

G. MARINE RESOURCES

1. Introduction

It is important that a Comprehensive Plan provide a thorough analysis of marine resources. Specifically, this section:

- a. describes Orland's marine resource areas, facilities, and water-dependent uses;
- b. assesses the adequacy of existing facilities, and public access points to handle current and projected use demands;
- c. predicts whether these facilities and resources will be threatened by the impacts of growth and development; and
- d. assesses the effectiveness of existing measures to protect and preserve marine resource areas and important water-dependent uses.

2. Key Findings and Issues

Orland has relatively limited marine resources when compared to many coastal Hancock County towns. This is due in part to its location on a tidal river rather than on the open ocean. While there are a limited number of commercial fishermen and marine worm diggers in town, there are no official records of shellfish harvesting for at least 20 years. Poor marine water quality is one factor that would limit any shellfish harvests.

Marine-related facilities are very limited. There are no public boat launching ramps on salt water. Since the Orland River channel is relatively shallow, navigation is limited to small craft.

3. Public Opinion Survey and Community Workshop Results

The survey showed that 57 percent of respondents felt that public shore access was "not a problem" and 26 percent said it was a problem. There were no other questions on the survey that applied to marine resources. Several participants at the first public workshop felt that salt water resources were an asset.

4. Marine Resource Areas

A. Shellfish

Records from the Maine Department of Marine Resources (DMR) indicate that no shellfish have been harvested in Orland since 1977, the first year for which such data

are presently available. Since not all shellfish harvests are reported officially to the DMR, there may have been some unreported harvests.

One factor that would limit any harvests in Orland is poor marine water quality. DMR data indicate that there are high levels of fecal coliform in the Orland River off Leaches Point. The DMR considers a concentration of over 460 fecal coliform per 100 ml. of water to be a "cause for concern" and 1,100 or higher to indicate severe pollution. The counts for the Orland River are at 1,100, thus falling into the severe category.

There are similar fecal coliform problem areas in the Penobscot River adjacent to Verona, Bucksport and Penobscot. Given the recent installation of the sewer in Orland, some improvements in water quality are possible in the future. It will be important, however, to monitor improvements being made in other towns.

B. Marine Fishing Licenses

As seen in Table G.1 there were relatively few marine harvest licenses issued in Orland in 1997. The single largest category was for marine worm digging with eight licenses. The next largest number were for the various types of elver licenses.

The licenses listed here are those sold to Orland residents. These include Orland residents who may fish out of town but do not include non-residents who may fish in Orland. According to Orland Comprehensive Planning Committee members, there are few, if any, non-residents who fish in Orland. The marine water quality problems and the lack of a deep water harbor limit fishing opportunities in Orland.

Department of Inland Fisheries and Wildlife data from 1992 (the last year for which data were available) show that eighteen boats were registered for salt water use and 112 for both salt and fresh water. There were also 201 boats registered for freshwater use. Only five boats in town were registered for commercial fishing. The remainder were for pleasure. None were registered for commercial passenger or rental use. This is an indicator of the limited amount of commercial marine-related activity in Orland.

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Table G.1 1997 MARINE HARVEST LICENSES, ORLAND	
License Type	Number
Scallop Diver	2
Scallop Non-Commercial	1
Sea Urchin Diver	2
Marine Worm Digging	8
Marine Worm Dealer	1
Lobster & Crab, Under Age 18	1
Lobster & Crab, Student	1
Lobster & Crab, Class I	1
Elver Dip Net	3
Elver Dip Net-2 Fyke Net	1
Elver Dip Net-3 Fyke Net	1
Elver Dip Net-5 Fyke Net	1
Commercial Shellfish	3
Commercial Fishing with Crew	1
Retail Seafood Dealers	4
Wholesale Seafood, No Lobsters	1
Wholesale Seafood, No Lobsters (Supplemental)	1
Commercial Fishing, Single Operator	3
SOURCE: Department of Marine Resources Harvester Count for 1997	

5. Public Access to the Shore

A. Publicly owned points

As mentioned in the Recreation Chapter, the only public access point to the shore is Narramissic River boat launch. This facility is in very poor condition and has no dock. Since it is above the Orland River dam, it does not offer salt water access. Most residents who desire a salt water access point use the ramp in Verona.

B. Privately Owned Access Points

There are no privately owned access points that are open to the general public.

C. Adequacy of Access

While there are no access points in town, it would be difficult to develop such sites given the large extent of tidal flats. Due to ongoing pollution problems and the lack of fish, the Orland River is not presently suited for recreational uses.

6. Water-Dependent Uses

Orland's existing water-dependent uses are shown on Map 1. Water-dependent uses are defined as those uses that would require direct access to coastal waters and cannot be located away from these waters. These would include fishing operations, piers, and the like.

According to the State Planning Office the only existing water-dependent use in Orland is the alewife weir on the Orland River. Orland has two sites which, according to the State Planning Office, have the potential for water-dependent uses. These are sites that meet the following criteria:

1. they are generally sheltered from excessive wind and seas year-round;
2. they have at least 5 feet of water within 150 feet of the shore at mean low water; and
3. they have an average land-side slope of 15 percent or less to 250 feet back from the high tide mark.

It must be stressed that these sites are based on natural features of the land. They do **not** consider preferences of the current land owner, road access, and surrounding land uses. These are all factors that must be considered when recommending the development of new water-dependent uses.

7. Harbors & Marinas

A. Facilities

Orland has no deep water docking or harbor facilities. The Orland River is navigable for small boats at high tide to the dam at Orland village about 2.2 miles above the mouth. The channel is crooked, unmarked, and bare in portions at low water.

B. Adequacy

Given the natural limitations of the Orland River, there is relatively little that can

be done to improve the adequacy of marine facilities.

8. Effectiveness of Existing Measures to Protect and Preserve Marine Resources

The primary way that marine resources are protected in Orland is through the shoreland zoning ordinance. This is the basic ordinance that all Maine towns are required to have. When Orland is revising its land use ordinances, it may also want to review its current treatment of water quality concerns such as storm water runoff from development. The ordinance revisions could call for stricter attention to erosion and sedimentation prevention in new subdivisions. Site plan review procedures could stress standards for the extent of impervious surface and drainage. Such measures could build on those already in place.

9. Regional Marine Resource Issues

The major regional marine resource issue is the poor water quality in the Penobscot River and adjoining tributaries. Orland may want to work with adjoining towns in efforts to remove threats to water quality such as any remaining unlicensed or improperly operating overboard discharges. Towns could also work cooperatively in clam flat restoration.