Lummi Nation
Wetland Ordinance Literature Review

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LUMMI NATION
WETLAND ORDINANCE LITERATURE REVIEW

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1. INTRODUCTION

Wetlands on the Lummi Indian Reservation (Reservation) have cultural and spiritual significance to tribal members and serve a number of important environmental and economic functions. Many plant and wildlife species found in wetlands have important cultural or spiritual roles and bring balance to the Lummi culture. Reservation surface and ground waters are environmentally and economically important to the Lummi Nation; the quantity and quality of Reservation wetlands affect the environmental quality and economic production of Reservation waters. The Lummi Nation therefore recognizes the need to develop a wetland-classification system and wetland regulations that reflect Lummi cultural values and that will protect wetland functions on the Reservation. The purpose of this literature review is to support the development of a wetland ordinance by examining relevant federal regulations and wetland regulations of other jurisdictions.

Pursuant to Lummi Indian Business Council (LIBC) resolutions 90-88 and 92-43, the Lummi Nation is developing a Comprehensive Water Resources Management Program (CWRMP) to protect Reservation water resources. The Water Resources Division of the Lummi Natural Resources Department (LNR) is responsible for developing and implementing the CWRMP. An integral part of the CWRMP is the Wetland Management Program (WMP). The "Lummi Indian Reservation Wetland Management Program Technical Background Document" provides the technical foundation for the program (LIBC 2000). The technical background document includes an inventory of Reservation wetlands and describes wetland functions, classifications, mitigation, restoration, and protection programs. It also provides an action plan for implementation of the WMP and for development of a wetland ordinance. Similar to other elements of the CWRMP, the Lummi Nation Wetland Ordinance is being developed in stages. The Wetland Ordinance will be drafted based on this literature review and the technical background document. The purpose of this report is to summarize federal wetland regulations and to examine wetland ordinances/regulations developed by tribal, state, and local governments in the region.

The Wetland Ordinance will be one of seven components in the revised Lummi Nation Water Code (Title 17 of the Lummi Nation Code of Laws). The revised water code, which is expected to be adopted in October 2001, will have the following chapters:

17.01 General Provisions
17.02 Water Resources Board and Water Administrator
17.03 Permit System for Water Use on the Lummi Indian Reservation
17.04 Water Quality Standards
17.05 Wellhead Protection
17.06 Storm Water Management
17.07 Wetland Management

This literature review is divided into nine sections:

- Section 1 is this introduction.
- Section 2 describes how this review was conducted.
- Section 3 summarizes the major federal regulations that pertain to wetlands.
- Section 4 describes tribal ordinances that regulate wetlands.
- Section 5 summarizes the Washington State laws and regulations that pertain to wetlands.
- Section 6 describes local government ordinances that regulate wetlands.

- Section 7 summarizes the wetland ordinances from the region and presents recommendations for the Wetland Management chapter (wetland ordinance) of the revised Lummi Water Code.
- Section 8 lists the references cited in this report.
- Section 9 lists the acronyms and abbreviations used in this report.

2. METHODS

This wetland-ordinance literature review begins with a summary of the major federal laws and regulations that are intended to protect wetlands. The review then summarizes the main features of three tribal wetland ordinances from the region (including the draft Lummi ordinance). State laws and 24 critical areas ordinances from local governments around Washington State are also summarized. Table 1 presents wetland-classification categories from several ordinances. Table 2 identifies (1) wetland buffers, (2) building-setback requirements from buffers, (3) regulated actions for wetlands, (4) non-regulated wetlands, and (5) wetland activities exempt from regulation for the federal, tribal, state, and local governments.

3. FEDERAL REGULATIONS

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) are responsible (i.e., have not delegated authority) for wetland permitting on the Reservation. The Corps has retained authority for wetland permitting (see Section 404 below) in all jurisdictions across the United States. The EPA certifies wetland permits as meeting water-quality standards (see Section 401 below) and will delegate certification authority to states or tribes, but has not yet done so for the Lummi Reservation. Federal regulations applicable to wetlands on the Reservation are summarized below.

3.1 EXECUTIVE ORDER 11990: PROTECTION OF WETLANDS

Executive Order 11990 of 24 May 1977 defined wetlands and recognized the significant values provided by wetlands. This order directed each federal agency to provide leadership and to act to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. To the extent permitted by law, each federal agency is to avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction and (2) that the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. Executive Order 11990 also directed each agency to provide opportunity for early public review of any plans or proposals for new construction in wetlands.

The essential requirement of Executive Order 11990 is determining whether a practicable alternative to locating an action in wetlands exists. This determination requires the identification and evaluation of alternatives that could be located outside of wetlands (alternative sites); other means that would accomplish the same purpose as the proposed action (alternative actions); and no action. If there is no practicable alternative to locating an action in wetlands, Executive Order 11990 requires that the action include all practical measures to minimize harm to the wetlands and to preserve and enhance the natural and beneficial values of the wetlands.

3.2 EXECUTIVE ORDER 11988: FLOODPLAIN MANAGEMENT

Executive Order 11988 of 24 May 1977 requires federal agencies to recognize the significant value of floodplains and to consider the public benefits that would be realized from restoring and preserving floodplains. The objective of Executive Order 11988 is avoidance, to the extent possible, of long- and short-term adverse effects associated with occupancy and modification of the base floodplain (100-year floodplain) and the avoidance of direct and indirect support of development in the base floodplain wherever there is a practicable alternative. This order directs federal agencies to act to (1) avoid development in the base floodplain unless it is the only practicable alternative; (2) reduce the hazard and risk associated with floods; (3) minimize the impact of floods on human safety, health, and welfare; and (4) restore and preserve the natural and beneficial values of the base floodplain.

3.3 CLEAN WATER ACT

The objective of the federal Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the "waters of the United States" (33 U.S.C 1251 et seq.). Section 404 of the CWA specifically protects wetlands by regulating the dredging or filling of waters of the United States, including wetlands. Under Section 404, the Corps issues permits for dredging and filling activities that affect wetlands. Under Section 401 of the CWA, the EPA must certify that proposed projects will not cause violation of water quality standards. When the Lummi Nation is authorized to administer Section 401 of the CWA and adopts water quality standards, the Lummi Natural Resources Department will be responsible for certifying that proposed projects will not cause violations of water quality standards. Section 401 also applies to all waters of the United States, including wetlands. Table 2 summarizes some details of Sections 404 and 401 as well as the details of tribal, state, and local regulations/ordinances that apply to wetlands.

3.3.1 Section 404

The basic premise of the Section 404 program is that no discharge of dredged or fill material can be permitted if there is a practicable alternative that is less damaging to the aquatic environment or if the discharge would result in significant degradation of the waters of the United States. Applicants for Section 404 permits are required to (1) demonstrate that adverse effects on wetlands and other aquatic resources have been avoided to the maximum extent practicable, (2) minimize potential adverse effects on wetlands, and (3) provide compensation for any remaining unavoidable effects through wetland restoration or creation activities (EPA 1993). The Corps has developed a permitting system for regulating wetlands that are considered waters of the United States. The three types of permits used by the Corps under Section 404 are Individual Permits, Regional General Permits, and Nationwide General Permits. Section 404(f) exempts some activities from regulation under Section 404. These activities include many ongoing farming, ranching, and silviculture practices (Ecology 1988; EPA 1993).

Individual Permits are for specific, individual projects that are too large for or do not otherwise meet the criteria of Regional or Nationwide permits (explained below). The Individual Permit process includes a full public-interest review of an application for a Section 404 permit, which may require a public hearing. A public notice is distributed to all known interested persons or organizations, including the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), the EPA, and state and local government agencies. The general public is notified through local newspapers.

The Corps uses Regional Permits for general category activities (e.g., minor road crossings, utility line backfill and bedding, etc.) that are similar in nature and cause minimal adverse effects, both individually and cumulatively. The Regional Permit reduces the burden of regulatory control and expedites the permitting process.

Nationwide Permits cover categories of activities throughout the United States. If the proposed activity does not meet any of the available categories, a regional or individual permit is required. Some Nationwide Permits require a public input phase, while others only require a permit application and notification after project completion.

It is important to note that proposed wetland activities may be subject to other laws even if exempted or covered by a Regional or Nationwide permit. A Joint Aquatic Resource Permits Application (JARPA) can be used to apply to the Corps for wetland permits. In cooperation with the Corps, the Lummi Nation developed a JARPA specific to the Reservation (LIBC 2000).

3.3.2 Section 401

A Section 401 Water Quality Certification may be required to ensure that the proposed project is implemented in a manner that does not result in a violation of water quality standards. The certifying agency must approve, condition, or waive the Section 401 permit before the applicant can begin work on the proposed project. Section 401 conditions become conditions of the Section 404 permit. Currently the certifying agency for wetland permits on the Reservation is the EPA. The Lummi Nation will become the certifying agency when the EPA approves the Lummi Nation's application to administer water-quality standards on the Reservation.

3.4 RIVERS AND HARBORS ACT

All work that is conducted in or over navigable waters of the United States requires a Federal River and Harbors Act Section 10 permit, which prohibits the unauthorized obstruction or alteration of any navigable water. Activities requiring a Section 10 permit include the construction of bulkheads, dolphins, floats, piers, and wharves. A permit is required for any activity that affects the course, location, condition, or capacity of "waters of the United States" (Corps 1998). The permit process includes consideration of navigational, flood control, fish and wildlife management, and environmental effects. National Environmental Policy Act (NEPA) compliance is required for a Section 10 permit.

3.5 NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act requires federal agencies to consider the environmental effects of agency decisions on permits and approvals required for development projects. The NEPA process emphasizes the full disclosure of environmental effects and their consideration, along with technical and economic considerations, prior to an agency decision. The NEPA requires that an environmental impact statement (EIS) be prepared for any major federal action that would have significant adverse environmental effects. The EIS must evaluate the effects of the proposed action and its alternatives. Mitigation under NEPA is similar to that of CWA Section 404 and is applied in the following order: (1) avoid impacts, (2) minimize impacts, (3) rectify impacts by restoring the affected environment, (4) reduce or eliminate impacts over time, and (5) compensate for impacts by replacing the resources or environments (Ecology 1988).

3.6 FOOD SECURITY ACT

The Natural Resources Conservation Service (NRCS, formerly the Soil Conservation Service [SCS]) is charged with delineating wetlands on agricultural lands throughout the United States (EPA 1998). The NRCS is responsible for determining whether an area is a wetland, farmed wetland, prior converted cropland, or a non-wetland area before the landowner can receive consideration for funding under the Food Security Act (7 CFR 650). Wetlands and farmed wetlands do not qualify for funding under the Wetland Conservation (Swampbuster) provisions of the Food Security Act (Corps 1997).

Section 404 of the CWA applies to all wetlands and farmed wetlands on agricultural lands. On agricultural lands, discharges are allowed when "associated with normal farming, ranching, and forestry activities, such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices" (33 USC 1251 et seq.). To be exempt, these activities must be part of an established, ongoing operation. Grading and filling activities that convert a wetland to upland are not exempt and require a Section 404 permit from the Corps (Corps 1997).

4. TRIBAL REGULATIONS

Effective wetland-protection programs generally combine regulatory and non-regulatory approaches. In 1997, the Lummi Indian Business Council (LIBC) adopted Resolution 97-104 to create a Technical Review Committee (TRC). The TRC reviews applications for land-use activities on the Reservation to ensure that the applicant complies with applicable tribal and federal laws and to ensure that effects on neighboring property owners are minimized. In creating the TRC, the LIBC reaffirmed its commitment to provisions of the Clean Water Act, the Rivers and Harbors Act, the Coastal Zone Management Act, and other federal laws that protect Lummi natural resources. Current regulatory approaches on the Lummi Reservation consist of the tribal laws and resolutions as well as the federal laws and executive orders that are implemented through the TRC review process.

The Tulalip and the Confederated Salish and Kootenai tribes provided wetland ordinances for this review. The Confederated Tribes of the Colville Reservation and the Blackfeet Tribe also have wetland or aquatic lands ordinances or regulations, but copies were not obtained. The two tribal ordinances that were obtained are summarized below, along with the Lummi Coastal Zone Management Plan and a draft Lummi wetland ordinance.

4.1 TULALIP ZONING ORDINANCE (NO. 80)

The Tulalip Tribes regulate wetlands under the Tulalip Zoning Ordinance (TZO), adopted on 8 December 1994 and amended six times since that date. The "environmentally sensitive lands" section of the TZO addresses wetlands as well as other important areas. Any permit or approval for development that would affect these sensitive lands must be reviewed and conditions must be established that are consistent with this ordinance and the 1994 Tulalip Comprehensive Plan prior to the issuance of a permit or approval of the activity. The TZO uses the federal definition of wetlands [33 CFR 328.3(b)], but does not specify the method for delineation of wetlands.

The TZO prohibits alterations to a wetland or its buffer without a use and occupancy permit. No impervious surfaces or topographic changes that would adversely affect wetland hydrology are

permitted within the approved buffer width. The TZO also addresses buffer enhancement and requires appropriate buffers for all wetland mitigation. The wetland-classification system in the TZO is similar to the Washington State Wetland Rating System (WSWRS), with the addition of factors specific to the Tulalip Reservation and accounting for wetlands having spiritual and/or cultural significance to tribal members. Tables 1 and 2 present details pertaining to the level of wetland protection provided in the TZO.

4.2 Confederated Salish and Kootenai Tribes Aquatic Lands Conservation Ordinance

The Aquatic Lands Conservation Ordinance (ALCO), adopted by the Confederated Salish and Kootenai Tribes (CSKT) on 5 December 1986, established the authority of the Council of the CSKT to regulate aquatic lands on the Flathead Reservation. The ordinance states that the policy of the tribal council is to prevent the degradation of Reservation waters and aquatic lands by regulating projects that may adversely affect the quality of such areas. The ALCO provides definitions of terms, permit guidelines, permit-review guidelines, requirements for emergency actions, enforcement guidelines and penalties, and procedures for administrative appeal and judicial review.

Under authority of the ALCO, the CSKT adopted regulations for aquatic lands. In addition to definitions and legal provisions (e.g., severability and variances), the ALCO regulations provide more specific permit procedures, review guidelines, requirements for emergency actions, and enforcement guidelines and penalties. The ALCO also lists exempted activities, permitting considerations, and project requirements. Table 2 presents the regulated and exempt activities in the ALCO; the ALCO regulations do not provide a wetland-classification system.

4.3 Lummi Coastal Zone Management Plan

The purpose of the Lummi Coastal Zone Management Plan (CZMP) is to preserve and protect the shoreline areas of the Reservation and to implement the U.S. Coastal Zone Management Act of 1972. As described in Table 2, it applies to all development within designated coastal zone management environments. Any applicant for a permit to conduct an activity in the coastal zone (as defined in Table 2, consisting of the area from the normal high water mark or from the edge of associated wetlands to a point 200 feet landward) must certify that their project is consistent with the provisions of the CZMP.

4.4 Draft Lummi Nation Stream and Wetland Protection Ordinance

The draft Lummi Nation Stream and Wetland Protection Ordinance (Caplow 1994) was prepared in conjunction with an earlier wetland inventory effort but was never finalized or presented to the Lummi Indian Business Council for adoption. The draft ordinance roughly follows the Washington State Model Wetlands Protection Ordinance (MWPO) and the Tulalip Zoning Ordinance in form and, with some variations, in content. The draft Lummi ordinance uses the federal definition of wetlands [33 CFR 328.3(b)] and specifies the U.S. Army Corps of Engineers Wetlands Delineation Manual (Corps 1987) for delineation of wetlands.

The draft Lummi ordinance declares a cultural, environmental, and economic purpose for the ordinance, including the intent to achieve no net loss of streams, wetlands, and wetland functions and to encourage the restoration or enhancement of streams and wetlands on the Reservation. It also includes definitions, a wetland-classification system, a declaration for the regulatory authority of Lummi Nation, and implementation procedures for permitting. The wetland-classification system is similar to the WSWRS, but is generalized and simplified in

design; Table 1 presents the details of the system. Table 2 summarizes the details of buffer requirements, regulated activities, and exempt activities for wetlands. The draft Lummi ordinance requires a permit before any regulated activities may occur in or within 200 feet of any stream or wetland on the Reservation.

5. STATE REGULATIONS

The state of Washington regulates wetlands with various laws and regulations, including the Growth Management Act (GMA), Shoreline Management Act (SMA), Water Pollution Control Act (WPCA), Hydraulic Code, Forest Practices Act, and State Environmental Policy Act (SEPA) (Ecology 1988). Although state laws and regulations do not apply on the Reservation, they are summarized here for information purposes. Table 2 contains specific information about the wetland provisions of the SMA and the Forest Practices Act.

The GMA requires local jurisdictions to designate critical areas, including wetlands, for protection; it is discussed in greater detail below in Section 6. The SMA regulates all development in wetlands within the 100-year floodplain or associated with (defined in Table 2) all marine waters, streams with mean flow greater than 20 cubic feet per second, lakes that are 20 acres or larger, and the upland areas within 200 feet of the edge of these waters. Under the SMA, development of the shorelines of the state is intended to be done in a manner that promotes and enhances the public interest and protects against adverse effects to the waters of the state, including wetlands, and their aquatic life. The WPCA prohibits the discharge of pollutants into waters of the state, including wetlands. The WPCA is implemented through rules adopted by Ecology; some of these rules also implement provisions of the federal CWA, including Section 401 water-quality certification and National Pollutant Discharge Elimination System permits. The other primary rules that apply to wetlands are water-quality standards for surface and ground water, sediment-management standards, and State Waste Discharge Permits. The Hydraulic Code is intended to protect aquatic life from damage throughout marine and fresh waters of the state by regulating construction and other work that uses, diverts, obstructs, or changes the natural flow or bed of those waters. Such work requires a Hydraulic Project Approval permit, which may be acquired from the Washington Department of Fish and Wildlife. The Forest Practices Act implements provisions of the CWA and the WPCA on state and private forest lands in Washington. Its regulations specifically define and protect wetland functions and establish wetland management zones (WMZ) around wetlands (Table 2). These regulations are implemented via a forest practices application submitted to the Washington Department of Natural Resources. The SEPA environmental review process for state and local development projects is similar to the NEPA process for projects requiring federal approval. Information provided during the SEPA process helps agency decision-makers and the public understand how a project would affect the environment. The potential effects of a project on wetlands are included in the threshold determination (Ecology 1988).

In addition to the regulatory oversight described above, the state of Washington also addresses wetland protection with its Floodplain Management Program (FMP) and the Puget Sound Water Quality Management Plan (PSWQMP). The core of the FMP is that local flood-prone jurisdictions adopt a flood damage prevention ordinance based on federal standards contained in the National Flood Insurance Program. In support of the FMP, Chapter 173-158 of the Washington Administrative Code includes advisory language that points out the beneficial role wetlands play in alleviating flood damages. The advisory also suggests a program by which local governments can identify and map critical wetland areas that are located within floodplains and that should not be filled. The PSWQMP contains a Wetlands Protection Program that has

three goals: (1) to improve coordination of governmental programs that protect wetlands; (2) to achieve no net loss of wetland functions and values in the short-term; and (3) to achieve a net gain of wetland functions and values in the long-term. The strategies for achieving the goals include aggressively using existing mandates, providing integrated solutions at the watershed level, using non-regulatory methods to preserve wetlands, implementing a long-range wetland education strategy, accurately inventorying wetlands, and restoring wetlands (Ecology 1988).

6. LOCAL REGULATIONS

The GMA required counties and cities in Washington State to adopt a critical areas ordinance (CAO) that regulates wetlands as one of five critical areas. Tables 1 and 2 present the primary wetland provisions of critical areas ordinances that were developed in response to the GMA. To provide guidance in developing regulations for wetland protection, Ecology provided a model ordinance (Ecology 1990) for wetlands protection. This model provides a comprehensive example of wetland regulations, including which activities will be allowed and regulated in wetlands; procedures for permitting and standards for permit decisions; wetland classifications; and standard buffer-zone widths and building-setback distances. The wetland classifications and buffer ranges provided in the model ordinance reflect the effect of development intensity and uses on wetland functions and values. These classifications and buffers incorporate the best available science needed to protect the functions of wetlands (CTED 1998).

The Washington Department of Community, Trade, and Economic Development (CTED) conducted a review (CTED 1998) of county and city critical areas ordinances to assess the levels of protection being provided to critical areas around the state. The local government section of Table 2 presents a portion of this review. CTED found that the state Model Wetlands Protection Ordinance (MWPO) formed the basic framework of most local ordinances, but that very few jurisdictions applied the Ecology-recommended buffer zones and development/land-use intensity scheme in their ordinances (see Table 2). Only Thurston County used the model guidelines completely. Some of the counties and cities in Washington used the “low intensity” (but not the “high intensity”) standard guidelines, but most counties and cities did not meet the high or the low intensity buffer guidelines (CTED 1998).

Table 2 also demonstrates that the scope of regulated and exempt activities specified in local government ordinances varies greatly between jurisdictions. In addition, many local governments modified the Washington State Wetland Rating System (WSWRS) used to classify wetlands in the MWPO (Table 1). Several local governments defined only two or three wetland categories; two counties (Franklin and Whatcom) did not classify wetlands; and three counties (Benton, Clark, and Skamania) added a fifth category for marginal, low-quality wetlands (Tables 1 and 2).

The Lummi Reservation WMP technical background document (LIBC 2000) describes four types of classification systems: (1) WSWRS, (2) Cowardin, (3) Washington Department of Natural Resources Wetland Classification System, and (4) Hydrogeomorphic Classification System. The WSWRS categorizes wetlands based on wetland functions and values; high quality, rare, or valuable wetlands are placed in the highest category, deserving of greater protection, while small, isolated, low quality, and/or degraded wetlands are placed in the lowest category, receiving the least protection. The other three classification systems are essentially taxonomic systems based on basic physical or biological wetland features with little relation to the functional value of a wetland.

Table 3 summarizes the wetland-mitigation ratios and the criteria for variation of standard buffer-zone widths from the MWPO and some of the local ordinances. Other provisions found in the MWPO or in local ordinances include the applicability of the regulations; permitted uses/activities in buffer zones; criteria required to justify conditioned permits that allow regulated activities to occur in wetlands (based on sequential avoidance, minimization, and mitigation of wetland impacts), including the criteria demonstrating that wetland regulations would deny reasonable economic use of a property; criteria for transfer of development density; special use permit conditions (e.g., sensitive-area tracts and deed restrictions); performance- and maintenance-bond requirements; wetland-compensation and mitigation-plan requirements; and procedures for temporary emergency permits, enforcement of wetland regulations, and appeal or judicial review of permit decisions.

7. RECOMMENDATIONS FOR THE WETLAND MANAGEMENT CHAPTER OF THE LUMMI WATER CODE

The details found in the CSKT, Tulalip, and draft Lummi wetland regulations provide language pertinent to tribal priorities and to the Reservation. The wetland section of the Whatcom County CAO provides an example of a minimalist approach in a wetland ordinance. Other ordinances, including those of the City of Bellingham and Clark, King, Skagit, and Thurston counties, provide a lengthy list of wetland provisions for consideration.

Regarding a wetland-classification system and wetland buffers, the claim that the WSWRS and the buffers included in the MWPO represent the best available science (CTED 1998) suggests that these details warrant consideration for the Lummi wetland regulations. Many local governments have simplified or generalized their classification systems. While this provides decision-makers more flexibility, it also leaves the classification of wetlands open to more interpretation. Greater specificity may provide greater protection for wetlands. Many local governments have also used smaller buffers than those in the MWPO. Adopting larger buffers will again provide greater protection to the wetlands on the Reservation, but may not be practicable because of the limited overall land base or the limited space associated with a particular project.

In addressing regulated and exempt activities for wetlands, the MWPO provides a lengthy list of activities to be considered for each category. Some of the other ordinances reviewed in Table 2 provide additional activities for consideration. The documents prepared as part of the Lummi Nation Comprehensive Water Resources Management Program list activities and pollutant sources that may affect wetlands on the Lummi Reservation (LIBC 1997; LIBC 1998; LIBC 2000); these activities and sources should be reviewed for possible inclusion in the wetland regulations.

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Draft Lummi Stream and Wetland Protection Ordinance	Wetlands that are identified by the Lummi Nation as having a high and irreplaceable level of significance for fisheries, Lummi culture, and/or water quality on the Reservation	Wetlands which are not considered "highest priority wetlands" but which have one or more significant wetland functions: fisheries habitat, migratory and wintering waterfowl habitat, general wildlife habitat, endangered or sensitive species habitat, unique ecological areas, shellfish habitat, ground water recharge, ground water discharge, water quality improvement, storm water control, flood and tidal surge storage, saltwater intrusion control, shoreline stabilization, support of baseflow, recreation, education, cultural use, and/or restoration/enhancement potential	(1) Wetlands which do not meet the criteria for the "highest priority wetlands" or the "moderate priority wetlands", or (2) wetlands which do not meet the criteria for the "highest priority wetlands", are under 10,000 ft^2, and are not part of a wetland complex	
Tulalip Zoning Ordinance	Those lands which meet any one of the following six criteria: (1) The presence of species (plant, animal, or fish) listed by the Tulalip Tribes or other resource management agencies as threatened or endangered, or the presence of critical habitat documented by the Tulalip Tribes for those species; (2) Regionally rare and unique native wetland communities, including sphagnum bogs and fens, and estuarine wetlands; (3) Wetlands having direct impact on the protection and production of tribal fisheries enhancement projects as identified by the Tulalip Dept. of Environment; (4) Wetlands having cultural and/or spiritual significance to Tulalip tribal members; (5) Irreplaceable wetland systems performing critical ecological functions; (6) Wetlands having exceptional habitat value and diversity as defined by the following characteristics: (a) those wetlands $\geq$ 5 acres and having three or more wetland classes, one of which is open water; or (b) wetlands having 40 to 60 % permanent open water in dispersed patches with two or more wetland classes and connected to another habitat area, either upland or aquatic, via a stream or vegetated corridor	Wetlands performing important ecological functions. These systems include all of those wetlands which do not meet the criteria for Category 1, but fulfill any of the following criteria: (1) Wetlands having documented habitat, recognized by the Tulalip Tribes or other resource management agencies, for sensitive or priority plant, animal, or fish species; (2) Wetlands with significant functions which can not be adequately replicated through creation or restoration efforts; (3) All riparian wetlands not meeting criteria defined for Category 1	Those lands that are of minimum habitat value, are suitable for restoration or enhancement efforts, and satisfy no Category 1 or 2 criteria. These lands may be characterized by the following features: (1) Monotypical vegetation of similar age class; (2) Hydrologically isolated systems lacking special habitat features (snags, open water component, nesting habitat, large woody debris, etc.); (3) Areas which are highly disturbed by human interference and/or contaminated by waste disposal	

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Washington State Wetland Rating System (WSWRS) for Western Washington (Ecology 1993) (Continued on next page)	A wetland is considered Category 1 if it meets any one of the following five criteria: (1) Documented occurrences of threatened or endangered plant, wildlife, or fish species recognized by federal or state agencies; or (2) Examples of High Quality Native Wetland Communities: (a) The wetland is already on record with the Washington Natural Heritage Program as a high quality native wetland; or (b) There is no significant evidence of human-caused changes to topography or hydrology of the wetland (significant changes include clearing, grading, filling, logging of the wetland or its immediate buffer, or culverts, ditches, dredging, diking or drainage of the wetland); there are no populations of non-native plants which are currently present and appear to be invading; and there is no significant evidence of human-caused degradation of the water quality of the system; or (3) Documented as regionally significant waterfowl or shorebird concentration areas; or (4) Wetlands with irreplaceable ecological functions: (a) At least 1/2 acre of contiguous, relatively undisturbed bog or fen with a cover of invasive species that is less than 10%; or (b) Mature forested wetlands where at least 50% of the forest canopy contains evergreen trees that are more than 80 years old or deciduous trees that are older than 50 years; **or** 50% of the forest canopy consists of trees taller than 50' and the structural diversity is high as characterized by a multi-layer community of trees > 50' tall, trees 20'-49' tall, shrubs, and herbaceous groundcover; **and** < 25 % of the cover in the herbaceous groundcover or shrub class are invasive exotic plant species listed in Table 3 (WSWRS); or (c) Wetlands listed as National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve,	A wetland is considered Category 2 if it meets none of the Category 1 criteria and it meets any one of the following five criteria: (1) Documented occurrences of sensitive plant, animal or fish species recognized by federal or state agencies; or (2) Documented priority habitats and species recognized by state agencies; or (3) Wetlands with significant functions which may not be adequately replicated through creation or restoration: (a) Bogs and fens that are 1/4 - 1/2 acre in size (see discussion of bogs and fens under Category 1); or (b) Estuarine wetlands 1-5 acres not meeting the criteria for Category 1; **or** Estuarine wetlands < 1 acre and meeting all four of the following criteria: (i) at least two estuarine wetland habitat classes (Dethier, 1990); (ii) minimum existing evidence of human related physical alteration such as diking, ditching, filling, cultivation, grazing or the presence of non-native plant species); (iii) surface water connection with tidal saltwater or tidal freshwater; and (iv) at least 75% of the wetland has a 100' buffer of ungrazed pasture, open water, shrub, or forest; or (4) Freshwater wetlands with significant habitat value (greater than or equal to 22 points on the WSWRS Wetlands Rating Field Data Form); or (5) Wetlands of Local Significance	A wetland is considered Category 3 if it meets none of the Category 1 or Category 2 criteria and meets any one of the following three criteria: (1) Wetlands where the habitat score for significant habitat value is less than or equal to 21 points (on the WSWRS Wetlands Rating Field Data Form); or (2) Wetlands identified as Category 3 wetlands of local significance; or (3) Estuarine wetlands less than 1 acre which fail to meet all four of the criteria listed for Category 2 estuarine wetlands	(1) Wetlands less than 1 acre, hydrologically isolated, and comprised of one vegetated class that is dominated (> 80% areal cover) by one species from the list in Table 3 or Table 4 (of the WSWRS); or (2) Wetlands less than two acres, hydrologically isolated, with one vegetated class, and > 90% of areal cover is any combination of species from the list in Table 3 (WSWRS); or (3) Wetlands that are ponds excavated from uplands, are smaller than 1 acre, and are without a surface water connection to streams, lakes, rivers, or other wetlands

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Washington State Wetland Rating System, continued	State Park, or Educational, Environmental or Scientific Reserves designated under WAC 332-30-151; **or** Estuarine wetlands > 5 acres; **or** Estuarine wetlands 1-5 acres that meet any 3 of the following 4 criteria: (i) at least two estuarine wetland habitat classes (Dethier, 1990); (ii) minimum existing evidence of human related physical alteration such as diking, ditching, filling, cultivation, grazing or the presence of non-native plant species; (iii) surface water connection with tidal saltwater or tidal freshwater; or (iv) at least 75% of the wetland has a 100' buffer of ungrazed pasture, open water, shrub, or forest; or (d) When an eel grass bed is present; **or** When a floating or non-floating kelp bed is present which has > 50% macro algal cover in the month of August or September; or (5) Documented wetlands of local significance (see WSWRS)			
Clark County (The rating system contains a general description of each wetland category followed by specific criteria. If the specific criteria conflict with the general description, the director shall	Category 1 wetlands are the highest quality and rarest of the wetlands in the county. Because of their rarity and the unique functions they provide, the risk of degradation to these wetlands must be minimized. Their characteristics include being very valuable for a rare species, being a high quality example of a rare wetland type, having irreplaceable wetland functions, or being impossible to replace within a human lifetime, if at all. These wetlands meet one of the following criteria: (1) Wetlands verified by a state or federal resource management agency as habitat for species recognized to be endangered or threatened by the U.S. Fish and Wildlife Service, Washington State Department of Wildlife, Washington State Department of Fisheries, or Washington State Department of Natural Resources; or (2) Sphagnum bogs and fens and forested wetlands where the majority of canopy coverage consists of mature trees eighty (80) years or older for softwoods and fifty (50) years or older for hardwoods; or	Category 2 wetlands occur more commonly than Category 1 wetlands but still need a high level of protection. Their characteristics include having habitat for very sensitive or important wildlife or plants, being difficult to replace, or having extensive wildlife habitat. This category also includes streams or sections of streams with demonstrated spawning habitat for anadromous fish (e.g., salmon and steelhead). These wetlands meet one of the following criteria: (1) Wetlands verified by a state or federal resource management agency as habitat for sensitive species, extirpated plant species, or species of concern by the U. S. Fish and Wildlife Service, Washington State Department of Wildlife, Washington State Department of Fisheries, or Washington State Department of Natural Resources; or (2) Forested wetlands outside the urban area	Category 3 wetlands occur more commonly than Category 1 or 2 and provide important functions such as water quality improvement, flood control, groundwater recharge, or fish and wildlife habitat. They are important for a variety of wildlife species. They are generally difficult to replace and need a moderate level of protection. This category also includes intermittent streams utilized by salmonids (e.g., trout) and all year-around streams. These wetlands meet one of the following criteria: (1) Wetlands that serve as headwaters of streams and provide either an average annual flow of at least five cubic feet per second or at least 20% of the average annual flow of a	Category 4 wetlands are smaller, isolated, and less diverse vegetatively. It is possible to replace these wetlands and even improve them from a habitat standpoint. Category 4 wetlands do provide important functions and losses must be mitigated. Intermittent streams not utilized by salmonids are also included in this category. These wetlands meet one of the following criteria: (1) Those portions of wetlands altered by prior legal use or activity which, if

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
determine the most appropriate classification as applied to a particular site.) (Clark County, continued)	(3) Wetlands > 7.5 contiguous acres in size with three or more wetland subclasses, one of which is open water; or (4) Wetlands connected to another habitat area, either upland or aquatic, via a stream or 100 foot wide vegetated corridor, or surrounded by a minimum of a 100 foot wide vegetated upland and possessing significant habitat value and diversity as demonstrated by the following characteristics: (a) A proportion of open water to vegetative cover in dispersed patches where the open water is no greater than sixty percent (60%), and no less than forty percent (40%) of the total wetland area during a majority of a normal water year, and (b) At least three wetland subclasses, and (c) At least two types of special habitat features: (i) Salmonid rearing areas as demonstrated by the presence of juvenile salmonids, (ii) Snags or trees with dead and dying tops, (iii) Rocky outcroppings or islands, and (iv) Large downed woody debris	which are one acre or greater in size; or (3) Wetlands where a heron rookery of at least five nests is present; or (4) Wetlands contiguous with demonstrated spawning habitat for anadromous fish; or (5) Sections of streams having demonstrated spawning habitat for anadromous fish; or (6) Wetlands > ten contiguous acres in size with two or more wetland classes, one of which is open water; or (7) Wetlands > five contiguous acres in size with two or more wetland subclasses and open water; or (8) Wetlands connected to another habitat area, either upland or aquatic, via a stream or 100 foot wide vegetated corridor, or surrounded by a minimum of a 100 foot wide vegetated upland and possessing significant habitat value and diversity as demonstrated by the following characteristics: (a) A proportion of open water to vegetative cover in dispersed patches where the open water is no greater than 60% and no less than 40% of the total wetland area during a majority of a normal water year, and (b) At least two wetland subclasses, and (c) At least one of the following special habitat features: (i) Salmonid rearing areas as demonstrated by the presence of juvenile salmonids, (ii) Snags or trees with dead and dying tops, (iii) Rocky outcroppings or islands, and (iv) Large downed woody debris	stream; or (2) Streams, both intermittent and year-around, utilized by salmonids; or (3) Year-around streams, not utilized by salmonids; or (4) Forested wetlands within the urban area	left alone, would revert to wetlands providing significant wetland functions; (2) Wetlands that are the result of regulated man-made drainage facilities that were constructed in natural wetland areas, except artificial wetlands created as mitigation; or (3) Intermittent streams not utilized by salmonids Category 5 wetlands (Exempted) are marginal wetlands that provide limited functions in terms of water quality and fish and wildlife habitat. They provide minimal, if any, water quality improvement and the wildlife habitat that they provide is undifferentiated from adjacent non-wetland areas. These wetlands meet one of the following criteria: (1) Isolated wetlands that have only one wetland class and a predominance (≥ 90%) of exotic species; or (b) Wetlands altered by prior legal use or activity that, if left alone, would not revert to wetlands or provide significant wetland functions

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Island County	A wetland that is not a Category 2 or 3 wetland, is 1/4 acre or larger in size, and meets the following criteria: (1) Presence of a protected species or an outstanding habitat for a protected species; or (2) Predominance of native wetland species over non-native wetland species	The wetland does not meet the criteria for Category 1 or Category 3 and is one acre or greater in size, provided that a Category 2 wetland that is enhanced through an authorized alteration or mitigation process so that it meets the Category 1 designation criteria shall continue to be designated as a Category 2 wetland	A wetland and/or deep water habitat (pond) may be designated as Category 3 by the Planning Director on a positive showing through documentation, photographs, statements and/or other evidence, that it was created through human actions that were carried out purposefully to create the wetland or deep water habitat where no wetland before existed. Wetlands created for mitigation purposes will not be considered as Category 3	
King County	Class 1 wetlands, only including wetlands assigned the Unique/Outstanding #1 rating in the 1983 King County Wetlands Inventory or which meet any of the following criteria: (1) Are wetlands which have present species listed by the federal or state government as endangered or threatened or outstanding actual habitat for those species; (2) Are wetlands which have 40% to 60% permanent open water in dispersed patches with two or more classes of vegetation; (3) Are wetlands $\geq$ ten acres in size and have three or more classes of vegetation, one of which is submerged vegetation in permanent open water; or (4) Are wetlands which have present plant associations of infrequent occurrence	Class 2 wetlands, only including wetlands assigned the Significant #2 rating in the 1983 King County Wetlands Inventory or which meet any of the following criteria: (1) Are wetlands greater than one acre in size; (2) Are wetlands equal to or less than one acre in size and have three or more classes of vegetation; (3) Are wetlands which: (a) are located within an area designated "urban" in the King County Comprehensive Plan; (b) are equal to or less than one acre but > 2,500 square feet; and (c) have three or more classes of vegetation; (4) Are forested wetlands equal to or less than one acre but > 2,500 square feet; or (5) Are wetlands which have present heron rookeries or raptor nesting trees	Class 3 wetlands, only including wetlands assigned the Lesser Concern #3 rating in the 1983 King County Wetlands Inventory or which meet any of the following criteria: (1) Are wetlands equal to or less than one acre in size and have two or fewer classes of vegetation; or (2) Are wetlands which: (a) are located within an area designated "urban" in the King County Comprehensive Plan; (b) are equal to or less than one acre but > 2,500 square feet; and (c) have two or fewer classes of vegetation.	

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Pierce County (Categories based on the following generalized criteria and the current WSWRS. The category of a wetland shall not be changed to recognize illegal modifications to the wetland.)	(1) Documented habitat for endangered or threatened plant, fish, or animal species or for potentially extirpated plant species recognized by state or federal agencies; or (2) High quality native wetland communities, including documented Natural Heritage wetland sites and sites which qualify as a Natural Heritage wetland; or (3) High quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens, estuarine wetlands, or mature forested swamps; or (4) Wetlands of exceptional local significance, as designated by separate Pierce County Ordinance	(1) Regulated wetlands that do not contain features outlined in Category 1; and (2) Documented habitats for sensitive plants or fish species recognized by federal or state agencies; or (3) Documented priority habitats and species recognized by state agencies; or (4) Regionally rare wetland communities which are not high quality but which have irreplaceable ecological functions, including sphagnum bogs and fens, estuarine wetlands, or mature forested swamps; or (5) Wetland types with significant functions that may not be adequately replicated through creation or restoration. These wetlands may be demonstrated by the following characteristics: (a) significant peat systems; or (b) forested swamps that have three canopy layers, excluding monotypic stands of red alder averaging eight inches diameter or less at breast height; or (c) significant spring-fed systems; or (6) Wetlands with significant habitat value based on diversity and size including wetlands which are: (a) $\geq$ ten acres and two or more wetland classes together with open water at any time during a normal year; or (b) $\geq$ ten acres, three or more wetland classes, and five or more subclasses of vegetation in a dispersed pattern; or (c) $\geq$ five acres, 40 to 60% open water at any time during a normal year, and two or more subclasses of vegetation in a dispersed pattern; or (7) Regulated wetlands that are contiguous with both year-round and intermittent salmonid fish-bearing waters; or (8) Wetlands with significant use by fish and wildlife	Regulated wetlands that do not contain features outlined in Category 1, 2, or 4	(1) Regulated wetlands that do not meet the criteria of a Category 1 or 2 wetland; and (2) Hydrologically isolated wetlands that are less than or equal to one acre in size, have only one wetland class, and have only one dominant plant species (monotypic vegetation)
Skagit County	See WSWRS	See WSWRS	See WSWRS	See WSWRS

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Snohomish County	Category 1 wetlands satisfy one or more of the following criteria: (1) Are ≥ ten acres in size, hydrologically connected, and contain three or more wetland classes, one of which is open water, each covering 10% or more of the wetland; or (2) Have been documented by the State Department of Fish and Wildlife priority habitat species program as regionally significant waterfowl or shorebird concentration areas; or (3) Are bog/fen systems that are ≥ one acre; or (4) Are mature forested wetlands ≥ ten acres in size; or (5) Are estuarine wetlands	Category 2 wetlands satisfy one or more of the following criteria: (1) Are ≥ five acres in size and contain three or more wetland classes; or (2) Are mature forested wetlands < ten acres in size; or (3) Are bog/fen systems less than one acre	Category 3 wetlands are wetlands that satisfy none of the criteria for Category 1, 2, or 4 wetlands	Category 4 wetlands are non-riparian wetlands < one acre, with one wetland class, and > 90% areal coverage of any combination of invasive/exotic plant species from the provided list
Thurston County (Continued on next page)	"Class 1 wetlands" can be described as the cream of the crop. Generally, these wetlands are not common and would make up a small percentage of the wetlands in the state. These are wetlands that: (1) provide a life support function for threatened or endangered species that have been documented, and the wetland is on file in databases maintained by state agencies, (2) represents a high quality example of a rare wetland type, (3) are rare habitat type within a given region, or (4) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime. Class 1 wetlands are: (1) Those that have a documented occurrence in the wetland of a federal or state listed endangered, threatened plant, animal, or fish species; or (2) High quality native wetland communities which qualify for inclusion in the Natural Heritage Information System; or (3) Documented as regionally significant waterfowl or shorebird concentration areas; or (4) Wetlands with irreplaceable ecological attributes which are impossible to replace in a human lifetime, such as bogs	"Class 2 wetlands" occur more commonly than Class 1 wetlands. These wetlands are those that (1) provide habitat for very sensitive or important wildlife or plants, (2) are difficult to replace, or (3) provide very high functions and values, particularly for wildlife habitat. Class 2 wetlands satisfy no Class 1 criteria and are: (1) Those that have a documented occupancy in the wetland of a federal or state listed sensitive plant, animal, or fish species; or (2) Those that contain priority species or habitats recognized by state agencies; or (3) Wetlands with significant functions which may not be adequately replicated through creation or restoration; or (4) Wetlands with significant habitat value of 22 or more points from the WSWRS (Wetlands Rating Field Data Form)	"Class 3 wetlands" occur more frequently throughout the state than do Class 1 and Class 2 wetlands. Generally these wetlands will be smaller, less diverse and/or more isolated than Class 2 wetlands. Wetlands that were converted to agriculture and where agriculture is existing and ongoing will normally be included in this wetland class. Hydrologically isolated wetlands identified as "Category 4 wetlands" under the State Wetland Rating System will also be included in this wetland class. Class 3 wetlands satisfy no Class 1 or 2 criteria and are: (1) Wetlands with a habitat value of 21 points or less from the WSWRS; or (2) Wetlands < one acre, and hydrologically isolated, and comprised of one vegetated class that is dominated (> 80 % areal cover) by soft rush, hard hack or cattail; or (3) Wetlands < two acres, and hydrologically isolated, with one	

Table 1. Wetland Classification/Rating Systems Used by Tribal and Local Governments

Government	Category 1 Wetlands	Category 2 Wetlands	Category 3 Wetlands	Category 4 Wetlands
Thurston County, continued			vegetated class, and > 90 % of areal cover is any combination of species from Table 3 "List of Invasive - Exotic Species" from the rating system; or (4) Wetlands that are ponds excavated from uplands and are < one acre without a surface connection to streams, lakes, rivers, or other wetlands throughout the year, and have < 5,000 ft^2 of vegetation	
Whatcom County	All wetlands not specified as exempt are classified using the best-suited and most scientifically valid functional rating system for determining buffer adjustments or mitigation requirements. Any functional assessment shall address the following functional attributes: (1) Erosion control and shoreline stabilization; (2) Fish habitat; (3) Groundwater recharge and base-flow maintenance; (4) Storm-water attenuation; (5) Water-quality improvement; and (6) Wildlife habitat.	See Category 1	See Category 1	See Category 1
City of Bellingham	Wetlands that have a high resource value based on ecological diversity and the presence of rare wetland communities and that are sensitive to disturbance. These wetlands have one or more of the following features: (1) Contain documented habitat for endangered, threatened or rare plant, fish or animal species recognized by state or federal agencies. (2) Contain irreplaceable or rare wetland types in the Puget Sound Basin. These types are sphagnum bogs, marine-influenced wetlands, and mature, forested wetlands. (3) Are comprised of three or more wetland classes, as defined by the Classification of Wetlands and Deep Water Habitats of the United States published by the U.S. Fish and Wildlife Service, Washington, D.C., 1979, one of which may be persistent open water, and are undeveloped.	Wetlands not included in Category 1, but that still have a moderate resource value based on their functions. These wetlands have one or more of the following features: (1) They are contiguous with any regulated stream or lake. (2) Contain documented habitat for sensitive plant, fish, or animal species recognized by state or federal agencies. (3) Contain three or more wetland classes, but do not meet Category 1 criteria. (4) Are abutting designated public open space, park or greenways corridors and are over 10,000 ft^2 in area. (5) Provide a significant and necessary storm water management function, such as retention/detention, without alteration, thus avoiding the need to construct artificial facilities.	All wetlands not included in Category 1 or 2 wetlands. Category 3 wetlands include, but are not limited to, wetlands not contiguous with a regulated stream, lake or designated open space, park or greenway corridor with no endangered, threatened, rare or sensitive plant, fish or animal species or rare wetland types. These wetlands have only one or two wetland class types and do not serve a necessary storm-water management function. Generally they provide only low value habitat functions.	

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
Federal Laws						
Clean Water Act Section 404	N/A	None Required (may be included in some permits or mitigation plans approved by the Corps or the EPA)[2]	None required[2]	Discharges of dredged or fill material into waters of the U.S., including wetlands, and any flooding, excavation, or drainage caused by such projects	Isolated wetlands (judged depressional and naturally unassociated with surface waters) or prior converted cropland[2]	Normal existing farming, forestry, and ranching activities, including cultivation, soil conservation practices, farm ponds, irrigation ditches, roads used strictly for farming or forestry operations, regular maintenance, and emergency reconstruction. Such activities may not be exempt if they convert natural wetlands to another use. Any incidental addition, including redeposit, of dredged material associated with any activity that does not have or would not have the effect of destroying or degrading wetlands.
Clean Water Act Section 401	None	Not required in Section 401, but may be a condition of the 401 permit	None required, but may be a condition of the 401 permit	Any activity that could result in the discharge of a pollutant and violation of applicable water-quality standards. (With respect to wetlands, Section 401 certification is most often triggered by an application for a Section 404 permit to fill wetlands.)	None specific to Section 401	None specific to Section 401
Tribal Ordinances						
Tulalip 12/8/94 (with several minor revisions since 1994 included in this table)	Category 1 Category 2 Category 3	200' 100' 50'	None specific to wetlands	Any activity having an effect on wetlands	Artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, storm water detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities. Not wetlands created for mitigation purposes.	Wetlands constructed for management of storm water runoff are exempt from buffer requirements. With a use and occupancy permit, approved alterations may be allowed for the following activities: landscaping within the buffer of Category 3 wetlands; to the minimum extent, access to developable property or to use Cat. 2 and 3 wetlands when no other reasonable alternative exists (mitigation required); trails; placement of public and private utility corridors within buffers on all wetland categories and within moderate value wetlands; logging associated with forestry practices in wetlands and their associated buffers. Tribal members have access for spiritual ceremonies.

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
Confeder-ated Salish and Kootenai 12/5/86	None	None	None	Any project having immediate, reasonably foreseeable long-term, or cumulative impacts on wetlands	None	Regular operation and maintenance of an existing project that involves no pollutants, toxins, dredging, filling, excavation or other similar agents or activities; environmentally sound agricultural practices of cropping, cultivation, or grazing.
Lummi Coastal Zone Manage-ment Plan	None	Adequate buffers shall be maintained between agricultural areas and wetlands; sufficient vegetation shall be maintained to alleviate the erosion of sensitive land/water interfaces.	None specified	All development within coastal zone management environments. (The coastal zone consists of the area from the normal high water mark or mean higher high tide, or from the edge of associated wetlands, to a point 200 feet landward. Associated wetlands are those that some part of which lie within the 200 ft coastal zone, which is extended to include all of the wetland area plus a 200 ft perimeter from the wetland edge. The coastal zone could therefore extend over 400 ft from the normal high water mark)	Wetlands not associated with the coastal zone (as defined to the left.)	Limited exemptions, including single-family homes, agriculture, aquaculture, and forestry
Draft Lummi Nation Stream and Wetland Protection Ordinance (Continued on next page)	Highest Priority Moderate Priority Low Priority	50-200' (no regulated activity permitted unless by public hearing) Up to 200' None (?) (Regulated activities within 200 ft of any wetland require a permit)	None specific to wetlands	Removal, excavation, grading, or dredging of soil, sand, organic matter, or material of any kind; dumping, discharging, or filling with any material; draining, flooding, or disturbing of the water level or water table; placing of obstructions; removal of beaver dams; construction, reconstruction, or expansion of any structure, road, or utility; destruction or alteration of wetland vegetation beyond the level of 4.3e (harvesting of wild plants); activities that would result in a significant change in the physical or chemical characteristics of stream, or wetland water, including quantity, or the introduction of sediment, excess nutrients, or pollutants.	None	Fishing; hunting; shellfish gathering; low-impact scientific or educational use; harvesting of wild plants, as long as harvesting does not harm the reproductive capacity of the plant population or change the existing topography or hydrology; cultural or spiritual activities within the stream or wetland as long as these activities do not substantially change the vegetation, topography, or hydrology of the stream or wetland; use of existing trails; conservation activities for fish or wildlife habitat improvement; existing and ongoing agricultural and aquaculture activities, including grazing, planting, tilling, and maintenance of drainage tiles, not including changes which will increase drainage or degradation of the stream or wetland beyond its current condition; normal maintenance of existing drainage ditches or storm management facilities; normal maintenance of

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
						lawfully located existing facilities and structures, such as roads, buildings, and utilities. The Lummi Nation reserves the right to inspect the above activities to determine their exemption from this ordinance, and to require a permit if the activity appears to be causing degradation to an existing stream or wetland.
State Laws and Regulations						
Washington Shoreline Management Act of 1971 (Ecology 2001) [The new Master Program Guidelines (WAC 173-26), adopted 11-29-00, specify two paths to meet SMA requirements; Path B, less flexible and more protective of salmonids than Path A,	WSWRS or similar classification system (regionally specific, scientifically based method for categorizing wetlands) shall be used. Path B: Higher quality/functioning wetlands should receive higher levels of protection; wetland classifications, together with protective	Path A: case-by-case basis. Path B: one "site-potential tree height"[5] along rivers where trees naturally grow, 60 feet along rivers where trees don't grow; ½ "site-potential tree height" or 100 feet (whichever is greater) along lakes and marine shorelines. Buffer requirements shall be adequate to ensure that wetland functions are protected and maintained in the long-term. Requirements for buffer zone widths	None specified	All development in regulated wetlands (described to the right under "Non-Regulated Wetlands"). Use regulations shall address the following uses to achieve, at a minimum, no net loss of wetland area and functions, including lost time when the wetland does not perform the function: The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind; The dumping, discharging, or filling with any material, including discharges of storm water and domestic, commercial, or industrial wastewater; The draining, flooding, or disturbing of the water level, duration of inundation, or water table; The driving of pilings; The placing of obstructions; The construction, reconstruction, demolition, or expansion of any structure; Significant vegetation removal, provided that these activities are not part of a forest practice governed under chapter 76.09 RCW and its rules; Other uses or development that result in a significant ecological impact to the	Wetlands not falling within the categories described below. Regulated wetlands are those wetlands within the 100-year floodplain or associated with the following: all marine waters; streams with a mean annual flow greater than 20 ft^3/sec; water areas of the state larger than 20 acres; and upland areas, called "shorelands," 200 ft landward from the edge (ordinary high water mark) of these waters. Associated wetlands may fall inside, outside, or may straddle the 200 foot boundary line, and they must meet the following two criteria: (1) It must be in proximity to a shoreline of the state; and (2) It must influence or be influenced by a shoreline of the state.	Include developments having a fair market value less than $2,500; docks worth less than $2,500 (salt water) or $10,000 (fresh water); normal maintenance and repair of existing structures; emergency construction to protect property from damage by the elements; existing and ongoing practices necessary for normal farming, agricultural, and ranching activities; construction of certain single family residences. Although exempt from permits, these activities must still comply with provisions of the SMA.

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
insulates local govern-ments from ESA litigation] (Washington Shoreline Manage-ment Act, continued)	standards for the specific classifica-tions, shall be sufficient to protect or restore ecological functions and PFC[4] for threatened and endangered species.	and management shall take into account the ecological functions of the wetland, the characteristics and setting of the buffer, the potential impacts associated with the adjacent land use, and other relevant factors. Buffers are not "no-touch" areas.		physical, chemical, or biological characteristics of wetlands; Activities reducing the functions of buffers; and, in Path B, Activities that may result in a change in the physical, biological, thermal, or chemical characteristics of wetland water sources that inhibit the protection and restoration of threatened and endangered species.		
Washington Forest Practices Act (Continued on next page)	Non-forested: Type A[6] > 5 acres 0.5 to 5 ac 0.25 to 0.5 Type B[6] > 5 acres 0.5 to 5 ac 0.25 to 0.5 Forested wetlands are not classified	Average (Range): 100' (50-200') 50' (25-100') 50' (25-100') 50' (25-100') 25' (25-25') No WMZ required	N/A	Various harvest activities for forested and non-forested wetlands; for non-forested wetlands, trees must be left within each acre of wetland management zone (WMZ) as follows: 50 trees greater than 6" diameter at breast height (DBH), 25 trees greater than 12" DBH, and 5 trees greater than 20" DBH. No timber shall be felled into or cable-yarded across Type A or B Wetlands without written approval of the department. Harvest shall not be allowed within a Type A Wetland that meets the definition of a bog. Ground-based logging systems shall not be used in Type A or B Wetlands or within the minimum WMZ width without prior written approval. Impacts from road and landing construction must be sequentially avoided, minimized, restored, reduced,	Wetlands < 0.25 acre	RCW 76.09.340: Forest practices consistent with a habitat conservation plan approved prior to March 25, 1996, are exempt from rules and policies under this chapter, provided the proposed forest practices indicated in the application are in compliance with the plan, and provided this exemption applies only to rules and policies adopted primarily for the protection of one or more species, including unlisted species, covered by the plan. Such forest practices are deemed not to have the potential for a substantial impact on the environment but may be found to have the potential for a substantial impact on the environment due to other reasons under RCW 76.09.050.

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
				and/or replaced.		
Washington Model Wetlands Protection Ordinance (Continued on next page)	 Category 1 Category 2 Category 3 Category 4 Category 1 Category 2 Category 3 Category 4	High Intensity Land Use[7]: 300' 200' 100' 50' Low Intensity Land Use[8]: 200' 100' 50' 25'	15'	Removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter or material of any kind; dumping, discharging or filling with any material; draining, flooding, or disturbing of the water level or water table; driving of pilings; placing of obstructions; construction, reconstruction, demolition, or expansion of any structure; destruction or alteration of wetlands vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland, provided that these activities are not part of a forest practice governed under chapter 76.09 RCW and its rules; or activities that result in a significant change of water temperature, a significant change of the physical or chemical characteristics of wetland water sources (including quantity), or the introduction of pollutants	Category 2: < 2,500 ft^2 Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2 Artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities. The applicant shall bear the burden of proving that the site was not previously a wetland. Not wetlands created as mitigation and wetlands modified for approved land use activities.	Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife; outdoor recreational activities; harvesting wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, or alteration of the wetland by changing existing topography, water conditions or water sources; existing and ongoing agriculture, including farming, horticulture, aquaculture, irrigation, ranching, or grazing of animals; (activities on areas fallow as part of a rotational cycle are ongoing; activities which bring an area into agricultural use are not ongoing; an operation ceases to be ongoing when the area on which it was conducted has been converted to another use or has lain idle so long that modifications to the hydrological regime are necessary to resume operations;) maintenance of existing drainage ditches; education, scientific research, and use of nature trails; navigation aids and boundary markers; boat mooring buoys; site investigative work necessary for land use application submittals such as surveys, soil logs, percolation tests, and other related activities; (in every case, wetland impacts shall be minimized and disturbed areas shall be immediately restored;) with ten days written notice and provided that wetland impacts are minimized and disturbed areas are restored: (1) normal maintenance, repair, or operation of existing serviceable structures, facilities, or improved areas; maintenance and repair does not include any modification that changes the character, scope, or size of the original structure, facility, or improved area and does not include the

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
						construction of a maintenance road; and (2) minor modification of existing serviceable structures within a buffer zone where modification does not adversely affect wetland functions; any other activity upon issuance of a permit.
Local Ordinances						
Adams County 7/26/93	Category 1 Category 2 Category 3 Category 4	No specific buffers	None specific to wetlands	Removal, excavation, grading, dredging of soil, sand, gravel, minerals, organic matter or material; dumping, discharging or filling of material; draining, flooding, disturbing of water table or water level; driving of pilings; placing of obstructions; construction of any structure; destruction of wetland vegetation; activities that result in significant change of the physical or chemical character of wetland water sources, including quantity or the introduction of pollutants	Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2	Emergencies, existing structures; mosquito control; operation, maintenance and construction of Columbia Basin project related facilities by the U.S. Bureau of Reclamation; or activities of the East Columbia Basin Irrigation District; maintenance of irrigation and drainage districts; maintenance of agricultural ponds, livestock watering ponds and fish ponds; artificial structures constructed from upland areas for storm water drainage or water quality control, or ornamental landscape ponds; maintenance of state highways, public streets, public utilities and public parks facilities; electrical, natural gas, cable communication and television utility related activities with conditions; and the reasonable use exception
Benton County 7/1/94 (Continued on next page)	Category 1 Category 2 Category 3 Category 4 Category 5	200' 100' 50' 25' 0' except water quality	None specific to wetlands	Removal, excavation, stockpiling, or grading of soil in excess of 25 ft^3; dredging of soil, sand, gravel, minerals, organic matter or material; dumping, discharging or filling with any material; draining of flooding so as to cause alteration of the surface water level; construction of a structure; activities which result in destructive or significant reduction of biological and hydrological function and value of wetland vegetation; activities that result in significant changes of water temperature or the physical or chemical character of surface	All classified wetlands are regulated	Conservation and preservation; outdoor recreation; trails, observation points; maintenance of existing irrigation and drainage ditches and road related facilities; farm ponds, manure lagoons, livestock watering lagoons, livestock watering ponds, existing structures and facilities; maintenance of existing utility structures and equipment; scientific research, education and site investigation; withdrawals of return flows by public irrigation districts; existing agriculture, livestock grazing; existing mineral resource activities; activities undertaken as part of projects authorized by the county; emergencies

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
				water resources, including quantity or introduction of pollutants		
Chelan County 11/30/93	Category 1 Category 2 Category 3 Category 4	Buffer Section of Ordinance has been invalidated	Invalidat-ed	Removing, excavating, dredging, dumping, discharging, distributing, or filling materials; draining, flooding, or altering water level or water table; surface water management, drainage, or erosion control development; driving pilings or placing obstructions; new constructions, including roads and utilities; removal of existing vegetation; uses that result in significant changes in water temperature or physical or chemi-cal character of water sources, including quantity and pollutants; Class 4 conver-sions under the Forest Practices Act	All classified wetlands are regulated	Existing land uses; new agriculture development on Category 4 wetlands; operation and maintenance of irrigation facilities; existing agriculture; Forest Practices applications; maintenance of existing structures; maintenance of existing public streets, highways, roads; utilities and associated structures, including the control of noxious weeds; low impact education activities, scientific research, outdoor recreation; site investigation; emergencies; the reasonable use provision
Clallam County 6/12/92	 Class 1 Class 2 Class 3 Class 4 Class 1 Class 2 Class 3 Class 4	Major New Developments: 200’ 100’ 50’ 25 Minor New Developments: 100’ 75’ 50’ 25’	None specific to wetlands	Agriculture building and conversion; bank stabilization; boat ramps; docks; draining; wildlife blinds; education and research; enhancement; excavation; filling; fish hatcheries; flooding; forest practices; golf courses; land division; mineral extraction; buoys; navigation aids; parks; ponds; public facilities; radio/TV towers; restoration; revegetation; roads; signs; site investigation; storm water; trails; unclassified uses; utilities; wildlife structures	Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2	Existing agriculture; non-commercial outdoor recreation; open space areas
Clark County 4/21/92 (amended several	Category 1 Category 2 Category 3 Category 4 Category 5	300’ 200’ 100’ 50’ 0’ (exempt)	None specific to wetlands	Removal, excavation, grading, dredging, dumping, discharging, filling of material; construction of a structure; construction of storm water management facilities; destruction of wetlands vegetation; new	Category 2 and Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2	Harvest of vegetation in non-injurious manner; removal of noxious weeds; site investigation; trail construction; emergency repairs; mosquito control

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
times since 1992, most recently in 7/00) (Clark County, continued)				roads and utilities	Category 5 (marginal wetlands) Artificial wetlands, but not those created for mitigation purposes; prior converted croplands; riparian wetlands < 5 ft wide	
Cowlitz County 6/24/95 (amended two times since 1995)	Class 1 Class 2 Class 3 Class 4	For all classes of wetlands: Buffers intended to protect wetland physical functions are based on the hydric soil phase; 200'-40', variable on a case-by-case basis Buffers intended to protect fish and wildlife habitats based on the open water component associated with the wetland, 200'-75', variable on a case-by-case basis	None specific to wetlands	Removing, clearing, grading, excavating, disturbing, or dredging soil, sand, gravel, minerals, organic matter, or materials; dumping, discharging, or filling; subdivisions, short subdivisions, PUDs, mobile home, and RV parks; construction of a structure or of a new road or driveway; destroying vegetation; draining, flooding, or disturbing the water level; activities causing a change in water temperature or a physical or chemical change of a water source to wetlands; application of pesticides, fertilizers, or chemicals harmful to wetland habitat, riparian corridors associated with surface water systems, or fish and wildlife	Class 3: < 1 acre Class 4(a): < 1 acre (Wetlands dominated by non-native, invasive plant species) Class 4(b): < 2 acres (Wetlands ≥ 2 acres that are not Class 1, 2, 3, or 4(a) wetlands)	Activities conducted pursuant to the Washington State Forest Practices act; existing and ongoing agriculture activities; development within a seismic hazard area, a volcanic hazard area, or a frequently flooded area containing no other critical area; maintenance of existing roads, driveways, utility lines and existing structures; construction or replacement of utility lines; removal of noxious weeds; maintenance of vegetation; site investigation; passive recreational uses; maintenance of artificially created wetlands or surface water systems; activities in non-regulated wetlands; emergencies
Douglas County 3/16/92	Level 1 Critical Level 2 Awareness	100' 50'	None specific to wetlands	Docks; road/ street repair and construction; major developments; surface water management; trails and trail related facilities; utilities	All classified wetlands are regulated	Maintenance of existing structures; emergency construction; agriculture activities normal or necessary to general farming conducted according to industry Best Management Practices, including the raising of crops or the grazing of livestock; normal maintenance and repair of natural drainage channels

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
Franklin County 4/12/95	No Specific Classes	No Specific Buffers	None specific to wetlands	Removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter or material; dumping, discharging or filling with material; draining, flooding, or disturbing of the water level or the water table; driving of pilings; placing of obstructions; construction, reconstruction, demolition or expansion of any structure; destruction of wetlands vegetation; activities that result in significant change of physical or chemical character of wetland water sources, including quantity or the introduction of pollutants	Artificial wetlands created from non-wetlands sites, but not including those wetlands intentionally created from non-wetlands areas for mitigation purposes	Regulated activities that were approved prior to the passage of this ordinance to which significant economic resources have been committed pursuant to such approval, but which does not conform to this ordinance may be continued subject to certain conditions
Island County 7/12/93 (amended several times since 1993)	Category A Category B	100' 25'	None specific to wetlands	Alteration of Category A and Category B wetlands	Category A: < 0.25 acre Category B: < 1 acre Category C (artificial wetlands)	Emergencies, and permitted use of underlying zone; artificial wetlands; drainage and flood control; irrigation; farming and ranching on agriculture zoned parcels if part of normal farming or ranching practices; recreational uses; residential landscaping; wetland habitats where vegetation is maintained by man-induced water.
Jefferson County 5/9/94	 Class 1 Class 2 Class 3 Class 4 Class 1 Class 2 Class 3 Class 4	High Intensity Land Use[5]: 150' 100' 50' 25' Low Intensity Land Use[6]: 75' 50' 25' 25'	None specific to wetlands	All development proposals	Class 2: < 2,500 ft^2 Class 3: < 10,000 ft^2 Class 4:< 10,000 ft^2	Applications for building permits issued under the Jefferson County Building Code Ordinance No. 1-0208-93, building lots created under provisions of Jefferson county subdivision ordinance 4-0526-92; and applications subject to SEPA review, previously subject to SEPA review, previously subject to critical area review; and those applications having received waiver consistent with the requirements of this ordinance

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
King County 9/10/90 (amended several times since 1990)	Class 1 Class 2 Class 3	100' 50' 25'	15' unless otherwise provided	All development proposals require appropriate mitigation plan upon review of special studies	Isolated wetlands:< 1,000 ft^2	Emergencies; reconstruction of existing structures; existing agriculture activities; electric, natural gas, cable communication and television utilities with conditions; utilities in buffers; sewer utilities; surface water management; public and private trails; docks; isolated wetlands; limited agriculture construction and buildings; limited cutting of firewood
Kitsap County 5/7/98 (amended 8/9/99)	Category 1 Category 2 Category 3 Category 4	200' 100' 50' 25'	15'	Agriculture building and construction; bank stabilization; boat ramps; docks; drainage; education and research; enhancement; excavation; filling; fish hatcheries; flooding; forest practices; golfing; land division; mineral extraction; buoys; navigation aids; parks; ponds; public facilities and projects; radio/TV towers; restoration; roads; signs; site investigation; storm water; trails; utility facilities	Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2 Wetlands created artificially, not for mitigation purposes	Existing and ongoing agriculture; site investigation
Kittitas County 9/12/94 (amended several times since 1994)	Category 1 Category 2 Category 3 Category 4	50'-200' 25'-100' 20'-80' 0'	A building setback line equal to the side yard setback requirement of the applicable zoning district is required from the edge of any wetland buffer	Activities not exempt from SEPA threshold determination; activities requiring approval through a public hearing process; rezones; long plats; short plats; shoreline substantial development permits; shoreline conditional uses; shoreline variances; zoning conditional use permits; replats; conversion of forest land to non-forest land uses; filling and draining of class 1-3 wetlands; new residential building permits	Category 2: < 2,000 ft^2 Category 3: < 10,000 ft^2 Category 4 (exempt)	Activities regulated administratively; existing and on-going agriculture; activities involving artificially created habitat; forest practices conducted under RCW 76.09 and Title 222 WAC; reconstruction resulting from destruction by a national disaster; construction, maintenance, or repair of county permitted or franchised utility facilities; education activities, scientific research and outdoor recreation activities; emergencies; existing natural resource activities; outdoor recreation; education; silviculture and mining; maintenance of existing facilities; structures, ditches, roads, bridges, and other utility systems; Category 4 wetlands for secondary storm water management facilities having no reasonable alternative on-site location, provided there is no significant adverse impact to the functions and values of those wetlands.

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
Lewis County 6/14/96	Class A: (includes Category 1 and Cat. 2 of WSWRS) Class B: (includes Category 3 and Cat. 4 of WSWRS)	High Intensity Land Uses[5]: 100' 50' Low Intensity Land Uses[6]: 50' 50'	None specific to wetlands	Utility lines; regional transmission facilities; local delivery systems; hydroelectric generating facilities; roadways and facilities; maintenance of existing structures and facilities; development activities allowed by permits; single family residence and ordinary residence improvements; regional storm water detention/retention facilities; golf courses	All classified wetlands are regulated	Conservation, preservation; outdoor recreation and education activities; harvesting wild crops; existing and ongoing agriculture, including maintenance of existing ditches and ponds; wetland relocation; maintenance of existing irrigation and drainage ditches; construction and maintenance of existing utility facilities; passive recreation uses; site investigation; maintenance of existing roads; any projects under review and vested
Mason County 8/3/93	Category 1 Category 2 Category 3 Category 4	125' 85' 50' 25'	15'	Removal, excavation, grading, dredging, dumping, discharging, or filling of material; draining or flooding; construction of storm water facilities; driving of pilings; placing of obstructions; construction of structures; destruction or alteration of wetlands and wetland vegetation; activities that result in change of water temperature	Category 2: < 2,500 ft^2 Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2 Artificial wetlands	Conservation or preservation; outdoor recreation; harvesting of wild crops or vegetation; existing agriculture; maintenance of drainage ditches; education and research; site investigation; maintenance of structures; uses conducted under the Wash. State Forest Practices Act; removal of noxious weeds; construction of trails; emergency repairs; mosquito control; removal of dangerous trees
Okanogan County 2/24/94	Category 1 Category 2 Category 3 Category 4 Category 1 Category 2 Category 3 Category 4	High Impact[5]: 300' 200' 75' 50' Low Impact[6]: 200' 75' 50' 50'	None specific to wetlands	Removal, excavation, grading, dredging of soil, sand, gravel, minerals, organic matter, or material of any kind; dumping, discharging or filling of pilings; placing of obstacles; construction, reconstruction of structures; destruction of vegetation; activities that result in significant changes of water temperature, or significant changes of physical or chemical characteristics of wetland water sources, including quantity, or the introduction of pollutants	Category 2: < 2,500 ft^2 Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2	Emergencies; conservation, preservation; outdoor recreation; harvesting of wild crops; existing and ongoing agriculture activities; existing and ongoing agriculture and commercial operations; maintenance of drainage ditches; education, scientific research, and use of nature trails; navigation aids and boundary markers; buoys; site investigation; maintenance of existing serviceable structures, facilities of improved areas; structures and activities that currently and legally existed in wetlands at the time of adoption of the ordinance

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
Pierce County 3/24/92 (amended in 1997)	Category 1 Category 2 Category 3 Category 4	150' 100' 50' 25'	8'	Excavating sand, gravel, minerals, organic matter; dumping, discharging or filling; draining, flooding or disturbing water level; driving pilings; placing obstructions; construction of structures; destroying vegetation; activities that change water temperature; application of pesticides, fertilizers; division of land	Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2 Wetlands created artificially, not for mitigation purposes	Existing agriculture activities; forest practices; placement of access roads; utility lines and utility poles; maintenance of existing roads; reconstruction of existing one family dwellings; site investigation; wetland resource protection activity; emergencies; control of noxious weeds; serviceable structures; uses conducted under the Wash. State Forest Practices Act
San Juan County 12/22/92	Category 1 Category 2 Category 3 Category 4	150' 75' 50' 35'	See Perfor-mance Standards	Removal, excavation, grading and dredging of material; dumping, discharging or filling; disturbing water level; driving of pilings; placing of obstructions; construction of structures; destruction of wetland vegetation; activities that result in change of water temperature, the physical or chemical character of wetland water sources or the introduction of pollutants	Category 2: < 2,500 ft^2 Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2	Maintenance, modification of existing structures; outdoor recreation; harvesting of wild crops; existing agriculture; normal maintenance existing nature trails; navigation aids; site investigation; drilling and maintenance of wells
Skagit County 6/13/96 (amended several times since 1996, most recently in 7/00)	Category 1 Category 2 Category 3 Category 4	150' 100' 50' 25'	None specific to wetlands	Wetland alterations	Category 2: < 2,500 ft^2 Category 3: < 2,500 ft^2 Category 4: < 10,000 ft^2	Existing and ongoing agriculture resource land management operations; maintenance of existing structures, utilities, sewage disposal systems, drainage facilities, roads, structures, facilities or improved areas; modification of existing single family residence; harvesting of wild crops; ongoing operation of maintenance dikes and drains; education and scientific research; navigation aids and channel markers; site investigation; activities adjacent to artificial water coursed maintained for irrigation and drainage; reasonable use exception and when wetland alteration is intended exclusively for the enhancement or restoration of an existing wetland and the proposal will not result in a loss of wetland function and value

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
Skamania County 12/30/96	Class 1 Class 2 Class 3 Class 4 Class 5	200' 200' 100' 50' 25'	None specific to wetlands	No specific regulated activities are listed	Class 2 and 3: < 2,500 ft^2 Class 4: < 10,000 ft^2 Artificial wetlands, but not those created for mitigation purposes; prior converted cropland	Activities conducted pursuant to Washington State Forest Practices Act; existing and ongoing agriculture; maintenance of existing trails, roads, utility lines and structure; removal of noxious weeds, site investigation; maintenance of artificially created wetlands, but not those created for mitigation purposes; emergencies; fish and wildlife management; research; boating; fishing; hunting; swimming; structures exempt from building permit requirements; existing structures
Snohomish County 3/7/95 (amended several times since 1995)	 Category 1 Category 2 Category 3 Category 4 Category 1 Category 2 Category 3 Category 4	Rural Wetlands: 100' 75' 50' 25' Urban Wetlands: 75' 50' 25' 25'	UBC, CAR, Title 24 establish building setbacks	Utility lines and facilities; roadways; wildlife management or viewing structures; outdoor scientific or interpretive facilities; enhancement projects with no net loss of functional values; filling in Cat. 3 and 4 wetlands with conditions; development activities allowed by county SMP; storm water detention/retention facilities	Category 2: < 5,000 ft^2 Category 3: < 5,000 ft^2 Category 4: < 10,000 ft^2	Emergencies; legally established existing structures and uses; expansion of single family residence structures with conditions; replacement of existing structure; existing and ongoing agriculture practices; replacement, operation, repair of state or local franchised utility companies; maintenance of existing utility facilities; development on lots created through subdivisions with conditions; construction of single family residence or ordinary residence improvements with conditions
Thurston County 12/20/93 (amended several times since 1993) (Continued on next page)	 Class 1 Class 2 Class 3 Class 1 Class 2 Class 3	High Intensity Land Uses[5]: 300' 200' 100' Low Intensity Land Uses[6]: 200' 100' 50'	None specific to wetlands	Agriculture building, conversion, and access roads; drainage ditch maintenance; emergencies; critical facilities; filling; fish hatcheries; buoys; navigation aids; golf courses; mineral extraction; non-conforming uses; outdoor recreation; parks; piers; ponds; public facilities and projects; radio/tv towers; roads; shoreline access; shoreline protective structures; single family residence; site restoration; ski lake; slope stabilization; storm water; stream enhancement and relocation; utilities;	Wetlands < 2,500 ft^2 that lie adjacent to a stream or within its 100-year floodplain, or < 11,000 ft^2 within any adopted urban growth boundary, or < 22,000 ft^2 elsewhere within rural Thurston County Artificial wetlands, not created for mitigation purposes, or those wetlands created after July 1, 1990, that were unintentionally created as a	Existing and ongoing agriculture; agriculture ditch maintenance; open space; research and site investigation; roads; signs; existing utilities; wildlife blind or nesting structure

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
				vegetation management and removal	result of the construction of a road, street, or highway	
Whatcom County 11/3/97	All wetlands not specified as exempt are classified using the best-suited and most scientifically valid functional rating system for determining buffer adjustments or mitigation requirements.	100', except: (1) Isolated wetland areas not characterized as mature forested, fens, sphagnum bogs, or estuarine wetlands shall be protected by a standard 50' buffer; (2) Isolated wet meadows shall be exempt from the standard buffer requirement when it is determined that the wetland functions are restricted primarily to storm water storage	None specific to wetlands	All land use and development within areas that meet the definition and criteria for critical areas	Artificial wetlands, not created for mitigation purposes Isolated wetlands < 1/3 acre in size Hydrologically isolated wetlands, with low quality vegetation, dominant functions limited to storm water storage/flood attenuation, and total functions no greater than all other sites on the parcel in question	Emergencies; diking or drainage district activities or flood control; construction work for existing structure; maintenance of development right of ways; conservation or preservation; low impact activities; mowing, pruning, etc.; non-chemical maintenance of drainage ditch; buoys; navigation aids; site investigation; pesticide application; maintenance of structures; removal of noxious weeds; construction of structures not subject to permit requirements; alteration of beaver built structures; gravel bar extractions; construction of public and private trails; pre-existing agriculture activities; clearing and revegetation of buffer areas for view purposes; fish and wildlife and/or wetland enhancement
City of Bellingham 12/31/91 (Continued on next page)	Category 1 Category 2 Category 3	100' 50' 25'	None specific to wetlands	(1) The excavation, dredging, grading or removal of soil, sand, gravel, minerals, organic matter or materials of any kind; (2) The filling, dumping, discharging or placement of materials of any kind; (3) Alteration of the water supply, water level, flow or drainage characteristics; (4) Alteration or destruction of existing vegetation, fish or wildlife habitat; (5) The conduct of any activity that results in a detrimental change of the physical or chemical characteristics of a	(1) Category 1 < 5,000 ft^2 that do not contain documented habitat for threatened, endangered or rare plant, fish or animal species recognized by the state or federal agencies; (2) Category 2 < 10,000 ft^2 that are not contiguous with any regulated stream and do not contain documented habitat for sensitive plant, fish or animal	(1) Normal maintenance, repair and routine replacement of lawfully located existing facilities, structures or landscaping such as fences, buildings, driveways, roads, lawns, drainage facilities and utilities including water and sewer lines, power, gas and telephone lines, provided that such activities do not significantly disrupt the associated wetland or stream functions and the ground surface is restored as near as possible to its previous condition after service. (2) Park, trail, educational and interpretive projects, including restoration and enhancement projects,

Table 2. Summary of the Primary Features of Wetland Ordinances and Regulations[1]

Source of Regulation or Ordinance	Wetland Class	Wetland Buffer	Building Setback from Buffer	Regulated Actions for Wetlands	Non-Regulated Wetlands	Wetland Activities Exempt from Regulation
City of Bellingham, continued				regulated wetland or stream due to the introduction of pollutants.	species recognized by state or federal agencies; (3) Category 3 < 1 acre that are classified as "wet meadow" or "wet pasture" only, and all other Category 3 < 10,000 ft^2, unless they function in association with a group or series of wetlands that together comprise 10,000 ft^2 or more in area; (4) Artificial wetlands, not created for mitigation purposes	directly related to wetland understanding, enjoyment and improved function, if they do not significantly disrupt the associated wetland or stream functions. (3) Emergencies.

[1]Information on federal and state laws/regulations adapted from Ecology (1988) or from the text of the law/regulation; information on local ordinances adapted from CTED (1998) or from the text of the ordinance

[2]Muffy Walker, Corps of Engineers, personal communication on April 24, 2001

[3]Alice Kelly, WA Dept. of Ecology, personal communication on April 26, 2001

[4]"Properly functioning condition" or "PFC" means conditions that create and sustain natural habitat-affecting processes (such as sediment routing, riverine community succession, precipitation-runoff patterns, and a natural range of flow variability and channel migration) over the full range of environmental variation and that support productivity at a viable population level of T&E species. The term "properly functioning condition" indicates a level of performance for a subset of the more broadly defined "ecological functions," reflecting what is necessary for the recovery of T&E species.

[5]"Site-potential tree height" is the maximum height that a tree potentially could grow at a particular site

[6]Type A wetlands are non-forested wetlands that are either bogs (including forested bogs), greater than 0.5 acre in size (including open water that is completely surrounded by the wetland), or those that have at least 0.5 acre of open water present on site for seven consecutive days between April 1 and October 1. All other non-forested wetlands greater than 0.25 acre are Type B.

[7]High Intensity Land Use includes land uses that are associated with moderate or high levels of human disturbance or substantial wetland habitat impacts, including, but not limited to, medium and high density residential, multifamily residential, active recreation, and commercial and industrial land uses.

[8]Low Intensity Land Use includes land uses that are associated with low levels of human disturbance or low wetland habitat impacts, including, but not limited to, passive recreation, open space, or agricultural or forest management land uses

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Tribal Ordinances						
Tulalip 12/8/94 (with several revisions)	Category 1 Category 2 Category 3	No specific mitigation guidelines are provided	Not specified	An alteration of buffer requirements may be approved based on a watershed analysis and review.	An alteration of buffer requirements may be approved based on a watershed analysis and review.	An alteration of buffer requirements may be approved based on a watershed analysis and review.
Confederated Salish and Kootenai 12/5/86	None	No specific mitigation guidelines are provided	Not specified	Not addressed	Not addressed	Not addressed
Draft Lummi Nation Stream and Wetland Protection Ordinance	Highest, Moderate, and Low Priority	No specific mitigation guidelines are provided	Not specified	Not addressed	Not addressed	Not addressed
State Regulations						
Washington Model Wetlands Protection Ordinance (Continued on next page)	 Category 1 Category 2 or 3 Category 4 Category 1 Category 2 or 3 Category 4	Creation or Restoration: 6 : 1 Forested: 3 : 1 Scrub-shrub: 2 : 1 Emergent: 1.5 : 1 1.25 : 1 Enhancement: N/A Forested: 6 : 1 Scrub-shrub: 4 : 1 Emergent: 3 : 1 2.5 : 1 An increase or decrease in the ratio may be required or approved to assure no	Provides cooperative restoration guidelines; Ecology is developing wetland mitigation banking rules.	Required on a case-by-case basis when necessary to protect wetland functions and values based on local conditions: (1) A larger buffer is necessary to maintain viable populations of existing species; or (2) The wetland is used by proposed or listed species or has outstanding potential habitat for those species or has unusual nesting or resting sites; or (3) The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse wetland impacts; or (4) The adjacent land has minimal vegetative cover or	May be reduced on a case-by-case basis where the following is demonstrated: (1) The adjacent land is extensively vegetated and has less than 15% slopes and no direct or indirect, short-term or long-term, adverse impacts to regulated wetlands will result from a regulated activity. Long-term monitoring and subsequent corrective actions may be required; or (2) The project includes a buffer enhancement plan that uses native vegetation and shows that the enhanced buffer will provide additional protection for wetland functions and values. An enhanced buffer shall not result in greater than a 25% reduction in the buffer width, and the reduced buffer shall not be less than 25 ft.	Shall be allowed only where the applicant demonstrates all of the following: (1) Averaging is necessary to avoid an extraordinary hardship to the applicant caused by circumstances peculiar to the property; (2) The wetland contains variations in sensitivity due to existing physical characteristics; (3) Low intensity land uses would be located adjacent to areas where buffer width is reduced, and such low intensity land uses are guaranteed in perpetuity by covenant, deed restriction, easement, or other legally binding mechanism; (4) Width averaging will not adversely affect the wetland

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Washington Model Wetlands Protection Ordinance, continued		net loss of wetland functions or values.		slopes greater than 15%.		functional values; and (5) The total area contained within the wetland buffer after averaging is no less than that contained within the standard buffer before averaging. In no instance shall the buffer width be reduced by more than 50% of the standard buffer or be less than 25 ft.
Local Regulations						
Clark County 4/21/92 (amended several times since 1992, most recently in 7/00)	Category 1 Category 2 Category 3 Category 4 Category 1 Category 2 Category 3 Category 4 Category 3 or 4 only	Replacement: 6 : 1 3 : 1 Forested: 3 : 1 Scrub/shrub: 2 : 1 Emergent: 1.5 : 1 1.25 : 1 Pre-Development Replacement: 1.5 : 1 1.25 : 1 1 : 1 1 : 1 Enhancement: Based on a 1:1 ratio that is reduced by 20% for each increase in wetland category. Replacing a Category 4 wetland with a Category 2 wetland results in a replace-ment ratio of 0.6:1.	Yes	N/A	Will be allowed if the following mitigation measures are undertaken: (1) Improving the quality of the buffer such that the buffer meets the criteria for a higher category (A, B, C, or D in the Clark County buffer rating system) decreases the base width by the following amounts: (i) Raising buffer from Type D to C or C to B: 15%; (ii) Raising buffer from Type D to B: 25%; or (2) Shielding the buffer from adjacent high intensity uses shall result in a decrease in adjusted base buffer width of 10%. Shielding includes, but is not limited to, berms and permanent solid fences. For commercial and industrial uses, shielding also includes orienting the building so the building itself acts as a shield; or (3) Permanent improvements to the hydrology of a wetland ecosystem, such as removing a ditch that is draining a wetland, shall result in a decrease in the base buffer width of 10%; or (4) Substantial improvements to the fish and wildlife habitat of a wetland or buffer, such as importing snags or meandering a channelized stream, shall result in a decrease in the base width of 10%; or (5) Improving a wetland by raising it to a higher category decreases the base width by 20%; the base buffer width in this case is that required for the original wetland.	If buffer averaging is used, the following conditions must be met: (1) The total area contained in the buffer after averaging shall be no less than that contained within the buffer prior to averaging; and (2) Averaging will not degrade the functions of the wetland or buffer. In the case of buffer averaging and buffer reduction via enhancement, the minimum buffer width at any point shall not be less than 50% of the base buffer widths

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Island County 7/12/93 (amended several times since 1993)	Category A Category B	No specifics provided other than habitat replacement should provide an insurance factor to take into account the risk of mitigation and the loss of fish and wildlife until the mitigation site becomes productive	Not specified	The width of the wetland buffer may be increased over the required minimum under the following condition: When the wetland is especially sensitive, a wider buffer of native vegetation should be provided.	Areas that are functionally separated from a critical area (due to pre-existing roads, structures, or vertical separation) and do not protect the critical area from adverse effects shall be excluded from buffers otherwise required by this chapter. The Director may require a Biological Site Assessment to determine whether the buffer is functionally isolated.	No specific provision; Any use permitted in the underlying zone shall preserve the stated undisturbed buffer unless the Island County Planning Director determines the proposed use would improve or protect the wildlife habitat, natural drainage, and/or other valuable functions of the wetland and would be consistent with this Chapter, whereupon such buffer width may be modified. Provided that the Planning Director may also administratively authorize a modification of up to 50% of the buffer width to provide a reasonable buildable area for a single-family residence or accessory building on a lot legally established prior to the effective date of this Chapter.
King County 9/10/90 (amended several times since 1990)	Class 1 Class 2 Class 3	Replacement or Enhancement (On- or Off-site): 2 : 1 2 : 1 1 : 1 with equivalent or greater biologic functions, including habitat functions, and with equivalent hydrologic functions, including storage capacity.	Yes	Increased buffer widths shall be required when necessary to protect wetlands. Provisions for additional buffer widths shall be contained in administrative rules, including, but not limited to, provisions pertaining to critical drainage areas, location of hazardous substances, critical fish and wildlife habitat, landslide or erosion hazard areas contiguous to wetlands, groundwater recharge and discharge, and the location of trail or utility corridors.	No provisions for buffer reduction; buffers in Table 2 are minimum buffers.	Buffer-width averaging may be allowed by King County if it will provide additional protection to wetlands or enhance their functions, as long as the total area contained in the buffer on the development proposal site does not decrease.

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Pierce County 3/24/92 (amended in 1997)	Category 1 Category 2 or 3 Category 4	On-Site, In-Kind Replacement Before Alteration: 3 : 1 Forested: 2 : 1 Scrub/shrub: 1.5 : 1 Emergent: 1.5 : 1 Open Water: 1 : 1 1 : 1 Ratios may be increased to insure no net loss of wetland function or value or decreased (not less than 1:1) if no net loss will result.	Not specified	May be required when necessary to protect wetland functions and values based on local conditions. This determination shall be reasonably related to protection of the functions and values of the regulated wetland and shall demonstrate any of the following: (1) A larger buffer is necessary to maintain viable populations of existing species; (2) The wetland is used by listed species or has priority habitats or outstanding potential sites (rookeries or nesting sites); (3) The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse wetland impacts; or (4) The adjacent land has minimal vegetative cover or slopes greater than 15%.	A reduction of up to 25% may be allowed when the applicant demonstrates any of the following: (1) The proposed buffer area is extensively vegetated and has less than 15% slopes, and the reduction will not result in adverse impacts to the wetland; (2) The project includes a buffer enhancement plan that uses indigenous plant species and substantiates that an enhanced buffer will improve the functional attributes of the buffer to provide additional protection for wetland functional values; or (3) The acreage included in the buffer would substantially exceed the size of the wetland and the reduction will not result in adverse impacts to the wetland, either intrinsically or due to a buffer enhancement plan.	May be allowed only where the applicant demonstrates all of the following: (1) The wetland contains variations in sensitivity due to existing physical characteristics; (2) Width averaging will not adversely affect the wetland; (3) The total buffer area after averaging is no less than the buffer area prior to averaging; and (4) The minimum buffer width will not be less than 50% of the standard widths.
Skagit County 6/13/96 (amended several times since 1996, most recently in 7/00)	Category 1 Category 2 or 3 Category 4	Restoration or Creation: 4 : 1 Forested: 3 : 1 Scrub/shrub: 2 : 1 Emergent: 2 : 1 1.25 : 1	Yes	Standard buffers may be increased upon a determination by the Administrative Official, with confirmation from the Washington State Departments of Ecology and/or Fish and Wildlife, that buffer-width averaging is not adequate to protect the functions and values of the wetland and increased	Decreasing of standard buffer widths will be allowed only if the Applicant demonstrates that all of the following criteria are met: (1) Buffer width averaging is not possible due to site characteristics; and (2) A decrease is necessary to accomplish the purposes of the proposal and no reasonable alternative is available; and (3) Decreasing width will not adversely affect the wetland functions and values; and	Averaging of required buffer widths will be allowed only if the Applicant demonstrates that all of the following criteria are met: (1) Averaging is necessary to accomplish the purposes of the proposal and no reasonable alternative is available; and (2) Averaging width will not adversely affect the wetland

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Skagit County, continued	Category 3 Category 4	Enhancement: Forested: 6 : 1 Scrub/shrub: 4 : 1 Emergent: 4 : 1 2.5 : 1 Where out-of-kind replacement is accepted, greater restoration or creation ratios may be required.		buffer widths are necessary to: (1) Maintain viable populations of existing species listed by the Federal or State government as endangered, threatened or sensitive; or (2) Maintain critical habitat for those species referenced in subsection (1) above; or (3) Protect wetlands against severe erosion that standard erosion control measures will not effectively address; or (4) If the wetland contains variations in sensitivity, increasing the buffer widths will only be done where necessary to preserve the structure, function and value of the wetland.	(4) If a portion of a buffer is to be reduced, the remaining buffer area will be enhanced, using native vegetation, artificial habitat features, vegetative screening, and/or barrier fencing, as appropriate to improve the functional attributes of the buffer and to provide adequate protection for wetland functions and values; and (5) The buffer width shall not be reduced below 50% of the standard buffer width or 25 feet, whichever is greater, unless the Administrative Official determines that no other reasonable alternative exists and that no net loss of wetland functional values will result, based on a functional assessment provided by the Applicant utilizing a methodology approved by the Administrative Official.	functions and values; and (3) The total area contained within the wetland buffer after averaging is no less than that contained within the standard buffer prior to averaging. The buffer width shall not be reduced below 50% of the standard buffer width or 25 feet, whichever is greater, unless the Administrative Official determines that no other reasonable alternative exists and that no net loss of wetland functional values will result, based on a functional assessment provided by the Applicant utilizing a methodology approved by the Administrative Official.
Snohomish County 3/7/95 (amended several times since 1995) (Continued on next page)	All categories	Wetland functions and values shall be replaced in-kind at a minimum ratio of 1:1. On-site mitigation is preferred; off-site mitigation will be used only when on-site mitigation is not feasible.	Yes	Not specified (outside of buffer-width averaging)	May be reduced if the buffer is enhanced in accordance with the following requirements: (1) Buffers, or buffers required after buffer averaging, will have minimal functions and values due to existing physical characteristics; (2) The applicant demonstrates that proposed buffer enhancement, together with proposed buffer-width reduction, will result in an increase in the functions and values of the buffer when compared with the functions and values of the standard buffer; (3) The applicant includes a comparative analysis of buffer values prior to and after enhancement, and demonstrates compliance with this chapter; (4) The buffer width is not reduced below 50% of the standard buffer width or 25 feet, whichever is greater,	Buffer widths may be averaged if all of the following requirements are met: (1) Averaging will not impair or reduce the habitat, water quality purification and enhancement, storm water detention, ground water recharge, shoreline and erosion protection, and other functions of the wetland and buffer; (2) Averaging does not reduce the total buffer area; and (3) No part of the width of the buffer is less than 50% of the required width or 25 feet, whichever is

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Snohomish County, continued					and the total buffer area after reduction is not less than 75% of the total buffer area before reduction; and (5) The functions and values of the wetland protected by the buffer are not decreased.	greater.
Thurston County 12/20/93 (amended several times since 1993) (Continued on next page)	Class 1 Class 2 Class 3 Isolated Wetlands	Restoration and Creation: Class 2 / Class 3 4 : 1 / 6 : 1 2 : 1 / 3 : 1 1-1.5 : 1 / 1.5-2 : 1 1.0 : 1 / 1.25 : 1 Enhancement: Class 2 / Class 3 8 : 1 / 12 : 1 4 : 1 / 6 : 1 2-3 : 1 / 3-4 : 1 1.5-2.5 : 1 / 2-3 : 1 The review authority may increase or decrease the restoration ratios under the following circumstances: (1) The probable success of the proposed restoration or creation; (2) The period of time between destruction and replication of wetland functions; (3) Projected losses in functional value;	Wetlands coopera-tive projects (similar to mitigation banking): Yes	N/A	(A) May be reduced from the high intensity land-use buffer to the low intensity land-use buffer when the applicant can demonstrate that one of the following conditions are present: (1) The development proposal includes adjacent land that is extensively vegetated; has slopes that could be defined as a landslide-hazard area; will have no direct or indirect, short-term or long-term, adverse impacts to wetlands, as determined by the regulatory authority; will result from a regulated activity; and will be placed in a critical area tract; or (2) The development proposal includes a landscaping plan to enhance the buffer using native vegetation that will improve the functional attributes of the buffer; access is restricted to the buffer and wetland through fencing; and the buffer and wetland are part of a critical area tract; or (3) The development proposal includes a wetland mitigation plan that documents how the functions and values of a wetland and its buffer could be restored or improved. Restoration or improvement of a wetland in a native condition (probably a Class I or II wetland) will not be likely, but such measures may be appropriate for Class III wetlands that have been converted for other uses, such as agriculture. The wetland mitigation plan must address all five of the following measures: a. Buffer Enhancement: improving the quality of the buffer so that it provides for increased visual screening or increased vegetative diversity. b. Shielding High Intensity Land Uses: providing berms and/or permanent solid fences at the edge of the buffer.	The review authority may reduce the standard wetland-buffer widths by averaging the buffer, but in no instance shall the buffer width be reduced by more than 50% of the standard buffer or be less than 25 feet. Wetland buffer-width averaging shall be allowed only where the applicant demonstrates all of the following: 1. That the total area contained within the wetland buffer after averaging is no less than that contained within the standard buffer prior to averaging; and 2. Averaging will increase or enhance the wetland functional values.

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Thurston County, continued		(4) Off-site compensation; or (5) Replacement because of an illegal action. In all cases, a minimum acreage replacement ratio of one-to-one shall be required except for "agricultural, wetland, conversion," which shall be evaluated on a case by case basis. The review authority may reduce the ratios by up to fifty percent when a local, state or federal road project will provide improved fish passage, improved water quality, increased spill protection or increased flood capacity.			It may also include orientation of the building so that the building itself acts as a shield to buffer the wetland. c. Hydrologic Improvement: providing permanent improvements to the site hydrology, which may include removal of a ditch that is draining a wetland. d. Habitat Enhancement: substantial improvements to the fish and wildlife habitat of a wetland or its buffer such as importing snags or meandering a channelized stream. e. Wetland Restoration: improving other functions and values of a wetland. (B) May be reduced to a point midway between the high intensity and low intensity land use for Class II or III wetlands when the applicant has provided three of the five activities listed in A(3) above. (C) May be reduced up to fifty percent when an existing lot of record is less than one hundred feet in depth. The proportionate reductions shall be based upon the size of the lot. (D) May be reduced when the development proposal lies between properties for which different wetland buffer distances were applied prior to the adoption of this chapter. In this circumstance, the review authority may average or transition the buffer distance between these properties consistent with the intent of this chapter. (E) May be reduced for those areas that are functionally separated from a wetland (due to a pre-existing road, structure, or vertical separation) and do not protect the wetland from adverse impacts. This provision shall not apply to a logging road constructed with or without a forest practices permit, or to any road or structure constructed in violation of this chapter.	

Table 3. Summary of Other Features of Wetland Ordinances and Regulations

Source of Regulation or Ordinance	Wetland Class	Mitigation Ratios	Mitigation Banking Option	Criteria for Increasing Buffer Width	Criteria for Decreasing Buffer Width	Criteria for Buffer-Width Averaging
Whatcom County 11/3/97	All wetlands not specified as exempt	In order to mitigate for functional losses, mitigation projects shall restore, enhance, or create equivalent areas at a scientifically based ratio appropriate for the function(s) being replaced. The restored, enhanced, or created area shall provide, at a minimum, an equivalent level of function, provided that replacement ratios shall not exceed 6:1.	Yes	Standard buffer widths shall be increased when it is determined that a larger buffer is necessary to protect wetland functions based on local conditions. Such determination shall be attached as a permit condition and shall demonstrate the following: (1) A larger buffer is required by an approved habitat management plan; (2) The impacts of proposed land uses require greater buffers to protect wetland functions; (3) The adjacent land is subject to slope instability or severe erosion; or (4) The standard buffer is subject to windthrow damage, if the increase in buffer width to protect against windthrow damage shall not exceed 50 ft.	Standard buffer widths shall be reduced under the following conditions: (1) The project includes a buffer enhancement plan appropriate to the site conditions and wetland functions. The enhanced buffer must provide additional protection for the wetland functions that is at least equal to the administratively determined buffer; or (2) The applicant demonstrates that smaller buffers will adequately protect wetland functions.	Buffer-width averaging shall be allowed when all of the following apply: (1) Averaging is necessary to avoid hardship to the applicant caused by circumstances peculiar to the property; (2) Buffer-width averaging will not adversely affect the wetland functions; and (3) The total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging.
City of Bellingham 12/31/91	Category 1 Category 2 Category 3	None specified	Yes	The buffer requirement may be increased and/or averaged where it is demonstrated that certain areas of the wetland/stream are more sensitive to disturbance than others. Buffer increases may be necessary to protect identified functions.	May be reduced on a case-by-case basis when either of the following can be demonstrated: (1) The adjacent land is extensively vegetated; has less than 15% slopes; and no direct or indirect, short-term or long-term, adverse impacts to regulated wetlands or streams will result from the regulated activity; or (2) An enhanced buffer plan will be implemented that will increase the effectiveness of the buffer even after reducing width. No reduction in minimum buffer requirements or averaging may be considered when the net result would increase the likelihood of negative impacts to the wetland/stream system.	The buffer requirement may be increased and/or averaged where it is demonstrated that certain areas of the wetland/stream are more sensitive to disturbance than others.

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9. LIST OF ACRONYMS AND ABBREVIATIONS

Programs and Terms:	
ALCO	Aquatic Lands Conservation Ordinance
CAO	Critical Areas Ordinance
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWRMP	Comprehensive Water Resources Management Program
CZMP	Coastal Zone Management Plan
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FMP	Floodplain Management Program
GMA	Growth Management Act
JARPA	Joint Aquatic Resource Permits Application
MWPO	Model Wetlands Protection Ordinance
NEPA	National Environmental Policy Act
PSWQMP	Puget Sound Water Quality Management Plan
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
TRC	Technical Review Committee
TZO	Tulalip Zoning Ordinance
USC	United States Code
WAC	Washington Administrative Code
WMP	Wetland Management Program
WMZ	Wetland Management Zones
WPCA	Water Pollution Control Act
WPP	Wellhead Protection Program
WSWRS	Washington State Wetland Rating System

Agencies and Organizations (Parent Organization):	
CSKT	Confederated Salish and Kootenai Tribes
Corps	U.S. Army Corps of Engineers
CTED	Washington Department of Community, Trade, and Economic Development
Ecology	Department of Ecology, Washington State
EPA	US Environmental Protection Agency
LIBC	Lummi Indian Business Council
LNR	Lummi Natural Resources Department
NMFS	National Marine Fisheries Service (NOAA)
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service (USDA) [formerly SCS]
SCS	Soil Conservation Service (USDA)
USDA	US Department of Agriculture
USDI	US Department of the Interior
USFWS	US Fish and Wildlife Service (USDI)