has had difficulty with jurisdictional issues. In 2008, the County Board of Supervisors updated the County's Petroleum Code to better deal with actors like Greka in the future. However, one of the inherent problems with regulating onshore oil operations in Santa Barbara County is that many of them are on private lands.

"Considered by many to be Santa Barbara's environmental public enemy number one for its facilities' frequent and flagrant oil spills, Greka has been quietly fighting more than 1,500 violations and more than half a million dollars in resulting fines at meetings with Santa Barbara County staffers and counsel since late January."

*Santa Barbara Independent,
February 18, 2009*

Santa Barbara County has been struggling to deal with the repeated spills and ineffective response from the company, which hired a former county supervisor as its spokesperson. In January 2009, the "board heard a report from County Fire officials about a series of four spills at North County Greka facilities that occurred during the Christmas holiday and which collectively leaked more than 12,000 gallons of crude oil and produced water. . . . The third spill was discovered on December 27 by County Fire officials visiting the site of the previous spill. Apparently, in looking to stop the flow of the earlier mishap, a Greka employee shut off the wrong valve, causing unwanted pressure buildup and the eventual explosion of an adjoining pipe. Before the error could be remedied, more than 9,200 gallons of oil and water spilled into a dry creek bed that serves as a seasonal tributary to the Sisquoc River.

. . . After grabbing national headlines last year for its less-than-spectacular track record, Greka, which is the largest onshore oil operator in Santa Barbara County, spurred an overhaul of the way in which the county regulates and punishes such entities as well as the way in which that information is shared within the county's regulatory agencies.

. . . However, in a point of attack led by 2nd District Supervisor Janet Wolf and echoed by the 1st District's Salud Carbajal, the new incarnation of the board, with the 3rd District's . . . seat now occupied by Doreen Farr, seemed more committed this week to cracking down on operators who make a habit of spilling." *Santa Barbara Independent January 8, 2009*

"Local elected officials have a responsibility to ensure that Federal and State laws governing water quality are vigorously enforced. As a member of the Santa Barbara County Board of Supervisors I have advocated for the provision of adequate resources for education and enforcement, both of which are essential to diligently protect our creeks, ocean and other critical aquatic habitat," said Supervisor Salud Carbajal.



Salud Carbajal

In 2007, the Board of Supervisors approved the Planning and Development, Petroleum Unit Strengthened Provisions of the County Code, Chapter 25, to improve public health and safety.

It wasn't only Santa Barbara County that was concerned about Greka spills. On July 23, 2008, the Central Coast Region of the California Regional Water Quality Control Board announced a potential \$8.6 million fine for Greka for "petroleum waste clean up violations that began in January 2007, and which continue to threaten water quality."

The Water Quality Control Board issued a cleanup order back in December 19 2006 for Greka's Casmalia, Cat Canyon, Santa Maria Valley, and Zaca oilfields "to ensure that Greka properly manages, tests and disposes of petroleum-impacted waste piles, including hazardous materials, to protect surface water and groundwater quality. Delaying the removal of the petroleum waste piles has extended the time surface waters are exposed to pollutants eroded from the piles by wind and rain . . . Surface waters in the vicinity of the waste pile sites include Schuman Canyon Creek, Bradley Canyon Creek, the Santa Maria River, Zaca Creek, and several unnamed surface waters," including "seasonal creeks and streams."

Santa Barbara County has seen repeated oil spills into a variety of seasonal streams and rivers, some named and some not, over the past several years. Supervisor Janet Wolf said, "Onshore oil production presents risks to our groundwater, creeks and streams. This industry must be closely monitored and regulated. One oil company in Santa Barbara County was flying under the radar, and after an enormous spill in December, 2007, I decided it was high time to hold them accountable, and I brought this matter to the Board of Supervisors. Since that time, our County codes have been strengthened, and a state law passed to provide the Department of Conservation increased authority to hold these onshore oil companies accountable. Most importantly we've seen a significant decrease in spills."



Janet Wolf

In addition to the environmental problems created by the oil spills themselves, jurisdictional questions due to the recent Supreme Court decisions have exacerbated the situation. The Environmental Defense Council's attorney noted that, "EPA has gone on-site to clean up several Greka spills. However, when the time came to collect enforcement costs from Greka, EPA's attorneys are/were concerned that the spills may not have reached 'waters of the United States,' hereby depriving the agency of a jurisdictional hook under the Clean Water Act." Uncertainty over whether the courts will still uphold Clean Water Act jurisdiction over many wetlands and small streams after SWANCC and Rapanos is weakening the Clean Water Act and putting the nation's waters at risk.

ST LOUIS COUNTY, MN: Hwy 47/Jumping Through Jurisdictional Hoops

The SWANCC and *Rapanos* Supreme Court decisions and agency guidance have made Clean Water Act permitting more time consuming and burdensome for county and private permittees alike. Before an applicant even gets to the permit phase, the Army Corps of Engineers must now carry out a comprehensive analysis to determine

whether the water body at issue has a chemical, physical, or biological effect on a traditionally navigable water.

In the summer of 2007, St. Louis County was faced with a decision by the Army Corps of Engineers that required them to undergo jurisdictional determinations on 36 separate wetlands, some as small as 0.007 acres, for a 4.74 mile-long road project. For public safety reasons, the county needed to fix the road; for complications due to the Supreme Court's interpretation of the Clean Water Act in the Rapanos case, the Army Corps felt it needed to evaluate each of the 36 wetlands individually.



A portion of the county road needing reconstruction.



Heavy equipment working on the road.

According to former St. Louis County Public Works Director/County Engineer Marcus J. Hall, in his testimony to the House Committee on Transportation and Infrastructure in 2007, the county anticipated a year long delay due to jurisdictional determinations. He said, "I believe that the Rapanos and Carabell decisions (or non-decisions) have thrown the federal regulatory agencies into turmoil and both the EPA and Army Corps of Engineers into a scramble on how to implement the new rulings. The latest agency guidelines (dated June 5, 2007) are very complex. The typical 60 to 120 day permit process has now slowed to a crawl. What the guidelines do is take a one-step process consisting of applying for the permit and turn it into a two-step process consisting of (1) applying for a review of your project to see if it falls under their jurisdiction and then (2) applying for the permit." He also

said, "With construction inflation typically running between 4 percent and 7 percent, this represents an annual cost of between \$1 and \$2 million in delays for St. Louis County."

County staff reports of what it actually took ranged from a few weeks to a couple of months. Besides the increased costs due to inflation over that period of time, there was also the cost of increased staff time dealing with the Army Corps on the 36 determinations.



Almost finished.

While no one was at risk of bodily harm because of the delay, the post-Rapanos confusion did increase uncertainty and county costs. The reconstruction of this county road connecting to Highway 47 is now completed.

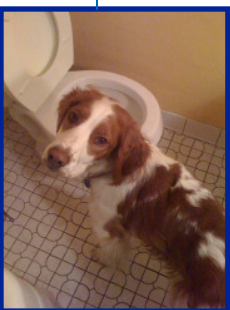
More recently, the Army Corps has revised its policy to allow prospective permittees to waive a formal jurisdictional determination and to stipulate to Clean Water Act jurisdiction over the wetlands in order to proceed with the normal permitting process. St. Louis County typically waives the formal jurisdictional determination, which, in turn, has reduced the time necessary to receive the Clean Water Act permit.

"In northeastern Minnesota we are blessed by abundant clean water. We have Lake Superior, over a thousand lakes and hundreds of rivers and streams, so we have a responsibility to care for this great treasure," said St. Louis County Commissioner Steve O'Neil.



Steve O'Neil

DANE COUNTY, WI: Water Pollution Brings Illness and Death



A county supervisor's dog making the point

You know you have a problem when your dog can drink from the toilet and live, and drink out of your lake and die.

Dane County's drinking water, beaches and lakes are what make it special, but a recent report by the Public Health department shows citizens can be at risk. A woman swimming in Lake Mendota next to the University of Wisconsin's Memorial Union—one of their most beloved landmarks—was sickened in 2008 by blue-green algae; dogs have died after drinking from the lakes. In 2002, Dane Rogers died from blue-green algae poisoning after swimming in a local pond. The Milwaukee Journal Sentinel reported that, "After a yearlong investigation, the Dane County coroner . . . concluded that the mysterious death of a Cottage Grove teenager last summer likely was the first in the nation caused by exposure to a toxin released by algae.

Two days after swallowing water while splashing and diving in a scum-covered pond . . . Dane Rogers went into shock and suffered a seizure before his heart failed, according to Coroner John Stanley's report. Another teen, unnamed in the report, also was in the pond with Rogers and later became sick, complaining of severe diarrhea and abdominal pain. He survived."

In 2008, the Wisconsin State Journal reported that "Brianna Schuetz, 18, of Madison, said Tuesday she was still suffering severe joint pain - along with a headache, rash, upset stomach and fatigue - after going for a swim with friends early Friday following a night of dancing downtown. 'Every joint in my body is pretty sore,' Schuetz said. 'It's just pain all day.'"

Beach closures due to high algae concentrations also increased in 2008 compared to reported closures in 2007 (34.8% versus 14.6% respectively). This sharp increase was due to the flooding experienced by Dane County in 2008. Storm water runoff from heavy rains is normally contaminated with bacteria and excess pollutants such as phosphorous and nitrogen that may lead to beach closures due to high e. coli concentrations and /or harmful algae blooms, according to the Dane County Environmental Report Card. Dane County Supervisor Brett Hulsey reports that Lake Mendota is at the headwaters of the Yahara River and is fed by headwater streams and tributaries that carry pollution from farm fields and city streets. These high pollution levels cause illness and, on tragic occasions, death.

The Wisconsin State Journal wrote in January 2010 that, "Algae-choked lakes, dead fish and contaminated wells are sending Wisconsin a warning: It's time to do more to protect the quality of our water." The Journal states that "phosphorus runoff from fertilized farm fields. . . is a primary cause of water-fouling algae growth."



Supervisor Hulsey with the beach closure sign and a handful of algae. (It is not recommended)

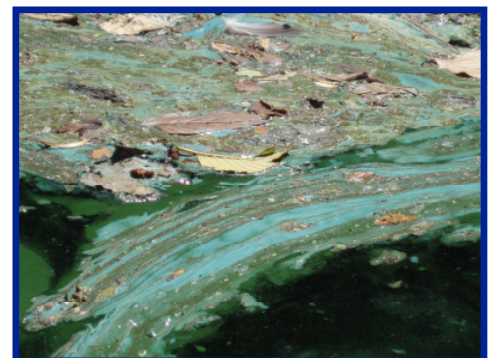
A recent report by the Madison-Dane County Public Health Department showed that beach closings and algae threats are increasing. While runoff from farms may be the major cause of this pollution in Wisconsin, Dane County Supervisor Brett Hulsey's information shows that runoff from development is the largest source of the pollution in Dane County. High levels of phosphorus in surface water leads to increased harmful algal blooms and excessive plant growth. Supervisor Hulsey is leading efforts to make the beaches safe for swimming and believes that "being able to swim at our beaches and in our lakes are fundamental rights and we need to take steps to make them safe for all of us to swim in."

And flooding damages to Dane County increased from \$11 million in 2007 to almost \$80 million in 2008, according to the Dane County Hazard Mitigation Plan (2009).

The solution is two-fold: 1) enforce and strengthen measures to clean up water pollution that threatens beaches and drinking water and 2) protect the wetlands that filter pollution and soak up floodwater. Supervisor Chuck Erickson, a member of the Lakes and Watersheds Commission says, "We need to draw up beach clean-up plans, fund storm sewer cleanup projects, ensure new development complies with the law, and promote more raingardens and rain barrels." Perhaps most importantly, he says, "We also need to restore protections that polluters and developers stripped from the Clean Water Act for headwater streams and wetlands. Wisconsin has fixed this for wetlands but our headwater streams here, and wetland and headwater streams across the nation, are at risk."

Blue-Green Algae a Major Health Threat

Blue-green algae is a threat across the country. Florida is particularly hard hit but we see evidence of this toxic algae in many other states, including Oregon. Farmer Steve Duyck, from Washington County OR, suffered physically and his crops were appreciably damaged. Mr. Duyck farms approximately 600 acres of black raspberries, cauliflower, corn and beets. A Washington County farmer for his entire life, when he began irrigating one year, he reported that his "farm workers and I saw bright blue, terrible smelling water coming out of the overhead irrigation water for several weeks. The smell was so bad we sometimes wore masks. . . . I got skin burns, itching and oozing sores where my hands and arms had been in the water at the irrigation pump sites. I told my workers not to touch the water, but some had rashes and itching anyway. My sores didn't heal and then



A close-up of blue-green algae in Washington County.

later, they started showing up on my upper chest and neck.”

He went on to say, “ that’s not the worst of it. My crops were burned by that water. . . . Due to the water pollution damage, my beet yield was 45% of normal. Cauliflower yields were even worse. I estimate I lost \$300,000 in crops. My nearby fields were not irrigated with this water and had normal yields.”

And finally, Mr. Duyck says, “I’m still feeling run down and having breathing problems. Was it the algae? I think so. We need to know what to do if this happens again. Food safety and farmers’ livelihoods are at stake.”

Washington County Commissioner Dick Schouten said, “Pollution like this anywhere in this country is unacceptable. We need all the protections of the Clean Water Act, including those for headwaters, intermittent streams and wetlands, to ensure that the public has safe and clean water.”



Dick Schouten

LANE COUNTY, OR: Fair for All



Dumping into a storm drain at the fairgrounds.

Lane County operates a 55-acre fairground area, owned by the people of Lane County, mainly as the Lane Events Center and the Lane County Fair. Amazon Creek, a tributary of the Long Tom River, which itself is a tributary of the Willamette River, which flows into the mighty Columbia, was affected by pollution from cows and horses and other large animals at the county fairgrounds, which borders the creek. There were animals at the fairgrounds 24 hours a day, 7 days a week, 365 days a year because people were allowed to stable animals there and the animal waste was getting into Amazon Creek (which flows by the fairgrounds property) via storm drains that flowed directly to the creek. Lane County gets its share of the Pacific Northwest’s ample rainfall, and the fresh manure ran straight into the Creek.



A storm drain at the fairgrounds.

On behalf of the Sierra Club and Citizens for Public Accountability, an attorney for the Oregon Clean Water Action Project sent Lane County a Clean Water Act notice of intent to sue. The fair board had legal counsel with a good working knowledge of the Clean Water Act, and they reportedly realized that they didn’t have much wiggle room—they needed to completely eliminate discharge of animal waste to the creek, and that was that. The attorney for the Sierra Club and Citizens for Public Accountability stated that “the county/fairgrounds was fairly responsive, and a series of meetings resulted in the county banning animals from the fairgrounds except during a few events (the county fair, the 4-H fair . . .) and the fairgrounds agreed to take measures to ensure that no animal waste got into the nearby creek during these events. After determining that other alternatives for eliminating animal waste were impractical or too expensive, the fair ultimately ended up re-plumbing the site so that the storm drains can be re-directed to the sewage treatment plant during a handful of annual events involving animals, and banning animals from the fairgrounds the rest of the time. Horses and cattle are now kept off the fairgrounds during the wet winter months. No lawsuit was filed in light of the county’s changed practices.”

This is an admirable example of the Clean Water Act in action. Citizens took advantage of the legal processes within the Act by filing the intent to sue. That pressured the county to resolve the problem. Because of Lane County’s actions, the creek is now cleaner and aquatic life is coming back in force.

Lane County Commissioner Pete Sorenson said, “While the county lost some revenue because we can’t hold horse shows on this property any longer, the aquatic life that is now coming back to Amazon Creek evens the score. The County stepped up to the plate and took care of the problem, and I am proud of that.”



Pete Sorenson

ST CLAIR COUNTY, AL: No Clean Water in No Business Creek

In the early 1980's, St. Clair County Commissioner Stan Batemon reports that a company was allowed to operate a restaurant grease "recycling" operation in his county. Several thousands of gallons of grease from hundreds of restaurants in Alabama and Georgia were deposited there. The company was originally allowed to dig open trenches on their property and to fill these open trenches with raw untreated restaurant grease with only a storm water run-off permit as required by the Alabama Department of Environmental Management (ADEM). The company later dug three large lakes and proceeded to dump the untreated grease into the lakes in an attempt to allow the water and solids to be removed by gravity and then to "skim off" the vegetable oil material and sell it for unknown products. As Commissioner Batemon said, "this was a VERY big operation."

Several complaints were submitted to ADEM about bad odor and flies from this facility. Commissioner Batemon stated that the County has no home rule authority and could not respond in any legal way to the complaints. After several years, the facility was over-whelmed with more grease than they could process and eventually went out-of-business. The odor and fly problem got worse and the lakes began to fill up with rain water until they eventually over-flowed into a drainage ditch that spilled into an unnamed tributary and then into No-Business Creek.

The result was a complete removal of the dissolved oxygen from the creek which caused an approximately 10-mile fish kill, as well as other aquatic damage to turtles, snails, etc. There was also a large swamp area where beavers, muskrats, and other wildlife were coated with the grease. Commissioner Batemon said that ADEM claimed no responsibility for the disaster but "the citizens that were damaged cried out for some one to help." The pollution, smells and flies devalued their property; recreational fishing and contact water sports such as swimming and water skiing were affected, also. The State Department of Conservation and Wildlife documented the damages and it was their reports to ADEM that caused further studies to be done by ADEM.

The County had no authority or responsibility to help, but ended up as the only government entity for the people to call on. Since the problem was on private property, the County had to get a judge to condemn the property and give ownership to the County to allow the County to help clean up the pits. The County then filed suit against the out-of-state and out-of-business owner.

The result cost St. Clair County over \$500,000 in legal fees and actual clean-up cost. ADEM claimed no responsibility based on the limited "nexus" between the pits and No-Business Creek. Prior to the Supreme Court decisions in 2001 and 2006, the discharge of grease from the overflowing lakes to the ditch and ultimately to No-Business Creek would almost certainly have been subject to ADEM authority under the Clean Water Act. Stronger, clearer Clean Water Act authority in this case would have saved St. Clair County over one half million dollars.

ADEM's reference to a limited "nexus" apparently stems from the agency's interpretation (or misinterpretation) of the showing of "significant nexus" seemingly required to establish CWA jurisdiction after *Rapanos*. It is no wonder ADEM balked. In late 2007, in another Alabama pollution case, the Eleventh Circuit U.S. Court of Appeals threw out the criminal conviction of an infamous polluter of an Alabama stream on grounds that the "significant nexus" had not been sufficiently well established. The Alabama trial judge who had presided over the jury trial was so "perplexed" and disturbed by the confused state of the law post-Rapanos that he washed his hands of the case when it was remanded to him for further consideration. Had Congress stepped in after the 2001 SWANCC decision and clearly defined "waters of the United States" to include those waters covered by longstanding EPA and Corps regulations, ADEM and EPA might have enforced the Clean Water Act in this case, and saved St. Clair County over one half million dollars.

Mathews County VA: An Example for Other Counties

"Widely acknowledged as the Pearl of the Chesapeake, Mathews is a beautiful, vibrant County with a rich cultural, political and economic heritage. With its 250 miles of waterfront, shoreline management and access to the water are priorities." *Mathews County website*



Mathews County website



Mathews County website

Located at the foot of Chesapeake Bay, Mathews County has recognized the importance of all the waterways—headwaters, intermittent streams and wetlands—that flow into the Bay and past their doorstep. On May 26, 2009, under the leadership of Supervisor Janine Burns, the Board of Supervisors adopted the following resolution. Supervisor Burns says she is happy for their resolution to be used as a model for other counties.

RESOLUTION: Clarification of Federal Jurisdiction under the Clean Water Act

Whereas, wetlands are among the most productive ecosystems in the world, providing habitats for many kinds of plants and animals, including more than one-third of the United States' threatened and endangered species; and

Whereas, wetlands play an important role in providing a number of ecological services, including flood protection and control; erosion and sedimentation prevention and control; surface water filtration; groundwater recharge; and support for economic activity that depends on healthy populations of fish and wildlife; and

Whereas, wetlands provide opportunities for recreation, education, and research as well as measurable economic contributions to the Chesapeake Bay Region; and

Whereas, the maritime heritage and the future of Mathews County, Virginia, are inextricably linked to water quality and the health of the Chesapeake Bay, and

Whereas, 70–90% of fish and shellfish in the Bay are dependent on wetlands for a life cycle phase, and

Whereas, more than one-half of the natural Chesapeake Bay Region wetlands have already been filled in or drained for agriculture, urban uses, shoreline development, recreation and resource extraction, compromising and sometimes eliminating the natural storage and cleansing functions of wetlands around the Bay; and

Whereas, the Clean Water Act's jurisdiction over wetlands and all waters of the United States has been made uncertain by U.S. Supreme Court decisions in *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* and related cases *Rapanos v. United States* and *Carabell v. United States*; and an estimated 20 million acres of wetlands and 50% of all stream miles in the lower 48 states are jeopardized by the Supreme Court decisions, and

Whereas, despite the issuance by the U.S. Corps of Engineers and the U.S. Environmental Protection Agency of supplementary guidance concerning Clean Water Act jurisdiction, confusion over federal jurisdiction under the Clean Water Act persists, adding substantial delays to valid permit actions and otherwise undermining the ability of the federal government and the states (whose wetland programs are legally intertwined with the Clean Water Act) to protect intermittent streams and isolated wetlands, placing large areas of Chesapeake Region wetlands and streams at risk of pollution and destruction.

Therefore, Be It Resolved that the Board of Supervisors of Mathews County, Virginia, supports continued and consistent definitions of federal jurisdiction of wetlands and water of the United States; and

Be It Finally Resolved, that the Board of Supervisors of Mathews County, Virginia, encourages the U.S. Congress to act immediately to reestablish Clean Water Act jurisdiction to the full scope of waters protected prior to the recent Supreme Court decisions, and to work in cooperation with the Chesapeake Region States and other interested organizations to resolve Clean Water Act jurisdiction issues.

County Officials Speak Out for Clean Water



Victoria Reinhardt

"I hope Congress will make it clear that America wants clean water. We need the full clean water protections America has enjoyed since the 1970s."

Ramsey County, MN, Commissioner, Victoria Reinhardt

"Clean water is absolutely vital to our economy and quality of life. Protecting our natural resources, our health, and our agricultural and tourism markets is fundamental to the people of Boulder County."

Boulder County, CO, Commissioner Ben Pearlman



Ben Pearlman

"85% of the people in my region list the protection of water quality in the Puget Sound as their highest environmental priority, over other issues including clean air, toxics clean-up, and other environmental issues. This indicates how critical clean water is to our high quality of life, our economy, and our future here in the Puget Sound region. A very important part of my job as a County Council member is to assure future generations enjoy the benefits of clean water and a healthy environment. We can't do it without the full protections of the Clean Water Act."

Snohomish County, WA, Councilmember Dave Somers



Robert Downing

"Here in Calhoun County, as in all of Alabama, we need stronger protection of our watersheds, including intermittent streams and wetlands. This is particularly true in light of the Supreme Court decisions which have left the majority of our waters without protection."

Calhoun County, AL, Commissioner Robert Downing

"I support full implementation of the Clean Water Act. We need to ensure that all the waters of the United States are protected from pollution, just as the Act intended back in the 1970s."

Mendocino County, CA, Supervisor Kendall Smith

"Clean water is critical for the recreational and destination tourism which are powerful economic engines in Summit County, Utah. The fish love it, the river rafters love it and the boaters and water skiers love it after the skiers have loved it first. In the end the irrigators love it last before it goes to waterfowl refuges and then to the Great Salt Lake to be evaporated and become "The Greatest Snow On Earth" in the afterlife."

Summit County, UT, Commissioner Sally Elliott



Sally Elliott

Photo by Laural Lamando

"While the oil crisis certainly did shape the 20th century, I believe it is our water crisis that will shape the 21st. One of our most precious and valued resources, water is being used in unsustainable ways and is an environmental and political problem that not enough people are paying attention to."

Oakland County, MI, Commissioner Marcia Gershenson

"Coal mines opened to supply fuel to Montana's steam ships, precious mineral mines that yielded lead to win a world war, and sediment from days gone by agricultural practices are just a few of the long standing threats to rivers and streams in Cascade County. Thankfully restoration efforts performed at the urging of County government are yielding promising results. Alfalfa grows deep to dry out a leaking coal mine, responsible parties are named in historic mining superfund areas and ranchers work to corral sediment from entering our waterways."

Cascade County, MT, Commissioner Peggy Beltrone



Peggy Beltrone



Barry Jacobs

"Appreciation for water quality has shaped Orange County's policies and land-use for decades, both within our borders and as regional partners. As the headwaters for two major North Carolina watersheds, we recognize and remain committed to protecting critical water resources. Our citizens and elected officials recognize that clean water is environmentally and economically vital to our quality of life, and to our future."

Orange County, NC, Commissioner Barry Jacobs

"Elected officials everywhere have a responsibility to assure clean water is readily available because it is a basic requirement for good health. Protecting the financial interests of businesses who pollute water is counter to our responsibility as elected officials to serve All of the people who need clean, affordable water to be healthy."

Gilpin County, CO, Commissioner Jeanne Nicholson



Jeanne Nicholson



Larry Phillips

"Stormwater pollution is the biggest, most widespread and pervasive water quality problem that we face. The Washington State Legislature is currently considering a measure called "Working For Clean Water" which would increase an existing hazardous materials tax to provide an ongoing, stable revenue source to clean up stormwater pollution. This makes sense, since it ties the money for cleanup to the source pollutants. The measure will also put people to work on construction jobs in these difficult economic times as stormwater capital projects get underway. This is a big step forward for creating green jobs and implementing the Clean Water Act in Washington State."

King County, WA, Councilmember Larry Phillips

"At least 50% of the residents of La Plata County in South Western Colorado rely on ground water as their sole source of clean water. The elimination of the "Halliburton Loophole" granted by the Bush administration under the Clean Water Act of 2005 would go a long way in protecting these people from the potential contamination of their water due to the toxic nature of the chemicals used by the natural gas industry."

La Plata County, CO, Commissioner Wally White

"We worry about the county's lack of authority over production water disposal and especially the exemption granted by the federal government concerning the composition of and disposal of fracking chemicals. Recently, we have received an application to dispose of production water by injecting it into the ground just a couple of miles up-gradient from the Colorado River. This is a pretty frightening prospect given our limited



Bob Greenberg

regulatory authority and technical resources.”

Grand County, UT, Councilmember Bob Greenberg

“King County residents are fortunate to be surrounded by a network of beautiful streams, rivers, lakes and the Puget Sound – all which provide them with ample clean water for drinking and recreation. With careful supervision from our Regional Wastewater Treatment Program, the County ensures that surface waters are kept free of dangerous chemicals and other noxious substances that threaten our clean water source and can endanger public health and the environment.”

King County, WA, Councilmember Julia Patterson



Julia Patterson



Bracken Burns

“Thomas Fuller once said that ‘we never know the worth of water till the well runs dry.’ How very true. Washington County is currently in the midst of a major influx of natural gas exploration involving the Marcellus Shale. In our haste to capitalize on this valuable natural asset we need to assure that our surface water is protected from the potentially deleterious effect of the waste water that comes from the ‘fracking process’ that liberates the gas from the shale.”

Washington County, PA, Commissioner Bracken Burns

“When I was running for office in one of the fastest growing counties in the nation and in a district with an EPA Superfund site that has poisoned drinking water wells, I was asked about my stand on clean water. I replied that working to protect our water – which is essential to all of us -- would be a top priority for me, and the debate audience broke out in a resounding applause. It was by far the biggest reaction I received during my entire campaign. People really care about clean water in Loudoun County.”

Loudoun County, VA, Supervisor Andrea McGimsey

The Conservation Leaders Network thanks the many county officials who contributed to this report.

The Conservation Leaders Network is the only nationwide organization that focuses on working with county commissioners to protect America’s natural resources.

www.conservationleaders.org