Management Candidate School

The Joint Environmental Training and Coordinating Committee, the Maine WasteWater Control Association and the Maine Department of Environmental Protection started up the first class of the Management Candidate School for Environmental Professionals. The new program is a 12 session program of full day courses designed to help the next generation of facility managers acquire the tools they will need to be successful in the near future. Based upon a similar and very successful program in Rhode Island, the first class of seventeen future managers is shown below with Leann Hanson and instructors for one of the early classes. Participating in the first class are: Steve Aievoli from Lisbon; Salvatore Bartolotta from Great Salt Bay; Chris Cline from Yarmouth; Peter Elias from Anson Madison; Gary Farnham from Boothbay Harbor; Celeste Fletcher from Wells; George Kathios from Kittery; Nick Konstantoulakis from Mechanic Falls; Dan Laflamme from South Portland; Scot Lausier from Kennebunkport, Carl Leathers from KSTD; Ty Morin from Sanford; Jeanette Murch from Falmouth; Jennifer Nicholson from Brunswick; Dale Quimby from Chick Hill; Peter Sherwood from KSTD and Michael Tibbetts from York.

The classes will run through September 2010 when the graduates will be presented at the Maine WasteWater Control Association’s annual conference.

2009 Officers

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Portland, ME

First Vice President
André Brousseau
Springvale, ME

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*For a complete Board Listing, please visit the MWWCA website at: www.mwwca.org

Upcoming Board Meeting Dates:

November 20 – Budget Workshop/Monthly Meeting
Portland Water District

December 18 – Monthly Meeting/Christmas Luncheon
Augusta-The Great Wall Buffet

January 15 – Monthly Meeting
(Location TBD)
Basic Notes on the new Maine DEP Nutrient Rule
By Mac Richardson and Tom Danielson

It appears that the Maine Department of Environmental Protection has taken the meaning of the Maine State motto “Dirigo” to heart lately. Roughly translated as “I guide” or “I lead”, the State motto could be used to describe DEP’s proposed chapter 583 dealing with nutrient limits imposed upon wastewater treatment plant effluents. In formulating the nutrient rules, Maine could have easily adopted a “one size fits all” definition of impaired waters based upon an ambient water concentration of total phosphorus as outlined by EPA in most of Maine at 10 parts per billion or 24 parts per billion along a small strip of south western Maine. Instead the DEP chose to look at “impairment” in a broader sense based upon the nature of the water, both its physical characteristics and its biota. From this came a “4 box matrix” structure for determining when a stream is impaired due to phosphorus as shown below:

The environmental response criteria include such parameters as Secchi Disk depths in lakes and impoundments, Water column chlorophyll a for Lakes, total water column chlorophyll a for rivers, streams and impoundments, diatom total phosphorus index for rivers and streams, aquatic life use attainment, percent cover of algae in streams and rivers, patches of bacteria and fungi in rivers and streams, dissolved oxygen concentrations, and pH.

Clearly, this is both a more thoughtful and complicated regulatory scheme than the one outlined by EPA. In general during the workshop sessions and stakeholder group meetings, comments from the regulated community have been supportive, once an understanding of the program is reached. It is also clear that EPA and many other states are watching how this regulatory approach works out because it is based on what really matters – in stream water quality.

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<thead>
<tr>
<th>Box 1: Not Impaired</th>
<th>Box 2: Not Impaired</th>
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<td>Mean total phosphorus concentration is less than or equal to the limit of the assigned class and all measured environmental response criteria that are measured in the waterbody meet the limits assigned.</td>
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<td>Result = no impaired uses</td>
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<th>Box 3: Not Impaired</th>
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<tr>
<td>Mean total phosphorus concentration is less than or equal to the limit of the assigned class and One or more of the response criteria that are measured in the waterbody do not meet the limits assigned.</td>
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<td>Result = an impaired use with a weight of evidence approach to determine if phosphorus caused or contributed to the impairment</td>
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<td>Result = phosphorus caused or contributed to an impaired use</td>
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Getting a Clean Water Message to the Public

The Public Relations Committee of MWWCA is excited to announce that it is in the process of improving the visibility of the organization in Maine, including updating the booth that is displayed at conferences around the state and in New England. “Most people are familiar with our Clean Water Week poster contest, but our members do so much every day to maintain that clean water,” said Ryan Wadsworth, Committee Chairperson. The changes will include the development of educational brochures that can be printed by wastewater utilities and districts and included as envelope stuffers with bills. Updates to the booth will include topics pertinent to our members, expanded information on the organization’s mission and current activities, and more visuals and graphics. To appeal to a younger audience and the general public, a separate set of booth visuals will explain the treatment process in an age-appropriate and interesting manner. Any members who wish to be involved in this Committee and assist with the exciting work ahead can contact Ryan Wadsworth at rwadsworth@woodardcurran.com or Aubrey Strause at astrause@tataandhoward.com.
On My Soapbox:
ALL THINGS TO ALL PLANTS

By Mac Richardson

I love the Maine WasteWater Control Association. We are an organization of hard working folks that seem to come together for each other and the improvement of our Maine environment. We are a generally friendly and straightforward bunch, and we seem to be able to maintain a reasonable degree of professionalism while managing to have a good time. Shocking though it may be, I have recently been confronted with the truth that we are not perfect!

At a recent executive committee meeting, it was debated that MWWCA may not be adequately representing the interest of Maine’s smaller waste water treatment facilities. A look at the make up of the executive committee may lend support to this notion – most of the executive committee members are employed by larger treatment plants and even consultants! It is my experience in over 15 years with this organization that the interests of small facilities with staffs of one, two, or three people are always considered and given high priority in discussions of new regulations, costs and other issues. The executive committee also understands that it is difficult for smaller facilities to let an employee have half a day to attend executive committee meetings and work on association business. Even with help from their employers, many MWWCA committee chairs spend significant portions of their own time on MWWCA business. So, where was I? Oh yes, those big plants dominating MWWCA. While I am at it, how about the fact that the executive committee is heavy with Chief Operators, Superintendents and other big shots? As a superintendent from one of the three largest plants in the state, I would like to respond.

First of all, on behalf of the entire executive committee, I want to invite every member that has the time and desire to attend an executive committee meeting (or even better yet to join the executive committee by becoming a committee chair) to come and be a part of a meeting or just listen in. Now that I think of it, if anyone is interested, you can be the new editor of the MWWCA newsletter and communications chair! Executive committee meetings are generally a little fun, a lot of information sharing, and some real problem solving. The meetings are generally held at 9:00 am on the third Friday of each month at the Maine Municipal Association offices in Augusta. If you can’t be there in person, and you want to participate, we’ll try to hook you in by phone!

In this newsletter I want to clearly extend an invitation to all facilities, large and especially small, to contribute your stories and information – plant profiles, employee news, upgrade projects or ideas that may be interesting or helpful to others. I know from direct experience in running a small facility that a small facility can be as challenging or more to run well as a large facility. That just means that we all need to work hard to communicate with each other and share what we know. There is no doubt in my mind that there is more collective knowledge and “know how” in Maine’s small plants than there is in the large ones and consulting firms combined. But, Hey! We have to make do with the people we can get! What can I say – I Love the Maine WasteWater Control Association!

WORLD WATER MONITORING DAY™
Great Opportunity to Involve the Public

By Brad Moore

Have you heard of World Water Monitoring Day? World Water Monitoring Day (WWMD) is an international education and outreach program that builds public awareness and involvement in protecting water resources around the world by engaging citizens to conduct basic monitoring of their local water bodies.

How can we, as utilities, get involved? There are several ways we can be involved and all center on purchasing or promoting the purchase of test kits that are used to monitor a water body. The easy-to-use test kits are used to monitor a water body. The easy-to-use test kits enables everyone from children to adults to sample local water bodies for a core set of water quality parameters including temperature, acidity (pH), clarity (turbidity) and dissolved oxygen (DO). The test kits are $13.00 each plus shipping. Results are shared with participating communities around the globe through the WWMD Web site. More information can be found at www.worldwatermonitoringday.org. The site explains how easy it is to get involved with this effort.

The coordinators of WWMD, the Water Environment Federation (WEF) and the International Water Association (IWA) plan to expand participation to one million people in 100 countries by 2012. In 2008, 73,000 people from 70 countries were involved with this outreach program. World Water Monitoring Day is officially celebrated on September 18; however, the monitoring window was extended for the first time in 2009 from March 22 (World Water Day) until December 31. Participants are encouraged to cel-

Cont’d on page 5
The Maine WasteWater Control Association’s 2009 annual conference was held recently at Sunday River Resort in Newry, Maine on September 16, 17 and 18. The events kicked off on Wednesday, September 16th with the association’s 18th annual golf tournament. The ever challenging Sunday River links were host to over 120 golfers who were treated to fine weather, great scenery, nearly perfect playing conditions and great camaraderie. The more serious side of the conference and trade show started on Thursday with over 250 attendees visiting over 50 vendors and taking in technical sessions with an emphasis on Asset Management and Nutrient Control. Safety Concerns, Regulatory Updates and Laboratory Quality Control/Quality Assurance were also highlighted technical sessions. The vendor area stretched along the corridors and lobby of the Grand Summit Hotel offering new products and innovative solutions to common treatment plant issues. The vendors are especially valuable members of our Association and their presence at the show is greatly appreciated. On Thursday, the annual awards luncheon took place with recognition for many colleagues given by the Maine DEP, Maine JETCC and MWWCA. On Friday, a new wrinkle was added to the festivities with the luncheon moved up mountain to the lodge at North Peak. Despite a blustery day featuring wet and a little frozen precipitation, attendees were treated to a ride up the mountain on the newly constructed Chondula (a combination six seat chair lift and gondola in one). The ride was enjoyed by all and provided breathtaking views of the majestic Mahoosuc Mountains and the Sunday River Valley. Thank you to all who exhibited, attended and pitched in to make the annual conference another acclaimed success.
Members on the move!!!!

Aubrey L. Strause has joined the firm of Tata and Howard serving as a project manager assigned to the Portland, Maine office. An active member of MWWCA, she will continue to assist the public relations and personnel advancement committees. Ms. Strauss is a professional engineer registered in Maine with significant experience in sewer and manhole rehabilitation, inflow and infiltration investigation CSO abatement, CMOM evaluations, industrial pretreatment and storm water management. She can be reached at (207) 518-9500 or astrause@tataandhoward.com.

MARK YOUR CALENDARS!

The Maine WasteWater Control Association would like to invite you to participate in the following upcoming events:

February 8 and 9, 2010 Monday and Tuesday – Joint Conference and Trade Show with Maine Water Utilities at the Holiday Inn by the Bay – Portland. This first ever effort will allow operators, managers and others with responsibility for both water and wastewater services to see vendors from both disciplines and to interact with professionals from both sides of the water cycle.

March 10, Wednesday – 3rd Annual Maine WasteWater Ski Day at Sunday River. Two years of great times with colleagues despite bad weather have not dampened the enthusiasm for this popular event. Better than a good day at the plant! Come, ski, network!

April 23, Friday – MWWCA Spring Conference at Hollywood Slots, Bangor. Tech sessions featuring the latest issues, good food and always good people – don’t miss it!

WORLD WATER cont’d

Ebrate with WEF and IWA in September or to observe their own WWMD anytime during the extended window. The deadline for submitting data to the WWMD database is December 31.

The Maine WasteWater Control Association is considering the purchase of test kits and these kits may become part of the prize package for the winners of the Clean Water Week Poster Contest. As operators of wastewater treatment plants, we recognize public education is an important part of our mission and WWMD provides another opportunity to involve and educate local schools and organizations about the value of clean water and the job we do every day.
New Water Quality Improvement Fund Created by Legislature –
Fees for Marine CSOs and MEPDES permits forestall shellfish ban
By Brian Kavanah

In the recently enacted biennial budget, (PL 2009, ch.213, part FFFF) the legislature created a new Water Quality Improvement Fund (Fund). The purpose of the Fund is to improve and protect water quality and reduce impacts on shellfish growing areas. The Fund will allow the hiring of 3 staff in the shellfish and water quality program at the Department of Marine Resources. The fund will also be used to improve the State’s wastewater infrastructure, remove licensed overboard discharges, abate pollution from failed subsurface wastewater disposal systems and improve the identification of pollution in shellfish harvesting areas.

This revenue prevented the closure of significant portions of the state’s shellfish harvesting areas on July 1. In addition the Federal Government had indicated that Maine would lose its authority to ship shellfish out of state if 3 positions were not added to the shellfish sanitation program this year, a direct threat to Maine’s shellfish industry which is valued at over $50M annually.

While much of the coast has been shut down this season due to rainfall events and flooding, the money in the fund has provided overtime dollars for weekend water quality sampling which significantly shortens closure events and puts clammers back on the flats sooner.

Revenue for the Fund will come from several sources including fees on certain municipal wastewater treatment facilities and combined sewer overflows. Revenue will also be generated from a new $15 surcharge collected by municipalities on non-engineered subsurface wastewater disposal system permits and a new annual $75 surcharge on overboard discharge licenses.

The requirement to charge this new fee is now established in law at 38 MRSA §353-B, sub-$2.A. as follows:

CSO’s
On an annual basis municipalities and publicly owned treatment works whose combined sewer overflows have the potential to impact shellfish harvesting areas as determined by the department by virtue of their locations within estuarine or marine waters of the State must be assessed a surcharge on their wastewater discharge licenses in a total amount of $12,000. This amount must be allocated among the municipalities and publicly owned treatment works according to their prior 3-year average annual flows as reported to the department.

The effect of this language is that the $12,000 total will be divided among municipalities and POTWs that have CSOs that discharge to estuarine and marine waters. Based on 3 year average flow data and due to the wide range in CSO flows from different facilities, the amounts billed to each entity will range from a very small percentage of the $12,000 to a very large percentage of the $12,000. Initial estimates are that 14 CSO facilities will be subject to this new fee.

Outfall Pipes
On an annual basis, publicly owned treatment works whose outfall pipes are licensed for the discharge of treated effluent cause adjacent shellfish growing areas to be closed for the purposes of harvesting shellfish must be assessed a license surcharge in a total amount of $25,000. This amount must be allocated among the publicly owned treatment works according to the acreage that each licensed outfall closes. This acreage must be determined by the Department of Marine Resources in consultation with the department.

The effect of this language is that the $25,000 total will be assessed to POTWs that cause or contribute to shellfish area closures. DEP is working with DMR to identify these facilities and the size of the associated closure areas. We expect that all or most of the approximately 56 POTWs with a mandatory closure area around their outfall pipes will be assessed a percentage of this fee.

It is expected that CSO facilities discharging to estuarine and marine waters will be subject to both fees.

The Department, in consultation with the Department of Marine Resources, is in the process of generating bills for these new fees. Bills were expected to be mailed to municipalities and POTWs subject to this law by the end of August. Due to the nature of these bills, they will be sent as a separate invoice from the normal annual MEPDES license fee. The bills will be sent with a detailed cover letter that explains the purpose of the bill and how it was calculated.

While no one likes paying additional fees, this action was necessary in order to prevent the virtual shut down of one of Maine’s most important exports. Contact Brian Kavanah at 287-7700 or brian.w.kavanah@maine.gov for more information or with any comments or questions.

UPCOMING EVENTS:
**NEWEA Annual Conference**
January 24-27 – Boston Marriott Copley Place

Maine WasteWater NEWS
Chapter 583 Nutrient Indicators for Classification Attainment Evaluation of Fresh Surface Waters

Background: Chapter 583, (the Rule) is being developed by Maine DEP as required by federal regulations. Numerical limits are required. Maine DEP must create a rule acceptable to EPA, or EPA will give Maine a rule. Representatives of EPA attended both stakeholder meetings.

The DEP decided to stop the current rulemaking process and hold 2 stakeholders meetings based on comments received during the previous comment period. The goal of the stakeholder meetings is to revise Chapter 583 based on stakeholder comments, and then post a revised version of the rule to the Board of Environmental Protection.

The first meeting was on October 1, 2009 and the second meeting was on October 13, 2009.

The Decision Framework was discussed first. The Decision Framework is a way to determine if there is impairment of a use, (aquatic life, habitat, or recreation), and if phosphorus or another nutrient caused or contributed to the impairment. Some of the comments were:

- Non-point source pollution can contribute to elevated phosphorus levels in waterbodies.
- Cyanobacteria, or blue-green algae, need to be included as an ecological response indicator.
- The matrix approach is a good possibility and has benefits to allow for variables in different waters.
- The matrix may need to be expanded.
- Upstream impaired waters may have an effect on treatment plant limits. What is the value of the rule when the water is already impaired?

- Is there sufficient data? If not who is going to collect more, the DEP or the utilities who discharge to fresh waters?

Implementation of the rule was the second topic covered at this meeting. A handout described how data would be collected and managed, how the determination of attainment of nutrient criteria would be arrived at, how assessment categories for the integrated 305(b)/303(d) list would relate to the decision framework, a description of how management plans would be developed, and implications for NPDES permits. Some of the comments were:

- Regarding Data Collection; monitoring is expensive, small WWTP’s have limited manpower to conduct sampling, there is room for error with limited expertise, and should the regulated community be doing the sampling.
- Insufficient data was a concern; environmental response data such as algal cover, bacteria and fungus occurrence, and diatom monitoring have been developed in shallow wadable streams. Deep river data is lacking and larger utilities tend to discharge to rivers, not shallow streams..
- There is nothing mentioned concerning the fresh water/tidal water interface. Which rules would apply, marine or fresh water rules, since there are differences in the rules.
- Energy spent by permittees to reduce nutrients isn’t considered in the criteria.

Total phosphorus criteria discussion spanned both meetings.

- Where is the total phosphorus to be measured, before the discharge, after the discharge, or both?
- The data is collected seasonally, are limits seasonal or year round?
- There is a need to develop baseline data at sites that will be regulated. Current data may be insufficient.
- How do we account for non-point source pollution contributing to total phosphorus levels.

There was also substantial discussion of the statistical methods, and models used to analyze the data.

Both meetings were well attended. People from the EPA, engineering firms, the pulp and paper industry, wastewater utilities, Maine Rural Water, MWWCA, and the Penobscot River Restoration Project were there. The DEP welcomed suggestions and are going to work with those suggestions and recommendations to rewrite the rule. The representatives from EPA seemed to view the rule favorably, although that is not to be considered an official position at this time. The fact that they were there for both meetings and involved in the discussions shows how seriously they regard this rule making endeavor. [See related story on page 2]

June Mooney
Water Quality Specialist
Greater Augusta Utility District
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jmooney@augustawater.org
Co-Chair MWWCA Laboratory Committee

This is your newsletter – if you have news you would like to pass along or an opinion to express that would be of interest to the membership of MWWCA we are always interested in receiving material and will make every effort to incorporate your submissions.