

## 5 EFFECTS OF DEVELOPMENT WITH APPLICATION OF THE SMP

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### 5.1 Environment Designations

#### 5.1.1 Purpose and Distribution

The first line of protection of the County's shorelines is the environment designation assignments (see SMP Appendix A). According to the Guidelines (WAC 173-26-211), the assignment of environment designations must be based on the existing use pattern, the biological and physical character of the shoreline, and the goals and aspirations of the community as expressed through a comprehensive plan.

The assignment of environment designations can help minimize cumulative impacts by concentrating development activity in lower functioning areas that are not likely to experience significant function degradation with incremental increases in new development or redevelopment.

Consistent with WAC Shoreline Master Program Guidelines, the County's environment designation system is based on the existing use pattern, the biological and physical character of the shoreline, and community interests. The *Shoreline Inventory and Characterization* report provided information on shoreline conditions and functions that informed the development of environment designations for each of the shoreline waterbodies. The proposed environment designations, consistent with SMP Guidelines, include: Natural, Rural Conservancy, Urban Conservancy, and Shoreline Residential, listed in order by increasing level of use. An Aquatic environment designation applies to most shorelines waterward of the ordinary high water mark (OHWM).

In general, the Natural environment designation was recommended for shorelines with unique features that are generally incompatible with intensive human use. These areas include undisturbed portions of wetlands, estuaries, unstable bluffs, spits, and other ecologically intact areas. Approximately 31 percent of the County's total shoreline area is in the Natural environment designation.

The Rural Conservancy designation covers just over 60 percent of the County's entire shoreline jurisdiction (Figure 5-1). The Rural Conservancy environment designation was assigned to areas supporting low-intensity resource-based uses (e.g., agriculture, forestry, and recreation) or areas with existing residential development that are subject to environmental limitations (e.g., steep banks, feeder bluffs, and floodplains).

The Urban Conservancy designation is limited to 1.1 percent of the total shoreline area in the County (Figure 5-1). The designation applies to areas within UGAs or LAMIRDs,

where existing and planned development is compatible with maintaining and restoring ecological functions.

The Shoreline Residential designation applies to 3.5 percent of the shoreline area (Figure 5-1) and nearly half of the total number of parcels (Figure 5-2). The designation applies to areas that are predominantly single-family or multi-family residential development, excluding areas where further residential development would cause adverse ecological impacts to sensitive environments (e.g., steep slopes, floodplains, wetlands).

## Shoreline Environment Designation Area 2018

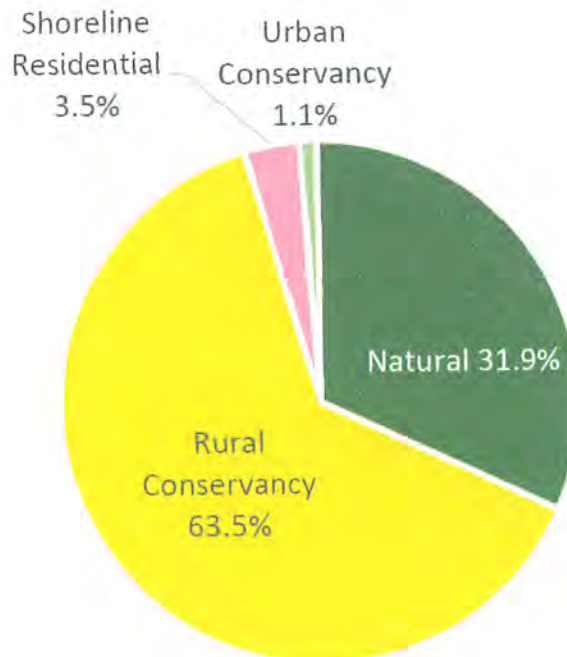


Figure 5.1 Distribution of Shoreline Environment Designations by Acres in Thurston County

## Shoreline Environment Designation Residential Unit Capacity 2014

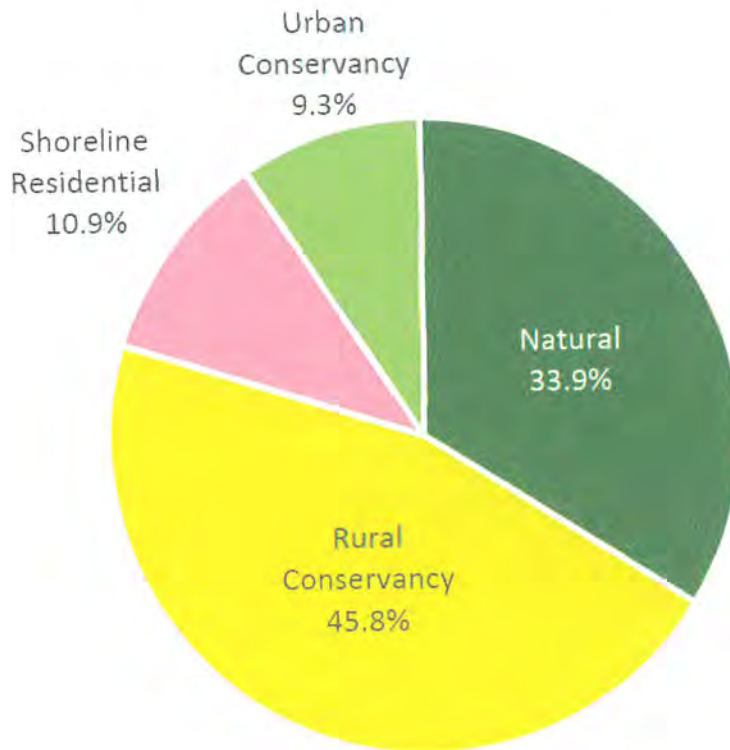


Figure 5-2. Distribution of Shoreline Environment Designations by Number of Parcels in Thurston County

### 5.1.2 Use and Modification Matrix

The Use and Modification Matrix (Chapter 19.600 and Appendix D of this document) identifies the prohibited and allowed uses and modifications in each of the shoreline environments, and clearly shows a hierarchy of higher-impacting uses and modifications being allowed in the already highly-altered shoreline environments, with uses more limited in the less developed areas either through prohibition or a requirement for a Shoreline Conditional Use Permit.

The allowed and prohibited uses established in the Use and Modification Matrix help minimize cumulative impacts by concentrating development activity in lower

functioning areas that are not likely to experience significant function degradation with incremental increases in new development. Furthermore, prohibited and permitted uses specific to environment designations limit potential conflicts between neighboring uses and ensure that uses are consistent with comprehensive plans, zoning, and existing functions.

### 5.1.3 Relationship to Marine Functions

Existing analyses of shoreline functions were used to evaluate how the distribution of environment designations correlates to existing levels of ecological functions. In the marine shoreline, the distribution of environment designations was compared to the level of direct disturbance on controlling factors (i.e. substrate, wave energy, depth/slope, light, frequency of disturbance, and water quality) as reported by Borde et al. (2009) and Judd (2010) and used in the Thurston County *Shoreline Inventory and Characterization* report. Direct disturbances included in the evaluation are armoring, boat launches, overwater structures, heavily modified areas, and impervious surface coverage (Borde et al. 2009). The direct disturbance score was used to provide a comparison of site-specific functions relevant to existing local land use conditions. It should be noted, however, that landscape-scale disturbances and factors also play a significant role in overall shoreline functions, and these factors are not explicitly considered in the functional score.

## 5.2 General Policies and Regulations

The SMP contains numerous general policies, with supporting regulations (see SMP Chapters 19.300 and 19.400), intended to protect the ecological functions of the shoreline and prevent adverse cumulative impacts and to satisfy the main objectives of the SMA. The General Policies and Regulations chapter applies to all activities, uses and modifications.

The proposed SMP requires mitigation sequencing for all permitted activities within shoreline jurisdiction to protect current ecological conditions and prevent or mitigate for adverse impacts (SMP 19.400). Mitigation sequencing involves first avoiding impacts where possible, and then minimizing the intensity of impacts; finally, where remaining impacts are unavoidable and cannot be reasonably minimized, mitigation is required to compensate for those remaining unavoidable impacts and ensure that shoreline functions are retained.

Among the general regulations, the Thurston County Critical Areas Ordinance (Title 24 TCC) is amended and incorporated by reference into the proposed SMP (19.400.115). In addition to critical areas established in the existing Critical Areas Ordinance, the SMP establishes "Critical Freshwater Habitats" and "Critical Saltwater Habitats." Critical Freshwater Habitats include all lakes and streams that qualify as Shorelines of the State (SMP 19.400.115(C)). Critical Saltwater Habitats (19.400.115 (D)) include kelp and eelgrass beds, forage fish spawning and holding areas, shellfish beds, mudflats, intertidal habitats with vascular plants, and areas with which priority species have a primary association. The basic components of Thurston County's critical areas regulations include Ecology's four-tiered wetland rating system with standard buffers ranging from 50 to 300 feet