



The Obligate

Maine Association of
Wetland Scientists

49 Topsham Fair Mall, Ste 20-103
Topsham, Maine 04086

President's Message by Gary Emond, President 2003-2005

Wetlands. This word can invoke ongoing nightmares for some of my clients. However, other clients view wetlands as areas that are worth protecting or restoring. Of course the opinions you get are heavily dependant on the clients you work for and the type of projects you work on. However, the opinions may also be based on *where* the work is being conducted.

As a consultant to the utility industry, I have traveled throughout southern Maine (for the record I consider Bangor as southern Maine and can explain this upon request), New England, and several other states in the northeast. Traveling always helps me keep things in perspective. I come back to Maine and think about how lucky I am to live here. We are truly blessed with an abundance of natural resources and clean water. Every time I fly back home to Maine and get off a plane I feel like a weight has been lifted off my shoulders. Those of you that think I am being dramatic have obviously not spent much time wading in so-called streams and wetlands in some of the more heavily developed states in the northeast. I'm not suggesting that development is bad; if it is done correctly effects on the natural environment are minimized *and* it is generally good for the economy.

For a state that has relatively little development compared to some of the other states in the northeast, Maine has some of the most progressive

resource protection laws. In short, we did not wait until many of our wetland resources were already lost before enacting laws to protect the precious few remaining.

We must keep in mind that as wetland scientists we are at the forefront of development and we all bear a heavy responsibility to ensure that things are done the right way. We are the liaison between the natural environment and the development community. This means that we have to continually learn and sometimes teach new skills, retain the ones we have, and apply these skills to the best of our ability.

One of the overall goals of MAWS is to facilitate this by supporting good science and sound policy, promoting continuing education, and communicating the values of wetland resources to the general public. I think another goal of MAWS should be to serve as a reminder to those wetland professionals that work and live here that we should not take what we have for granted.

In closing, on behalf of the Executive Committee I'd like to thank all members of MAWS for their continued support, and the presenters for this year's annual meeting. We have an excellent program scheduled and I am sure that most if not all of you will leave having learned something new. I look forward to seeing you all at the annual meeting.

American bittern artwork copyright 1991 by Nancy Derey

Legislative Report for 2003/04

-By Jeff Simmons

This has been an active year on the legislative front, with a great deal of activity at both the federal and state levels. The items below highlight the major wetland-related legislative issues proposed or adopted in 2003.

Federal

As discussed at last year's MAWS Annual Meeting, the Supreme Court's 2001 decision in the case of *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (commonly referred to as the "SWANCC" decision) led to some controversy regarding the jurisdictional status of isolated wetlands. Specifically, the SWANCC decision overturned the Corps' assertion of federal jurisdiction over certain isolated wetlands based on the presence of migratory birds. As a follow-up to the court decision, the EPA and Corps issued an advance notice of proposed rulemaking (ANPRM) on January 15, 2003, seeking public comment on issues associated with the Clean Water Act's (CWA) definition of "waters of the United States". Numerous comments were provided prior to the closing date early last year, including those provided by MAWS through the Executive Committee.

On December 16, 2003, the Environmental Protection Agency (EPA) and the Army Corps of Engineers (Corps) announced that they would not issue a new rule on federal regulatory jurisdiction over isolated wetlands. The joint announcement by EPA and the Corps indicated their continued commitment to the goal of "no net loss" of wetlands in the US. The agencies also indicated that they will continue to monitor implementation of this important program to ensure its effectiveness.

In addition to the ANPRM regarding CWA jurisdiction over isolated wetlands, the Corps also issued a public notice soliciting comment on the Mitigation Checklist and Guidance (Public Notice dated December 15, 2003). As most of us are well aware, the New England District Corps of Engineers has used a mitigation checklist informally for many years. The Public Notice sought comments regarding the use of an updated checklist by the District, as well as a guidance document that incorporates the guidelines recommended by the National Research Council. The mitigation checklist was developed in response to the National Wetlands Mitigation Action Plan, signed by the Department of Army (Civil Works), Environmental

Protection Agency, Department of Commerce, Department of Interior, Department of Agriculture, and Department of Transportation. Comments on the updated checklist and guidance document were to be forwarded to the Corps by January 15, 2004.

State

Some of the changes in regulations or rules proposed or adopted in 2003 of relevance to wetland science are described below.

An Act to Amend the Classification System for Maine's Waters.

Under State Statute, the Board of Environmental Protection was required to promulgate rules to implement a water quality classification system and a method of evaluation of impacts on the resident biological communities of rivers and streams. In 2003, the Department codified technical procedures that were utilized by the Department to determine attainment of statutory aquatic life standards since 1990. Adoption of this protocol incorporates into law, numeric biocriteria that refine and interpret Maine's existing narrative 'aquatic life' standards for each riverine water quality classification. The rule applies statewide to all classified rivers and streams, but does not apply to other waterbody-types, including wetlands, lakes, or estuaries. The biocriteria rule describes the process that the Department uses to make classification attainment decisions related to aquatic life in rivers and streams. The protocol involves the sampling of benthic macroinvertebrates from rivers and streams along with laboratory analyses by qualified personnel, statistical modeling analysis of the data, and procedures for determination of final classification attainment decision results. Became effective on May 27, 2003. For additional information contact Susan Davies at 287-7778 or via email at susan.p.davies@state.me.us.

Chapter 315 – Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses

DEP recently adopted new rules to evaluate impacts on existing scenic and aesthetic uses resulting from activities in, on, over, or adjacent to protected natural resources subject to the Natural Resources Protection Act (NRPA). The rules were promulgated based upon Standard 1 in Section 480-D of the NRPA. Specifically, Standard 1 requires an applicant to demonstrate that a proposed activity will not unreasonably interfere with existing scenic and aesthetic uses. The rule applies to the alteration of a coastal wetland, great pond,

freshwater wetland, fragile mountain area, river, stream, or brook. The requirements of the rules recognize that environmental aesthetic values are shared among the general population. Chapter 315 further defines State regulatory concerns and differentiates them from local concerns, defines scenic and aesthetic impacts and associated vocabulary, provides direction for evaluating scenic and aesthetic impacts generated from proposed projects, describes when a visual assessment is necessary, describes the components of a visual assessment when required, and defines avoidance, mitigation and offset measures that eliminate or reduce adverse impacts to existing scenic and aesthetic uses. The rules became effective on June 29, 2003. For more information visit the Maine DEP website, or contact Judy Gates at 287-7691 or by email at

judy.gates@state.me.us

Chapter 355 - Sand Dune Rule Changes

The DEP proposed revisions to the coastal sand dune rules for the following reasons: 1) to improve the comprehension of the rules by the public, municipal officials, and the regulated community, primarily through reformatting of the rules; 2) to amend a number of definitions to improve the clarity of the rules; 3) to establish new regulatory variance provisions for construction in frontal dunes; and 4) to include a provision to allow for the one time reconstruction of buildings damaged by more than 50% by an ocean storm.

The major amendments to the rules include:

- The requirement that reconstructed and new building in frontal dunes and unstable back dune areas be elevated on post or pile foundations. This provision significantly improves the ability of sand and water to move freely within the beach system and significantly improves the ability of those structures to withstand coastal flood hazards.
- The elimination of the current exemption for second story additions or the addition of dormers. All such construction now requires a permit and is required to meet the requirements for post or pile foundations. A variance provision has been included to allow for other types of foundations to address undue hardship.
- A new definition for a building's value. The exemption in the previous rules for maintenance and repair as well as the prohibition for reconstruction of buildings damaged by more

50% by an ocean storm relied on a determination of appraised market value. The rules now allow for a building's value to be determined in either of two ways. The value of a building may be the assessed value as established by the municipality and adjusted by the State's certified ratio, or it may be the appraised market value as determined by a State certified appraiser within the previous five years prior to the date an application is received by the Department. Exceptions to the prohibition on new structures or additions to existing structures in frontal dunes to allow for the construction of ramps, fire escapes and other structures to meet Americans with Disabilities Act and local fire code requirements.

- A provision allowing for the issuance of a permit for new residential buildings to be constructed on vacant lots in frontal dune areas where the surrounding lots are already developed. The provision is applicable whenever there is a structure located within 100 feet on both sides of a vacant lot. The building is required to have a post or pile foundation and is limited to covering 20% of the lot with limited additional areas for parking and walkways. A variance provision allowing, in certain circumstances, the construction of new buildings on vacant lots in less developed frontal dune areas and for buildings in V zones. An applicant would need to demonstrate that several criteria are met to obtain a permit.

The rules were provisionally adopted by the Environmental Protection Board on June 19, 2003. The Legislature is anticipated to consider these changes sometime prior to April 15, 2004. For more information contact Jeff Madore at 287-7848 or by email at

jeff.g.madore@state.me.us.

Stormwater Rules

Since last year's annual meeting, the EPA's NPDES Phase II program took effect (March 10, 2003). The federal requirements affected new development disturbing between 1 and 5 acres of land ("small construction activities"), and urban areas within 28 municipalities in Maine designated under federal regulations as having regulated small Municipal Separate Storm Sewer Systems (MS4s). The Maine DEP issued a single general permit to cover both Phase I and Phase II construction activities. This permit is in

effect from March 10, 2003 until July 1, 2004. Three MS4 separate general permits were issued on June 3, 2003 for the following activities: 1) discharges from small municipal systems (e.g., many of the coastal towns and cities of southern Maine); 2) discharges from DOT and Maine Turnpike Authority municipal separate storm sewer systems; and 3) stormwater discharges from State or Federally owned municipal separate storm sewer system facilities. The Federal Multisector General Permit will continue to be administered by the EPA until the DEP issues a state general permit. For more information contact David Ladd at 287-5404 or by e-mail at david.ladd@state.me.us.

Act to Require the Consideration of the Cumulative Effect on Protected Natural Resources when Permitting Activities (LD 242)

LD 242 required the DEP convene a working group to design a method for considering cumulative effects of

Message From The Ethics Chair

- By Brett M. Battaglia

The Maine Association of Wetland Scientists (MAWS) typically offers a wetland research stipend to actively enrolled students for use on a research project(s) relating to Maine wetlands for up to \$1,000. An announcement describing the process was circulated to colleges and universities in Maine with department's known to be involved in wetland related studies. After completed application forms are returned to MAWS from interested candidates, the MAWS Executive Committee (EC) reviews applicants' proposals/abstracts and awards the stipend(s) to the selected candidate(s). As part of receiving the stipend, the selected student(s) are required to give a presentation on the outcome or progress of their research at the MAWS annual membership meeting.

River, Stream, Brook or Other: October 3rd, 2003 M.A.W.S. Workshop

By Chris Dorion

THE SITE BACKGROUNDS

On October 3rd, 2003, M.A.W.S. sponsored a workshop to aid wetland scientists in assessing the N.R.P.A. criteria used in making "River, stream, or brook"

activities on protected natural resources. Incremental impacts can cause the loss of valuable natural areas, resulting in a decrease in the abundance of large undeveloped parcels for wildlife habitat and leading to fragmentation and other adverse changes. A working group of 15 individuals representing the public and private sectors met three times between September and November of 2003 to discuss assessment methodologies. A report outlining the results of the working groups efforts was submitted to the Joint Standing Committee on Natural Resources in early January of 2004 (titled *Report to the Joint Standing Committee on Natural Resources Concerning the Provisions of Resolve 2003, Chapter 14 Relating to the Consideration of the Cumulative Effect on Protected Natural Resources*, Cumulative Impact Report Doc. Num. DEPLW00630-A2004) This document is available online at:

www.maine.gov/dep/blwq/report/03cumimpact.pdf.

This year MAWS received five applications for the wetland research stipend. The applications ranged from on-going research projects being conducted at Windham High School by the Science Department, to assessing cumulative wetland conversion on a watershed scale within the Casco Bay Watershed. Because all the applicants' proposals demonstrated excellent research projects, the MAWS EC decided to award two \$500.00 stipends.

The 2003 MAWS wetland research stipend winners are: Christopher Flannagan and Megan K. Gahl. Each of the candidates are students at the University of Maine, Orono. Mr. Flannagan will be discussing his research regarding a Subaqueous Soil Survey of Taunton Bay, and Ms. Gahl will be presenting her research on Spatial and Temporal Patterns of Amphibian Diseases in Acadia National Park: Causal Factors and Potential Management Strategies.

determinations in the State of Maine. The workshop was based at the Penobscot County Conservation Association's rustic lodge on the banks of the Penobscot River, in north Brewer. During the morning, participants visited three "problem" sites. These were located in Bangor in a mixed urban-rural setting.

The Ohio - Finson Road site at first glance appeared to meet at least 2 of the 5 criteria. However, in walking downstream 75 feet, the scoured channel dissolved into

a broad wetland composed of a wet meadow-type assemblage of grasses, ferns, and forbs, occupying the swale floor, with no evidence of a channel or mineral bottom. Thus, it appeared that this site did not merit a stream classification. However, upon walking upstream, the channel was continuous for several hundred feet, and met most of the stream criteria.

The Broadway Street site was located in outer Bangor in an area of idle farmland that is now rapidly developing into residential and commercial facilities. Parent material was marine sediments, most likely a Scantic-Lamoine complex with Buxton on the convex knolls of the old farmland. A *Typha latifolia* - type marsh dominated the up-gradient portion of the broad swale. Below a series of beaver dams, evidence of a stream meeting several criteria was observed. However, road maintenance activities had created extensive ditching which had re-routed the apparent stream. It then crossed under Broadway through a 4 foot diameter culvert, emerging again in a ditched swale, and eventually flowing into natural channel.

The Nason and Mildred Avenues site was located where till-mantled uplands met the broad marine plain upon which Bangor International Airport was constructed. The possible stream originated from a defined drainage area in the uplands, mostly covered now by residential housing and roadways, crossed under I-95 through a series of culverts, emerging periodically as a stream meeting several of the N.R.P.A. criteria, then again passing through culverts under two residential streets, before emerging along the runway approach meadowed area, at which point it is depicted as a continuous blue line on the USGS 1:24,000 scale quadrangle.

AQUATIC MACROINVERTEBRATE CLASS AND PANEL DISCUSSION

After lunch, John Cullen (MDEP) led the group to the pond on the PCCA property. Dip nets and tubs were provided and we collected macroinvertebrates from both the pond and inlet stream. John, Jeff Varricchione (MDEP), and other insect specialists led the identification workshop. Damsel and dragon fly larvae were identified, along with isopods, beetles, water striders, mayflies, and several taxa of aquatic plants. We then regrouped inside for the panel discussion.

Jim Beyer (MDEP), Marcia Spencer-Famous (LURC), Jeff Varricchione (MDEP), and John Cullen (MDEP) comprised the panel for discussion of the three problem sites. A productive exchange of ideas, observations,

and experiences ensued. I will summarize the discussion as it related to the sites and to the regulatory process in general.

When making a stream determination, first look for a scoured channel. Secondly, examine for non-aquatic vegetation growing in places in the channel. The channel must be devoid of upland vegetation. The aquatic vegetation definition is located in the wetland rules, and requires a 12 month per year submergence. Thirdly, are aquatic insects present? Fourthly, is the size of the channel significant? Generally we cannot utilize the 6 month continuous flow parameter unless we can monitor the site periodically. Sometimes the apparent stream can meet the definition but may not be functioning as a stream. In addition, the stream may be discontinuous, and flowing segmentally underground, as we saw at the Ohio and Finson Road site. The wetland scientist should walk both upstream and downstream to gain an understanding of the larger system. Wetlands can contain small streams (~30 feet of channel), but this is not an immutable standard. The wetland scientist must determine if the site is primarily functioning as a stream with some wetland inclusions, or rather as a wetland with minor stream segments. The wetland scientist should also evaluate the site to determine if storm water discharge has cut a channel through a wetland, in which case it would be a constructed ditch and not classify as a stream. Once constructed, a ditch or drainage way does not have to be maintained as such to remain excluded from a positive stream determination. In parts of the State covered by rubble land or extremely bouldery surface stoniness, some streams flow underground. This situation would require advisory opinions. In summary, the Ohio and Finson Road site discussion elucidated a need for more guidance on the problem of segmented streams within wetlands. It was agreed that Jim Beyer and Marcia Spencer-Famous will bring this issue to their respective agencies for guidance, and they will consult with M.A.W.S. also.

The Broadway site was determined to be a stream with a ditched section along the roadway. The ditch is a stream diversion, constructed for the purpose of diverting a stream, not capturing storm water from a development. Thus, the 75 foot wide protection zone extends on both sides of the stream. However, a permit to work within this setback zone does not necessarily exclude development. There is regulatory flexibility within the 75 foot setback zone, especially if there is no alternative.

The Finson and Mildred Avenues site was more problematic. Most participants found that the site met at least 2 of the 5 stream criteria, but that it was not functioning as a stream in the urbanized section. The wetland scientist may want to complete a Functions and Values Assessment to show whether this conclusion is valid or not. If there is still doubt, an advisory ruling should be sought from regulatory staff. It was also brought up that the purpose of the rule is to protect the stream ecosystem, and if the possible stream is no longer functioning in this capacity, then it may not meet the intent of the Statute.

Additional discussion highlighted the differences between the Shoreland Zoning (individual towns) and N.R.P.A. definitions of a stream. The N.R.P.A. definition includes more criteria than S.Z. For example, S.Z. only classifies tributary streams as a scoured channel between defined banks, and must lie in the S.Z., and, must lie below the confluence of two intermittent streams (second order or greater). Since September of

2002, cutting of vegetation adjacent to streams is now regulated. Lastly, advise a client that a drainage swale is not a suitable location for development and requires intensive engineering efforts to overcome the site limitations.

Many thanks to our panelists and those M.A.W.S. members participating in the workshop. Thanks also to Moyse Environmental Services and Jim Beyer for suggesting the problem sites. The Penobscot County Conservation Association provided a natural setting and fine facility for the workshop at a specially reduced rental cost. Jeff Varricchione displayed several reference books, amongst which *A Guide to Common Freshwater Invertebrates of North America*, 2002, J. Reese Voshell, Jr., McDonald and Woodward Publishing, 442 pages proved to be a most useful field guide, complete with many color illustrations, black and white line drawings, and clear, concise text.

Soil Description and Taxonomy Workshop, September 10th, 2003

*By Chris Dorion, with excerpts from Dave Wilkinson,
N.R.C.S.*

On September 10th, under clear blue skies and light breezes, the Maine Association of Site Evaluators (M.A.S.E.), the Maine Association of Professional Soil Scientists (M.A.P.S.S.), and the Maine Association of Wetland Scientists (M.A.W.S.) assembled at the University of Maine's Highmoor Farm in Monmouth. Jay Hardcastle of M.A.S.E. organized the day-long soil description workshop and provided the lunch cookout. Similar to past years, the backhoe-dug soil pits were located for the Maine Division of Health Engineering's Site Evaluator Exam. Both M.A.P.S.S. and M.A.W.S. were fortunate to be able to utilize the extensive soil pits located across the property. Also, thanks to the University of Maine for allowing the workshop to take place. A special note of appreciation is warranted to Wayne Hoar and Dave Wilkinson of the N.R.C.S. who had spent the previous day describing and classifying the soils.

Dave Wilkinson summarized the day's events as follows:

"Wayne and Dave described and classified four test pits prior to the workshop. Participants described the soils in their own way and then discussions ensued concerning the differences between methods. This is an

excellent way to get everyone closer to describing soils similarly. Discussions delved into everything including texture, structure, consistence, depth to redoximorphic features, rock fragment content, horizon nomenclature and breaks, and color. As might be expected, all the descriptions were different to some extent except for Wayne and Dave's which were exactly the same, oddly enough! Each of the soils were classified to the Family level and the Series that most closely matched the pedon was named."

In addition to the four soil pits described in depth, at least 6 other soil pits were open, and one could walk up (or down) a given soil catena. The area lies in what was once a dynamic glaciomarine and glaciofluvial environment: the marine limit passes through the site along a contour on the hillside farm, invisible to most but clearly evident to the workshop participants. Marine sediments classified as Scantic and Lamoine soils filled the lowlands at the site, while surf zone beach deposits of fine sand overlying estuarine (clamflat) muds were found upslope, with glaciofluvial outwash spread above the marine limit (outwash plain/ice-contact subaerial deposits). Based on these parent materials, and the pedogenic development observed in each pit, 4 soil series were classified: Adams, Nicholville, Swanton, and Colton. There was often lively discussion at each soil pit on depth to redoximorphic features, with the result that participants gained a greater knowledge of soil

morphology. We enjoyed the challenge of accurately describing the horizonation, texture, and other characteristics and then comparing our data with Wayne and Dave's. As Dave Wilkinson so eloquently surmised:

"It is workshops such as these that allow us to correlate our own methods and ideas with those of our colleagues, to recalibrate ourselves, to promote similar methods, and to hopefully stem the feeling of isolation that can occur as we make decisions without having anyone around to provide feedback on those decisions and ideas."

**Maine Association of Planners Annual Meeting:
June 6th, 2003
By Chris Dorion**

On June 6th, 2003, M.A.W.S. co-sponsored a workshop with the Maine Association of Planners (M.A.P.) in Boothbay Harbor, Maine. The day-long workshop introduced town and city planners to wetlands, vernal pools, and both State and Federal Statutes. Steve Pelletier, Woodlot Alternatives, presented a talk on how wetlands are determined, their functional values, and community types. During the morning break, Gary Emond, M.A.W.S. President, and Chris Dorion, Program Chair, answered questions about M.A.W.S. and wetland science in general. They handed out brochures and information packets from the A.C.O.E. and M.D.E.P. The second half of the morning session featured Dr. Aram Calhoun from U.M.O. presenting an illuminating talk on vernal pools. Dr. Calhoun introduced the publication *Best Development Practices: Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States*, a manual containing color plates of amphibian taxa, vernal pool types, management objectives, and a host of other regulatory and planning considerations.

Calhoun A.J.K., and Klemens, M.W., 2002: *Best Development Practices: conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States*, MCA Technical Paper No. 5, Metropolitan Conservation Alliance, Wildlife Conservation Society, Bronx, New York. (for copies, go to mca@wcs.org)

**2003-2005 EXECUTIVE
COMMITTEE MEMBERS**

President: Gary Emond
President Elect: Kathleen Miller
Legislative Chair: Jeff Simmons
Secretary: Stephanie Swiezynski
Program Chair: Chris Dorion

**ELECTIONS TO BE HELD FOR THE
FOLLOWING EXECUTIVE COMMITTEE
CHAIR SEATS AT THE 2004 ANNUAL
MEETING**

<u>Position</u>	<u>Current Nominees</u>
Treasurer	Dana Valteau
Ethics	Brett Battaglia
Membership	Richard Jordan

**Nominations will also be accepted from the
floor at the Annual Meeting.**

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WWW.MAINEWETLANDS.ORG AND SIGN
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Receive workshop and regulatory updates from the comfort of your inbox! Also, start or add to an ongoing online discussion group....

MAWS Financial Statement - F.Y. 2003-2004

(For period of Jan. 01, 2003 to Jan. 20, 2004)

Respectfully submitted to MAWS Membership

20 January 2004 - Richard Jordan, Treasurer

	Balance 01/01/2003	\$2651.69	
	Balance 01/20/2004	\$2811.46	
Income	Projected	Actual	
	Membership	\$1115.00	\$1085.00
	Annual Meeting		
	Attendance	\$1900.00	\$2055.00
	Other Workshops	\$1900.00	\$160.00
	Other Sources	\$40.00	\$0.00
	Total	\$4955.00	\$3300.00

Expenditures

2003 Annual Meeting	-\$1600.00	-\$1173.84
Postage and Copying	-\$400.00	-\$324.70
P.O. Box Rental	-\$60.00	-\$60.00
2003 Workshops (not incl. mailing)	-\$1000.00	-\$145.95
Non-Profit Registration	-\$35.00	-\$25.00
Student Research Grant	-\$1000.00	-\$1000.00
Web Hosting	-\$100.00	-\$95.70
Bank Fees (including bank discrepancies)	-\$75.00	-\$115.04
Other (purchases, sponsorships)	-\$400.00	-\$200.00
Total	-\$4470.00	-\$3140.23

Total projected income 2003-2004 \$485.00

Projected balance, January 2004 \$3136.69

Actual balance, January 2004 \$2811.46

Difference between projected and actual -\$325.23

Actual Total Gross Income, 2003 \$159.77

Projected Budget for 2004-2005 (assuming status quo from 03-04)

Income

Membership	\$1085.00
Annual Meeting	
Attendance	\$2055.00
Other Workshops	\$160.00
Other Sources	\$0.00
Total Income	\$3300.00

Expenditures

2004 Annual Meeting	-\$1600.00	-\$1173.84
Postage and Copying	-\$400.00	-\$324.70
P.O. Box Rental	-\$60.00	-\$60.00
2004 Workshops (not incl. mailing)	-\$1000.00	-\$145.95
Non-Profit Registration	-\$35.00	-\$25.00
Student Research Grant	-\$1000.00	-\$1000.00
Web Hosting	-\$100.00	-\$95.70
Bank Fees (including bank discrepancies)	-\$75.00	-\$115.04
Other (purchases, sponsorships)	-\$400.00	-\$200.00
Total	-\$4470.00	-\$3140.23

Total Projected Income 2004-05 \$159.77

Projected Balance January 2005 \$2971.23

Maine Association of Wetland Scientists

Business Meeting Agenda

March 12, 2004

2:00 – 3:30 p.m.

Secretary's Report – Stephanie Jordan

Reading and Acceptance of the Minutes of the 2003 Annual Meeting

Treasurer's Report – Richard Jordan

Executive Committee Reports

- Ethics – Brett Battaglia
- Legislative – Jeff Simmons
- Membership – David Ladd
- Program – Chris Dorion
 - 2003 Program Recap/Discussion of Possible 2004 Programs – Chris Dorion
 - Volunteers for Program Committee

Floor Discussions

- 2004 Stipend
- Suggested topics for 2003 workshops
- Additional possible approaches to certification/licensing of wetland scientists/delineators in Maine – Jim Boyle

Election of Executive Committee Officers

- Treasurer
- Ethics
- Membership
- Adjourn

**Maine Association of Wetland Scientists
Annual Meeting
Friday, March 12, 2004
Augusta Elks Lodge
Route 11/27. Augusta, ME 04338**

The Maine Association of Wetland Scientists will be holding its annual meeting at the Augusta Elks Lodge (Routes 11/27, off Exit 31 of I-95 in Augusta, ME) and we hope to see you there! Speakers and the topics of their presentations appear below, and another important part of the day will be the business meeting. To cover the cost of the facility and food, MAWS is asking members to pay \$25 (not including annual dues). Registration for non-members will be \$35. Student fees are \$15. Please take this opportunity to continue your support of MAWS by paying your annual dues and bring plenty of \$1 bills for a special raffle that we having. We look forward to seeing you.

- 8:00 – 8:30 **Registration**
- 8:30 – 8:45 **Welcome and Introduction of Speakers**
- 8:45 – 9:30 **Field Indicators for Identifying Hydric Soils in New England, Version 3** – Dave Rocque, State Soil Scientist, Maine Department of Agriculture
- 9:30 – 10:15 **Program Update: Bio-assessment Methods for Assessing Wetland Condition** – Jeanne Difranco, Research Biologist, Maine DEP
- 10:15 – 10:30 **Break**
- 10:30 – 11:15 **Stormwater Phase II Program Update** – David Ladd, Stormwater Phase II Coordinator, Maine DEP
- 11:15 – 12:00 **Subaqueous Soil Survey of Taunton Bay, Maine** – Christopher Flannagan, University of Maine, MAWS 2003 Stipend Winner
- 12:00 – 1:00 **Lunch**
- 1:00 – 1:45 **Spatial and Temporal Patterns of Amphibian Diseases in Acadia National Park Wetlands: Causal Factors and Potential Management Strategies** – Meghan K. Gahl, University of Maine, MAWS 2003 Stipend Winner
- 1:45 – 2:00 **Break and Raffle Drawing**
- 2:00 – 3:30 **Business Meeting**

If you have any questions, contact MAWS Program Chair Chris Dorion at (207) 866-7806, or by e-mail at cdorion@infionline.net

REGISTRATION FOR MAWS ANNUAL MEETING

Please mail registration form and payment to: MAWS c/o Chris Dorion, 79 Bennoch Road, Orono, ME 04473. **Please note: registration and check should be received no later than March 5, 2004.** Checks should be made payable to MAWS.

Name: _____ Affiliation: _____
Address: _____ City/State: _____

Telephone and/or e-mail address: _____

>> Check here if this is an address, telephone, or email address change.

RETURN TO: David Ladd
17 State House Station
Augusta, ME 04333

TO: