

Shellfish Program
Freeport January 4, 2012 & Ellsworth January 6, 2012

The Maine Nutrient Management Program was established by the Legislature in 1998. This program was initiated by the Maine Department of Agriculture, local soil & water conservation districts and, primarily, interested farmers who shared a proactive interest in the proper storage, management and utilization of farm nutrients. A key element of this program has been the development of over 750 nutrient management plans covering over 150,000 acres and 115,000 animal units. Some farms are not required to have a nutrient management plan; however, farms which confine and feed 50 or more animal units, utilize or store more than 100 tons of manure or compost annually, utilize or store regulated residuals, or are the subject of a verified complaint of improper manure handling must develop and implement a Plan. Certified nutrient management planners are trained and licensed by the Department. Staff also provide guidance to farms for composting on-farm and off-farm nutrients. Contact for this program is: Mark F. Hedrich, Nutrient Management Program Coordinator, 28 SHS, Augusta, Maine 04333-0028; Telephone: 287-7608; Email: mark.hedrich@maine.gov.

The Agricultural Compliance Program (ACP) of the Maine Department of Agriculture (Department) was developed to investigate and resolve complaints from the public concerning farms and farm operations that involve threats to human or animal health and safety, and to the environment.

An important aspect of the program is providing assistance to farmers to develop or remain in compliance with Best Management Practices (BMPs). BMPs are those agricultural practices that are determined by the Commissioner of Agriculture to be a preferred method or practice based on best reasonably available and economically feasible methods and technologies that are technically and environmentally sound. They are practices that are best suited to preventing, reducing or correcting general or site specific agriculture-related problems.

The success of the ACP is a result of an effective working relationship between farmers, the Department of Agriculture and other state and federal agencies. The ACP serves as an effective intermediary between farmers and others for resolving conflicts in a timely and meaningful manner. Complaints regarding improper manure handling are always investigated. The ACP is complaint driven except when a potential adverse water quality impact from animal waste exists. In those cases, the Department has authority to initiate an investigation without having received a complaint. The contact for this program is Matthew Randall. Matt can be reached at (207)287-7708 or matthew.randall@maine.gov.

David Rocque, State Soil Scientist: Phone-287-2666; e-mail: david.rocque@maine.gov
Certified Soil Scientist # 181, Licensed Site Evaluator # 154, Licensed Professional Forester # 795, Wetland Scientist (no State certification program)

The Maine State Soil Scientist is a position originally created for the Maine Soil and Water Conservation Commission (SWCC). The SWCC was a State Agency comprised of representatives from the Maine Department of Agriculture, Maine Department of Environmental Protection, Maine Department of Conservation, Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, Maine Cooperative Extension Service, Natural Resources Conservation Service and 6 representatives from the 16 Soil and Water Conservation Districts established in Maine (the 6 representatives were elected by the 16 districts). The focus of the State Soil Scientists work was assisting all natural resource based State agencies as well as the Soil and Water Conservation Districts and municipalities. In 1995, the SWCC was dissolved with its primary functions and duties transferred to the Maine Department of Agriculture. The State Soil Scientists position was also transferred to MDOA with no change in duties or responsibilities. I continue to serve all State agencies with technical expertise in soils, hydrology, wetlands, storm water runoff and septic systems. One of my specialties is solving runoff/waste problems from existing uses on small properties with significant site and soil limitations.

Maine Department of Environmental Protection

Small Community Grant Program

The Small Community Grant program provides assistance to municipalities to address/eliminate small but serious wastewater problems by repairing or replacing malfunctioning septic systems that are directly or indirectly discharging sewage to waters of the State.

Upon receipt of a grant application and confirmation of eligibility, the municipality may be offered a grant to administer the correction. Eligible systems are prioritized (1. impact to public drinking water supplies, 2. impact to shellfishing areas, 3. impact to other surface waters, and 4. public nuisance conditions) and grants are provided based on owner's annual taxable income or business gross profit (Grants are scaled from 25% to 100% based on the total of all owners taxable income less than \$40,000).

In June 2010, the SCG program received 1.0 million in bond money however it has not received any additional bond money since that time.

Since 1982, this program has disbursed over \$25 million in funds. This money has been used to install over 4,900 replacement systems across the State.

A program handbook and application is available online on the DEP website at www.maine.gov/dep.

Overboard Discharge Removal Grant Program

An overboard discharge (OBD) is a small mechanical wastewater treatment plant or sand filter that treats and disinfects sewage from homes, businesses, schools and institutions. OBDs were originally developed as an alternative for wastewater disposal on sites without public sewer and that were not suitable for a subsurface disposal system. OBDs can legally discharge treated wastewater to receiving water if they have a valid discharge license with the DEP. Untreated or unlicensed discharges are not eligible for grant assistance under the OBD Removal Grant Program. Although a properly operating OBD is capable of providing a high quality effluent to the receiving water, the effluent may still contain trace pollutants and disease causing microorganisms. Sanitation laws require that areas around an OBD be closed to shellfishing because of the potential threat to health in the event of a malfunction.

OBD Laws require OBD removal if an alternative is available and either 1. the property title is transferred or a significant addition to the property or; 2. the property is not a primary residence or; 3. the owners' income exceeds \$125,000 or; 4. a grant offer is made for the removal.

The OBD removal grant program has provided funds to assist in the removal of OBDs based on a Priority List. (Grants are scaled from 25% to 100% for incomes less than \$125,000). With the present funding, this program is concentrating its' efforts on High Priority OBDs, including areas with high value shellfish acreage closures attached to them, various fresh water discharges and other known malfunctioning OBD systems.

Since 1989, this program has received \$8.0 million in appropriations (most recently, we received 0.5 million in June 2010). Over 575 OBDs have been removed through this program.

Contact: Tim MacMillan (207) 287-7765 or tim.a.macmillan@maine.gov

DHHS/ Maine CDC - Subsurface Wastewater Program

The Subsurface Wastewater Program:

- Promulgates and administers the Subsurface Waste Water Disposal Rules (CMR 241), Rules for Appointment and Administration of Local Plumbing Inspectors (CMR 240), and Rules for Site Evaluators of Subsurface Wastewater Disposal Systems (CMR 245).
- Maintain copies of all plumbing and subsurface waste water permits issued statewide.
- The Program processes approximately 10,000 subsurface waste water permits annually.
- License site evaluators for subsurface waste water disposal systems pursuant to CMR 245.
- Provide reviews of engineering plans for compliance with or variance from departmental rules in support of the Division's various program areas.
- Provide interagency reviews and make recommendations for Maine Department of Environmental Protection, Maine Land Use Regulation Commission, and Department of Marine Resources, among others.
- Conduct site inspections to assist site evaluators, local officials, and property owners.
- Administer a voluntary subsurface waste water disposal system installers certification program, in association with the Maine Department of Environmental Protection.
- Provide training for Site Evaluators, Plumbing Inspectors and Septic System Installers.

30-A MRSA § 4212, is the statute that gives DHHS the authority to order towns to submit corrective action plans for malfunctioning septic systems. If the town does not submit a plan or live up to the commitments in its approved plan, DHHS may fine the towns a minimum of \$500 per month.

When DEP staff receive complaints that allege malfunctioning septic systems, the complaints are recorded in the Complaint Tracking System and forwarded to Brent Lawson, State Plumbing Inspector. He communicates with town officials to ensure that they address the allegation and correct any malfunctions. When DEP staff discover malfunctioning septic systems during the course of sanitary survey work, the final report describing the malfunctions is provided to the towns under a cover letter signed by Brent Lawson as well as the staff involved in the survey. Similar to complaints, Brent monitors the towns to ensure that they get the malfunctions corrected. Brent can be reached at (207) 592-7376 or at brent.lawson@maine.gov.

Maine Department of Marine Resources Municipal Shellfish Management - Program

Management of Maine's softshell clam resource is a joint responsibility between the State and its municipalities. In 1963, Maine enacted legislation that authorized municipalities to enact shellfish ordinances, subject to the approval of the Commissioner of Marine Resources. Municipalities that assume this management responsibility do so with the understanding that they must meet certain statutory and regulatory requirements.

Currently the program has two DMR staff members: Supervisor Denis-Marc Nault and Area Biologist, Hannah Annis. Together we are responsible for providing technical assistance to 110 coastal communities covering over 3,500 miles of coastline; 78 of these municipalities have shellfish ordinances.

DMR: Authority and Responsibility

- Promulgates regulations setting program/ordinance criteria
- Reviews programs/ordinances for consistency with regulations
- Reviews and approves/denies/rescinds:
 - Programs/ordinances
 - License allocation requests
 - Conservation openings/closings
 - Seeding/reseeding requests

Municipal Shellfish Program Staff:

- *Make all approval/denial decisions*
- *Set policy and resolves legal issues*
- *Consult with the municipalities*
- *Assist with ordinance preparation/amendment* - Whether a town is just coming on board or the committee of a well-established program is considering an amendment to its ordinance, the area biologists are often able to make suggestions to expedite the process.
- *Provide interpretation of applicable laws* - Although they are not lawyers, the biologists can provide committees with the official interpretation of statutes, regulations and rules to help them avoid legal problems in administering their programs.
- *Conduct survey training and analyze survey data* - This service is provided by the area biologist but can also be obtained through trained volunteers, shellfish consultants and the University of Maine Extension Service.
- *Assist in license number determination* - Consultation with the area biologist is a requirement to establish license numbers; advice is always available.
- *Recommend appropriate management tool use (and strategies)* - Area biologists transfer their knowledge of what works and what doesn't among the various towns.
- *Monitor Compliance*
 - Review new and renewal ordinances and amendments
 - Review requests for licenses/closures/reseeding for consistency with management goals.
 - Conduct the Annual Shellfish Management Review to determine the level of conservation activity being undertaken.

Contact: Supervisor - Denis-Marc Nault (207) 422-2092 or denis-marc.nault@maine.gov
Hannah Annis (207) 949-4498 or hannah.annis@maine.gov

Brookings Bay Survey Project 2011: Overview

To confront the problems facing shellfish harvesting communities in the Kennebec Estuary, the Kennebec Estuary Partnership (KEP) was formed in 2009. The community stakeholders in the partnership are the shellfish committees from Georgetown, Woolwich, Phippsburg, and West Bath, the Kennebec Estuary Land Trust (KELT), the Maine Department of Marine Resources (DMR), the Androscoggin Valley Soil and Water Conservation District (AVSWCD), and the Maine Department of Environmental Protection (DEP). The partnership allows for increased cooperation, discussion, and identification of priority areas for shellfish harvesting. As the KEP gained momentum, increased capacity to handle special projects was needed. In 2011, two AmeriCorps volunteers were hosted by KELT and the DMR to concentrate on clam flat restoration.

In 2011, the KEP worked to complete a project in one priority area, Brookings Bay, in the town of Woolwich. The shellfish flats in Brookings Bay have been closed to all harvesting since late 2008 due to elevated levels of bacteria pollution. The bay is a hydrologically and ecologically complicated area. Four year round and multiple seasonal streams flow into the bay and the Sasanoa and Back Rivers meet at the mouth of the bay to the south. During a large tide, Brookings Bay almost entirely empties of water at low tide. This combination of streams, rivers, and shallow depth has made it difficult for the DMR to accurately identify the sources of fecal pollution with the agency's limited time and manpower.

Over a 10 month timeline (January-October), the KEP brought together the Woolwich Shellfish Conservation Committee, the DMR, the DEP, KELT, the two AmeriCorps volunteers, and two high school volunteers to complete a thorough survey of the bay.

Step 1: Examination of the existing DMR data which included the last sanitary survey, past water quality data, and maps of the area to identify hydrologic features, surrounding land uses, and current water sampling stations.

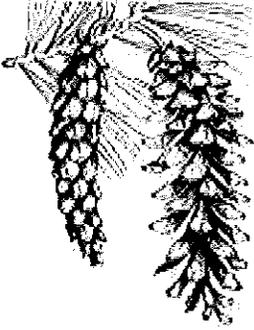
Step 2: From this study of baseline data, the actions needed to better understand the source and movement of the bacteria pollution within in the bay were identified. These actions included a new sanitary survey of properties surrounding the bay, stream sampling and streamflow measurements, water sampling and data analysis to look at the influence of connecting water bodies, recruitment of water sampling volunteers, and establishment of more sample sites within the bay.

Step 3: Starting in spring, the actions (office and field) identified in Step 2 began. First, areas where new sample sites would be useful were identified using maps and groundtruthing. Then the proposed data collection sites were presented and discussed with the DMR for approval. Before sampling began, landowners with sample sites on their properties were asked for permission to access the sites throughout the sampling season (spring through fall). Two high school students from a local high school expressed interest in doing science for a real-world project. They were recruited by KELT and trained by a DMR staff member to help with sampling of streams. Field sampling commenced in May completed by the high school students and AmeriCorps members and was in strict coordination with the DMR Water Quality Laboratory. In locations where samples were collected at offshore sites, the Woolwich Shellfish Conservation Committee volunteered to take the trained samplers to the locations by boat. In coordination with the DEP, a shoreline survey was completed in early summer. Finally, community outreach on the link between clean water and clams was established through septic system workshops (AVSWCD), classroom sessions (KELT), community events (KELT), etc.

Step 4: Once data was collected, DMR staff and DMR AmeriCorps member analyzed the new sampling data, the new shoreline survey results, and previous sampling data to determine if reclassification of the shellfish flats was possible (factors examined included tide, rainfall, season, salinity, and stream influence). Once the data was crunched, a new management plan was proposed by the DMR to close areas around the mouths of streams year round, to open an area for harvesting under specific seasonal conditions, and to open an area to harvesting year round. By October, commercial harvesters in Woolwich were able to harvest softshell clams in Brookings Bay.

Contact:

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Keeping Clams Flats Open: A Valuable Resource for Municipalities

Maine Forest Service Assistance for Woodland Owners

Maine Forest Service, Department of Conservation, 22 State House Station, Augusta, ME 04333

Forests and Water Quality

According to the USDA Forest Service's Forests, Water, and People report, "Forests provide the best land cover when it comes to protecting soil, moderating streamflow, supporting healthy aquatic systems, and sustaining good water quality." Forests can be managed for many values including commercial forest products, while providing clean water for Maine's residents and business needs.

One of the best things woodland owners can do to protect water quality, among many woodland values, is work with a forester to sustainably manage their woodlot. Often this means developing a plan for the land, and then carrying out the recommended activities in a sound manner. There are several programs in place to help woodland owners move forward. The Be WoodsWISE Program, administered by the Maine Forest Service, offers cost-share assistance for landowners to hire consulting foresters to develop Woodland Resource Action Plans (WRAPs) which provide concise descriptions of current stand conditions coupled with a prioritized list of actions to steward the forest while reaching personal goals and objectives. More information can be found at <http://www.maine.gov/doc/mfs/fpm/wwi/wwi.htm>, or by contacting the MFS Landowner Outreach Forester at 287-8430.

The Natural Resources Conservation Service (NRCS) also administers programs that provide financial and technical assistance to non-industrial private forest owners. The Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP) are the primary sources of funding for more detailed forest management plans, as well as forestry practices such as thinning, pruning, planting and trail construction and maintenance. For more information check with your local USDA Service Center. To find your local USDA Service center, visit <http://offices.sc.egov.usda.gov/locator/app?agency=nrsc>, or call the Maine NRCS State office at 207-990-9100, Extension 3

Project Canopy helps Maine towns and communities develop long-term community tree and forestry programs to maximize on the benefits those trees and public woodlands provide. The program is a partnership of the Maine Forest Service and GrowSmart Maine, and together is providing important information to help municipal woodland owners maintain the health of their trees and woodlands to protect water quality. The Project Canopy Assistance program provides financial assistance for towns, schools and land trusts to develop WoodsWISE forestry plans for publicly owned or accessed woodlands, plant and maintain trees, and develop street tree inventory and management plans. Water quality improvement projects can include the development of demonstration forests to highlight exemplary forest practices, implementation of Low Impact Development (LID) projects that include trees and green infrastructure to treat stormwater runoff, assessment of street and park tree populations to determine where plantings could make a direct and positive impact on water quality, and more. More information can be found at <http://www.maine.gov/doc/mfs/projectcanopy/>, or by contacting the Project Canopy Coordinator at 287-4987.

Of all aspects of timber harvesting, stream crossings have the greatest potential to negatively impact water quality. In order to minimize the potential impact, the Maine Forest Service has temporary, portable skidder bridges available for loan during harvesting operations. As funding allows, cost-share may also be available for the purchase of portable bridges. More information can be found at <http://www.maine.gov/doc/mfs/fpm/water/skidderbridge.html>, or by contacting the Water Resources Forester at 287-1073 for more information.

For additional information call: 1-800-367-0223 or email: forestinfo@maine.gov

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The Maine Forest Service has 10 district Foresters who provide technical assistance and educational services to landowners, loggers, schools, municipalities and other stakeholders. District Foresters conduct educational workshops, field demonstrations, media presentations and can provide limited one-on-one contact with individual landowners.

Maine Forest Service information sheets on a variety of topics including timber harvesting in the shoreland zone, forest management planning, and forestry best management practices can be found at <http://www.maine.gov/doc/mfs/fpm/facts.htm>.

MFS has a reference guide, "Best Management Practices for Forestry; Protecting Maine's Water Quality" which can be found at <http://www.maine.gov/doc/mfs/fpm/water/bmp.html> or by calling 1-800-367-0223.