

## Appendix C

### Example Findings of Fact

#### General Critical Areas Findings

The Growth Management Act requires the adoption of development regulations that protect critical areas designated in accordance with RCW 36.70A.170.

RCW 36.70A.172 requires local governments to give special consideration to the conservation and protection measures necessary to preserve or enhance anadromous fisheries.

Critical areas include: wetlands; areas with a critical recharging effect on aquifers used for potable water; frequently flooded areas; geologically hazardous areas; and fish and wildlife habitat conservation areas.

Development may result in cumulative impacts to those functions and values of critical areas that contribute to and are necessary for a healthy natural environment and perceived quality of life.

The development of residences, businesses, shopping areas and other structures, and the clearing of land for accommodation of livestock and for such development all have the potential of adversely and significantly impacting the functions and values of critical areas.

The unwise development of resource lands or areas susceptible to natural hazards may lead to inefficient use of limited public resources, jeopardize environmental resource functions and values, subject persons and property to unsafe conditions, and affect the perceived quality of life.

It is more costly to remedy the loss of critical area functions and values than to conserve and protect them from loss or degradation.

In determining what critical areas are to be afforded a particular degree of protection, the [jurisdiction] has evaluated a wide range of the best science available with respect to the critical areas to make informed decisions that meet the intent of the Growth Management Act and that are also reflective of local needs.

The sources of this best available science that were evaluated and included in this ordinance are listed below:

*[List the scientifically valid sources of scientific information relied upon in the designation and protection of critical areas functions and values. See WAC 365-195-915 for criteria for including the best available science in developing policies and development regulations. This list should include inventory, survey, and assessment information, as well as research and management recommendations identified in synthesis documents.]*

Protection standards for one critical area often provide protection for one or more other critical areas.

Critical areas may also be protected by other actions by the [jurisdiction], such as stormwater management standards, critical area restoration, and public education; and from other regulations, such as the Forest Practices Act, the Shoreline Management Act, and the State Environmental Policy Act. *[List the other programs and ordinances relied upon in achieving critical area protection.]*

The U.S. Constitution prohibits the taking of private property without just compensation.

## **Wetlands**

Wetlands and streams are environmentally sensitive and serve numerous natural functions and values. These functions include: wildlife and fisheries habitat; water quality protection; flood protection; shoreline stabilization; stream flow; and ground water recharge and discharge. In many situations, these functions cannot be adequately replicated or replaced.

The scientific literature supports in the inclusion of protective buffers from wetlands to provide sediment control and nutrient inputs to wetlands, and to protect important wetland functions.

Wetlands are identified and rated according to the *Washington State Wetland Identification and Delineation Manual* and *Washington State Wetland Rating System* (Eastern and Western Washington) prepared by the Washington State Department of Ecology (Ecology).

The scientific literature supports protective buffers ranging from 25 to 300 feet of relatively intact native vegetation to adequately protect wetland functions and values.

Appropriate wetland mitigation ratios – ratios of areas of wetland replacement and enhancement to that altered or destroyed – are established in *Wetland Mitigation Replacement Ratios: Defining Equivalency*, published by Ecology, 1992.

## **Critical Aquifer Recharge Areas**

WAC 365-190-080 defines wellhead protection areas, sole source aquifers, special protection areas, and other areas that are susceptible or vulnerable to ground water contamination as areas with a critical recharging effect on aquifers used for potable water (also referred to as critical aquifer recharge areas).

Potable water is an essential life-sustaining element.

Much of [the region's] drinking water comes from ground water supplies.

Once ground water is contaminated it is difficult, costly, and sometimes impossible to clean up.

Preventing ground water contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people.

*Guidance Document for Establishment of Critical Aquifer Recharge Area Ordinances*, by Ecology, 2000, includes scientific recommendations for protecting ground water, including limiting certain uses and the intensity of development in critical aquifer recharge areas.

## **Frequently Flooded Areas**

Flood hazard areas are subject to periodic inundation that results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

These flood losses are caused by development in areas prone to inundation that increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

Floodplain and stream connectivity are major elements in maintaining healthy riparian habitat and off-channel habitats for the survival of fish species and conveyance of floodwaters. If river, floodplains, and other systems are not viewed holistically as biological, geomorphological units, this can lead to serious degradation of habitat and increase flood hazards, which in turn can contribute to listing of various fish species as threatened or endangered and result in extraordinary public expenditures for flood protection and relief.

Frequently flooded areas, including the 100-year floodplain and the floodway, are commonly mapped on flood insurance maps, often known as Flood Insurance Rate Maps, or FIRMs.

## **Geologically Hazardous Areas**

Geologically hazardous areas are subject to periodic geological events that result in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

Geologic hazards may be exacerbated by development and human activity in sensitive areas, and impacts resulting from geologic hazards may be reduced by limiting development and human activity within or adjacent to the geologic hazard.

Some geologic hazards may be intensified during periods of consistent or heavy rainfall that results in ground saturation or surface water drainage flows.

## **Fish and Wildlife Habitat Conservation Areas**

Fish and wildlife habitat conservation areas perform many important physical and biological functions that benefit the [jurisdiction] and its residents, including but not limited to: maintaining species diversity and genetic diversity; providing opportunities for food, cover, nesting, breeding and movement for fish and wildlife; serving as areas for recreation, education and scientific study and aesthetic appreciation; helping to maintain air and water quality; controlling erosion; and providing neighborhood separation and visual diversity within urban areas.

Wetlands and streams are environmentally sensitive and serve numerous natural functions and values. These functions include: wildlife and fisheries habitat; water quality protection; flood protection; shoreline stabilization; stream flow; and ground water recharge and discharge. In many situations these functions cannot be adequately replicated or replaced.

The scientific literature supports in the inclusion of protective buffers from streams to provide sediment control, nutrient inputs to downstream waters, large woody debris, and other functions important to riparian areas.

The Washington Department of Fish and Wildlife (WDFW) has prepared management recommendations for the preservation of priority habitat and species, which are based on the best available science, and include, in some instances, recommended protective buffer distances.

Kelp and eelgrass beds have been identified and mapped by the Washington State Department of Natural Resources (DNR) in some areas. Herring and smelt spawning times and locations are outlined in WAC 220-110-240 through 220-110-260. Locations for both may be found by referring to *Critical Spawning Habitat for Herring, Surf Smelt, Sand Lance and Rock Sole in Puget Sound, Washington: A Guide for Local Governments and Interested Citizens*, 2002, and the *Puget Sound Environmental Atlas, Volumes 1 and 2*.

Salmonid and anadromous fish may be more impacted by development and human activity during some times than others. Such times are referred to as “fish windows,” which have been documented by WDFW.

DNR has classified watercourses according to two stream-typing systems based on channel width, fish use, and perennial or intermittent status.

WAC 365-190-080(5) grants [the jurisdiction] the flexibility to make decisions in the context of local circumstances, and specifically excuses local jurisdictions from being required to protect “all individuals of all species at all time.”