

DRAFT

3/2/04-BC-Edits 4/16/04, 4/20/04, 4/30/04

Subject: Periodic Review Task 10, Riparian Ordinance Revisions

Goal 5, Natural Resources – Text and Policies

Background/Context:

Framed by the Coast Range to the east and the Pacific Ocean to the west, Tillamook County encompasses a large and diverse riparian habitat from the Salmonberry River, in the North to the Salmon River in the South. Tillamook County contains seven (7) major rivers fed by a complex network of perennial and intermittent streams. The major rivers are: The Nehalem*, the Miami, the Kilchis, the Wilson, the Trask, the Tillamook, and the Nestucca Rivers**. There are five (5) major bays and estuaries in Tillamook County; the Nehalem, Tillamook, Netarts, Sandlake, and the Nestucca. Lower river segments are influenced by ocean tides and salt water, lower river valleys, within the major river drainage basins, represent the unique agricultural/grazing lands that have been the foundation for the dairy industry that has flourished in the county. Riparian habitats within the county vary greatly, dependent upon the primary terrain features. Tillamook County is characterized by mountainous uplands, meandering river valleys and floodplains, and estuarine and coastal shoreland habitats, each area may be slightly or substantially different than the other. The dominant landforms and bio-diversity in the county gave rise and support to the predominant industries of wood products, agriculture (dairy), and commercial and recreational fishing. The county settlement patterns have occurred in the river valleys and coastal shorelands. These lands have been planned to accommodate the future needs and demands for both primary and secondary housing within Tillamook County.

*Note: * indicates river systems with flows of 1,000 cfs from ocean to mountains;
** the Nestucca has a flow of 1,000 CFS from the rivers mouth to it's confluence with Three Rivers in the vicinity of Cloverdale and Hebo;
the Miami, the Kilchis, the Wilson, the Trask, and the Tillamook Rivers **do not have** average annual flows of 1,000 cfs*

Periodic Review Task 10, mandated by DLCD/LCDC, requires the county to update and amend the Tillamook County Comprehensive Plan, Goal 5 Riparian Habitat Policies, the Tillamook County Land Use Ordinance, Section 4.080 – Requirements for Protection of Water Quality and Streambank Stabilization, to be consistent with state rules and statutes promulgated to provide protection to riparian habitats under Statewide Goal 5 – Natural Resources, which extends and includes riparian elements of Goal 16 – Estuarine Resources, and Goal 17 – Coastal Shorelands.

Land ownership in Tillamook County is dominated by public ownership, 66 percent, compared to private ownership, 34 percent, of the total land area; details are:

- Federal lands (USFS & BLM) – 142,000 acres (20%)

• State lands (primarily ODF) –	315,000 acres	(44%)
• County lands -	5,000 acres	(1%)
• Private (corporate timberlands)	158,000 acres	(22%)
• Private (cities, farm, RR)*	97,000 acres	(14%)
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Total Acreage	713,600	(100%)

*Note:** There are 8,155 acres in rural residential exception areas, 2,790 acres in excepted rural unincorporated communities, and 4,724 acres within the incorporated cities. The 10,945 acres of lands in rural Tillamook County represents 1.5% of the total county land area that will be subject to the proposed Phase Two ordinance amendments.

Lands in resource use:

• Forestry	659,000	(92%)
• Agriculture	33,600	(4.6%)
• Other uses	21,000	(3.4%)

Land areas planned and zoned for forest production and agriculture are categorically exempt from local land use riparian requirements, except for non-forest or non-farm uses that are subject to local land use authority. These exempt lands are subject to the State Forest management Plan (ODF), the Federal Forest Management Plan (BLM & USFS), The Oregon Forest Practices Act (private-commercial forest land), and SB1010 which governs riparian habitat and restoration within private-commercial agricultural zones. Estuarine areas within the bays and rivers have been designated as either Estuarine Natural (Sandlake), Estuarine Conservation, or Estuarine Development or as a blend. Most of the lower river segments are characterized by dikes and levees developed to control or protect agricultural lands from flooding; while many dikes and levees were constructed by the US Army Corps of Engineers (USACE), others were constructed by local drainage or flood control districts or individual property owners. The dikes and levees are primarily located within the commercial agricultural farm designated and zoned lands.

Tillamook County has a tradition of habitat restoration in forestry and agriculture. The reforestation of the Tillamook Forest attests to that fact following the devastating fires that swept the forest lands in the 1930's and 1940's. The county was a key partner and sponsor in the formation of the Performance Partnership, now Tillamook Estuary Partnership, in collaboration with local citizens, state and federal agencies. A central emphasis of the estuary partnership, together with the EPA, DEQ, SWCD and watershed councils is water quality and habitat restoration. Tillamook County has worked collaboratively with the Soil & Water Conservation District through the years, and with the advent of active volunteer watershed councils the county has expanded it's working relationship with the citizens of the county to continue to improve the local environment. Tillamook County has decided to focus its goal 5 riparian inventory on fish bearing water bodies, where the presence of fish has been documented by inventory, as the central element for consideration of significance together with the consideration of other inventoried factors required by OAR 660-023-0090 (4).

Goal 5 Inventory:

The following agencies were notified of the County's decision to address Goal 5 through the inventory process and requests were made for any relevant inventoried information regarding riparian resources in Tillamook County:

- 1) Oregon Department of Fish and Wildlife (ODFW)
- 2) Oregon Department of Forestry (ODF)
- 3) Oregon Department of Environmental Quality (DEQ)
- 4) Tillamook County Soil and Water Conservation District (SWCD)
- 5) Natural Resources Conservation Service (NRCS)
- 6) Bureau of Land Management (BLM)
- 7) U.S. Fish and Wildlife Service (USFW)
- 8) National Oceanic and Atmospheric Administration- Fisheries (formerly National Marine Fisheries Service) (NOAA)
- 9) U.S. Army Corps of Engineers (USACE)
- 10) Water Resources Department, North Coast Average Stream Flow Model

Inventory information was provided by: ODFW, ODF, ODEQ, TCSWCD, BLM, and USACE. The following watershed councils provided local information and assessments: Tillamook Bay Watershed Council, the Nestucca-Neskowin Watershed Council, and the Lower Nehalem Watershed Council. The Tillamook Estuaries Partnership provided the Environmental Characterization of Tillamook Bay and the five rivers that comprise the watershed for the bay. Additional information and materials were provided by the Tillamook County Watershed Resource Center.

Determination of Adequacy & Significance:

The county, in concert with the Science Advisory Group and Director's Focus Group looked at the location, quality and quantity of riparian resources, depicted in the inventoried information. To ascertain the adequacy of the inventory in making a determination of significance the county considered:

- Most perennial water bodies in Tillamook County have been mapped, although many perennial and intermittent streams have not been mapped or inventoried for fish presence or evaluated as fish habitat by ODFW. Perennial bodies of water as well as some intermittent streams are areas upon which fish may depend in order to meet their requirements for spawning, rearing, food supply, and migration. Perennial and intermittent streams that have been inventoried and that reflect the presence of fish, connectivity to other water bodies, or to substantive fish supportive habitat will be periodically added to the inventoried information.
- Rivers, creeks, bays, lakes and intermittent streams with a defined channel have riparian areas. A riparian area by definition is "the area adjacent to a river, lake, or

stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem.” (OAR 660-023-0090).

- In the absence of actual mapping the review of aerial photos, and/or Oregon Department of Forestry stream classification maps, Federal Emergency Management Agency Federal Insurance Rate Map’s, USGS 7.5 minute quadrangle maps, and/or the National Wetlands Inventory maps, together with site visits may be used to determine and verify the presence and general condition of a riparian area.
- The Oregon Department of Environmental Quality provided the Total Maximum Daily Load and Water Quality Management Plans that included a riparian inventory and characterization, the Oregon Department of Fish and Wildlife provided riparian area assessments and inventories portrayed on Oregon Department of Forestry Maps.
- The Soil Survey for the Tillamook Area, developed by the Soil Conservation Service in Cooperation with the Oregon Agricultural Experiment Station and Soil & Water Conservation District, Series 1957, No. 18 provides both a detailed soil survey and a general soil map. Soils may be used to identify areas of riparian habitat based upon soil suitability to support riparian plant materials that may exist at a given site. Individual assessments of habitat quality may be made at the time of application for development.
- The county’s determination of the quality of a riparian resource is based upon a watershed approach. The riparian areas have been categorized into 4 different areas:
 - ✓ Area 1 includes the mainstem of all perennial rivers, estuaries and lakes greater than 1 acre;
 - ✓ Area 2 applies to all other perennial streams;
 - ✓ Area 3 is applicable to intermittent streams with a definable channel that has been inventoried and where the presence of fish has been documented; and
 - ✓ Area 4 applies to man-made ditches.

In terms of quantity, all waterbodies have a riparian area as defined by OAR 660-023-0090; however, not all waterbodies in Tillamook County have been identified, mapped or inventoried. A static criteria, such as the Goal 5 inventory process, is more easily applied to resources that have definable boundaries, such as aggregate or historical sites, rather than riparian areas which are part of a dynamic system that may not possess readily definable boundaries, but may be identified as the “area of transition from an aquatic ecosystem to a terrestrial ecosystem.” (OAR 660-023-0090). The amount of land located within the riparian area varies with the geologic and geographic nature of the site, suitability of soils, channel width, and riparian functions associated with the site. Those functions include but are not limited to fish habitat, wildlife habitat, shade, bank stability, filtration, floodplain connectivity, and the introduction of large woody material to the streams to augment in-stream habitat.

The inventory information obtained has been deemed adequate to make a determination of significance. Determinations of significance shall be based upon the criteria in OAR 660-023-030 (4) (a)-(c), unless challenged by the department, objectors, or the commission based upon contradictory information. A determination of significance shall be based on: 1) the quality, quantity, and location information; 2) supplemental or

superseding criteria set forth in OAR 660-023-0090 through 660-023-0230; and 3) additional criteria that may be adopted by the local government, provided the criteria does not conflict with the requirements of OAR 660-023-0090 through 660-023-0230. The quality, quantity and location information is used to identify and determine whether riparian areas are significant resource sites. The County has defined a significant riparian area as “riparian areas and riparian wetlands that contribute individually or cumulatively to functions necessary to maintain beneficial use standards for water quality and habitat for fish and wildlife resources.” Riparian areas contribute to functions that result in healthy riparian conditions, that comprise improved fish and wildlife habitat, biological diversity, and water quality which are deemed to be significant. The county has found the inventory information adequate to make a determination of significance of those riparian areas, within the designated and zoned commercial forest and agricultural lands, for perennial rivers, streams and lakes together with those intermittent streams that have a discernible channel and where fish presence has been established by inventory.

A central theme of the Statewide Riparian Management Policy is that “the condition of riparian areas must be improved in order to meet Oregon’s objectives and standards for water quality and healthy, productive stream systems and watersheds.” The theme encourages a landscape approach which includes looking at the cumulative impacts of activities on the riparian area and its functions, and management of riparian functions along the stream system. Water quality limited segments have been identified in the County, as a result total maximum daily loads (tmdl’s) have been established for temperature and bacteria. Riparian areas may directly affect the water quality of a stream and may be deemed significant for that purpose, where a clear correlation has been established. Although a particular reach may have degraded functions, its contribution and location to the rest of the system may be such that such areas may be deemed significant.

Methodology:

Tillamook County is taking a blended two-phase approach and process to address this mandated Periodic Review Task. Phase 1 consists of the inventory of federal, state, and privately owned commercial forest lands, together with privately owned commercial agricultural lands. These lands comprise 98.5% of the total land area of Tillamook County and are subject to other federal and state laws and standards for habitat protection and conservation. Federal lands comprised of US Forest Service holdings for both forest and park usage, BLM holdings for forest purposes are subject to federal forest management plans and agency guidelines and policies. State owned forest lands and forest trust lands under the management of the Oregon Department of Forestry (ODF) are subject to the State Forest Management Plan and Oregon Forest Practices Act. Privately owned commercial forest lands are subject to the Oregon Forest Practices Act, and privately owned commercial agricultural lands are subject to the provisions of the Oregon Department of Agriculture North Coast Basin Watershed Management Plan (SB1010). These lands are essentially exempt from local ordinances, except where a use or activity is engaged or proposed on the land as a non-forest or non-farm use of the land or riparian

habitat, inclusive of Goal 17-Coastal Shorelands that are designated and zoned for forest or farm use.

Phase 2, of the process, will address the other planned and zoned unincorporated areas of Tillamook County; rural residential lands, rural unincorporated communities, commercial land, industrial land, and those areas designated within the Tillamook County Comprehensive Plan Goal 17-Coastal Shorelands, inclusive of the inventory of appropriate riparian based Goal 17 resources, findings and policies set forth in the acknowledged county plan. These areas constitute less than 1.5% of the total land area of Tillamook County. In these areas the county will apply the Economic, Social, Environmental, Energy (ESEE) analysis process to determine significance of the resource together with the appropriate levels of protection.

County Stewardship, a Key Socio-economic Factor:

A salient key to riparian habitat conservation, preservation and restoration within Tillamook County begins with the commitment of numerous volunteers and non-regulatory organizations dedicated to the conservation, preservation and restoration of sustainable and healthy habitats. This ingrained sense of stewardship is present in the forestry community, agricultural community, school districts and resident population of the county. Many second and recreational home-owners contribute time, energy and effort to these volunteer activities to conserve, preserve and protect the natural habitat. The predominant organizations in the County are: the Soil and Water Conservation District, the National Resource Conservation Service, The Tillamook Estuary Partnership, The Lower Nehalem Watershed Council, The Tillamook Bay Watershed Council, The Nestucca-Neskowin Watershed Council, and The Tillamook County Watershed Resource Center.

The Tillamook County Soil & Water Conservation District project summary from 1991 to 2003 is emblematic of the overall commitment to in-county habitat restoration efforts:

- ✓ 116 miles of streamside fencing installed,
- ✓ 6,000 additional feet of streamside fencing in process,
- ✓ 96 landowners participating in streamside fencing projects with an additional 30 property owners signed up for future fencing,
- ✓ 15 miles (79,200 ft) of off-stream watering systems (1" pipe) installed,
- ✓ 8 livestock crossings installed,
- ✓ a solar pump with two troughs installed,
- ✓ 998 nose pumps installed,
- ✓ 750,000 native trees and shrubs planted in riparian areas,
- ✓ 350 native wetland plants placed for wetlands restoration,
- ✓ 106 landowners participating in restoration plantings.

Local programs are coordinated between SWCD, NRCS, the TEP, watershed councils, schools and private organizations that reflects a growing and healthy awareness of environmental issues and action steps to improve stream and habitat conditions. Local organizations are engaged in public outreach and education. The TEP educational

program takes a pro-active approach in providing information to the public through an array of public information and outreach efforts. The State of the Bay Conference, promotional activities and events, participation in school activities and service learning projects, local and regional beach and bay cleanup programs represent a portion of their activities. These programs elevate public awareness and participation of volunteers in efforts to improve water quality, restore riparian habitats and address environmental issues. The connectivity with local schools and more importantly with the students and youth of the community provides the understanding and promise of a bright future for citizen stewardship in Tillamook County.

Watershed councils inter-act locally on a site-specific basis to evaluate, restore and monitor habitat improvement projects. Many of the restoration projects would not be realized but for the capable assistance provided by the youth of Tillamook County as volunteers through in-service learning programs coordinated through local school districts. Tillamook County boasts the presence of three excellent watershed councils whose ranks are filled with Tillamook County volunteers. They comprise an extraordinary asset to enhance and preserve the environment while providing leadership for community based conservation, preservation and restoration efforts. Non-regulatory enhancement activities are encouraged in Tillamook County, there are many activities that are not subject to permit issuance, these include uses such as: the removal of invasive vegetation and replacement with native plant materials, removal of trees and understory materials that pose an erosion, safety, or fire hazard to existing uses allowed by the underlying zone, mowing or maintaining existing lawn areas and pasture, removal and or pruning of vegetation for the maintenance of utility lines, vegetation removal for the repair, operation or maintenance of bridges and roadways, and the pruning of plant materials to retain views and vistas.

The restoration of game fish for sport and recreational fishing is of significant value to the regional economy. The commercial ocean fishery has been substantially reduced by quota limitations imposed on the industry, while still providing fresh ocean bright fish to local and niche markets. Forestry and agriculture round out the in-place traditional industries of Tillamook County. These industries are resource dependent and water quality is a key link to their sustainability.

Goal 5 – Plan Policies:

These plan policies provide for the preservation, conservation and protection of designated Significant and/or Exceptional resource areas (public and private) for riparian habitats within the designated Coastal Shorelands, Goal 17 boundaries; significant estuarine resources identified as Goal 16 resources; together with inventoried water bodies, where the presence of fish has been documented, within Tillamook County may be deemed as significant riparian habitat. Tillamook County recognizes that riparian habitats substantially differ from one ecotone to another, whether in coastal shoreland habitat, estuarine habitats, or upland river and stream habitats. Tillamook County shall make determinations of significance or non-significance, together with the adoption of

appropriate protective measures in accordance with Safe Harbor provisions, set forth in OAR 660-023-0020) for the commercial forest and agricultural lands (phase 1), and the Goal 5 Inventory Process for rural residential, rural unincorporated communities, commercial, industrial and coastal shorelands (phase 2), set forth in OAR 660-023-0000, 0010, 0030 – 0070, and 0090.

Policies:

- To protect, preserve, conserve and restore riparian habitats in the upland, river valleys, estuarine, and coastal shorelands of Tillamook County.
- To recognize and protect public infrastructure that presently exists within riparian habitat, and to preserve the public right to replace, repair and maintain public infrastructure such as: highways, roads, utilities, water lines, sanitary sewer lines, together with those systems deemed necessary and essential to serve human development and occupancy.
- To protect the right of private property owners to utilize and develop private property in accordance with ORS 105.700 and public protection and conservation policies.
- To develop a coordinated stewardship program for participation by private property owners that provides for habitat restoration and conservation planning with implementation and assistance in cooperation with local volunteer watershed councils, the Soil & Water Conservation District, the Tillamook Estuary Partnership, Tillamook Coastal Watershed Resource Center and state, federal or local agencies.
- The County will support legislative amendments for the inclusion of rural residential, commercial and industrial property qualification for riparian habitat tax incentive programs created by the State of Oregon for agricultural and forested lands.
- The County will establish and maintain coordination and assistance for ongoing habitat restoration projects between private property owners, local watershed councils, the Soil and Water Conservation District, state and federal resource management and regulatory agencies.
- The County will utilize existing inventories of Fish Bearing Streams, where the presence of fish has been documented, together with other related inventories to establish appropriate resource protection of habitat. Work closely with the appropriate agencies to establish clear and concise criteria for the inclusion or exclusion of habitat areas, and develop a process that will provide a standardized review of a habitat area or segment prior to its addition or removal from an adopted list of significant riparian habitat.
- Intermittent streams included within the Inventory of Fish Bearing Streams, where the presence of fish has been documented, shall be protected. Intermittent streams that have not been inventoried will not be protected, but may be added to the Inventory of

Fish Bearing Streams where the evidence supports the conclusion that an intermittent stream, based upon clear and concise criteria, is “fish bearing”. Review criteria for the inclusion or exclusion from an adopted Inventory of Fish Bearing Streams shall be based upon clear and concise criteria and standards.

- The County will develop non-regulatory guidelines for the enhancement and restoration of riparian and in-stream habitats in conjunction with volunteer organizations and agencies listed herein.