Section 4: Tidal Wetlands Are Part of a Larger Landscape

Sound stewardship and management strategies for the protection of tidal marshes must take adjacent upland and ocean into consideration as well. Land use within the watershed and adjacent to a marsh has an effect on the water quality, wildlife habitat, wildlife use, recreational and commercial potential, and aesthetics of the marsh system. A municipality's decisions about comprehensive planning, shoreland zoning and development permits are critical to the health of the tidal marsh. For a more detailed discussion of land use issues in upland areas near the marsh, consult *Maine Citizens Guide to Evaluating, Restoring and Managing Tidal Marshes.* Residents of coastal towns should urge their municipal officials to consult the Maine Department of Inland Fisheries and Wildlife, the Maine Department of Marine Resources, and the Coastal Program of the State Planning Office when making land use plans that will affect land adjacent to tidal marshes. *The Estuary Book* (Maine State Planning Office, 1998) is an excellent source of information on coastal planning.

Careful land use planning should be an ongoing part of marsh system management that will require coordination between the town's planning board, code enforcement officers, conservation commission and shellfish committee. Additional sources of information to help with the planning process are included in the References section.

If a land use plan for the area exists, specific regulatory measures may help protect marsh systems. The state's Shoreland Zoning law is an important tool to control land use within 250 feet of a marsh. Zoning can be used to minimize the impact of development near areas with exceptional wildlife, finfish, and shellfish value. If a marsh scores low on some values it does not eliminate the need for protection, however. Restoration might enhance a marsh's ecological integrity, and its value for wildlife, for example. The Department of Inland Fisheries and Wildlife has rated wildlife values for most coastal wetlands, and the US Fish and Wildlife Service may have additional data. Gathering information on wetland values will support the case for proposed zoning changes.

Towns can identify ways to control **non-point pollution**, such as runoff from streets, parking lots, farms and other developed areas. It is not only point source pollution that

carries enough bacteria to close clam flats. Stormwater runoff can be controlled; **best management practices** should always be used in new construction, and remediation of existing sources should be considered. The Maine State Planning Office Coastal Program and the Department of Environmental Protection can provide assistance with both point and non-point source pollution.

Other planning decisions affect marsh functions and values. One of the most important ways to protect a marsh is to protect water quality within the watershed of the marsh. Any **point sources** of pollution, such as malfunctioning or non-existent septic systems and overboard sewage discharges, should be identified and eliminated. These failures should be identified by the town's Code Enforcement Officer and corrected.

The condition of the adjacent coastal waters is as important as upland development to marsh health. Although a primary purpose of tidal marsh restoration is to support the marine ecosystem, human activities in adjacent ocean waters can undermine the ultimate restoration of the marsh. Some maritime activities that can affect marshes adversely are channel dredging and the improper disposal of dredge spoils, inshore finfish aquaculture, oil spills, ballast water discharges from commercial maritime traffic, and sewage discharge from recreational vessels. In Maine, comprehensive and integrated management planning and regulation below the high water line is far less developed than on land. However, if your study area is located in a heavily used port or bay, you may want to consult the Maine Department of Environmental Protection or the National Marine Fisheries Service about regulations and oversight.

For the Maine Department of Environmental Protection, contact:

Lee Doggett
Bureau of Land and Water Quality
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017 (207) 287-7666

For the NMFS habitat restoration office in Gloucester, MA, contact:

John Catena
National Marine Fisheries Service
Habitat Conservation and Protected Resources Divisions
1 Blackburn Drive
Gloucester, MA 01930 (978) 281-9313

It is critical to the long-term protection of marshes that restoration groups become involved in regional efforts such as the Casco Bay National Estuary Project, the Pen Bay Network or another network of organizations in your area. It is also critical that you keep informed of positive and negative developments in the Maine Legislature through organizations like the Natural Resources Council of Maine and Maine Audubon Society. All your work can be frustrated by legislation that loosens a water quality regulatory standard.

Stay involved!