

Improving the effectiveness of wetland mitigation

DES notes success of new Aquatic Resource Mitigation fund

The Wetlands Mitigation Program has added important improvements that have enhanced the overall effectiveness of the bureau. Traditionally, compensation for wetland impacts is achieved through creating a new wetland, restoring a former wetland site, or protecting a high-quality aquatic resource by preserving adjacent upland habitat. Most wetland mitigation is still done by the person getting the permit, and the mitigation effort usually takes place on the site of the proposed development. Studies have shown that many of the mitigation efforts fail to offset lost wetland functions, especially when the developer is responsible for wetland restoration or creation. In addition, many projects have gone uncompleted due to lack of compliance review by DES.

Working to improve the effectiveness of the wetland mitigation program, DES pursued the newest improvement more commonly referred to as an *in-lieu fee program*. This mitigation option is available for smaller projects that have difficulty in locating an appropriate mitigation site. An applicant provides a payment into a wetlands fund where such fees would contribute to ongoing restora-

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Commissioner's Column

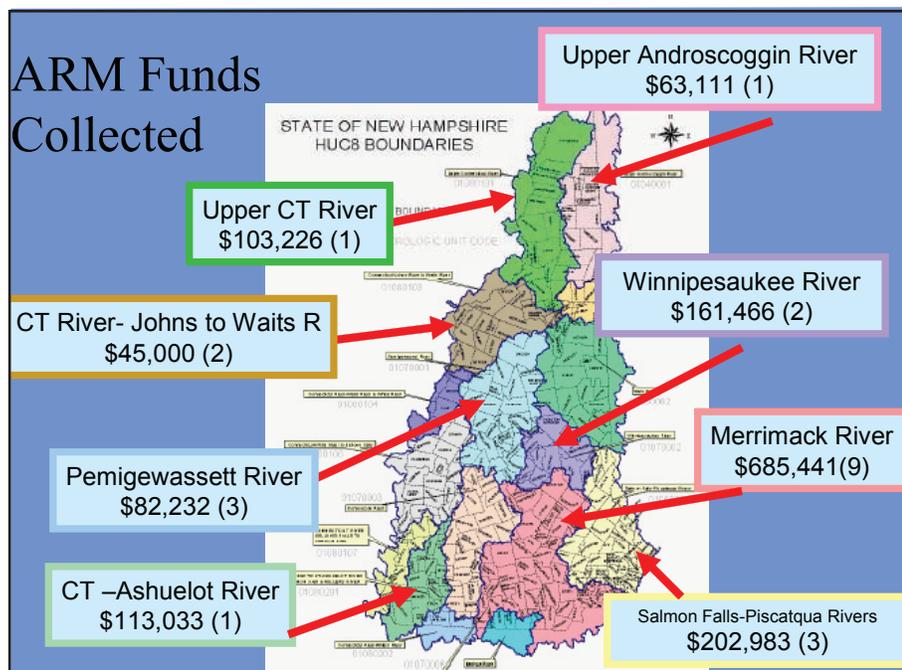
Strategic directions for success

There is no question that our state and country currently face an unprecedented economic crisis. During these difficult economic times, it is important to not lose sight of our responsibility to maintain and improve New Hampshire's quality of life by confronting the environmental challenges of today. To meet these challenges, DES has embarked on a bold, new strategic planning effort to explore what a 21st century environmental agency should look like.

Instead of a traditional program-by-program assessment, we stepped back and posed (first to ourselves) a seemingly simple question: "Looking back 20 years from now, what will people say that DES and the state of New Hampshire should have been doing to protect the state's exceptional quality of life?" The answers to this haunting question were indeed eye-opening.

To affirm our approach and some of our early findings, we took this question, and others "to the street" and our website via an informal electronic public opinion survey to several thousand parties. I want to thank everyone for their frank and thoughtful insights. Know that you have most certainly influenced our thinking. The survey results from over 1,000 respondents reaffirmed our belief that

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Commissioner

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DES and its many partners will have to approach things very differently in the years ahead if we are to effectively and sustainably deal with the serious root issues of climate change, energy use, and the protection of the state's natural resources from growth and development-related pressures.

In addition to the online survey, we have met with many stakeholders (e.g., the Governor, sister state agencies, regional planning commissions, environmental organizations, and trade associations) to share our new approach, identify partnership opportunities, and gather feedback on some of the efforts we hope to undertake in the years ahead. I'm pleased to report that the feedback we've received thus far has been very positive and heartening. There appear to be many partnership opportunities emerging.

Things are clearly different now. We are at a turning point, and DES can no longer accomplish its broad mission alone, or with a narrow focus on a few thousand regulated businesses and municipalities. Today's problems are more complex than ever, and are largely a by-product of our collective modern lifestyles, including for example, our driving habits, how we heat and light our homes and how we care for our yards. Education and outreach, while essential, won't be enough; we need to find ways to motivate individual behavior changes. That's what it is going to take. To do this right, we need everyone to pull their weight. We need unprecedented levels of stewardship, accountability and personal responsibility. We will all need to be more creative, efficient and deliberate in how we live, work and play, and we will need to work in full collaboration across all levels of government, the business community, academia, and the public – that is, all of us!

I encourage you to visit our website at www.des.nh.gov to learn more about the department's many programs and initiatives, including work on our new Strategic Plan. There's much good work to be done – together! I look forward to working strategically and collaboratively with all who will join me and DES in the years ahead to ensure that New Hampshire remains the special place that it is for generations to come.

Tom Burack, *Commissioner*

Federal stimulus package impacts DES

DES will be administering many of the programs that are receiving funding through the federal stimulus act. Early estimates are the stimulus law will provide New Hampshire with \$39 million for the Clean Water State Revolving Fund program for grants or loans for municipal wastewater system upgrades, \$19 million for the Drinking Water State Revolving Fund program for drinking water system upgrades, and \$1.8 million for Brownfields projects.

In addition, DES anticipates receiving approximately \$1.7 million for the state Diesel Emission Reduction Act program that will, in turn, be awarded to the public and private sector for in-state diesel emission reduction projects. ■

2009-2020 DES Strategic Plan Framework: Seven Strategic Directions

1. DES and its partners are proactively addressing the issue of climate change and energy use in New Hampshire.
2. DES and its partners are effectively protecting New Hampshire's natural resources that contribute to our high quality of life as the state continues to grow.
3. DES employs integrated pre-application, permitting, and enforcement approaches across all of its programs and operates in a cooperative and integrated manner with its sister local, regional state, and federal agencies.
4. New Hampshire's environment is improving, with DES remaining focused on environmental results and reporting them in an understandable and transparent manner.
5. Environmental compliance is high in New Hampshire, supported by partnerships, widespread accountability, and a broad environmental stewardship ethic.
6. DES provides exceptional customer service.
7. DES is one of the most desirable employers in state government.

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Funding available for energy programs

Proceeds of RGGI auctions

By Jack Ruderman, Sustainable Energy Division, PUC

Funds totaling between \$4.5 million and \$6.5 million are being made available from the new Greenhouse Gas Emission Reduction (GGER) Fund for programs that will reduce greenhouse gas emissions from energy use in New Hampshire. Specifically, the Public Utilities Commission, the agency that manages the fund, issued a request for proposals on February 23 for initiatives that will support energy efficiency, conservation, and demand response programs based in New Hampshire.

The money in the GGER fund is generated from the proceeds of carbon dioxide (CO₂) allowance auctions that are part of the Regional Greenhouse Gas Initiative. RGGI is a cooperative effort among 10 northeastern and mid-Atlantic states to reduce carbon dioxide emissions from fossil fuel burning power plants. RGGI will reduce CO₂ emissions through a mandatory, market-based cap-and-trade program that caps, or places limits on, regional emissions.

The current funds available for distribution from the GGER fund include approximately \$2.5 million from the December 2008 RGGI auction, which resulted in the sale of about 1.2 million allowances at a clearing price of \$3.38. The next auction scheduled for March 18, 2009, is expected to bring in a minimum of \$2 million in additional funding for distribution.

Entities eligible for applying for this funding include state and local government agencies and instrumentalities and non-governmental organizations, including non-profits, for profit entities and individuals. The types of programs eligible for funding include, but are not limited to:

- Energy audits.

- Weatherization and electric/thermal energy efficiency improvements of new and existing residences and commercial buildings.
- Energy efficiency related work force training and development.
- Revolving loan funds for efficiency related investment.
- Energy efficiency related industrial process and control systems.
- Integration of passive solar heating and ventilation.
- Programs to foster the development of highly efficient and affordable housing.
- Education, outreach and information programs that promote

energy efficiency, conservation, compliance with energy codes, and demand response.

- Demand response programs to reduce New Hampshire's peak electric load.

The GGER Fund is administered through the Sustainable Energy Division of the PUC. Interested applicants should contact Jack Ruderman, director, at (603) 271-6012 or jack.ruderman@puc.nh.gov. The deadline for submitting proposals for this first round of funding is March 23, 2009. Additional requests for proposals will be issued later in 2009 as more funds become available in the GGER fund. ■

New Hampshire Stormwater Manual now available

DES has just released the *New Hampshire Stormwater Manual*. The manual is consistent with the recently adopted Alteration of Terrain Program Rules (Env-Wq 1500), and provides guidance on state and federal stormwater regulations, and selection and design of best management practices, including low impact development strategies. The manual is issued as a three volume set: 1) Stormwater and Antidegradation; 2) Post-Construction Best Management Practices Selection and Design; and 3) Erosion and Sediment Control Practices during Construction.

To view or download the document on-line, go to www.des.nh.gov and click on "Stormwater Manual" under the "A to Z List." For more information, please contact Jillian McCarthy at (603) 271-8475 or at jillian.mccarthy@des.nh.gov. ■

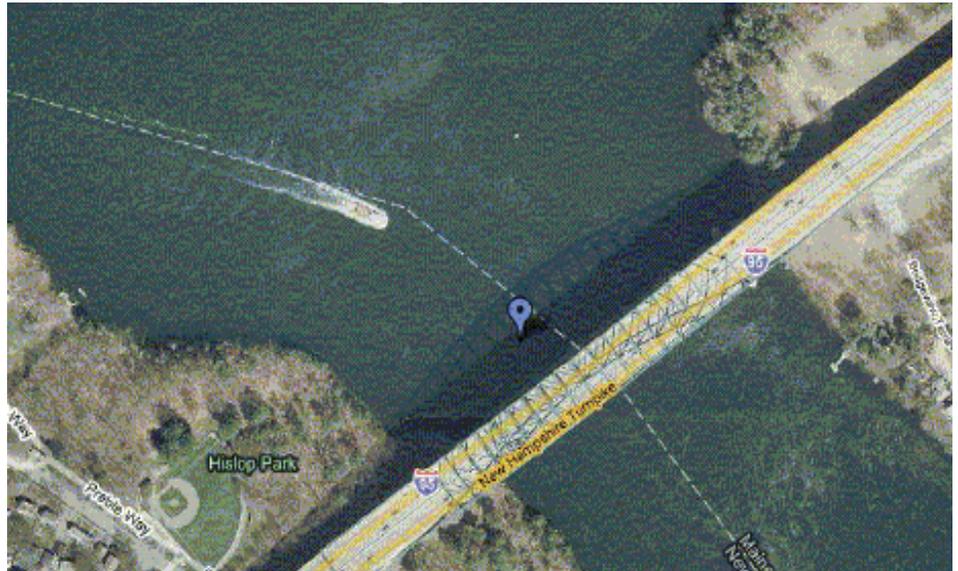


Tidal Energy Commission releases final findings

In 2007, a tidal energy commission was legislatively created to study the feasibility of tidal power generation, specifically in the Piscataqua River under the Little Bay and General Sullivan bridges. During its study, the commission looked at several topic areas, including permitting requirements; public and business community outreach; environmental and wildlife impact analysis; and cost and benefits analysis. The commission's final report was recently released with the following findings.

After a year's worth of scrutiny of the site's unique conditions and the state of the technology, the commission determined that it is premature to build a commercial tidal energy project there. The commission found that currently available tidal energy technologies are too new at this point to warrant installation and require further research on their suitability for tidal rivers with multi-uses like fishing and boating. The site would be an ideal place to further test these technologies, and it was recommended that the University of New Hampshire take the lead on this testing.

The commission's final report states, "It appears that the science and technology of ocean current and wave energy devices is lagging somewhat behind the entrepreneurial spirit. Prototype testing has seen some setbacks and even failures that can be based



Aerial view of the Piscataqua River flowing under the Little Bay Bridge. This was one of the test sites for the national tide current observation survey conducted by the National Oceanic Atmospheric Administration in 2007. Photo courtesy of NOAA/the UNH Joint Hydrographic Center.

on insufficient knowledge of the flow field around ocean turbines ..." The commission specifically questioned if current tidal energy technologies would be able to handle water-borne debris, such as lobster traps and tree branches, as it's carried through the narrow river channel under the bridges. It was also unclear if the underwater infrastructure could withstand the unsteady forces of the naturally strong currents and high tides in the Piscataqua.

Because the Piscataqua River connects Great Bay and the Atlantic Ocean, commercial fishermen and recreational boaters must pass under the Little Bay and General Sullivan bridges to travel between the two waterbodies. The commission found that the need to maintain this critical waterway further restricted a viable power generation facility under the bridges.

Also as a part of its findings, the tidal energy commission recommended that state law be amended to

clarify the state's authority on leasing submerged waters. New legislation will be necessary to bring about this recommendation.

The commission was comprised of a diverse group that included representatives from the Legislature, state agencies, Dover and Newington, the University of New Hampshire, the New Hampshire Commercial Fishermen's Association, the National Marine Fisheries Service, environmental protection and advocacy organizations, and the general public. The DES Coastal Program was selected to coordinate the commission's efforts, including hosting a website. Ted Diers of the Coastal Program served as vice chair, and Coastal Program Federal Consistency Coordinator Chris Williams chaired the permitting requirements subcommittee.

The tidal energy commission's final report, meeting minutes and presentations are available at www.des.nh.gov and search "tidal energy commission." ■

State settles air pollution case with Pinetree Power Inc.

The execution of an administrative fine by consent with Pinetree Power Inc. of Houston, Texas, was recently announced for its wood-fired electric generating facility in Bethlehem, N.H. The settlement resolves alleged violations of the state Air Pollution Control Act and the Federal Clean Air Act that occurred at the Bethlehem facility during the installation of pollution control equipment in 2008.

Under the terms of the settlement, Pinetree Power agreed to pay administrative fines totaling \$92,700 for violations of its air permit, of which \$23,175 will be paid in cash to the State. The remaining penalty of \$69,525 will be paid in the form of supplemental environmental projects to fund local energy efficiency related projects, renewable energy projects, clean fleet programs, or other environmentally related programs to benefit the town of Bethlehem.

Pinetree Power operates a 17.5 megawatt wood-fired electric generating facility. In March 2008, Pinetree Power undertook the installation of over-fire air and flue gas recirculation technologies, as well as selective catalytic and non-catalytic reduction systems. Installation of this technology provides air quality benefits by reducing nitrogen oxide emissions approximately 65 percent. However, during the equipment installation, Pinetree Power's contractor incorrectly installed the over-fire air dampers, thereby causing carbon monoxide emissions to exceed the federal

Prevention of Significant Deterioration permit limits.

"Even though in the end Pinetree Power's pollution control project will provide a net benefit to the environment, the company must comply with all environmental requirements and permits along the way," said DES Commissioner Tom Burack. "In settling this matter, we took into account the cooperation of the company, the efforts it took to address the violations and the ultimate environmental benefits of the project."

The installation of the control technology qualifies Pinetree Power for Renewable Energy Certificates (RECs) under New Hampshire's Renewable Portfolio Standards program. As a renewable power source generator that now meets specified emission standards, Pinetree is eligible to receive RECs. Each REC is a marketable/tradable commodity that represents one megawatt hour (1,000 kWh) of power generation from a renewable energy source. Pinetree Power's air pollution control project helps to assure the continued use of biomass as a renewable resource and will help meet Gov. Lynch's commitment to have 25 percent of the state's energy use supplied by renewable energy sources by 2025.

For information on the settlement with Pinetree Power and New Hampshire's air quality compliance program, contact Pamela Monroe, DES Compliance Bureau Administrator, at (603) 271-0882. ■

EPA undertakes review of DES programs

In March, EPA Region I New England will initiate its third consolidated review of DES's RCRA Subtitle C (Hazardous Waste Compliance) program, Clean Air Act Stationary Sources (Title V) program, and surface water discharge program (analogous to the federal NPDES program, for which DES is not delegated).

EPA-New England's first consolidated review of DES programs was conducted in 1997-1998, with the final report being issued in 1999. As a result of that review, DES made several changes to its internal procedures and developed the Compliance Assurance Response Policy (CARP) to provide guidance on how violations of envi-

ronmental laws will be addressed. Subsequent to that review, EPA and the states jointly developed the "State Review Framework" (SRF) system. The SRF system is intended to standardize, nationally, how EPA regional offices evaluate state-delegated programs as well as the cycles on which the programs are evaluated. EPA-NE conducted "Round 1" of the SRF review process in New Hampshire in 2005-2006.

After the first round of SRF reviews, EPA and the states analyzed the process and results, and made changes to the SRF system. The 2009 review of DES is being done as part of "Round 2" of the SRF reviews. These reviews

will once again review DES's performance relative to data management, inspections, and enforcement activities in the selected programs. A final report is expected in federal fiscal year 2010. ■



DES & home builders association sign agreement

DES and Home Builders and Remodelers Association of New Hampshire recently signed a partnership agreement to further their common goals of environmental education; protection of the state's natural resources; strong and economically diverse communities; encouraging local land use decision-making consistent with the state's smart



DES Commissioner Burack adds his signature to the partnership agreement as Paul Morin, chair of the HBRA Legislative Committee, witnesses the signing.

New Hampshire. "Our Partners Program strengthens the informal partnerships DES currently has with more than 100 different groups by bringing greater recognition and structure to these relationships and enabling us to better align our joint efforts in support of the department's goals and the goals of our partner organizations," stated DES

growth principles; and state level policy initiatives resulting in more affordable housing opportunities and more land conservation.

This partnership agreement was signed as part of the Partners Program that DES initiated with a wide range of organizations across

Commissioner Tom Burack.

In the past, DES and HBRANH have worked cooperatively and in partnership on efforts dealing with environmental and building regulations and how construction debris is most effectively handled. "We have openly discussed and compromised in areas of new legislation as well," said Burack.

It is anticipated that this partnership agreement will result in enhanced communication between DES and HBRANH and improved overall environmental protection. The specific areas of cooperation are detailed in a work plan that covers the time period from January 1, 2009 to December 31, 2010.

DES initiated the DES Partners Program to advance the agency's mission of sustaining a high quality of life by protecting and restoring the environment and public health in New Hampshire. It is anticipated that the Partners Program will help to raise environmental awareness through a strengthening of the department's current relationships with non-governmental organizations, trade associations, industry, business and other organizations in New Hampshire, as well as the development of new collaborative relationships.

A copy of the agreement is posted at www.des.nh.gov/organization/commissioner/partners_program.htm and is available upon request. For more information about the agreement or the DES Partners Program, please call Sharon Yergeau at (603) 271-2918. ■

Deadlines approach for p2 opportunities

The NH Pollution Prevention Program announces the application deadlines for two of its long standing programs: April 1 for the 2009 UNH P2 internship program, and June 5 for the Governor's Award for Pollution Prevention.

Since 1993, the NHPPP has partnered with UNH and EPA to provide a highly successful internship program for New Hampshire businesses and municipalities. The internship allows companies and organizations to become more efficient, reduce waste and pollution and realize significant monetary savings. The benefits for both parties are great: the student acquires real world experience, and the company has the opportunity to save money while creating a safe and environmentally sustainable work space. To find out more about how to hire a P2 intern, please contact Dr. Ihab Farag, UNH at (603) 862-2313 or ihab.farag@unh.edu by April 1. For more information on the P2 Internship Program, search for "Internships: UNH/NHPPP" under the A-Z list at www.des.nh.gov.

For 15 years, the Governor's Award has recognized New Hampshire companies for outstanding pollution prevention projects implemented at their facilities. For example, the 2008 winners have incorporated waste reduction strategies and sustainability practices into their everyday operations. These projects not only better protect the environment, they also resulted in financial savings for the company. For the opportunity to be included in this elite group of companies, please submit your application for the 2009 Pollution Prevention Governor's Award by June 5. Information, applications and examples of past projects can be found on the NHPPP Governor's Award webpage; search for "Governor's Award" under the A-Z list from www.des.nh.gov.

Additional information on these and other NHPPP programs can be found on the DES website, or by emailing the program at nhppp@des.nh.gov. ■

North Country emergencies covered by skilled team

Across the North County, distances are long and resources spread thin. To meet these challenges for emergency responders, DES's Spill Response and Complaint Investigation Section and the North Country Emergency Response Team have partnered to support each organization's mission. The response teams have jointly responded to numerous emergency situations, including fatal truck collisions, residential oil spills, illicit drug laboratories, chemical spills and terrorism threats.

Team members have wide ranging backgrounds from pipe fitters to chemists. Using these talents and intensive training, the mutually supporting teams provide highly technical emergency response capabilities to 42 towns in Coos and northern Grafton counties. An example of how the teams pool their critical resources and expertise came when a recent call from a local emergency department asked them to assist in identifying an unknown material to which a two year old child was exposed. Their accurate and timely response helped save the child.

Personnel, all of whom are volunteers, give up at least one Saturday every other month to train. DES often provides training scenarios, equipment and props, including a mock methamphetamine lab and specially fitted pressurized gas cylinders. In the summer of 2008, members participated in an oil boom deployment exercise in the Androscoggin River. In February, North Country Emergency Response team members spent several days training in Nevada on radiological response.

The North Country team's leader, Gorham Fire Chief Rick Eichler, has obtained several grants for sophisticated communications, gear and field analytical equipment. Most of



North Country Emergency Response Team respond to a truck rollover on Rte. 115 in Jefferson, in March 2006.

the team's equipment is in Gorham where a decontamination trailer and response truck are based, but it also has equipment strategically staged throughout Coos County. DES provides a response truck and trailer out of its Gorham field office, and has spill supplies staged in Littleton, Berlin,

Lancaster and Colebrook.

The people of northern New Hampshire are well served by this dedicated, highly trained, and effective collaborative team. North Country Emergency Response and DES are ready to respond whenever an emergency call comes in. ■

Discover WILD New Hampshire Day — Saturday, April 18, 2009

Celebrate Earth Day by bringing the family to Discover WILD New Hampshire Day, on Saturday, April 18, from 10 a.m. to 3 p.m. on the grounds of the NH Fish and Game Department on Hazen Drive in Concord. Admission is free! Enjoy lots of hands-on activities, including exhibits representing more than 35 environmental, conservation and outdoor groups; see hybrid vehicles; and learn more energy-saving ideas. The event is co-sponsored by Fish and Game and DES, with support from the Wildlife Heritage Foundation of New Hampshire. Visit www.WildNH.com. ■



Photo courtesy NH Fish and Game Dept.

Will you be hanging out to dry April 19?

National Hanging Out Day, held annually on April 19, is a day to demonstrate *your "right to dry"*!

Promoted by Project Laundry List and others, the event highlights the benefits of relying on the sun and wind instead of fossil fuels or nuclear power to dry clothes. Project Laundry List, an international, non-profit group based in New Hampshire, is dedicated to making air-drying laundry acceptable and desirable as a simple and effective way to save energy. On average, only the refrigerator uses more electricity than the dryer among household appliances, which accounts for an estimated 10 percent of a household's electricity usage. Using a clothesline or drying rack instead of a dryer can save the average household more than \$100 annually in energy costs – plus clothes last longer and smell better, too!

Hang out on April 19 and see for yourself the difference you can make!

For more information, go to www.laundrylist.org.



ARM

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tion or creation efforts, or improve upon known preservation projects that would have immediate environmental benefit.

The recently adopted revised mitigation rules for the Aquatic Resource Mitigation Fund (ARM) authorize the collection of mitigation funds in lieu of other forms of wetland mitigation as part of a wetlands permit application. The ARM program was signed into law by Gov. Lynch in 2006 and the final DES rules were adopted in June 2007.

The ARM fund is the first in-lieu fee program in New England. It recognizes the potential for long-term environmental results from wetland mitigation that considers watershed goals, assists conservation efforts in recognizing green infrastructure plans of a town or region, and has the ability to target important and vulnerable wetlands in a region. Out of the 16 watershed accounts set up to receive payments, 22 payments have been received within eight watersheds with a total of more than \$1.45 million received to date. ■



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