

NONPOINT SOURCE TIMES

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Stormwater Inspection & Maintenance: The Sleeping Giant

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Stormwater-quality management for new urban developments commonly is required in most areas of the country today. The requirement to clean stormwater is driven by regulatory programs, such as the National Pollutant Discharge Elimination System and its underlying legislation, the Clean Water Act.

Many developers view the implementation of stormwater-quality controls as a prerequisite to obtaining approvals for a building permit. Without the regulatory requirement, it is debatable whether many private developers would spend the money to implement such controls because the average person does not think stormwater pollution is a significant concern.

People understand and can visualize concerns related to flooding, polluted drinking water and lack of sewage treatment. On the other hand, people cannot visualize the impacts of stormwater pollution. Many people just don't believe rain falling on pavement and collecting in a storm drain is polluted enough to warrant treatment. Impacts of stormwater pollution are complicated further because they might manifest slowly over time and are related to changes in hydrology and chemical constituents. This makes showing a cause-and-effect relationship between individual developments and downstream water-resources impairment difficult-if not impossible.

Because of the lack of general understanding regarding the impact of urban development on stormwater quality, any private owners do not consider inspection and maintenance of stormwater-quality, many private owners do not consider inspection and maintenance of stormwater-quality practices im-

portant. Many onsite maintenance personnel who are supposed to be responsible for underground stormwater practices are not even aware of these devices.

To determine the level of awareness regarding stormwater inspection and maintenance, 62 private owners of stormwater-quality

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practices were contacted in two northeastern states to find out who was maintaining their stormwater facility and whether they would have it inspected if it was not being maintained. The method of contact involved phoning the owner to determine the person responsible for maintenance, sending a flyer about the need to maintain stormwater-quality practices to that person and then following up with that person to determine his or her interest in stormwater-quality inspection and maintenance. Of the people contacted, approximately 35% admitted they were not maintaining their stormwater-quality practices. An additional 55% would not return the phone calls. Only 10% of the people contacted indicated they were maintaining their stormwater-quality practices.

To further ascertain the level of interest in stormwater-quality-practice inspection and maintenance, a survey was mailed to 2,000 consultants and regulatory agency personnel. This mailing resulted in one phone call from an interested consultant and two inspection leads.

Actual inspections of existing stormwater-quality practices indicate improper installation as a problem in addition to lack of maintenance. Inspections of 29 stormwater-quality practices revealed that approximately 70% of the practices had installation deficiencies, including improperly oriented access openings, incorrect parts, missing parts and improperly installed parts. Maintenance was required or overdue for 70% of the 29 inspected practices.

As these numbers clearly show, inspection and maintenance of stormwater-quality practices are lagging far behind the implementation of the practices themselves. Although there are requirements regarding inspection and maintenance, typically there is no enforcement of private-owner inspection and maintenance after construction approvals are granted.

Frequently, inspection and maintenance requirements are written into the conditions of approval and/or an inspection and maintenance plan is required for approval. Without enforcement, these plans are shelved and the conditions are forgotten. In many cases, the authority for enforcement is delegated from the state level to the local, municipal level and municipalities often are reluctant to bite the hand that feeds them or expect private owners to follow the order of conditions and do not stringently enforce stormwater inspection and maintenance.

Economics are a big reason behind the neglect of stormwater inspection and maintenance. Due to the economy, regulatory agencies have been downsized, funding has been cut and there aren't enough resources or isn't enough capital for enforcement of stormwater inspection and maintenance. Businesses are struggling and stormwater-quality inspection and maintenance are at the bottom of their priority list. In such areas as Maryland, stormwater taxes fund county programs for inspecting stormwater facilities. This has helped ensure inspection of private stormwater practices-albeit at the expenses of the general taxpayer.

There is a common agreement among regulatory agencies, consultants and stormwater vendors that inspection and maintenance of stormwater-quality practices are required to ensure their long-term operation. It also commonly is agreed that private owners should be responsible for inspecting and maintaining their stormwater-quality facilities. There is less agreement, however, on who should be enforcing private inspection and maintenance and how practically to enforce compliance. Consequently, inspection and maintenance are not occurring for the majority of private stormwater-quality practices implemented today. The lack of maintenance and the improper installation of stormwater practices result in the waste of capital expenditure for these practices and the absence of public environmental benefit. This trend can be expected to continue until there is a better mechanism for ensuring cradle-to-grave management of stormwater-quality measures in urban development projects.





How Do You Know When You've Been Successful?

How Do You Know When You've Been Successful?

This question comes up frequently when you are working on improving or protecting surface water quality. Well don't look any further, have we got a story for you...

Back in 1995, the analysis of Highland Lake's water quality had professionals scratching their heads and wondering why the lake had not had a serious algae bloom. Expectations were that at any day people would wake up and find Highland Lake had turned green.

Fortunately, the statistically negative trend in the lake's water clarity had mobilized folks around Highland Lake to take the initiative to contact the Cumberland County Soil and Water Conservation District (CCSWCD) to plan a watershed survey. A survey serves as the necessary first step to success - documentation and prioritization of issues – the basis for planning.

Highland Lake was on the road to success, but how would you know? All along the road, the signs were in the right place...

- ✓ The lake had local advocates who kept the needs of Highland Lake in front of their selectmen.
- ✓ The Lake Association had water quality monitoring and outreach programs in place.
- ✓ The Towns came through with financial support at crucial times in order to maintain the level of commitment that had been established in the watershed.
- ✓ The CCSWCD and MDEP viewed the work they were doing in this watershed as developing a program, not a project – so sustainability of effort was explored every step of the way.

“Lake protection never reaches an endpoint, but instead, requires a continual process of education and routine maintenance .”

The watershed survey led to the development of a watershed management plan and the implementation of a \$206,975 Conservation Project that was matched by \$157,494 in local sweat equity and cash match. Highland Lake continued on the road to success through a tremendous commitment on the part of CCSWCD and MDEP staff, watershed volunteers, and the municipalities of Windham, Falmouth and Westbrook.

“Keep the soil out of the water!” became the mantra heard on high in the Highland Lake Watershed. Watershed residents heard this message from Highland Lake Association (HLA), neighbors, in HLA newsletters, at the HLA Annual Meeting, and from district and MDEP staff who had a visible presence in the watershed over the three-year conservation project.

It is important to remember that the road to success for Highland Lake began in 1995, and the spirit of the community was evident in many of the following accomplishments:

- ✓ Twenty-two (22) road projects were completed (15 was the goal).
- ✓ One hundred and forty seven (147) technical assistance visits were completed (30 was the goal), largely due to interest generated by the success of the Youth Conservation Corps (YCC).

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- ✓ YCC was started under the grant as a two-year program that aimed to complete 30 sites. Eighty-eight (80) sites were completed over three years and the Towns of Windham and Falmouth were instrumental in providing key financial support to continue the YCC program.
- ✓ YCC continues to this day. The Towns of Windham and Falmouth, in collaboration with the leadership of the Highland Lake Association, have carried on the good work of the YCC for a total of five years, and year six is planned for this coming summer!

So there is the bean counting for you – each goal was not only met, but exceeded. But we hear you saying, “So what?” And you are not alone. Watershed residents, town officials, and watershed management specialists, alike, always want to see the proof in the pudding. Well, we’ve got it! At least, the preliminary analysis of water clarity data indicates that after showing a statistically significant downward trend in water clarity through 1998, water clarity data from 1999 through 2003 is stable. Hot diggity!

Granted, we are treading softly. At least three to five more years of additional data are needed to be confident that the trend we think we are seeing is real.

From the beginning, there was buy in from the local community and that set the stage for Highland Lake’s success. Lake protection never reaches an endpoint, but instead, requires a continual process of education and routine maintenance – this point has not been lost on the stakeholders of the Highland Lake Watershed.

- ✓ More watershed residents are taking the initiative to fix erosion problems themselves and YCC is there to provide the muscle, when needed.
- ✓ Highland Lake Association has continued to host buffer cruises to educate watershed residents about the benefits of buffers.
- ✓ The “Guide to Living Responsibly in the Highland Lake Watershed,” that was developed as part of the grant project has continued to be a resource for new watershed residents.
- ✓ Finally, CCSWCD will begin a Phase II 319 project this spring that will capitalize on the existing energy in this watershed to considerably increase the vegetated buffers along Highland Lake’s shoreline and continue to address camp road erosion issues.

So there you have it. Good people, doing good work, and getting the job done. For more information contact Tamara Lee Pinard (District Lakes Program Manager) 207-856-2777 or Tamara-Lee-Pinard@me.nacdn.org or Don Kale (MDEP Watershed Management Specialist) 207-822-6319 or donald.kale@maine.gov

Sourcewater Protection Program for Drinking Water Resources

Free Technical Assistance to help your community develop and implement a Sourcewater Protection Plan

Program Goal: To assist public water systems in the creation of Sourcewater Protection Plans and implementation measures to reduce or eliminate potential risks to the supply.

Program Requirements:

- Formation of a sourcewater protection team involving 5-15 entities
- MRWA creates a Sourcewater Protection Plan and Contingency Plan based upon team goals
- Team implements the plan with assistance from MRWA

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Example Sourcewater Protection Measures: Education and/or Training, Ordinances, Brochures, Signs, Comprehensive Planning, Conservation Easements, Contingency Plans for Contamination and Quantity/Allocation Issues, Monitoring and Surveillance Plans, Hazardous Waste Collection, Invasive Aquatic Plant Prevention and Management Strategies

For more information, contact: Susan Breau, Sourcewater Program Manager, Maine Rural Water Association, (207) 729-6569 or email: sbreau@mainerwa.org

Roots, Bark and Boughs Are All About Giving Back

From Forestry Notes the newsletter of the Society for the protection of NH Forests.

(Editors note—looking for reasons to help sell buffer planting—you might try some of these.)

Whether they grow deep in the woods or decorate a busy Main Street, well-tended trees offer an astounding array of benefits:

- An acre of trees absorbs enough carbon dioxide in a year to equal the amount produced by driving a typical car 26,000 miles.
- Over a 50-year lifetime, a tree generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution control, recycles \$37,500 worth of water and controls \$31,250 worth of soil erosion.
- Urban trees can cut street-level, airborne soot up to 60%.
- Trees remove airborne pollutants such as sulfur dioxide, ozone and nitrogen, as well as trace toxic metals, including cadmium, nickel, chromium and lead.
- For every 5% of tree cover added to a community, storm water runoff is cut by about 2%.
- Healthy, mature trees add 10-20% to a home's market value.
- By shading roofs and walls, trees can cut daytime air conditioning costs up to 58%. By blocking cold winter winds, trees can cut heating costs. Homes surrounded by trees save between 20-25% in energy costs, compared to homes in wide-open areas.
- The cooling effect of the water evaporating from a healthy tree is equivalent to 10 room-sized air conditioners running 24 hours a day.
- Trees shading parking lots and roads can keep entire cities cooler. Sun-baked asphalt make cities "heat islands" that are 5-9 degrees hotter than surrounding areas.
- Shade trees can extend the life of asphalt paving 10-15 years. Without shade, oil-based binders that hold paving together vaporize more quickly, weakening the asphalt.
- Well-positioned trees reduce noise pollution, screen unsightly views and reduce soil erosion. By slowing storm water runoff, trees reduce the amounts of pollutants reaching streams, including phosphorous and potassium.
- With trees, commercial retail areas are more attractive to shoppers, business parks lure more clients, apartments rent more quickly and tenants stay longer.
- For every dollar a city spends on planting and maintaining trees, it gets \$3.80 back in total benefits





RFP–NPS Control Projects

Maine DEP expects to issue a Request For Proposals for Nonpoint Source Projects in late March 2004. Projects are to help restore or protect lakes, streams, or coastal waters that are polluted or considered threatened. DEP anticipates issuing NPS grants with FFY 2005 monies provided to Maine by the U.S. Environmental Protection Agency under the Section 319(h) of the Federal Clean Water Act. Maine public organizations such as state agencies, soil and water conservation districts, regional planning agencies, watershed districts, municipalities, and nonprofit 501(c)(3) organizations are eligible recipients.

The RFP is for watershed-scale projects that benefit waters listed as "NPS Priority Watersheds". A portion of funds will be allocated for projects crafted to help restore 303(d) listed waters that have an approved TMDL analysis. Three types of projects will be invited: Watershed Projects, Watershed Surveys, and Development of Watershed Management Plans. DEP plans to devote about 80% of the funds for NPS Watershed Projects. A NPS Watershed Project focuses on implementing actions in a watershed to improve or protect a water body. The project is designed so that BMPs are implemented in a manner that leads to a significant reduction in NPS pollutant load to a water body.

There is considerable opportunity to obtain a NPS grant to help protect or restore Maine's clean waters. As an outcome of last year's RFP, this spring DEP is scheduled to award about \$616,000 for 10 projects. DEP had received twenty-four proposals.

The 2005 RFP will be posted at DEP website www.state.me.us/dep/blwq/grants.htm#319
FMI contact: Norm Marcotte, Maine Department of Environmental Protection, Division of Watershed Management, 17 State House Station, Augusta, ME 04333, norm.g.marcotte@maine.gov or 207-287-7727

After The Storm

After the Storm- co-produced by EPA and The Weather Channel (TWC) which premiered on TWC on Wed. Feb. 4, 2004. Upcoming air dates include May 9, 2004 at 8:30 and 11:30pm Eastern.

EPA is currently producing VHS copies of the "After the Storm" special and these copies should be available by the end of March/early April. If you would like a copy of the video, please call the National Service Center for Environmental Publications at 513-489-8190 or 800-490-9198 or email ncepimal@one.net as they are taking orders now. When you request a VHS copy of the "After the Storm" video, please refer to the EPA document number: EPA 840-V-04-001. These VHS tapes are intended for education and communication purposes and for use in classrooms, at conferences, etc. However, the tape should not be reproduced, distributed, broadcast or cablecast, without the express written permission of EPA. If you have any questions, please send them to EPA at weatherchannel@epa.gov

EPA will have full rights to the program after Aug. 5, 2004. At that time they plan to make Beta SP copies available to cable and other broadcast stations for their use. Additional updates and information about this program will be posted on the web site at <http://www.epa.gov/weatherchannel/>



Wider Buffers Not Necessarily Better

(From Buffer Notes October 2003 published by NACD www.nacdnet.org/buffers. Reprinted with permission.)

POINT OF VIEW

Editor's Note: Wendell Gilliam, emeritus professor of soil science at North Carolina State University, is recognized as an international expert on conservation buffers. Gilliam has long held the view that riparian buffers are the most effective water quality conservation practices in humid regions of the U.S. He is joined in penning this opinion piece by colleague Deanna Osmond, a soil science specialist and assistant professor at North Carolina State. They argue that for water quality purposes, buffer widths can be kept to reasonable minimums. They also make the case for natural regeneration in riparian areas. In this piece, they address issues related specifically to water quality, not wild life habitat or other considerations. In these cases, wider buffers may be necessary to achieve program goals.

By Wendell Gilliam and Deanna Osmond

We, at the North Carolina State University, have been involved with research on riparian buffers for more than two decades and believe they are a wonderful tool for protecting surface water quality, improving or maintaining stream health and providing wildlife habitat.

We are very pleased with the widespread acceptance of the value of buffers by both the conservation and regulatory communities, as well as by landowners. The value of buffers, particularly for water quality, is well supported by research data. There are, however, some current trends in the installation of new buffers that disturb us.

There is no question that wide buffers are likely to be more effective than narrow buffers. Diminishing returns, however, in pollutant removal per added foot of buffer width are quickly reached. There is no one ideal buffer width for all landscape situations. As slopes increase in the buffer area, the wider the buffer needs to be to achieve a given level of surface-transported pollutant removal. Often mitigation and other public funds are being used to buy land or easements to install buffers wider than needed for water quality purposes. It is not uncommon for buffers 300 to 500 feet to be installed on gently sloping land. This is a wasteful expenditure of public funds, at least for water quality benefits, which is generally the primary objective of the mitigation. It would be much more effective to have 50- or 100-foot buffer widths along a longer stream reach than to have the wider buffers over a shorter distance.

"We are confident that a much wiser expenditure of funds would be to allow succession of whatever native species colonize the buffer without any influence of man."

There is very little scientific data to justify required planting of certain woody plant species or specific mixtures of species in new buffers. It bothers us to see large amounts of funds being spent to achieve a certain mixture of plant species in wide buffers. Often these planted species do not survive unless weed control is obtained because weeds compete better than the saplings. Certainly these buffers can achieve their intended purpose but at what cost? We are confident that a much wiser expenditure of funds would be to allow succession of whatever native species colonize the buffer without any influence of man. We realize that this approach will not work everywhere because of a lack of seed source, but we are convinced that it will work in many, if not most, areas. This approach would allow buffers to be established on many more miles of streams using no more funds.

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Finally, riparian buffers do not work equally well everywhere, at least for water quality purposes. It has been clearly shown that nitrate in ground water passing more than 5=6 feet below a riparian buffer will be influenced very little, if any, by the presence of a buffer. Mitigation buffers are currently being established in some landscapes with relatively flat sandy soils with little or no erosion problems on streams too deeply incised for the nitrate to be denitrified from the groundwater passing below the buffer. These buffers will have little influence on removal of N because the groundwater is too deep and since erosion is not a problem, the buffers are not needed for sediment and sediment-attached pollutant control. This defeats the primary purpose of buffer installation for water quality gains!

We wish to emphasize our support of riparian buffer installation across the country. Our purpose in this editorial is to encourage the wiser use of funds in their installation so more and better buffers can be installed.

Comparative Evaluation Of Microbiological Source tracking Techniques

Microbiological source tracking (MST) methods are potentially powerful management tools for discriminating between human and non-human sources of fecal contamination. Some source tracking methods also allow differentiation of fecal contamination originating from individual animal species. MST methods augment measurement of indicator bacteria density (total coliforms, fecal coliforms, and Enterococci), which are used to assess whether waters are safe for recreation but provide little insight about the source of the problem when counts are high.

Despite the potential of source tracking techniques to disentangle sources of fecal contamination, most of these methods are still experimental. They have been tested in a limited number of locations, often within a single watershed, and with a limited number of possible sources. None have been subjected to standardized comparative testing, and most have not been tested in marine waters. Public agencies, particularly those in California, are preparing to spend millions of dollars on MST techniques with the hope to identify sources of recreational water contamination. Without comparative studies, local water quality managers do not have the necessary information to make logical, cost-effective choices regarding which source tracking method to use and cannot know to what extent they can rely on the results when the methods are employed.



Recognizing the need for reliable information on the efficacy of different source tracking methodologies, seven organizations (Southern California Coastal Water Research Project, National Water Research Institute, State of California Water Resources Control Board, US EPA, Southern California Stormwater Monitoring Coalition, Orange County Sanitation District, and City of Santa Barbara) are cooperating to conduct a comparative evaluation of microbiological source tracking methods. Utilizing a study plan built around criteria for method evaluation established at the Microbiological Source

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Tracking Workshop, twenty-one researchers are performing nine different source tracking methods as part of the evaluation study.

The study is currently underway. Study samples were sent out in October and are undergoing analysis at this time. Laboratory processing is due for completion February 1st. Participating researchers will gather in mid-February to review results and begin report preparation. We anticipate releasing a report summarizing results by Fall 2003.

In addition to coordinating this comparative evaluation, SCCWRP is pushing forward the development of new source tracking methods. Using molecular biological techniques, researchers at SCCWRP are working to develop source tracking methods able to differentiate between sources of enterococci and are collaborating with researchers at two major academic institutions to develop methods to detect and quantify human pathogenic viruses in recreational waters.

From <http://www.sccwrp.org/>

Maine Rivers Alewife Education Program

Think of Maine, and what do you see? Spruce covered islands; a long, craggy coastline; thundering rivers....loons, bald eagles, black bears....and alewives. Alewives, frankly, may not be what most of us conjure up when we first think of Maine. That's because, as once was the case with loons and bald eagles, Maine's historically thriving population of alewives has plummeted during the last two centuries, victims of polluted and dammed rivers, and of over harvesting. We've lost our memory of alewives, and how important they are in the life of Maine.

But think of Maine five thousand years ago, in prehistory. Scientists tell us that prior to Europeans settling this region, there was probably not a stream from one end of the state to the other – and along the entire Gulf of Maine, for that matter -- that didn't have an annual alewife migration, their silvery bodies crammed bank to bank on their springtime spawning runs....

Maine



Rivers

Maine Rivers has been awarded a grant from the Gulf of Maine Council on the Marine Environment to conduct educational sessions across the state on the role of alewives in the Gulf of Maine and Maine's river systems.

We've assembled a highly-qualified team of resource experts to advise us, and we've put together a presentation that details the biology of alewives, their role in the larger Gulf of Maine ecosystem and in our rivers, as well as their decline and the potential for their restoration. The presentation includes vintage photographs from the well-known Damariscotta Mills alewife run, as well as contemporary, underwater photographs from National Geographic Photographer Bill Curtsinger.

The presentation, with slides, will run about half an hour, with extra time for questions and discussion afterwards.

Please let us know if your group(s) would be interested in this presentation. We'll be happy to schedule one. Call Naomi Schalit at 622-3101, extension 219, or send us an email at nschalit@mainerivers.org



Stormwater Research Articles

The following are papers from Jiri Marsalek who is the head of the Urban Water Management Project at Environment Canada's National Water Research Lab in Burlington, Ontario (Thanks to Susanne Meidel for sharing).

Marsalek et al 2003: Review of operation of urban drainage systems in cold weather: water quality considerations. *Wat Sci Techn* 48(9): 11-20

Marsalek 2003: Road salts in urban stormwater: an emerging issue in stormwater management in cold climates. *Wat Sci Techn* 48(9): 61-70

Marsalek et al 2002: Assessment of stormwater impacts on an urban stream with a detention pond. *Wat Sci Techn* 45(3): 255-263



Marsalek et al. 1999: An exploratory study of urban runoff toxicity. *Wat Sci Tech* 39(12): 33-39

Marsalek and Kok 2000: Urban Stormwater Management for Ecosystem Protection (Foreword). *Water Qual Res J Canada* 35(3): 313-314

VonLoon et al. 2000: Characterizing Stormwater Sediments for Ecotoxic Risk. *Water Qual Res J Canada* 35(3): 341-364

Rochfort et al. 2000: Using Benthic Assessment Techniques to Determine Combined Sewer Overflow and Stormwater Impacts in the Aquatic Ecosystem. *Water Qual Res J Canada* 35(3): 365-397

Sztruhar et al. 1997: A Case Study of Combined Sewer Overflow Pollution: Assessment of Sources and Receiving Water Effects. *Water Qual Res J Canada* 32(3): 563-578

Marsalek et al 1999: Toxicity testing for controlling urban wet-weather pollution: advantages and limitations. *UrbanWater* 1: 91-103

Watershed Planning Tool

PLAN2FUND, a watershed planning tool developed by the Environmental Finance Center, walks users through estimating the costs of their watershed plan's goals and objectives, assessing any local matches, and determining funding needs to meet the goals and objectives. PLAN2FUND can be downloaded off the EFC's website at <http://sspa.boisestate.edu/efc/services.htm>. The results from PLAN2FUND can be used to search for funding sources utilizing the Environmental Finance Center's internet-based Directory of Watershed Resources. The Directory of Watershed Resources is an on-line, searchable database for watershed restoration funding that includes over 700 federal, state (Idaho, Oregon, Washington and Alaska) and private funding source. The Directory allows users to query the information in a variety of ways to locate funding sources that match their specific needs. The Directory is available online at <http://ssrc.boisestate.edu>.

The Environmental Finance Center at Boise State University assists with the "how to pay issues" of environmental protection. You can find out more about the EFC and the services we provide on our website at <http://sspa.boisestate.edu/efc>. We are currently in the process of developing our work plan for next year. If you would like to request our assistance or are interested in partnering with the EFC, please let us know.



Local Maine Groups Receive Grant Funds

Congratulations to the following groups. They have successfully applied for and received a grant from New England Grassroots Environmental Fund. For more information on this fund contact NEGEF at P. O. Box 1057, Montpelier, VT 05601. (802) 223-4622 or info@grassrootsfund.org. www.grassrootsfund.org

- Friends of Cox Pinnacle Brunswick, ME \$2,000** To continue with the fundraising campaign to raise \$125,000 by January 2004 to preserve a 103-acre parcel for recreational trail use and wildlife habitat.
- Loon Echo Land Trust – Bridgton, ME \$1,500** To help fund "Mapping Our Landscape", a mapping project that will create maps for conservation planning, stewardship programs, marketing, education and fundraising.
- Organization for Watershed Living (OWL) – Houlton, ME 2,000** To help residents of the Meduxne-keag River Watershed communities understand lake and river ecology and the parameters that are used to assess water quality in each by developing a citizen science program.
- Orono Land Trust – Orono, ME \$2,000** To help fund the campaign to protect the Bangor-to-Old Town Conservation and Recreation Corridor, a continuous swath of undeveloped land for wildlife habitat and public use.
- Pemaquid Watershed Association Damariscotta, ME \$2,000** To train a corps of citizen volunteers to survey the Pemaquid Pond and McCurdy Pond watershed for soil erosion, polluted runoff and other signs of nonpoint source pollution, and then work with landowners to reduce or eliminate any problems identified in the survey.
- Sabattus Hill Huggers – Sabattus, \$2,000** To protect the environment, public health and natural resources through ensuring that all excavation projects and other operations are required to follow local environmental and land use regulations.
- Sebasticook River Watershed Association – Unity, ME \$2,000** To protect water quality, wildlife habitat, and public access through land conservation on the shores of Great Moose Lake and Sebasticook River.
- Western Maine Citizens for Clean Air and Water – West Paris, ME \$2,000** To initiate a pilot study to inform citizens about air pollution and train them to participate in a community-based air monitoring program
- Androscoggin Land Trust Auburn, ME \$2,000** To help fund the Androscoggin River Corridor Conservation Project in an effort to reduce the threat of sprawl on the areas surrounding Lewiston and Auburn.
- Aziscohos Lake Preservation Committee – Wilsons Mill, ME \$1,500** To help fund environmental monitoring, impact studies and lake level analysis, combined with pushing for enforcement of existing provisions of Aziscohos Hydroelectric Project's license and permits.
- Griffin Park Citizens Against Toxic Streams – Bangor, ME \$2,500** To pressure the city of Bangor to take a variety of actions to ensure the health and quality of life of Griffin Park residents and the surrounding environment.
- Maine Chapter of the Izaak Walton League – Kents Hill, ME \$2,000** To help fund outreach efforts to ensure that the new chapter continues to grow at the current pace.





Quick Updates and Briefs

The new email address for the Volunteer Lake Monitoring Program is: vlmp@mainevlmp.org And they have now gone electronic with their newsletter - check it out at: <http://www.mainevolunteerlakemonitors.org/pub/>

The ASWIPCA NPS Meeting held in Austin Texas in February 2004 has posted the presentations on the web. If you would like to view visit: <http://209.216.203.82/asiwpca.org/events/other.htm>

May 18 - 20 the Wells NERR is hosting a the course "Project Design and Evaluation. It is put on by the NOAA Coastal Services Center and is designed to provide skills for design and evaluation of the effectiveness of programs designed to educate and/or influence decision making and change behavior. According to Christine Feurt: "I attended the class in New Hampshire with a group of Sea Grant folks and was so impressed with the potential for the training to affect all of our work in education, outreach and social change that I scheduled a training in Maine. This training was transformative for me.." FMI contact Christine Feurt, Coordinator, Coastal Training Program, Wells National Estuarine Research Reserve, 342 Laudholm Farm Road, Wells, Maine 04090. 207.646.1555 ext.111

Maine USDA received a 2004 financial assistance (cost-shares) allowance for mandatory funds. They are as follows:

- Wetland Reserve Program \$200,000.00 a \$20,000.00 decrease from 2003
- Environmental Quality Incentives Program (EQIP) \$6,903,300.00 a \$2,079,600.00 increase from 2003
- EQIP Ground and Surface Water \$307,600.00 a \$307,600.00 increase from 2003
- Wildlife Habitat Incentives Program \$450,000.00 a \$115,000.00 increase from 2003
- Farmland Protection Program \$1,523,400.00 a \$412,000.00 increase from 2003
- Grassland Reserve Program \$396,700.00 a \$296,700.00 increase from 2003

Gordon Moore has been selected as Maine Forest Service's new Water Resources Forester. Gordon started this past January. To reach Gordon 207-695-3721 or Gordon.Moore@maine.gov

For the second year in a row, a Maine District has been tapped by NACD to give a presentation on "Our Success Story" at the NACD National Convention. Only five Districts of the 3,000 in our country are so honored every year, with a seven-minute presentation before the all of the 1,000-plus attendees at the convention. Last year, Cumberland County SWCD was asked to give their District's success story; this year, Piscataquis County SWCD has been named. Steve Hobart, who will be at the convention as MACD President and alternate NACD director, will give Piscataquis' story.

Redesigned Rain Garden web site <http://www.raingardens.org> . More information will be going up soon; a plant database is going to go up as well as garden design layouts for download, and a lot more images.

Quick Updates and Briefs—continued

New Strategy to Curb Sprawl in New Jersey (Star-Ledger 2/2)

<http://www.nj.com/news/ledger/jersey/index.ssf?/base/news-5/1075704196124750.xml>

A proposal by the New Jersey Board of Public Utilities (BPU) would give developers a new incentive to build in urban areas and existing suburbs and rural centers. Under the proposal, the costs of extending electricity, hot water, and natural gas infrastructures to new, sprawling subdivisions should be levied by developers, not taxpayers. The proposal is designed to reinforce the New Jersey State Development and Redevelopment plan, a blueprint that maps the state into planning areas and channels growth into higher density areas. If the proposal, now in a 60-day public comment period, is adopted, developers would be reimbursed for the cost of extending services in different amounts and at varying speeds depending on where they build. Developers will be reimbursed more, and at a quicker pace, if they build in growth areas designated by the state plan. Builders are currently required to pay for a portion of extending services, but are reimbursed by at least half as the utilities come online. Groups opposed to sprawl are generally happy with the BPU's idea, although some note that the development and redevelopment plan needs to be reworked for the proposal to be truly effective.

LakeSmart

(LakeSmart is a new MDEP program)

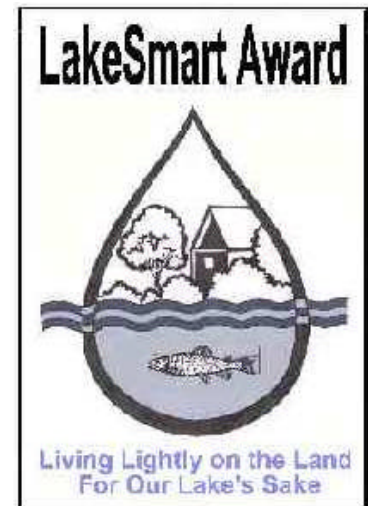
How we develop the land around lakes (watersheds) can have a huge impact on the water quality. With fewer natural, vegetated areas to absorb stormwater, more pollutants from the land that gets washed into the lake each time it rains or snow melts.

Pristine lake waters add beauty, increase property value and provide recreational opportunities throughout the seasons. Studies have shown that as water quality declines the value of shorefront property also decreases. This, in turn, may increase the property taxes on property located away from the lake. Declining water quality can also affect the type and number of fish species that inhabit the lake and can hinder other recreational uses of the lake as well as the local economy.

Clearly it is in everyone's best interest to take whatever actions they can to protect lake water quality. LakeSmart is an educational program that offers **FREE** workshops for homeowners to teach them how to manage their home and yard to protect the water quality of their lake. The goal of LakeSmart is to change the increasingly common suburban landscaping practices around lakes to more natural, lake-friendly environments. The primary focus of LakeSmart is to stabilize eroding areas, reduce the use of chemicals, divert rainwater into vegetated areas, and minimize lawns and other impervious areas.

Landscaping and managing your property in an environmentally friendly manner through LakeSmart is one way to do *your part* in protecting your lake's water quality.

For more information on LakeSmart visit <http://www.maine.gov/dep/blwq/doclake/lakesmart/index.htm>





Calendar of Events

April 7, 2004. MainE Stream Summit 2004 (MESS). University of Maine Huchinson Center Belfast ME (Rt. 3). FMI Jeff Varricchione 1-888-769-1036 or mstp@maine.gov.

April 16, 2004 from 7-9 pm. Workshop with Dr. Doug-McKenzie-Mohr on community-based social marketing hosted by USM. FMI <http://www.usm.maine.edu/prov/convocation/events.htm>

April 20-23, 2004. 17th Annual National Conference Enhancing The States' Lake Management Programs "Effective monitoring programs for lakes and reservoirs".. Holiday Inn Chicago Mart Plaza. Chicago, Illinois. FMI <http://www.nalms.org/symposia/chicago/index.htm>

April 21, 2004. Maine Water Conference. Augusta Maine. FMI www.umaine.edu/WaterResearch/mwc/index.htm

April 21, 2004. Conservation Expo. University of Maine at Farmington hosted by Franklin County SWCD. FMI 207-778-4279 or rosetta-thompson@me.nacdnet.org

April 30, 2004. Maine Land Conservation Conference hosted by Maine Land Trust Network. Camden Hills Regional High School. FMI www.mltm.org

May 18 - 20, 2004. Northeast Freshwater Fish Origins, Distribution, Status, and Taxonomy at Eagle Hill in Steuben, Maine. FMI For further information, contact: Dr. David Halliwell, david.halliwell@maine.gov, (207) 287-7649

May 25-27, 2004. NEIWPCC's 15th Annual NPS Pollution Conference in Lake George, NY. FMI Rebecca M. Weidman. (978) 323-7929 ext. 229. rweidman@neiwppcc.org.

June 2-4, 2004. Best Education Practices for Water Outreach Professionals Symposium. University of Wisconsin, Madison. FMI <http://www.uwex.edu/erc/waterbeps/>

June 19, 2004. 2004 Annual COLA Meeting. Southern Maine Community College. Also the Summer Milfoil Summit. FMI 1-877-254-2511 or info@mianecola.org

July 26-29, 2004. StormCon Conference and Exposition 2004. Palm Desert, CA. FMI info@StormCon.com

Sept. 27-30, 2004. 12th National Nonpoint Source Monitoring Workshop: Managing Nutrient Inputs and Exports in the Rural Landscape, in Ocean City, Maryland. FMI <http://www.ctic.purdue.edu/NPSWorkshop/NPSWorkshop.html>

This newsletter is prepared especially of those involved in nonpoint source pollution issues. It is funded through an EPA 319 Clean Water Act Grant. If you have any announcements, comments or items for the Nonpoint Source Times, or if you would like to be added to the mailing list, please call or write:
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