

**DRAFT**

# **CANNON BEACH WETLAND STUDY**

**Local Wetland Inventory, ESEE Analysis, and Draft Zoning  
Amendments**

**Prepared for:**

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## **1 INTRODUCTION**

Oregon's land use planning Goal #5 requires that local jurisdictions "conserve open space and protect natural and scenic resources". Cannon Beach received a wetland planning assistance grant from the U.S. Environmental Protection Agency which was administered by the Oregon Department of Land Conservation and Development and the Oregon Division of State Lands (DSL) to complete Goal #5 process for wetlands. Additional funding was provided by the Oregon Coastal Zone Management Association. This process includes: a Local Wetlands Inventory, an evaluation of wetland functional values and site significance, an ESEE analysis, and zoning provisions to protect wetlands.

The Local Wetlands Inventory was conducted according to the standards and guidelines developed by the DSL (OAR 141-86-110 to 240). The objective of this inventory was to document, map, and evaluate wetlands within the Cannon Beach Urban Growth Boundary (UGB). When the inventory was completed, site significance was determined based on wetland functional values. The degree of significance for each site was rated as high, medium, or low. An ESEE analysis was completed for each significant wetland and Draft Zoning Ordinance Amendments were prepared.

## **2 PROJECT TEAM**

Christie Galen and Janet Burcham of Fishman Environmental Services conducted the Local Wetlands Inventory. Field inventory of the majority of resource sites was conducted from March through June, 1993. Two additional sites were field checked in August. Mark Barnes, Consulting Planner, conducted the ESEE analysis and prepared draft zoning ordinance amendments. Resumes are included in Appendix A.

## **3 METHODOLOGY**

The methodology used to inventory wetlands followed the standards and requirements developed by DSL for a Local Wetlands Inventory (1993). Wetlands were determined by the criteria set forth in the Corps of Engineers Wetlands Delineation Manual (1987).

Wetland sites were established based on the following factors: stream corridors, breaks in natural features created by roads or culverts, land ownership, and land use according to initial instructions by DSL. For example, an uninterrupted stream corridor was given one number although it may encompass diverse habitats. If a stream corridor was interrupted by a main road, the continuation of the stream was given a new number.

Each wetland was classified according to Cowardin (1979): Forested wetlands (PFO), shrub-scrub wetlands (PSS), emergent wetlands (EEM, PEM), and streams (R). Streams were assigned an "R" and often a "PFO" if they were forested stream corridors.

### Public Involvement

The City of Cannon Beach notified all property owners within the UGB of the study on February 10, 1993. Landowners were invited to attend a public meeting on March 10, 1993 to learn about the purpose and methodology of the inventory. They were also given an opportunity to deny access to their property. Cannon Beach staff reviewed numerous responses and noted tax lots on assessor maps where access was denied. These maps were provided to Fishman Environmental Services for field work. A second public meeting was held on June 25, 1993 to share preliminary results.

### Literature Review and Field Preparation

A systematic survey began with a field tour conducted by Rainmar Bartl, project manager and City Planner for Cannon Beach. FES staff met with Mr. Bartl to discuss the objectives and methodology for the project and to obtain all available existing information that would help in defining and mapping the wetlands of the study area.

Maps, aerial photos, and other resources utilized for the project included:

- National Wetlands Inventory (NWI) maps for Tillamook Head and Arch Cape (USFWS, 1982)
- Storm Drainage Maps (1993, Scale: 1 in. = 200 ft.) (most useful because open channels which were the dominant wetland resource in the UGB were identified by basin).
- Flood Insurance Rate Maps for Cannon Beach (1976, Scale: 1 in. = 100 ft.) compiled by CH2M Hill from topographic maps by Aerial Mapping Co. of Oregon
- Clatsop County Tax Assessor's map (Scale: 1 in. = 100 ft.)
- Oregon Department Of Transportation aerial photography, blue-line reproductions of "Ocean Shores" series sheet nos.21-24. Scale: 1 in. = 200 ft., January 1984.
- USDA-Soil Conservation Service Soil Survey for Clatsop County
- The hydric soils list from the Clatsop County SCS office (SCS 1989)
- Wetland delineations completed previously for a few properties within the UGB that were on file with the City of Cannon Beach

Copies of the NWI map and the soils map for the study area are included in Appendix B.

Ms. Galen met with DSL staff (Janet Morlan, Emily Roth) to review project approach, methods and data sheets. DSL staff approved the methods.

### Field

Each site was field surveyed to determine hydrology, soil, vegetation, land features, water resources, condition, adjacent land uses, and to rate the existing wetland functional values. On properties where access was denied, wetlands were viewed from adjacent roadsides or properties. Field information was recorded on standardized data sheets used by Fishman Environmental Services on similar projects (Appendix D).

### Wetland Determination

Wetland boundaries were determined according to the criteria and methodologies listed in the Corps of Engineers Wetlands Delineation Manual (1987), using the three parameter approach which specifies an assessment of hydrology, soils, and vegetation. Field work was conducted early enough during the growing season to assess hydrology; this was a critical factor in identifying disturbed wetland sites where relict vegetation and soils were present. At each site where access was permitted, a sample point was established and mapped. Indicators of hydrology (surface ponding, saturation within 12 inches of the surface), hydric soils (gleyed and low chroma matrix, mottles, sulfidic odor, and concretions), hydrophytic vegetation (more than 50% of dominant species are classified as Facultative, Facultative Wet, and Obligate wetland plants by the Federal Hydric Plant List) were recorded on standardized data forms.

### Wetland Functional Values

Each site was evaluated for 10 wetland functions based on a field method used by Fishman Environmental Services for similar projects<sup>2</sup>. Completed evaluation forms are included in Appendix D. Wetland functions evaluated included ecological integrity, wildlife habitat, fish habitat, noteworthiness, educational potential, recreation, flood control, sediment trapping, nutrient retention, and urban quality (Table 1). Each function was rated as low, medium, or high. Ratings of values were made for existing conditions at the time of survey and not for the potential values sites might have if conditions were to change.

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<sup>2</sup> Fishman Environmental Services developed a field method based on a draft EPA worksheet and elements of the New Hampshire wetland functional values method.

#### 4 MAPPING

Each site was mapped on Clatsop County Tax Assessor's Maps (Scale: 1 in. = 100 ft.) and identified by number. Site boundaries are approximate; they were drawn by superimposing plat maps over contour maps (Flood Insurance Rate Maps) where available, by photo interpretation from 1984 Oregon Department Of Transportation aerial photography blue-line reproductions (Scale: 1 in. = 200 ft.), or field measurements by pacing from a point of reference. The topographic maps are based on aerial photographs which are imprecise in forested terrain but were used when they seemed most accurate. In undeveloped areas with few or no cultural features for field orientation, or on properties where access was denied, wetland boundary lines were solely based on photo interpretation and/or contour maps. Consequently, the level of mapping accuracy is variable with each site. A color aerial photo would have allowed more accurate mapping, but it was not available this year due to unseasonal overcast weather.

Site acreages were estimated from the tax assessor maps, or were determined with a planimeter.

#### 5 SUMMARY SHEETS

Summary sheets are included in Appendix C for each site. Each summary sheet contains the site number, acres if not limited to a narrow stream channel, location, basin name, tax map number, and tax lots. Summary sheets also contain a brief description of the site, its wetland functional values, impacts/disturbances such as fill or invasive nuisance species, and significance. Table 2 summarizes data for each site.

#### 6 SIGNIFICANCE CRITERIA

The determination of significance is a relative process. The criteria which we used in this survey to evaluate the significance of a site were mainly biological and ecological. We recognize, however, that social and community values play a major part in the final designation of the significance or nonsignificance of a wetland or other natural resource site. We do not wish to imply that sites identified in this survey as having low significance or no significance are of no value or importance. We recommend that our findings be considered in reference to community values to determine the final relative significance of each site. \*✓

**TABLE 1. WETLAND FUNCTIONAL VALUES RATING CRITERIA**

**1. ECOLOGICAL INTEGRITY**

- High - nearly undisturbed condition, large area, little or no surrounding development, contiguous with other large undisturbed areas, minimum of 5 native plant species
- Medium - somewhat disturbed condition, somewhat disconnected from other refugia, surrounded by some development
- Low - very disturbed, distinctly disconnected from other natural areas, monoculture of plant species, surrounded by relatively dense development

**2. WILDLIFE HABITAT**

- High - permanent water, diverse cover types and food resources, and connectivity to other wildlife habitat; seasonal water if habitat is critical for amphibians or waterfowl
- Medium - some disturbance to plant community, some disruption of travel corridors, somewhat less diversity in plant cover and structure
- Low - no water, limited plant diversity, greatly altered from natural conditions

**3. FISH HABITAT (ODFW known populations of native fish)**

- High - spawning, rearing areas present; habitat condition pristine or slightly disturbed
- Low - very disturbed habitat; polluted, sediment build-up; too small or ephemeral to support fish.

**4. NOTEWORTHINESS**

- High - critical habitat for sensitive species, unique features such as forest age, successional stage, or type; large size of natural area in otherwise developed area
- Medium - not a critical habitat for sensitive species, vegetation community somewhat uncommon, some disturbance evident but recovery relatively advanced
- Low - no potential habitat for sensitive species, vegetation community common for surrounding area, much disturbance and little or no recovery

**5. EDUCATION POTENTIAL**

- High - High ecological diversity, low sensitivity to impacts, safe public access
- Medium - within bussing distance to schools, moderate to high values for ecological integrity, noteworthiness, and/or wildlife habitat to offer educational potential, some disturbance from natural conditions, small size
- Low - Low diversity, high sensitivity to impacts, too far to walk from school, no parking available, no public access, very disturbed conditions

(continued next page)

**TABLE 1. WETLAND FUNCTIONAL VALUES RATING CRITERIA (continued)**

**6. RECREATION**

High - variety of natural, undisturbed habitats, wildlife observation, access for boats or pedestrians, good water quality, fishing, boating

Medium - one or two natural habitats, potential access, cleanup potential, access for water-related activities or public access by trail

Low - lack of habitat diversity, small size, no access, poor water quality, no boating

**7. FLOOD CONTROL**

High - wetland location in drainage and morphology ensures retention of above average flows, large distinct floodplain, located downstream of major sources of input

Medium - small floodplain, limited retention

Low - wetlands are small or not appropriately located to retain much runoff

**8. SEDIMENT TRAPPING**

High - slopes of watershed above wetland are greater than 8% and have cropland, construction, or logging activities; emergent or herbaceous vegetation is dense or wetland or water impoundment is large enough to allow sediments to collect from the drainage

Medium - limited floodplain, site not downstream of major source of input

Low - adjacent slopes less than 3% and undeveloped watershed (forest, abandoned farm), ponding, if present, too small to effectively trap sediments, no floodplain development, site not downstream of major source of input

**9. NUTRIENT RETENTION**

High - site downstream of potential sources of excess nutrients (pastureland, urban land); aquatic and/or emergent plants present to absorb nutrients, large floodplain

Medium - site not downstream of major sources of input, small floodplain and limited vegetation

Low - site not downstream of potential sources (watershed predominantly forested), no floodplain

**10. URBAN QUALITY OF LIFE wetlands as aesthetically valuable and a last refuge for wildlife**

High - natural vegetation, animal choruses, and natural odors predominate, buffer > 25 ft, 2 or more cover types, permanent water; potential for educational or passive recreational use; scarcity of wetland type; high visual quality

Medium - some disturbance; somewhat uncommon vegetation community type but not rare or scarce in area

Low - unpleasant odors, loud noises, buffers < 15 feet and dense surrounding development, 1 cover type and disturbed conditions

Determination of the significance of a site for this survey was based on the wetland functional value ratings. If a site rated low for all values, it was indicated as "not significant." These sites were usually seasonal streams interrupted into short sections by culverts or development; however, they also included small, disturbed forested wetlands. Sites determined to be significant were also assigned a degree of significance of low, medium, or high (Table 2). Sites rated low significance were primarily short, perennial, interrupted stream sections consisting of only a channel or a channel with a very narrow fringe. These often had medium wildlife habitat value. Sites of medium significance included small streams with connectivity to other sites, or larger forested wetlands. Large forested wetlands, moderate-sized forested wetlands connected to larger natural upland areas, and estuarine emergent wetlands were of highest significance.

## 7 CONCLUSION

### 7.1 Study Area Summary

A total of 51 sites was inventoried; many sites contained more than one wetland type. Wetland types within these 51 sites included: 5 emergent wetlands, 3 shrub-scrub wetlands, 27 forested wetlands, and 38 stream sections.

#### Emergent Wetlands (PEMC, EEM)

Five emergent wetland sites were inventoried including two estuarine wetlands. Typical vegetation growing in freshwater emergent wetlands included soft rush, slough sedge, bulrush, buttercup, velvet grass, and red top. Typical vegetation in estuarine emergent wetlands included Pacific silverleaf, Lyngbye's sedge and beachgrass. The freshwater emergent wetlands (Sites 21, 43, and 31) were generally small and disturbed by fill and/or land clearing. Sites 21 and 31 rated Medium due to their association with larger diverse habitat. The estuarine emergent wetlands (Sites 10B and 16) are associated with Ecola Creek. They are highly significant because of their large size and their location. They provide habitat for migrating and wintering waterfowl and resident elk. They also provide water quality functions for flood control, sediment trapping, and nutrient retention.

#### Scrub-shrub Wetlands (PSSc)

Scrub-shrub wetlands are a small component of larger emergent and forested wetlands.

TABLE 2. Site Location, Size, NWI classification, Map #, Basin, Wetland Functional Values, Significance, and Degree of Significance

SITE #	Location name	ACRES	NWI	MAP #	Basin	EI	WH	FISH	N	EP	REC	FC	SED	NUT	UQ	High	Med.	Low	Sign.	Degree	Site #
1	Logan	NA	R	4106CB	Logan	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	1
2	Logan Lane	NA	R	4106CB	Maher	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	2
3	Maher St.	NA	R	4106CB	Atkins	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	3
4	Pacific / Kenal	<0.5	R/PSSC	4106BC	Kenai	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	4
5	East of Pacific	<0.5	R/PFOC	4106BC	Kenai	L	M	L	M	L	L	L	L	L	L	0	2	8	Y	LOW	5
6	Hemlock / Kenal	NA	R	4106BC	Brallier	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	6
7	Hwy 101 / Hemlock	<1	R/PFOC	4106BC	Ocean	L	L	L	L	L	L	L	L	L	M	0	1	9	Y	LOW	7
8	Pacific / Midway	<0.5	PFOC	4106BC	Ocean	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	8
9	Pacific / Midway	NA	R	4106BC	Ocean	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	9
10A	sewage ponds	30	PFOC	51020CC/CA/CB;51029	Ecola Creek	H	H	L	H	H	H	M	L	L	H	6	1	3	Y	HIGH	10A
10B	sewage ponds	6	EEM/ESS/PEM	51020CC	Ecola Creek	H	H	L	H	H	H	M	M	M	H	6	3	1	Y	HIGH	10B
11	Elk Run Park	<0.5	PFOC	51030AA	Commercial 3	M	M	L	M	M	H	L	L	L	H	2	4	4	Y	HIGH	11
12	E. of Gower	<1	PFOC/R	51029BC	Coolidge 12 & 13	L-M	L-M	L	L-M	L	L	L	L	L	M	0	4	9	Y	MED	12
13	Cypress / Dawes	<0.5	PFOC	51029CB	Coolidge 13	L-M	L-M	L	L	L	L	L	L	L	L-M	0	3	10	Y	LOW	13
14	Dawes / Spruce	<1	PFOC/R	51029CB	Coolidge 13	L	M	L	L	L	L	L	L	L	M	0	2	8	Y	LOW	14
15	Dawes / Coolidge	<0.5	PFOC/R	51030AD	Coolidge 13	L	M	L	M	L	L	L	L	L	M	0	3	7	Y	MED	15
16	N. of Ecola Cr.	8	EEM/PEM	51020CB	Ecola Creek	L	M-H	L	L	L	H	L	L	L	H	3	1	7	Y	HIGH	16
17	Logan Cr.	NA	R	51019AD;51020CB	Breaker's Point	M	H	M	H	L	L	L	L	L	M	2	3	5	Y	HIGH	17
18	Ecola Pk Hwy / Laurel	NA	R	51019AD/AA	Breaker's Point	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	18
19	Ecola Pk Hwy / Laurel	6	PFOC	51019AD/AA	Breaker's Point	H	H	L	M-H	M	L	L	L	L	H	4	2	5	Y	HIGH	19
20	E. of Ecola Pk Hwy	10	PFOC	51020BC	Breaker's Point	H	H	L	H	H	L	L	L	L	H	5	0	5	Y	HIGH	20
21	Old Hwy / Beach	<1	R/PFOC/PEM	51020CB	Elm	M	M	L	L	L	L	L	L	L	M	0	3	7	Y	MED	21
22	Hills / Ross	<1	PFOC	51030DA	Coolidge 1	L	M	L	L	L	L	L	L	L	M	0	2	8	Y	LOW	22
23	Arbor / Elliott Way	<0.5	R/PFOC	51030DD/DA	Coolidge 1 & 2	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	23
24	Forest Lawn/ Hemlock	<1	PSSC	51030DA	Coolidge 2	L	L	L	L-M	L	L	L	L	L	L-M	0	2	10	Y	LOW	24
25	Nelchena / Hemlock	<1	PFOC/R	51032BC	Hemlock	H	M	L	H	L	L	L	L	L	H	3	1	6	Y	HIGH	25
26	Matanuska / Tanana	<1.5	PFOC/R	51032BC/BB	Hemlock	M-H	M	L	M-H	L	L	L	L	L	H	3	3	6	Y	HIGH	26
27	Arbor Lane	NA	R	51030DD	Coolidge 1	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	27
28	Matanuska/ Hemlock	<0.5	PFOC/R	51032BC	Hemlock	M	M	L	M	L	L	L	L	L	M	0	4	6	Y	MED	28
29	Hemlock / Amber	<1	PFOC/R	51032BB	Gulcana	L	L	L	L	L	L	L	L	L	M	0	1	9	Y	LOW	29
30	NE of N. Chinook St.	NA	R	51032CC	Tolovana	M	M	L	M	L	L	L	L	L	L	0	3	7	Y	MED	30
31	E. of #101/ Tolovana	<0.5	R/PEMC	51032BC	Tolovana	M	M	L	L-M	L	L	L	L	L	L	0	3	8	Y	MED	31
32	E. of #101 N. of 31	NA	R	51032BC	Hemlock	M	M	L	L-M	L	L	L	L	L	L	0	3	8	Y	MED	32
33	E. of #101 N. of 32	NA	R	51032BC	Hemlock	M	M	L	L-M	L	L	L	L	L	L	0	3	8	Y	MED	33
34	E. of #101 N. of 33	NA	R	51032BB	Hemlock	M	M	L	L-M	L	L	L	L	L	L	0	3	8	Y	MED	34
35	E. of #101 N. of 34	NA	R	51032BB	Gulcana	M	M	L	L-M	L	L	L	L	L	L	0	3	8	Y	MED	35
36	Tyee	<0.5	PFOC	51032CC	Umpqua	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	36
37	Poplar	NA	R/PFOC	51029CB	Coolidge 13	M	M	L	L	L	L	L	L	L	M	0	3	7	Y	MED	37
38	Ekland Rd.	<0.5	PFOC	51029BC	Ekland	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	38
39	Elk Cr. Rd.	NA	R	51029CA	Ecola Creek	H	L-M	L	M	L	L	L	L	L	L	1	2	8	Y	MED	39
40	Elk Cr. Rd.	NA	R	51029CA	Ecola Creek	H	M	L	M	L	L	L	L	L	L	1	2	7	Y	MED	40
41	Elk Cr. Rd.	NA	R	5109CA	Ecola Creek	H	L-M	L	M	L	L	L	L	L	L	1	2	8	Y	MED	41
42A	Haskell Ln	11	PFOC	51029;51029BC/BD/CA	Ecola Creek	H	H	L	H	M	L-M	H	H	H	H	7	2	1	Y	HIGH	42A
42B	Tertiary Treatment	29	PFOC	51029;510	Ecola Creek	H	H	L	H	L	L	M	H	H	L	5	1	4	Y	HIGH	42B
43	Elliot/Sunset	<0.5	PFOC/PEMC	51030DA	Coolidge 3	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	43
44	Elk Cr. Rd.	NA	R	51029CA	Ecola Creek	L	M	L	L	L	L	L	L	L	L	0	1	9	Y	LOW	44
45	Gulcana/Hemlock	NA	R	51031AA	Gulcana	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	45
46	Haystack Resort	NA	R	51032CB	Tolovana	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	46
47	Hemlock/Umpqua	NA	R	51031DD	Umpqua	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	47
48	Tolovana/Hemlock	<0.5	R/PFOC	51032CC	Coos	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	48
49	Oswald West Spring	NA	R, spring	51031AA	?	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	49
50	N. of Ecola Cr/W. of 101	2.5	R/PFOC	51020CB/CA	Ecola Creek	H	H	L	M	M	M	L	L	L	M	2	4	4	Y	HIGH	50
51	Kenal/Pacific	<0.5	R/PFOC	4106BC	Brallier	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	51
52	NW of Nazina/Hemlock	NA	R	51031AA	Chena	L	L	L	L	L	L	L	L	L	L	0	0	10	N	NA	52

TABLE 2

LEGEND

- NWI - National Wetlands Inventory wetland classification
- R - riverine
- PSSC - palustrine, scrub-shrub, seasonal
- PFOC - palustrine, forested, seasonal
- EEM - estuarine emergent
- ESS - estuarine scrub-shrub
- PEM - palustrine emergent
- EI - Ecological Integrity
- WH - Wildlife Habitat
- FISH - Fish Habitat
- N - Noteworthiness
- EP - Educational Potential
- REC - Recreation
- FC - Flood Control
- SED - Sediment Trapping
- NUT - Nutrient Retention
- UQ - Urban Quality of Life
- Sign. - Significance (yes or no); based on wetland functional values; if all values are rated low, no significance
- Degree - Degree of Significance
- NA - Not applicable

### Forested Wetlands (PFOC)

Twenty-seven forested wetland sites were inventoried. All of these sites are associated with stream corridors or relict drainages. Forested wetland vegetation included a multi-layered canopy dominated by Sitka spruce, red alder, Hooker's willow, salmonberry, skunk cabbage, slough sedge, and lady fern. The diverse layered canopy provides cover, food, nesting and perching sites for a variety of wildlife.

The degree of significance of forested wetlands ranged from Low to High. Low significance reflects the isolation of a site from other natural areas, low vegetative species diversity, and impacts caused by soil, vegetation and/or hydrologic disturbance (Sites 5, 7, 8, 13, 14, 23, 36, 38, 43, 48, and 51). Highly significant sites were large, usually greater than 1 acre, and located adjacent to permanent water source; vegetation on these sites consisted of a variety of food and cover plants for wildlife (Sites 10A, 11, 19, 20, 25, 26, 28, 42B and 50). Sites 19, 20, 42B, and 50 are located near Ecola Creek and provide excellent habitat for small herds of elk which frequent these sites. Each of these sites contains nearly pristine vegetation and some ancient spruce trees. Site 11 is the smallest of these sites but ranks high because it is already established as a park in the center of the city; this increased its urban quality and recreation function values. Sites 25, 26, and 28, which are adjacent sites, are highly significant because the uplands between them have not been developed and together they create a large block of upland and wetland forest. Forested wetlands are one of the most difficult wetland types to replace or restore because of the slow growth rates of trees.

### Stream Sections (R)

Thirty-eight stream section sites were inventoried. The Cannon Beach UGB is long and narrow with numerous drainages crossing westward to the ocean. These stream corridors have become interrupted and isolated by major roads such as Highway 101 and Hemlock St, the old Coast Highway, culverts, fill, and development. All of these site disturbances impact the wetland functional values of the site. They impact wildlife habitat, water quality and fish habitat.

The quality and diversity of vegetation along stream corridors influences the diversity of wildlife. Greater plant diversity provides greater food, cover and reproductive resources for wildlife. A site with limited plant diversity has lower wildlife habitat value. Plant diversity may be reduced by disturbance such as channelization of streams and fill for homesites. This can also promote noxious weed growth on the associated disturbed soils, often resulting in dense blackberry thickets that reduce access for large mammals like deer and elk. Himalayan blackberry and English ivy are examples of nuisance plants in Cannon Beach that reduce food, cover and breeding potential for wildlife species because they out-compete native herbaceous plants.

Riparian vegetation also benefits water quality. The riparian canopy shades the stream, helping maintain cooler water temperatures to potentially support aquatic invertebrates, amphibians, and fish. It prevents banks from eroding and contributing silt to the stream. Vegetation on slopes also regulates the rate of runoff into the drainage basin and can physically and biologically remove potential contaminants originating in upland areas. It is important to preserve riparian vegetation to protect water quality.

The majority of streams in the UGB have no habitat for fish because they are short, low flow, and high gradient streams. The exceptions are Ecola Creek and Logan Creek which provide or have the potential to provide fish habitat. Fish species recorded during spawning surveys in Ecola Creek by ODFW (C. Barber, ODFW, pers. comm. 1993) include winter steelhead trout, coho salmon, and sea-run and resident cutthroat trout. Fall chinook salmon may also occur in Ecola Creek. No surveys have been conducted by ODFW in Logan Creek which enters Ecola Creek at the City Park. However, the lower stretch is accessible to juveniles of all the fish species found in Ecola Creek which may move upstream in Logan Creek to feed. The tide gates between the channels in the forested and emergent wetlands flanking the sewage lagoons may block fish passage from Ecola Creek. Consequently it is not likely that juvenile salmonids could move in and out of these freshwater channels from Ecola Creek to feed and rear. No surveys have been conducted by ODFW in these channels to confirm the presence of fish, however.

Thirty-eight stream section sites were inventoried. Some of these streams have more than one site number due to barriers and extreme changes in site conditions caused by urban development. Ratings of stream sections ranged from not significant to highly significant. Sites rated not significant or low significance were generally seasonal, isolated, culverted streams sandwiched between development (Sites 1-6, 14, 22-24 for example). In extreme cases, the stream was channelized (Sites 9 and 49). Highly significant stream sections contain perennial water, provide travel routes for wildlife, and are located within larger forested wetlands and uplands (Sites 17 and 50, for example).

## 8 RECOMMENDATIONS

The total acreage of the study area exclusive of streets is approximately 570 acres. Of this area, approximately 100 acres are wetlands.

This inventory identified and evaluated 52 wetland and water resources within the Urban Growth Boundary of the City of Cannon Beach. Water, permanent and seasonal, is critical to all wildlife species. It must be of good quality and accessible. All wetlands are regulated by the U.S. Army Corps of Engineers and by the Oregon Division of State Lands. Permits are required from both agencies for placing fill in wetlands, and from DSL for removal from or alteration of wetlands. Wetland boundaries determined for the purpose of this inventory are not delineations as required for state and federal permit applications.

The following recommendations are made for protection of the wetland resources:

1. Forested wetlands are most difficult to replace. Fragmentation of remaining forested wetlands should be avoided to the maximum extent possible.
2. Habitat links between uplands and wetland/water resources should be protected to provide travel corridors for wildlife, particularly elk and deer. Wildlife require access to food, cover and water resources and safe passage for traveling to feeding and rearing sites.
3. Hydrology and soil resources of wetlands need to be protected. Proposed development near wetlands should be carefully reviewed to determine the existing hydrologic patterns that maintain the wetland, and measures should be incorporated to prevent excessive flooding or dewatering of the wetland resource. Development should not be allowed that will disrupt surface or groundwater flows to wetland resources. Soils in wetlands should be protected from compaction and erosion if heavy equipment is used in and around these areas.
4. Fill material, including soil, yard debris, and animal waste should be removed where it has been dumped in wetlands. This will improve wetland and water quality. The City should encourage composting and begin a city wide yard debris collection or composting program to prevent unwanted dumping in natural areas.
5. Invasive plants should be removed to restore native plant communities and enhance wildlife habitat and ecological integrity. English ivy has been used historically to stabilize banks and has gained a foothold along Highway 101. Himalayan blackberry has spread throughout disturbed soil areas. Restoration could be accomplished by pulling out these

invasive species; often native species are still present beneath and will thrive once the nuisance plant is removed. Occasionally, native species must be replanted. Native plant alternatives to English ivy should be used to stabilize banks.

6. Water quality and the integrity of stream corridors should be preserved. Development on steep sided slopes that can result in erosion should be discouraged or closely regulated. Planting guidelines for fill and earth disturbing activities can prevent unstable fill slopes and disturbed ground from erosion or invasion of non-native species. Logging operators upstream from the UGB should be encouraged to use forestry best management practices to reduce downstream degradation of streams.
7. Educate the public. Wetlands associated with City parks or near a school have the greatest potential to serve as educational and passive recreation sites. Soft trails or boardwalks may encourage a closer look at some wetland features and foster appreciation of the natural resources. Interpretive signs and brochures can also help the public understand the importance and sensitivity of these natural resources.
8. Structures on pilings proposed over wetland areas should be carefully reviewed at the local level and referred to appropriate state and federal authorities. Development in wetlands is regulated by the state through the Oregon Division of State Lands under ORS 196.800-196.990. The U.S. Army Corps of Engineers has authority to regulate wetlands under Section 404 of the Clean Water Act and has interpreted the use of pilings as a substitute for fill to be subject to that agency's regulation (Regulatory Guidance Letter 90-8). Applications for these types of proposed developments should go through the state and federal wetland permit processes for review.

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Arch Cape, Oregon.

## APPENDICES

APPENDIX A: RESUMES

APPENDIX B: SOILS AND NATIONAL WETLAND INVENTORY MAPS

APPENDIX C: SUMMARY SHEETS

APPENDIX D: DATA SHEETS AND WETLAND FUNCTIONAL VALUES  
ASSESSMENT FORMS

APPENDIX A

RESUMES

**JANET BURCHAM, M.S.**

**YEARS OF EXPERIENCE: 15**

**AREA OF SPECIALIZATION:**

Fisheries, wetland, and terrestrial ecology

**EDUCATION:**

B.S., fisheries science, Oregon State University (1978)  
M.S., fisheries science, Texas A & M University (1985)

**AREAS OF EXPERTISE:**

- \* Fish habitat and ecology research and monitoring
- \* Environmental impact assessment
- \* Threatened and endangered species surveys
- \* Wetland and riparian delineations (Unified Federal Method)
- \* Preparation and review of technical documents for publication
- \* Wildlife habitat evaluations



**CHRISTIE GALEN, B.S.**

**YEARS OF EXPERIENCE: 15**

**AREA OF SPECIALIZATION:**

Wildlife, wetland and terrestrial ecology, environmental planning

**EDUCATION:**

B.S., biology, Portland State University (1978)

**AREAS OF EXPERTISE:**

- \* Habitat restoration
- \* Wildlife and habitat inventories
- \* Threatened and endangered species surveys
- \* Terrestrial and wetland habitat enhancement planning
- \* Wetland and riparian assessments and boundary determinations  
(Unified Federal Method)
- \* Mitigation planning
- \* E.I.S. and Environmental assessments
- \* Wildlife research
- \* H.E.P. experience



### AREAS OF EXPERTISE

- Land use planning
- Natural resource inventories and management planning
- Project management
- Oral and written presentations on planning and coastal resource management

### EDUCATION

Master of Urban and Regional Planning; University of Oregon; Eugene, Oregon (1982).

Bachelor of Science, Natural Resources; University of California; Berkeley, California (1979).

### PROFESSIONAL AFFILIATIONS

American Planning Association, Oregon Chapter.

Pacific Estuarine Research Society

### PROFESSIONAL EXPERIENCE

Consulting Planner. Astoria, Oregon. Owner. Starting and managing an environmental/land use planning consulting business. Areas of emphasis include Oregon land use planning process; Washington Growth Management, SEPA, and SMP processes; coastal resource management and planning; GIS and database development and management; and local government planning issues. January 1992 through present.

Columbia River Estuary Study Taskforce. Astoria, Oregon. Executive Director. Responsible for project development and implementation; supervision of professional and clerical staff; management of \$100,000 annual budget; and project coordination with federal, state and local governments. Projects included wetland planning, grant writing, permit development and review, in addition to others related to the Columbia River Estuary. March 1989 through December 1991.

Columbia River Estuary Study Taskforce. Astoria, Oregon. Planner. Project implementation, permit review, data analysis, technical writing, public presentations, and current planning tasks. Projects included wetland planning, permit development and permit review, in addition to others related to the Columbia River Estuary. October 1985 through April 1989.

Clatsop County Department of Planning and Development. Astoria, Oregon. Senior Planner. Long-range planning, zoning ordinance administration, citizen involvement coordination, Planning Commission presentations, and Comprehensive Plan development. Responsibilities included review of wetland and riparian area development proposals; and forest and rural lands planning. September 1982 through October 1985.

University of Oregon. Eugene, Oregon. Teaching assistant. Taught courses in land use planning and in statistics. 1981 - 1982.

#### SELECTED PUBLICATIONS AND PROJECTS

Barnes, M. 1992. *1992 Annual Overall Economic Development Program Progress Report*. Astoria, OR: Clatsop Economic Development Council.

Barnes, M. 1992. *Neawanna Creek Estuary Wetlands Preserve Proposal*. Astoria, OR: North Coast Land Conservancy, Inc.

Barnes, M., and Rushmore, C. 1992. *Commercial Fishing Vessel Moorage in the Columbia River Estuary*. Astoria, OR: Columbia River Estuary Study Taskforce.

Barnes, M., and Rushmore, C. 1991. *Columbia River Estuary Regional Wetland Management Planning Framework*. Astoria, OR: Columbia River Estuary Study Taskforce.

Barnes, M., and Fox, D. 1988. *Columbia River Estuary Regional Management Plan*. Astoria, OR: Columbia River Estuary Study Taskforce.

Barnes, M.; Marshall, J.; and Fox, D. 1987. *Mitigation and Restoration Plan For The Columbia River Estuary*. Astoria, OR: Columbia River Estuary Study Taskforce.

**AREAS OF EXPERTISE**

- Land use planning
- Natural resource inventories and management planning
- Project management
- Oral and written presentations on planning and coastal resource management

**EDUCATION**

Master of Urban and Regional Planning; University of Oregon; Eugene, Oregon (1982).

Bachelor of Science, Natural Resources; University of California; Berkeley, California (1979).

**PROFESSIONAL AFFILIATIONS**

American Planning Association, Oregon Chapter.

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**PROFESSIONAL EXPERIENCE**

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Barnes, M. 1992. *Neawanna Creek Estuary Wetlands Preserve Proposal*. Astoria, OR: North Coast Land Conservancy, Inc.

Barnes, M., and Rushmore, C. 1992. *Commercial Fishing Vessel Moorage in the Columbia River Estuary*. Astoria, OR: Columbia River Estuary Study Taskforce.

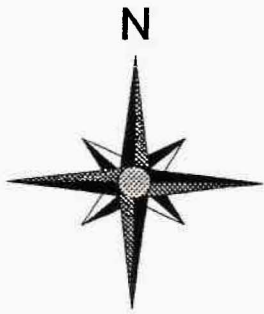
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Barnes, M., and Fox, D. 1988. *Columbia River Estuary Regional Management Plan*. Astoria, OR: Columbia River Estuary Study Taskforce.

Barnes, M.; Marshall, J.; and Fox, D. 1987. *Mitigation and Restoration Plan For The Columbia River Estuary*. Astoria, OR: Columbia River Estuary Study Taskforce.

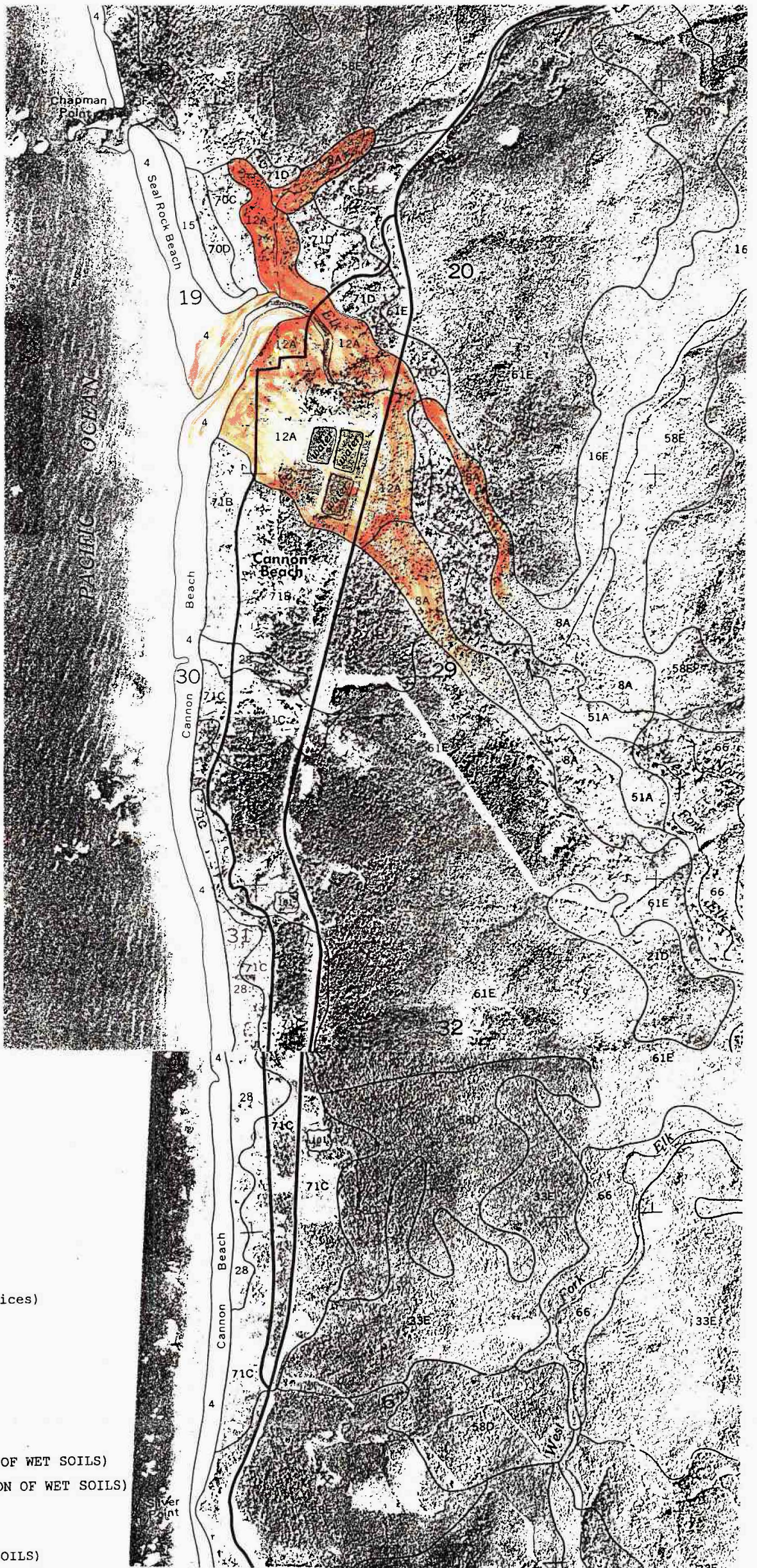
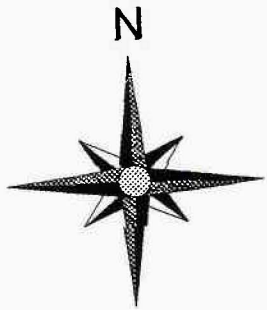
APPENDIX B

SOILS AND NATIONAL WETLAND INVENTORY MAPS



SOURCE: National Wetlands Inventory, Tillamook & Cannon Beach  
(U.S. Fish and Wildlife Service)

- E2USN Estuarine tidal
- PFOC Palustrine forested Seasonal
- RFSBC Riverine, Intermittent
- R3UBH Riverine, Upper Perennial, Permanent
- R1UBV Riverine, Tidal, Permanent
- E2EMP Estuarine, Intertidal, Emergent
- E1UBL Estuarine, Subtidal
- PFOR Palustrine, Forested Seasonal
- PEMR Palustrine, Emergent, Seasonal Tidal
- E2EMP Estuarine, Intertidal, Emergent
- E1UBL Estuarine, Subtidal
- PSSC Palustrine, Scrub/Shrub, Seasonal
- M2USN Marine, Interidal (beach)
- PEMC Palustrine, Emergent, Seasonal
- PUBK Palustrine, Artificial (Treatment Lagoons)



SOURCE: Soil Survey of Clatsop County, Oregon  
 Sheets 40 & 45 (U.S.- Soil Conservation Services)

Soil legend

- 3F ASCAR- ROCK OUTCROP COMPLEX, 60 TO 90% SLOPES
  - 4 BEACHES
  - 15 DUNE LAND (\*INCLUSION WET SOIL)
  - 70C WALDPOR FINE SAND, 3 TO 15% SLOPES (\*INCUSION OF WET SOILS)
  - 71D WALLUSKI SILT LOAM, 15 TO 20% SLOPES (\*INCLUSION OF WET SOILS)
  - \*8A BRENNER SILT LOAM, 0 TO 3% SLOPES
  - \*12A COQUILLE-CLATSOP COMPLEX, 0 TO 1% SLOPES
  - 51A NEHALEM SILT LOAM, 0 TO 3% (\*INCLUSION OF WET SOILS)
  - 71B WALLUSKI SILT LOAM, 0 TO 7% (\*INCLUSION OF WET SOILS)
  - 28 HUMITROPEPTS-TROPAQUEPTS COMPLEX, 0 TO 20% (\*SOME AREAS OF TROPAQUEPTS)
  - 71C WALLUSKI SILT LOAM, 7 TO 15% SLOPES, (\*INCLUSION OF WET SOILS)
  - 61E TEMPLETON-ECOLA SILT LOAM, 30 TO 60% SLOPES
  - 33E KLOOTCHE-NECANICUM COMPLEX, 30 TO 60% SLOPES
  - 58D SKIPANON GRAVELLY SILT LOAM, 3 TO 30% (\*INCLUSION OF WET SOIL)
  - 28 HUMITROPEPTS-TROAQUEPTS COMPLEX, 0 TO 20% SOME AREAS OF TROPAQUEPTS
- \* indicates hydric soil

APPENDIX C

SUMMARY SHEETS

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 1 ACRES: NA NWI CLASSIFICATION: R  
LOCATION: Between Hwy 101 and Logan St., southern end of City BASIN NAME: Logan  
TAX MAP NO.: 4106CB TAX LOTS: 3405, 3406, DATE OF INVENTORY: 4/20/93  
3407, 3409

Wetland Functional Values Assessment <sup>1</sup>		
Ecological Integrity	<u>L</u>	Recreation <u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>L</u>

**GENERAL DESCRIPTION** This site is a small, narrow seasonal stream channel averaging 5 ft. wide and 5 in. deep, located between Hwy 101 and Logan Lane. It is culverted under a homesite and Logan Road. Above the culvert, two channels combine into one and the wetland at the confluence is approximately 30 ft. wide. Vegetation is dominated by a dense salmonberry thicket with red alder canopy. Other species include twinberry, red elderberry, lady fern, bulrush, rush, buttercup and water parsley. Coarse woody debris is abundant and provides cover for small wildlife species. Adjacent hillslopes are steep, and the wetland boundary occurs at the toe of the slope where sword fern occurs.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All of the functional values with the exception of Wildlife Habitat rated low due to the small size of the drainage and the level of existing disturbance from residential development, construction of Highway 101, and upstream logging. Wildlife Habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Filling and culverting of channel.

**SIGNIFICANCE** Low. This stream and riparian community has wildlife value but it is small and isolated from other natural areas by Highway 101. Consequently, it is primarily important for drainage runoff and is rated low relative to other Cannon Beach Wetlands.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 2 ACRES: NA NWI CLASSIFICATION: R  
LOCATION: Between Hwy 101 and Logan Lane, south end of City. BASIN: Maher  
TAX MAP NO.: 4106CB TAX LOTS: 3408, 3411 DATE OF INVENTORY: 4/20/93

Wetland Functional Values Assessment <sup>1</sup>		
Ecological Integrity	<u>L</u>	Recreation <u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>L</u>

**GENERAL DESCRIPTION** Two small tributaries join to form one channel averaging 5 ft. wide and 5 in. deep east of Logan Lane. Hillslopes are very steep and stream is high gradient. Second growth spruce and alder dominate the canopy with western red cedar present. The understory is dominated by salal, sword fern, false lily-of-the-valley and lady fern. The wetland is limited to the channel except west of Logan Lane where a pocket of slough sedge approximately 20 ft. wide occurs. In this area the stream is ditched along a beach access path below Logan Lane until it reaches the beach. This site is bounded by residential development.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All of the functional values except wildlife habitat rated low because of the high level of disturbance (ditching, culverting, etc.) along this drainage. Wildlife habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Most of the channel has been ditched or culverted. English ivy is spreading into the riparian zone; it should be removed before it degrades native flora.

**SIGNIFICANCE** Low. Because of its small size and disturbance factors, this site is primarily important for drainage runoff.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 3 ACRES: NA NWI CLASSIFICATION: R  
LOCATION: Between Maher St. and West Way BASIN: Atkins  
TAX MAP NO.: 4106CB TAX LOTS: 901, 906, 1700, DATE OF INVENTORY: 4/20/93  
1800, 1803, 1805, 1806, 1900

Wetland Functional Values Assessment <sup>1</sup>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Small stream with a narrow, incised channel that is approximately 5 ft. wide. Water depth ranged from 1-5 inches. Hillslopes are moderate to steep. Vegetation is dense, brushy salmonberry with a second growth Sitka spruce canopy. The understory is dominated by sword fern and false lily-of-the-valley. The wetland is limited to the channel which is very short between Hemlock St. and Logan Lane.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All of the functional values rated low except Wildlife Habitat because of the short length of open channel remaining and the existing level of disturbance. Wildlife Habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Fill and lawn development have occurred on hillslopes within the riparian area. If filling is allowed in riparian habitat, erosion control measures must be taken to protect water quality and prevent stream degradation. Adjacent residents have dumped yard debris into the corridor. Disposal of yard debris should not be permitted in stream corridors.

**SIGNIFICANCE** Low. This site is primarily important for drainage runoff.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 4 **ACRES:** <0.5 **NWI CLASSIFICATIONS:** R/PSSC  
**LOCATION:** Between Pacific St. (Beach Loop) and Kenai St. **BASIN:** Kenai  
**TAX MAP NO.:** 4106BC **TAX LOTS:** 9800, 9801, 9802, **DATE OF INVENTORY:** 4/20/93  
9900, 10,000

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This stream is an open channel for only a short stretch between Hemlock St. and Pacific St. Wetlands are generally confined to the channel except in an area disturbed by fill where the zone of saturation is approximately 20 ft. wide. The canopy is dominated by 15 ft. red alder saplings. The understory contains brushy salmonberry, slough sedge, skunk cabbage, and two species of rushes. Streets and dwellings surround this site. The wetland boundary occurs where vegetation changes from sedges to Himalayan blackberry and Sitka spruce and ground surface is elevated by fill.

**SOIL** Silty Clay (9-17 10 YR 4/1-2 w/5YR 4/6 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** All of the functional values except Wildlife Habitat rated low due to the short length of open channel and the level of disturbance due to filling that has occurred. Wildlife Habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Much of channel has been ditched or culverted. Widest area of wetlands has been partially filled, but this has not effectively altered site hydrology.

**SIGNIFICANCE** Low.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 5 ACRES: <0.5 NWI CLASSIFICATIONS: R/PFOC  
LOCATION: Upstream continuation of Site 4, east of Pacific St. (Beach Loop) BASIN: Kenai  
TAX MAP NO.: 4106BC TAX LOTS: 9400, 9500 DATE OF INVENTORY: 4/20/93

Wetland Functional Values Assessment <sup>1</sup>		
Ecological Integrity	<u>L</u>	Recreation <u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>L</u>

**GENERAL DESCRIPTION** Site 5 is upstream of Site 4 between Hwy 101 and Hemlock St. Hillslopes are moderate. The stream channel averages approximately 1 ft. wide and is braided. Vegetation is older second growth spruce and western hemlock than downstream in Site 4 and a few larger Sitka spruce are present. The understory is dominated by skunk cabbage. The upper end of the wetland is approximately 30 ft. wide and the lower end is approximately 55 ft. wide. Wetlands are defined by the toe of the slope where vegetation changes from skunk cabbage to sword fern, salal, and false lily-of-the-valley.

**SOIL** Silty Clay Loam; mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Most functional values rated low due to the short length of open channel. Wildlife Habitat rated medium due to the presence of permanent water and Noteworthiness rated medium due to some very large Sitka spruce located along the banks.

**IMPACTS/DISTURBANCES** Grading or filling has occurred on the channel near Hemlock St. English ivy is encroaching from Highway 101 fill slopes. Himalayan blackberry dominates residential fill. Invasive species such as ivy and blackberry should be controlled.

**SIGNIFICANCE** Low. Because of its small size and high level of disturbance, this site rates low. Restoration and enhancement of native flora--preservation of old growth Sitka spruce and permanent water would increase the value of this site.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 6    **Acres:** NA    **NWI CLASSIFICATION:** R  
**LOCATION:** Between Hemlock St. and Hwy 101, north of Kenai St.    **BASIN:** Brailer  
**TAX MAP NO.:** 4106BC    **TAX LOT:** 10600    **DATE OF INVENTORY:** 4/21/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Very small stream culverted for all of its length below site from Hemlock St. to the beach. Channel is confined between high ground to the south and fill placed for lawn development to the north. The channel and wetland fringe includes approximately 10 ft. The channel averages 3 ft. wide and 6 in. deep. The hillslope above the south bank is undeveloped mixed coniferous/deciduous forest. The canopy is dominated by red alder and western hemlock. The understory is dominated by salmonberry, false lily-of-the-valley, water parsley, lady fern, and English ivy. Wetlands are defined by the toe of the slope and dominance of sword fern.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All functional values rated low except Wildlife Habitat due to the short length of open channel and the impacts of fill on this small stream. Wildlife Habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Filling for building on one side and culverting of much of stream length. Encroachment of English ivy.

**SIGNIFICANCE** Low. This site is small and isolated from other natural areas by roads and residences.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 7 ACRES: <1 NWI CLASSIFICATIONS: R seasonal/PFOC  
LOCATION: Between Hwy 101 and Hemlock St. BASIN: Ocean  
TAX MAP NO.: 4106BC TAX LOTS: 4300, 4400 DATE OF INVENTORY: 4/21/93  
4500, 4501

Wetland Functional Values Assessment <sup>1</sup>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** Mosaic of wetlands and uplands with three braided channels. The stream channel divides, flows subterranean, resurfaces, and forms pools. Stream channels average 3 ft. wide and 5 in. deep. Vegetation is dominated by Sitka spruce, salmonberry, and skunk cabbage and includes lady fern, slough sedge, and false lily-of-the-valley. The stream is culverted below the site from Hemlock Street to the beach. Wetlands are defined by the change in vegetation from skunk cabbage to sword fern.

**SOIL** Silty Clay Loam (10YR 4/1, 10 YR 4/3 with 7.5YR 5/8 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Urban quality of life rated medium due to the visual aesthetics of the site and limited disturbance.

**IMPACTS/DISTURBANCES** English ivy is common in the margins of the wetlands. It should be removed before it encroaches the site.

**SIGNIFICANCE** Low. This site contains some significant wetland features but is isolated by two major roads.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 8    **ACRES:** <0.5    **NWI CLASSIFICATIONS:** PFOC  
**LOCATION:** East of Pacific St. at intersection with Midway St.    **BASIN:** Ocean  
**TAX MAP NO.:** 4106BC    **TAX LOT:** 2900    **DATE OF INVENTORY:** 4/21/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This undeveloped lot slopes down from Hemlock St. to Pacific St. and is vegetated with second growth Sitka spruce with an understory of slough sedge. The property may have been wet over a larger area at some earlier time, but the small stream (Site 9) that may have supplied some of the water is now ditched along the property line. The lowest area of the property adjacent to Pacific St. still has wetland hydrology. The extent of saturation within 12 in. of the surface defines the wetland boundary which is approximately 30 ft. by 30 ft.

**SOIL** Silty Loam (10YR 2/1); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** All functional values rated low due to the limited size of the site and the altered hydrology and vegetation community. The second growth forest type and size on this site is widespread in the UGB.

**IMPACTS/DISTURBANCES** Fill was placed in the lowest portion of the property over the last several weeks just prior to the field survey but not spread flat.

**SIGNIFICANCE** Low due to its small size, fill, and hydrologic alterations. The extent of jurisdictional wetlands needs to be examined more carefully than this inventory allows because of filling and hydrologic alterations.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 9 ACRES: NA NWI CLASSIFICATIONS: R, seasonal  
LOCATION: East of Pacific St. at intersection with Midway St. BASIN: Ocean  
TAX MAP NO.: 4106BC TAX LOTS: 2800, 2900 DATE OF INVENTORY: 4/21/93

Wetland Functional Values Assessment <sup>1</sup>		
Ecological Integrity	<u>L</u>	Recreation <u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>L</u>

**GENERAL DESCRIPTION** Small stream issuing from a culvert under Hemlock St. flows a short distance in the natural channel, then is ditched along the property lines in or adjacent to Midway St. right-of-way before being culverted the remaining length to the beach. The stream is approximately 3 ft. wide and 6 in. deep. Driveway and lawn development have removed riparian vegetation for most of the length of the natural channel. Remaining vegetation includes Sitka spruce, red elderberry, false lily-of-the-valley, and lady fern. Wetlands are confined to the channel.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All functional values rated low because the channel has been so altered for residential and road development.

**IMPACTS/DISTURBANCES** Ditching and culverting have altered natural features. Vegetation in the lower area is dominated by weedy species including reed canarygrass and Himalayan blackberry.

**SIGNIFICANCE** Low due to its small size and high level of disturbance.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 10a ACRES: ≈ 30

NWI CLASSIFICATION: PFOC

LOCATION: North, E., & S. of the sewage treatment ponds

BASIN: Ecola Creek

TAX MAP NO.: 51020CC; TAX LOT: 200; 201;

DATE OF INVENTORY: 4/21/93

51029

200

51020CB

3700, 5301;

51020CA

300

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>H</u>	Recreation	<u>H</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>M</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>H</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>H</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** This site includes the forested wetlands north, east, and south of the sewage treatment ponds. Ecola Cr. divides the north end. Before construction of Highway 101, site 10A was contiguous with site 42. Seeps and flowing water occur throughout the area with some pools greater than 1 ft. deep. The red alder canopy is of more than one age. The shrub layer is dominated by twinberry and includes salmonberry, Hooker's willow, and red elderberry. The herbaceous layer is dominated by skunk cabbage in the wettest areas and includes slough sedge, water parsley, and lady fern. A well traveled path meanders through the south end. It is used by pedestrians, fishers, and bicyclists. It contains a limited amount of garbage. The wetland boundaries are defined by the toe of the slope adjacent to Hwy. 101 and to the upland forest to the north and south.

**SOIL** Silty Clay with fine gravel (10YR 2/1, 5YR 5/8); mapped as Coquille-Clatsop Complex SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Many functional values rated high due to the large size of this site remaining undisturbed after construction of the sewage treatment ponds, the structural and species diversity of the forest/shrub/emergent community, public access, its location contiguous with extensive wetlands and forest lands of Ecola Creek Basin, and the valuable open space refugia for wildlife.

**IMPACTS/DISTURBANCES** Construction of the sewage treatment ponds eliminated the center of this large wetland area and redirected natural water flow, but the site still remains wetlands. Biking should not be allowed on trails through the site because it degrades them and causes erosion of soil and degradation of water quality.

**SIGNIFICANCE** High. The multi-layered canopy with well developed understory benefits wildlife and people. Diverse habitat with permanent water, abundant snags, coarse woody debris, large size, trails, etc. This site should be preserved and maintained as a natural area for passive recreation, education, and refuge for wildlife.

<sup>1</sup>Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 10b **ACRES:** ≈ 6

**NWI CLASSIFICATION:** EEM/ESS/PEM

**LOCATION:** West of the sewage treatment ponds

**BASIN:** Ecola Creek

**TAX MAP NO.:** 51020CC **TAX LOT:** 201

**DATE OF INVENTORY:** 4/21/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>H</u>	Recreation	<u>H</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>M</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>M</u>
Noteworthiness	<u>H</u>	Nutrient Retention	<u>M</u>
Education Potential	<u>H</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** This site includes the estuarine/palustrine emergent wet meadow with fringing willow stands west of the sewage treatment ponds. Vegetation is dominated by Lyngbye's sedge and Pacific silverleaf. Hooker's willow is encroaching into the emergent habitat degrading the estuary. Elk graze the meadow seasonally. The wetland boundary is defined by fill for roadways and parking lots.

**SOIL** Silty Clay (10YR 3/1-2 with sulfidic odor); mapped as Coquille-Clatsop Complex by SCS.

**WETLAND FUNCTIONAL VALUES** Many functional values rated high due to the large size and near-natural condition of the site. The site provides valuable open space for wildlife; it is contiguous with extensive wetlands and forest lands of Ecola Creek drainage.

**IMPACTS/DISTURBANCES** Construction of the sewage treatment ponds eliminated the center of this large wetland area and redirected natural water flow, but it is still a productive wetland.

**SIGNIFICANCE** High. This large site of diverse habitat is a valuable refuge for wildlife and provides scenic and aesthetic benefits for people.

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<sup>1</sup>*Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 11 ACRES: <0.5

NWI CLASSIFICATION: PFOC

LOCATION: Elk Run City Park at Spruce St. south of 1st St.

BASIN: Commercial 3

TAX MAP NO.: 51030AA TAX LOT: 3700, 3701, 3702,  
3800, 4401, 4402

DATE OF INVENTORY: 4/21/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>M</u>	Recreation	<u>H</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>M</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** This undeveloped lot maintained as a natural wayside by the City is a remnant of old growth Sitka spruce forest with depressions of pooled water, skunk cabbage, and a meandering stream channel. The wetland is small and isolated, surrounded by Spruce and Hemlock Streets and Ecola Square. The wetland boundary is defined by fill material and a topographic break as well as the change in vegetation from skunk cabbage to sword fern and salal.

**SOIL** Silty Clay (10YR 2/2, 4/4 with 7.5YR 4/6 mottles) mapped as Coquille-Clatsop Complex by SCS.

**WETLAND FUNCTIONAL VALUES** This site rated medium for noteworthiness because it is an old growth forest remnant with a natural stream channel. Education potential rated medium due to its small size, central location, and public access. Urban Quality of Life rated high for its visual aesthetics. Ecological Integrity and Wildlife Habitat rated medium due to its small size and isolation.

**IMPACTS/DISTURBANCES** Fill for the development of building pad and parking lot for Ecola Square has been pushed into the wetlands along the north side.

**SIGNIFICANCE** High. The dominance of native vegetation, pools of water, and proximity to the city increase the significance of this site. This is a great site to provide the public with environmental interpretation of forest/skunk cabbage community, importance of wetlands, etc. It should continue to be protected as a park for public use.

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<sup>1</sup>Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 12    **ACRES:** <1    **NWI CLASSIFICATIONS:** PFOC/R, seasonal  
**LOCATION:** East end of Gower St.    **BASIN:** Coolidge 12 & 13  
**TAX MAP NO.:** 51029BC    **TAX LOTS:** 7100, 7101, 7200,    **DATE OF INVENTORY:** 4/21/93  
7400, 7500, 7600, 7900, 8000

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>L-M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L-M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L-M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** This site was observed from neighboring properties and the road because access was denied. The property appears to be a mosaic of uplands and wetlands with older second growth alder and spruce canopy and diverse shrub and groundcover vegetation. A small stream enters and exits the site with pockets of skunk cabbage.

**SOIL** No sample (access denied); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** The functional values of ecological integrity, wildlife habitat, noteworthiness, and urban quality of life rated moderate at most due to the large size of this undeveloped lot which includes a mixture of uplands and wetlands. The wetlands alone are of less significance, but combined with the surrounding older second-growth forest they offer a diversity of wildlife habitat. The wetlands provide seasonal water for wildlife that inhabit the forest.

**IMPACTS/DISTURBANCES** Difficult to assess without access.

**SIGNIFICANCE** Medium. Without protection of adjacent uplands this site would be of low significance.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 13    **ACRES:** <0.5  
**LOCATION:** On Cypress Ct. off Dawes Ave.  
**TAX MAP NO.:** 51029CB    **TAX LOTS:** 1801, 1805,  
1806, 1808

**NWI CLASSIFICATION:** PFOC  
**BASIN:** Coolidge 13  
**DATE OF INVENTORY:** 4/21/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>		
Ecological Integrity	<u>L-M</u>	Recreation <u>L</u>
Wildlife Habitat	<u>L-M</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>L-M</u>

**GENERAL DESCRIPTION** Access was denied on part of this site; observations were made from adjoining properties. This site is continuous with Site 12. The canopy is dominated by red alder. The shrub understory contains scattered salmonberry and salal. The herbaceous understory is dominated by slough sedge. Surface water does not appear to be present on site.

**SOIL** Silt Loam (10YR 2/1); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** The functional values of ecological integrity, wildlife habitat, and urban quality of life rated moderate at most mainly because this undeveloped site is in close proximity to Site 12 which increases its size and habitat value. Access was denied, so presence of water could not be verified. No streams entered or left the site.

**IMPACTS/DISTURBANCES** Difficult to assess without access.

**SIGNIFICANCE** Low. This wetland is of low significance due to its small size.

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<sup>1</sup>*Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

SITE NO.: 14 ACRES: <1 NWI CLASSIFICATIONS: PFOC/R  
LOCATION: East of intersection of Dawes and Spruce St. BASIN: Coolidge 13  
TAX MAP NO.: 51029CB TAX LOTS: 1600, 1601, 1604 DATE OF INVENTORY: 4/21/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** This forested wetland was delineated by CH2M Hill (9/11/90). The CH2M Hill wetland delineation identified wetlands over most of TL 1604. We feel these wetlands are not as extensive as previously described but include a mosaic of uplands and wetlands and a perennial stream. The canopy is dominated by red alder. Salmonberry and slough sedge dominate the understory. Sword fern and English holly are scattered throughout the site which indicates wetlands hydrology is not consistently present.

**SOIL** CH<sub>2</sub>M Hill (9-21-90); mapped as Humitropepts-Tropaquepts Complex by SCS.

**WETLAND FUNCTIONAL VALUES** This site received a medium rating for wildlife habitat and urban quality of life because it is a relatively large undeveloped site with a permanent stream. Coarse woody debris, a significant habitat feature for small wildlife species, is common on the forest floor.

**IMPACTS/DISTURBANCES** English holly is scattered throughout the site and should be removed to prevent its spread.

**SIGNIFICANCE** Low. This site is of low significance due to its size and isolation.

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<sup>1</sup>Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 15 ACRES: <0.5 NWI CLASSIFICATIONS: PFOC/R, permanent  
LOCATION: East of Evergreen St. between Dawes and Coolidge Sts. BASIN: Coolidge 13  
TAX MAP NO.: 51030AD TAX LOTS: 12301, 12302, DATE OF INVENTORY: 4/21/93  
12303, 12304, 12305, 12306,  
12307, 12308, 12309

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** This stream is larger than many of the streams in the UGB It is approximately 3-5 ft. wide and 12 in. deep. Its floodplain is a wetland which becomes 50 feet wide in places. Short stretches of it remain forested with a red alder and Sitka spruce dominated canopy. The understory is dominated by skunk cabbage and water parsley with lady fern, red elderberry and salmonberry. Other parts of the channel have been ditched, filled for building pads and parking lots, and culverted. Wetlands are confined to the channel where it is ditched or the edge of fill where it is filled or the break in slope at the boundary between skunk cabbage and sword fern.

**SOIL** Silty Clay Loam (10YR 3/2 with 5YR 4/6 mottles) and Silty Clay (10YR 4/1 with 7.5 YR 4/6 mottles); mapped as Walluski SiL and Humitropepts-Tropaquepts Complex by SCS.

**WETLAND FUNCTIONAL VALUES** Wildlife Habitat rated medium due to the presence of permanent water. Noteworthiness rated medium for the presence of remnant mature spruce forest in an along sections of the channel. Urban Quality of Life rated moderate based on the visual aesthetics in backyards of surrounding development.

**IMPACTS/DISTURBANCES** The most serious impacts have been filling of the channel for building and parking lot pads. This has caused siltation in the stream and channelization in places.

**SIGNIFICANCE** Medium. This stream corridor is moderately significant and the remainder of the open channel should be protected by native tree/shrub buffers if adjacent development is permitted.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 16 ACRES: ≈ 8 NWI CLASSIFICATIONS: PEM/EEM  
LOCATION: North of Ecola Creek BASIN: Ecola Creek  
TAX MAP NO.: 51020CB TAX LOTS: 2800, 3000, 3100 DATE OF INVENTORY: 4/22/93  
3200, 3700, 5300

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>L</u>	Recreation	<u>H</u>
Wildlife Habitat	<u>M-H</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** Site 16 is an palustrine/estuarine emergent wetland. The wetland has been disturbed by construction of a rocky dike near the city park west of the old highway and by grazing horses on the east side of the highway. Vegetation is dominated by slough sedge, beach grass, and soft rush to the west. Other small isolated wetlands are scattered in remnant pockets in the park north of the dike. Hooker's willow is a common constituent of these pockets. East of the old Oregon Coast highway no access was permitted; vegetation is cropped short and difficult to identify from a distance but appears to be a pasture mix with clumps of soft rush. The estuary attracts a variety of resident and migrant wildlife species. Elk also graze the meadow seasonally.

**SOIL** Sandy; mapped as Coquille-Clatsop Complex by SCS.

**WETLAND FUNCTIONAL VALUES** The functional values of recreation and urban quality of life rated high for this site because it has been developed specifically as a park with visual aesthetics and public facilities. Wildlife Habitat rated medium to high; high due to the relationship of Ecola Creek to the site; medium due to the impact of grazing east of the old highway.

**IMPACTS/DISTURBANCES** Fill material is common throughout the site. Himalayan blackberry should be controlled and replaced with native vegetation.

**SIGNIFICANCE** High. The western half of this site has high recreation value and should be maintained for public use. The estuary has high value for migratory and resident wildlife.

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<sup>1</sup>Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 17 ACRES: NA

NWI CLASSIFICATION: R

LOCATION: Between Hemlock St. and Ecola Park Road

BASIN: Breaker's Point

TAX MAP NO.: 51019AD TAX LOTS: 10890, 11200,

DATE OF INVENTORY: 4/22/93

11302, 11101, 11100, 11000, 11003, 10800, 10900, 10901

TAX MAP NO.: 51020CB TAX LOTS: 2800, 3300

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>L</u>
Fish Habitat	<u>M</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>H</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Logan Creek, which flows through Site 20 and Site 16, travels through a variety of habitats from pristine palustrine forest in site 20 to residential development. The channel contains permanent water and is downcut approximately 3.5 ft. in some areas. Riparian vegetation is dominated by a Sitka spruce/red alder canopy with a few very large, old growth Sitka spruce (4+ Ft. in diameter) located adjacent to the channel between Hemlock Street and Ecola Park Highway. The understory in this area is dominated by very brushy Himalayan blackberry due to past filling and land clearing in this residential area. The forested wetland is composed of native species and described in the summary for Site 20.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** Noteworthiness rated high due to the presence of a few very large, old-growth Sitka spruce. Wildlife habitat rated high due to the presence of permanent water and surrounding forested wetland. Fish Habitat rated medium because it is likely to have occasional stray salmon from the Columbia River system. Ecological Integrity rated medium due to the connectivity of habitat it provides and its somewhat disturbed condition.

**IMPACTS/DISTURBANCES** Himalayan blackberry (see above). Remove Himalayan blackberry and replace with native species.

**SIGNIFICANCE** Medium. The site is highly significant due to the presence of a permanent water tributary to Ecola Creek, noteworthy old-growth spruce trees, and multi-layered lush native wetland forest which accompanies most of the stream. It rated medium due to disturbance.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 18    **ACRES:** NA

**NWI CLASSIFICATION:** R

**LOCATION:** From vicinity of 8th & Ecola Park Hwy.,  
downstream to Logan Creek

**BASIN:** Breakers Point

**TAX MAP NO.:** 51019AD & 51019AA    **TAX LOTS:** (see below)

**DATE OF INVENTORY:** 4/22/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This is a small tributary that originates near 8th St. and Ecola Park Hwy. and is one of the small feeder streams to Logan Creek. Much of the stream is ditched and culverted for building pads and road crossings. The natural channel is downcut as much as 4 ft. Wetlands are mainly confined to the channel.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All of the functional values rated low for this stream with the exception of Wildlife Habitat because most of its length has been ditched, culverted, and filled. Wildlife Habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Much of the channel has been straightened and culverted.

**SIGNIFICANCE** This stream is of low significance due to impacts/disturbances.

**TAX MAP NO:** 51019AD  
**TAX LOTS:**

**TAX MAP NO:** 51019AA  
**TAX LOTS:**

1000            2600  
1800            2700  
1900            2800  
1901            2900  
1902            3000  
2000            3100  
2100            3300  
2200            11200  
2500

6200  
5603  
5602  
5700  
5701  
5801

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 19 ACRES: ≈6 NWI CLASSIFICATION: PFOC  
LOCATION: Between Ecola Park Hwy., Laurel St. and 6th St. BASIN: Breakers Point  
TAX MAP NO.: 51019AD & 51019AA TAX LOTS:(see next page)  
DATE OF INVENTORY: 4/22/93

Wetland Functional Values Assessment <sup>1</sup>		
Ecological Integrity	<u>H</u>	Recreation <u>L</u>
Wildlife Habitat	<u>H</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>M-H</u>	Nutrient Retention <u>L</u>
Education Potential	<u>M</u>	Urban Quality of Life <u>H</u>

**GENERAL DESCRIPTION** This forested wetland is large and diverse and contiguous with larger forest lands of Ecola Park to the north. Vegetation is dominated by a red alder canopy with a couple of noteworthy old growth Sitka spruce. The herbaceous understory is dominated by slough sedge, skunk cabbage, water parsley and creeping buttercup. Seasonal pooled water occurs throughout the site. The structural diversity of vegetation and diverse species composition offer high wildlife forage and cover values. Elk sign was common on an elk trail that meanders through the site. Most of the site is wetland with small hummocks of upland interspersed. Wetlands are defined by the change in vegetation from skunk cabbage and/or rushes to sword fern and/or salal.

**SOIL** Sandy Silty Loam (10YR 2/2) and Silty Clay (10YR 4/1 with 5YR 4/6/ 5/8 mottles); mapped as Walluski SiL and Templeton-Ecola SiL by SCS.

**WETLAND FUNCTIONAL VALUES** The functional values of ecological integrity, wildlife habitat, noteworthiness, and urban quality of life rated high because of the large size of the site, its location contiguous to larger forest lands, the natural and diverse structure and species richness of the forest community.

**IMPACTS/DISTURBANCES** Fill from backyards on the eastern margin of the site has encroached on the wetlands. Himalayan blackberry is present in this disturbed part of the site and should be removed and replaced with native species.

**SIGNIFICANCE** High. This site is highly significant for providing a low elevation forage area for elk, a groundwater discharge area for seeps that feed Logan Creek, and for the size of near-natural open space it represents.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 19 (continued) **ACRES:** ≈6

**NWI CLASSIFICATION:** PFO

**LOCATION:** Between Ecola Park Hwy., Laurel St. and 6th St.

**BASIN:** Breakers Point

TAX MAP NO. 51019AD				TAX MAP NO. 51019AA	
TAX LOTS: 3100, 3300				TAX LOTS:	
1500	3300	303	600	6502	6500
1600	3400	304	700	6600	6501
1601	3500	305	701	6700	6503
1700	200	306	800	7500	6400
2900	300	307	900	7501	6801
3000	301	400			
3100	302	500			

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 20 ACRES: ≈ 10+

NWI CLASSIFICATION: PFOC

LOCATION: East of Ecola Park Hwy. and north of 6th St.

BASIN: Breakers Point

TAX MAP NO.: 51020CB TAX LOT: 200

DATE OF INVENTORY: 4/22/93

TAX MAP NO.: 51020BC TAX LOTS: 400, 500, 501, 502, 100

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>H</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>H</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>H</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** This is a large undeveloped area that is the best example of native coastal Sitka spruce forest within the UGB. Large old growth Sitka spruce and red alder dominate the multi-layered forest canopy. The shrub understory is dominated by red elderberry and salmonberry. The herbaceous understory is dominated by skunk cabbage, slough sedge, and water parsley with scattered clumps of lady fern. Depressions filled with seasonal water are scattered throughout the forest. Logan Creek meanders through this site. The area is used by elk and is contiguous with higher elevation forests outside the UGB. Elk move freely between the forested hillsides to the north and the swampy site lowlands.

**SOIL** Fine Sandy Silty Clay (10YR 3/1, 7.5YR 5/8 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** This site is the largest remnant of the original old growth spruce forest remaining in the UGB. For that reason, the functional values of ecological integrity, wildlife habitat, noteworthiness, education potential, and urban quality of life all rated highly. This site contains critical breeding habitat features such as snags, downed woody debris, and seasonal pondings.

**IMPACTS/DISTURBANCES** Little or no disturbance has occurred except encroaching residential development, road construction and possibly some selective logging at the edges of this site.

**SIGNIFICANCE** High. Site 20 is one of the most significant wetlands in Cannon Beach. This site rates high for providing a low elevation forage area for elk, a groundwater discharge area for seeps that feed Logan Creek, and for the large size of its natural wetland forest. Fragmentation would reduce the functional values of the site and should be avoided.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 21    **ACRES:** <1    **NWI CLASSIFICATIONS:** R/PFOC/PEMC, permanent  
**LOCATION:** Between Old Coast Hwy. and 6th St. and Beech St.    **BASIN:** Elm  
**TAX MAP NO.:** 51020CB    **TAX LOTS:** 2400, 2402,    **DATE OF INVENTORY:** 4/22/93  
2403, 2405, 2600, 2700

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** This site is a small headwater stream with 2 branches that join to flow down a steep ravine of second growth spruce. As the topography flattens out, the canopy changes to red alder with a skunk cabbage and salmonberry understory. At the lowest reach before the stream is culverted under Beech St., gravel fill has been placed in a slough sedge dominated emergent wetland and graded flat. The natural channel and vegetation is altered significantly by recent fill near Beech Street, but wetlands still occur over much of the filled area. The wetland boundary is defined by the toe of hillslopes in the upper end of the channel. It is less distinct in the lower end because of recent fill activities. In this area the wetland boundary probably extended to Beech Street.

**SOIL** Refusal due to gravel. Mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity, Wildlife Habitat, and Urban Quality of Life rated medium for this site based on the diversity of forest and wetland vegetation communities.

**IMPACTS/DISTURBANCES** The lower half of the channel has been ditched and filled. The emergent wetland has been filled with gravel and yard debris. Gravel and yard debris should be removed and replaced with native wetland vegetation.

**SIGNIFICANCE** Medium. This site is moderately significance because of its size and diversity. Hillslopes are very steep and future development should be required to leave an adequate buffer to protect water quality from slope erosion.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 22    **ACRES:** <1    **NWI CLASSIFICATION:** PFOC, permanent  
**LOCATION:** Between Hills and Ross Lanes west of Spruce St.    **BASIN:** Coolidge 1  
**TAX MAP NO.:** 51030DA    **TAX LOTS:** 6900, 6901, 7200, 7300, 7400, 7500, 7601, 8500, 8400,  
8300, 9800, 9900, 10000, 10100    **DATE OF INVENTORY:** 4/23/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>		
Ecological Integrity	<u>L</u>	Recreation <u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>M</u>

**GENERAL DESCRIPTION** Water for this site probably originates from the hill to the south but appears on the surface from no visible culvert between Hills and Ross Lanes. A broad area up to approximately 40 ft. wide at the widest point, of slow flowing or pooled water is dominated by skunk cabbage and lady fern. The channel then becomes more distinct and flows northwest between culverts and ends in another broad swale. Wetlands are defined by the channel or the change in vegetation from wetland skunk cabbage to upland sword fern or salal.

**SOIL** Silty Clay (10YR 2/1 with 10 YR 4/6 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** All of the functional values rated low with the exception of Wildlife Habitat and Urban Quality of Life because extensive alteration of the natural channel due to roads, residential development, and culverts. Wildlife Habitat rated medium due to the presence of permanent water; Urban Quality of Life rated medium for visual aesthetics.

**IMPACTS/DISTURBANCES** Most of the stream length has been ditched or culverted.

**SIGNIFICANCE** Low. This site is of low significance due to small size, isolation, and proximity to residential development.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 23 ACRES: <0.5 NWI CLASSIFICATIONS: R, PFOC  
LOCATION: South of Arbor Lane to Spruce St. near Elliott Way BASINS: Coolidge 1 & 2  
TAX MAP NO.: 51030DA TAX LOTS: 10700, 10800, DATE OF INVENTORY: 4/23/93  
10900, 9600, 8700, 8800, 8900,  
7200, 6900

TAX MAP NO.: 51030DD TAX LOTS: 905, 6600, 6700, 6100, 6000

Wetland Functional Values Assessment <sup>1</sup>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This seasonal stream originates on the hillside south of Arbor Lane and is a narrow, steep-gradient channel until it crosses Arbor Lane where the channel begins to meander and braid through hummocks of upland. The broadest area of saturation, approximately 15 ft. wide, occurs just south of Hills Lane before the channel is culverted. North of Hills Lane, the channel has been filled, but depressions in the old channel still hold rainfall and support skunk cabbage. Wetland vegetation is dominated by a Sitka spruce canopy. The understory is dominated by salmonberry, slough sedge, and skunk cabbage. Wetlands are generally confined to the channel but occasionally broaden into a forested wetland. The forested wetland boundary is defined by the change in vegetation from skunk cabbage to upland vegetation such as sword fern.

**SOIL** Clay (10YR 2/6 with 10YR 4/6 mottles), gley (5Y 6/1); mapped as Walluski SiL and Templeton-Ecola SiL by SCS.

**WETLAND FUNCTIONAL VALUES** All of the functional values rated low with the exception of Wildlife Habitat because the stream channel is altered by road and residential development. Wildlife Habitat rated medium due to the presence of permanent water. The uppermost length south of Arbor Lane is less developed to date due to the steepness of the surrounding slopes.

**IMPACTS/DISTURBANCES** Some of the stream channel has been filled and culverted.

**SIGNIFICANCE** Low. This site is of low significance due to its size, isolation and proximity to residential development.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 24 **ACRES:** <1

**NWI CLASSIFICATION:** PSSC

**LOCATION:** Intersection of Forest Lawn Rd. and Hemlock St.

**BASIN:** Coolidge 2

**TAX MAP NO.:** 51030DA **TAX LOT:** 4100

**DATE OF INVENTORY:** 4/23/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>		
Ecological Integrity	<u>L</u>	Recreation <u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>L-M</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>L-M</u>

**GENERAL DESCRIPTION** This site was viewed from the road since access was denied. The ground slopes down from south to north, and almost one-half of the lower portion of the property is willow/scrub wetlands. Vegetation is dominated by Hookers willow, twinberry, and slough sedge. Standing water is widespread under the willows and water flows out of this area into a culvert under Hemlock St. The southern portion of the property is upland with larger conifers and upland shrubs. There is a transition area between uplands and wetlands which is a mosaic that contains salal covered upland hummocks surrounded by wetland depressions. Wetlands are defined by a slight break in the slope and the change in vegetation from willows to spruce trees.

**SOIL** No sample (access denied); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Noteworthiness rated low-medium based on the size of this undeveloped lot and the juxtaposition of willow-dominated wetlands with conifer-dominated uplands. Urban Quality of Life rated low-medium due to the visual esthetics of natural habitat adjacent to a main road.

**IMPACTS/DISTURBANCES** Site has been cut off from other wetlands by surrounding roads and drainage from the wetland has been culverted. The site is located adjacent to a main thoroughfare (Hemlock Street).

**SIGNIFICANCE** Low. This site is of low significance due to the extent of surrounding development that isolates it from other wetlands.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 25 ACRES: <1 NWI CLASSIFICATIONS: PFOC, R  
LOCATION: East of the intersection of Nelchena & Hemlock St. BASIN: Hemlock  
TAX MAP NO.: 51032BC TAX LOTS: 500, 1500, 1501 DATE OF INVENTORY: 4/23/93  
1502, 1503, 1600

Wetland Functional Values Assessment <sup>1</sup>		
Ecological Integrity	<u>H</u>	Recreation <u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control <u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping <u>L</u>
Noteworthiness	<u>H</u>	Nutrient Retention <u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life <u>H</u>

**GENERAL DESCRIPTION** This stream is located west of Highway 101. Its a braided channel that flows alternately between the surface and subsurface. The stream channel is approximately 3 ft. wide and the forested wetland surrounding the channel is up to 150 ft. The forested wetland is a multi-layered diverse mixed coniferous/deciduous forest. The canopy is dominated by red alder and Sitka spruce. Understory vegetation is dominated by salmonberry, red elderberry, slough sedge, skunk cabbage, and lady fern. Wetlands are defined by a break in slope and the change in vegetation from a Sitka spruce/skunk cabbage community to a Sitka spruce/sword fern community.

**SOIL** Silty Clay (10YR 3/1 with 7.5YR 5/8 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** The functional values of ecological integrity, noteworthiness, and urban quality of life rated high due to the near pristine condition of the stream channel and surrounding forest. The undeveloped lot is large and the forest is little disturbed by logging or residential development.

**IMPACTS/DISTURBANCES** Some residential development has occurred on the south side of the property, but a vegetated buffer of varying width remains. The main drainage feature is nearly pristine.

**SIGNIFICANCE** High. This site is highly significant due to its connectivity to sites 26 and 28 and its limited disturbance.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 26 ACRES: <1.5 NWI CLASSIFICATIONS: PFOC, R  
LOCATION: Between Matanuska & Tanana Sts., Hemlock St. & Hwy 101 BASIN: Hemlock  
TAX MAP NO.: 51032BC TAX MAP NO.: 51032BB DATE OF INVENTORY: 4/23/93  
TAX LOTS: 500, 601, 1200, TAX LOT: 306  
1300, 1400, 1401

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>M-H</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M-H</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** This stream corridor is contiguous with Site 28 and in close proximity to Site 25. The mixed forest canopy is dominated by Sitka spruce and red alder. Sitka spruce is present in slightly drier soils while the red alder is found closer to the channel. Numerous fallen trees are scattered throughout the swale and are nurse logs for upland seedlings and shrub species, such as salal and red huckleberry. The wetland herbaceous vegetation is dominated by skunk cabbage and includes water parsley, slough sedge, and lady fern. The wetland is broadest (100 ft.) at the lower end and narrows to 50 ft. behind midway and becomes a wetland/upland mosaic. Wetland are reduced to the channel in the upper reach. The stream channel averages 5 ft. wide and 2 in. deep. The channel substrate is clogged with sediment.

**SOIL** Silty Clay (10YR 3/1 and 5YR 4/1 with 7.5YR 5/8 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Urban Quality of Life rated high because the forest adjacent to and surrounding the stream is older second growth that provides a scenic open space and buffer for the neighborhood. Ecological Integrity, Wildlife habitat, and Noteworthiness rated medium or medium-high due to the size and vegetative diversity of the forested swales.

**IMPACTS/DISTURBANCES** The stream channel is natural except for recent fill adjacent to Hemlock Street.

**SIGNIFICANCE** High. The size of the site and its connectivity to Sites 25 and 28 increase its significance.

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<sup>1</sup>Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 27 ACRES: NA NWI CLASSIFICATION: R  
LOCATION: South of and crossing Arbor Lane BASIN: Coolidge 1  
TAX MAP NO.: 51030DD TAX LOT: 905, 5400, 5500, 4701, 7200, 7300 DATE OF INVENTORY: 4/23/93

Wetland Functional Values Assessment <sup>1</sup>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This is a very small seasonal stream (less than 1 ft. wide) originating on the hill south of Arbor Lane that is filled and culverted at Arbor Lane and appears to percolate below the surface in tax lot 5400. Gravel fill is also placed on this lot that may have caused the natural flow to move subsurface. The headwater of the stream is a steep, narrow ravine surrounded by uplands and spruce forest. Wetlands are confined to the channel.

**SOIL** gravel fill.

**WETLAND FUNCTIONAL VALUES** All of the functional values of this site were rated low due to ditching, culverting, and filling of the lower length of the channel, and the small size of the upper stretch.

**IMPACTS/DISTURBANCES** Channel has been ditched, filled and culverted for much of its length. Future development adjacent to the upper length should be required to leave an adequate buffer to protect the steep slopes from eroding into the stream.

**SIGNIFICANCE** Low. Its primary significance is for drainage runoff.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 28    **ACRES:** <0.5    **NWI CLASSIFICATIONS:** PFOC, R, seasonal  
**LOCATION:** East of Matanuska/Hemlock    **BASIN:** Hemlock  
**TAX MAP NO.:** 51032BC    **TAX LOT:** 500, 1400    **DATE OF INVENTORY:** 5/18/93

<b>Wetland Functional Values Assessment <sup>1</sup></b>			
Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** This intermittent stream corridor contains pockets of pooled surface water. The forest canopy is dominated by a dense stand of Sitka spruce. The understory is dominated by skunk cabbage with 50% bare ground. The stream channel is approximately 3 ft. wide and water, where present, is 1-2 in. deep. The wetland boundary is defined by the break in slope and where vegetation changes from skunk cabbage to sword fern.

**SOIL** Silty Clay (10YR 7/1 with 7.5YR 5/8 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** All wetland functional values actually rated low on this site due to the lack of diversity of vegetation and the seasonal nature of the stream. The values of Ecological Integrity, Noteworthiness, and Urban Quality of Life were upgraded to medium because of their position in a layer ecosystem combined with the more pristine sites 25 and 26.

**IMPACTS/DISTURBANCES** None

**SIGNIFICANCE** Medium. The significance of this site is medium due to its connectivity with sites 25 and 26 and the forest upland ridges which exist between them.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 29 ACRES: <1 NWI CLASSIFICATIONS: PFOC, R, seasonal  
LOCATION: North of Hemlock/Amber Lane BASIN: Gulcana  
TAX MAP NO.: 51032BB TAX LOTS: 117, 199, DATE OF INVENTORY: 5/18/93  
301, 316

Wetland Functional Values Assessment <sup>1</sup>			
Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** Site 29 is a common greenspace area for the surrounding residential properties. The mostly closed Sitka spruce canopy limits understory shrub vegetation, but salmonberry and red elderberry are present. Understory wetland vegetation is dominated by skunk cabbage, water parsley, slough sedge, and lady fern. Soils were saturated to the surface throughout the swale during the survey. A seasonal/permanent (?) stream flows through the site and is approximately 5 ft. wide. The wetland boundary is defined by the toe of the hillslopes where the wetland vegetation described above is no longer present.

**SOIL** Gray with bright orange mottles (10YR 2/1 with 10YR 5/8 mottles); mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Most values rated low due to the lack of vegetation diversity. If permanent water is present in this drainage, wildlife habitat values increases to medium. Urban quality of life also rates medium because it is a protected greenspace common area with limited disturbance.

**IMPACTS/DISTURBANCES** English ivy is encroaching the site and should be removed. Steep side slopes should be protected from eroding into the stream.

**SIGNIFICANCE** Low.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 30 ACRES: NA NWI CLASSIFICATION: R, PSSC  
LOCATION: N & E of N Chinook Street BASIN: Tolovana  
TAX MAP NO.: 51032CC TAX LOTS: 3300, 3400, 3401 DATE OF INVENTORY: 5/19/93  
3500, 3501, 3600, 3700, 3900

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L-M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 30 is a narrow high gradient perennial stream corridor located on the edge of residential development. The intermittent channel is approximately 5 ft. wide. It is culverted under Highway 101 and eventually connects to Site 46. The riparian corridor is dominated by Sitka spruce, red elderberry and sword fern. Other species include western hemlock, red alder, Hooker's willow, and Himalayan blackberry. There are occasional pockets of skunk cabbage within the drainage swale. Wetlands are generally confined to the channel, until it reaches the Tolovana Highway Loop where it broadens out into a dense willow thicket.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity and Wildlife Habitat rated medium due to the location of the stream corridor adjacent to a larger undeveloped forest. The stream is also important for drainage runoff.

**IMPACTS/DISTURBANCES** Himalayan blackberry is present on slopes adjacent to residences. It should be removed and replaced with native species of shrubs/herbs to prevent further encroachment into the forest. The steep sideslope should be protected from eroding into the stream.

**SIGNIFICANCE** Medium. The stream corridor is used as a wildlife travel corridor providing wildlife a route to and from the coastal forests.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 31 ACRES: <0.5 NWI CLASSIFICATIONS: R, PEMC, seasonal  
LOCATION: East of Hwy 101, N of Tolovana exit BASIN: Tolovana  
TAX MAP NO.: 51032BC TAX LOTS: 100, 101, 400 DATE OF INVENTORY: 6/26/93

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 31 is a seasonal stream. The channel is approximately 3 ft. wide. The wetland broadens to 15 ft. at approximately 150 ft. east of Highway 101. It becomes even wider, between 50 ft. and 60 ft., 100 ft. east of the highway. The channel meanders through a dense Sitka spruce forest with limited understory. When it reaches the wetland, the canopy has been cleared. Vegetation in the forest opening is dominated by skunk cabbage and small fruited bulrush and includes lady fern, hedgenettle, and salmonberry. Part of the wetland is a mosaic. The wetland boundary is defined by the lack of bulrush and sedge and the increase in Sitka spruce.

**SOIL** Aquic moisture regime; mapped as Templeton-Ecola SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity, Wildlife Habitat, and noteworthiness rated medium due to the connectivity of the stream corridor with larger forest lands to the east. The stream is also important for drainage runoff.

**IMPACTS/DISTURBANCES** Canopy vegetation has been cleared recently.

**SIGNIFICANCE** Medium. The stream corridor is used as a wildlife travel corridor for wildlife providing wildlife a route to and from the Coast Range.

<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 32 ACRES: NA NWI CLASSIFICATION: R, P  
LOCATION: East of Hwy 101, N of Tolovana exit & N of site 31 BASIN: Hemlock  
TAX MAP NO.: 51032BC TAX LOTS: 100, 300 DATE OF INVENTORY: 6/26/93

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 32 is a perennial stream corridor. Wetlands are limited to the channel and adjacent floodplain. Wetland width is approximately 10 ft. The stream is located in a steep gradient channel that is culverted under Highway 101. Steep side slopes contain a dense canopy dominated by Sitka spruce and red alder. Wetland vegetation along stream margins is dominated by skunk cabbage and lady fern. The wetland boundary is defined by a topographic break and a change in herbaceous vegetation from skunk cabbage and lady fern to oxalis, sword fern, and/or deer fern.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity, Wildlife Habitat, and noteworthiness rated medium due to the connectivity of the stream corridor with larger forest lands to the east. The stream corridor is also important for drainage runoff.

**IMPACTS/DISTURBANCES** Yard debris has been dumped frequently on the southern hillslopes above the drainage.

**SIGNIFICANCE** Medium. This stream corridor is used as a wildlife travel corridor for elk, deer, birds, etc., providing wildlife a route to and from the Coast Range.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 33    **ACRES:** NA    **NWI CLASSIFICATION:** R, seasonal  
**LOCATION:** East of Hwy 101, N of Tolovana exit, N of site 32, & S of private road  
**TAX MAP NO.:** 51032BC    **TAX LOT:** 102    **BASIN:** Hemlock  
**DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 33 is a seasonal stream corridor. Wetlands are limited to the channel and adjacent floodplain. Wetland width is approximately 10 ft. The stream is located in a steeply sloped steep gradient channel that is culverted under Highway 101. The dense canopy is dominated by Sitka spruce. Wetland vegetation along the stream margin is dominated by skunk cabbage and lady fern. The wetland boundary is defined by the toe of the hillslopes and a change in herbaceous vegetation to oxalis, sword fern, and deer fern.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity, Wildlife Habitat, and noteworthiness rated medium due to the connectivity of the stream corridor with larger forest lands to the east. The stream corridor is also important for runoff.

**IMPACTS/DISTURBANCES** Garbage, such as an old road sign, has been dumped on slopes above the drainage.

**SIGNIFICANCE** Medium. This stream corridor is used as a wildlife travel corridor providing wildlife a route to and from the Coast Range.

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<sup>1</sup>Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 34 **ACRES:** NA

**NWI CLASSIFICATION:** R

**LOCATION:** E of Hwy 101, N of site 33, just S of public road

**BASIN:** Hemlock

**TAX MAP NO.:** 51032BB **TAX LOT:** 118

**DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 34 is a perennial stream. Wetlands are confined to the channel which is approximately 5 ft. wide. Water is approximately 2 in. deep. Lady fern is present along the channel margins. The wetland boundary is distinct and defined by a topographic break. Riparian vegetation includes a Sitka spruce canopy with a sparse shrub understory of salal and salmonberry. Herbaceous cover is dominated by sword fern and deer fern.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity, Wildlife Habitat, and noteworthiness rated medium due to the connectivity of the stream corridor with larger forest lands to the east. The stream corridor is also important for drainage runoff.

**IMPACTS/DISTURBANCES** None.

**SIGNIFICANCE** Medium. The stream corridor is used as a wildlife travel corridor providing wildlife a route to and from the Coast Range.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 35    **ACRES:** NA    **NWI CLASSIFICATION:** R  
**LOCATION:** E of Hwy 101, N of site 34, approx. 325 ft. N of public road    **BASIN:** Gulcana  
**TAX MAP NO.:** 51032BB    **TAX LOTS:** 101, 121    **DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 35 is a narrow stream channel. The wetlands are confined to the channel and are approximately 3 ft. wide. Extremely steep hillslopes surround the drainage. Riparian vegetation is dominated by a dense Sitka spruce canopy. The understory is mostly bare ground with scattered sword fern. The wetland boundary is defined by the channel and a distinct topographic break.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity, Wildlife Habitat, and Noteworthiness rated medium due to the connectivity of the stream corridor with larger forest lands to the east. The stream corridor is also important for drainage runoff.

**IMPACTS/DISTURBANCES** None.

**SIGNIFICANCE** Medium. This stream corridor is used as a wildlife travel corridor providing wildlife a route to and from the Coast Range.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 36 **ACRES:** <0.5

**NWI CLASSIFICATION:** PFOC

**LOCATION:** N of the E end of Tyee Street.

**BASIN:** Umpqua

**TAX MAP NO.:** 51032CC **TAX LOT:** 900, 901

**DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 36 is a forested depression area surrounded by fill and residential development. The dense canopy is dominated by Sitka spruce. The herbaceous understory is dominated by skunk cabbage and lady fern and includes slough sedge. Bare ground is prevalent. Salal is also common on large fallen trees. Coarse woody debris is abundant. Soils contained low chromas and were saturated to the surface. Limited surface ponding was also present.

**SOIL** Silty Clay Loam (10YR 2/1) saturated to surface; mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Wetland values rated low due to its small size and isolation.

**IMPACTS/DISTURBANCES** Construction debris has been dumped in margins of the wetlands. Historic logging also left abundant tree fall and woody debris. Present owners are attempting to clear out construction debris and re-plant with native vegetation.

**SIGNIFICANCE** Low. Past disturbance and isolation reduce the significance of this site relative to other Cannon Beach forested wetlands.

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<sup>1</sup>Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 37    **ACRES:** <1    **NWI CLASSIFICATIONS:** RP, PFOC  
**LOCATION:** Poplar Street **BASIN:** Coolidge 13  
**TAX MAP NO.:** 51029CB **TAX LOTS:** 1000,    **DATE OF INVENTORY:** 5/18/93 & 6/26/93  
1302, 1314

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>M</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** Site 37 is a stream channel with a broad forested wetland swale. The mixed forest canopy is dominated by Sitka spruce and red alder. The understory consists of skunk cabbage, water parsley, and lady fern with sparsely scattered red huckleberry and red elderberry. Surface water occurs in the channel and scattered in shallow pondings throughout the PFO. The wetland is approximately 50 ft. wide on the northern end and becomes smaller to the south. It is reduced to approximately 5 ft. wide west of Poplar. The wetland boundary is well defined by a topographic break.

**SOIL** Silty Clay Loam (10YR 2/1-2 with bright orange mottles 10YR 5/8). Mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Ecological Integrity rated medium reflecting its somewhat disturbed condition. Wildlife Habitat rated medium due to the presence of permanent water coupled with its connectivity to larger open space areas. Urban Quality of Life rated medium due to the visual aesthetics of the site.

**IMPACTS/DISTURBANCES** Land clearing and road building have allowed invasive species like English ivy and Himalayan blackberry a foothold on the periphery of the site. These invasive species should be removed and replaced with native plant species before they further degrade the native vegetation.

**SIGNIFICANCE** Medium.

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<sup>1</sup>Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 38 ACRES: <.5

NWI CLASSIFICATION: PFOC

LOCATION: NE of Hwy 101/trailer park entrance (Elkland Rd.)

BASIN: Elkland

TAX MAP NO.: 51029BC TAX LOTS: 10900, 11000

DATE OF INVENTORY: 5/18/93

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This forested wetland contains seasonal water. Vegetation is dominated by a red alder canopy with Sitka spruce. The understory is dominated by Hooker's willow and slough sedge. The wetland has been influenced by historic filling for Highway 101 and Elkland Road. The wetland boundary is defined by the lower edge of fill to the south and west, and the change in vegetation from slough sedge and red alder to upland grasses and forbs to the north and east.

**SOIL** Silty Clay Loam (5Y 4/1 with 10 YR 3/4 mottles). Mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** All functional values rated low due to isolation of the site from other natural areas.

**IMPACTS/DISTURBANCES** Site is surrounded by fill and fragmented by roadways.

**SIGNIFICANCE** Low in relationship to other Cannon Beach forested wetlands.

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<sup>1</sup> Based on best professional judgment and field assessment methods

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 39 ACRES: NA NWI CLASSIFICATION: R, seasonal  
LOCATION: E of Elk Creek Road, SE of Site 40 BASIN: Ecola Creek  
TAX MAP NO.: 51029CA TAX LOT: 400 DATE OF INVENTORY: 6/26/93

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>H</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L-M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This seasonal steep gradient stream is approximately 3 ft. wide and 2 in. deep. Stream substrate contains gravels. Site 39 is a tributary to Ecola Creek. The wetland boundary extends into the floodplain on either side of the channel and is approximately 10 ft. wide. Vegetation is dominated by Sitka spruce, red alder, oxalis, skunk cabbage, and water parsley. The wetland boundary is generally defined by topography and specifically defined by the change in vegetation from skunk cabbage to sword fern. Elk tracks were observed.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** The high rating for ecological integrity reflects the natural condition of the stream corridor with no surrounding development. The stream corridor provides a wildlife travel corridor between Ecola Creek and the Coast Range. Since water is only seasonal, wildlife habitat rated low-medium. Noteworthiness also rated medium due to the significance of connectivity of the site.

**IMPACTS/DISTURBANCES** None

**SIGNIFICANCE** Medium. This site is moderately significant because it provides a wildlife corridor between Ecola Creek and the Coast Range.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 40    **ACRES:** NA

**NWI CLASSIFICATION:** R

**LOCATION:** E of Elk Creek Road, NW of Site 39 & SE of Site 41

**BASIN:** Ecola Creek

**TAX MAP NO.:** 51029CA    **TAX LOT:** 400

**DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>H</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This perennial steep gradient stream is approximately 3 ft. wide and 2 in. deep. Stream substrate contains gravels. Site 40 is a tributary to Ecola Creek. The wetland boundary extends into the floodplain on either side of the channel and is approximately 10 ft. wide. Vegetation is dominated by Sitka spruce, red alder, oxalis, skunk cabbage, and water parsley. The wetland boundary is generally defined by topography and specifically defined by the change in vegetation from skunk cabbage to sword fern. Elk tracks were observed.

**WETLAND FUNCTIONAL VALUES** The high rating for ecological integrity reflects the natural condition of the stream corridor with no surrounding development. The stream corridor provides a wildlife travel corridor between Ecola Creek and the Coast Range. Since water is only seasonal, wildlife habitat rated medium. Noteworthiness also rated medium due to the significance of connectivity of the site.

**IMPACTS/DISTURBANCES** None

**SIGNIFICANCE** Medium. This site is moderately significant because it provides a wildlife corridor between Ecola Creek and the Coast Range.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 41 ACRES: NA  
LOCATION: E of Elk Creek Road, NW of Site 40  
TAX MAP NO.: 51029CA TAX LOT: 300

NWI CLASSIFICATION: R, seasonal  
BASIN: Ecola Creek  
DATE OF INVENTORY: 6/26/93

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>H</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L-M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This seasonal steep gradient stream is approximately 3 ft. wide and 2 in. deep. Stream substrate contains gravels. Site 40 is a tributary to Ecola Creek. The wetland boundary extends into the floodplain on either side of the channel and is approximately 10 ft. wide. Vegetation is dominated by Sitka spruce, red alder, oxalis, skunk cabbage, and water parsley. The wetland boundary is generally defined by topography and specifically defined by the change in vegetation from skunk cabbage to sword fern. Elk tracks were observed.

**WETLAND FUNCTIONAL VALUES** The high rating for ecological integrity reflects the natural condition of the stream corridor with no surrounding development. The stream corridor provides a wildlife travel corridor between Ecola Creek and the Coast Range. Since water is only seasonal, wildlife habitat rated low-medium. Noteworthiness also rated medium due to the significance of connectivity of the site.

**IMPACTS/DISTURBANCES** None

**SIGNIFICANCE** Medium. This site is moderately significant because it provides a wildlife corridor between Ecola Creek and the Coast Range.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 42a **ACRES:** ≈ 11

**NWI CLASSIFICATION:** PFOC

**LOCATION:** E of Hwy 101; located N & E of Haskell Lane

**BASIN:** Ecola Creek

**TAX MAP NO.:** 51029CA **TAX LOT:** 101

**DATE OF INVENTORY:** 6/26/93

**TAX MAP NO.:** 51029BD **TAX LOT:** 100, 200, 400

**TAX MAP NO.:** 51029 **TAX LOT:** 101

**TAX MAP NO.:** 51029BC **TAX LOT:** 8100, 100

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>H</u>	Recreation	<u>L-M</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>H</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>H</u>
Noteworthiness	<u>H</u>	Nutrient Retention	<u>H</u>
Education Potential	<u>M</u>	Urban Quality of Life	<u>H</u>

**GENERAL DESCRIPTION** This forested wetland contains a multi-layered canopy with diverse vegetation. The canopy is dominated by red alder and includes Sitka spruce trees and large snags. The shrub understory contains willow and twinberry. The herbaceous understory is dominated by slough sedge and skunk cabbage and includes lady fern. Additional habitat features include seasonal pondings for breeding amphibians such as tree frogs and snags for cavity nesters such as pleated woodpeckers. Site 42 is large and connected to Ecola Creek and the Coast Range.

**SOIL** SiL ( 2.5Y 2/0 or 5Y 3/1 with 5YR 4/6 mottles) gley. Mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** High ratings due to large size and its position in the Ecola Creek watershed. Contains significant habitat for cavity nesters and amphibians. Potential to preserve water quality by trapping sediments and retaining nutrients from upstream logging activities.

**IMPACTS/DISTURBANCES** A portion of the site has been filled with construction debris and a roadway. Himalayan blackberry is growing on the fill.

**SIGNIFICANCE** High. Wildlife travel corridors should be maintained between Ecola Creek and forest lands.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 42b    **ACRES:** ≈ 29  
**LOCATION:** E of Hwy 101; tertiary treatment wetlands  
**TAX MAP NO.:** 510    **TAX LOT:** 2601  
**TAX MAP NO.:** 51029    **TAX LOT:** 101

**NWI CLASSIFICATION:** PFOC  
**BASIN:** Ecola Creek  
**DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>H</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>M</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>H</u>
Noteworthiness	<u>H</u>	Nutrient Retention	<u>H</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** The tertiary treatment wetland is a forested wetland with a fairly open deciduous canopy and permanent pondings. Secondary effluent is pumped through numerous channels throughout the site where it is polished. Red alder dominates the canopy with a few scattered old-growth Sitka spruce trees and stumps. The understory is dominated by twinberry, skunk cabbage, and slough sedge and includes red elderberry and salmonberry. Elk tracks are abundant throughout the site. Wood duck and mallard are also common. This site is adjacent to Ecola Creek and provides excellent habitat for wildlife attracted to the stream.

**SOIL** Silty Clay (5Y 4/1). Mapped as Coquille-Clatsop Complex by SCS.

**WETLAND FUNCTIONAL VALUES** The high rated functions were due to the large size of the site, permanent water, large size of Sitka spruce trees, and tertiary treatment of secondary sewage effluent. The low rated functions were due to lack of access to the site.

**IMPACTS/DISTURBANCES** The tertiary treatment system has altered natural hydrologic fluctuations, but many wetland functional values remain high.

**SIGNIFICANCE** High. Site 43 provides highly significant water quality functions and wildlife habitat. It also has potential for juvenile fish habitat.

<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 43    **ACRES:** <0.5    **NWI CLASSIFICATION:** PFOC, PEM  
**LOCATION:** Between Elliot and Sunset    **BASIN:** Coolidge 3  
**TAX MAP NO.:** 51030DA    **TAX LOTS:** 6000, 5200?    **DATE OF INVENTORY:** 8/10/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 43 is an isolated forested/emergent wetland depression area surrounded by fill and residential and commercial development. The dense canopy is dominated by Hooker's willow and contains Sitka spruce. The understory contains water parsley where present and Himalayan blackberry and salal in the drier areas bordering the woodland. The emergent wetland is dominated by buttercup, velvet grass, bentgrass, and birdsfoot trefoil. It was too late in the season to assess the extent of hydrology and the boundary is uncertain.

**SOIL** Silty Clay (10YR 3/2 with 7.5YR 5/8 MT), moist; mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Wetland values rated low due to its small size, disturbance and isolation.

**IMPACTS/DISTURBANCES** The site has been impacted by fill for surrounding development.

**SIGNIFICANCE** Low. Past disturbance and isolation reduce the significance of this site.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 44 ACRES: NA

LOCATION: E of powerline on edge of forest

TAX MAP NO.: 51029CA TAX LOTS: 200, 300, 301

NWI CLASSIFICATION: R

BASIN: Elk Creek Road

DATE OF INVENTORY: 6/26/93

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>M</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This perennial steep gradient stream is approximately 5 ft. wide. The wetland fringe averages 15 ft. across. Vegetation is dominated by a Sitka spruce canopy. The understory is dominated by skunk cabbage (95%) and includes slough sedge and salmonberry. The wetland boundary is defined by a break in slope and where dominant vegetation changes from skunk cabbage to sword fern. Water source is from a culvert.

**WETLAND FUNCTIONAL VALUES** All of the functional values rated low with the exception of Wildlife Habitat due to the small size of the drainage and the level of existing disturbance due to culverts, fill, and adjacent clearcutting. Wildlife Habitat rated medium due to the presence of permanent water.

**IMPACTS/DISTURBANCES** Disturbed by fill sand and culverts.

**SIGNIFICANCE** Low due to large amount of disturbance.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 45    **ACRES:** NA

**NWI CLASSIFICATION:** R, seasonal

**LOCATION:** NW of Gulcana/Hemlock

**BASIN:** Gulcana

**TAX MAP NO.:** 51031AA    **TAX LOTS:** 5401, 5402

**DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 45 is a stream corridor which is a continuation of Site 29 that is culverted under Hemlock Street. The stream has been channelized and is approximately 3 ft. wide. It bisects a mowed lawn. Vegetation on channel banks is dominated by lady fern. Other vegetation present within the channel includes water parsley, speedwell, buttercup, bulrush, and scattered Hooker's willow. Wetlands are confined to the channel and a narrow (approximately 5 ft.) wetland fringe.

**WETLAND FUNCTIONAL VALUES** All functional values rated low due to the high degree of disturbance.

**IMPACTS/DISTURBANCES** Surrounded by a weedy mowed lawn.

**SIGNIFICANCE** Low. This site is primarily significant for drainage runoff.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 46    **ACRES:** NA    **NWI CLASSIFICATION:** R  
**LOCATION:** NE of Hemlock/N of Haystack Resort (Near Hwy interchange)    **BASIN:** Tolovana  
**TAX MAP NO.:** 51032CB    **TAX LOTS:** 900, 1003    **DATE OF INVENTORY:** 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This perennial stream corridor is channelized and is a continuation of Site 30. The channel and wetland fringe averages 5 ft. wide. Riparian vegetation is dominated by red alder, Hooker's willow, and Himalayan blackberry. Sitka spruce, buttercup, and water parsley are also present. The south bank is adjacent to a large parking lot and the north bank is adjacent to a mowed lawn. Wetland are confined to the channel and steep channel banks.

**WETLAND FUNCTIONAL VALUES** All functional values rated low due to the high degree of site disturbance.

**IMPACTS/DISTURBANCES** Stream is channelized and culverted and surrounded by a mowed lawn on one side and a parking lot on the other.

**SIGNIFICANCE** Low. This site is primarily significant for drainage runoff.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 47    **ACRES:** NA    **NWI CLASSIFICATION:** R, seasonal  
**LOCATION:** NW of Hemlock/Umpqua    **BASIN:** Umpqua  
**TAX MAP NO.:** 51031DD    **TAX LOTS:** 501, 600, 800,    **DATE OF INVENTORY:** 6/26/93  
900, 1001, 1002

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This seasonal stream has been channelized, culverted and filled. Access is extremely difficult due to dense Himalayan blackberry and Hooker's willow thickets. Much of the thicket is probably a relict wetland that has been dewatered by hydrologic alterations. The channel averages 3 ft. wide. Soil was sampled in an adjacent depression area.

**SOIL** Silty clay, saturated to surface, 10YR 3/1 with 7.5YR 3/4 MT

**WETLAND FUNCTIONAL VALUES** This site is only significant for drainage runoff.

**IMPACTS/DISTURBANCES** Extreme disturbance due to channelization and fill.

**SIGNIFICANCE** Low due to a large amount of disturbance.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 48 ACRES: < 0.5 NWI CLASSIFICATION: R, PFOC  
LOCATION: NE of Tolvana/Hemlock BASIN: Coos  
TAX MAP NO.: 51032CC TAX LOT: 500 DATE OF INVENTORY: 5/18/93 & 6/26/93  
TAX MAP NO.: 51032CC, supp. #2 TAX LOTS: 8000, 8001, 8002, 8003  
80,000; 80,001; 80,002; 80,003

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** This forested swale contains a canopy of Sitka spruce with snags. The understory is dominated by skunk cabbage, water parsley, and slough sedge. In drier areas or on fallen trees salal dominates the understory. The south half of the wetland is a mosaic with salal dominating the understory upland pockets. The wetland is approximately 50 ft. wide north of the condominiums and is reduced to braided channelized streams approximately 2.5 ft. wide as the channels meander under house pilings and between houses on the east end of the site. Upon return on 6/26 to sample soils, the forest had been cleared and pushed into the wetlands.

**SOIL** Too disturbed to assess. Mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Before extensive clearing was accomplished, the site was rated medium for wildlife due to unique site functions such as seasonal pondings and snags. Recent disturbance has reduced the value of this site.

**IMPACTS/DISTURBANCES** This site has been impacted by stream channelization and land clearing.

**SIGNIFICANCE** Low.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

SITE NO.: 49 ACRES: NA NWI CLASSIFICATION: R, spring  
LOCATION: W of Hemlock adjacent to Oswald West Home BASIN: no name  
TAX MAP NO.: 51031AA TAX LOT: 500 DATE OF INVENTORY: 6/26/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 49 is a spring and drainage ditch. The spring is enclosed in a potentially historic landmark as part of the Oswald West Estate. The spring feeds a narrow incised drainage ditch that is approximately 2 ft. wide and surrounded by a mowed lawn. Vegetation on the bank of the ditch includes buttercup and grass.

**SOIL** not sampled in stream bed.

**WETLAND FUNCTIONAL VALUES** All values rated low due to the high level of disturbance and small size of the resource.

**IMPACTS/DISTURBANCES** The channel is an incised ditch surrounded by a mowed lawn.

**SIGNIFICANCE** Low.

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<sup>1</sup> *Based on best professional judgment and field assessment methods*

Cannon Beach Local Wetlands Inventory

SITE SUMMARY

SITE NO.: 50 ACRES: ≈ 2.5 NWI CLASSIFICATION: PFOC, R  
LOCATION: N of Ecola Creek and W of Highway 101 BASIN: Ecola Creek  
TAX MAP NO.: 51020CB TAX LOTS: 3400, 3700, 5301 DATE OF INVENTORY: 5/18/93  
TAX MAP NO.: 51020CA TAX LOT: 300

Wetland Functional Values Assessment <sup>1</sup>

Ecological Integrity	<u>H</u>	Recreation	<u>M</u>
Wildlife Habitat	<u>H</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>M</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>M</u>	Urban Quality of Life	<u>M</u>

**GENERAL DESCRIPTION** The large forested wetland contains a stream channel that enters the site from a culvert under Highway 101. The channel averages 5 ft. across. The deciduous forest canopy is dominated by red alder. The understory is dominated by skunk cabbage (80%) and also includes water parsley, slough sedge, lady fern, oxalis and stinking currant. Adjacent uplands are dominated by Sitka spruce and red elderberry. Elk sign is abundant.

**SOIL** Silty Clay (gray with bright orange mottles); mapped as Walluski SiL and Templeton-Ecola SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Many values rated high and medium due to the large size of the forested wetland and the relative naturalness of the site. The site is adjacent to Ecola Creek estuary and extensive forests on the other side of Highway 101. This site contains critical breeding habitat features such as snags, downed woody debris, and seasonal pondings.

**IMPACTS/DISTURBANCES** The margins of the wetlands have been impacted by an overnight camping park; also fragmented by Highway 101.

**SIGNIFICANCE** High. This site is highly significant for its large size providing elk habitat, groundwater discharge area, and for connectivity with Ecola Creek estuary.

<sup>1</sup> Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

**SITE SUMMARY**

**SITE NO.:** 51 **ACRES:** <0.5

**NWI CLASSIFICATION:** PFOC, R

**LOCATION:** Kenai/Pacific

**BASIN:** Brailer

**TAX MAP NO.:** 4106BC **TAX LOTS:** 4700, 5700, 5800  
5900, 6600, 10,400

**DATE OF INVENTORY:** 8/10/93

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 51 is an isolated forested perennial stream corridor surrounded by residential development and culverted at both ends. The channel is approximately 3 to 6 ft wide. The dense canopy is dominated by maturing Sitka spruce and also includes Hooker's willow. The understory contains escaped ornamentals, slough sedge, skunk cabbage, false lily-of-the-valley, and Himalayan blackberry.

**SOIL** mapped as Walluski SiL by SCS.

**WETLAND FUNCTIONAL VALUES** Wetland values rated low due to its small size, disturbance and isolation.

**IMPACTS/DISTURBANCES** The site has been impacted by invasive non-native species including Himalayan blackberry and montbretia.

**SIGNIFICANCE** Low. Small size, disturbance, and isolation reduce the significance of this site.

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<sup>1</sup>Based on best professional judgment and field assessment methods

*Cannon Beach Local Wetlands Inventory*

SITE NO.: 52 ACRES: NA NWI CLASSIFICATION: R, seasonal  
LOCATION: NW of Nazina/Hemlock BASIN: Chena  
TAX MAP NO.: 51031AA TAX LOTS: 901, 902, 1600 DATE OF INVENTORY: 3/15/94

**Wetland Functional Values Assessment <sup>1</sup>**

Ecological Integrity	<u>L</u>	Recreation	<u>L</u>
Wildlife Habitat	<u>L</u>	Flood Control	<u>L</u>
Fish Habitat	<u>L</u>	Sediment Trapping	<u>L</u>
Noteworthiness	<u>L</u>	Nutrient Retention	<u>L</u>
Education Potential	<u>L</u>	Urban Quality of Life	<u>L</u>

**GENERAL DESCRIPTION** Site 52 is a stream corridor which begins at a culvert under Hemlock Street and continues approximately 200 feet to a covered drainage at Nazina Avenue. The channel and wetland fringe averages 5 feet in width. There are several areas where ponding water has created broader wetland areas. Riparian vegetation is dominated by Sitka spruce, Hooker's willow, and water parsley.

**WETLAND FUNCTIONAL VALUES** All functional values rated low due to the high degree of disturbance.

**IMPACTS/DISTURBANCES** Surrounded by roadways.

**SIGNIFICANCE** Low. This site is primarily significant for drainage runoff.

**NOTE:** This site was assessed by Rainmar Bartl, City of Cannon Beach, after the field work was completed by FES

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<sup>1</sup>Based on best professional judgment and field assessment methods

APPENDIX D

DATA SHEETS AND WETLAND FUNCTIONAL  
VALUES ASSESSMENT FORMS

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 Project/City: CANNON BEACH LWI  
 T, R, S: T4N/S, R.10W, 1/4 OF SEC. 6  
 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/20/93 Time: 1:00  
 Wetland No.: 1 Plot No.: P1  
 Tax Map/Lots: W102 CS  
 Condition: \_\_\_\_\_  
 Plot Location: S. end of Cannon Beach (CB)  
 Landform: stream channel - w/ long culverts Normal Circumstances? YES/NO/UNK  
 Topography: \_\_\_\_\_ Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

## VEGETATION

Species	Indicator	%	Layer	Domin.	Species	Indicator	%	Layer	Domin.
	Status	Cover				Status	Cover		
<u>Scirpus sp</u>		<u>25</u>	<u>H</u>	<u>✓</u>	<u>FAC Twinberry</u>	<u>-</u>	<u>5</u>		
<u>Ranunculus repens FACW</u>		<u>25</u>	<u>H</u>	<u>✓</u>	<u>OBL Oenanthe samentosa</u>	<u>-</u>	<u>H</u>		
<u>lady fern</u>	<u>FAC</u>	<u>25</u>	<u>H</u>	<u>✓</u>					
<u>Salmonberry</u>	<u>FAC</u>		<u>S</u>	<u>✓</u>					
<u>Red alder</u>	<u>FAC</u>		<u>T</u>	<u>✓</u>					
<u>Equisetum tel. FACW</u>		<u>25</u>	<u>H</u>	<u>✓</u>					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: stream channel (not sampled) Survey Mapping Verified? YES/NO Hydric Soils List? YES/NO  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Criteria Depth: \_\_\_\_\_ IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth: YES/NO/UNK 2+ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO \_\_\_\_\_ IN.  
 Hydrology Alteration: YES/NO → culvert - broader wetland at culvert (15' wide) otherwise  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_ up to 70' in places  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_  
 Comments: \_\_\_\_\_

## DETERMINATION

WETLAND? YES/NO  
 Comments: Difficult access - salmonberry dense thicket  
Wetlands → Uplands at break in slope + where sword fern occurs

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

Cannon Beach Inventory

Site No. 1

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent

Stream Width (ft): Ave 10-15' Pond (sq. ft.): \_\_\_\_\_  
Depth: ~ 5"  
Substrate: small gravel / silt  
Outlet restrictions: culvert

Topography: moderate -> steep banks

Adjacent Land Uses: Residence - culvert under house

Major Structures or Roads: Logan lane

Impacts/Disturbances: creek has been culverted at Highway 101 to the SE of backyard of house (#4671) Riparian veg. impacted by inst. clearing (very brushy.)

2. VEGETATION (\* = Dominant Species >20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
* Red alder	Twimberry Salmonberry Red elderberry		Lady fern Scirpus sp Tuncus sp Paniculus ripens Juncus acrocarpa

3. SIGNIFICANT HABITAT FEATURES

Snags: dead branches in alder

Downed woody debris: abundant

Breeding habitat: Potential

Amphibians: ✓

Cavity nesters:

4. WILDLIFE Species/Sign Observed

Birds

White crown sp  
winter wren  
crow  
orange crowned warbler

Mammals

Herptiles

Fish

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 1	<b>LOCATION:</b> (4106CB) <i>southern end of UGB; traverses TL 3405, 3406; and enters culvert at TL 3407</i>	<b>OBSERVER:</b> CG JB
<b>DATE:</b> 4/20	<b>BASIN:</b> Logan	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> <i>stream comes northwest from Hwy 101 to culvert in backyard of TL 3407; culverted under Logan Lane &amp; to beach outfall</i>		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M (L)	<i>crossed by Hwy 101 &amp; culverted to ocean from residence downstream</i>
2. WILDLIFE HABITAT	H	(M) L	<i>perennial stream small open stream reach &amp; dense brush; Hwy 101 on one side &amp; Logan Ln on other side</i>
3. FISH HABITAT	H	M (L)	<i>narrow channel <math>\approx</math> 1-1.5' wide, high gradient, shallow (<math>\bar{x} \approx 4"</math>)</i>
4. NOTEWORTHINESS	H	M (L)	<i>very brushy, second growth</i>
5. EDUCATION POTENTIAL	H	M (L)	<i>inaccessible, far from schools</i>
6. RECREATION	H	M (L)	<i>very brushy, inaccessible</i>
7. FLOOD CONTROL	H	M (L)	<i>small, narrow drainage</i>
8. SEDIMENT TRAPPING	H	M (L)	<i>steep gradient, very little emergent vegetation</i>
9. NUTRIENT RETENTION	H	M (L)	<i>steep gradient, very little emergent vegetation</i>
10. URBAN QUALITY OF LIFE	H	M (L)	<i>not located in largely developed area</i>

*2 channels make area  $\approx$  30' wide just above culvert at backyard but  $\bar{x} \approx 5'$  for rest of channel  
no soil samples taken in channel*

**Fishman Environmental Services**

Cannon Beach Inventory

Site No. 2

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent

Stream Width (ft): Ave 5' Pond (sq. ft.): \_\_\_\_\_  
Depth: 5"  
Substrate: sand / gravel  
Outlet restrictions: culvert under Logan Rd -> beach

Topography: steep slopes  
Adjacent Land Uses: residential; built on top of slope  
Major Structures or Roads: Logan Rd - across stream  
Impacts/Disturbances: Evy - in riparian S. of drainage; west of Logan Rd - beach access

2. VEGETATION (\* = Dominant Species >20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
( <u>&gt; 2' dbh</u> ) * Sitka spruce Red alder WR Cedar	* Salal willow	* sword fern Funguscap * False Lily of the Valley	* lady fern Mex obnupta Carex sp.

trail passes through edge of drainage / wetland (w/ Carex); in this area width of the WL is 220'

3. SIGNIFICANT HABITAT FEATURES

Snags:  $\emptyset$   
Downed woody debris: abundant  
Breeding habitat: potential  
Amphibians:   
Cavity nesters: small branches

4. WILDLIFE Species/Sign Observed

<u>Birds</u>	<u>Mammals</u>	<u>Herptiles</u>	<u>Fish</u>
GC Chickadee Winter wren RC Kinglet			

Summary - WL is limited to drainage channel. Soils are dry on steep slopes. Small patches of Carex + willow are growing on slopes at no apparent exp.

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 2	<b>LOCATION:</b> Between TL 3408 and 3411 (4106CB)	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/20/93	<b>BASIN:</b> maher	<b>NWI CLASS:</b> R.
<b>COMMENTS:</b> very steep banks; wetland confined to bottom break in slope; channel ≈ 5' wide; 2 branches join below Hwy 101 to make 1 channel		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) culverted at Hwy 101 + Logan Lane very brushy near Hwy 101, second growth near Hwy 101
2. WILDLIFE HABITAT	H	(M)	(L) short stretch between Hwy 101 + Logan Ln.
3. FISH HABITAT	H	M	(L) very shallow stream
4. NOTEWORTHINESS	H	M	(L) very brushy, younger second growth
5. EDUCATION POTENTIAL	H	M	(L) no access, far from schools
6. RECREATION	H	M	(L) very brushy, no access
7. FLOOD CONTROL	H	M	(L) small, narrow channel
8. SEDIMENT TRAPPING	H	M	(L) see comment for 7.
9. NUTRIENT RETENTION	H	M	(L) see comment for 7.
10. URBAN QUALITY OF LIFE	H	M	(L) some visual buffering but very disturbed vegetation

no soil sample taken in channel; 2 channels cross Hwy 101 + join before crossing Logan Lane; beach access trail along lower stretch w/ no trees  
small gravel + silt substrate

Cannon Beach Inventory

Site No. 3

1. SITE FEATURES - weather = heavy rain

Water Features: Stream Pond Seasonal Permanent ?

Stream Width (ft): 5' (narrowed to 3') Pond (sq. ft.):  
Depth: 1-5"  
Substrate: Rocks, small gravels  
Outlet restrictions:

Topography: Moderate to steep slopes

Adjacent Land Uses: Residential

Major Structures or Roads: old pump house (?) immediately adjacent to channel

\* Impacts/Disturbances: Fill encroaching riparian habitat on North & South sides of drainage. 1. type very new & eroding into creek = nice - dumping ground for yard debris (Hm. BB, some garbage)

2. VEGETATION (\* = Dominant Species > 20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
* Sitka spruce	* salmonberry salal	* sword fern * False Lily of the Valley	water parsley

3. SIGNIFICANT HABITAT FEATURES

Snags:  $\phi$  Breeding habitat: Potential  
Downed woody debris: stump; common Amphibians:  $\checkmark$   
Cavity nesters:  $\phi$

4. WILDLIFE Species/Sign Observed if raining; limited observation time

Birds Mammals Herptiles Fish

✓ Wetland = stream channel  $\rightarrow$  upland at lower break in slope where sword fern & red elderberry occur most of the channel is open surrounded by dense thickets

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 3	<b>LOCATION:</b> between Maher St. & West Way (4106CB)	<b>OBSERVER:</b> CG & JB
<b>DATE:</b> 4/20/93	TL 906, 1900, 1800, 1805, <b>BASIN:</b> 1806, 1803, 1760 Atkins	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> steep banks, narrow channel, high gradient stream, silt & small gravel substrate, dense brush and second growth wetlands identified as break at bottom of bank slope.		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) adjacent residents dump yard debris down bank; dense blackberry at TCB
2. WILDLIFE HABITAT	H	(M) L	short length between Hembec St. and culvert at Logan Lane; residential development near edge.
3. FISH HABITAT	H	M	(L) very shallow, steep gradient very small stream
4. NOTEWORTHINESS	H	M	(L) very brushy, younger second growth
5. EDUCATION POTENTIAL	H	M	(L) no access; far from schools
6. RECREATION	H	M	(L) very brushy; no access
7. FLOOD CONTROL	H	M	(L) see comment for 3.
8. SEDIMENT TRAPPING	H	M	(L) see comment for 3.
9. NUTRIENT RETENTION	H	M	(L) see comment for 3.
10. URBAN QUALITY OF LIFE	H	M	(L) some visual buffering for neighboring houses, but growth is dense brush; water mostly hidden

WETLAND DETERMINATION DATA SHEET

FEMA ①

Applicant: CITY OF CANNON BEACH  
 T, R, S: T4 N, R.10W, 1/4 OF SEC. 6  
 Field Date: 4/21/93 Time: 7:30  
 Tax Map/Lots: 4106 BC  
 Plot Location: 1/2 from creek  
 Landform: Stream  
 Topography: \_\_\_\_\_

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 4 Plot No.: 4 sample 4  
 Condition: hummocks of fill on west end

Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

VEGETATION

Species	Indicator	%	Layer	Domin.	Species	Indicator	%	Layer	Domin.
	Status	Cover				Status	Cover		
Red Alder	FAC	50	S	✓					
Juncus effusus	FACW	50	H	✓					
Carex stricta	OBL	50	H	✓					
Salix hookeriana	FAC	50	S	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

SOIL

Series/Phase: mapped as Walluski silm 7-159. Survey Mapping Verified? YES/NOT <sup>like</sup> mapped  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Hydric Soils List? YES/NO  
 Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 0-3" 7.5YR 3/2 SiCL saturated  
 3-7" 10YR 4/2 Large MT 5YR 4/6 SiC sat.  
 7-19" 10YR 4/1-2 " " SiC (Phase of 10YR 4/2 + 10YR 4/2)

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: ✓ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE \*surrounding uplands 10YR 2/1 sil dry & crumbly  
 Comments: (0-17") 10YR 3/2 sil (pinned) (12-17")  
 silica spore, false hq. of the valley, silty

HYDROLOGY

Inundation and Depth: YES/NO/UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 17 IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

DETERMINATION

WETLAND? YES/NO The pond surface is hummocked on the west banks  
 Comments: of the low have been dumped here

Cannon Beach Inventory

Site No. 4

1. SITE FEATURES PSS w/ stream

Water Features: Stream Pond Seasonal Permanent

Stream Width (ft): 3' Pond (sq. ft.): \_\_\_\_\_  
Depth: ~ 8" \_\_\_\_\_  
Substrate: silt \_\_\_\_\_  
Outlet restrictions: \_\_\_\_\_

Topography: *gentle-moderate slopes; wetland broad (~100' across at lower end)*  
Adjacent Land Uses: *Residential*  
Major Structures or Roads: *Drain through culvert at Kenai St.*  
Impacts/Disturbances: *Fill in lower half; yard debris*

2. VEGETATION (\* = Dominant Species > 20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
<i>Red alder saplings (on fill piles) ~15' tall (5 years?)</i>	<i>Salmonberry</i>	<i>Falce Lily of valley</i>	<i>Stunk cabbage</i>
			<i>Carex obnupta</i>
			<i>Juncus siliquosus</i>
			<i>Juncus sp</i>
			<i>Equisetum telmateia</i>

3. SIGNIFICANT HABITAT FEATURES

Snags: ① Breeding habitat: ?  
Downed woody debris: *limited because of PSS + fill* Amphibians: \_\_\_\_\_  
Cavity nesters: *yes*

4. WILDLIFE Species/Sign Observed

<u>Birds</u>	<u>Mammals</u>	<u>Herptiles</u>	<u>Fish</u>
<i>ring-necked plover (CB) Shrike</i>			

*Wetland → upland where vegetation changes to huckleberry, blackberry + other species*

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 4	(4 10 6BC) west of Beach Loop through TL 9802, 9801, 9802	<b>LOCATION:</b>	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/20/93		<b>BASIN:</b> First Street Kenai (Pacific St.)	<b>NWI CLASS:</b> R (S/S)
<b>COMMENTS:</b> short stretch from Beach Loop to culvert with fill in some places - continues in culvert under Kenai St. to outfall on beach			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) disturbed by culverting and fill
2. WILDLIFE HABITAT	H	(M)	(L) short stretch between roads and flanked by residences Permanent water
3. FISH HABITAT	H	M	(L) shallow, small stream (≈ 5" deep)
4. NOTEWORTHINESS	H	M	(L) very brushy second growth
5. EDUCATION POTENTIAL	H	M	(L) no access, far from schools
6. RECREATION	H	M	(L) no access; unremarkable vegetation community
7. FLOOD CONTROL	H	M	(L) some opportunity for water retention if culvert is stopped up by debris
8. SEDIMENT TRAPPING	H	M	(L) see comment for 7.
9. NUTRIENT RETENTION	H	M	(L) see comment for 7.
10. URBAN QUALITY OF LIFE	H	M	(L) size of area limited and disturbed by fill; some visual buffering for neighbors

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 T, R, S: T4 N ~~W~~, R. 10W, 1/4 OF SEC. 6  
 Field Date: 4/21 Time: 8:00  
 Tax Map/Lots: 4106 BC  
 Plot Location: Base of slope  
 Landform: Stream  
 Topography: moderate to steep sloped Stream channel

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 5 Plot No.: P5 FEMA ①  
 Condition: Natural

Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Soruce	FAC	FAC	canopy	✓					
W. hemlock									
Skunk cabbage	OBL	90%	h	✓					
Lady fern	FAC	10%	h						

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments:

## SOIL

Series/Phase: Walluski SiLm 7-15% Survey Mapping Verified? YES/NO <sup>as mapped</sup> Hydric Soils List? YES/NO  
 Classification: Drainage Class: Aquic Conditions? YES/NO/UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-4"	10YR 7/2	SiCL sat. to surface
	4-16"	Mosaic 5Y 5/1	w/7.5 YR 4/3 SiL very sticky

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: ✓ NONE GLEYED MATRIX HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS SULFIDIC ODOR SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments:

## HYDROLOGY

Inundation and Depth: YES/NO/UNK IN. Depth of Major Portion of Root Zone: 10 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 12 IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type:

Other Indicators: NONE SEDIMENT DEPOSITS WATER-STAINED LEAVES  
 DRIFT LINES WATER MARKS LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE Stream channel / swamp  
 Comments:

## DETERMINATION

WETLAND? YES/NO Becomes upland at lower bank in slope where vegetation changes from skunk cabbage to sword fern + salsal

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

Cannon Beach Inventory

Site No. 5  
upstream of site 4  
FEMA(D)

1. SITE FEATURES Forested Swamp

Water Features: Stream Pond Seasonal Permanent

Stream Width (ft): 1' Pond (sq. ft.): \_\_\_\_\_  
Depth: 2-4" \_\_\_\_\_  
Substrate: gravel, silt \_\_\_\_\_  
Outlet restrictions: \_\_\_\_\_

Topography: abraded channel; gentle gradient; riparian slopes moderate

Adjacent Land Uses: Residential

Major Structures or Roads: Hemlock St + Highway 101

Impacts/Disturbances: Upper end is impacted by fill + yard debris

2. VEGETATION (\* = Dominant Species >20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
* Spruce	Salal		Lady fern
W. Hemlock	Blackberry (on fill)	false-lily of valley	* Skunk Cabbage
		Sword fern	water parsley

Wetland → upland occurs at the lower break in slope where vegetation includes: Sword fern + false-lily of the valley

Ivy dominates Highway fill slopes. H. Blackberry dominates residential fill.

3. SIGNIFICANT HABITAT FEATURES

Snags: 0 Breeding habitat: too silt  
Downed woody debris: some Amphibians: ?  
Cavity nesters: ?

4. WILDLIFE Species/Sign Observed too Noisy from 101; also rainy

Birds Crows, jays, etc. Mammals Herptiles Fish  
The upper end of the drainage is 40-50' across. the lower end is 45-55' across.

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 5	<b>LOCATION:</b> (Pacific St.) east of Beach Loop in TL 9400, 9500, 9600 (4 10 6 BC)	<b>OBSERVER:</b> CG & JB
<b>DATE:</b> 4/20/93	<b>BASIN:</b> First Street Kenai	<b>NWI CLASS:</b> R(PFO)
<b>COMMENTS:</b> short stretch upstream of site 4		

(circle the appropriate rating)

- |                           |   |     | <u>comments</u>   |
|---------------------------|---|-----|---|
| 1. ECOLOGICAL INTEGRITY   | H | M   | (L) vegetation most disturbed along Hwy 101; stream culverted at Hwy 101 and Beach Loop |
| 2. WILDLIFE HABITAT       | H | (M) | (L) short reach between 2 roads; habitat best for birds; permanent                      |
| 3. FISH HABITAT           | H | M   | (L) small, shallow channel (≈ 5" deep)  |
| 4. NOTEWORTHINESS         | H | M   | (L) second growth with some large trees; small stretch not culverted                    |
| 5. EDUCATION POTENTIAL    | H | M   | (L) far from schools; no access   |
| 6. RECREATION             | H | M   | (L) no special resource; no access  |
| 7. FLOOD CONTROL          | H | M   | (L) stream small and mostly culverted   |
| 8. SEDIMENT TRAPPING      | H | M   | (L) see comment for 7.  |
| 9. NUTRIENT RETENTION     | H | M   | (L) see comment for 7.  |
| 10. URBAN QUALITY OF LIFE | H | M   | (L) size of area limited; some large Sitka spruce remain                                |

Cannon Beach Inventory

FEMA (D)

Site No. 6

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent

Stream Width (ft): 3'

Pond (sq. ft.):

Depth: ~ 6"

Substrate: silt

Outlet restrictions: yes. Vertical Culvert (5' diam) water flows - but a barrier to wildlife

Topography: Stream w/ gentle to moderate slopes

Adjacent Land Uses: Residential

Major Structures or Roads: 101 / Hemlock

Impacts/Disturbances: Ivy (forming shoulder), fill for residential development Culvert (see above)

2. VEGETATION (\* = Dominant Species > 20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
Red alder W Hemlock	H. Willow * Salmonberry	* Sword fern * FLV * <u>IVY</u>	* Oregon the sarmenosa * lady fern

wetland is wider on north side of channel - channel + wetland F. ac. ~ 10'

3. SIGNIFICANT HABITAT FEATURES

Snags: 1+

Downed woody debris: common

Breeding habitat: Potential? too silty?  
Amphibians:  
Cavity nesters: yes

4. WILDLIFE Species/Sign Observed

too noisy

Birds

Mammals

Herptiles

Fish

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 6	<b>LOCATION:</b> (4106BC) Between Hwy 101 and Hemlock St., TL 10600	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/21/93	<b>BASIN:</b> Brailer	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> creek channel confined between high ground on south and fill for yard on north; channel $\approx$ 1 ft. wide and $\approx$ 4" deep; lower section culverted		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) most of stream to beach is culverted
2. WILDLIFE HABITAT	H	(M)	(L) short stretch between Hwy 101 and Hemlock St., permanent water
3. FISH HABITAT	H	M	(L) small, shallow stream
4. NOTEWORTHINESS	H	M	(L) like many other, partially altered drainages in UGB
5. EDUCATION POTENTIAL	H	M	(L) small and altered by fill
6. RECREATION	H	M	(L) some bird watching potential
7. FLOOD CONTROL	H	M	(L) no flood plain
8. SEDIMENT TRAPPING	H	M	(L) see note above
9. NUTRIENT RETENTION	H	M	(L) see note above
10. URBAN QUALITY OF LIFE	H	M	(L) short open channel affected by fill for residences

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 Project/City: CANNON BEACH LWI  
 T, R, S: T4 N 44W, R.10W, 1/4 OF SEC. 6  
 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/21 Time: \_\_\_\_\_  
 Wetland No.: 7 Plot No.: P7  
 Tax Map/Lots: 4106 BC  
 Condition: \_\_\_\_\_  
 Plot Location: West of 101 + East of Beach Loop near Brallins Rd; sample 20' from stream channel  
 Landform: stream Normal Circumstances? YES/NO/UNK  
 Topography: gentle slope Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

**VEGETATION**

Species	Indicator	%	Layer	Domin.	Species	Indicator	%	Layer	Domin.
	Status	Cover				Status	Cover		
Sitka Spruce	FAC			✓	English Ivy	-	25%	H	✓
Salmonberry	FAC			✓					
Lady fern	FAC	15%	Herb						
Skunk cabbage	OBL	50%	Herb	✓					
Manx obrupta	OBL		H						
Maianthemum	FAC+	10%	H						

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE > 50% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

**SOIL**

Series/Phase: Walluski silm 7-15% Survey Mapping Verified? YES/NO/Not mapped Hydric Soils List? YES/NO  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Aquic Conditions? YES/NO/UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-9.5	10YR 3/3-4	SICL saturated; Bright specks 10YR 4/6
	9-16	Mosaic 10YR 4/1 + 10YR 4/3	w/ Bright prominent MT 7.5YR 4/8 SIC

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**HYDROLOGY**

Inundation and Depth: YES/NO/UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 9.5 IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: water flows on surface + subsurface  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND? YES/NO  
 Comments: Boundaries are difficult to define + need further study.  
Site is a mosaic of up = wetlands. Map as entire spruce canopy.  
 max. extent

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

Cannon Beach Inventory

Site No. 7

FEMA (2)

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent

3 Braided channels (water goes below surface in places)

Stream Width (ft): 3

Pond (sq. ft.):

Depth: 25"

Substrate: silty, gravelly

Outlet restrictions:

Topography: gentle slope

Adjacent Land Uses: Residential

Major Structures or Roads: Beach Loop + Highway 101

Impacts/Disturbances: English ivy is common on the margins

2. VEGETATION (\* = Dominant Species > 20%)

Tree Species

Shrub Species

Herb Species

Wetland Species

(see TR data sheet)

3. SIGNIFICANT HABITAT FEATURES

Snags: 0

Downed woody debris: common

Breeding habitat: ?

Amphibians:

Cavity nesters: 0

4. WILDLIFE Species/Sign Observed

Birds

Mammals

Herptiles

Fish

Winter wren

Y-rumped warbler

CB chick

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 7	<b>LOCATION:</b> TL 4400, 4300 (4106C) South of Brailier and east of Hemlock St.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/21/93	<b>BASIN:</b> Ocean	<b>NWI CLASS:</b> PFO/R
<b>COMMENTS:</b> mosaic of wetlands and uplands where stream channel divides, flows subterranean, resurfaces, forms pools with skunk cabbage among large sitka spruce; culverted from Hemlock St. to beach		

(circle the appropriate rating)

- |                           |   |     | <u>comments</u>   |
|---------------------------|---|-----|---|
| 1. ECOLOGICAL INTEGRITY   | H | M   | (L) some disturbance from logging early part of century + more recently Hwy 101, but relatively less disturbed than other sites |
| 2. WILDLIFE HABITAT       | H | M   | (L)   |
| 3. FISH HABITAT           | H | M   | (L) no access from beach; small stream, some subsurface flow  |
| 4. NOTEWORTHINESS         | H | M   | (L) not unique wetland type to this area  |
| 5. EDUCATION POTENTIAL    | H | M   | (L) far from schools; small size  |
| 6. RECREATION             | H | M   | (L) small size; no particular attraction features   |
| 7. FLOOD CONTROL          | H | M   | (L) not downstream of high discharge area   |
| 8. SEDIMENT TRAPPING      | H | M   | (L) some retention possible if watershed east of Hwy 101 is logged  |
| 9. NUTRIENT RETENTION     | H | M   | (L) not below noted source of nutrients   |
| 10. URBAN QUALITY OF LIFE | H | (M) | L open understory; visual esthetics; large spruce trees and large undeveloped lot   |

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 T, R, S: T4 N, R.10W, 1/4 OF SEC. 6  
 Field Date: 4/21 Time: \_\_\_\_\_  
 Tax Map/Lots: 4106BC  
 Plot Location: Pacific St. between Orford + Brallies  
 Landform: depression  
 Topography: gentle slope  
 Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 8 Plot No.: P8  
 Condition: Disturbed  
 Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<i>Carex obnupta</i>	OBL	70	H	✓					
<i>Maianthemum</i>	FACW	30	H	✓					
Sitka Spruce	FAC		T	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 50 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: Walluski silm 7-15%  
 Classification: \_\_\_\_\_  
 Horizon: \_\_\_\_\_ Depth: 0-12" Matrix Color: 10YR 2/1 Mottle Contrast & Color, Texture, Moisture, Other Characteristics: sil Saturated at 7"  
 Survey Mapping Verified? YES/NOT as mapped  
 Drainage Class: \_\_\_\_\_ Hydric Soils List? YES/NO  
 Aquic Conditions? YES/NO/UNK

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth: YES/NO/UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 14 IN.  
 Hydrology Alteration: YES/NO \_\_\_\_\_  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE Saturated at 7"  
 Comments: \_\_\_\_\_

## DETERMINATION

Jurisdictional Wetland? YES/NO Recent filling is either making this area wetter  
 Comments: or has filled a broader area of wetland. This site requires further investigation.  
 The wetland is approx 30' x 30' presently. The rest of the forest to the east appears to be relict wetland + no longer has hydrologic characteristics.  
 Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

Cannon Beach Inventory

Site No. 8

FEMA (2)

1. SITE FEATURES

Water Features:  $\phi$  Stream      Pond      Seasonal      Permanent

Stream Width (ft): \_\_\_\_\_

Pond (sq. ft.): \_\_\_\_\_

Depth: \_\_\_\_\_

Substrate: \_\_\_\_\_

Outlet restrictions: \_\_\_\_\_

Topography: *gentle slope*

Adjacent Land Uses: *residential*

Major Structures or Roads: *Pacific Rd.*

Impacts/Disturbances: *Recent fill maybe in wetland*

2. VEGETATION (\* = Dominant Species > 20%)

Tree Species      Shrub Species      Herb Species      Wetland Species  
(see 8 p. Data sheet)

3. SIGNIFICANT HABITAT FEATURES

Snags: ?

Breeding habitat:  $\phi$

Amphibians:

Cavity nesters: ?

Downed woody debris: *common*  
*WW @ stump East of WL*

4. WILDLIFE Species/Sign Observed

*in vicinity*

Birds

Mammals

Herptiles

Fish

*Chickadee*

*2 Raccoons*

*crow*

*winter wren @*

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 8	<b>LOCATION:</b> East of Pacific St. and intersection with Midway	<b>OBSERVER:</b> CG & JB
<b>DATE:</b> 4/21/93	<b>BASIN:</b> Ocean	<b>NWI CLASS:</b> PEM
<b>COMMENTS:</b> lowest point in west-trending slope with spruce and sedge understorey; fill placed in lowest point over the last two weeks		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) lot surrounded by houses and roads
2. WILDLIFE HABITAT	H	M	(L) (2 acres) too small or impacted by recent filling
3. FISH HABITAT	H	M	(L) no stream
4. NOTEWORTHINESS	H	M	(L) common vegetation community
5. EDUCATION POTENTIAL	H	M	(L) small area; far from schools
6. RECREATION	H	M	(L) no beach access through lot
7. FLOOD CONTROL	H	M	(L) no stream
8. SEDIMENT TRAPPING	H	M	(L) no stream
9. NUTRIENT RETENTION	H	M	(L) no stream
10. URBAN QUALITY OF LIFE	H	M	(L) some visual aesthetics for neighbors

Cannon Beach Inventory

Site No. 9

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent  
 Stream Width (ft): 3' Pond (sq. ft.): \_\_\_\_\_  
 Depth: 6" \_\_\_\_\_  
 Substrate: Silty \_\_\_\_\_  
 Outlet restrictions: Storm drain

Topography: stream

Adjacent Land Uses: Residential

Major Structures or Roads: culverted under Pacific Rd - open again for a short stretch

Impacts/Disturbances: culvert ; channelized on edge of property

2. VEGETATION (\* = Dominant Species >20%)

*In natural upstream locations*

Tree Species

Sitka Spruce

Shrub Species

Red elderberry

Herb Species

False Lof V  
Lower "ditch" weedy

Wetland Species

Lady Fern  
Road canopy grass  
Himalayan BB

3. SIGNIFICANT HABITAT FEATURES

Snags: 0

Downed woody debris: \_\_\_\_\_

Breeding habitat: \_\_\_\_\_

Amphibians: \_\_\_\_\_

Cavity nesters: \_\_\_\_\_

4. WILDLIFE Species/Sign Observed

Birds

Mammals

2 Raccoons

Herptiles

Fish

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 9	TL 2900, 3000, Govt. 4 Intersection of Midway & Pacific St.	<b>LOCATION:</b> (4106BC)	<b>OBSERVER:</b> CG & JB
<b>DATE:</b> 4/21/93	<b>BASIN:</b> Ocean		<b>NWI CLASS:</b> R
<b>COMMENTS:</b> stream surfaces from Hemlock to Pacific and is then culverted to Beach			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) very short section open to surface
2. WILDLIFE HABITAT	H	M	(L) see note above; channel ditched
3. FISH HABITAT	H	M	(L) very small, maybe intermittent stream ≈ 10" wide and 5" deep
4. NOTEWORTHINESS	H	M	(L) channel ditched
5. EDUCATION POTENTIAL	H	M	(L) small size; disturbed
6. RECREATION	H	M	(L) see comment for 5.
7. FLOOD CONTROL	H	M	(L) see comments for 1. & 4.
8. SEDIMENT TRAPPING	H	M	(L) see comments for 1. & 4.
9. NUTRIENT RETENTION	H	M	(L) see comments for 1. & 4.
10. URBAN QUALITY OF LIFE	H	M	(L) channel intentionally ditched to facilitate development

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T, R, S: T. 5 N. 10 W., 1/4 OF SEC. 20 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/21/93 Time: \_\_\_\_\_ Wetland No.: 10A Plot No.: P10A  
 Tax Map/Lots: 51020 CC/CA/CS Condition: Natural FEMA 6  
 Plot Location: South of sewage ponds near break in slope  
 Landform: Terrace Normal Circumstances? YES/NO/UNK  
 Topography: Flat Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

on map 51020

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Skunk Cabbage	OBL	80%	H	✓	Red Alder	FAC		T	✓
Lady Fern	FAC	5	H						
Carex obnupta	OBL	15	H						
Demarthe	OBL	5	H						
Thimberry	FAC		S	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

mapped as:

**SOIL**

Series/Phase: Coquille-Clatsop complex, protected Survey Mapping Verified? YES/NO Hydric Soils List? YES/NO  
 Classification: Hydric Drainage Class: U.P. Aquic Conditions? YES/NO/UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
"	0-3"	Mosaic 10YR 2/1 + 10YR 3/3	S.C w/ fine gravel
	3-5"	5YR 5/8	Saturated to surface refusal at 5"; too gravelly

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: NONE GLEYED MATRIX HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS SULFIDIC ODOR SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**HYDROLOGY**

Inundation and Depth: YES/NO/UNK IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 3 IN.  
 Hydrology Alteration: YES/NO

Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: NONE SEDIMENT DEPOSITS WATER-STAINED LEAVES  
 DRIFT LINES WATER MARKS LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND? YES/NO Forested wetland -> Forested Upland at the break  
 Comments: in slope

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

Cannon Beach Inventory

Site No. 10A

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent

Elk Cr + Trib.

Stream Width (ft): \_\_\_\_\_

Pond (sq. ft.): seasonal ponding ubiquitous

Depth: 0 - x'

Substrate: Silt - rock

Outlet restrictions: ∅

Topography: Dune

Adjacent Land Uses: Sewage Treatment Ponds, Hwy 101

Major Structures or Roads: Bridge; Maintained trail through woods used by pedestrians + mountain bikes

Impacts/Disturbances: garbage limited (only 1 Bear can observed) English holly scattered; noise from 101

2. VEGETATION (\* = Dominant Species >20%)

<u>Tree Species</u>	<u>Shrub Species</u>	<u>Herb Species</u>	<u>Wetland Species</u>
<u>Sitka spruce</u>	<u>Red elderberry</u>	<u>Deer fern</u>	<u>Carex OB</u>
	<u>Red huckleberry</u>	<u>Sword fern</u>	<u>Skunk l.</u>
	<u>Twining</u>	<u>Trillium</u>	<u>Oenanthe sarmentosa</u>

3. SIGNIFICANT HABITAT FEATURES

Snags: Abundant

Downed woody debris: Abundant

Mosaic of upland islands of stumps etc... + seasonal ponding

Breeding habitat: Excellent

Amphibians: ✓

Cavity nesters: ✓

4. WILDLIFE Species/Sign Observed

<u>Birds</u>	<u>Mammals</u>	<u>Herptiles</u>	<u>Fish</u>
<u>Winter wren</u>	<u>Elk</u>		
<u>Y-R warbler</u>	<u>Deer?</u>		
<u>BT Gray warbler</u>			
<u>Wren-tit</u>			
<u>wood ducks?</u>			
<u>crow</u>			
<u>or-a warbler</u>			
<u>Swinson's thrush</u>			

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 10A	TL 201 Between Hwy 101 and Spruce St., south of Elk Cr.	<b>LOCATION:</b> (5 10 20cc)	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/21/93		<b>BASIN:</b> unnamed <small>are assessed?</small>	<b>NWI CLASS:</b> PFOC
<b>COMMENTS:</b> Forested wetlands of alder, willow, shrub layer, skunk cabbage, and other herbaceous species three sides of sewer treatment lagoons			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	(H)	M	L connection to other riparian refugia and foothills by Elk Cr. corridor
2. WILDLIFE HABITAT	(H)	M	L large, structurally diverse area connected to undeveloped areas along Elk Cr.
3. FISH HABITAT	H	M	(L) unknown
4. NOTEWORTHINESS	(H)	M	L large wetland system with portions undisturbed or recovered from disturbances 30 yrs. ago or more
5. EDUCATION POTENTIAL	(H)	M	L large wetland with developed parking lot near main part of town
6. RECREATION	(H)	M	L existing trails used by hikers, bikers, and birdwatchers
7. FLOOD CONTROL	H	(M)	L ? tidegates, may restrict backflow from Elk Creek
8. SEDIMENT TRAPPING	H	M	(L) opportunity for dense woody and emergent vegetation to retain sediments but wetland not downstream of source
9. NUTRIENT RETENTION	H	M	(L) wetland not downstream of major source of input
10. URBAN QUALITY OF LIFE	(H)	M	L visual aesthetics of large forested area; natural park area for city recreation

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T, R, S: T. 5N, R. 10W, 1/4 OF SEC. 20 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/21/93 Time: \_\_\_\_\_ Wetland No.: 10B Plot No.: P10B  
 Tax Map/Lots: S1020CC Condition: \_\_\_\_\_  
 Plot Location: SE of natural channel + west of N. end of treatment pond  
 Landform: PEM Normal Circumstances?  YES /  NO /  UNK  
 Topography: Flat Atypical Situation?  YES /  NO /  UNK Problem Area?  YES /  NO /  UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<i>Carex lyngbyi</i>	OBL	75	H	✓					
<i>Potentilla pedunculis</i>	OBL	25	H	✓					
<i>Juncus</i> sp.									

Hydrophytic Vegetation Criterion Met?  YES /  NO /  INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: mapped as Coquille - Clatsop complex Survey Mapping Verified?  YES /  NO Hydric Soils List?  YES /  NO  
 Classification: Hydric Drainage Class: very poorly drained Aquic Conditions?  YES /  NO /  UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 0-12" 10YR 3/1-3/2 Si c Saturated to surface

Criteria Depth: 10 IN. Effectively Drained?  YES /  NO /  UNK Relic Characteristics?  YES /  NO /  UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS  SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES /  NO /  INDEFINITE  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth:  YES /  NO /  UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES /  NO 2 IN.  
 Hydrology Alteration:  YES /  NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES  WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES /  NO /  INDEFINITE  
 Comments: \_\_\_\_\_

## DETERMINATION

**WETLAND?**  YES /  NO This is a large PEM w/ a border of PSS  
 Comments: A drainage system of numerous channels runs through + w/ a ditch along the N. margin where willows grow along it.

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 10B	TL 201 Between sewage treatment lagoons and Spruce St.	<b>LOCATION:</b> (510 20 CC)	<b>OBSERVER:</b> CG & JB
<b>DATE:</b> 4/21/93		<b>BASIN:</b> Wetlands	<b>NWI CLASS:</b> PEM/SS
<b>COMMENTS:</b> Sedge-dominated meadow with fringe and groups of willows			

(circle the appropriate rating)

- |                           |     |     | <u>comments</u>   |
|---------------------------|-----|-----|---|
| 1. ECOLOGICAL INTEGRITY   | (H) | M   | L connection to riparian corridor of Elk Cr. & refugia in foothills upstream  |
| 2. WILDLIFE HABITAT       | (H) | M   | L see note above; currently used by elk and many passerine birds  |
| 3. FISH HABITAT           | H   | M   | (L) ? No passage presently? great potential juvenile habitat  |
| 4. NOTEWORTHINESS         | (H) | M   | L centrally located large natural area; meadow type uncommon in coast range forest habitat                            |
| 5. EDUCATION POTENTIAL    | (H) | M   | L centrally located, large natural area with adjacent parking   |
| 6. RECREATION             | (H) | M   | L currently used for birdwatching and elk watching  |
| 7. FLOOD CONTROL          | H   | (M) | L flood control for Elk Cr. tide gates may influence backflow   |
| 8. SEDIMENT TRAPPING      | H   | (M) | L opportunity for dense emergent vegetation to retain sediment; wetlands downstream of potential source for pollution |
| 9. NUTRIENT RETENTION     | H   | (M) | L see note above  |
| 10. URBAN QUALITY OF LIFE | (H) | M   | L visual aesthetics of large natural area   |

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 Project/City: CANNON BEACH LWI  
 T, R, S: T. 1 N, R. 10 W, 1/4 OF SEC. 30  
 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/21/93 Time: \_\_\_\_\_  
 Wetland No.: 11 Plot No.: P11  
 Tax Map/Lots: Elk run Park; S1030AA  
 Condition: PFD - Forested Swamp  
 Plot Location: Middle of site  
 Landform: \_\_\_\_\_ Normal Circumstances?  YES/NO/UNK  
 Topography: swale Atypical Situation?  YES/NO/UNK Problem Area?  YES/NO/UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Skunk cabbage	OBL	30	h	✓	Salix lasiandra			t	
Oenanthe sarmentosa	OBL	30	h	✓	Salix hookeriana			t	
Carex obnupta	OBL	25	h	✓	Maianthemum sp.				(growing on fallen logs)
Lady fern	FAC	15			Red elderberry				
Red alder	FAC		t	✓					

Hydrophytic Vegetation Criterion Met?  YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: mapped as Coquille-Clatsop complex  
 Classification: hydric  
 Survey Mapping Verified?  YES/NO  
 Drainage Class: up.d.  
 Hydric Soils List?  YES/NO  
 Aquic Conditions?  YES/NO/UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-5.5"	10YR 2/2	S.C. saturated to surface
	5.5-16"	10YR 4/4	Large Bright Mt 7.5 YR 4/6 Sil

Criteria Depth: 10 IN. Effectively Drained?  YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators:  NONE  GLEYED MATRIX  HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS  SULFIDIC ODOR  SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth: Rockets  YES/NO/UNK ~2 IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO \_\_\_\_\_ IN.  
 Hydrology Alteration: YES/NO \_\_\_\_\_  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators:  NONE  SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 DRIFT LINES  WATER MARKS  LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: Water puddled throughout & subs

## DETERMINATION

WETLAND?  YES/NO The wetland is a 60' across on the west side of Highway N.S. 15 & 12' across  
 Comments: WL Boundary -> upland w/ fill for development + top break  
where swam fern & sedge are not common.  
There's a relic PSS willow wetland to the west of this site but it no longer  
 Field Investigator(s): J. Burcham, C. Galen  
 contains hydrology  
 Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 11	TL City Park on Spruce south of Ecola Square	<b>LOCATION:</b> (510 30AA)	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/21/93		<b>BASIN:</b> Commercial 3	<b>NWI CLASS:</b> PFO
<b>COMMENTS:</b> City Park of remnant old growth spruce and understory of skunk cabbage			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	(M)	L wetland crossed by two roads but close to large forested area of site
2. WILDLIFE HABITAT	H	(M)	L water, diverse vegetative structure, abundant woody debris
3. FISH HABITAT	H	M	(L) shallow, seeping flow
4. NOTEWORTHINESS	H	(M)	L old growth forested wetland type; small size
5. EDUCATION POTENTIAL	H	(M)	L centrally located; off-road parking; small size
6. RECREATION	(H)	M	L viewing and picnicking
7. FLOOD CONTROL	H	M	(L) opportunity for water retention in depressions, but wetland not downstream of major discharge source
8. SEDIMENT TRAPPING	H	M	(L) upper reach does not receive large input of sediments
9. NUTRIENT RETENTION	H	M	(L) no major source of input above
10. URBAN QUALITY OF LIFE	(H)	M	L centrally located; high visual aesthetics

NOTE:  
 \* No wetland determination  
 Data sheet because access  
 denied.

Cannon Beach Local Wetlands Inventory

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. (12)	TL 8000, 7100, 7101, 7200, 7400, 7500, 7600, 7900 East end of Gower St.	LOCATION: (5 10 29BC)	OBSERVER: CG & JB
DATE: 7/21/93	BASIN: Coolidge 12 + 13		NWI CLASS: PFO/R
COMMENTS: no access; property viewed from road and neighboring properties; appears to be a mosaic of wetlands and uplands			

(circle the appropriate rating)

- |                           |   |         | <u>comments</u>   |
|---------------------------|---|---------|---|
| 1. ECOLOGICAL INTEGRITY   | H | (M) (L) | large undeveloped area of older second growth and variety of vegetation communities surrounding small pockets of natural wet. |
| 2. WILDLIFE HABITAT       | H | (M) (L) | large area still undeveloped but surrounded by residences and roads   |
| 3. FISH HABITAT           | H | M (L)   | small, shallow surface flow   |
| 4. NOTEWORTHINESS         | H | (M) (L) | large undeveloped area; successional stage of second growth includes multiple layers  |
| 5. EDUCATION POTENTIAL    | H | M (L)   | no access   |
| 6. RECREATION             | H | M (L)   | no access   |
| 7. FLOOD CONTROL          | H | M (L)   | wetland not downstream of major discharge   |
| 8. SEDIMENT TRAPPING      | H | M (L)   | see comment for 7.  |
| 9. NUTRIENT RETENTION     | H | M (L)   | see comment for 7.  |
| 10. URBAN QUALITY OF LIFE | H | (M) L   | few undeveloped properties of more natural forest type of this size remain in UGB;  |

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 Project/City: CANNON BEACH LWI  
 T, R, S: T. 5N W6, R. 10W, 1/4 OF SEC. 29  
 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/2/93 Time: \_\_\_\_\_  
 Wetland No.: 13 Plot No.: P13  
 Tax Map/Lots: 510 29CB  
 Condition: Natural  
 Plot Location: in Tax Lot 1806 at East end  
 Landform: flat  
 Topography: Headwaters  
 Normal Circumstances?  YES  NO  UNK  
 Atypical Situation?  YES  NO  UNK  
 Problem Area?  YES  NO  UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Red Alder	FAC								
Carex abrupta	OBL	100	(5' tall)	H					✓
Salmonberry	FAC								
Salal	-								

Hydrophytic Vegetation Criterion Met?  YES  NO  INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: <sup>mapped as</sup> Walluski silt loam  
 Survey Mapping Verified?  YES  NOT as mapped  
 Hydric Soils List?  YES  NO  
 Classification: \_\_\_\_\_  
 Drainage Class: \_\_\_\_\_  
 Aquic Conditions?  YES  NO  UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-4"	10YR 7/1	Moist Silty loam
	4-12"	10YR 7/1	S.L. Saturated at 7"

Criteria Depth: 10 IN.  
 Effectively Drained?  YES  NO  UNK  
 Relic Characteristics?  YES  NO  UNK  
 Other Indicators: \_\_\_\_\_  
 NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES  NO  INDEFINITE Low chroma + aquic moisture regime  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth: YES  NO  UNK \_\_\_\_\_ IN.  
 Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES  NO 11.5 IN.  
 Hydrology Alteration: YES  NO  UNK  
 Wetland Drainage Pattern: YES  NO  UNK Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_  
 NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES  NO  INDEFINITE  
 Comments: \_\_\_\_\_

## DETERMINATION

WETLAND?  YES  NO  
 Comments: WL potentially in TL 1805, 1806, 1808, 1801 on Tax map 5-10 29CB  
 WL is located within 50' of 101 near a N/S fence line

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 13	TL 1806, 1805 (no access) (51029 CB)	<b>LOCATION:</b> Cypress Ct. off Dawes Ave.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/21/93		<b>BASIN:</b> Coolidge 13	<b>NWI CLASS:</b> PFD
<b>COMMENTS:</b> TL 1805 viewed from TL 1806; second growth alder canopy with large patches of sedge understory			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	(M) — (L)	continuous with large, undeveloped lot to the north
2. WILDLIFE HABITAT	H	(M) — (L)	varied structure, (Site 12) contiguous with Site 12
3. FISH HABITAT	H	M (L)	no stream
4. NOTEWORTHINESS	H	M (L)	common second growth community type
5. EDUCATION POTENTIAL	H	M (L)	not centrally located; no access
6. RECREATION	H	M (L)	no access
7. FLOOD CONTROL	H	M (L)	no stream
8. SEDIMENT TRAPPING	H	M (L)	see - 7.
9. NUTRIENT RETENTION	H	M (L)	see - 7.
10. URBAN QUALITY OF LIFE	H	(M) — (L)	provides some buffer for adjacent residences and from Highway 101

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 6N ~~R. 10W~~, R. 10W, 1/4 OF SEC. 29  
 Field Date: 4/21/93 Time: \_\_\_\_\_  
 Tax Map/Lots: 5 10 29 CB  
 Plot Location: TL 1600, 1604 (5 10 29 CB) east of intersection of Daves and Spruce  
 Landform: \_\_\_\_\_ Normal Circumstances? YES/NO/UNK  
 Topography: \_\_\_\_\_ Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 14 Plot No.: CH<sub>2</sub>M Hill Report  
 Condition: \_\_\_\_\_

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Red alder	FAC	100	t	✓	H. Blackberry	-		h	
Carex abrupta	OBL	85	h	✓					
Sword fern	-	15	h						
Salmonberry	FAC		s	✓					
Eng holly	-		s						

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_ % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

-----SOIL-----

Series/Phase: Humitropepts - Tropaquepts complex Survey Mapping Verified? YES/NO Hydric Soils List? YES/NO  
 Classification: refer to CH<sub>2</sub>M Hill delineation Drainage Class: \_\_\_\_\_ Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO \_\_\_\_\_ IN.  
 Hydrology Alteration: YES/NO \_\_\_\_\_  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE we felt hydrology is present in stream channel  
 Comments: but not necessarily throughout mapped wetland

-----DETERMINATION-----

WETLAND? YES/NO Refer to CH<sub>2</sub>M Hill Report 9-21-90 HPdx 31008. B0 for Steve Martin  
 Comments: Delineation on file w/ City of Cannon Beach + DSL

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 14	TL 1600, 1604 (5 10 29 CB)	<b>LOCATION:</b> east of inter- section of Daves + Spruce	<b>OBSERVER:</b> CJ + JB
<b>DATE:</b> 4/21/93		<b>BASIN:</b> Coolidge 13	<b>NWI CLASS:</b> PFO/R
<b>COMMENTS:</b> TL 1604 previously delineated by CH <sub>2</sub> M Hill (9/21/90); second growth alder with large areas of sedge understory + salmonberry; may be a mosaic of upland + wetland			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) surrounded by roads and residences
2. WILDLIFE HABITAT	H	(M)	L permanent water, diverse structure in + isolated by Hwy 101
3. FISH HABITAT	H	M	(L) small, shallow channel
4. NOTEWORTHINESS	H	M	(L) younger stage of second growth
5. EDUCATION POTENTIAL	H	M	(L) not centrally located
6. RECREATION	H	M	(L) brushy and no outstanding features
7. FLOOD CONTROL	H	M	(L) not downstream of major discharge
8. SEDIMENT TRAPPING	H	M	(L) see 7.
9. NUTRIENT RETENTION	H	M	(L) see 7.
10. URBAN QUALITY OF LIFE	H	(M)	L some buffer for adjacent residences, "larger" site than many

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 5N, R. 10W, 1/4 OF SEC. 30  
 Field Date: 4/21/93 Time: \_\_\_\_\_  
 Tax Map/Lots: S1030AD  
 Plot Location: in center of 50' w/r  
 Landform: \_\_\_\_\_  
 Topography: Stream-swale  
 Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 15 Plot No.: P15  
 Condition: \_\_\_\_\_  
 Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Sitka spruce	FAC		T	✓	skunk cabbage	OBL	60	H	✓
Red alder	FAC		T	✓	gentle samaras	OBL	35	H	✓
Red alder berry					lady fern	FAC	5	H	
Salmon berry									

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC.  
 Comments: The canopy contains diverse structure, snags, stumps.

**SOIL**

Series/Phase: mapped as: Ustoluski silt loam and Humitropepts-tropaquepts  
 Classification: Complete  
 Survey Mapping Verified? YES/NOT as mapped  
 Drainage Class: \_\_\_\_\_  
 Aquic Conditions? YES/NO/UNK  
 Hydric Soils List? YES/NO

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-10	10YR 3/2	w/ Red MT 5YR 4/6 SiCl; saturated to surface
	10-18	10YR 4/1	2.5YR 4/6 SiC

Criteria Depth: 10 IN.  
 Effectively Drained? YES/NO/UNK  
 Relic Characteristics? YES/NO/UNK  
 Other Indicators: NONE, GLEYED MATRIX, HISTOSOL/HISTIC EPIPEDON, CONCRETIONS, SULFIDIC ODOR, SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**HYDROLOGY**

Inundation and Depth: YES/NO/UNK IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 11 IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: NONE, SEDIMENT DEPOSITS, WATER-STAINED LEAVES, DRIFT LINES, WATER MARKS, LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND? YES/NO wetland is a narrow channel that maneuvers around the margins of the A-frame property + becomes 50' wide PFO between the properties to the west.  
 Comments: The stream channel is 3-5' wide + ≈ 12" deep

Field Investigator(s): J. Burcham, C. Galen  
 Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 15	TL 12302, 12303, 12304, 12305, 12306, 12307, 12308, 12309 <b>LOCATION:</b> (51030AD) east of Evergreen betw. Dawes + Coolidge	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/21/93	<b>BASIN:</b> Coolidge 13	<b>NWI CLASS:</b> PFO/R
<b>COMMENTS:</b> older spruce and second growth alder canopy and skunk cabbage/lady fern understory; wetland and stream channel filled for building pads and parking lots on several lots		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) surrounded by roads and development but relatively large area of spruce forested wetland type
2. WILDLIFE HABITAT	H	(M)	L water, fairly diverse structure but isolated by development
3. FISH HABITAT	H	M	(L) small, shallow stream
4. NOTEWORTHINESS	H	(M)	L older spruce forest canopy less common in urbanized area
5. EDUCATION POTENTIAL	H	M	(L) no access; far from schools
6. RECREATION	H	M	(L) some birdwatching possible
7. FLOOD CONTROL	H	M	(L) channel has been ditched to direct water away quickly
8. SEDIMENT TRAPPING	H	M	(L) not a broad, vegetated floodplain
9. NUTRIENT RETENTION	H	M	(L) see 8.
10. URBAN QUALITY OF LIFE	H	(M)	L site is visually esthetic with large trees and skunk cabbage "old forest" appearance in back yards of surrounding development

Cannon Beach Inventory

4/22/93

Site No. 16

1. SITE FEATURES

PEM/PSS - Estuarine  
outlet to Ecobla Cr.

Water Features: Stream Pond Seasonal Permanent

What was large PFD with supplies water

(Logan Cr)

Stream Width (ft): ~13'

Pond (sq. ft.):

Depth: ~10"

Substrate: gravel + rock

Outlet restrictions:

Topography: ~flat

Adjacent Land Uses: City Park - mostly lawn & picnic tables, restrooms  
East of bridge estuary is heavily grazed by horses  
access was denied

Major Structures or Roads: 5th Street (S. of Antler Ave)

Impacts/Disturbances: site has been killed historically + diked  
- water bleeding from ecobla cr. estuary

2. VEGETATION (\* = Dominant Species >20%)

50%  
100%  
Park

Tree Species	Shrub Species	Herb Species	Wetland Species
Sitka spruce	* Hooker's willow	* Beach grass	Carex obnupta *
Red alder	Salal		Juncus effusus *

Sampled soil in willow PSS - sandy, silt - refusal

3. SIGNIFICANT HABITAT FEATURES

Snags: Breeding habitat:  
Amphibians:  
Downed woody debris: Large quantity of driftwood  
- wood debris on eastern side of dike (in Park)  
Cavity nesters:

4. WILDLIFE Species/Sign Observed

Birds Mammals Herptiles Fish

Park in process of removing blackberries + planting  
tree + shrub species such as coast pine, planted by school  
& bald cypress. The remaining blackberries should be removed  
- areas planted with various tree/shrub/herbs that will  
help prevent further encroachment by H. blackberry

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 16	<b>LOCATION:</b> TL 3300, 2800, 3000, 3100, 3200 (5 10 20 CB) City park at mouth of tributary to Ecola Cr.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/22/93	<b>BASIN:</b> Unnamed basin (Estuarine) - south of Ecola Park basin	<b>NWI CLASS:</b> PEM/SS
<b>COMMENTS:</b> City park is mosaic of fill and wetlands; dikes of rocks constructed		
Lumped as such?		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) site partially filled, cleared
2. WILDLIFE HABITAT	(H)	(M)	L estuarine; disturbed; high level of daily human activity during summer months; water is turbid
3. FISH HABITAT	H	M	(L) stream ditched and culverted after short stretch upstream of mouth; some fish may enter from Ecola Creek
4. NOTEWORTHINESS	H	M	(L) not a natural habitat
5. EDUCATION POTENTIAL	H	M	(L) wetlands and stream have been altered for flood control and park development
6. RECREATION	(H)	M	L used often by local residents and tourists for walking, riding & viewing
7. FLOOD CONTROL	H	M	(L) see comment for 5.
8. SEDIMENT TRAPPING	H	M	(L) see comment for 5.
9. NUTRIENT RETENTION	H	M	(L) see comment for 5.
10. URBAN QUALITY OF LIFE	(H)	M	L park has scenic views and developed picnicking facilities

Cannon Beach Inventory

Site No. 17

1. SITE FEATURES

Water Features: Stream tributary of Eccla Cr. Pond Seasonal Permanent  
Logan Cr.  
 Stream Width (ft): 15' Pond (sq. ft.): \_\_\_\_\_  
 Depth: \_\_\_\_\_  
 Substrate: sand, gravel, rocks  
 Outlet restrictions: \_\_\_\_\_

Topography:

Adjacent Land Uses: Stream meanders through new houses North of 531 + W of 555 + N of Hemlock. Another tributary (18) enters the  
 Major Structures or Roads: Stream N.W. of 555 + comes from the NW crosses Eccla Park Highway + 5th St.  
 Impacts/Disturbances:

2. VEGETATION (\* = Dominant Species > 20%)

Tree Species      Shrub Species      Herb Species      Wetland Species

(West of Eccla Park Rd.)  
 The channel is incised ~ 3.5' A Vegetation on bank is larch pine  
 \* HBS, red elderberry, red alder, + giant horse tail. The forest  
 understory surrounding the reach from Hemlock St. to Eccla PK  
 Rd. is extremely disturbed + dominated by HSB. There are a  
 few outrageous (4' dbH) spruce trees located along the bank. The source of water  
 for this stream originates in the large Site 20. Vegetation is previously  
 + described in Site 20

3. SIGNIFICANT HABITAT FEATURES

Snags: \_\_\_\_\_ Breeding habitat: \_\_\_\_\_  
 Downed woody debris: \_\_\_\_\_ Amphibians: \_\_\_\_\_  
 Cavity nesters: \_\_\_\_\_

4. WILDLIFE Species/Sign Observed too rainy

Birds      Mammals      Herptiles      Fish

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 17	<b>LOCATION:</b> Between Hemlock + Ecola Park Rd — + 5 <sup>th</sup> + 6 <sup>th</sup> streets	<b>OBSERVER:</b> C. Gale
<b>DATE:</b> 4/22/93	<b>BASIN:</b> Breakers Point	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> This stream originates in the PFO #20 + is culminated under Ecola Park Road. The channel is incised $\approx 3.5'$ + winds through residential development		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	<sup>in forest</sup> (H) — (M) — <sup>in residential</sup> (L)			H. Blackberry dominates the banks.
2. WILDLIFE HABITAT	<sup>in forest</sup> (H) — (M) — <sup>in residential</sup> (L)			permanent water but banks quite steep making access difficult.
3. FISH HABITAT	H — (M) — L			Degraded fish habitat but randoms like mayfly etc.
4. NOTEWORTHINESS	<sup>in forest</sup> + (H) — (M) — L			A few outrageous Sitka Spruce along bank (4' + dbh)
5. EDUCATION POTENTIAL	H — M — (L)			
6. RECREATION	H — M — (L)			limited to residents
7. FLOOD CONTROL	H — M — (L)			incised channel
8. SEDIMENT TRAPPING	H — M — (L)			"
9. NUTRIENT RETENTION	H — M — (L)			"
10. URBAN QUALITY OF LIFE	H — (M) — L			great potential for enhancement offers esthetic buffer to adjacent residence where vegetation is not too disturbed.

Cannon Beach Local Wetlands Inventory

TL 3100, 1600, 1601, 3300, 3400  
(5/10/19AD)

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. 18	LOCATION north fork of small tributary to Elk Cr. from 6th & Hemlock streets north; TL 1000, 2200, 2100, 2500, 2000, 2600, 2700, 1900, 1901, 1902, 1800, 2800, 2900, 1700, 3000	OBSERVER: CG + JB
DATE: 4/22/93	BASIN: Breakers Point	NWI CLASS: R
COMMENTS: This northern branch of the small tributary to Elk Cr. has been ditched and culverted for much of its length from 6th & Hemlock streets upstream with houses and lawns to edge of bank; channel		

is downcut about 4 ft. downstream from 6th & Hemlock to City Park, only short sections are surrounded by natural scrub/shrub vegetation (circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) natural stream channel greatly altered
2. WILDLIFE HABITAT	H	(M)	L vegetated corridor disrupted but contains permanent water
3. FISH HABITAT	H	M	(L) habitat greatly altered by ditching and culverting
4. NOTEWORTHINESS	H	M	(L) see comment for 1.
5. EDUCATION POTENTIAL	H	M	(L) see comment for 1.
6. RECREATION	H	M	(L) see comment for 1.
7. FLOOD CONTROL	H	M	(L) channel was ditched to move water away quickly
8. SEDIMENT TRAPPING	H	M	(L) see comments for 1. & 7.
9. NUTRIENT RETENTION	H	M	(L) see comments for 1. & 7.
10. URBAN QUALITY OF LIFE	H	M	(L) remaining small sections with natural shrub community offer esthetic buffer to adjacent residences

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 Project/City: CANNON BEACH LWI  
 T, R, S: T. 5N, R. 10W, 1/4 OF SEC. 19  
 County, State: CLATSOP COUNTY, OREGON  
 Field Date: Apr. 22, 1993 Time: \_\_\_\_\_  
 Wetland No.: 19 Plot No.: P19  
 Tax Map/Lots: 51019 AD/AA  
 Condition: Natural PFD  
 Plot Location: N of 6th/Hendrick sampled ≈ 30' N of 6th/Hendrick  
 Landform: PFD: Flat at base of "cliff"  
 Normal Circumstances?  YES/ NO/ UNK  
 Topography: \_\_\_\_\_ Atypical Situation? YES/ NO/ UNK Problem Area? YES/ NO/ UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<i>Pinus olmuta</i>	OBL	25	H	✓	<i>Spruce</i>			T	
<i>Stemk callidge</i>	OBL	25	H	✓	<i>Red alder</i>			T	✓
<i>Water parakey</i>	OBL	25	H	✓					
<i>Ranunculus alpinus</i>	FACW	25	H	✓					

Hydrophytic Vegetation Criterion Met?  YES/ NO/ INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC

Comments: The size structure of this PFD is quite significant. 2 mammoth Sitka spruce trees are present - an elk trail meanders through the site.

## SOIL

Series/Phase: Willuski silt loam - *Templeton - Ecoda silt* Survey Mapping Verified?  YES/ NO/ AS mapped  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Hydric Soils List?  YES/ NO  
 Aquic Conditions?  YES/ NO/ UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-3"	10YR 7/2	oxidized chromospheres in matrix
	3-16"	10YR 4/1	st. 4+ 2" large concretions in matrix

Criteria Depth: 10 IN. Effectively Drained? YES/ NO/ UNK Relic Characteristics? YES/ NO/ UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES/ NO/ INDEFINITE

Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth:  YES/ NO/ UNK <sup>min. 60s</sup> pondings ≤ 2 IN. ✓ Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES/ NO 9.5 IN.  
 Hydrology Alteration: YES/ NO  
 Wetland Drainage Pattern:  YES/ NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES/ NO/ INDEFINITE

Comments: \_\_\_\_\_

## DETERMINATION

WETLAND?  YES/ NO Extensive PFD - fill from backyards on each street  
 Comments: have encroached on the wetlands

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 19	<b>LOCATION:</b> Between Ecola Park Hwy & Laurel St. northward from 6th St.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/22/93	<b>BASIN:</b> Breakers Point	<b>NWI CLASS:</b> PFO
<b>COMMENTS:</b> A large, open area of old, selective cut primary and second growth forest		

(circle the appropriate rating)

- |                           |         |     | <u>comments</u>  |
|---------------------------|---------|-----|--|
| 1. ECOLOGICAL INTEGRITY   | (H) M   | L   | very large, relatively undisturbed area of older second growth and contiguous with other forested areas at higher elevations |
| 2. WILDLIFE HABITAT       | (H) M   | L   | multiple layered vegetation; sign of heavy elk use   |
| 3. FISH HABITAT           | H M     | (L) | stream channel (18) is restricted by ditching now & does not meander. This site is much as to improve previous               |
| 4. NOTEWORTHINESS         | (H) (M) | L   | not primary growth, some disturbance from earlier logging but still a large intact, undeveloped                              |
| 5. EDUCATION POTENTIAL    | H (M)   | L   | near schools, but limited access   |
| 6. RECREATION             | H M     | L   | trail (dk) present through site  |
| 7. FLOOD CONTROL          | H M     | (L) | see comment for 3.   |
| 8. SEDIMENT TRAPPING      | H M     | (L) | see comment for 3.   |
| 9. NUTRIENT RETENTION     | H M     | (L) | see comment for 3.   |
| 10. URBAN QUALITY OF LIFE | (H) M   | L   | few, large undeveloped stands of diverse vegetation and older forest remain so near urban center that are used by elk        |

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T, R, S: T. 6N, R. 10W, 1/4 OF SEC. 20 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/22/93 Time: \_\_\_\_\_ Wetland No.: 20 \* Plot No.: P20  
 Tax Map/Lots: 51070 BC Condition: \_\_\_\_\_  
 Plot Location: East of Gorda Park Rd - 20' east side of channel, north of 6th St.  
 Landform: East side of Gorda Butte Normal Circumstances?  YES/NO/UNK  
 Topography: \_\_\_\_\_ Atypical Situation?  YES/NO/UNK Problem Area?  YES/NO/UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Skunk cabbage	OBL	30	H	✓	Sitka spruce	FAC		T	✓
Arise obnupta	OBL	30	H	✓	Red Alder				✓
Juncus roemerianus	OBL	30	H	✓	Salmonberry	FAC		S	
Red Alder	FAC	10	H						
	FAC		T	✓					

Hydrophytic Vegetation Criterion Met?  YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: Walluski silt loam Survey Mapping Verified?  YES/NOT as mapped Hydric Soils List?  YES/NO  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Aquic Conditions?  YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 0-5.5" 0m 7/3 stick, fine sandy silty clay - saturated ✓  
 5.5-10" 1m 7/4 1/2" 1/4" 1/4" 1/4" 7.5 YR 5/8 = 100  
 10-14" 1.5m 7/4 1/2" 1/4" 1/4" 1/4" 7.5 YR 5/8 = 100

Criteria Depth: 10 IN. Effectively Drained?  YES/NO/UNK Relic Characteristics?  YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES/NO/INDEFINITE low chroma, bright mottles, acidic moisture  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth:  YES/NO/UNK 43 IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO \_\_\_\_\_ IN.  
 Hydrology Alteration:  YES/NO  
 Wetland Drainage Pattern:  YES/NO Pattern Type: meandering channels through field + seasonal ponding  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

## DETERMINATION

WETLAND?  YES/NO Extensive PFO ecological integrity. 9 spp were observed  
 Comments: on site (including ponding) they utilize the bluff = PFO  
 extensively. Stream channels + surface ponding observed.  
 Although during high water were + surface hummocks heard  
 Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 20	<b>LOCATION:</b> (5 10 20 BC) TL 500, 501, 400, 300 East of Ecola Park Rd. + north of 6 <sup>th</sup> St.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/22/93	<b>BASIN:</b> Breakers Point	<b>NWI CLASS:</b> PFO
<b>COMMENTS:</b> Large undeveloped area of old spruce forest in undisturbed condition with multiple layers of canopy, shrub and groundcover; shows no sign of logging		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	(H)	M L	primary forest of large spruce trees and undisturbed shrub + ground cover typical of original forests along coast
2. WILDLIFE HABITAT	(H)	M L	large, undeveloped area contiguous with forests at higher elevation; sign of elk
3. FISH HABITAT	H	M (L)	stream channelized into ditch along Ecola Park Rd.
4. NOTEWORTHINESS	(H)	M L	rare, undisturbed old forest near urbanized center
5. EDUCATION POTENTIAL	(H)	M L	good example of old forest type near schools
6. RECREATION	H	M (L)	trail present through site
7. FLOOD CONTROL	H	M (L)	stream channel ditched to direct water away quickly
8. SEDIMENT TRAPPING	H	M (L)	see comment for 7.
9. NUTRIENT RETENTION	H	M (L)	see comment for 7.
10. URBAN QUALITY OF LIFE	(H)	M L	high visual esthetics for travelers on Ecola Park Road; best example of coastal old forest at low elevation within UGB

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 6N, R. 10W, 1/4 OF SEC. 20  
 Field Date: 4/22/93 Time: \_\_\_\_\_  
 Tax Map/Lots: 51020 CB  
 Plot Location: lower end of corridor in PEM  
 Landform: Swale  
 Topography: flat

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 21C PEM Plot No.: P21  
 Condition: stream channel, PFD, PEM

Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK  
 Sites been disturbed by fill (gravel) + yard debris

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Carex diandra	OBL	90	H	✓					
Juncus effusus	FACW	10	H						
RCG									
Blackberry									

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_ % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

**SOIL**

Series/Phase: Wolluski SIL Survey Mapping Verified? YES/NO Hydric Soils List? YES/NO  
 Classification: Hydric Inclusions Drainage Class: poorly drained Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 -0- Soil refusal due to gravel fill

Criteria Depth: \_\_\_\_\_ IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_ inferred from other strong parameters saturated/inundated  
 Comments: much of lower end of drainage has been filled with gravel

**HYDROLOGY**

Inundation and Depth: YES/NO/UNK (puddles) IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO ? IN.  
 Hydrology Alteration: YES/NO \_\_\_\_\_  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_ surface water common - ground saturated  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND? YES/NO The PEM is ~ 90' x 90' the PFD is ~ 50' wide +  
 Comments: the stream channel is 3-5'

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 21	<b>LOCATION:</b> (S 10 20CB) Between Old Ore. coast Hwy., 6 <sup>th</sup> St. + Beech St.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/22/93	<b>BASIN:</b> Elm	<b>NWI CLASS:</b> R/PFO/PEM
<b>COMMENTS:</b> Small forest stream crossed by Ecola Park Hwy. in headwaters and some residential development to edge of water; flows from coniferous forest to second growth alder area and into partially cleared and filled		

area that supports emergents near intersection of Beech St. + old Oregon Coast Hwy. Banks very steep and channel "V" shaped above (circle the appropriate rating) filled area - subject to erosion.

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	(M)	L diverse forest types form riparian community, but stream very short
2. WILDLIFE HABITAT	H	(M)	L stream very small and borders by highway + some houses, <sup>perennial</sup> water
3. FISH HABITAT	H	M	(L) small, steep gradient stream
4. NOTEWORTHINESS	H	M	(L) small size; disturbed condition
5. EDUCATION POTENTIAL	H	M	(L) no access; unremarkable natural features
6. RECREATION	H	M	(L) no access
7. FLOOD CONTROL	H	M	(L) see comment for 3.
8. SEDIMENT TRAPPING	H	M	(L) see comment for 3.
9. NUTRIENT RETENTION	H	M	(L) see comment for 3.
10. URBAN QUALITY OF LIFE	H	(M)	L some visual buffering by riparian vegetation + <sup>sectors</sup> is larger than many other low value stream corridors

Cannon Beach Inventory

NW of Spruce/Ross Lane

Site No. 22

1. SITE FEATURES

Water Features: Stream Pond Seasonal Permanent

Stream Width (ft): up to 40'

Pond (sq. ft.):

Depth: \_\_\_\_\_

Substrate: \_\_\_\_\_

Outlet restrictions:

Topography:

Adjacent Land Uses:

Major Structures or Roads:

Impacts/Disturbances:

In the upper end of drainage W of Spruce/Ross lane the wetland is a broad ponded area w/ skunk cabbage & pockets of upland below a forested spruce canopy - The swale narrows between houses & meanders through back yards & culverted under Hills lane. The source of the water is piped from the S-SE hillside.

2. VEGETATION (\* = Dominant Species >20%)

Tree Species

Shrub Species

Herb Species

Wetland Species

Sitka spruce

SAOB  
Skunk Cabb

3. SIGNIFICANT HABITAT FEATURES

Snags:

Downed woody debris: abundant

Breeding habitat: ponded water

Amphibians:

Cavity nesters:

4. WILDLIFE Species/Sign Observed

Birds

Mammals

Herptiles

Fish

Data sheet missing

(Site Summary notes 5.1

colors)

None exists - Observations

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

(51030DA)

<b>SITE NO.</b> 22	TL 10000, 10100, 9900, Between Hills & Ross Lanes west of Spruce St.	<b>LOCATION:</b> 9800, 8500, 8400, 8300, 8200, 7400, 7500	<b>OBSERVER:</b> CG + JTB
<b>DATE:</b> 4/23/93	<b>BASIN:</b> Coolidge 1		<b>NWI CLASS:</b> PFO
<b>COMMENTS:</b> Stream emerges (from a pipe?) just north of Ross Lane and forms pools with skunk cabbage among hummocks of upland under spruce canopy			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) short stretch of natural stream channel; mostly culverted
2. WILDLIFE HABITAT	H	(M)	(L) disrupted corridor, surrounded by roads & development but contains permanent water
3. FISH HABITAT	H	M	(L) very small stream
4. NOTEWORTHINESS	H	M	(L) like many other streams in USB affected by development
5. EDUCATION POTENTIAL	H	M	(L) small area far from school.
6. RECREATION	H	M	(L) no access
7. FLOOD CONTROL	H	M	(L) small stream; site not downstream of major input
8. SEDIMENT TRAPPING	H	M	(L) see comment 7.
9. NUTRIENT RETENTION	H	M	(L) see comment 7.
10. URBAN QUALITY OF LIFE	H	M	(L) some visual buffering for neighboring residences

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 5N ~~W.~~ R. 10W, 1/4 OF SEC. 30  
 Field Date: 4/23/93 Time: \_\_\_\_\_  
 Tax Map/Lots: S1030 DD/DA

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: (23) Plot No.: P23  
 Condition: \_\_\_\_\_

Plot Location: \_\_\_\_\_  
 Landform: Stream / swale Normal Circumstances? YES/NO/UNK  
 Topography: gentle slopes Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Slough sedge	OBL	80		✓					
Skunk cabbage	OBL	20							
Salmonberry	FAC			✓					
Sitka spruce	FAC			✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

-----SOIL-----

Series/Phase: Wallerstein Sil + Templeton Ecolg Survey Mapping Verified? YES/NO  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Hydric Soils List? YES/NO  
 Aquic Conditions? YES/NO/UNK  

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-7"	10YR 2/1	Large Brown MT 10YR 4/6 Clay
	7-10"	10YR 4/1-3/1	" " " 10YR 4/6 "
	10-16"	gray 5Y 6/1	

Criteria Depth: \_\_\_\_\_ IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE ✓ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK in pockets IN. Depth of Major Portion of Root Zone: 10 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO 3 IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS ✓ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

-----DETERMINATION-----

WETLAND? YES/NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

TL 10700, 10800, 10900, 9600, 8700, 8800, 8900, 7200, 7300, 6900 (51030DA)

<b>SITE NO.</b> 23	<b>LOCATION:</b> 7L 905, 6600, 6700, 6000, 6100 (51030DD) south of Arbor Lane to Spruce St. near Elliott way	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/23/93	<b>BASIN:</b> Coolidge 1 + 2	<b>NWI CLASS:</b> R, PFD
<b>COMMENTS:</b> stream originates on hill south of Arbor Lane + flows down a steep ravine crossing Arbor, Ross, and Hills Lane. The stream is culverted from Hills Lane to the beach; channel is broad and supports large area of skunk cabbage just south of Hills Lane		

(circle the appropriate rating)

- |                           |   |   | <u>comments</u>                                       |
|---------------------------|---|---|---|
| 1. ECOLOGICAL INTEGRITY   | H | M | Ⓛ stream disrupted by culverts, roads and development |
| 2. WILDLIFE HABITAT       | H | Ⓜ | L permanent water present                             |
| 3. FISH HABITAT           | H | M | Ⓛ small, headwater stream                             |
| 4. NOTEWORTHINESS         | H | M | Ⓛ like many other impacted streams in UGB             |
| 5. EDUCATION POTENTIAL    | H | M | Ⓛ see comment 4.                                      |
| 6. RECREATION             | H | M | Ⓛ see comment 4.                                      |
| 7. FLOOD CONTROL          | H | M | Ⓛ not downstream of major input                       |
| 8. SEDIMENT TRAPPING      | H | M | Ⓛ see comment 7                                       |
| 9. NUTRIENT RETENTION     | H | M | Ⓛ see comment 7                                       |
| 10. URBAN QUALITY OF LIFE | H | M | Ⓛ some visual buffering for surrounding vegetation    |

**WETLAND DETERMINATION DATA SHEET**

*off-site*

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 5N ~~10~~, R. 10W, 1/4 OF SEC. 30  
 Field Date: 9/23/93 Time: \_\_\_\_\_  
 Tax Map/Lots: S 10 30 DA  
 Plot Location: \_\_\_\_\_  
 Landform: \_\_\_\_\_  
 Topography: \_\_\_\_\_

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 24 Plot No.: NONE  
 Condition: \_\_\_\_\_

Normal Circumstances? YES/NO/UNK

Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Hooker's willow		-	S	✓					
Typha obsoleta	OBL	-	H	✓					
Ternstroemia	FAC	✓	S	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_ % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

**SOIL**

Series/Phase: *Mixed as Wellisk; Sil* Survey Mapping Verified? YES/NO  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Hydric Soils List? YES/NO  
 Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics

*NO ACCESS*

Criteria Depth: \_\_\_\_\_ IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: *Soils assumed to be hydric based on adjacent sites*

**HYDROLOGY**

Inundation and Depth: YES/NO/UNK *in pockets* IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO *SHALLOW* IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE *NO ACCESS*  
 Comments: *Hydrology assumed*

**DETERMINATION**

WETLAND? YES/NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 24	TL 4100 (S 10 30DA) <b>LOCATION:</b> Intersection of Forest Lawn Rd. and Hemlock St.	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/23/93	<b>BASIN:</b> Coolidge 2	<b>NWI CLASS:</b> PSS
<b>COMMENTS:</b> Almost one-half of this lot is dense willow wetland with pooled water visible from the road; the ground rises up to the south and an older second-growth forest and some larger spruce grow; access was denied, so property was viewed from the road		

(circle the appropriate rating)

- |                           |   |           | <u>comments</u>   |
|---------------------------|---|-----------|---|
| 1. ECOLOGICAL INTEGRITY   | H | M         | (L) isolated by surrounding roads and development   |
| 2. WILDLIFE HABITAT       | H | M         | (L) dense willow growth and adjacent uplands provide habitat for passerine birds; roads + development obstacles to many |
| 3. FISH HABITAT           | H | M         | (L) water source is culverted for much of upstream length   |
| 4. NOTEWORTHINESS         | H | (M) - (L) | this area is one of the larger undeveloped lots; it has wetlands in the low area and uplands adjacent on high ground    |
| 5. EDUCATION POTENTIAL    | H | M         | (L) no access   |
| 6. RECREATION             | H | M         | (L) dense willow growth nearly impenetrable   |
| 7. FLOOD CONTROL          | H | M         | (L) not downstream of major input   |
| 8. SEDIMENT TRAPPING      | H | M         | (L) see comment 7.  |
| 9. NUTRIENT RETENTION     | H | M         | (L) see comment 7.  |
| 10. URBAN QUALITY OF LIFE | H | (M) - (L) | relatively large open space free of development provides visual esthetics + buffer from road                            |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T, R, S: T. 5N ~~10~~, R. 10W, 1/4 OF SEC. 32 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 4/23/93 Time: \_\_\_\_\_ Wetland No.: (25) Plot No.: P25  
 Tax Map/Lots: S1032BC Condition: Natural  
 Plot Location: East of Hemlock between Nelchena & Chisana  
 Landform: Nice broad forested swale; wonderful condition Normal Circumstances? YES/NO/UNK  
 Topography: Gentle swale Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Slough Sedge	OBL	50	H	✓	red alderberry				
Skunk Cabbage	OBL	50	H	✓					
Salmonberry	FAC		S	✓					
Sitka Spruce	FAC		T	✓					
Judy Fern	FAC		H						

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: This broad swale is 100'+ wide

-----SOIL-----

Series/Phase: <sup>mapped as</sup> Wallucki SL Survey Mapping Verified? YES/NO <sup>as mapped</sup> Hydric Soils List? YES/NO  
 Classification: Hydric inclusion Drainage Class: upd. Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 0-8" Mosaic 10YR 4/1-3/2 SiC; saturated  
 8-13" 10YR 3/1 7.5YR 3/3 w/ Dt Bright Mt 7.5 YR 5/8 SiC  
 13-20" 7.5YR 3/3 + 5Y 4/1 w/ Dt MT 7.5 YR 5/8 SiC

Criteria Depth: 16 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: NONE GLEYED MATRIX HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS SULFIDIC ODOR SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE Low chromas, Dt mottling, aquic moisture regime  
 Comments:

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK <sup>in pockets</sup> IN. Depth of Major Portion of Root Zone: 8-10 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO <sup>variable</sup> IN. <sub>surface - 12"</sub>  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: channel - flood plain - saturated to surface  
 Other Indicators: NONE SEDIMENT DEPOSITS WATER-STAINED LEAVES  
 DRIFT LINES WATER MARKS LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE channel is ~3' broad  
 Comments: Stream channel is present but subs<sup>surface</sup> west of #172. Can't see water in places where it's not visible

-----DETERMINATION-----

WETLAND? YES/NO  
 Comments:

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 25	TL 500 (51032BC) Between Nelchena + Chisana St., Hemlock St.	<b>LOCATION:</b>	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/23/93		<b>BASIN:</b> Hemlock	<b>NWI CLASS:</b> PFO
<b>COMMENTS:</b> Stream enters from under Hwy 101 + flows in braided channels on surface and subterranean through skunk cabbage and lady fern; surrounding forest is largely primary growth sitka spruce, may have been selectively cut. Large lot has uplands adjacent to three streams running through it.			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	Ⓜ	M	L large area of primary or selective cut forest; high structural + species diversity
2. WILDLIFE HABITAT	H	Ⓜ	L corridors somewhat disrupted by Hwy 101 + Hemlock St.; but see comment
3. FISH HABITAT	H	M	Ⓛ stream sometimes flows subterranean naturally + is culverted at Hemlock St.
4. NOTEWORTHINESS	Ⓜ	M	L large undeveloped lot of old forest in pristine or near-pristine condition
5. EDUCATION POTENTIAL	H	M	Ⓛ no access; far from schools
6. RECREATION	H	M	Ⓛ no access
7. FLOOD CONTROL	H	M	Ⓛ not downstream from major input
8. SEDIMENT TRAPPING	H	M	Ⓛ see comment 7.
9. NUTRIENT RETENTION	H	M	Ⓛ see comment 7.
10. URBAN QUALITY OF LIFE	Ⓜ	M	L visual esthetics; large open space and diverse forest community

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 6N AS, R. 10W, 1/4 OF SEC. 32  
 Field Date: 9/23/93 Time: \_\_\_\_\_  
 Tax Map/Lots: S10 32 BC / 500, 1300  
 Plot Location: East of Hemlock - near Matanuska  
 Landform: broad, forested swale  
 Topography: SWALE  
 Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 26 Plot No.: P26  
 Condition: Natural  
 Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
skunk cabbage	OBL	50	H	✓					
rough sedge	OBL	50	H	✓					
Salmonberry	FAC		S	✓					
Sitka spruce	FAC		T	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

**SOIL**

Series/Phase: mapped as Walluski  
 Classification: Hydric Inclusion  
 Survey Mapping Verified? YES/NO as mapped  
 Drainage Class: ypd.  
 Aquic Conditions? YES/NO/UNK  
 Hydric Soils List? YES/NO/UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics
	0-8"	Mosaic 10YR	4/4 - 3/2 SiC, saturated
	8-12"	10YR 3/1	7.5YR 3/2 SiC
	12-20"	7.5YR 3/3	5Y 4/1 w/DT MT 7.5YR 5/8 SiC

Criteria Depth: 16 IN.  
 Effectively Drained? YES/NO/UNK  
 Relic Characteristics? YES/NO/UNK  
 Other Indicators: NONE, GLEYED MATRIX, HISTOSOL/HISTIC EPIPEDON, CONCRETIONS, SULFIDIC ODOR, SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE Low chroma, distinct mottling, aquic moisture regime  
 Comments: \_\_\_\_\_

**HYDROLOGY**

Inundation and Depth: YES/NO/UNK IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO surface IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: channel, flood plain, saturated to surface  
 Other Indicators: NONE, SEDIMENT DEPOSITS, WATER-STAINED LEAVES, DRIFT LINES, WATER MARKS, LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND? YES/NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

1300

<b>SITE NO.</b> 26	TL 500 (51032BC) Between Matanuska & Tanana St., Hemlock	<b>LOCATION:</b>	<b>OBSERVER:</b> CG
<b>DATE:</b> 4/23/93		<b>BASIN:</b> Hemlock	<b>NWI CLASS:</b> PFOC
<b>COMMENTS:</b> this stream corridor is similar to site 25, but forest is slightly younger second growth; lower end of stream impacted by fill before culvert at Hemlock St.			

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	<input checked="" type="radio"/> H	<input type="radio"/> M	L second growth canopy somewhat smaller than site 25, but corridor still within large undeveloped lot with permanent water
2. WILDLIFE HABITAT	H	<input checked="" type="radio"/> M	L see comment 1,
3. FISH HABITAT	H	M	<input checked="" type="radio"/> L high gradient stream culverted from Hemlock St. to beach
4. NOTEWORTHINESS	<input checked="" type="radio"/> H	<input type="radio"/> M	L large undeveloped lot; relatively large second growth spruce
5. EDUCATION POTENTIAL	H	M	<input checked="" type="radio"/> L no access
6. RECREATION	H	M	<input checked="" type="radio"/> L no access
7. FLOOD CONTROL	H	M	<input checked="" type="radio"/> L not downstream from major input
8. SEDIMENT TRAPPING	H	M	<input checked="" type="radio"/> L see comment 7.
9. NUTRIENT RETENTION	H	M	<input checked="" type="radio"/> L see comment 7.
10. URBAN QUALITY OF LIFE	<input checked="" type="radio"/> H	M	L visual esthetics; large green space; second growth forest relatively closer to maturity than other sites

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 T,R,S: T.5N,R.10W,Sec.30  
 Field Date: 4-23-93  
 Aerial Map/Lots: 510 3000  
 Plot Location: N. of Arden lane + channel  
 Landform: Flat  
 Topography: Flat

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 27 Plot No.: P27  
 Condition: Filled w/ gravel

Normal Circumstances? YES/NO/UNK  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Creeping buttercup	FACW	50	H						
grass	?	50	H						
Himalayan blackberry	NI		H						
Equisetum telmateia									

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_ % of domin. species are OBL, FACW, FAC+ and/or FAC

Comments: \_\_\_\_\_

## SOIL

Series/Phase: Disturbed; Filled w/ gravel  
 Classification: \_\_\_\_\_  
 Horizon:  $\emptyset$  Depth:  $\emptyset$  Matrix Color:  $\emptyset$

Survey Mapping Verified? YES/NO  
 Drainage Class: \_\_\_\_\_  
 Mottle Contrast & Color, Texture, Moisture, Other Characteristics: \_\_\_\_\_

Hydric Soils List? YES/NO  
 Aquic Conditions? YES/NO/UNK

Criteria Depth: \_\_\_\_\_ IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_

Comments: No sample taken ; gravel fill

## HYDROLOGY

Inundation and Depth: YES/NO/UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO Surface IN.  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_

Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE \_\_\_\_\_

Comments: \_\_\_\_\_

## DETERMINATION

WETLAND? YES/NO

Comments: It is unknown when this site was filled. It is also unknown if water was directed here by artificial means.

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 27	TL 905, 7300, 5400 (510 30 DD) <b>LOCATION:</b> South of and crossing Arbor Lane west of	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 4/23/93	<b>BASIN:</b> Coolidge 1	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> very small headwater originates on hill south of Arbor Lane, crosses Arbor Lane in a culvert and appears to percolate into the ground in TL 5400; very steep slopes in uppermost stretch		

(circle the appropriate rating)

- |                           |   |   | <u>comments</u>  |
|---------------------------|---|---|--|
| 1. ECOLOGICAL INTEGRITY   | H | M | (L) short stream length, impacted by fill and culverts   |
| 2. WILDLIFE HABITAT       | H | M | (L) surrounded by houses and roads in lower reach, seasonal  |
| 3. FISH HABITAT           | H | M | (L) very small, shallow stream   |
| 4. NOTEWORTHINESS         | H | M | (L) like many impacted streams in UGB  |
| 5. EDUCATION POTENTIAL    | H | M | (L) small, far from schools  |
| 6. RECREATION             | H | M | (L) no access  |
| 7. FLOOD CONTROL          | H | M | (L) steep, narrow channel  |
| 8. SEDIMENT TRAPPING      | H | M | (L) see 7.   |
| 9. NUTRIENT RETENTION     | H | M | (L) see 7.   |
| 10. URBAN QUALITY OF LIFE | H | M | (L) uppermost length of stream in undeveloped lots that are scenic and provide buffers for scattered residences, but lower stretch altered |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T,R,S: T.5N,R.10W,Sec.32 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 5/18/93 Wetland No.: 28 Plot No.: 28P 2, plot not on map  
 Tax Map/Lots: 5 10 32 BC / 500 Condition: Natural  
 Plot Location: in lower swale  
 Landform: swale Normal Circumstances? YES/NO/UNK  
 Topography: gentle slope Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<u>Skunk cabbage</u>	<u>OBL</u>	<u>90</u>	<u>H</u>	<u>✓</u>					
<u>water parsley</u>	<u>OBL</u>	<u>5</u>	<u>H</u>						
<u>slough sedge</u>		<u>5</u>	<u>H</u>						
<u>Sitka spruce</u>			<u>T</u>	<u>✓</u>					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: Vegetation only covers 50% of the ground cover due to a dense closed canopy

-----SOIL-----

Series/Phase: mapped as Willuski SIL Survey Mapping Verified? YES/NO as mapped Hydric Soils List? YES/NO  
 Classification: hydric inclusion Drainage Class: pd. Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
0-7" Mosa 10R4/4-3/2 SiC saturated  
8-12 10YR 3/1 7.5YR 3/2 SiC  
12-20" 4.5YR 3/2 v 2.4/1 7.5YR 5/8 MT SiC

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: ✓ NONE --- GLEYED MATRIX --- HISTOSOL/HISTIC EPIPEDON  
--- CONCRETIONS --- SULFIDIC ODOR --- SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK IN. Depth of Major Portion of Root Zone: 8 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO surface  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: swale  
 Other Indicators: --- NONE --- SEDIMENT DEPOSITS ✓ WATER-STAINED LEAVES  
--- DRIFT LINES --- WATER MARKS --- LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: Sub. Hydrology is intermittent w/ shallow pools. The stream channel is a 30' across + water where present is 1-2" deep

-----DETERMINATION-----

WETLAND? YES/NO  
 Comments: This swale is ~ 50' across. Wetlands broaden to 100' wide where this site meets site No. 26

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 28	<b>LOCATION:</b> East of Matanuska / Hemlock St	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 5/18/93	<b>BASIN:</b> Hemlock	<b>NWI CLASS:</b> PFOC, R
<b>COMMENTS:</b> Small size + lack of plant diversity limit the functional values of this site but <sup>some</sup> functional values were upgraded to Medium because Site 28 is surrounded by higher quality sites = 25 + 26		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	<del>M</del> (L)	{ low species diversity canopy too dense " ; seasonal water
2. WILDLIFE HABITAT	H	<del>M</del> (L) <sup>sites 25+26</sup>	
3. FISH HABITAT	H	M <del>X</del>	None
4. NOTEWORTHINESS	H	<del>M</del> (L)	low diversity by itself but <u>M</u> when considered as a unit w/ sites 25 + 26
5. EDUCATION POTENTIAL	H	M (L)	small size "
6. RECREATION	H	M (L)	" "
7. FLOOD CONTROL	H	M (L)	seasonal water; limited vegetation
8. SEDIMENT TRAPPING	H	M (L)	"
9. NUTRIENT RETENTION	H	M (L)	"
10. URBAN QUALITY OF LIFE	H	<del>M</del> (L)	upgraded to medium because it is surrounded by sites 25 + 26

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T,R,S: T.5N,R.10W,Sec. 32 County, State: CLATSOP COUNTY, OREGON  
 Field Date: 5/18/93 Wetland No.: 29 Plot No.: 29 P1 of P29  
 Tax Map/Lots: S1032 BB / 316 + 301 + 117 Condition: Natural  
 Plot Location: in swale below + north of 180 Amber Ln  
 Landform: swale Normal Circumstances? YES/NO/UNK  
 Topography: v. gentle slope Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Skunk cabbage	OBL	25	H	✓					
Water parsley	OBL	25	H	✓					
slough sedge	OBL	25	H	✓					
lady fern	FAC	25	H	✓					
Sitka spruce	FAC		T	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

-----SOIL-----

Series/Phase: mapped as Wallisli SIL Survey Mapping Verified? YES/NO is mapped Hydric Soils List? YES/NO  
 Classification: Hydric inclusion Drainage Class: v. poorly drained Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
0-3" 10YR 3/3  
3-18" 10YR 2/1 w/ 10YR 5/8 m gray w/ bright orange mottles  
too rainy + dark to read soil chart

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: ✓ NONE GLYED MATRIX HISTOSOL/HISTIC EPIPEDON  
CONCRETIONS SULFIDIC ODOR SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE low chromas w/ contrasting bright mottles  
 Comments: + agruc moisture regime

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK IN. Depth of Major Portion of Root Zone: 8 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO Set. to surf  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: NONE SEDIMENT DEPOSITS WATER-STAINED LEAVES  
DRIFT LINES WATER MARKS LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE saturation to surface  
 Comments: \_\_\_\_\_

-----DETERMINATION-----

WETLAND? YES/NO ✓  
 Comments: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 29	<b>LOCATION:</b> N of Hemlock / Amber Lane	<b>OBSERVER:</b> CG + JB
<b>DATE:</b> 5/18/93	<b>BASIN:</b> <i>gulfiana</i>	<b>NWI CLASS:</b> PFO, R
<b>COMMENTS:</b> Site 29 contains a dense canopy which limits under-story vegetation. It is surrounded by residential development + is part of a protected greenway.		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	<u>L</u>	low diversity, some structural + species
2. WILDLIFE HABITAT	H	M	<u>L</u>	limited availability, seasonal water
3. FISH HABITAT	H	M	<u>L</u>	no indication of fish culverts
4. NOTEWORTHINESS	H	M	<u>L</u>	
5. EDUCATION POTENTIAL	H	M	<u>L</u>	no access
6. RECREATION	H	M	<u>L</u>	no access except common area for neighborhood
7. FLOOD CONTROL	H	M	<u>L</u>	not downstream from major input
8. SEDIMENT TRAPPING	H	M	<u>L</u>	"
9. NUTRIENT RETENTION	H	M	<u>L</u>	"
10. URBAN QUALITY OF LIFE	H	<u>M</u>	L	large green space + common area for neighborhood

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 30	<b>LOCATION:</b> North + East of North Chinook St.	<b>OBSERVER:</b> CJ
<b>DATE:</b> 5/19/93	<b>BASIN:</b>	<b>NWI CLASS:</b> R, perennial
<b>COMMENTS:</b> Site 30 is a narrow high gradient seasonal stream.		
Slopes are <u>very</u> steep. Wetland is confined to narrow channel.		

(circle the appropriate rating)

	H	<u>M</u>	L	<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	<u>M</u>	L	contiguous w/ larger forest
2. WILDLIFE HABITAT	H	<u>M</u>	L	" "
3. FISH HABITAT	H	M	<del>X</del>	None, seasonal
4. NOTEWORTHINESS	H	<u>M</u>	L	contiguous w/ larger forest multi-layered forest canopy
5. EDUCATION POTENTIAL	H	M	<u>L</u>	located too far from schools, limited access
6. RECREATION	H	M	<u>L</u>	No trails
7. FLOOD CONTROL	H	M	<u>L</u>	seasonal water
8. SEDIMENT TRAPPING	H	M	<u>L</u>	"
9. NUTRIENT RETENTION	H	M	<u>L</u>	
10. URBAN QUALITY OF LIFE	H	M	<u>L</u>	on edge of UGB

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 31	LOCATION: East of #101 / Tolovana	OBSERVER: CG + JB
DATE: 5/18/93	BASIN: Tolovana	NWI CLASS: R, PEMC, seasonal
COMMENTS: Site 31 is on the eastern edge of the UGB		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	(M) L	native species ; contiguous with larger forest lands
2. WILDLIFE HABITAT	H	(M) L	"
3. FISH HABITAT	H	M X	Seasonal stream
4. NOTEWORTHINESS	H	(M) (L)	contiguous w/ larger forest
5. EDUCATION POTENTIAL	H	M (L)	No access ; located far from schools
6. RECREATION	H	M (L)	"
7. FLOOD CONTROL	H	M (L)	No stream (perennial)
8. SEDIMENT TRAPPING	H	M (L)	"
9. NUTRIENT RETENTION	H	M (L)	"
10. URBAN QUALITY OF LIFE	H	M (L)	on edge of UGB

Cannon Beach Local Wetlands Inventory

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. 32	LOCATION: E. of #101 ; N. of Site 31	OBSERVER: CJ + JS
DATE: 5/18/93 + 6/26/93	BASIN: Hemlock	NWI CLASS: R, perennial
COMMENTS: Site 32 is located on the E. edge of the UGB		

(circle the appropriate rating)

- |                           |   |         | <u>comments</u>   |
|---------------------------|---|---------|---|
| 1. ECOLOGICAL INTEGRITY   | H | (M) L   | native species dominate;<br>Site is contiguous w/ larger forest lands |
| 2. WILDLIFE HABITAT       | H | (M) L   | " "   |
| 3. FISH HABITAT           | H | M (L)   | perennial <del>seasonal</del> stream but low flow<br>high gradient    |
| 4. NOTEWORTHINESS         | H | (M) (L) | contiguous w/ larger forest   |
| 5. EDUCATION POTENTIAL    | H | M (L)   | No access ; far from school   |
| 6. RECREATION             | H | M (L)   | No access   |
| 7. FLOOD CONTROL          | H | M (L)   | Not downstream from<br>major output                                   |
| 8. SEDIMENT TRAPPING      | H | M (L)   | "   |
| 9. NUTRIENT RETENTION     | H | M (L)   | "   |
| 10. URBAN QUALITY OF LIFE | H | M (L)   | on the edge of UGB  |

Cannon Beach Local Wetlands Inventory

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. 33	LOCATION: E. of #101 ; N. of 32	OBSERVER: CB + JB
DATE: 5/18/93 + 6/26/93	BASIN: Hemlock	NWI CLASS: R, seasonal
COMMENTS: Site 33 is located on the E. edge of the UGB		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	(M) L	native vegetation; site is contiguous w/ larger forest
2. WILDLIFE HABITAT	H	(M) L	"
3. FISH HABITAT	H	M (L)	None; seasonal water
4. NOTEWORTHINESS	H	(M) (L)	Contiguous w/ larger forest
5. EDUCATION POTENTIAL	H	M (L)	No access; far from schools
6. RECREATION	H	M (L)	No access
7. FLOOD CONTROL	H	M (L)	seasonal water; not below major outport
8. SEDIMENT TRAPPING	H	M (L)	"
9. NUTRIENT RETENTION	H	M (L)	"
10. URBAN QUALITY OF LIFE	H	M (L)	on the edge of the UGB

Cannon Beach Local Wetlands Inventory

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. 34	LOCATION: E. of #101; N of 33	OBSERVER: Cg
DATE: 5/18/93 & 6/26/93	BASIN: Hemlock	NWI CLASS: R perennial
COMMENTS: Site 34 is located on the eastern edge of the UGB		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	<input checked="" type="radio"/> M <input type="radio"/> L	native species; site is contiguous w/ larger forest
2. WILDLIFE HABITAT	H	<input checked="" type="radio"/> M <input type="radio"/> L	"
3. FISH HABITAT	H	M <input checked="" type="radio"/> L	low flow, high gradient stream
4. NOTEWORTHINESS	H	<input checked="" type="radio"/> M <input checked="" type="radio"/> L	contiguous with larger forest
5. EDUCATION POTENTIAL	H	M <input checked="" type="radio"/> L	NO access
6. RECREATION	H	M <input checked="" type="radio"/> L	"
7. FLOOD CONTROL	H	M <input checked="" type="radio"/> L	Not below major runoff source
8. SEDIMENT TRAPPING	H	M <input checked="" type="radio"/> L	"
9. NUTRIENT RETENTION	H	M <input checked="" type="radio"/> L	"
10. URBAN QUALITY OF LIFE	H	M <input checked="" type="radio"/> L	on the edge of the UGB

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 35	LOCATION: E of #101, N of 34	OBSERVER: Cg
DATE: 5/18/93 + 6/26/93	BASIN: Gulcana	NWI CLASS: R seasonal?
COMMENTS: Site 35 is located on the eastern edge of the UGB		

(circle the appropriate rating)

- |                           |   |         | <u>comments</u>                   |
|---------------------------|---|---------|-----------------------------------|
| 1. ECOLOGICAL INTEGRITY   | H | (M) L   | contiguous w/ larger forest lands |
| 2. WILDLIFE HABITAT       | H | (M) L   | "                                 |
| 3. FISH HABITAT           | H | M (L)   | limited water                     |
| 4. NOTEWORTHINESS         | H | (M) (L) | contiguous w/ larger forest       |
| 5. EDUCATION POTENTIAL    | H | M (L)   | No access                         |
| 6. RECREATION             | H | M (L)   | "                                 |
| 7. FLOOD CONTROL          | H | M (L)   | limited water                     |
| 8. SEDIMENT TRAPPING      | H | M (L)   | "                                 |
| 9. NUTRIENT RETENTION     | H | M (L)   | "                                 |
| 10. URBAN QUALITY OF LIFE | H | M (L)   | on the edge of UGB                |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T,R,S: T.5N,R.10W,Sec.32  
 Field Date: 6/26/93  
 Tax Map/Lots: 51032 CC;  
 Plot Location: center of depression  
 Landform: depression area surrounded by fill  
 Topography: \_\_\_\_\_  
 Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 36 Plot No.: 36P, P36  
 Condition: Natural  
 Normal Circumstances?  YES  NO  UNK  
 Atypical Situation? YES  NO  UNK Problem Area? YES  NO  UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
skunk cabbage	OBL	80	H	✓					
lady fern	FAC	20	H	✓					
Sitka Spruce	FAC	100	T	✓					

Hydrophytic Vegetation Criterion Met?  YES  NO  INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

-----SOIL-----

Series/Phase: mapped as walluski Sil Survey Mapping Verified?  YES  NO <sup>as mapped</sup> Hydric Soils List? YES  NO  
 Classification: hydric inclusion Drainage Class: very poorly drained Aquic Conditions?  YES  NO  UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
0-2" coarse wood fragments silty clay loam  
2-12" 10YR 2/1  
12-18" 10YR 3/2

Criteria Depth: 16 IN. Effectively Drained? YES  NO  UNK Relic Characteristics? YES  NO  UNK  
 Other Indicators:  NONE  GLEYED MATRIX  HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS  SULFIDIC ODOR  SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES  NO  INDEFINITE  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth: YES  NO  UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: 0 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES  NO  UNK surface IN.  
 Hydrology Alteration: YES  NO  UNK surrounded by fill  
 Wetland Drainage Pattern: YES  NO  UNK Pattern Type: \_\_\_\_\_  
 Other Indicators:  NONE  SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 DRIFT LINES  WATER MARKS  LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES  NO  INDEFINITE  
 Comments: Soils are saturated to the surface; recent ponding evident

-----DETERMINATION-----

WETLAND?  YES  NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 36	<b>LOCATION</b> Tye (east end)	<b>BASIN</b> Umpqua
<b>DATE:</b> 6/26/93	<b>OBSERVER:</b> CG	<b>NWI CLASSIFICATION:</b> PFOC
<b>COMMENTS:</b> This site is a very small, disturbed Sitka spruce forested wetland. It is surrounded by residential development. It contains pockets of surface ponding		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) Nice Sitka spruce canopy, but little understory
2. WILDLIFE HABITAT	H	M	(L) "
3. FISH HABITAT	H	M	(L) NONE; No permanent water
4. NOTEWORTHINESS	H	M	(L) too much historic logging-type disturbance
5. EDUCATION POTENTIAL	H	M	(L) too small; no access
6. RECREATION	H	M	(L) "
7. FLOOD CONTROL	H	M	(L) No water source
8. SEDIMENT TRAPPING	H	M	(L) "
9. NUTRIENT RETENTION	H	M	(L) "
10. URBAN QUALITY OF LIFE	H	M	(L) Nice for the immediate neighbors

**WETLAND DETERMINATION DATA SHEET**

Applicant: **CITY OF CANNON BEACH**  
 T,R,S: **T.5N,R.10W,Sec.29**  
 Field Date: **5/18/93 / 6/26/93**  
 Tax Map/Lots: **S1029CB 1000,1302,1314**  
 Plot Location: **N of Poplar St.**  
 Landform: **Stream corridor**  
 Topography: **flat - gentle swale**

Project/City: **CANNON BEACH LWI**  
 County, State: **CLATSOP COUNTY, OREGON**  
 Wetland No.: **37** Plot No.: **37 P1** P37  
 Condition: **Natural**  
 Normal Circumstances?  YES  NO  UNK  
 Atypical Situation?  YES  NO  UNK Problem Area?  YES  NO  UNK

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Skunk cabbage	OBL	30	H	✓					
water penny	OBL	30	H	✓					
lady fern	FAC	30	H	✓					
Sitka spruce	FAC	50	T	✓					
Red alder	FAC	50	T	✓					

Hydrophytic Vegetation Criterion Met?  YES  NO  INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

**SOIL**

Series/Phase: mapped as Nalkski Sil Survey Mapping Verified?  YES  NO <sup>+ mapped</sup> Hydric Soils List?  YES  NO  
 Classification: hydric udisol Drainage Class: very poorly drained Aquic Conditions?  YES  NO  UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
 1 3-10 10YR 2/1-2 SiCl sat to surface, shale smooth  
 2 10-18 " 10YR 5/8

Criteria Depth: 16 IN. Effectively Drained?  YES  NO  UNK Relic Characteristics?  YES  NO  UNK  
 Other Indicators:  NONE  GLEYED MATRIX  HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS  SULFIDIC ODOR  SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES  NO  INDEFINITE \_\_\_\_\_  
 Comments: \_\_\_\_\_

**HYDROLOGY**

Inundation and Depth:  YES  NO  UNK packets IN. Depth of Major Portion of Root Zone: 10 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES  NO surface IN.  
 Hydrology Alteration:  YES  NO  
 Wetland Drainage Pattern:  YES  NO Pattern Type: \_\_\_\_\_  
 Other Indicators:  NONE  SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 DRIFT LINES  WATER MARKS  LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES  NO  INDEFINITE saturated to surface  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND?  YES  NO approx 50' wide near house  
 Comments: educed in width down stream  
subverted under poplar (25' below)

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 37	<b>LOCATION:</b> SE of Poplar / Sunset Blvd.	<b>OBSERVER:</b> CJ
<b>DATE:</b> 5/18/93 + 6/26/93	<b>BASIN:</b> Coolidge 13	<b>NWI CLASS:</b> R, <sup>limited</sup> PFD
<b>COMMENTS:</b>		

(circle the appropriate rating)

- |                           |   |                  | <u>comments</u>  |
|---------------------------|---|------------------|--|
| 1. ECOLOGICAL INTEGRITY   | H | (M) <del>L</del> | English ivy + blackberry on perimeter of site            |
| 2. WILDLIFE HABITAT       | H | (M) L            | permanent water; connectivity to larger open space sites |
| 3. FISH HABITAT           | H | M (L)            | NONE   |
| 4. NOTEWORTHINESS         | H | M (L)            | Disturbed by Poplar St + past land clearing              |
| 5. EDUCATION POTENTIAL    | H | M (L)            | No access  |
| 6. RECREATION             | H | M (L)            | private  |
| 7. FLOOD CONTROL          | H | M (L)            | limited  |
| 8. SEDIMENT TRAPPING      | H | M (L)            |  |
| 9. NUTRIENT RETENTION     | H | M (L)            |  |
| 10. URBAN QUALITY OF LIFE | H | (M) L            | visual aesthetics; adjacent to residential               |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T,R,S: T.5N,R.10W,Sec.29  
 Field Date: 5/18/93  
 Fax Map/Lots: S 10 29 CB + S 10 29 BC  
 Plot Location: East end, center  
 Landform: \_\_\_\_\_  
 Topography: flat

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 38 Plot No.: 38 P, P38  
 Condition: "Natural" influenced by roads + development

Normal Circumstances?  YES  NO  UNK  
 Atypical Situation?  YES  NO  UNK  
 Problem Area?  YES  NO  UNK

**VEGETATION**

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<u>Red alder</u>	<u>FAC</u>		<u>T</u>	<input checked="" type="checkbox"/>					
<u>Hookers willow</u>	<u>FACW</u>		<u>S</u>	<input checked="" type="checkbox"/>					
<u>Slough sedge</u>	<u>OBL</u>	<u>100</u>	<u>H</u>	<input checked="" type="checkbox"/>					

Hydrophytic Vegetation Criterion Met?  YES  NO  INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

**SOIL**

Series/Phase: mapped as: Walluski Sil Survey Mapping Verified?  YES  NO as mapped Hydric Soils List?  YES  NO  
 Classification: Hydric inclusion Drainage Class: poorly drained Aquic Conditions?  YES  NO  UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
0-2 10YR 3/3  
2-18 5Y 4/1 10YR 3/4 Mt

Criteria Depth: 16 IN. Effectively Drained?  YES  NO  UNK Relic Characteristics?  YES  NO  UNK  
 Other Indicators:  NONE  GLEYED MATRIX  HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS  SULFIDIC ODOR  SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES  NO  INDEFINITE  
 Comments: \_\_\_\_\_

**HYDROLOGY**

Inundation and Depth:  YES  NO  UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: 10 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES  NO surface IN.  
 Hydrology Alteration:  YES  NO ?  
 Wetland Drainage Pattern:  YES  NO Pattern Type: \_\_\_\_\_  
 Other Indicators:  NONE  SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 DRIFT LINES  WATER MARKS  LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES  NO  INDEFINITE  
 Comments: \_\_\_\_\_

**DETERMINATION**

WETLAND?  YES  NO  
 Comments: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 38	LOCATION: Elkland Rd	OBSERVER: Cg
DATE: 5/18/93	BASIN: Elkland	NWI CLASS: PFOC
COMMENTS: Adjacent to Highway 101. Surrounded		
by fill for #101 + trailer park		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) fill + fragmentation caused by roads + trailer park
2. WILDLIFE HABITAT	H	M	(L) "
3. FISH HABITAT	H	M	(L) No stream
4. NOTEWORTHINESS	H	M	(L) see 1
5. EDUCATION POTENTIAL	H	M	(L) "
6. RECREATION	H	M	(L) "
7. FLOOD CONTROL	H	M	(L) see 3
8. SEDIMENT TRAPPING	H	M	(L)
9. NUTRIENT RETENTION	H	M	(L)
10. URBAN QUALITY OF LIFE	H	M	(L) see 1 + 3

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 T,R,S: T.5N,R.10W,Sec. \_\_\_  
 Field Date: 5/19/93  
 Tax Map/Lots: S 10 29 CA  
 Plot Location: \_\_\_\_\_  
 Landform: Stream  
 Topography: gentle to moderately sloped gradient

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 39,40,41 Plot No.: \_\_\_\_\_  
 Condition: natural; very similar stream channels

Normal Circumstances?  YES  NO  UNK

Atypical Situation?  YES  NO  UNK Problem Area?  YES  NO  UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<u>Oxalis</u>		<u>60</u>	<u>H</u>	<input checked="" type="checkbox"/>					
<u>skunk cabbage</u>		<u>30</u>	<u>H</u>	<input checked="" type="checkbox"/>					
<u>water parsley</u>		<u>10</u>	<u>H</u>						
<u>Sitka spruce</u>			<u>T</u>	<input checked="" type="checkbox"/>					
<u>Red alder</u>			<u>T</u>						

Hydrophytic Vegetation Criterion Met?  YES  NO  INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC

Comments: \_\_\_\_\_

## SOIL

Series/Phase: Not sampled/Stream Survey Mapping Verified?  YES  NO Hydric Soils List?  YES  NO  
 Classification: Corridor Drainage Class: \_\_\_\_\_ Aquic Conditions?  YES  NO  UNK

Horizon	Depth	Matrix Color	Mottle Contrast & Color, Texture, Moisture, Other Characteristics

Criteria Depth: \_\_\_\_\_ IN. Effectively Drained?  YES  NO  UNK Relic Characteristics?  YES  NO  UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES  NO  INDEFINITE \_\_\_\_\_

Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth:  YES  NO  UNK \_\_\_\_\_ IN. Depth of Major Portion of Root Zone: \_\_\_\_\_ IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES  NO surface IN.

Hydrology Alteration:  YES  NO

Wetland Drainage Pattern:  YES  NO Pattern Type: \_\_\_\_\_

Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES  NO  INDEFINITE \_\_\_\_\_

Comments: \_\_\_\_\_

## DETERMINATION

WETLAND?  YES  NO The channel is ~ 3' wide + water is 2" deep  
 Comments: the wetland boundary is ~ 10' wide; 3.5' on either side of the channel

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_



*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 40	LOCATION: Elk Creek Rd.	OBSERVER: cg
DATE: 5/18/93	BASIN: Ecola Cr	NWI CLASS: R
COMMENTS: This narrow perennial stream corridor		
is a tributary to Ecola Cr. used as a wildlife		
travel corridor by Elk & other wildlife species		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	(H)	M	L	Diverse, native plant community contiguous with larger forest perennial stream
2. WILDLIFE HABITAT	H	(M)	L	
3. FISH HABITAT	H	M	(L)	low flow, high gradient stream
4. NOTEWORTHINESS	H	(M)	L	connectivity of Ecola Creek to larger forest lands
5. EDUCATION POTENTIAL	H	M	(L)	far from schools
6. RECREATION	H	M	(L)	
7. FLOOD CONTROL	H	M	(L)	small channel, no significant runoff
8. SEDIMENT TRAPPING	H	M	(L)	"
9. NUTRIENT RETENTION	H	M	(L)	"
10. URBAN QUALITY OF LIFE	H	M	(L)	surrounded by open space

Cannon Beach Local Wetlands Inventory

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. 41	LOCATION: EIK Creek Rd	OBSERVER: cg
DATE: 5/18/93	BASIN: ECOLA Creek	NWI CLASS: R seasonal
COMMENTS: This small seasonal stream is a tributary to Ecola Cr.		

(circle the appropriate rating)

- |                           |           |  |
|---------------------------|-----------|--|
| 1. ECOLOGICAL INTEGRITY   | (H) M L   | <p><u>comments</u></p> <p>Diverse natural vegetation<br/>contiguous w/ larger forest<br/>seasonal water</p> <p>seasonal stream</p> <p>connectivity of Ecola Cr<br/>to large upland area<br/>far from schools</p> <p>limited water<br/>no significant runoff<br/>source</p> <p>"</p> <p>"</p> <p>surrounded by<br/>open space</p> |
| 2. WILDLIFE HABITAT       | H (M) (L) |  |
| 3. FISH HABITAT           | H M (L)   |  |
| 4. NOTEWORTHINESS         | H (M) L   |  |
| 5. EDUCATION POTENTIAL    | H M (L)   |  |
| 6. RECREATION             | H M (L)   |  |
| 7. FLOOD CONTROL          | H M (L)   |  |
| 8. SEDIMENT TRAPPING      | H M (L)   |  |
| 9. NUTRIENT RETENTION     | H M (L)   |  |
| 10. URBAN QUALITY OF LIFE | H M (L)   |  |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T,R,S: T.5N,R.10W,Sec. \_\_\_\_\_ County, State: CLATSOP COUNTY, OREGON  
 Field Date: 5/19/93 Wetland No.: 42 Plot No.: 42P P42A  
 Tax Map/Lots: S1029CA TL101 Condition: Natural  
 Plot Location: East of Haskell lane 250' past the edge of salal  
 Landform: Flood plain of Ecoda Cr Normal Circumstances?  YES/ NO/ UNK  
 Topography: \_\_\_\_\_ Atypical Situation?  YES/ NO/ UNK Problem Area?  YES/ NO/ UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Red alder	FAC		T	✓					
Slough sedge	OBL	95	H	✓					
lady fern	FAC	S	H						
Sitka spruce (snags)									

Hydrophytic Vegetation Criterion Met?  YES/ NO/ INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

-----SOIL-----

Series/Phase: Sil Survey Mapping Verified?  YES/ NO as mapped Hydric Soils List?  YES/ NO  
 Classification: Hydric Inclusion Drainage Class: v. poorly drained Aquic Conditions?  YES/ NO/ UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
0-2 10YR 3/3  
2-18 Mosaic 2.5Y 2/0 or 5Y 3/1 w/ 5YR 4/6 MT Sil

Criteria Depth: 16 IN. Effectively Drained?  YES/ NO/ UNK Relic Characteristics?  YES/ NO/ UNK  
 Other Indicators:  NONE  GLEYED MATRIX  HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS  SULFIDIC ODOR  SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES/ NO/ INDEFINITE gley, low chroma, Bt mottles  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth:  YES/ NO/ UNK in places IN. Depth of Major Portion of Root Zone: 8 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES/ NO surface  
 Hydrology Alteration:  YES/ NO  
 Wetland Drainage Pattern:  YES/ NO Pattern Type: \_\_\_\_\_  
 Other Indicators:  NONE  SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 DRIFT LINES  WATER MARKS  LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES/ NO/ INDEFINITE \_\_\_\_\_  
 Comments: \_\_\_\_\_

-----DETERMINATION-----

WETLAND?  YES/ NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 42 <i>a</i>	<b>LOCATION:</b> <i>E. of Highway 101; N + E of Haskell Lane</i>	<b>OBSERVER:</b> <i>cg</i>
<b>DATE:</b> <i>5/19/93</i>	<b>BASIN:</b> <i>Ecola Cr. ?</i>	<b>NWI CLASS:</b> <i>R</i>
<b>COMMENTS:</b>		

(circle the appropriate rating)

- |                           |                                    |                                    |                                    | <u>comments</u>  |
|---------------------------|------------------------------------|------------------------------------|------------------------------------|--|
| 1. ECOLOGICAL INTEGRITY   | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>large, natural, undisturbed area</i>                                    |
| 2. WILDLIFE HABITAT       | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>permanent water, abundant snags + downed woody debris</i>               |
| 3. FISH HABITAT           | <input type="radio"/> H            | <input type="radio"/> M            | <input checked="" type="radio"/> L | <i>(8th Gray warbler, Wilson's warbler, ? Alder woodpecker, Tree frog)</i> |
| 4. NOTEWORTHINESS         | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>large size</i>  |
| 5. EDUCATION POTENTIAL    | <input type="radio"/> H            | <input checked="" type="radio"/> M | <input type="radio"/> L            | <i>w/in busing distance</i>  |
| 6. RECREATION             | <input type="radio"/> H            | <input checked="" type="radio"/> M | <input checked="" type="radio"/> L | <i>potential passive recreation such as birding, exploring</i>             |
| 7. FLOOD CONTROL          | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>located adjacent to Ecola Cr.</i>                                       |
| 8. SEDIMENT TRAPPING      | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>"</i>   |
| 9. NUTRIENT RETENTION     | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>"</i>   |
| 10. URBAN QUALITY OF LIFE | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | <i>"</i>   |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH Project/City: CANNON BEACH LWI  
 T,R,S: T.5N,R.10W,Sec. \_\_\_\_\_ County, State: CLATSOP COUNTY, OREGON  
 Field Date: 5/19/93 Wetland No.: 42B Plot No.: ~~42B~~ P42B  
 Tax Map/Lots: \_\_\_\_\_ Condition: "Natural"  
 Plot Location: in tertiary treatment area; Sand  
 Landform: Flood plain of Eccla Cr. Normal Circumstances? YES/NO/UNK  
 Topography: flat Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Red alder	FAC		T	✓					
Salmon berry	FAC		S	✓					
Skunk cabbage	OBL	50	H	✓					
slough sedge	OBL	50	H	✓					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100% of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: open canopy; excellent structural diversity

-----SOIL-----

Series/Phase: Mapped as Coquille-Clatsop Survey Mapping Verified? YES/NO Hydric Soils List? YES/NO  
 Classification: Hydric - muck Drainage Class: v. poorly drained Aquic Conditions? YES/NO/UNK  
 Horizon    Depth    Matrix Color    Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
          0-10        10 YR 3/3        SL muck  
          10-18       5Y 4/1

Criteria Depth: 10 IN. Effectively Drained? YES/NO/UNK Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK in tertiary treatment channels Depth of Major Portion of Root Zone: 8 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO Sat. to surface  
 Hydrology Alteration: YES/NO  
 Wetland Drainage Pattern: YES/NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE  
 Comments: \_\_\_\_\_

-----DETERMINATION-----

WETLAND? YES/NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen

Checked By: \_\_\_\_\_

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. <del>428</del>	LOCATION: Tertiary Treatment Area; East of Hwy 101	OBSERVER: Cgo
DATE: 5/19/93	BASIN: Ecola Cr	NWI CLASS: PFO
COMMENTS: This site contains excellent vegetative species structure and diversity. Water fowl & elk sign are abundant.		

(circle the appropriate rating)

- |                           |     |     |     | <u>comments</u>  |
|---------------------------|-----|-----|-----|--|
| 1. ECOLOGICAL INTEGRITY   | (H) | M   | L   | large undisturbed wetland Great habitat                                      |
| 2. WILDLIFE HABITAT       | (H) | M   | L   | permanent water  |
| 3. FISH HABITAT           | H   | M   | (L) | ? could also be habitat  |
| 4. NOTEWORTHINESS         | H   | (M) | L   | some disturbance   |
| 5. EDUCATION POTENTIAL    | H   | M   | (L) | tertiary treatment could be studied  |
| 6. RECREATION             | H   | M   | (L) | tertiary treatment area access through area to river (Ecola Cr.) for fishing |
| 7. FLOOD CONTROL          | H   | (M) | L   |  |
| 8. SEDIMENT TRAPPING      | (H) | M   | L   | tertiary treatment   |
| 9. NUTRIENT RETENTION     | (H) | M   | L   | "  |
| 10. URBAN QUALITY OF LIFE | H   | M   | (L) |  |

**WETLAND DETERMINATION DATA SHEET**

Applicant: CITY OF CANNON BEACH  
 T,R,S: T.5N,R.10W,Sec.30  
 Field Date: 8/10/93  
 Tax Map/Lots: 51030 DA  
 Plot Location: south end in PEM  
 Landform: Art, surrounded by fill  
 Topography: \_\_\_\_\_

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 43 Plot No.: P43  
 Condition: \_\_\_\_\_

Normal Circumstances? YES/NO/UNK late season  
 Atypical Situation? YES/NO/UNK Problem Area? YES/NO/UNK

-----VEGETATION-----

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
<u>Velvet grass</u>	<u>FAC</u>	<u>25</u>	<u>h</u>	<u>✓</u>					
<u>Agrostis alba</u>	<u>FACW</u>	<u>25</u>	<u>h</u>	<u>✓</u>					
<u>birdfoot trefoil</u>	<u>FAC</u>	<u>25</u>	<u>h</u>	<u>✓</u>					
<u>buttercup</u>	<u>FACW</u>	<u>25</u>	<u>h</u>	<u>✓</u>					

Hydrophytic Vegetation Criterion Met? YES/NO/INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

-----SOIL-----

Series/Phase: Wallusk. SiL Survey Mapping Verified? YES/NO <sup>as mapped</sup> Hydric Soils List? YES/NO  
 Classification: \_\_\_\_\_ Drainage Class: \_\_\_\_\_ Aquic Conditions? YES/NO/UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics  
0-6 10YR 3/2 Sandy SiP moist  
6-12 10YR 3/2 7.5YR 5/8 SiC moist

Criteria Depth: 12 IN. Effectively Drained? YES/NO/UNK NO Relic Characteristics? YES/NO/UNK  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ GLEYED MATRIX \_\_\_\_\_ HISTOSOL/HISTIC EPIPEDON  
 \_\_\_\_\_ CONCRETIONS \_\_\_\_\_ SULFIDIC ODOR \_\_\_\_\_ SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met? YES/NO/INDEFINITE NO  
 Comments: \_\_\_\_\_

-----HYDROLOGY-----

Inundation and Depth: YES/NO/UNK NO IN. Depth of Major Portion of Root Zone: 12 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth: YES/NO \_\_\_\_\_ IN.  
 Hydrology Alteration: YES/NO NO  
 Wetland Drainage Pattern: YES/NO NO Pattern Type: \_\_\_\_\_  
 Other Indicators: \_\_\_\_\_ NONE \_\_\_\_\_ SEDIMENT DEPOSITS \_\_\_\_\_ WATER-STAINED LEAVES  
 \_\_\_\_\_ DRIFT LINES \_\_\_\_\_ WATER MARKS \_\_\_\_\_ LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met? YES/NO/INDEFINITE NO  
 Comments: \_\_\_\_\_

-----DETERMINATION-----

WETLAND? YES/NO ? Needs further study DSL checked 1/26/94  
 Comments: \_\_\_\_\_ standing water at W. portion, saturated at 5" at S. portion.  
 \_\_\_\_\_ 10YR 3/2 or 2/1 at 8" S. portion  
 Field Investigator(s): J. Burcham, C. Galen Checked By: \_\_\_\_\_

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 43	LOCATION: <i>Between Elliot + Sunset</i>	OBSERVER: <i>cg</i>
DATE: 8/10/93	BASIN: <i>Coolidge 3</i>	NWI CLASS: PFOC, PEMC
COMMENTS: <i>Site 43 is an isolated depression area that has been surrounded by fill + development</i>		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L)	<i>weedy, isolated surrounded by fill + development</i>
2. WILDLIFE HABITAT	H	M	(L)	<i>seasonal water; "</i>
3. FISH HABITAT	H	M	(L)	<i>DONE</i>
4. NOTEWORTHINESS	H	M	(L)	<i>see 1</i>
5. EDUCATION POTENTIAL	H	M	(L)	<i>see 1</i>
6. RECREATION	H	M	(L)	<i>see 1</i>
7. FLOOD CONTROL	H	M	(L)	<i>No stream</i>
8. SEDIMENT TRAPPING	H	M	(L)	<i>"</i>
9. NUTRIENT RETENTION	H	M	(L)	<i>"</i>
10. URBAN QUALITY OF LIFE	H	M	(L)	<i>see 1</i>

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 44	LOCATION: Elk Creek Rd. East of Powerline	OBSERVER: CG
DATE: 6/26/93	BASIN: Elk Creek Rd	NWI CLASS: R
COMMENTS: Perennial steep gradient stream surrounded by a clearcut to the east + a sand fill + power substation to the west. Appears to be a tributary to Foola Cr.		

(circle the appropriate rating)

			<u>comments</u>	
1. ECOLOGICAL INTEGRITY	H	M	<input checked="" type="radio"/> L	surrounded by clearcut on one side + sand fill on other perennial stream
2. WILDLIFE HABITAT	H	<input checked="" type="radio"/> M	L	
3. FISH HABITAT	H	M	<input checked="" type="radio"/> L	small, disturbed stream inlets above + below
4. NOTEWORTHINESS	H	M	<input checked="" type="radio"/> L	see 1
5. EDUCATION POTENTIAL	H	M	<input checked="" type="radio"/> L	no access; far from school See 1
6. RECREATION	H	M	<input checked="" type="radio"/> L	"
7. FLOOD CONTROL	H	M	<input checked="" type="radio"/> L	see comments for 1 + 3
8. SEDIMENT TRAPPING	H	M	<input checked="" type="radio"/> L	"
9. NUTRIENT RETENTION	H	M	<input checked="" type="radio"/> L	"
10. URBAN QUALITY OF LIFE	H	M	<input checked="" type="radio"/> L	surrounded by open space + power station

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 45	LOCATION: Gulcana / Hemlock	OBSERVER: EG
DATE: 6/26/93	BASIN: Gulcana	NWI CLASS: R seasonal
COMMENTS: continuation of Site 29. Channelized stream		
surrounded by a mowed lawn		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L)	vegetation weedy & mowed
2. WILDLIFE HABITAT	H	M	(L)	seasonal water, limited food & cover
3. FISH HABITAT	H	M	(L)	seasonal water
4. NOTEWORTHINESS	H	M	(L)	see 1
5. EDUCATION POTENTIAL	H	M	(L)	∅; residential mowed lawn
6. RECREATION	H	M	(L)	∅ "
7. FLOOD CONTROL	H	M	(L)	small seasonal stream;
8. SEDIMENT TRAPPING	H	M	(L)	"
9. NUTRIENT RETENTION	H	M	(L)	"
10. URBAN QUALITY OF LIFE	H	M	(L)	small + mowed

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 46	<b>LOCATION:</b> NE of Hemlock / N of Haystack resort	<b>OBSERVER:</b> CG
<b>DATE:</b> 6/26/93	<b>BASIN:</b> Tolovana	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> channelized stream corridor w/ steep banks surrounded by mowed lawn & parking lot		

(circle the appropriate rating)

- |                           |   |   | <u>comments</u>  |
|---------------------------|---|---|--|
| 1. ECOLOGICAL INTEGRITY   | H | M | (L) unnatural habitat  |
| 2. WILDLIFE HABITAT       | H | M | (L) limited food & cover;<br>traffic                               |
| 3. FISH HABITAT           | H | M | (L) channelized & culverted  |
| 4. NOTEWORTHINESS         | H | M | (L) see all comments above   |
| 5. EDUCATION POTENTIAL    | H | M | (L) "  |
| 6. RECREATION             | H | M | (L) "  |
| 7. FLOOD CONTROL          | H | M | (L) channelized; no flood plain                                    |
| 8. SEDIMENT TRAPPING      | H | M | (L) "  |
| 9. NUTRIENT RETENTION     | H | M | (L) "  |
| 10. URBAN QUALITY OF LIFE | H | M | (L) Channel intentionally<br>retained to facilitate<br>development |

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 47	LOCATION: NW of Hemlock / Umpqua	OBSERVER: Cg
DATE: 6/26/93	BASIN: Umpqua	NWI CLASS: R seasonal
COMMENTS: seasonal stream: channelized, culverted + filled		

(circle the appropriate rating)

			<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L) Extreme disturbance to native plant communities
2. WILDLIFE HABITAT	H	M	(L) " ; seasonal water
3. FISH HABITAT	H	M	(L) φ " "
4. NOTEWORTHINESS	H	M	(L) see 1 above
5. EDUCATION POTENTIAL	H	M	(L) "
6. RECREATION	H	M	(L) "
7. FLOOD CONTROL	H	M	(L) seasonal water
8. SEDIMENT TRAPPING	H	M	(L) "
9. NUTRIENT RETENTION	H	M	(L) "
10. URBAN QUALITY OF LIFE	H	M	(L) channel intentionally channelized & filled for development

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 48	LOCATION: NE of Tolovana/Hemlock	OBSERVER: cg
DATE: 5/18 + 6/26	BASIN: Coos	NWI CLASS: R, PFOC
COMMENTS: stream has been rocked & channelized to meander around condominiums. Wetland mosaic has been developed w/ condo's on pilings. Sample point not taken because of <sup>land clearing</sup> disturbance. nce		

(circle the appropriate rating)

	H	M	L	<u>comments</u>
1. ECOLOGICAL INTEGRITY			(L)	Development of condo's has degraded ecosystem
2. WILDLIFE HABITAT			(L)	"
3. FISH HABITAT			(L)	Low flow stream, channelized & culverted
4. NOTEWORTHINESS			(L)	see above comments
5. EDUCATION POTENTIAL			(L)	"
6. RECREATION			(L)	"
7. FLOOD CONTROL			(L)	"
8. SEDIMENT TRAPPING			(L)	"
9. NUTRIENT RETENTION			(L)	"
10. URBAN QUALITY OF LIFE			(L)	"

**Cannon Beach Local Wetlands Inventory**

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

<b>SITE NO.</b> 49	<b>LOCATION:</b> W of Hemlock adjacent to Oswald West Home	<b>OBSERVER:</b> CJ + JB
<b>DATE:</b> 6/26/93	<b>BASIN:</b> ?	<b>NWI CLASS:</b> R
<b>COMMENTS:</b> Site 49 is a <sup>very small</sup> spring fed stream. The stream is incised + banks are mowed. The most significant aspect of this site is the <u>historical</u> significance of the spring + the mansion it served.		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L)	mowed lawn
2. WILDLIFE HABITAT	H	M	(L)	"
3. FISH HABITAT	H	M	(L)	the channel is too short, small & disturbed
4. NOTEWORTHINESS	H	M	(L)	spring is historical
5. EDUCATION POTENTIAL	H	M	(L)	∅, private, no access
6. RECREATION	H	M	(L)	"
7. FLOOD CONTROL	H	M	(L)	too small of a discharge
8. SEDIMENT TRAPPING	H	M	(L)	"
9. NUTRIENT RETENTION	H	M	(L)	"
10. URBAN QUALITY OF LIFE	H	M	(L)	too small & disturbed

*Cannon Beach Local Wetlands Inventory*

**WETLAND FUNCTIONAL VALUES ASSESSMENT**

SITE NO. 50	LOCATION: N. of Ecola Cr + West of Highway 101	OBSERVER: C Galen
DATE: 5/18/93	BASIN: Ecola Cr.	NWI CLASS: PFO, R
COMMENTS:		

(circle the appropriate rating)

- |                           |                                    |                                    |                                    | <u>comments</u>   |
|---------------------------|------------------------------------|------------------------------------|------------------------------------|---|
| 1. ECOLOGICAL INTEGRITY   | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | diverse native vegetation   |
| 2. WILDLIFE HABITAT       | <input checked="" type="radio"/> H | <input type="radio"/> M            | <input type="radio"/> L            | 500+ birds abundant   |
| 3. FISH HABITAT           | <input type="radio"/> H            | <input type="radio"/> M            | <input checked="" type="radio"/> L | ? tributary to Ecola Cr<br>subjected under #101   |
| 4. NOTEWORTHINESS         | <input type="radio"/> H            | <input checked="" type="radio"/> M | <input type="radio"/> L            | large size, contiguous<br>with estuary  |
| 5. EDUCATION POTENTIAL    | <input type="radio"/> H            | <input checked="" type="radio"/> M | <input type="radio"/> L            | adjacent to campground  |
| 6. RECREATION             | <input type="radio"/> H            | <input checked="" type="radio"/> M | <input type="radio"/> L            | adjacent to campground  |
| 7. FLOOD CONTROL          | <input type="radio"/> H            | <input type="radio"/> M            | <input checked="" type="radio"/> L | small stream  |
| 8. SEDIMENT TRAPPING      | <input type="radio"/> H            | <input type="radio"/> M            | <input checked="" type="radio"/> L |   |
| 9. NUTRIENT RETENTION     | <input type="radio"/> H            | <input type="radio"/> M            | <input checked="" type="radio"/> L |   |
| 10. URBAN QUALITY OF LIFE | <input type="radio"/> H            | <input checked="" type="radio"/> M | <input type="radio"/> L            | adjacent to campground;<br>old tracks meander through<br>site<br>divided from main road |

# WETLAND DETERMINATION DATA SHEET

Applicant: CITY OF CANNON BEACH  
 T, R, S: T. 5N03, R. 10W, 1/4 OF SEC. 20  
 Field Date: 5/18/93 Time: \_\_\_\_\_  
 Tax Map/Lots: 51020 CB/CA  
 Plot Location: \_\_\_\_\_  
 Landform: \_\_\_\_\_  
 Topography: \_\_\_\_\_

Project/City: CANNON BEACH LWI  
 County, State: CLATSOP COUNTY, OREGON  
 Wetland No.: 50 Plot No.: 50 P  
 Condition: Natural

Normal Circumstances?  YES/ NO/ UNK  
 Atypical Situation?  YES/ NO/ UNK Problem Area?  YES/ NO/ UNK

## VEGETATION

Species	Indicator Status	% Cover	Layer	Domin.	Species	Indicator Status	% Cover	Layer	Domin.
Skunk cabbage	OBL	80	H	<input checked="" type="checkbox"/>					
Tough sedge	FACW	10	H						
Water Parsley	OBL	10	H						
Red alder	FAC		T	<input checked="" type="checkbox"/>					

Hydrophytic Vegetation Criterion Met?  YES/ NO/ INDEFINITE 100 % of domin. species are OBL, FACW, FAC+ and/or FAC  
 Comments: \_\_\_\_\_

## SOIL

Series/Phase: mapped as Walluski Sil Survey Mapping Verified?  YES/ NO as mapped Hydric Soils List?  YES/ NO  
 Classification: Hydric inclusion Drainage Class: U poorly drained Aquic Conditions?  YES/ NO/ UNK  
 Horizon Depth Matrix Color Mottle Contrast & Color, Texture, Moisture, Other Characteristics

0-4	10YR 3/6	SS, C	<u>saturation</u>
4-12	10YR 3/4	2.5YR 5/8	MT
12-18	10YR 4/1	"	MT

Criteria Depth: 16 IN. Effectively Drained?  YES/ NO/ UNK Relic Characteristics?  YES/ NO/ UNK  
 Other Indicators:  NONE  GLEYED MATRIX  HISTOSOL/HISTIC EPIPEDON  
 CONCRETIONS  SULFIDIC ODOR  SANDY W/ORGANIC ACCUMULATION

Soil Criterion Met?  YES/ NO/ INDEFINITE  
 Comments: \_\_\_\_\_

## HYDROLOGY

Inundation and Depth:  YES/ NO/ UNK poorly drained Depth of Major Portion of Root Zone: 10 IN.  
 Saturation Criteria: 45 DAYS (YEAR-ROUND GROWING SEASON) Water Table and Depth:  YES/ NO surface IN.  
 Hydrology Alteration:  YES/ NO  
 Wetland Drainage Pattern:  YES/ NO Pattern Type: \_\_\_\_\_  
 Other Indicators:  NONE  SEDIMENT DEPOSITS  WATER-STAINED LEAVES  
 DRIFT LINES  WATER MARKS  LIVE OXIDIZED RHIZOSPHERES

Hydrology Criterion Met?  YES/ NO/ INDEFINITE  
 Comments: \_\_\_\_\_

## DETERMINATION

WETLAND?  YES/ NO  
 Comments: \_\_\_\_\_

Field Investigator(s): J. Burcham, C. Galen

Checked By: [Signature]

Cannon Beach Local Wetlands Inventory

WETLAND FUNCTIONAL VALUES ASSESSMENT

SITE NO. 51	LOCATION: Kenai / Pacific	OBSERVER: Cg
DATE: 8/10/93	BASIN: Brautler	NWI CLASS: PFOC, R
COMMENTS: Isolated perennial stream surrounded by residential development. Ornamental flowers have escaped into the flood plain. It was too late in the season to assess hydrology of the flood plain & too small to matter		

(circle the appropriate rating)

				<u>comments</u>
1. ECOLOGICAL INTEGRITY	H	M	(L)	Mentzelia & Himalayan blackberry are common
2. WILDLIFE HABITAT	H	M	(L)	small & isolated
3. FISH HABITAT	H	M	(L)	low flow, high gradient stream
4. NOTEWORTHINESS	H	M	(L)	see 1
5. EDUCATION POTENTIAL	H	M	(L)	private; no access; see 1
6. RECREATION	H	M	(L)	"
7. FLOOD CONTROL	H	M	(L)	low flow stream
8. SEDIMENT TRAPPING	H	M	(L)	"
9. NUTRIENT RETENTION	H	M	(L)	"
10. URBAN QUALITY OF LIFE	H	M	(L)	too disturbed & hidden by residences immediately surrounding it.