Maine State Wetlands Conservation Plan

MAINE STATE PLANNING OFFICE

SEPTEMBER, 2001

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State of Maine Executive Department
State Planning Office
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Funding for the ***Maine State Wetlands Conservation Plan*** was provided by the U.S. Environmental Protection Agency, Office of Water, under the Federal Water Pollution Control Act of 1972 as amended.

The ***Conservation Plan*** was produced by Jackie Sartoris and Elizabeth Hertz. Cover design by Charles Oldham; illustrations by Victor E. Young, with additional coastal illustrations by Robert Shetterly.

Evan Richert, AICP, Maine State Planning Office

Spotted Salamander

Printed under appropriation number 013-07B-3266-012-9408.

Wetlands are abundant in Maine, a blessing born of the state's glacial history and resulting lakes, rivers and streams. In the Northeast, Maine has not only the most acres of wetlands of any state, but the percentage of land composed of wetlands is also highest in Maine. At least a quarter of the land mass in Maine - over 5 million acres - is wetland. Maine's wetlands also abound in their variety, ranging from enormous saltwater marshes to tiny, ephemeral, freshwater ponds, with dozens of variations in between. Maine's wetlands are the primary habitat for most of the state's endangered and threatened species, and also provide habitat and biomass essential in the life cycle of most of the state's wildlife species. To hunt, fish, bird watch or simply listen to a chorus of frogs on an early spring evening is to partake in Maine's wetland heritage.

Each year, new information underscores the importance of wetlands to Maine's citizens. Their appreciation for the benefits of wetlands and their support for wetland protection has grown. Flood control, water quality protection for lakes, river and streams, spawning grounds for fish and shellfish, habitat for wildlife - wetlands provide these tangible benefits; yet the relationship between wetlands and people has been, and continues to be, a difficult one. There are several reasons for this.

One is society's new and growing appreciation for wetlands. Historically, wetlands were regarded as a nuisance, a breeding ground for mosquitos and other insects. As recently as the early 1970's, state and federally-funded programs still existed in the southern United States to drain and fill wetlands near human populations. Scientific study of wetlands and a better understanding of their role in the environment has been very recent, relative to other natural resources. In Maine, wetlands were historically viewed as valuable resources if they could be made economically productive, such as when estuarine wetlands were altered to grow and harvest salt hay.

A second problem is that some wetlands can be much more difficult to recognize than many other natural resources. Wetlands exist on a continuum between obviously wet open-water marshes to apparently dry, forested stands. It is difficult to appreciate and protect what can't be seen at certain times of the year. This is an issue of special significance in Maine, where most wetlands are forested and can be seasonally dry, and thus more difficult to identify than other wetland types.

A third problem lies in what is currently the primary means of protecting wetlands — regulation of land use for wetland areas. The United States' history of strong private property rights unavoidably clashes with government regulation of privately held wetlands. Yet in this clash lies the potential for better opportunities for wetland protection, as private landowners are often better able to truly preserve and protect natural resources above and beyond any regulatory approaches. This is especially true in Maine, where the well-known independent nature of Mainers is complemented by a long-standing environmental ethic.

The federal picture

Since 1972, wetlands have been protected under Section 404 of the Clean Water Act. Landowner efforts to fill wetland areas for many kinds of development became regulated, and permission, in the form of a permit, had to be granted by federal or state agencies to the landowner. It was inevitable that a clash would occur between this new environmental protection for wetlands and the private landowners of this newly defined national resource. The new regulations were subjected to legal challenges, and wetland protection nationally continues to be an area of frequent legal confrontation. The battle continues in part because the Clean Water Act does not specifically address wetlands, and Congress left the Army Corps of Engineers (ACE) and the Environmental Protection Agency (EPA) with the task of deciding whether and how to protect wetlands. The regulations of both ACE and EPA and case law establish the parameters of federal wetland protection.

Ironically, as contentious as the 404 program is, the current regulation of wetlands is inadequate to secure their long-term protection. Federal wetland law and policy intends to fully protect wetland functions and values. In practice, Section 404 usually regulates only the actual area, or footprint, of a wetland. Federal or state review of an action which affects a wetland is almost always triggered by a proposed quantitative change to the area of a wetland. Quantitatively, the national wetland regulatory program has succeeded in considerably slowing the loss of wetland acreage.

Exemptions from wetland regulations

Many activities are exempt from wetland protection laws under Section 404 of the Clean Water Act (CWA). These exemptions include: farming activities, including roads associated with farming and the construction or maintenance of farm ponds, irrigation or drainage ditches; maintenance of structures such as dikes, dams, levees, etc.; construction of temporary sedimentation basins on construction sites; forest roads or temporary roads for moving mining equipment. For some of these exemptions guidelines known as best management practices must be followed to reduce or alleviate impairment to wetlands and other waterways. Exemptions are limited to routine activities with relatively minor impacts on waters. As stated by Maine's Senator Edmund S. Muskie when sponsoring the amendments establishing the exemptions in 1977, the exemptions could apply only to "those narrowly defined activities that cause little or no adverse effects either individually or cumulatively." Undertaking an exempt activity requires neither notice nor record-keeping, and it is therefore difficult to estimate the impacts upon wetlands due to exempt activities.

But the stated intent of the federal regulatory program is also to provide qualitative protection - to fully protect wetland functions and values. Mounting evidence suggests that, especially for the function of habitat, protecting land adjacent to the wetland, known as upland, may be as critical as protecting the wetland itself. One recent study linked a loss of up to 50% of a wetland's habitat function when only 20% of the adjacent upland area had been deforested. While policymakers continue to squabble over the right to restrict losses of wetland acres, wetland functions and values continue to evaporate. Even if existing legal protections could leave all wetland acreage intact, development near these wetlands means that a great number will ultimately be devoid of many of the very qualities which make them so important.

The Maine perspective

Maine's development is low compared to other Northeastern states. However, the type of growth experienced in Maine for the past 30 years mirrors that of its neighboring states. Suburban-style development, miles from town centers, is the most common type of development now taking place in Maine. This type of development demands more space and paved road per person than development or redevelopment in town centers, and causes fragmentation of country sides and habitats for wildlife. A 1985 study of three towns in southern Maine found that 76% of the wetlands were visible from or were within 2,000 feet of a road. The resulting fragmentation, not just of those wetlands crossed by roads, but of the adjacent uplands, lessens the value of those wetland systems as habitat. Although Maine's development has been slower than that of its southern neighbors, the incremental slicing of Maine's formerly rural countryside is, in human terms, a permanent one. Maine will take longer to develop, but its future may look a lot like much of the rest of the Eastern seaboard.

But Maine does not yet approach the level of development found just south of the state. Maine can modify its responses to development to encourage shifts in the way the landscape is changing, and is doing so by addressing the ways in which state government inadvertently encourages sprawling development. Maine also still has unique opportunities to preserve habitats found in systems of highly functioning wetlands and uplands even in the more densely populated southern part of the state. Clearly, these opportunities are dwindling, and will disappear unless the shortcomings in a regulatory approach are acknowledged. Since changes made pursuant to the Wetland Conservation Plan effort, the state's law now provides baseline protection for all but the very smallest of the state's wetlands; but in reality, if regulation is the only protection provided, many of the wetland functions which are so essential to this state's unique character will be lost forever.

View of coastal wetlands

COASTAL WETLANDS PROTECTION

Coastal wetlands are nature's marine nursery. The nutrient-rich wetlands along Maine's coast provide breeding and feeding habitat for fish and shore birds, and are prime locations for the state's abundant shellfish. Due to their high ecological value, coastal wetlands have received special protection under state law since the early 1970s. A permit to alter a coastal wetland is more difficult to obtain and has higher requirements for compensation than one for a freshwater wetland. In the past, development pressure along the coast and resultant roads and other infrastructure altered the hydrology and vegetation of many of Maine's coastal wetlands. A coalition of state, federal and private organizations are seeking to identify and fund restoration of some of these areas. Today, new threats to coastal wetlands come primarily from development on adjacent uplands, sea-level rise due to global warming, and non-native invasive plant species. Development adjacent to coastal wetlands impairs habitat value, and increases freshwater runoff and pollutant inputs, while also raising concerns about how these wetlands can shift and grow inland as the sea-level rises.

View of coastal wetlands

MAINE'S WETLAND REGULATIONS

Maine's historical record on wetland protection has been proactive over the last three decades. In Maine, coastal wetlands have been regulated since the early 1970's, while wetlands adjacent to rivers, streams, or brooks have been regulated since 1978. The state's freshwater wetlands have been regulated since 1985, but, until 1995, only those wetlands 10 acres or greater received protection.

In 1993, most of the public and legislative interest in wetlands centered on problems applicants encountered with wetland regulation. Applicants discovered that federal regulation of wetlands applied for some wetland alterations, while in other instances the state's laws were in effect. Sometimes both sets of regulations needed to be satisfied. However, with the state and federal agencies operating independently from one another, the applicant might receive approval for a wetland alteration from one entity while failing to gain approval from the other. For some, the process of receiving permits was cumbersome, expensive and fraught with uncertainty. In addition, Maine's economic recession from the boom years of the mid-1980's, a recession which lasted longer than some of its neighboring states, left lawmakers and their constituents wondering how to resuscitate Maine's economy. Environmental protection programs came under scrutiny, and the obvious problems for Maine developers with the dual permit program made it ripe for change.

These problems led to two actions. First, from among several competing legislative responses to constituent complaints, the Maine State Legislature passed a Legislative Resolve in 1993 calling for a task force to study and recommend changes in the regulation of Maine's wetlands. The Resolve specifically charged the Department of Environmental Protection (DEP) in cooperation with the State Planning Office (SPO) to examine increased efficiencies and enhanced protection that could result from streamlining the State's wetland regulations. Second, prior to the Resolve, the Maine State Planning Office applied for, and received, a wetland planning grant from the Environmental Protection Agency to write a wetland conservation plan for the state. A conservation plan would explore not just regulatory issues for wetlands, but would also consider broader wetland policy and program opportunities and make recommendations for change. Staff at SPO began working on these dual goals in partnership with DEP in May of 1994, with the priority going to the difficult task of crafting and implementing a new freshwater state wetland law.

Task Force

The Legislative Resolve directed DEP and SPO to convene and consult with a balanced group of conservation and development interests as well as state and federal agencies involved in wetland regulation and protection. The resulting Task Force first met in June of 1994 and established ground rules for its deliberations. The Task Force, con-

cerning issues of regulation, used a facilitator and had a goal of consensus on outcomes. Each Task Force member was asked to list three issues they hoped to resolve in developing a Conservation Plan.

As the Task Force listed issues, accompanied by some discussion, it became clear that issues beyond regulatory streamlining were the primary concern of many Task Force participants. While regulatory streamlining was mentioned most frequently, many Task Force members spoke of their concern that wetland functions and values - especially habitat - were inadequately protected by existing laws. In addition, concerns were raised that policy makers lack a full picture of all wetland impacts, including those impacts resulting from activities exempt from wetland regulatory requirements. A desire to plan for full wetland protection, rather than react to case-by-case wetland alteration, and a desire to establish priorities for protection, were listed repeatedly.

Work groups

Work groups were convened around each suite of issues. Specific recommendations from each Work Group are included in the Recommendations Table, and a brief discussion of each Work Group appears below. A list of the organizations participating in the Task Force and Work Groups can be found at the end of this document.

Regulatory

The Regulatory Work Group dealt with the most contentious and time-sensitive issue - how best to change Maine's wetland laws to streamline wetland regulation. The Work Group faced a deadline of February, 1995 to report to the Legislature. Although the Work Group did not complete its work by the February deadline, ultimately the Work Group and Task Force were successful in reaching consensus on major changes to the state's wetland regulation program, and most of the recommendations from the Work Group and Task Force were passed into law in 1995. The changes in Maine's law allowed the federal regulatory agencies to reach agreement on issuance of a State Programmatic General Permit (SPGP) from the Army Corps of Engineers, which allows the state regulatory program, operated by the Department of Environmental Protection, and the federal permit program to work in tandem. Maine's Unorganized Territories, mostly in the northern part of the state, are under the jurisdiction of the state's Land Use Regulation Commission (LURC). LURC is currently working to achieve the same level of regulatory streamlining as now occurs in the southern part of the state. Recommendations from the Regulatory Work Group appear primarily under Goal 3 of the Recommendations Table and Discussion Section.

Assessment

The Assessment Work Group began its deliberations as the Acquisition Work Group. The deliberations of this group were quickly broadened beyond acquisition, which is a

PERILS TO PLANTS

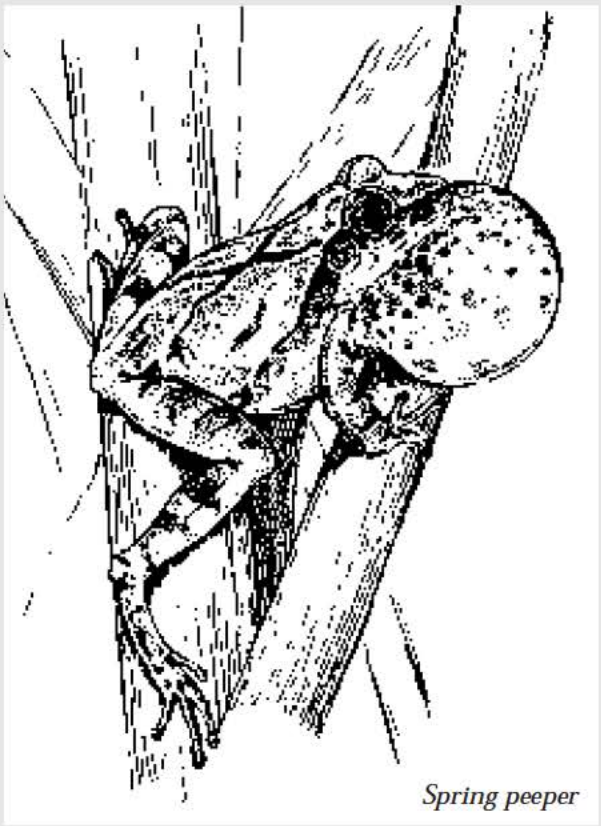
From alpine bogs to tidal flats, the tremendous diversity of Maine's wetlands is reflected in our varied wetland vegetation. Nearly half of the state's 190 rare plants are associated with wetlands. These include the Furbish's lousewort, which grows only on the ice-scoured banks of the St. John River, and the prairie-white fringed orchid, which inhabits just one isolated bog in central Maine. Other rare plants are uniquely adapted to freshwater tidal marshes, sandy outwash pondshores, and northern white cedar swamps. Together with more common wetland plants and animals, these rare plants form part of a larger biological heritage that is precious to Maine. Threats to rare plants include subtle changes in wetland hydrology, removal of forested cover, and competition from non-native plants.

White-fringed orchid

particular protection mechanism, to discuss the broader issue of how wetland functions and values should be assessed, whether and how to prioritize protection actions once assessment has been completed, and how to implement prioritization. The work of this group provided the impetus for the ongoing Casco Bay Wetland Characterization Project. The recommendations of this group appear primarily under Goal 1 of the Recommendations Section.

Inventory

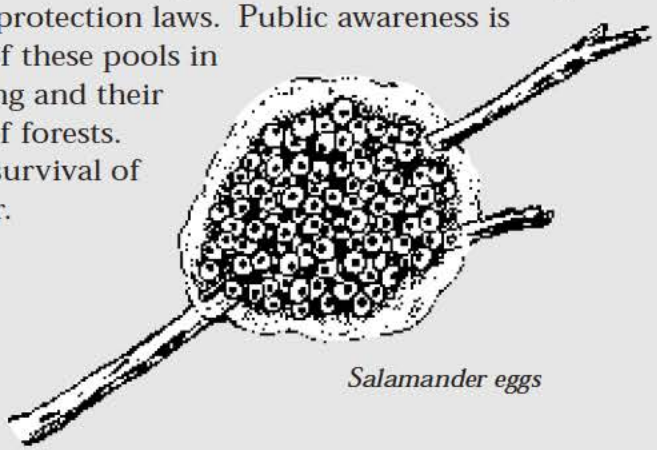
Questions about the adequacy of information about Maine's wetlands often made deliberations about changing the wetland regulatory program difficult. Maine's coniferous forested wetlands are sometimes difficult to inventory using existing, affordable remote sensing techniques. The state's numerous tiny springtime, or vernal, pools and fringing salt marshes require special inventory efforts as well. Recommendations from the Inventory Work Group appear primarily under Goal 2 in the Recommendations Table and discussion section.



Spring peeper

POOLS WITH A VOICE

In Maine, the cries of frogs in the night in early spring is a cherished reminder that warmer months are soon to come. Many frogs, salamanders, turtles and some endangered and threatened species are dependent on vernal pools for their primary breeding habitat. Wood frogs, spotted salamanders and blue-spotted salamanders migrate up to a mile to pools each spring to lay their eggs. Often tiny and overlooked, vernal pools are temporary or sometimes permanent pools which occur in shallow depressions. These pools may fill with water during the spring and fall, and often dry during the summer. Their often tiny size and period of dryness generally means an absence of predatory fish which would otherwise feast on egg masses and newly-hatched amphibians. They are among Maine's most unique and productive wetlands. Their size makes them especially vulnerable to destruction due to intentional or inadvertent filling, or degradation from changes in their surrounding landscape. They are especially at risk because they are often too small to be protected under the state's wetland protection laws. Public awareness is growing about the importance of these pools in providing for amphibian breeding and their valuable role in the food chain of forests. That awareness may ensure the survival of Maine's natural springtime choir.



Salamander eggs

Mitigation (Compensation)
The Mitigation Work Group was charged with reviewing and recommending improvements to existing methods of compensating for permitted wetland losses. Under existing state regulation, losses of wetland acreage above 20,000 square feet (approximately _ acre) generally require compensation. Losses in wetlands of special significance trigger compensation at much smaller impacts. As federal regulation has a "no net loss" goal, compensation for wetland impacts generally emphasizes the net acreage result, with wetland restoration a preferred option. Two separate frustrations were expressed by Task Force and Mitigation Work Group members. One group, primarily the permit-seeking community, expressed frustration with the uncertainty inherent in the compensation process, as well as the cost and lack of clear parameters for compensation searches. The other group, primarily the wetland consulting community and some from the environmental community, expressed concern that the net acreage approach resulted in resources being used to narrowly address the impact of development on a specific wetland regardless of that wetland's importance in a broader landscape context. This group wanted the use of compensation resources to more broadly consider wetland systems, as well as priorities for restoration and preservation within the watershed of the impact. The recommendations from this group appear primarily under Goals 1 and 5.

Beyond the Wetland Conservation Plan
The state Wetland Conservation Plan is intended to provide a snapshot of the state's ideas and priorities to achieve wetland conservation, and to implement the recommendations that were made in the Conservation Plan process. The goals and recommendations must be reviewed and changed each year as old goals are accomplished and new opportunities emerge. The process of reviewing the state's progress in implementing the Plan will be the responsibility of the WIT (see Goal 5), working with the state's federal partners in an annual meeting.

The goals and recommendations developed below are the products of the Work Groups and Task Force, and in some cases were developed by state staff with members of the Work Groups and Task Force acting in an advisory capacity. They are not arranged in order of priority.

GOALS

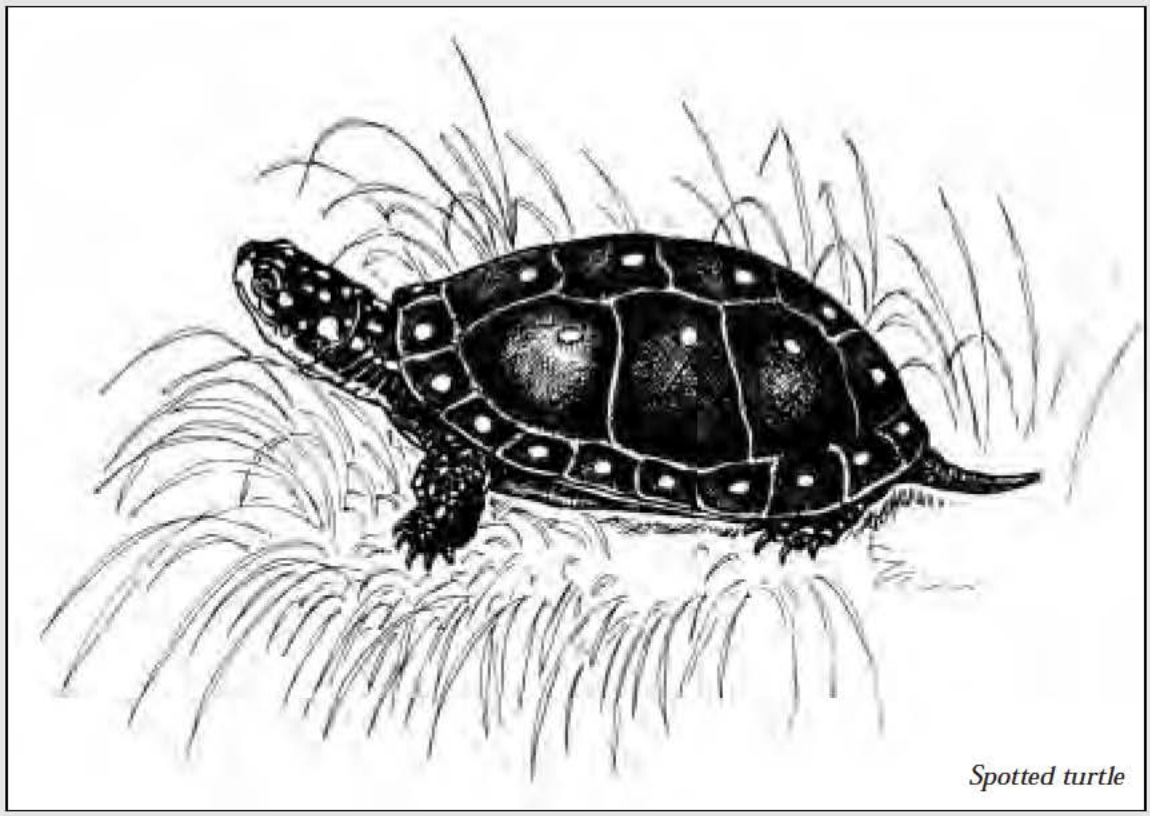
Goal 1. Provide full protection for Maine's priority wetland systems.

The issues of cumulative impacts to wetlands and frustration with a lack of comprehensive planning for wetland protection were raised numerous times by the Task Force participants. Maine enjoys abundant wetlands, but even wetlands in such great quantity have been compromised in quality in the more developed parts of the state. This happens in part due to sprawling patterns of development, but also because wetland protection, through regulation, generally occurs in response to proposed development, not in advance. The current system of regulatory response to permit requests results in roughly equal treatment for all wetlands, little consideration for related and often critical uplands, and lost opportunities for the preservation of important wetland systems which might deflect development impacts to areas of lesser environmental importance. The system of regulating wetland impacts needs to be put into perspective, and viewed as a baseline for protecting wetlands. Planning, voluntary stewardship, acquisition, restoration, and education must be added to provide the most comprehensive protection.

Wetland systems are complex ecosystems. Too often regulatory action only takes place when wetland systems have already suffered impairment from impacts to uplands or small impacts to wetlands. Acquisition of extremely valuable wetlands and uplands is an important option for protection, which should be coordinated to achieve the optimal results. Partnerships among federal and state resource agencies and non-governmental organizations can result in more and better protection than groups acting alone.

Goal 2. Increase and improve knowledge about Maine's wetlands for use at all levels of protection.

The state has an obligation to ensure that decisions about wetland resources are based upon high quality information about the location and functioning of wetlands and wetland systems, as well as knowledge about impacts upon wetlands from various types of development. Improved knowledge about Maine's wetlands will enable private landowners and public policy-makers to make decisions which are responsive to Maine's particular ecology and patterns of development. Maine's relatively less-developed landscape, as compared to other New England states, has led many decision-makers to prefer non-regulatory approaches to wetland protection; but Maine must also improve its knowledge about its wetlands in order to demonstrate any environmental advantages of such approaches.



Spotted turtle

HOPE FOR TROUBLED TURTLES

Many of Maine's rare and endangered animal species spend much of their life cycle in close connection to wetlands. Two of Maine's rarest reptiles, the spotted and Blanding's turtles, are semi-aquatic species preferring small, shallow wetlands, many of which are vernal pools. Much of this habitat has been lost due to development. Maine's Inland Fisheries and Wildlife Department and the Maine Natural Areas Program are working with towns, land trusts, private landowners, and private conservation groups to conserve the habitat of these species on a 50,000 acre area surrounding Mount Agamenticus. This region has Maine's best habitat for Blanding's and spotted turtles, the rare ringed boghaunter dragonfly and other rare wildlife, plants and natural communities. If successful in protecting these species, this effort will a model for future collaborative approaches between the state and private landowners to protect Maine's wetland heritage.

"FROM AWAY"

Non-native, invasive plant and animal species are an increasing concern for wetlands, as well as Maine's uplands and water resources. In wetlands, the strikingly beautiful but destructive plant called purple loosestife has become a commonplace sight in the wet ditches and wetlands close to highways. Purple loosestife poses a special concern for wetlands because of its ability to quickly colonize entire wetlands, closing open water spaces and preventing native species from flourishing. Unfortunately, purple loosestife is only one of many invasive plant species which threaten the state's natural species and balance of plants and animals. Many other invasives occur to the south of Maine and are moving northward, with their ability to spread and survive in colder climates unknown. Ironically, even as states, including Maine, mount public awareness and education campaigns to discourage the spread of these invasives, many known plant invasives are available for purchase from nurseries and mail-order catalogues and web sites. The problem is compounded by the fact that so many plant and animal species are, even today, imported for an intended beneficial use, with unintended consequences. One particularly frightening example concerns the highly unattractive, wetland-loving rodent, nutria, introduced in the U.S. to spur the fur trade in the late 1930's. Since then, these rat-like, up to 35-lb. creatures have caused an enormous amount of damage to marsh systems and related shellfish resources in the Chesapeake Bay area. They have not yet adapted to colder climates, but their spread to 16 states and millions of dollars in lost shellfish resources and expenditures on control efforts should provide a strong incentive to fight invasives "from away."

Vernal pool

Goal 3. Protect Maine's wetlands by improving applicable laws and regulations while streamlining the regulatory process.

This Goal was a primary issue for which the Task Force was convened. Maine's pre-1995 system of protecting wetlands left those under 10 acres with virtually no state protection, and larger wetlands with a highly duplicative yet fundamentally different set of regulations at the state and federal levels. The changes implemented through the Task Force, Legislature, DEP, and federal regulatory agencies have significantly improved regulation of wetlands in Maine.

Goal 4. Promote the appreciation, stewardship and voluntary protection of wetland resources by private landowners, towns and non-governmental entities.

State regulation can only provide the backbone of wetland protection, giving a basic, uniform protection throughout the state and preventing all avoidable losses of wetland acreage. But most wetlands are privately owned, and the best protection results not from regulation, but from private landowner stewardship, local land trust acquisition of easements or property, and resource planning done at the town level. One way in which state agencies can help promote the benefits of local wetland planning is by providing the information and tools needed by local entities to enable them to participate in the resource protection process. Because wetland ecosystems are so intertwined with uplands, any system of wetland regulation will be inadequate unless adjacent uplands are being actively conserved by their private landowners. Public awareness and knowledge are essential to promote protection and to create an ethic of stewardship, as existing regulation cannot protect whole systems.

Goal 5. Improve coordination between agencies with respect to wetland policies and regulatory programs to ensure efficiency in effort and consensus in outcome.

Many agencies are charged with different roles in wetland policy and regulation. These roles are sometimes complementary and sometimes conflicting. State and federal agency efforts occasionally are duplicative or fail to optimize effort by appropriately using each agency's imoqie abilities to further shared goals. During the first scoping meeting, members of the Task Force expressed repeated frustration with the conflicts and duplication sometimes experienced by individuals when dealing with multiple agencies concerning wetland policy or programs. Especially at a time of government streamlining, coordination is essential to ensure that goals and effort are shared when possible and that time-consuming conflicts are avoided. Communication will be essential to working most effectively towards the shared goal of wetland protection.

Goal 6. Participate in state, regional and national forums to exchange information and develop new approaches to wetland protection.

Maine's situation with respect to development, the value of its wetland systems, and its approach to long-term protection is unique among New England states. Maine's willingness to address and change the inadvertent state policy of encouraging sprawling development, and its ongoing efforts to plan within a watershed context for wetland protection are proactive commitments to maintaining and improving the state's wetland resources. Participation of Maine's state agencies in forums to discuss and shape wetland protection policies is essential to ensure the relevance of Maine's policies in the national picture. Maine's absence from these dialogues will result in lost opportunities to change policy outcomes where appropriate.

Discussion of Recommendations and Actions

A table summarizing the goals, recommendations, actions and those groups responsible for implementation follows the discussion.

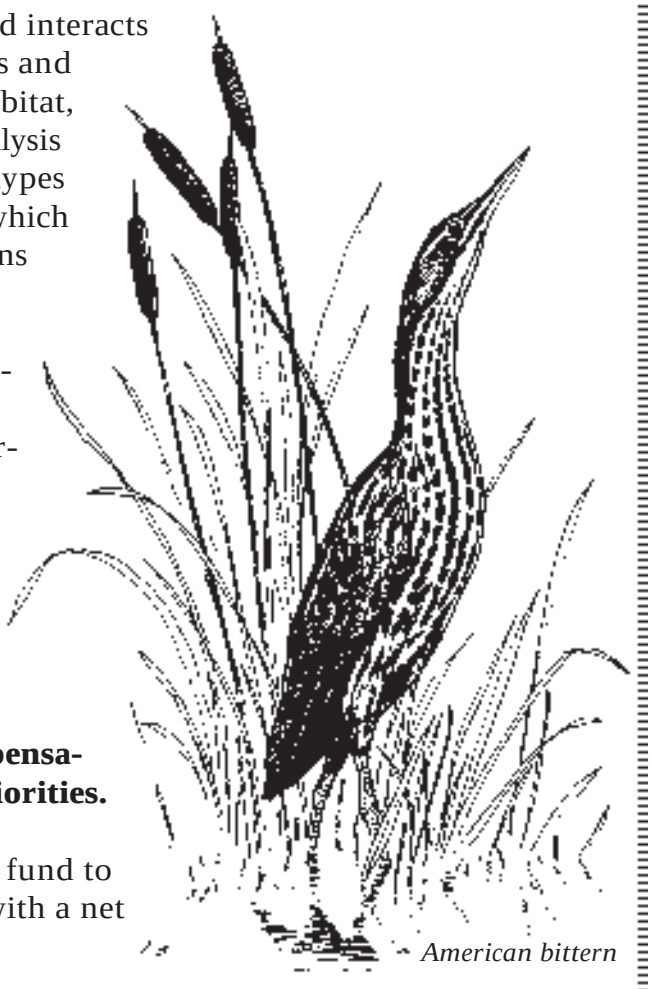
Goal 1: Provide full protection for Maine's priority wetland systems.

Recommendation A: Protect priority wetlands in a watershed context, creating approaches to steward wetlands and associated uplands.
Actions:

1. Conduct a wetland characterization project in a selected watershed as a pilot with federal/state/local steering committee.
2. Make recommendations on the future of wetland characterizations.

Discussion: To understand wetland ecosystems, it is important to understand the way a wetland fits into the surrounding landscape and its watershed. This gives an indication of how a wetland interacts with surrounding land uses and what functions and values it has (floodflow, sediment retention, habitat, etc.). Watershed characterization yields an analysis of the relative abundance or rarity of wetland types and can identify wetland and upland systems which warrant additional protection for their functions and values.

Watershed analysis gives a more holistic evaluation of the wetland resources, their functions and values, and can help to identify sites important to protect based on the dynamics of the whole system. Watershed characterizations of wetlands create databases to use in compensatory situations and can afford an opportunity for more "valuable" compensation choices in the context of the watershed.



American bittern

Recommendation B: Create a fee-based compensation method tied to established watershed priorities.
Actions:

3. Explore the ability of a compensation fund to enhance wetland protection objectives with a net

gain in the value of wetland compensation over existing measures.

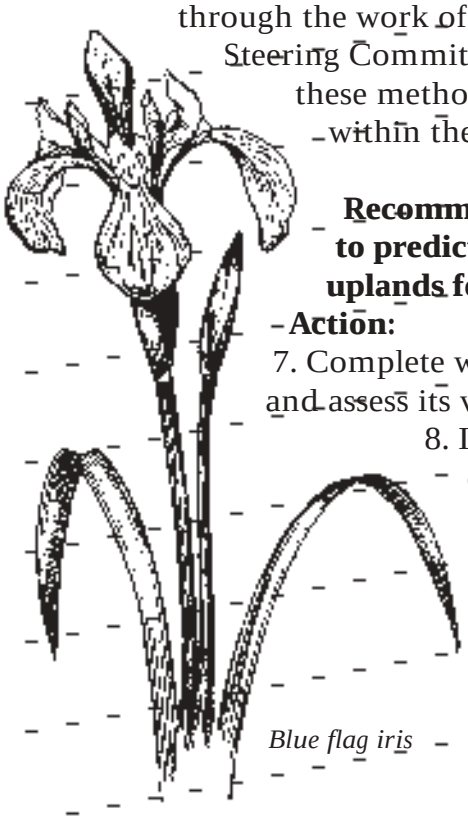
Discussion: A fee-based method of compensation would allow permittees with small or less significant wetland impacts to compensate for wetland losses by paying a fee into a wetland compensation fund. Such a fund would then be tied to restoring or acquiring priority wetland areas as identified by a wetland characterization project. The fee method proposed by SPO is intended for use in a pilot program, which will then be assessed for economic and environmental impacts.

Recommendation C: Improve the utility of functional assessment methods for Maine wetland planning.

Actions:

4. Adopt list of functions and values from the Assessment Work Group for Watershed Characterization Project.
5. Compare Army Corps of Engineers Highway Method with the New Hampshire Method in the Wetland Project and report findings to the Steering Committee.
6. Test matrix developed by the Assessment Work Group in the Watershed Characterization Project.

Discussion: The Assessment Work Group considered the need for consistent approaches in assessing wetland functions and values, and developed recommendations to create consistency. Comparing the most commonly used assessment methods through the work of the Wetland Project will enable the Wetland Project Steering Committee to make findings and recommendations on the use of these methods and identify the caveats that should be considered within the various contexts in which assessment occurs.



Blue flag iris

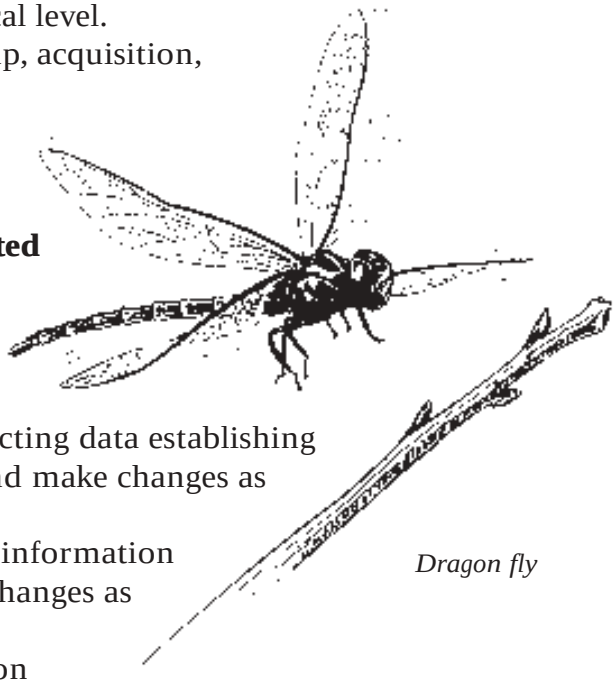
Recommendation D: Explore the ability of computer modelling to predict potential wildlife habitat values of wetlands and uplands for use in planning for protection.

Action:

7. Complete work on the wildlife habitat predictor model with USGS and assess its value.
8. Implement habitat-based approaches for the conservation of open space.

Discussion: Predictive models to plan for habitat conservation, especially of wetlands and associated uplands, can be a valuable tool in identifying priority areas and encouraging local planning for their protection. State agencies, in cooperation with federal, local, and non-governmental partners, are currently working

with several localities in a pilot project to identify these areas, with protection strategies tailored at the local level. Protection strategies can include stewardship, acquisition, restoration and ties to comprehensive planning and zoning. This pilot program is expected to to be completed in 2002.



Dragon fly

Recommendation E: Protect wetland-related animal and plant species and related habitats.

Actions:

9. Assess current methods, including those of federal agencies, of collecting data establishing the presence of species of concern and make changes as appropriate.
10. Assess methods of disseminating information and protecting resources and make changes as appropriate.
11. Develop and implement protection plans.
12. Use information where available to aid in the prioritization of wetland systems.

Discussion: Wetland-related animal and plant species and the habitats which permit their survival are of special significance. Most rare and endangered animal and plant species in Maine are linked to wetlands, and most of their habitats are found on private land. As a result, collecting data establishing the presence of these species, disseminating this information, and working with landowners to create meaningful protection for these special places is vital, yet the potential for conflict also arises. The state's approach in creating the necessary partnerships to accomplish protection should be consistent and well-considered.

Recommendation F: Create and maintain partnerships and mechanisms to restore or acquire priority wetlands and adjacent uplands.

Actions:

13. Continue efforts of state agencies to identify state and federal wetland habitat priorities.
14. Continue to seek funding for state and federal wetland habitat priorities, building upon existing successful partnerships between the state and federal agencies, local governments and private conservation organizations.
15. Explore currently untapped options for acquisition and restoration of wetlands.

Bull moose

16. Summarize existing acquisition and restoration efforts in the state for L&WRC.
17. Host conference on wetland acquisition/ restoration opportunities in Maine targeted at potential local partners.

Discussion: Maine's many state agencies currently work in partnership to identify certain types of acquisition priorities for specific funding sources. While the current system works well for some wetland areas - specifically coastal wetlands tied to particular species of concern - acquiring wetlands identified as a priority through watershed prioritization projects will require new coordination and the exploration of currently untapped resources. Restoration of priority wetlands in Maine that is not tied to specific permit actions is currently rare, yet such restoration is increasingly common in other states. Maine needs to explore the potential to restore wetlands which have been identified as priorities either through the watershed prioritization plans or through other programs. Forming partnerships to share the state's interest in particular wetland systems and to encourage local action will be essential when implementing wetland plans.

Goal 2: Increase the knowledge base about Maine's wetlands for use at all levels of protection.

Recommendation A: Improve state wetland data quality, accessibility and efficiency of retrieval.

Actions:

1. Create wetland site on state web page.
2. Establish a digital catalogue of existing state wetland inventory information.
3. Promote the use of a standardized field form for wetland data.
4. Establish and maintain a database of wetland data gathered by state agencies and other entities as appropriate, including "negative data."

Discussion: The wetland site on the state's web page will provide general information about Maine's wetlands, as well as more technical information about recent research. Included in the web site will be a list of all of the inventories, and information on accessing them, of Maine wetlands which were reviewed by the Inventory Work Group,

and thought to be of value to wetland scientists, property owners, and others. Additions to the list of inventories and other relevant information will be made periodically.

Recommendation B: Develop a comprehensive digital statewide inventory of 95% of all wetlands one acre and larger.
Action:

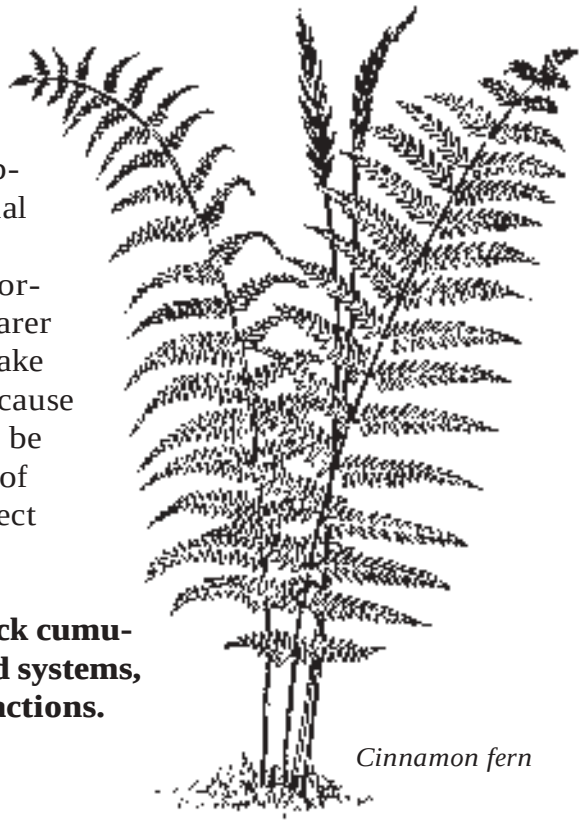
5. Digitize and link remaining NWI quadrangles.

Discussion: Completing the digitization of the remaining NWI quadrangles provides the ability to perform a comprehensive statewide characterization of Maine's wetlands. Although NWI data itself cannot provide a complete inventory of all the state's wetland resources, the ability to link NWI data with other digitized data gives the state a powerful tool in its efforts to understand how our wetland systems interact with other landscape features. NWI's give a standardized baseline on which to compare future changes to the extent of the state's wetland resource. This action was taken in 1998.

Recommendation C: Inventory vernal pools.
Actions:

6. Initiate a pilot volunteer vernal pools identification program.
7. Test inventory methods for vernal pools and make recommendation for targeting and funding.
8. Make recommendations for vernal pools identification program.

Discussion: Recent research has indicated that vernal pools, although small and temporal, are some of the most productive wetlands. The amphibians and macro invertebrates which depend on vernal pools in turn support a vast array of other species. While new information has begun to detail the importance of many of these pools, it has also become clearer that the size and temporal nature of vernal pools make them quite vulnerable to development pressure. Because of these unique characteristics, a special effort must be undertaken to inventory these pools. An inventory of these pools will be essential in future efforts to protect those which are most significant.



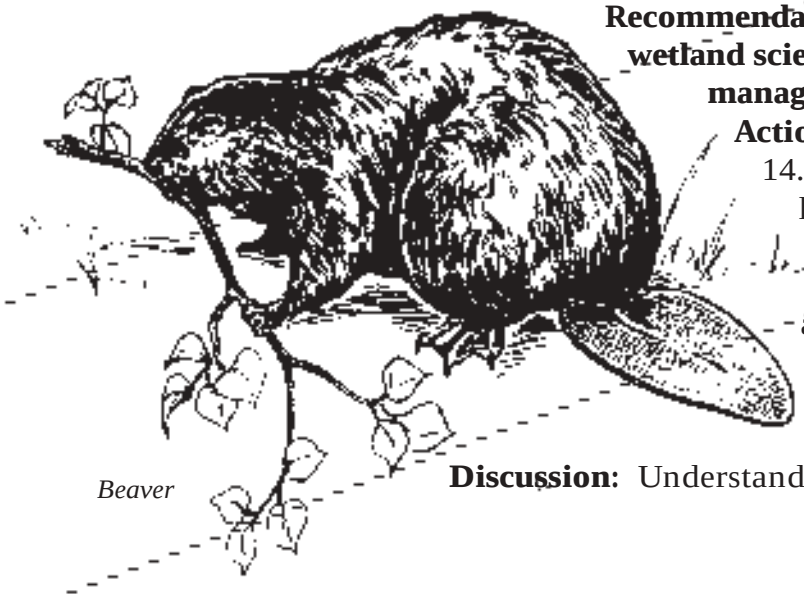
Cinnamon fern

Recommendation D: Develop a mechanism to track cumulative effects of permitted development on wetland systems, which can also help ensure consistency in permit actions.
Actions:

9. Develop a computerized wetland permit tracking system and consider ways to identify cumulative impacts to wetlands.
10. Track, summarize and report wetland permit and other regulatory actions near wetlands to the L&WRC and others each February.
11. Assess the effects of cumulative impacts on the state's wetland resources and recommend changes to state policy as appropriate.
12. Develop protocols for wetland biomonitoring to determine the natural variability of wetland systems and to assess the effects of human activities on ecological integrity.
13. Develop biocriteria and other water quality standards for wetlands in accordance with the requirements of the Clean Water Act.

Discussion: The issue of cumulative impacts to wetlands is perhaps the major unanswered question remaining from the Wetland Task Force. In part, this reflects the status of the science in assessing multiple and often diffuse impacts to wetlands. It is also exceedingly difficult to create appropriate and acceptable policy options with which to respond to the issue of cumulative impacts to wetlands. Regardless, Maine is no closer today in deciding how best to measure cumulative impacts, at what threshold to intervene, or how best to respond. Work has been done, however, which indirectly addresses some ways to prevent cumulative impacts. SPO's 1997 report, "The Cost of Sprawl" proposes ways in which one cause of cumulative impacts to wetlands - sprawling development - can be reconsidered and perhaps controlled.

Without data showing the impacts upon wetland habitat by sprawling patterns of development, it will be difficult to motivate changes in patterns of development, and impossible to develop standards to identify cumulative impacts significant enough to warrant regulatory attention. This information will also be essential in educating landowners and encouraging voluntary wetland stewardship.



Beaver

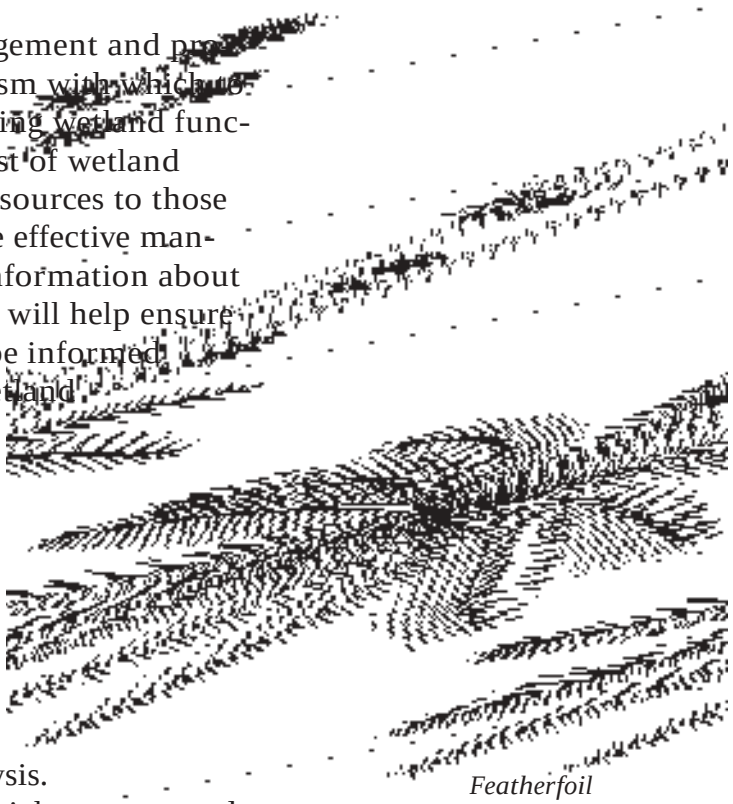
Recommendation E: Promote research on salient wetland science and management issues.

Actions:

14. Develop and periodically update a long term list of wetland issues needing research.
15. Help facilitate communication and information sharing among and between policy-makers and the scientific community.

Discussion: Understanding the complex and dynamic nature

of wetland systems is essential for their management and protection. Applied research provides a mechanism with which to begin to unlock the natural processes underlying wetland functions across the landscape. By developing a list of wetland issues needing research, the state can target resources to those areas, thus aiding in the development of more effective management and protection strategies. Sharing information about current policy needs and scientific knowledge will help ensure that decisions about wetland protection will be informed with the best current understanding about wetland functions. In turn, scientists can focus on those research issues which are most pertinent for wetland policy.



Featherfoil

Recommendation F: Expand knowledge concerning the presence of wetland related rare or endangered plant species and communities, as well as invasive plant species.
Actions:

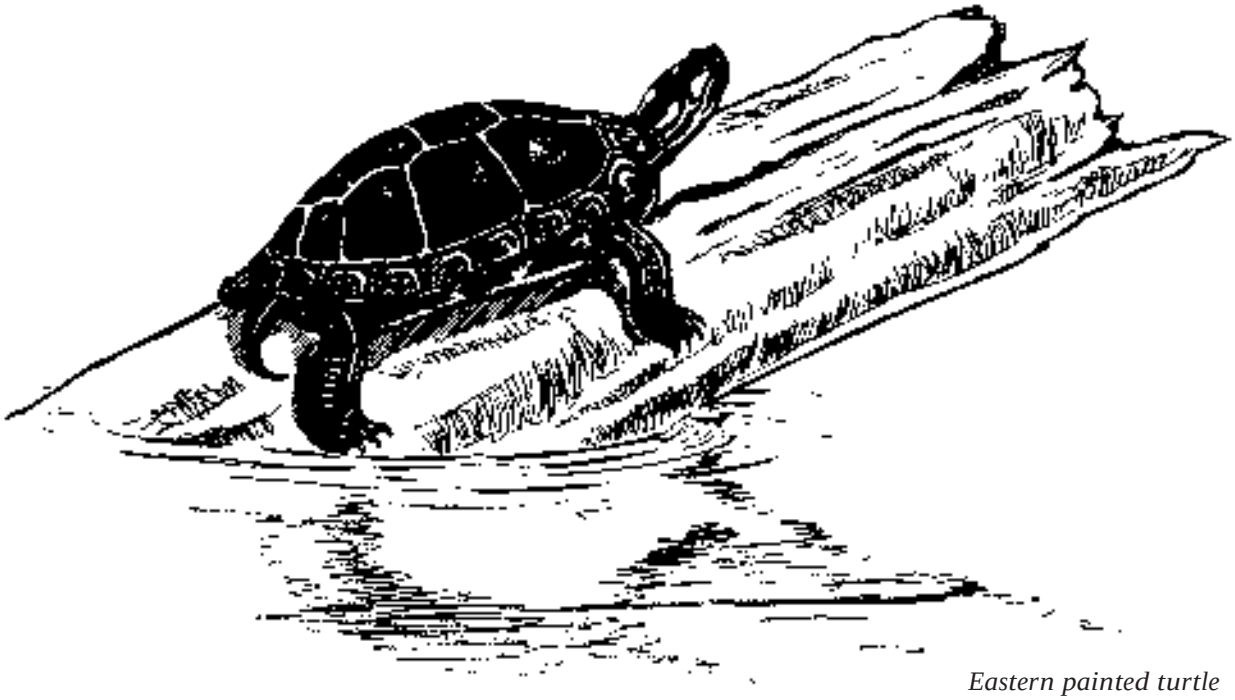
16. Conduct regional surveys and analysis.
17. Inform all landowners of the potential presence and significance of rare and endangered species and communities on their property.
18. Ensure that adequate resources are provided for understanding and combatting invasive plant species which threaten Maine's wetland resources.

Discussion: Identifying and protecting wetland related rare or endangered plant species and communities is essential for maintaining our regional biodiversity. Data on the location and status of these species and communities is crucial to ensure their continued existence. As most of Maine's wetlands are in private ownership, a lack of information about the presence of these species can lead to inadvertent destruction of their habitat. With knowledge of their geographic distribution, specialized protection and stewardship plans can be developed in coordination with individual landowners.

Goal 3: Protect Maine's wetlands by improving its laws and regulations while streamlining the regulatory process.

Recommendation A: Protect all of the state's wetlands, not just those 10 acres or greater in size, by regulating size of impact.
Actions:

1. Change Natural Resources Protection Act (NRPA) as recommended by



Eastern painted turtle

Conservation Plan Task Force.

2. Revise State's wetland regulations and rules.

Discussion: These actions were taken in 1995 and 1996. Improving protection of the state's wetland resources resulted in environmental benefits as well as permit streamlining. The major wetland protection improvements made to NRPA by the Legislature were largely a result of the deliberations of the Wetland Conservation Plan Task Force and its Work Groups. Revision of wetland regulations in the State's Land Use Regulation Council district took place in 1997. The new maps of regulated areas are now in production.

Recommendation B: Coordinate federal and state wetland programs to streamline the permit process.

Actions:

3. Make changes to NRPA.

4. Receive a State Programmatic General Permit.

5. Provide continuous oversight of PGP status and scoping of future policy issues.

Discussion: These actions were also taken in 1995. The permit streamlining has been ongoing, and recent evaluations show a marked improvement due to the NRPA changes. These evaluations show some areas could be improved, and these issues are expected to be discussed when the Programmatic Permit is up for renewal in 2000.

Recommendation C: Protect significant vernal pools, which generally fall below normal regulatory action size thresholds.

Actions

6. Make changes to NRPA.
7. Define vernal pools as mandated by the NRPA Section 480-X.
8. State agencies develop and approve Vernal Pool Action Plan.

Discussion: State agencies have been grappling with protection of vernal pools since deliberations on overall wetland protection began in 1994. Scientific understanding of these resources is currently limited, but there is a growing consensus that they are important and unique in their contribution to the environment. Defining significant vernal pools is called for in NRPA, but beyond developing a definition, providing actual protection to these often tiny, easily-missed wetlands will be difficult. The Vernal Pool Action Plan now being drafted by the state agencies will identify short-term needs for vernal pools with known immediate threats, and longer term questions which need to be addressed.

Recommendation D: Ensure that 1995 changes to NRPA are achieving goals of Task Force and Legislature.

Action:

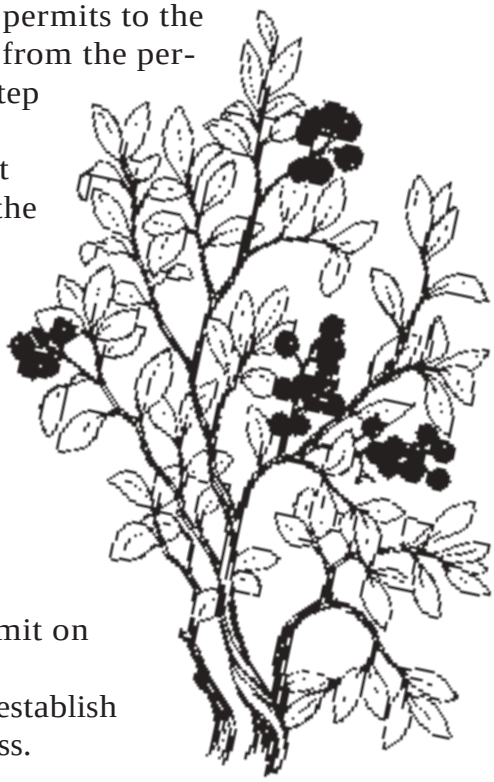
9. Secure ability to provide oversight of existing wetland programs.
10. Review progress and produce report for the L&WRC.

Discussion: DEP now provides a summary of wetland permits to the Legislature each year. However, assessing the program from the perspective of all involved state agencies is an important step prior to review of the existing Programmatic General Permit granted by the Army Corps. The program must be reviewed not only from the perspective of whether the Legislature's program is being implemented effectively, but also from the State's overall progress in wetland protection to date. This review will consider any necessary changes prior to the expiration of the PGP in 2000, and future renewals of the PGP beyond 2000.

Recommendation E: Streamline cranberry permit process without compromising protection.

Actions:

11. Achieve extension of Cranberry General Permit on federal level.
12. Work cooperatively with federal agencies to establish model requirements in advance of permit process.



High bush blueberries

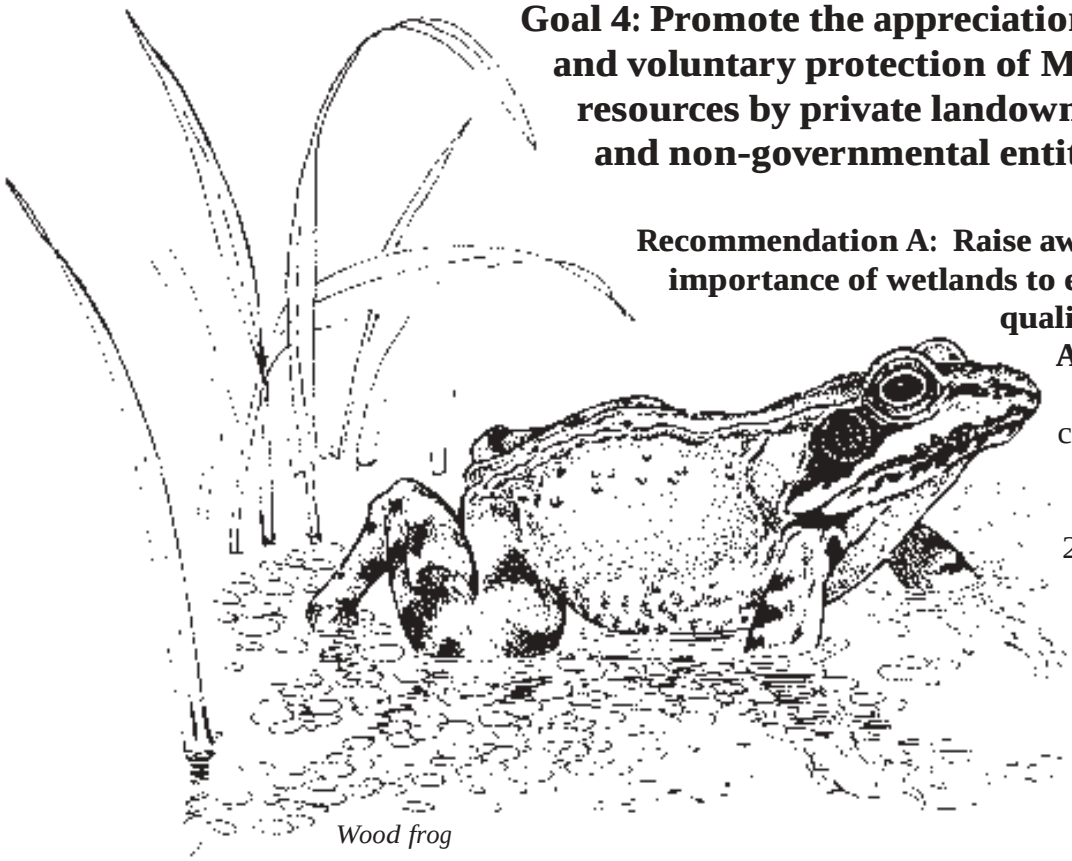
Discussion: A significant amount of effort by many of the participants in the Conservation Plan went into discussing the multiple policy issues surrounding the use of wetlands for cranberry production. Ultimately, state efforts to extend the Cranberry General Permit were rejected at the federal level.

Recommendation F: Add the Compensation Fund to NRPA to provide better wetland compensation for small impacts while streamlining regulatory process .
Actions:

13. Propose language creating pilot Fund to Legislature.
14. Periodically report status and propose continuation of trial compensation fee if appropriate.

Discussion: Permission to perform a test of a Compensation Fund was granted by the Legislature in 1997. The Fund will be available through the Casco Bay Pilot Project. The Compensation Fund offers the opportunity to fund priority wetland actions within a watershed as compensation for permissible wetland losses, where the priority wetland actions are environmentally preferable to site-specific compensation. Rather than continued reliance on the current reactive system of regulation, the Fund will be one way in which the state can benefit from advance planning to establish priorities.

Goal 4: Promote the appreciation, stewardship, and voluntary protection of Maine's wetland resources by private landowners, towns, and non-governmental entities.



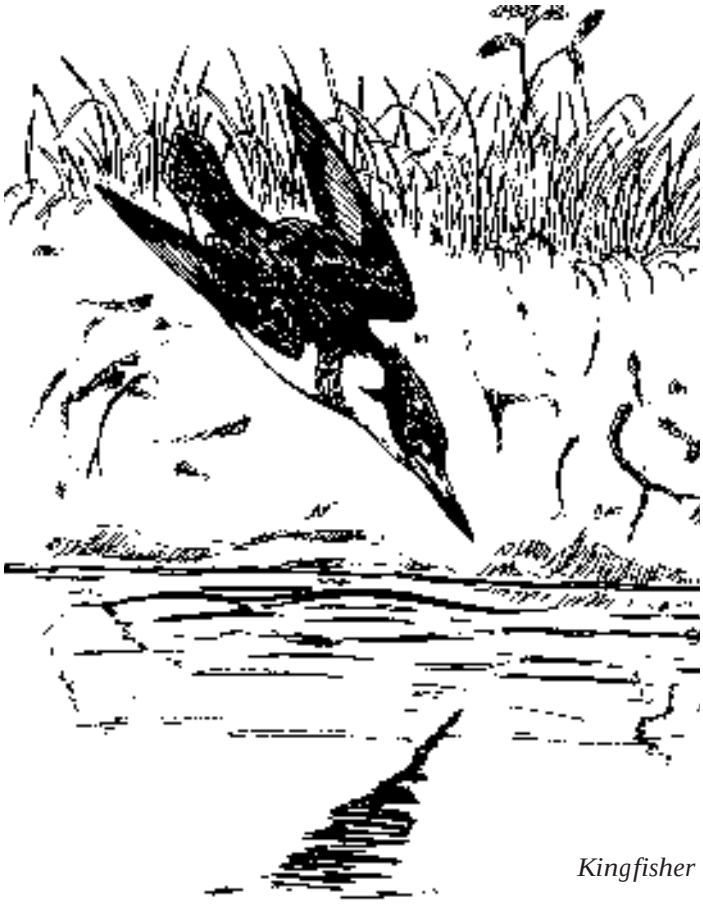
Wood frog

Recommendation A: Raise awareness of the importance of wetlands to environmental quality.

Actions:

1. Develop education program for realtors and developers.
2. Fund small grants program for grassroots education.
3. Host Wetlands Month to promote wetland awareness.

Discussion: Maine's citizens are good environmental stewards, but a conservation ethic can only act to protect Maine's wetland resources when the public is knowledgeable about the value of wetland systems and how they can help protect them. Although the direct benefits to the environment from public education programs are difficult to quantify, unquestionably efforts to educate Maine's citizens and members of the development community will reap results positive for Maine's wetlands.



Kingfisher

Recommendation B: Distribute results of watershed characterization to towns for use in developing or updating comprehensive plans and planning for wetland stewardship opportunities.

Actions:

4. Distribute maps and detailed explanation of data layers for the Casco Bay towns as part of the wetland characterization project.

5. Explore the creation of an interactive tool for towns, regional planning commisions and land trusts.

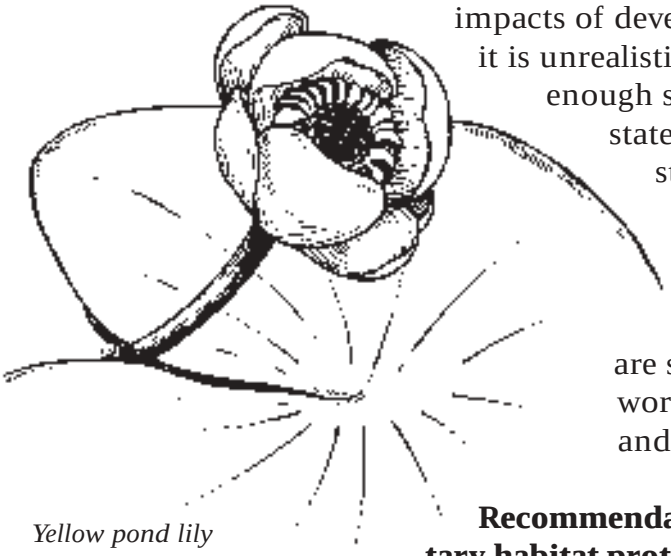
Discussion: Maps and reports will be sent to each town as part of the Casco Bay pilot watershed characterization. An interactive planning tool is being considered by the state, which would identify wetland areas likely to have specific characteristics selected by the town planner or regional planning commision. This tool will not replace any of the regulatory processes in place at either the local, state or federal levels; however, providing this information and capability to town planners and regional planning commissions will make the actions to protect wetlands at all levels supported by good data.

Recommendation C: Address the effects of cumulative impacts of development on wetlands. (also see Goal 1.D)

Action:

6. Develop volunteer wetland steward monitoring program to test ability for qualitative assessments to trigger state response to potential cumulative impacts.

Discussion: Current agency staffing levels are inadequate to monitor the cumulative



Yellow pond lily

impacts of development to the state's natural resources; it is unrealistic to expect that there would ever be enough staff to monitor wetlands across the entire state. Using volunteer monitors to trigger state response, we can increase the numbers of wetlands that are evaluated for degradation caused by human impacts and hopefully respond to these impacts more quickly and efficiently. Volunteers are strong advocates of the resources they work with; this helps strengthen protection and stewardship of those resources.

Recommendation D: Expand upon existing voluntary habitat protection approaches for wetlands and associated uplands in a pilot for statewide use where appropriate.

Actions:

7. Fully fund program at IF&W and MNAP.
8. Report on results of protection approach to L&WRC.

Discussion: Because protection of wetland habitat includes protection of the wetland and related upland systems, non-regulatory approaches must be considered as essential components of a complete approach to wetland protection. Voluntary habitat protection plans can provide a mechanism through which an understanding of important habitats and development of broad-based, local support for their protection can occur. Such support can help to ensure the eventual success of protection plans.

Goal 5: Improve coordination among agencies with respect to wetland policies and regulatory programs to ensure efficiency in effort and consensus in outcome.

Recommendation A: Ensure coordination of state wetland policy and programs.

Actions:

1. Formalize state Wetlands Interagency Team (WIT).
2. Coordinate state wetland programs and policies through WIT.
3. WIT perform annual review of progress on Conservation Plan, add new items to Recommendations and report to L&WRC.
4. Consider additional staffing for continued wetland coordination and refer to Legislature as appropriate.
5. Coordinate closely between agencies to ensure lack of policy conflicts.

Discussion: An informal WIT has been working for at least two years on emerging

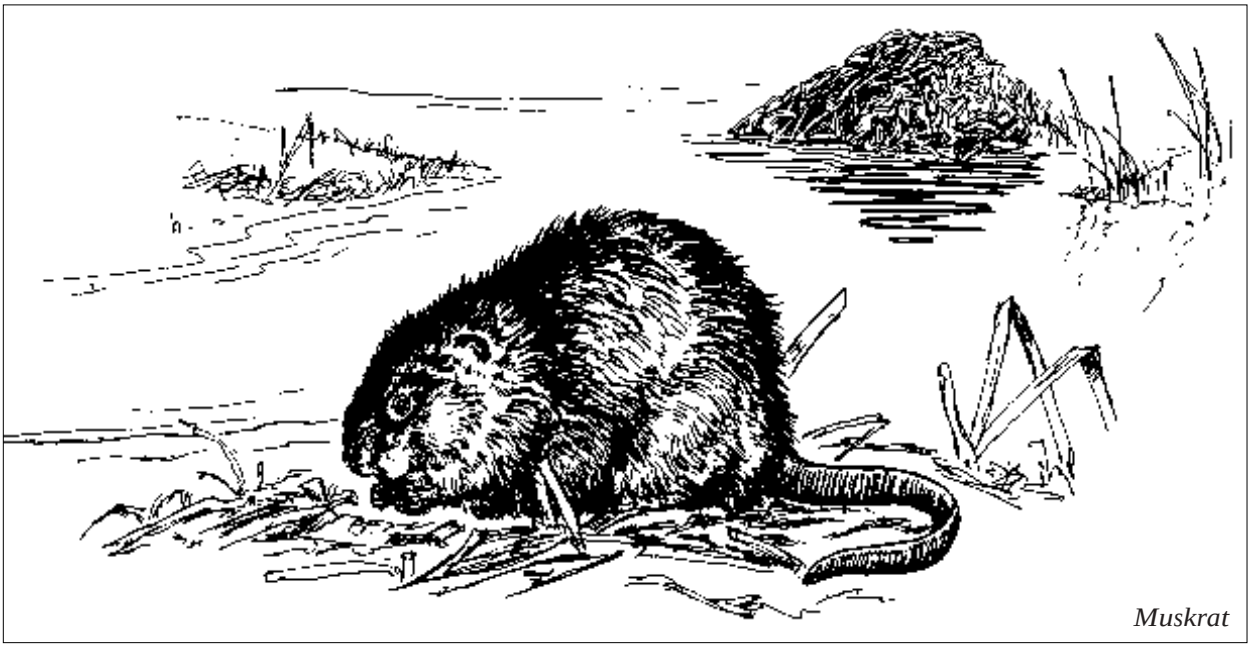
wetland issues. This group has, for example, put Maine in a good position for federal funding requests, as requests can legitimately be identified as the state's priority rather than that of any individual agency. In addition, efforts to coordinate wetland issues foster better communication between state agencies, allowing the state to prioritize wetlands for action and resources, not simply for one agency's interest, but for those of the state.

Recommendation B: Facilitate communication between state and federal agencies to achieve an understanding and respect for shared goals and differences in state and federal approaches to wetland protection, and overcome disagreement where possible.

Action:

5. Create opportunities for ongoing dialogue with federal partners in wetland protection.
6. Encourage shared state and federal responsibility for implementation of the Conservation Plan.

Discussion: Experience during the development of the state's new wetland laws and subsequent discussions concerning differences in state and federal policy indicates that fostering cooperation in advance of specific conflicts is an important endeavor. Regulatory and wetland policy agencies work under differing mandates, resulting in different yet equally legitimate views on the best approach to wetland protection. Determining when and how those differences can coexist while attempting to resolve conflicts as they arise is vital to the performance of each agency's mandate, and to the maintainence of each agency's accountability to the public. Fostering an environment



Muskrat

in which each agency's mission and methods of functioning can be discussed openly and questioned where appropriate will enable Maine and the New England federal offices to work together more effectively for the benefit of wetlands.

Goal 6: Participate in state, regional, and national forums to exchange information and develop new approaches to wetland protection.

Recommendation A: Participate in scientific dialogues concerning wetlands.
Actions:

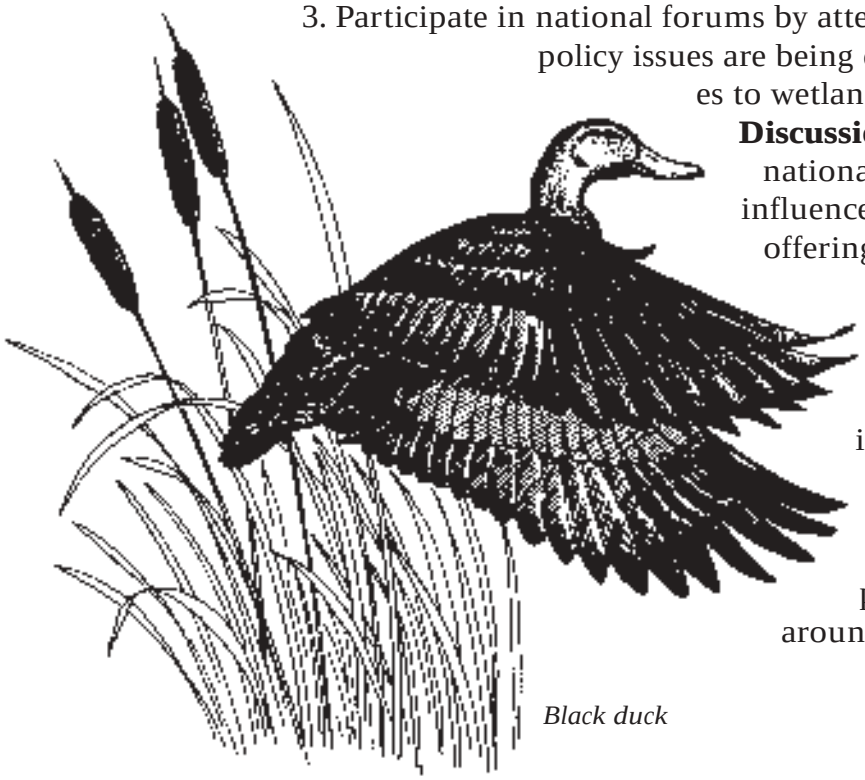
1. Continue active participation in the national and New England Biological Assessment of Wetlands Working Groups.

Discussion: The state's participation in the Biological Assessment of Wetlands Working Groups will enable Maine to be at the national forefront in the development of replicable monitoring techniques to measure variations in biological function in wetlands. This technique may enable planners and scientists to more fully understand the impacts of different types of activities around wetlands on wetland biota.

Recommendation B: Participate in policy discussions where the future of wetland protection is being determined.
Actions:

2. Continue to work with the New England Interstate Water Pollution Control Commission on wetland issues.
3. Participate in national forums by attending conferences where emerging policy issues are being discussed and offer Maine's approaches to wetland planning.

Discussion: Participation in regional and national policy discussions allows Maine to influence the direction of changing policy by offering Maine's perspective on the potential impacts of proposed policy. In addition, the state's ongoing development of a GIS-watershed planning tool for wetlands will be an important contribution to wetland planning efforts nationally. This effort benefits from the comments and questions raised by wetland policy-makers and planners from around the country.



Black duck

WETLAND CONSERVATION PLAN GOALS

1. **Provide full protection for Maine's priority wetland systems.**

2. **Increase and improve knowledge about Maine's wetlands for use at all levels of protection.**

3. **Protect Maine's wetlands by improving applicable laws and regulations while streamlining the regulatory process.**

4. **Promote the appreciation, stewardship, and voluntary protection of Maine's wetland resources by private landowners, towns, and non-governmental entities.**

5. **Improve coordination between state and federal agencies with respect to wetland policies and regulatory programs to ensure efficiency in effort and consensus in outcome.**

6. **Participate in state, regional, and national forums to exchange information and develop new approaches to wetland protection.**

GOAL 1. PROVIDE FULL PROTECTION FOR MAINE'S PRIORITY WETLAND SYSTEMS.

Recommendation	Action	Status
A. Protect priority wetlands in a watershed context, creating approaches to steward wetlands and associated uplands.	1. Conduct a wetland characterization project in a selected watershed as a pilot with federal/state/local steering committee.	completed
	2. Make recommendations on the future of wetland characterizations.	completed
B. Create a fee-based compensation method tied to established watershed priorities.	3. Explore the ability of a compensation fund toenhance wetland protection objectives with a net gain in the value of wetland compensation over existing measures.	ongoing
C. Improve the utility of functional assessment methods for Maine wetland planning.	4. Adopt list of functions and values from the Assessment Work Group for Wetland Project.	completed
	5. Compare Army Corps of Engineers Highway Method with the New Hampshire Method in the Wetland Project.	completed
	6. Test matrix developed by the Assessment Work Group in the Wetland Project.	completed
D. Explore the ability of computer modelling to predict potential wildlife habitat values of wetlands and uplands for use in planning for protection.	7. Complete work on the wildlife habitat predictor model with USGS and assess its value.	completed
	8. Implement habitat-based approach for the conservation of open space.	ongoing
E. Protect wetland-related rare and endangered animal and plant species and related habitats.	9. Assess current methods, including those of federal agencies, of collecting data establishing the presence of species of concern and make changes as appropriate.	ongoing
	10. Assess methods of disseminating information and protecting resources and	ongoing

Recommendation	Action	Status
E. (continued)	make changes as appropriate.	
	11. Develop and implement protection plans.	ongoing
	12. Use information where available to aid in the prioritization of wetland systems.	ongoing
F. Create and maintain partnerships and mechanisms to restore or acquire priority wetlands and adjacent uplands.	13. Continue to identify state and federal wetland habitat priorities.	ongoing
	14. Continue to seek funding for state and federal wetland habitat priorities.	ongoing
	15. Explore currently untapped options for acquisition and restoration of wetlands.	ongoing
	16. Summarize existing acquisition and restoration efforts in the state for L&WRC.	unscheduled
	17. Host conference on wetland acquisition/ restoration opportunities in Maine targeted at potential local partners.	unscheduled

GOAL 2. INCREASE AND IMPROVE KNOWLEDGE ABOUT MAINE'S WETLANDS FOR USE AT ALL LEVELS OF PROTECTION.

Recommendation	Action	Status
A. Improve state wetland data quality, accessibility and efficiency of retrieval.	1. Create wetland site on state or DEP web page.	ongoing
	2. Establish a digital catalogue of existing state wetland inventory information.	unscheduled
	3. Promote the use of a standardized field form for wetland data.	ongoing
	4. Establish and maintain a database of wetland data gathered by State agencies and other entities as appropriate, including "negative data."	ongoing
B. Develop comprehensive digital statewide inventory of 95% of all wetlands one acre and larger.	5. Digitize and link remaining NWI quadrangles.	completed
C. Inventory vernal pools.	6. Initiate a pilot volunteer vernal pools identification program.	ongoing
	7. Test inventory methods for vernal pools and make recommendation for targeting and funding.	ongoing
	8. Make recommendations for targeting and funding vernal pools identification program.	ongoing
D. Develop a mechanism to track cumulative effects of permitted development on wetland systems, which can help ensure consistency in permit actions.	9. Develop a computerized wetland permit tracking system and consider ways to identify possible cumulative impact areas.	ongoing
	10. Track, summarize and report wetland permit and other regulatory actions near wetlands to the L&WRC and others each February.	ongoing
	11. Assess the effects of cumulative impacts on the state's wetland resources and recommend changes to state policy as appropriate.	ongoing

Recommendation	Action	Status
D. (continued)	12. Develop protocols for wetland biomonitoring to determine the natural variability of wetland systems and to assess the effects of human activities on ecological integrity.	ongoing
	13. Develop biocriteria and other water quality standards for wetlands in accordance with the requirements of the Clean Water Act.	ongoing
E. Promote research on salient wetland scientific and management issues.	14. Develop and periodically update a long term list of wetland issues needing research.	unscheduled
	15. Help facilitate communication and information sharing among and between policy-makers and the scientific community.	unscheduled
F. Expand knowledge concerning the presence of wetland related rare or endangered species and communities, as well as invasive plant species.	16. Conduct regional surveys and analysis.	ongoing
	17. Inform all landowners of the potential presence and significance of rare and endangered species and communities on their property.	ongoing
	18. Ensure that adequate resources are provided for understanding and combatting invasive plant species which threaten Maine's wetland resources.	ongoing

GOAL 3. PROTECT MAINE'S WETLANDS BY IMPROVING ITS LAWS AND REGULATIONS WHILE STREAMLINING THE REGULATORY PROCESS.

Recommendation	Action	Status
A. Protect all of the state's wetlands, not just those 10 acres or greater in size, by regulating size of impact.	1. Change Natural Resources Protection Act (NRPA) as recommended by Conservation Plan Task Force. 2. Revise State's wetland regulations and rules.	completed completed
B. Coordinate federal and state wetland programs to streamline permit process.	3. Make changes to NRPA. 4. Receive a State Programmatic Permit. 5. Provide continuous oversight of PGP status and scoping of future policy issues.	completed completed ongoing
C. Protect significant vernal pools, which generally fall below normal regulatory action size thresholds.	6. Make changes to NRPA. 7. Define vernal pools as mandated by the 1995 NRPA Section 480-X. 8. State agencies develop and approve vernal pool action plan.	completed ongoing ongoing
D. Ensure that 1995 changes to NRPA are achieving goals of Task Force and Legislature.	9. Secure the ability to provide oversight of existing wetland programs. 10. Review progress and produce report for the L&WRC.	ongoing ongoing
E. Streamline cranberry permit process without compromising protection.	11. Achieve extension of Cranberry General Permit on federal level. 12. Work cooperatively with federal agencies to establish model requirements in advance of permit process.	failed, 1997 completed

Recommendation	Action	Status
F. Add Compensation Fund to NRPA to provide better wetland compensation for small impacts while streamlining regulatory process	13. Propose language creating pilot Fund to Legislature. 14. Periodically report status and propose continuation of trial compensation fee in statute for permits if appropriate.	completed ongoing

GOAL 4. PROMOTE THE APPRECIATION, STEWARDSHIP, AND VOLUNTARY PROTECTION OF MAINE'S WETLAND RESOURCES BY PRIVATE LANDOWNERS, TOWNS, AND NON-GOVERNMENTAL ENTITIES.

Recommendation	Action	Status
A. Raise awareness of the importance of wetlands to environmental quality	1. Develop education program for realtors and developers.	unscheduled
	2. Fund small grants program for grassroots education.	unscheduled
	3. Use Wetlands Month to promote wetland awareness.	ongoing
B. Distribute results of watershed characterization to towns for use in developing or updating comprehensive plans and planning for wetland stewardship opportunities.	4. Distribute maps and detailed explanation of data layers for the Casco Bay towns as part of the wetland characterization project.	ongoing
	5. Explore the creation of an interactive tool fortowns, regional planning commissions and land trusts.	ongoing
C. Address the effects of cumulative impacts of development on wetlands. (also see Goal 2.)	6. Develop volunteer wetland steward monitoring program to test ability for qualitative assessments to trigger state response to potential cumulative impacts.	unscheduled
D: Expand upon existing voluntary habitat protection approaches for wetlands and associated uplands in a pilot for statewide use.	7. Fully fund program at IF&W and MNAP.	unscheduled
	8. Report on results of protection approach to L&WRC.	unscheduled

GOAL 5. IMPROVE COORDINATION AMONG STATE AND FEDERAL AGENCIES WITH RESPECT TO WETLAND POLICIES AND PROGRAMS TO ENSURE EFFICIENCY IN EFFORT AND CONSENSUS IN OUTCOME.

Recommendation	Action	Status
A. Ensure coordination of State wetland policy and programs.	1. Formalize State Wetland Interagency Team (WIT),	completed
	2. Coordinate state wetland programs and policies through WIT.	ongoing
	3. WIT perform annual review of progress on Conservation Plan, add new items to Recommendations and report to L&WRC.	ongoing
	4. Consider additional staffing for continued wetland coordination and refer to Legislature as appropriate.	ongoing
	5. Coordinate closely between agencies to ensure lack of policy conflicts.	ongoing
B. Communicate between state and federal agencies to achieve an understanding and respect for shared goals and differences in state and federal approaches to wetland protection, and overcome disagreement where possible.	6. Create opportunities for ongoing dialogue with Federal partners in wetland protection.	ongoing
	7. Host federal/state policy summits as appropriate.	completed and ongoing

GOAL 6. PARTICIPATE IN STATE, REGIONAL, AND NATIONAL FORUMS TO EXCHANGE INFORMATION AND DEVELOP NEW APPROACHES TO WETLAND PROTECTION.

Recommendation	Action	Status
1. Participate in scientific dialogues concerning wetlands.	1. Continue active participation in the national and New England Biological Assessment of Wetlands Working Groups.	ongoing
2. Participate in policy dialogues where the future of wetlands protection and planning is being determined.	2. Continue to work with the New England Interstate Water Pollution Control Commission on wetland issues.	ongoing
	3. Participate in conferences where emerging issues are being discussed and offer Maine's approaches to wetland planning.	ongoing

PARTICIPATING ORGANIZATIONS — MAINE WETLANDS CONSERVATION PLAN

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Augusta, Maine 04332-5519

Department of Agriculture
28 State House Station
Augusta, Maine 04333-0028

Department of Conservation
Bureau of Parks & Recreation
22 State House Station
Augusta, Maine 04333

Department of Conservation
Land Use Regulation Commission
22 State House Station
Augusta, Maine 04333-0022

Department of Conservation
Maine Geological Survey
22 State House Station
Augusta, Maine 04333

Department of Conservation
Natural Areas Program
93 State House Station
Augusta, Maine 04333-0093

Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Department of Human Services
Division of Health Engineering
Drinking Water Program
10 State House Station
Augusta, Maine 04333

Department of Inland Fisheries & Wildlife
41 State House Station
Augusta, Maine 04333-0041

Department of Marine Resources
21 State House Station
Augusta, Maine 04333

Department of Transportation
16 State House Station
Augusta, Maine 04333-0016

Ducks Unlimited
61 Holmes Brook Lane
Winthrop, Maine 04364

Gosline, Reitman and Ainsworth
Dispute Resolution Services
47 Ocean Drive
Brunswick, Maine 04011

Maine Association of Realtors
19 Community Drive
Augusta, Maine 04333

Maine Association of Wetland Scientists
PMB 103
49 Topsham Fair Mall
Suite 20-103
Topsham 04086

Maine Audubon Society
Gilsland Farm
P.O. Box 6009
Falmouth, Maine 04105-6009

Maine Chamber & Business Alliance
7 Community Drive
Augusta, Maine 04330

Maine Congress of Lake Associations
P.O. Box 38
Readfield, Maine 04355

Maine Farm Bureau
4 Gabriel Drive RR 5 Box 1254
Augusta, Maine 04330-9322

Maine Forest Products Council
146 State Street
Augusta, Maine 04333

Maine Municipal Association
60 Community Drive
Augusta, Maine 04330

Maine Office of GIS
125 State House Station
Augusta, Maine 04333-0022

Maine Potato Board
744 Main Street
Presque Isle, Maine 04769

Maine Pulp and Paper Association
P.O. Box 5670
Augusta, Maine 04330

Maine State Planning Office
38 State House Station
Augusta, Maine 04333-0038

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Regional Office
One Blackburn Drive
Gloucester, Massachusetts, 01930

The Natural Resources Council of Maine
3 Wade Street
Augusta, Maine 04333

The Nature Conservancy
Fort Andross, Suite 401
14 Maine Street
Brunswick, Maine 04011

Resource Policy Group
RR#1 Box 820
Kents Hill, Maine 04349

Small Woodlot Owners Association of Maine
153 Hospital Street
P.O. Box 836
Augusta, Maine 04332-0836

Southern Maine Regional Planning Commission
21 Bradeen Street, Suite 304
Springvale, Maine 04083

Sportsman's Alliance of Maine
RR 12 Box 1174
Augusta, Maine 04330

Town of Kennebunk
Town Planner
1 Summer Street
Kennebunk, Maine 04043

US Army Corps of Engineers
Project Office
675 Western Ave., Suite 3
Manchester, Maine 04351
and
New England Division
696 Virginia Road
Concord, Massachusetts 01742-2751

United States Department of Agriculture
Natural Resources Conservation Service
967 Illinois Avenue, Suite #3
Bangor, Maine 04401

United States Department of Transportation
Federal Highway Administration
40 Western Avenue
Augusta, Maine 04330

United States Environmental Protection Agency
Region 1
JFK Federal Building
Boston, Massachusetts 02203

United States Fish & Wildlife Service
1033 South Main Street
Old Town, Maine 04468
and
4 R Fundy Road
Falmouth, Maine 04105

Wells National Estuarine Research Reserve
342 Laudholm Farm Road
Wells, Maine 04090

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