



PART THREE:

Rocky Shores Management Strategy

F. SITE ANALYSIS & CATEGORIES

1. Site Designation Process

a. Inventory and Evaluation

The Oregon Department of Fish and Wildlife Marine Region, in cooperation with the Oregon Parks and Recreation Department and U.S. Fish and Wildlife Service, conducted a coastwide survey of resources and areas of Oregon's rocky shores. The inventory survey included field site visits to all sites, review of existing published studies and reports, aerial photographic surveys of all sites, and interviews with professional staff knowledgeable about sites and resources.

Data were collected on intertidal invertebrate and algal species composition, seabirds or marine mammals, the presence of Threatened or Endangered species, trail access, geologic characteristics, upland facilities, ownership or management of adjacent upland, uses of the area, and other site characteristics. Inventory data have been recorded in digital form and displayed on maps of each cell derived from base maps digitized by the State Geographic Information Service Center from U.S. Geological Survey Quad sheets. The rocky shores inventory provides information for evaluating the management needs and plan provisions for each shoreline site. This inventory, which will be updated and refined, is available from the Oregon Department of Fish and Wildlife, Marine Region.

The resources and uses of each rocky shoreline site were evaluated against a set of criteria to determine appropriate management recommendations for each site. This is the first time such a coastwide site evaluation has been conducted and allowed the Ocean Policy Council to determine appropriate management designation, areas needing further study, and other needed management measures such as regulations, seasonal closures, an educational or informational programs

Sites were evaluated with several considerations that are, paradoxically, both simple and complex. Simply put, the evaluation considered the environmental conditions and natural resources of a site and compared them against patterns and kinds of human use to yield an estimate of "areas of concern." However, these considerations were also quite complex.

Evaluation Considerations

1: Site Type

- a) Shoreline or Offshore type

- b) Current ODFW management designation

2: Environmental Considerations

- a) Intertidal habitat
 - X Habitat diversity
 - X Habitat size
- b) Animal concentrations
 - X Seabird colony size
 - X Pinniped haulout size
- c) Resource conflict concerns
 - X Intertidal overuse concerns
 - X Bird and mammal conflict concerns
 - X Presence of threatened or endangered species

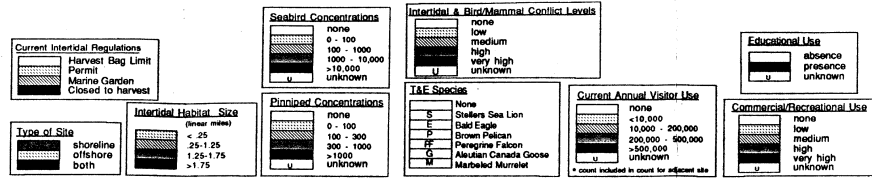
3: Site Use

- a) Current Use
 - X Visitation
 - X Accessibility
- b) Types of Use
 - X Educational/interpretive use (shoreline)
 - X Commercial use (collecting, harvesting, etc)
 - X Recreational use (collecting, sightseeing, etc)
- c) Source of Impact Concerns
 - X Intertidal overuse concerns
 - X Foot traffic
 - X Boating activity
 - X Aircraft activity
 - X Noise
 - X Water pollution

b. **Graphic Summary: Inventory Information and Site Evaluation**

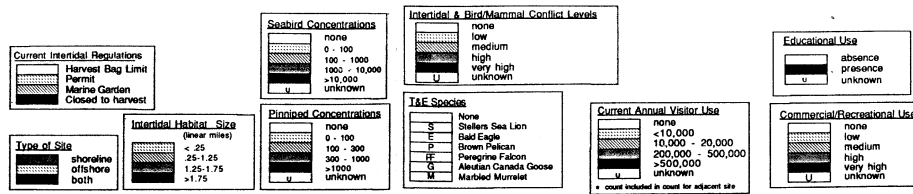
Extensive, detailed site descriptions and other information in the rocky-shores resource inventory provide the basis for assessing the management situation of Oregon's rocky shores. Key information from the detailed site descriptions was summarized onto a single map (Figures 7a, 7b) for a coastwide comparison among sites. This summary map is a distillation of complex information into several primary considerations to support the site evaluation criteria. Used together, the detailed site descriptions, summary map, public input, and professional judgment of coastal resource experts provided the means to evaluate management needs of the rocky shores sites and designate specific areas into management categories. The summary maps are an important but not the sole source of information for site evaluation.

NOTE: The relative rankings expressed for each summarized element are comparable among sites along the coast (e.g. Animal Concentrations may be compared among all sites coastwide). However, these rankings are not comparable between different elements (e.g. "high" Animal Concentrations cannot be compared with "high" Current Use).



CURRENT COFV	REGULATION	TYPE OF SITE	INTERSTITIAL HABITAT		ANIMAL CONCENTRATIONS		RESOURCE CONFLICT CONCERNS			CURRENT USE			TYPE OF USE			
			Size	Seabird Colonies	Pinniped Maxima	Interstitial	Bird/Mammal	T&E Species	Visitation	Accessibility	Educational	Commercial	Recreation			
1.1	1.1															1.1 Tillamook Head
1.2	1.2															1.2 Indian Beach
1.3	1.3															1.3 Ecotia Point
2.1	2.1															2.1 Haystack Rock
2.2	2.2															2.2 Arcadia Beach
3.1	3.1															3.1 Arch Cape
3.2	3.2															3.2 Cape Falcon
3.3	3.3															3.3 Smuggler's Cove
4.1	4.1															4.1 Pillar and Pyramid Rock
4.2	4.2															4.2 Cape Meares
4.3	4.3															4.3 Three Arch Rocks
4.4	4.4															4.4 Maxwell Point
5.1	5.1															5.1 South Interstitial
5.2	5.2															5.2 South Cliff Face
6.1	6.1															6.1 Cape Kiwanda Head
6.2	6.2															6.2 Haystack Rock
7.1	7.1															7.1 Harts Cove
7.2	7.2															7.2 South Cascade Head
7.3	7.3															7.3 Road's End Headland
8.1	8.1															8.1 Ocean Lake Interstitial
9.1	9.1															9.1 Fogarty Creek
9.2	9.2															9.2 Boiler Bay
9.3	9.3															9.3 Pirate Cove
9.4	9.4															9.4 North Depoe Bay
9.5	9.5															9.5 Whale Cove
10.1	10.1															10.1 Rocky Creek St. Wayside
10.2	10.2															10.2 Otter Rock / Gull Rock
10.3	10.3															10.3 Otter Crest
11.1	11.1															11.1 Yaquina Head Marine Gardens
11.2	11.2															11.2 South Yaquina Head
11.3	11.3															11.3 BLM Tide Pool
11.4	11.4															11.4 Jump Off Joe Platforms
12.1	12.1															12.1 Seal Rock
13.1	13.1															13.1 Smelt Sands
13.2	13.2															13.2 Yachats State Park
13.3	13.3															13.3 Yachats Ocean Rd. St. Wayside
14.1	14.1															14.1 Cape Perpetua Park
14.2	14.2															14.2 Neptune State Park
14.3	14.3															14.3 Strawberry Hill
14.4	14.4															14.4 Bob Creek
14.5	14.5															14.5 Stonefield Beach State Park
15.1	15.1															15.1 Devil's Elbow State Park
15.2	15.2															15.2 Seaton Point

Summary: Resource Information for North Coast Rocky-Shore Sites



CURRENT ODFW REGULATION	TYPE OF SITE	INTERTIDAL HABITAT		ANIMAL CONCENTRATIONS		RESOURCE CONFLICT CONCERNS			CURRENT USE		TYPE OF USE			
		Size	Colonies	Headouts	Intertidal	Bird/Mammal	T&E Species	Visitation	Accessibility	Educational	Commercial	Recreational		
16.1 Gregory Point/Squaw Island	16.1													16.1 Gregory Point/Squaw Island
16.2 Sunset Bay	16.2													16.2 Sunset Bay
16.3 Shore Acres Park	16.3													16.3 Shore Acres Park
16.4 North Cove	16.4													16.4 North Cove
16.5 Middle & South Coves	16.5													16.5 Middle & South Coves
17.1 Five Mile Point	17.1													17.1 Five Mile Point
18.1 Coquille Point & Rocks	18.1													18.1 Coquille Point & Rocks
18.2 Haystack Rock	18.2													18.2 Haystack Rock
19.1 Blacklock Point/Tower Rock	19.1													19.1 Blacklock Point/Tower Rock
19.2 Castle & Gull Rocks	19.2													19.2 Castle & Gull Rocks
19.3 Cape Blanco	19.3													19.3 Cape Blanco
19.4 Blanco Reef	19.4													19.4 Blanco Reef
20.1 Orford Reef	20.1													20.1 Orford Reef
21.1 The Heads	21.1													21.1 The Heads
21.2 Nellie's Etichenor Cove	21.2													21.2 Nellie's Etichenor Cove
21.3 Battle Rock	21.3													21.3 Battle Rock
22.1 Rocky & Coal Points	22.1													22.1 Rocky & Coal Points
22.2 Redfish & Island Rocks	22.2													22.2 Redfish & Island Rocks
22.3 Humbug Mountain	22.3													22.3 Humbug Mountain
23.1 Lookout Rock	23.1													23.1 Lookout Rock
23.2 Arizona Beach	23.2													23.2 Arizona Beach
23.3 Sisters Rocks	23.3													23.3 Sisters Rocks
23.4 Devil's Backbone	23.4													23.4 Devil's Backbone
24.1 Nesika Head	24.1													24.1 Nesika Head
24.2 Hubbard Mound Rocks	24.2													24.2 Hubbard Mound Rocks
24.3 Otter Point	24.3													24.3 Otter Point
25.1 Rogue Reef	25.1													25.1 Rogue Reef
26.1 Cape Sebastian	26.1													26.1 Cape Sebastian
26.2 Meyers Creek Rocks	26.2													26.2 Meyers Creek Rocks
27.1 Crook Point	27.1													27.1 Crook Point
27.2 Mack Reef	27.2													27.2 Mack Reef
27.3 Mack Arch Cove	27.3													27.3 Mack Arch Cove
27.4 North Boardman	27.4													27.4 North Boardman
27.5 Mid Boardman	27.5													27.5 Mid Boardman
28.1 Thomas Creek	28.1													28.1 Thomas Creek
28.2 Indian Sands	28.2													28.2 Indian Sands
28.3 Whalehead Rocks	28.3													28.3 Whalehead Rocks
28.4 Cape Ferrero	28.4													28.4 Cape Ferrero
28.5 S. Boardman Rocks	28.5													28.5 S. Boardman Rocks
28.6 South Boardman Beach	28.6													28.6 South Boardman Beach
29.1 Goat Island	29.1													29.1 Goat Island
29.2 Harris Beach	29.2													29.2 Harris Beach
29.3 Chisno Point	29.3													29.3 Chisno Point
29.4 Harbor Beach	29.4													29.4 Harbor Beach

Summary: Resource Information for South Coast Rocky-Shore Sites

2. Management Categories

NOTE: Nothing in the descriptions of attributes, intended uses, or management characteristics of the following management categories is intended to negate or override any agreement between the State of Oregon and any coastal Indian tribe for the use of coastal sites for hunting, fishing, and gathering. (see also Rocky Shores Policy #5, page 69.

a. Marine Garden

Marine Gardens are primarily intertidal areas intended to be focal points for visitors seeking to enjoy or learn about intertidal resources. These areas will be specially promoted and managed for visitor use with special emphasis on marine education programs.

- 1.) **Justification:** Marine Garden designation is needed to provide the public, especially coastal travelers, sightseers, and school groups, with opportunities to enjoy and learn about marine ecosystems while protecting the marine life of popular, accessible sites.
- 2.) **Attributes:** Marine Garden designation will be applied to rocky intertidal areas and adjacent areas that are readily accessible to the public and exemplify the diverse or unique intertidal marine life of the Oregon coast.
- 3.) **Intended Uses:** The primary use of a Marine Garden will be as a quality marine intertidal recreational and interpretive experience for organized school groups, tours, and the general public while maintaining overall ecosystem health. These intertidal showcases are intended to be focal points for travel and recreation promotions by the state and local communities.
- 4.) **Management Characteristics:** Public access encouraged but managed where necessary; on-site educational and interpretive programs particularly during late spring and summer; close monitoring of use and effects, "rest and recovery" of areas within Gardens; public facilities and amenities provided; harvesting or collecting of marine life prohibited (except as may be provided for in the NOTE at the top of this page); close on-site coordination between relevant agencies; use of locally oriented volunteer groups and docents in visitor programs.

b. Habitat Refuge

Habitat Refuge are areas that are needed to maintain the health of the rocky shore ecosystem. While protection of habitat values of individual sites is important, protection of the aggregate of all sites is essential.

- 1.) **Justification:** Habitat Refuges are needed to ensure that various representative areas of marine life in Oregon's rocky shores will be managed to protect natural habitat values and to maintain viable populations of marine plants and animals, a condition essential to achieving the rocky shore management goal.

2.) Attributes: Habitat Refuges will be designated based on:

X the ecological significance of the area to maintaining ecosystem structure, biological productivity and/or diversity, and representative species assemblages;

X representation of natural ecosystem types along the range of variation;

X the importance of the area to life history stages of marine organisms;

X the ecological contribution of the area to maintaining populations of sensitive, threatened, or endangered species;

X the need to protect areas and biological communities from human disturbance.

3.) Intended Uses: The primary use of areas designated as Habitat Refuge will be as a natural habitat area undisturbed by or protected from human activities or presence during some or all of the year. Designation as a Habitat Refuge is not intended to exclude all human uses; those compatible with refuge status, such as fishing, sightseeing, research, or recreating, will be allowed at appropriate levels and times. Likewise, commercial harvest activities that are compatible with the specific refuge situation may be continued during some or all of the year.

4.) Management Characteristics: Habitat Refuges will be managed based on the resources and situation of each area, using such methods as seasonal or permanent area closures; maintaining poor or very limited physical access, especially from land; restricting certain uses where necessary to protect ecosystem functions and values; and providing public information or interpretive materials where appropriate. Habitat Refuge designation may also be applied to buffer areas around specific habitat sites.

c. Research Reserve

Research Reserves are needed to identify and manage areas suitable or being used for scientific study or research including baseline study, monitoring, or applied research. However, designation of Research Reserves is not intended to limit research or study exclusively to these areas.

1.) Justification: Research Reserves are needed to provide sites where information may be reliably obtained over time on natural variations and changes in the marine environment. This baseline and monitoring information is essential to on-going management of all marine resources. Scientific research on marine resources often requires long time periods. Designation of Research Reserves will be a means of ensuring that sites will not be jeopardized through the inadvertent action of an agency and that researchers may rely on relatively undisturbed conditions over time.

2.) Attributes: Research Reserves could embody a wide variety of characteristics depending upon the research topic. Research Reserves designation will be based on consideration of

X access by the general public; areas should not be readily accessible to the public or should be able to be closed where appropriate by site managers;

X access by researchers; in some cases, proximity to research institutions is needed to provide for efficient study; in other cases, remoteness and difficult access may be desirable.

X the presence of representative or typical assemblages of marine organisms; research should not be limited to the unique or exotic but should also include the typical;

X the presence of unique conditions or marine organisms; some sites may have special characteristics that make study of it and its marine life valuable to the managers and/or scientists;

X the suitability of an area to provide needed information; future decisions to designate a Research Reserve should be linked to the suitability of the area for the kind of research proposed.

3.) Intended Uses: Scientific research and study are intended to be the primary human use. Other compatible uses, such as fishing, recreational diving or recreational visitation, will be allowed unless detrimental to research in the area or otherwise prohibited.

4.) Management Characteristics: Management measures to protect integrity and continuity of research or studies will be based on situational needs and may include seasonal or permanent area closures, maintaining poor or limited physical access, prohibiting or restricting collecting or harvesting of invertebrates or algae except through permits, and providing public information or interpretive materials as appropriate.

d. Marine Shore

Marine Shores are areas of general biological, aesthetic, or geologic interest, open to the public for recreational, educational, or commercial use, including collecting or harvesting as allowed by general regulations. A Marine Shore designation is intended for all rocky shoreline sites not otherwise designated as Marine Garden, Habitat Refuge, Scientific Research Reserve, or listed as Not Yet Designated.

1.) Justification: Marine Shore designation is needed and appropriate for many rocky shore areas where other more restrictive or intensely managed categories are not appropriate or justified based on site access, area configuration, or natural resource characteristics.

2.) Attributes: Marine Shores, because of their general nature, will have no specific attributes. Rather, they will be areas of general public use with little or no on-site management and may encompass a mix of rocky types as well as sandy shores within an area. In some areas, rocks within the Oregon Islands National Wildlife Refuge may be included; federal regulations for these refuges will remain.

3.) Intended Uses: Public recreation and enjoyment, natural habitat, harvesting or collecting of

invertebrates and marine algae allowed by regulation, permit, or agreement.

- 4.) Management Characteristics:** Little or no on-site management except informational or interpretive signage; State Park or ODFW regulations for personal collecting of invertebrates or marine algae; US Fish and Wildlife Service regulations where applicable; special permits or agreements for educational, scientific, or other special collecting; sites may or may not have parking or improved access or visitor facilities; some Marine Shores areas may have additional site management concerns based on the presence of or proximity to habitat or other natural features where more restrictive management is applied.

d. Not Yet Designated

Some sites require further study and planning to affirmatively apply one or more of the four management designations, above. These sites will continue to be subject to applicable rules and regulations of state and federal agencies such as the ODFW, State Parks, the US Fish and Wildlife Service, etc. As additional site assessment and planning are completed, the Council will amend the Territorial Sea Plan to add new site designations pursuant to procedures in subsection C.2.a of this section.

e. Priority Rock and Reef Sites

Priority rock and reef sites are those offshore rocks, islands, or reefs determined to be most likely to need study and possible management action. Nine offshore rock and reef sites, grouped into seven habitat areas, are identified in this plan as the highest priority sites for future study and possible management action. These sites were identified after analyzing sites listed as "sensitive marine bird and mammal habitat" in the Oregon Ocean Resources Management Plan.

No management category is designated or management action prescribed for these priority sites except at Shell Island/Simpson Reef, part of a larger rocky-shore management area in the north cove of Cape Arago where information and analysis was sufficient to make overall resource management decisions.

3. Sites by Management Designations

Sites are described and mapped in subsection F.4., below). **Any shoreline site not listed here is to be managed as Marine Shore.** Offshore rocks will continue to be managed as National Wildlife Refuges.

1.) Marine Garden

- p.106 Haystack Rock (Cannon Beach)
- p.122 Otter Crest
- p.125 Yaquina Head
- p.130 part of Yachats State Park
- p.132 Cape Perpetua
- p.140 Sunset Bay
- p.145 South Cove, Cape Arago
- p.172 part of Harris Beach

2.) Habitat Refuge

- p.103 Tillamook Head
- p.110 Three Arch Rocks NWR
- p.112 Cape Lookout (south side)
- p.114 Cascade Head/Cliff Cr. Cove
- p.120 Whale Cove
- p.142 Simpson Reef/Shell Island
- p.147 Coquille Point & Rocks

- p.164 Crook Point/Mack Reef
- p.165 Hooskanaden Creek
- p.167 Cape Ferrelo

3.) Research Reserve

- p.116 Boiler Bay
- p.118 Pirate Cove
- p.135 Strawberry Hill
- p.139 Gregory Point/Squaw Island
- p.144 Middle Cove, Cape Arago
- p.150 Cape Blanco
- p.155 Humbug Mountain/Lookout Rock

4.) Marine Shore (NOT SHOWN ON MAPS)

- parts of Tillamook Head not in other category
- Silver Point to Cape Falcon
- Cape Mears/Maxwell Point
- Cape Lookout (north side)
- Cape Kiwanda
- parts of Cascade Head not in other categories
- Headland at Roads End
- Lincoln City to Fogarty Creek
- Depoe Bay
- parts of C. Foulweather not in other categories
- Yachats oceanfront (excl. Marine Garden area)
- Bob Creek to Heceta Head
- Yoakam Point
- Shore Acres
- tip of Cape Arago not in other categories

4.) Marine Shore (continued)

- base of cliff south of Cape Arago South Cove
- Five Mile Point
- The Heads (Port Orford)
- Nellies Cove/Tichenor Cove (Port Orford)
- Rocky and Coal points
- Arizona Beach to Sisters Rock
- Cape Sebastian
- Deer Point/Natural Bridges
- Thomas Creek/Indian Sands/Whaleshead
- Lone Ranch (south end)
- Parts of Harris Beach not in other categories
- Chetco Point
- Harbor oceanfront
- **any other rocky shoreline area not listed on this page is Marine Shore.**

5.) Not Yet Designated

- p.104 Ecola Point
- p.108 part of the tip of Cape Falcon
- p.128 Seal Rock
- p.134 Neptune State Park
- p.137 part of Heceta Head
- p.149 Blacklock Point
- p.158 Sisters Rk to Devil's Backbone
- p.160 Nesika Head to Otter Point

- p.168 south Sam Boardman State Park

6.) Priority Offshore Rocks/Reefs (for future study as necessary)

- p.104 Sea Lion Rock at Ecola Point
- p.123 Gull Rock near Otter Crest
- p.142 Shell Island/Simpson Reef
- p.152 Orford Reef
- p.154 Redfish Rocks/Island Rock
- p.162 Rogue Reef
- p.170 Twin Rocks/Goat Island

NOTE: except for those few rocks in non-refuge ownership, all rocks and islands remain in National Wildlife Refuge status subject to all applicable federal laws.

