

ORDINANCE 01- 2015**AN ORDINANCE REGARDING CRITICAL AREA REGULATIONS; AMENDING
ORDINANCE NOS. 2-2014 AND 16-2014 AND SAN JUAN COUNTY CODE 18.30.110,
18.50.150 AND 18.30.160.****BACKGROUND**

- A. San Juan County adopted amended critical area regulations in Ordinance No. 02-2014 on March 5, 2014, in response to the State of Washington's Growth Management Hearings Board's (Board) September 6, 2013, decision in Case No. 13-2-0012c.
- B. On August 20, 2014, the Board issued an order finding compliance and continuing noncompliance of the County's critical area regulations with the Growth Management Act (GMA). The Board set a February 17, 2015 compliance deadline.
- C. The Board found two areas of noncompliance that are summarized below:
- The County's allowance of sleeved and water-tight sewer lines in wetlands fails to assure no net loss of ecosystem functions and values, fails to include Best Available Science to protect the functions and values of critical areas, and fails to provide a reasonable justification for departing from the Best Available Science (BAS) (pg. 39 of the Board's decision), and
- The County did not provide any rationale or reasoning for departing from the BAS and has not required adequate compensatory mitigation for long-term harm to wetlands from ground disturbing utility line construction (pg. 54-55 of the Board's decision).
- D. The Board also pointed out a scrivener's error in SJCC 18.30.160 Table 3.8 Item (g) where the word "wetland" was intended to be "FWHCA."
- E. An environmental checklist was prepared evaluating potential effects of the proposed amendments and a notice of Determination of Non-significance was issued and published on October 1, 2014, in the Journal of the San Juan Islands and The San Juan Islander. The notice was provided to federal, state and local agencies in accordance with SJCC 18.80.050 and WAC 197-11-340.
- F. As required by RCW 36.70A.106, a 60-day notice regarding the potential adoption of amendments to the critical area regulations was provided to the Washington State Department of Commerce on October 1, 2014.
- G. Efforts to involve the public included a:
- I. Discussion at the September 8, 2014, County Council meeting (First Touch);
 - II. Planning Commission briefing and public hearing on October 17, 2014;
 - III. County Council briefing (2nd Touch) on December 9, 2014; and
 - IV. County Council discussion regarding the utility exemption on January 13, 2015;
 - V. County Council public hearing (3rd Touch) on January 27, 2015.
- H. The Planning Commission conducted a duly advertised public hearing on October 17, 2014. Notice of

the hearing was published on October 1, 2014, in the Journal of the San Juan Islands and The San Juan Islander.

- I. The County Council considered the Planning Commission's recommendations at a public meeting on December 9, 2014, conducted a public hearing and deliberated on January 20, 2014. Notice of the public hearing was published January 7, 2014, in the Journal of the San Juan Islands and The San Juan Islander.
- J. The County Council makes the following findings:
 - I. The proposed regulations are consistent with the goals and policies of the San Juan County Comprehensive Plan.
 - II. Section 1 amends SJCC 18.30.110(C)(3)(a), the utility exemption applied within *existing development areas* (SJCC 18.20.040) including existing right-of-ways and roads. These areas have been previously disturbed and predevelopment conditions have already been altered. In addition, most right-of-ways are mowed annually.

The section is amended to comply with the GMA by requiring additional measures to protect critical areas and to require compensatory mitigation in conformance with the requirements of SJCC 18.30.110(E). SJCC 18.30.110(E)(8)(d) contains the mitigation sequence to be followed including avoidance of adverse impacts, reducing or minimizing impacts, rectifying impacts, and compensating for impacts. Mitigation of long-term harm to wetlands through the County's mitigation sequence is designed to eliminate or reduce the severity of negative impacts to functions and values and to provide compensation for those impacts.

The utility exemption is a departure from the Best Available Science. WAC 365-195-915 provides guidance on including the Best Available Science in the development of critical area regulations and departing from science based recommendations. The guidance specifies that (1) any information in the record that supports the decision should be identified, (2) the rationale for departing from science based recommendations should be explained, (3) potential risks to the functions and values of critical areas should be described, and (4) measures chosen to limit such risk should be identified.

1. Information in the record that supports the decision to depart from science-based recommendations:

- i. Of Orcas Power & Light's approximate 1,100 miles of line, 800 miles were found to be within critical areas or their buffers. The implication is that about seventy-five percent of OPALCO projects will be affected by the critical areas regulations.
- ii. While pre-existing land uses are not categorically exempt, the regulations are proposed to provide a carefully limited exemption for the installation of utilities.

2. Rationale for departing from science based recommendations:

- i. *Wetlands in Washington State Volume 2 Protecting and Managing Wetlands* in 8.C.2.4.2 indicates where a legally established, nonconforming use of a buffer exists (e.g. a road or structure that lies within the width of the buffer recommended for that wetland), proposed

actions in the buffer may be permitted as long as they do not increase the degree of nonconformity.

- ii. If impacts to critical areas cannot be avoided, the County's mitigation sequence is implemented.
- iii. The County's mitigation requirements in SJCC 18.30.110(E) are consistent with Ecology's recommendations and the BAS. SJCC 18.30.110(E)(7) and (8) require projects to be designed and located in a way that avoids adverse impacts to the functions and values considering BAS. If impacts cannot be avoided, the County's mitigation sequence requires, reducing or minimizing impacts, rectifying them and compensating for any adverse impacts by replacing, enhancing or providing similar resources or environments that will substitute for adversely impacted functions and values.
- iv. *Wetlands in Washington State Volume 2*, Section 8C.2.4.2 Appendix 8-C provides Guidance on Widths of Buffers and Ratios for Compensatory Mitigation for Use with the Western Washington Wetland Rating System. Condition 2: Reductions in Buffer Widths Where Existing Roads or Structures Lie Within the Buffer states "where a legally established, non-conforming use of the buffer exists (e.g., a road or structure that lies within the width of buffer recommended for that wetland), proposed actions in the buffer may be permitted as long as they do not increase the degree of non-conformity."
- v. The exemption in SJCC 18.30.110(C)(3)(a) for utility construction only applies to existing development areas. These are areas where development has already occurred including roads and their right-of-ways. Utilities are usually installed under the road or within the right-of-ways which have been previously graded, trenched and mowed. Some installations may be nonconforming to existing critical area regulations.
- vi. The Washington State Supreme Court in *Swinomish Indian Tribal Community v. WWGMHB*, 161Wn.2d 415, 166 P.3d 1198 (2007) held that the absence of native vegetation due to land-clearing before there was a legal impediment in GMA was a reasoned justification from departing from BAS. Similarly, existing roads and their right-of-ways have been previously disturbed by clearing, grading, and construction and maintenance activities.
- vii. Utility installations in existing development areas are sometimes constrained by property rights or topographical restrictions.
- viii. Installations in critical areas or their buffers may be required for functional reasons such as equipment movement, gravity flow or to meet local, state or federal design requirements.
- ix. The provision of utility services to the public on the islands is largely dependent upon work in existing disturbed right-of-ways.
- x. Installations in development areas often have less overall impacts to critical areas than new alternative locations outside of previously disturbed areas.
- xi. The exemption helps to ensure that GMA Goals (3) Transportation and (12) Public facilities and services will be implemented effectively.

- xii. The proposal supports the goals and policies in the San Juan County Comprehensive Plan including those in:
- a. Element 8 Utilities Goal 8.2.D and Policy 3: Identify utility installation, relocation and maintenance activities which are expected to have insignificant environmental impacts and will establish exemptions from permit requirements for those type of activities.
 - b. Element 10 Economic Development Element Goal 2, Policy B: Support high-speed broadband infrastructure which enables the creation of jobs and improved educational opportunities for islanders.

3. Potential risks to the functions and values of critical areas:

The BAS in the record indicates that functions and values of critical areas and their buffers which are described in *Wetlands in Washington State, Volume 1* may be degraded when utilities are installed. These functions and values include the ability to improvement of water quality through sediment removal, removal of nutrients, metals and toxic organic compounds and pathogens, maintaining the water regime by reducing peak flows, decreasing erosion and recharging groundwater and maintaining habitat and food webs. According to *Wetland Mitigation in Washington State - Part 1*, the potential risks to functions and values from utility installation are summarized to include:

- alteration of vegetation reducing the potential for sediment and contaminant removal;
- alteration of soils and soil structure and infiltration from compaction by installation equipment and from trenching and plowing which can also modify hydrologic functions;
- changes in the amount of sediment (increasing or decreasing the amount) and increases in soil erosion that leads to reduced water quality;
- changes in the amount of stormwater run-off that disturbs flows and velocity and could increase sedimentation and degrades water quality;
- disturbance of the water/hydrological regime and hydrologic functions (frequency, amplitude, direction of flow, fluctuation of water levels);
- introduction of invasive species after clearing; and
- noise and other habitat disturbances such as fragmentation.

The BAS in the record indicates that there are long-term adverse impacts to wetland functions and values and to the water regime caused by construction activities, soil disturbance and introduction of invasive species in wetlands.

4. Measures chosen to limit potential risks to the functions and values of critical areas:

- i. The County's mitigation sequencing is consistent with science-based mitigation established in the Washington State Environmental Policy Act (Chapter 43-21C RCW) administered by the Washington Department of Ecology, and Section 404 of the federal Clean Water Act (*Wetlands in Washington State, Part 1, Section 3.5.1*).
- ii. SJCC 18.30.110(C)(3)(a) requires the use of the County's mitigation sequence established in SJCC 18.30.110(E)(8)(d) and (e). In addition, the revisions to the utility exemption provide some specific mitigation steps that may be used to reduce the impacts of utilities in existing development areas. Several previous conditions are addressed in the specific mitigation requirements.

- iii. Utility construction in the right-of-way requires a right-of-way permit. These permits are reviewed by the County's Department of Community Development for compliance with the County's development regulations including critical areas, shoreline and stormwater regulations. They are also reviewed by the Department of Public Works for construction standards and compliance with Chapter 12.16 SJCC regarding utility installation. The County can condition right-of-way permits to ensure that the requirements of the utility exemption are met and to further minimize impacts to critical areas. Utility installation is inspected during and after construction of the development project to review work and the implementation of project conditions.
- iv. The County has an active noxious weed prevention program including specific requirements for weed control of invasive species in right-of-ways. Noxious Weed Control program staff use the most appropriate pest control methods and strategies emphasizing that all mechanical, cultural and biological methods are used for control prior to resorting to chemical methods. Where and when it is necessary to control invasive species in the right-of-way, hand labor and light equipment are mobilized.
- v. San Juan County utilities participate in the San Juan County Utility Coordinating Committee whose purpose is to coordinate development efforts in the right-of-way. OPALCO, Century Link, Zito Media, and the water and sewer users associations on the islands coordinate on project development, timing and construction efforts. These efforts result in positive benefits through the coordination and implementation of joint construction projects. Benefits include minimization of land disturbances in existing disturbed areas/right-of-ways by opening one trench for multiple projects. Such coordination avoids the impacts of multiple construction activities, reduces the number of utility trenches, and the amount of compaction and disturbances of previously undeveloped areas. It also limits the amount of noise and continued removal of vegetation from existing development areas.
- vi. The Weed Control Board's works closely with the following agencies and organizations: Washington State University Integrated Weed Control Project, WSU (San Juan County) Extension Service, San Juan County Land Bank, San Juan County Public Works, San Juan Islands Conservation District, San Juan County Permit Center and many other state and federal agencies to reduce and contain the spread of noxious weeds.
- vii. Where critical habitats or invasive species are known and present, the County places signs in the right-of-way to help regulate the appropriate removal of vegetation to protect habitat or to reduce the spread of noxious weeds. For instance, the County posted signage indicating the presence of the Island Marbled butterfly in the right-of-way on Lopez Island.
- viii. The exemption contains a baseline of mitigation restrictions designed to minimize the risk of impacts from utility installation to critical areas and their buffers.
- ix. The County implements the 2005 Stormwater Management Manual for Western Washington. Utility installation projects are conditioned to comply with Stormwater Management Minimum Requirement #2 to control erosion and prevent sediment and other pollutants from leaving the site during the construction phase of a project. *Appendix*

I-D Wetlands and Stormwater Management Guidelines of the Manual also address development in wetlands.

- III. Section 1 amends SJCC 18.30.110(C)(3)(b), pertaining to utility exemptions in previously undisturbed areas. The statement “provided that reasonable efforts are made to avoid impacts to critical area functions and values,” is deleted because the first step in the mitigation sequence is avoidance. Amendments require compensatory mitigation and establish mitigation measures that must be used when applicable.
- IV. Section 2 amends SJCC 18.30.150 Table 3.5 Item (u)(ii) pertaining to sleeved and water-tight drainfield lines. The word “yes” is changed to “no” in the wetland column. The construction of drainfield lines is not permitted in a wetland.
- V. Section 3 amends a scrivener's error in SJCC 18.30.160 Tale 3.8 Item (g). The word “wetland” is changed to “FWHCA” because the table applies to Fish and Wildlife Habitat Conservation Areas.
- VI. Section 3 also amends SJCC 18.30.160(E)(7)(b)(ii) to correct “300 feet” to “200 feet” because it is a technical area and the review area for FWHCAs is 200 feet.
- VII. These code amendments are consistent with the Board’s order and the GMA.

NOW, THEREFORE BE IT ORDAINED by the County Council of San Juan County, State of Washington, as follows:

SECTION 1. SJCC 18.30.110 and Ord. 2-2014 § 6 are each amended to read as follows:

18.30.110 Critical Areas.

- A. Purpose.** Critical areas overlay districts are adopted to protect the functions and values of critical areas in conformance with the requirements of the Washington Growth Management Act and the policies of the San Juan County Comprehensive Plan. There are five types of critical areas as defined in SJCC 18.30.120 through 18.30.160:
 - 1. Geologically hazardous areas.
 - 2. Frequently flooded areas.
 - 3. Critical aquifer recharge areas.
 - 4. Wetlands.
 - 5. Fish and wildlife habitat conservation areas.
- B. Applicability.** These overlay districts provide regulations for land use, and development and vegetation removal in critical areas and areas adjacent to critical areas as established in SJCC 18.30.120-160.

Applicability to uses and structures within the shorelines of the state. Notwithstanding any provision in this code to the contrary, any use or structure legally located within shorelines of the state that was established or vested on or before the effective date of the County’s development regulations to protect critical areas, shall be regulated consistent with RCW 36.70A.480(3)(c). Such uses or structures may continue as a conforming use and may be redeveloped or modified if the redevelopment or modification is consistent with SJCC Chapter 18.50 and either: (1) the proposed redevelopment or modification will result in no net loss of shoreline ecological functions; or (2) the

redevelopment or modification is consistent with SJCC 18.30.110-.160. If the applicant chooses to pursue option (1), the application materials for required project or development permits must include information sufficient to demonstrate no net loss of shoreline ecological functions. For purposes of this subsection, an agricultural activity that does not expand the area being used for the agricultural activity is not a redevelopment or modification. For purposes of this paragraph "Agricultural activity" has the same meaning as defined in RCW 90.58.065.

C. General Exemptions. When conducted in accordance with the provisions of this subsection (C), and other applicable requirements the following uses and activities are exempt from standard critical area regulations.

1. **Emergency Response.** Those activities necessary to prevent an imminent threat to public health, safety, or the environment; or to public or private property, and that require remedial or preventive action in a time frame too short to allow for review and approval in accordance with critical area requirements. Within seven days of the emergency, the person or agency undertaking the action shall report to the director the extent of the action taken and any adverse impacts to critical area functions and values caused by the action. Any mitigation and/or restoration necessary to bring the action into compliance with these critical area requirements shall be undertaken pursuant to a mitigation plan or other plan that is consistent with the critical area requirements of this chapter. The director shall be the decision maker for these plans.
2. The operation, maintenance, repair, remodel, or replacement of existing structures, facilities, infrastructure systems, development areas and uses, provided there is no further intrusion into geologically hazardous areas, frequently flooded areas, wetlands, or fish and wildlife habitat conservation areas or their buffers; soil erosion is controlled; disturbed areas are promptly stabilized; and actions do not have an additional adverse effect on the functions and values of critical areas. Existing structures, uses and activities located within shorelines of the state are addressed separately as described in SJCC 18.30.110(B) above and 18.30.160.
3.
 - a. Installation, construction of electrical, telecommunications, cable, water, sewer, and other utility lines and equipment within existing structures, facilities, infrastructure systems, development areas and uses, utility easements, and public and private rights-of-way, provided:
 - i. There is no further intrusion into geologically hazardous areas, frequently flooded areas, wetlands, or fish and wildlife habitat conservation areas or their buffers;
 - ii. Soil erosion is controlled;
 - iii. Disturbed areas are promptly stabilized; and
 - iv. ~~Actions do not have any additional adverse effect on the functions and values of critical areas.~~ Any adverse impacts to critical areas are mitigated in accordance with SJCC18.30.110(E).
 - b. Installation and construction of utility lines and equipment not previously covered in SJCC 18.30.110(C)(2) and (C)(3)(a) above provided that reasonable efforts are made to avoid impacts to critical area functions and values, and:
 - i. BMPs are used to minimize clearing, erosion, sedimentation and other soil disturbance;
 - ii. Disturbed areas are promptly stabilized and re-vegetated; and
 - iii. Any adverse impacts to critical areas are mitigated in accordance with SJCC18.30.110(E).
4. Removal of hazard trees as defined in SJCC 18.20.080. In addition, to allow for defensible space for fire protection purposes, 30 feet of vegetation may be cleared around buildings lawfully existing on the effective date of this ordinance.

5. The divisions of land specified in 18.70.010(C) are exempt from critical area compliance review. Parcels created via 18.70.010(C) are, however, subject to compliance with critical area protection requirements, and if created subsequent to the effective date of this ordinance, they are not eligible for reasonable use exceptions.
6. Forest practices regulated under the provisions of RCW Chapter 76.09 and WAC Title 222.
7. Installation of navigation aids and survey markers.
8. Site investigative work associated with land use applications, such as surveys, soil borings, and test holes, provided that critical area functions and values are protected and disturbed areas are immediately restored.

D. Reasonable Use Exception.

It is the policy of San Juan County that private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.

To avoid the taking of property without just compensation, this subsection establishes a reasonable use exception from standard critical area protection regulations. (Also see SJCC section 18.80.100 on the procedures and requirements for approval of a variance). Reasonable use shall be liberally construed to protect the constitutional property rights of the applicant.

1. Reasonable use exceptions only apply to compliance with critical area requirements. They do not relieve the applicant of the duty to comply with other local, State, or Federal requirements.
2. The burden of proof is on the applicant to provide adequate information for the director to make a finding of compliance with the requirements of this subsection (D).
3. Reasonable use exceptions may only be granted for parcels created before the effective date of this ordinance. Reasonable use exceptions cannot be used to justify building on parcels not intended to be used as a building site (e.g. recreational lots including those platted as common area).
4. Two sets of options are available under the reasonable use exception.
Option One – No Mitigation:
 - a. A development area of up to 2,500 square feet of development constructed using Low Impact Development practices may be located in a critical area buffer.
 - b. A development area of up to 1,500 square feet of development constructed using Low Impact Development practices may be located in a critical area.
 - c. A combined development area of 2,500 square feet of low impact development, with no more than 1,500 square feet located in the critical area and the balance located in the critical area buffer.

And;

Option Two – With Mitigation

- a. Up to 10% of the parcel, or up to one half (1/2) acre, or the minimum necessary to allow for reasonable use of the property, whichever is more, may be developed if adverse impacts to critical area functions and values are mitigated in accordance with subsection 18.30.110.E of this section.
- b. Low impact development practices are encouraged in all development under the reasonable use exception and are required for all reasonable use exception development creating a footprint greater than 10,890 square feet in size.

5. Applications for reasonable use exceptions are project permits, which are reviewed and approved by the director as a provisional use permit.
6. Application for a reasonable use exception shall include:
 - a. The applicable items listed in SJCC Section 18.80.020.C (Project Permit Applications-Forms) along with photos of the site and a detailed site plan showing the location of frequently flooded areas within the proposed development area; geologically hazardous areas in or within 200 feet of the proposed development area; wetlands in or within 300 feet of the proposed development area; and fish and wildlife habitat conservation areas in or within 200 feet of the proposed development area; the location of any golden eagle nests in or within 1,000 feet of the proposed development area; and the location of any peregrine falcon or great blue heron nests in or within ¼ mile of the proposed development area;
 - b. Any related project documents such as applications to other agencies or environmental documents prepared pursuant to the State Environmental Policy Act;
 - c. Required critical area reports, critical area delineations, and, for the “with mitigation” option, Best Available Science documents supporting the proposal;
 - d. A copy of proposed or approved storm water and erosion control plans as required by SJCC 18.60;
 - e. A narrative describing anticipated adverse impacts to the functions and values of critical areas, based on Best Available Science, and explaining how the proposal meets the reasonable use exception approval criteria;
 - f. Mitigation, Monitoring and Adaptive Management Plans. For the “With Mitigation” option, plans meeting the requirements of subsection 18.30.110.E for mitigating any adverse impacts or harm that would result in a net loss of the functions and values of critical areas, for monitoring the effectiveness of mitigation actions, and when necessary for adaptively managing the mitigation project to ensure its success;
 - g. For the “With Mitigation” option, a cost estimate, prepared by a qualified professional, for implementing mitigation and monitoring plans;
 - h. Financial Guarantee. For the “With Mitigation” option, a financial guarantee covering 115% of the cost of implementing mitigation and monitoring plans. This guarantee and the associated agreement must meet the requirements of SJCC 18.80.
7. Reasonable Use Exception Approval Criteria.
 - a. The application is complete and includes all applicable items listed in SJCC 18.30.110.D.6.
 - b. The parcel was created before the effective date of this ordinance and was established as a building site.
 - c. The applicant is unable to meet standard critical area protection regulations and the application of SJCC 18.30.110-160 would deprive the land owner of all economic or beneficial use of the property.
 - d. The need for the exception is not the result of action by current or previous property owners after the effective date of this ordinance (e.g., creating new parcels without a feasible building site or means of access).
 - e. Where possible, proposed development areas are located in such a way as to avoid adverse impacts to the functions and values of critical areas, considering the Best Available Science.
 - f. The proposed development meets the requirements of either option One (No Mitigation) or Two (With Mitigation).
 - g. The proposal is consistent with the requirements of subsections D.3 and D.4.
8. Recording of Approved Exception, Site Plan, and Notice to Title.

The County shall record a copy of the approved exception and site plan, along with a Notice to Title referencing the plan, with the cost of recordation included in the application fee.

E. Critical Area Mitigation Requirements.

1. This section outlines the provisions for mitigating adverse impacts to critical area functions and values when mitigation is authorized or required by the San Juan County Code. Possible mitigation actions may include minimizing impacts as well as re-establishment, rehabilitation, restoration, creation, and enhancement.
2. Mitigation, monitoring, and adaptive management plans must be developed by a qualified professional(s).
3. Mitigation, monitoring, and adaptive management plans are reviewed and approved by the decision maker for the underlying permit or approval (director or hearing examiner, depending on type of permit/approval).
4. Preparation of mitigation, monitoring, and adaptive management plans, and their review by the County, which may include referral to independent qualified professionals, shall be at the applicant's expense. If review by a third party is necessary because of the complexity of the plans or apparent errors, the Department may require advance payment of fees for this review based on the estimated review time. As an alternative to third party review, the applicant and the director may jointly select the qualified professional who will complete the plans.
5. Mitigation options include the use of certified mitigation banks and approved in-lieu fee mitigation sites when they are developed.
6. Removal of illegal modifications cannot be used to mitigate new adverse impacts to critical areas when those modifications were made by the owner of the property that is the subject of the application.
7. Mitigation plans must be appropriate for the scale and scope of the project, and include adequate information for the decision maker to determine that the project and application are in conformance with approval criteria. Potential components of an application include the following:
 - a. For both the area proposed for development or vegetation removal, and the proposed mitigation site, the applicable items listed in SJCC Section 18.80.020.C (Project Permit Applications-Forms) as well as photos of both the development and mitigation sites,
 - b. Any related project documents such as applications to other agencies or environmental documents prepared pursuant to the State Environmental Policy Act;
 - c. For both the area proposed for development or vegetation removal, and the proposed mitigation site, applicable critical area reports, critical area delineations and Best Available Science documents supporting the proposal.
 - d. For both the area proposed for development or vegetation removal and the mitigation site, copies of any proposed or approved storm water and erosion control plan required by SJCC 18.60.
 - e. A narrative describing anticipated adverse impacts to critical area functions and values, the mitigation proposal (including the goals of the proposal, performance standards that will be used to gauge the effectiveness of the proposal, construction methods, and the sequence and timing of actions), and explaining how the proposal meets the plan approval criteria. Assessment of adverse impacts to critical area functions and values and of the effectiveness of proposed mitigation shall be based on the Best Available Science.
 - f. For offsite mitigation actions, an explanation of why on-site mitigation was not feasible, along with the site selection criteria employed.
 - g. Grading and excavation details. If grading or excavation is proposed, pre- and post-construction contour plans are required at a scale that is suitable for the site.
 - h. A planting plan (if planting is proposed) identifying plant species, quantities, sizes, locations, spacing, and density, along with proposed measures to protect and maintain the plants until they are established.
 - i. Any other drawings necessary to illustrate the proposal.

- j. Monitoring and adaptive management plans appropriate for the scale and scope of the project. These plans must describe measurable data that will be collected to assess the effectiveness of the project, must include a monitoring schedule (monitoring is required at least once each year, with a report submitted to the Department by November 1), and must explain corrective actions that will be taken to deal with any problems. The project shall be monitored for three (3) years or until the director determines that it is successful, functioning as designed, and that established performance standards have been met.
 - k. For mitigation of adverse impacts to wetlands, the plan, including associated wetland replacement ratios, must be consistent with the guidance provided in *Wetland Mitigation in Washington State - Part 1: Agency Policies and Guidance, Ecology publication 06-06-011a*; and *Wetland Mitigation in Washington State - Part 2, publication 06-06-011b*. As an alternative, mitigation actions may follow the procedures described in Ecology Publication No. 10-06-011, *Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington* or another mitigation approach or publication approved by Ecology.
 - l. A description of the report author's education and experience relevant to designing and implementing the proposed actions.
 - m. A cost estimate, prepared by a qualified professional, for implementing the mitigation plan and monitoring the site for a period of three (3) years or until the project is anticipated to be fully completed and functional as determined by the qualified professional and approved by the decision maker (director or hearing examiner, depending on type of underlying permit).
 - n. Financial Guarantee. Unless exempt under RCW 36.32.590, a financial guarantee and associated agreement covering 115% of the cost of implementing the mitigation and monitoring plans. This guarantee and the associated agreement must meet the requirements of SJCC 18.80, and for mitigation of adverse impacts to Wetlands and Fish and Wildlife Habitat Conservation Areas, it must initially be established to cover a time period of three (3) years or until the project is anticipated to be fully completed and functional as determined by the qualified professional and approved by the decision maker (director or hearing examiner, depending on type of underlying permit). Note: The maximum cost to the property owner is the original cost for implementing and monitoring the project, plus 115% of that cost.
 - o. A statement, signed by the property owner, agreeing to periodic inspections as established in the monitoring plan. The purpose of inspections is to determine compliance with approved plans, and inspections can be performed by either a qualified professional hired by the property owner, or a County representative. If a County representative conducts the inspection(s), they shall be by appointment or following advance written notice.
8. Mitigation Plan Approval Criteria. Approval of mitigation plans shall be based on conformance with the following criteria:
- a. The application includes the applicable items listed in SJCC 18.30.110.E.7.
 - b. Mitigation is authorized or required by the San Juan County code.
 - c. The mitigation, monitoring and adaptive management plans were developed by qualified professionals. For wetlands, the plans, including associated wetland replacement ratios, shall be consistent with the guidance provided in *Wetland Mitigation in Washington State - Part 1: Agency Policies and Guidance, Ecology publication 06-06-011a*; and *Wetland Mitigation in Washington State - Part 2, publication 06-06-011b*. These and other wetland mitigation and monitoring guidance documents are available from the Department of Ecology. As an alternative, mitigation requirements may be determined through application, by a qualified professional, of procedures described in Ecology Publication No. 10-06-011, *Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington* or another mitigation approach or publication approved by Ecology.
 - d. For areas outside shoreline jurisdiction, proposed development is designed and located in such a way as to avoid adversely impacting the functions and values of critical areas,

considering the Best Available Science. If adverse impacts cannot be avoided, then they must be mitigated so there will be no net loss of critical area functions and values, considering the Best Available Science. When necessary, mitigation actions shall occur in the following preferred sequence:

- i. Reduce or minimize adverse impacts by limiting the degree and magnitude of the action, or by applying appropriate technology and engineering;
 - ii. Rectify adverse impacts by repairing, rehabilitating, or restoring the affected environment;
 - iii. Compensate for adverse impacts by replacing, enhancing, or providing similar resources or environments that will substitute for those functions and values that were adversely affected.
- e. For areas within shoreline jurisdiction, mitigation actions must be consistent with the mitigation sequence outlined in SJCC 18.30.160.E.7.
 - f. When feasible, adverse impacts shall be mitigated on site. If this is not possible, and offsite mitigation is proposed, the mitigation site shall be located on the same island, as close as possible to the development site.
 - g. If removal of an illegal modification is proposed as mitigation, the modification was not made by the owner of the property or properties that are the subject of the application.
9. Recording of Approved Plan and Notice to Title. The County shall record a copy of the approved mitigation plan, along with a Notice to Title referencing the plan, with the cost of recordation included in the application fee.
 10. If the goals, objectives and performance standards of the mitigation plan are not met, the decision maker (director or hearing examiner, depending on type of underlying permit or approval) may require additional actions or additional monitoring. To allow for successful completion of the mitigation project, the monitoring period, financial guarantee and associated agreement may be extended.

F. Existing legally established structures, uses, and activities. It is the policy of San Juan County that existing legally established structures, uses and activities existing on the effective date of this ordinance may continue in perpetuity and will not be considered nonconforming as a result of critical area requirements. Existing structures, uses and activities located within shorelines of the state are addressed separately as described in SJCC 18.30.110(B) above.

Because they provide diminished support of the habitat, water quality and hydrologic functions and values of wetlands and FWHCAs, structures and development areas lawfully established prior to the effective date of this ordinance, are excluded from critical areas, their buffers or Tree Protection Zones.

To determine the applicable critical area, buffer, or Tree Protection Zone relevant to this Section, the area should be drawn to exclude all existing development areas.

Any legally established structures, uses, and activities within this area may be modified, replaced, relocated, or expanded within the development area existing on the effective date of this ordinance in conformance with the procedures and requirements of (1) through (3) below.

1. Legally established structures may be modified, replaced, relocated, or expanded within the development area existing on the effective date of this ordinance provided: a) any required project or development permits are obtained; b) the magnitude of adverse impacts to water quality or the functions and values of critical areas are not increased; c) risks to people and property will not be increased; and d) complete application(s) for any required project or development permits for replacement structures are submitted within 48 months of removal or destruction of the original

structure, unless the director extends this time period for good cause, or the property owner provides a letter declaring their intent to rebuild the structure in the future. To retain the right to rebuild, a letter of intent must be submitted every 48 months.

2. Legally established structures may be maintained and repaired within the footprint existing on the effective date of this ordinance, provided any required project or development permits are obtained.
3. Uses and activities may be continued, replaced with other uses or activities, or relocated, provided, any required project or development permits are obtained, and there is no increase in the magnitude of adverse impacts to water quality or the functions and values of critical areas. Relocation of any use or activity in this area shall be reviewed as a provisional use.

G. Nonconforming structures, uses, and activities.

1. A structure for which a variance to critical area requirements has been issued in accordance with SJCC chapter 18.80 shall be considered a legal nonconforming structure.
2. Abandonment of Nonconforming Uses and Activities. Nonconforming uses and activities shall be considered abandoned if the use or activity ceases to operate or is discontinued for 48 consecutive months unless the director extends this time period for good cause, or the property owner provides a letter declaring their intent to continue the use or activity in the future. To retain the right to continue a ceased or discontinued nonconforming use or activity, a letter of intent must be submitted every 48 months.

SECTION 2. SJCC 18.30.150 and Ord. 16-2014 § 1 are each amended to read as follows:

18.30.150 Wetlands.

- A. Applicability.** Unless exempted or allowed under SJCC 18.30.110, the provisions of this section apply to areas in or within 300 feet of wetlands as defined in SJCC 18.20.230. Many wetlands are depicted on various maps developed by the County and natural resource agencies. These maps are, however, only a guide and in all cases conditions in the field shall control. In order to protect their functions and values, development activities, removal of vegetation and other site modifications are limited or prohibited within wetlands and their buffers. Any use or structure legally located within shorelines of the state that was established or vested on or before the effective date of the County's development regulations to protect critical areas, shall be regulated consistent with RCW 36.70A.480(3)(c). Such uses or structures may continue as a conforming use and may be redeveloped or modified if the redevelopment or modification is consistent with SJCC Chapter 18.50 and either: (1) the proposed redevelopment or modification will result in no net loss of shoreline ecological functions; or (2) the redevelopment or modification is consistent with SJCC 18.30.110-160. If the applicant chooses to pursue option (1), the application materials for required project or development permits must include information sufficient to demonstrate no net loss of shoreline ecological functions. For purposes of this subsection, an agricultural activity that does not expand the area being used for the agricultural activity is not a redevelopment or modification. For purposes of this paragraph "Agricultural activity" has the same meaning as defined in RCW 90.58.065.

In addition to County regulations, in some cases wetlands may be regulated under the federal Clean Water Act administered by the U.S. Army Corps of Engineers, or by the Washington State Water Pollution Control Act and/or Shoreline Management Act, administered by the Washington State Department of Ecology. Compliance with County regulations does not relieve the property owner of the responsibility to comply with state and federal requirements.

B. Wetland Rating. San Juan County wetlands are rated according to the *Washington State Wetland Rating System for Western Washington - Revised*, (Ecology Publication #04-06-025) as revised by Ecology. This rating system is designed to differentiate between wetlands based on their sensitivity to disturbance, rarity, irreplaceability, and the functions and values they provide. Wetland ratings must be determined by a qualified wetlands professional.

1. Applicability of rating system. Wetlands should be rated based on their condition at the time of permit application.
2. Wetland rating categories are:
 - a. Category I. These wetlands are the “best of the best.” Category I wetlands represent a unique or rare wetland, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or provide a very high level of functions. These are wetlands that are:
 - i. Relatively undisturbed estuarine wetlands larger than 1 acre;
 - ii. Wetlands that are identified by scientists of the Washington Natural Heritage Program Washington State Department of Natural Resources as high quality wetlands;
 - iii. Bogs;
 - iv. Mature and old-growth forested wetlands larger than 1 acre;
 - v. Wetlands in coastal lagoons; or
 - vi. Wetlands that perform many functions well.
 - b. Category II. These wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands and need a relatively high level of protection. They include:
 - i. Estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre;
 - ii. Disturbed coastal lagoons;
 - iii. Interdunal wetlands larger than 1 acre; or
 - iv. Wetlands with a moderately high level of functions.
 - c. Category III. Generally, wetlands in this category may have been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. These wetlands provide important functions and values. They provide habitat for a variety of flora and fauna and occur more commonly throughout the County than either Category I or II wetlands. Category III wetlands are:
 - i. Wetlands with a moderate level of functions; or
 - ii. Interdunal wetlands between 0.1 and 1 acre in size.
 - d. Category IV. These wetlands are smaller, isolated, and have less diverse vegetation than Category I, II, and III wetlands. Category IV wetlands have the lowest levels of functions and values and are often heavily disturbed.

C. Minimum Size Thresholds for Regulated Wetlands. To allow for the reasonable administration of these regulations, some wetlands are exempted from the requirements of this section based on their size and rating. Wetlands exceeding the following size thresholds are regulated under SJCC 18.30.150:

1. Category I wetlands: no exemption - all wetlands are regulated.
2. Category II and III wetlands: 1,000 square feet.
3. Category IV wetlands and wetland mosaics: 2,500 square feet.

D. Protection Standards. This subsection establishes protection standards for wetlands, including a site-specific procedure for sizing wetland buffers.

1. **Site-Specific Buffer Sizing Procedure.** The following is a site-specific procedure for determining the size of vegetative buffers necessary to protect the water quality, water quantity,

and habitat functions of wetlands. Two separate buffer components, a water quality component, and habitat component, are considered in the procedure

Required buffers apply regardless of whether the wetland is on the same parcel or another parcel that may be under different ownership. If the wetland is under different ownership and is not accessible, then the wetland rating and boundaries are established using available maps and information, including a visual assessment if possible. The Water Quality Buffer is determined first based on the wetland rating category and land use intensity from Tables 3.3 and 3.3A provided in Step 4 below is then determined from Table 3.4. In all cases, conditions on the ground shall control.

a. Determine the Water Quality Buffer.

Step 1. Location relative to wetlands. Is the proposed development, vegetation removal or other site modification located within 300 feet of a wetland? If so, proceed to the next step. In some cases, to answer this question, it may be necessary to have the wetland edge facing the area that will be developed or modified delineated in accordance with subsection (E) of this section. In many cases, this can be based on a wetland reconnaissance rather than a full delineation. Although maps and other imagery can be used to help with this determination, conditions on the ground shall control. If the proposed development, vegetation removal, and other modifications are more than 300 feet from the wetland, no further action is needed for compliance with wetland critical area regulations. (Note: If proposed activities do not require development or project permits, and activities are consistent with the requirements outlined in Table 3.5 and subsections D.6 and D.7 of this section, it may not be necessary to identify the edge of the wetland and the size of the water quality buffer.)

Step 2. Drainage Direction. Does the area proposed to be developed or modified drain to the wetland? If the area proposed to be developed or modified drains to the wetland, delineate the wetland in accordance with subsection (E) of this section and proceed to determine the required Water Quality Buffer. If the area proposed to be developed or modified does not drain to the wetland, a Water Quality Buffer is not required and only a Habitat Buffer applies. Proceed to the Habitat Buffer sizing procedure in subsection (D.1.b) of this section.

Step 3. Wetland Rating Category. Determine the wetland rating category using the *Washington State Wetland Rating System for Western Washington - Revised* (Ecology Publication #04-06-025) as revised by Ecology. This will require the assistance of a qualified professional. (Note: If the wetland contains particular plants or animals protected as Fish and Wildlife Habitat Conservation Areas, a higher rating may apply. See SJCC 18.30.160.B and F).

Step 4. Identify the Water Quality Buffer Width. Using Tables 3.3 and 3.3A below, determine the water quality buffer based on the wetland rating category and land use intensity of the proposed development. Buffers are measured horizontally from the edge of the wetland.

The director may reduce the standard buffer widths in an Urban Growth Area when impacts to critical areas are mitigated according to SJCC 18.30.110(E) and the buffer reduction is consistent with all other applicable requirements of this section provided:

- A. The buffer of a Category I or II wetland shall not be reduced to less than 75 percent of the required buffer or 50 feet, whichever is greater, and

- B. The buffer of a Category III or IV wetland shall not be reduced to less than 50 percent of the required buffer, or 25 feet, whichever is greater.

Table 3.3 Water Quality Buffers³

Water Quality Buffers			
Wetland Rating	Land Use Intensity¹		
	Low	Medium	High
Category I Bogs and Natural Heritage Wetlands²	125 feet	190 feet	250 feet
Categories I and II	50 feet	75 feet	100 feet
Category III	40 feet	60 feet	80 feet
Category IV	25 feet	40 feet	50 feet

¹See Table 3.3A for a list of land uses that are considered low, medium, or high land use intensity.

² If the bog is located within another wetland category, the bog buffer only applies to the area immediately adjacent to the bog, and not to the surrounding wetland. Buffers are measured horizontally from the edge of the wetland.

³ Buffers shall be increased by 50 percent on slopes greater than 30 percent.

Table 3.3A
Land Use Intensity by Type

Land Use Intensity	Types of Land Uses
High	Commercial Urban Industrial Institutional Retail sales Residential at more than 1 unit per acre High intensity agriculture (dairies, nurseries, greenhouses, annual tilling, raising animals etc.) High intensity recreation (golf courses, ball fields etc.)
Medium	Residential at not more than 1 unit per acre Moderate intensity open space (parks with biking, jogging etc.) Paved trails Logging roads Utility corridors with access road Hobby farms
Low	Forestry (limited to cutting of trees) Low intensity agriculture (orchards, hay fields etc.) Low intensity open space (hiking, bird watching etc. allowed) Unpaved trails

Utility corridors without access road and little or no vegetation management
--

b. Determine the Habitat Buffer.

Step 1. Determine the Wetland Rating Category.

Determine the wetland rating category using the *Washington State Wetland Rating System for Western Washington - Revised*, (Ecology Publication #04-06-025) as revised by Ecology (See SJCC 18.30.150.B.). This will require the assistance of a qualified professional. If the wetland contains particular plants or animals protected as Fish and Wildlife Habitat Conservation Areas, a higher rating may apply. See SJCC 18.30.160.B and F.

Step 2. Determine Habitat Buffer from Table 3.4.

Using the wetland rating category and the proposed land use intensity type from Table 3.3A, determine the required size of the Habitat Buffer from Table 3.4. Unlike the Water Quality Buffer, the Habitat Buffer must completely surround the wetland. Buffers are measured horizontally from the edge of the wetland. Proceed to Step 3 if desired. (Note: If no trees are being removed, proposed activities do not require development or project permits, and activities are consistent with the requirements outlined in Table 3.5 and subsections D.6 and D.7 of this section, it may not be necessary to identify the edge of the wetland and the size of the habitat buffer.)

Table 3.4

Habitat Buffers

Wetland Category	Land Use with Low Impact ¹	Land Use with Moderate Impact ¹	Land Use with High Impact ¹
I	150 feet	225 feet	300 feet
II	150 feet	225 feet	300 feet
III	75 feet	110 feet	150 feet
IV	25 feet	40 feet	50 feet

¹See Table 3.3A for types of land uses that can result in low, moderate, or high impacts to wetlands.

Step 3. Habitat Buffer Averaging. Habitat Buffer averaging allows reduction of the required Habitat Buffer in specified locations on the property proposed for development, vegetation removal or other modification, in conjunction with increases of the buffer in other areas, so that the total area of the Habitat Buffer is unchanged. Averaging of the Habitat Buffer will be allowed only if the applicant demonstrates that all of the following criteria are met:

- (A) Averaging is necessary to accomplish the purposes of the proposal, and no reasonable alternative is available;
- (B) If the wetland contains variations in habitat sensitivity due to existing physical characteristics, the reduction from standard Habitat Buffer sizes will occur only contiguous to the area of the wetland determined to be least sensitive;
- (C) The total area contained within the Habitat Buffer after averaging is no less than that

contained within the standard Habitat Buffer prior to averaging;

(D) The Habitat Buffer shall not be reduced by more than 25 percent, and the reduced Habitat Buffer must not occur along more than one-half the circumference of the wetland; and

(E) If a portion of the buffer is to be reduced, the remaining Habitat Buffer area will be enhanced using native vegetation and fencing where appropriate to improve the functional attributes of the buffer, and to provide additional protection for wetland functions and values. A proposal to enhance a buffer shall not be used as justification to reduce an otherwise functional standard Habitat Buffer, unless such buffer reduction complies with all other criteria for buffer averaging.

D.2. Buffers and Roads. Buffers shall not extend across public roads. For private roads, buffers shall not extend across the road when the road design, flow of runoff, quantity of traffic, and/or gap in tree canopy result in an area that does not support the functions and values of the wetland being protected as determined by a qualified professional.

D.3. Structures, Uses and Activities Allowed and Prohibited in Wetlands and Wetland Buffers. Structures, uses and activities that are listed as “yes” uses in Table 3.85 below are allowed in wetlands or wetland buffers, subject to compliance with the San Juan County Code. State or federal requirements administered by the WA Department of Ecology, WA Dept. of Fish and Wildlife, WA Dept. of Natural Resources, or U.S. Army Corps of Engineers may also apply to these areas.

Table 3.5

Structures, Uses and Activities Allowed in Wetlands and Wetland Buffers		
Activity	Allowed Within Wetland	Allowed Within Wetland Buffers
a. Outdoor activities that do not involve modifying the land or vegetation, and that will not adversely affect the functions and values of wetlands.	YES	YES
b. The harvesting of wild plants and foods in conformance with applicable regulations and in a manner that is not injurious to the natural reproduction of wetland plants, provided the harvesting does not require tilling soil, planting, or changing existing topography, water conditions, or water sources except when allowed as an agricultural activity under (e) below.	YES	YES
c. Removal of invasive plants; planting of native wetland plants; and vegetation management activities implemented as part of a habitat management plan developed or approved by a local, state, federal or tribal agency.	YES	YES
d. Agricultural activities conducted in accordance with a voluntary stewardship program developed pursuant to RCW 36.70A.705, with the exception of the construction of agricultural structures which are subject to the same provisions as other structures.	YES	YES
e. With the exception of the construction of agricultural structures, agricultural activities, including seasonal and recurrent activities existing or in development during the year prior to the effective date of these regulations, provided they do not result in additional adverse impacts to the functions and values of wetlands. This can include changing the type of farming, management practices, and crops within the existing geographic area already in use (such as in the rotational management of farmland) as long as the change does not result in additional adverse impacts to	YES	YES

Structures, Uses and Activities Allowed in Wetlands and Wetland Buffers		
Activity	Allowed Within Wetland	Allowed Within Wetland Buffers
wetland functions and values. Agricultural structures are subject to the same provisions as other structures. (Note: See definition of “garden” in SJCC 18.20.070.)		
f. Temporary development activities defined in SJCC 18.20.200 provided that reasonable efforts are made to avoid impacts to wetland functions and values and any adverse impacts are mitigated in accordance with SJCC 18.30.110(E).	NO	YES
g. Non-compensatory enhancement. Wetland restoration or enhancement activities not required as project mitigation, provided the activity is approved by the U.S. Fish and Wildlife Service, the Washington State Department of Ecology, Washington Department of Fish and Wildlife, or other responsible local, state, federal, or tribal jurisdiction.	YES	YES
h. Within the buffers of wetlands rated Category III or IV, the establishment and expansion of orchards and gardens, cultivated and managed with appropriate BMPs and without the use of synthetic chemicals provided that: <ul style="list-style-type: none"> i. They will occupy no more than 4,000 square feet of the buffer; ii. They are installed within the outer 25% of the buffer; iii. Other than fences, no structures or impervious surfaces are constructed or created and fences will not impede the flow of water or prevent the movement of wetland animals; iv. A buffer of at least 30 feet is retained; v. Mowing does not occur in the habitat portion of the buffer until after July 15; and vi. Trees are protected in accordance with this section. 	NO	YES
i. Construction of new ponds in or adjacent to Category IV wetland, as part of a wetland mitigation or non-compensatory enhancement project approved by the County or other responsible state, federal, or tribal jurisdiction. (Note: Construction of new ponds is not allowed in or adjacent to Category I, II, and III wetlands.	YES	YES
j. The construction of trails, stairs, or raised walkways provided that the improvement: <ul style="list-style-type: none"> i. Is designed to direct sheet flow runoff into adjacent vegetation; ii. Prevents adverse impacts to the wetland from runoff and eroding soil; iii. Does not exceed five feet in width; iv. Is constructed of non-toxic materials; v. Does not totally circumnavigate the wetland perimeter; vi. Does not include the placement of fill; and vii. Is consistent with the applicable requirements of subsection E.6 of this section. 	YES	YES
k. Temporary wildlife watching blinds.	YES	YES
l. Drilling and digging of wells provided they are located within the outer 25% of the buffer, that there are no anticipated adverse impacts to adjoining wetlands, that measures are taken to avoid compaction of soils during drilling and development of	NO	YES

Structures, Uses and Activities Allowed in Wetlands and Wetland Buffers		
Activity	Allowed Within Wetland	Allowed Within Wetland Buffers
the well, and that disturbed areas are immediately stabilized and replanted with the type of vegetation found in the buffer.		
m. Limited tree removal to allow for a filtered view from the primary structure, provided: <ul style="list-style-type: none"> i. Stumps are retained and disturbance of the soil and duff layer is minimized; ii. The remaining forest consists of trees that are multi-aged and well distributed across the buffer and the canopy cover for the remaining forest is at least 65%, except directly between the primary structure and the wetland, where the canopy cover may be reduced to not less than 50%; and iii. All vegetation overhanging streams, ponds, lakes, wetlands, and marine waters is retained; and iv. Trees \geq 12 inches dbh are retained. 	NO	YES
n. Temporary development activities defined in SJCC 18.20.200 provided that reasonable efforts are made to avoid impacts to wetland functions and values and any adverse impacts are mitigated in accordance with SJCC 18.30.110I.	NO	YES
o. To allow for a view or for fire hazard reduction, minor trimming and pruning of the foliage of trees and shrubs, provided the health of the trees and shrubs is maintained, trees are not topped, and all vegetation overhanging streams, ponds, lakes, wetlands, and marine waters is retained. In no case shall more than 20% of the foliage of individual trees or shrubs be removed during a 12 month period.	NO	YES
p. Components of stormwater management facilities in conformance with local and State stormwater management requirements and any applicable tree protection requirements. Provided that reasonable efforts are made to avoid impacts to wetland functions and values and any adverse impacts are mitigated in accordance with SJCC 18.30.110I.	NO	YES
q. Fences, provided they do not impede the flow of water or prevent the movement of wetland animals.	YES	YES
r. Road and trail crossings in conformance with subsection E.6 of this section.	YES	YES
s. Development allowed pursuant to an exemption, a reasonable use exception, or provisions for non-conforming structures, uses and activities outlined in SJCC 18.30.110.	YES	YES
t. Maintenance to support or improve the functions and values of wetlands.	YES	YES
u. The following on-site sewage disposal system components: <ul style="list-style-type: none"> i. Water-tight septic tanks and pump chambers; ii. Sleeved and water-tight sewer lines; and iii. Drainfields². <p>These components are allowed when they conform with local and State</p>	NO YES-NO NO	YES YES YES, outside of the water

Structures, Uses and Activities Allowed in Wetlands and Wetland Buffers		
Activity	Allowed Within Wetland	Allowed Within Wetland Buffers
requirements, reasonable efforts are made to avoid impacts to wetland functions and values, and: (A) Appropriate BMPs are used to minimize erosion, sedimentation and soil disturbance; (B) For new systems, limited tree removal is allowed in habitat buffers, provided: (1) Stumps are retained and disturbance of the soil and duff layer is minimized; (2) The remaining forest consists of trees that are multi-aged and well distributed across the buffer and the canopy cover for the remaining forest is at least 65% (3) All vegetation overhanging streams, ponds, lakes, wetlands, and marine waters is retained; and (4) Trees \geq 12 inches dbh are retained; and (C) Any adverse impacts to critical areas or their buffers are mitigated in accordance with SJCC 18.30.110(E).		quality buffer
v. Other uses that will not adversely impact wetland functions and values, considering the Best Available Science.	P/C ¹	P/C ¹

¹“P/C” means Provisional or Conditional Use Permit depending on the level of impacts (see SJCC 18.80.090).

² Drainfields shall not be located within 300 feet of a Natural Heritage Wetland.

D.4. Field Marking of Wetland and Wetland Buffer. Prior to building permit approval, the location of the outer extent of the wetland and any wetland buffer adjacent to the area that will be developed shall be marked in the field, and the Director may require field approval prior to the commencement of permitted activities. Markings for wetlands and buffers shall be maintained throughout the duration of construction activities.

D.5. For recorded plats, short plats and binding site plans the applicant shall show the boundary of required buffers on the face of the plat or plan.

D.6. Road and Trail Crossings. The construction of new or expanded roads, driveways, trails, and associated culverts and bridges across wetlands and their buffers is allowed, provided they are in conformance with SJCC 18.60.080 - 100 and the following. Road and driveway crossings may also be approved through the reasonable use exception process outlined in SJCC 18.30.110.

- a. New roads and driveways may only be constructed across wetlands and their buffers if reasonable efforts are made to avoid and minimize impacts to wetland functions and values.
- b. When practicable, new roads, driveways, trails and walkways must be located on existing road grades, utility corridors, or previously disturbed areas.
- c. When required, permits and approvals must be obtained from appropriate state and federal agencies, including but not limited to: Washington Department of Fish and Wildlife; Washington State Department of Ecology; Washington State Department of Natural Resources; U.S. Army Corps of Engineers; U.S. Coast Guard; NOAA Fisheries Service; and U.S. Fish and Wildlife Service.

- d. Roads must cross wetlands and their buffers at, or as close as possible to, a ninety degree angle.
- e. Crossings must not interfere with the flow and circulation of water or other wetland processes. The location and design of the road or driveway crossing must be evaluated by a qualified wetland professional or other qualified professional, to ensure that wetland processes will not be adversely affected.
- f. Construction must occur during any work windows and time limits established by the state or federal agencies with jurisdiction.
- g. All crossings must be designed to accommodate 100-year flood flows.
- h. Whenever practicable, crossings must serve multiple properties.
- i. When expanding existing crossings that do not meet these standards, the crossing must be upgraded as necessary to reduce wetland impacts and meet the requirements of this subsection (D.6). For purposes of this section, an expansion is an increase in the footprint of crossing structures and associated roads or trails.
- j. Roads and driveways must be crowned, in-sloped, or out-sloped to sheet flow runoff from the road surface and into vegetated areas such as grass-lined ditches or drainageways.
- k. Where roads and trails cross wetlands, adverse impacts must be mitigated in accordance with SJCC 18.30.110.

D.7. Lighting. Exterior lighting fixtures must be shielded and the light must be directed downward and away from wetlands, their buffers, and the habitat of any species listed as endangered, threatened, sensitive, or a San Juan County species of special importance.

D.8. Final Inspections and Financial Guarantees. Unless exempt under SJCC 18.30.110, all development activities, vegetation removal and other site modifications requiring a project permit or a development permit, must have a final inspection to verify compliance with approved plans and the requirements of this section. The property owner shall notify the Department when the work is complete and ready for inspection. For permitted projects that are not complete at the time that any associated building construction is completed, or for those that do not occur in conjunction with a permitted structure, the Director may require a financial guarantee and associated agreement in conformance with SJCC chapter 18.80.

E. Determination of Wetland Boundary and Requirements for Wetland Reports.

1. The purpose of wetland boundary delineations and wetland reports is to provide the information necessary to determine compliance with the wetland protection requirements of the County Code, and to help maintain protected areas over time.
2. The delineation of wetland boundaries, and except as noted, the preparation of wetland reports, must be performed by a qualified wetlands professional.
3. If a wetland is under different ownership and is not accessible by the applicant, the wetland boundaries and information for the report will be obtained from available maps and information, including a visual assessment if possible.
4. The necessary scope of wetland delineations and reports ranges from a wetland reconnaissance that simply confirms the presence or absence of a wetland, determines the wetland type, rating, and approximate size, and identifies the edge of the wetland in a limited area, to a delineation of the entire wetland with a detailed report describing its functions and values.
5. A wetland report and boundary delineation, with an appropriate scope and scale to determine compliance with the County Code, must be provided with applications for project and development permits located within 300 feet of wetlands.

6. Identification of wetland boundaries. Wetland boundaries shall be determined through a field investigation by a qualified wetlands professional using the definitions and methods prescribed in the 1987 U.S. Army Corps of Engineers "*Corps of Engineers Wetlands Delineation Manual*," Technical Report Y-87-1, including any applicable regional supplements.
7. If the applicant wishes to have a delineation entered into the County's Geographic Information System (GIS) for future wetland mapping, a copy of the delineation must be submitted to the County in a compatible electronic format.
8. Wetland reports – minimum requirements. Following are required components of wetland reports that are necessary to determine compliance with the wetland protection requirements of the County Code. Requirement 8.a.i., 8.b., 8.c. and 8.e. must be provided by a qualified wetlands professional. Other materials may be added by the property owner, contractor or other professional.
 - a. Map. A map at a scale and level of accuracy that is appropriate for the site and the project, showing:
 - i. Location of the wetland. If a full delineation is not completed, the map must indicate where the wetland boundaries were delineated, and where they were estimated.
 - ii. Location of the required habitat buffer.
 - iii. Location of the water quality buffer if known.
 - iv. Existing and proposed development features including structures, roads, utilities, stormwater and sewage systems, areas to be graded, and areas to be converted to lawns and gardens.
 - b. A narrative describing the vegetation communities on site, classified in accordance with the U.S. Fish and Wildlife Service *Classification of Wetland and Deepwater Habitats of the United States* (1979).
 - c. Wetland rating category based on the *Washington State Wetland Rating System for Western Washington - Revised*, (Ecology Publication #04-06-025) as revised by Ecology.
and a narrative explaining the basis for the determination of wetland rating category.
 - d. If the wetland contains particular plants or animals protected as Fish and Wildlife Habitat Conservation Areas, a higher rating may apply. See SJCC 18.30.160 B and F.
 - e. Expiration date of wetland report. Wetland reports are valid for a period of five (5) years.
9. Wetland reports – other elements that may be necessary to determine compliance with the wetland protection requirements of the County Code. These items must be provided by a qualified wetlands professional.
 - a. Hydrologic conditions including inflow/outflow, sources of water within the system, and seasonal changes in hydrology.
 - b. Detailed description of wetland functions and values.
 - c. Mitigation plan meeting the requirements of SJCC 18.30.110.
 - d. Other.

SECTION 3. SJCC 18.30.160 and Ord. 2-2014 § 10 are each amended to read as follows:

18.30.160 Fish and Wildlife Habitat Conservation Areas (FWHCAs).

A. Applicability. Unless exempted or otherwise allowed under SJCC 18.30.110, the provisions of this section apply to uses and activities in or within 200 feet of fish and wildlife habitat conservation areas as defined in SJCC Title 18 (the Unified Development Code). In addition, this section applies to uses and activities located within 1,000 feet of a golden eagle nest, and ¼ mile of a peregrine falcon or great blue heron nest. Many of these areas are depicted on maps, however, these maps are only a guide and in all cases conditions in the field shall control. In order to protect their functions and values, this section limits

development activities, removal of vegetation and other site modifications within FWHCAs and their buffers.

In some cases, fish and wildlife habitat conservation areas may overlap geologically hazardous areas, frequently flooded areas, or wetlands regulated under SJCC 18.30.120, 18.30.130, and 18.30.150, or shorelines regulated under SJCC chapter 18.50. If there are conflicts, unless directed otherwise in this section, the most restrictive requirement applies.

For areas within shoreline jurisdiction, these requirements apply in addition to the standards of SJCC Chapter 18.50, until they are replaced with an approved comprehensive update of the Shoreline Master Program. With the exception of SJCC 18.50.330.B.19 (pertaining to existing platted setbacks), in case of conflict the more restrictive requirement applies.

Notwithstanding any provision in this code to the contrary, any use or structure lawfully located within shorelines of the state that was established or vested on or before the effective date of this ordinance, shall be regulated consistent with RCW 36.70A.480(3)(c). Such uses or structures may continue as a conforming use and may be redeveloped or modified if the redevelopment or modification is consistent with SJCC Chapter 18.50 and either: (1) the proposed redevelopment or modification will result in no net loss of shoreline ecological functions; or (2) the redevelopment or modification is consistent with SJCC 18.30.110 – 160. If the applicant chooses to pursue option (1), the application materials for required project or development permits must include information sufficient to demonstrate no net loss of shoreline ecological functions. For purposes of this subsection, an agricultural activity that does not expand the area being used for the agricultural activity is not a redevelopment or modification. For purposes of this paragraph “agricultural activity” has the same meaning as defined in RCW 90.58.065.

In addition to County regulations, in some cases activities in fish and wildlife habitat conservation areas may be regulated by State and Federal agencies including the WA Department of Ecology, WA Department of Fish and Wildlife, WA Department of Natural Resources, and the U.S. Army Corps of Engineers. Compliance with County regulations does not relieve the property owner of the responsibility to comply with state and federal requirements.

B. Types of Fish and Wildlife Habitat Conservation Areas (FWHCAs).

Following are the types of fish and wildlife habitat conservation areas protected by these regulations. Fish and wildlife habitat conservation areas do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of and are maintained by a port district or an irrigation district or company.

- 1. Areas with which endangered, threatened and sensitive species have a primary association:**
 - a. Animal species listed under the State or Federal Endangered Species Acts as of the adoption date of this ordinance are identified below.

<p>Birds¹</p> <p>Brown pelican Common loon Marbled murrelet Peregrine falcon</p> <p>Marine Mammals</p> <p>Southern resident orca Steller sea lion Humpback whale Gray whale Sea otter</p>	<p>Insects</p> <p>Taylor's Checker-spot butterfly</p> <p>Fish</p> <p>Salmon Chinook - Puget Sound ESU² Chum - Hood Canal Summer Run ESU² Steelhead - Puget Sound DPS³ Rockfish Boccocio - Georgia Basin DPS³ Canary - Georgia Basin DPS³ Yelloweye - Georgia Basin DPS³</p>
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¹The bald eagle has been delisted but continues to be protected under other statutes.

²Evolutionary Significance Unit.

³Distinct Population Segment.

- b. Plants listed under the State or Federal Endangered Species Acts as of the adoption date of this ordinance are identified below.

<ul style="list-style-type: none"> • Adder's-tongue (<i>Ophioglossum pusillum</i>) • Arctic Aster (<i>Eurybia merita</i>) • Blunt-leaved Pondweed (<i>Potamogeton obtusifolius</i>) • California Buttercup (<i>Ranunculus californicus</i>) • Coast Microseris (<i>Microseris bigelovii</i>) • Erect Pygmy-weed (<i>Crassula connata</i>) • Few-flowered Sedge (<i>Carex pauciflora</i>) • Golden Paintbrush (<i>Castilleja levisecta</i>) 	<ul style="list-style-type: none"> • Lesser Bladderwort (<i>Utricularia minor</i>) • Nuttall's Quillwort (<i>Isoetes nuttallii</i>) • Slender Crazy Weed (<i>Oxytropis campestris</i> var. <i>gracilis</i>) • Rosy Owl-clover (<i>Orthocarpus bracteosus</i>) • Rush Aster (<i>Symphyotrichum boreale</i>) • Sharpfruted Peppergrass (<i>Lepidium oxycarpum</i>) • Twayblade (<i>Liparis loeselii</i>) • Water Lobelia (<i>Lobelia dortmanna</i>) • White Meconella (<i>Meconella oregana</i>) • White-top Aster (<i>Sericocarpus rigidus</i>)
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2. **Shellfish areas;**
3. **Kelp and eelgrass beds;**
4. **Herring, smelt, sand lance and other forage fish spawning areas;**
5. **Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat;**
6. **The following waters of the State: lakes and streams;**
7. **State natural area preserves, natural resource conservation areas and state wildlife areas;**
8. **Habitats of Local Importance;**
 - a. Critical salt water habitats. These habitats include all kelp beds; eelgrass beds; spawning and holding areas for forage fish, such as herring, smelt and sandlance; subsistence, commercial and recreational shellfish beds; mudflats; intertidal habitats with vascular plants; and areas with which priority species have a primary association.
 - b. West Side Prairie.

- c. Herbaceous Balds and Bluffs.
- d. Garry oak (*Quercus garryana*) woodlands and savannas.
- e. Pocket beaches.
- f. Bluff backed beaches.

9. Areas with which the following species of local importance have a primary association.

- a. Black oystercatcher.
- b. Golden eagle.
- c. Great blue heron.
- d. Island marble butterfly.
- e. Pigeon guillemot.
- f.. Townsends big eared bat.
- g. Flying squirrel
- h. Sharp-tailed snake.
- i. Western toad.
- j. Taylor's checkerspot butterfly.
- k. Great arctic butterfly.
- l. Valley silverspot butterfly.
- m. Sand verbena moth.
- n. Areas with roosting concentrations of bats (all species).
- o. Active nests of any of the following birds: golden eagle, northern harrier, merlin, black oystercatcher, Wilson's snipe, short-eared owl, long-eared owl, northern pygmy-owl, sooty grouse, common nighthawk, American dipper, western bluebird, chipping sparrow, vesper sparrow, horned lark, western meadowlark, western screech owl, lazuli bunting, and American kestrel.
- p. Brittle prickly pear cactus (*Opuntia fragilis*).
- q. Alaska alkaligrass (*Puccinellia nutkaensis*)

C. Maps. Maps of FWHCAs, including those created and maintained by State and Federal agencies, are available from San Juan County. These maps show lakes, the location and type of most streams, and the approximate location of some protected species and habitats. These maps are however only a guide to the possible location of these critical areas, and conditions in the field control. Maps showing habitats and species that have been positively identified, including Type F streams, shall however be presumed to be correct until proven otherwise by a qualified professional. (Note: Though State regulations prohibit general dissemination of detailed maps showing the location of protected species, staff can provide available information for particular sites).

D. General Protection Standards for all FWHCAs.

1. **Lighting.** Exterior lighting fixtures must be shielded and the light must be directed downward and away from streams, lakes, ponds designated as FWHCAs, the marine shoreline, and habitat of specific animals protected under this section.
2. **Final Inspections and Financial Guarantees.** Unless exempt under SJCC 18.30.110, all development activities, vegetation removal and other site modification requiring a project or development permit, must have a final inspection to verify compliance with approved plans and the requirements of this section. The property owner shall notify the Department when the work is complete and ready for inspection. For permitted projects that are not complete at the time that any associated building construction is completed, or for those that do not occur in conjunction with a permitted structure, the Director may require a financial guarantee and associated agreement in conformance with SJCC chapter 18.80.

E. Protection Standards for Aquatic Fish and Wildlife Habitat Conservation Areas (FWHCAs).

This subsection establishes protection standards for aquatic FWHCAs including a site specific procedure for sizing buffers and Tree Protection Zones.

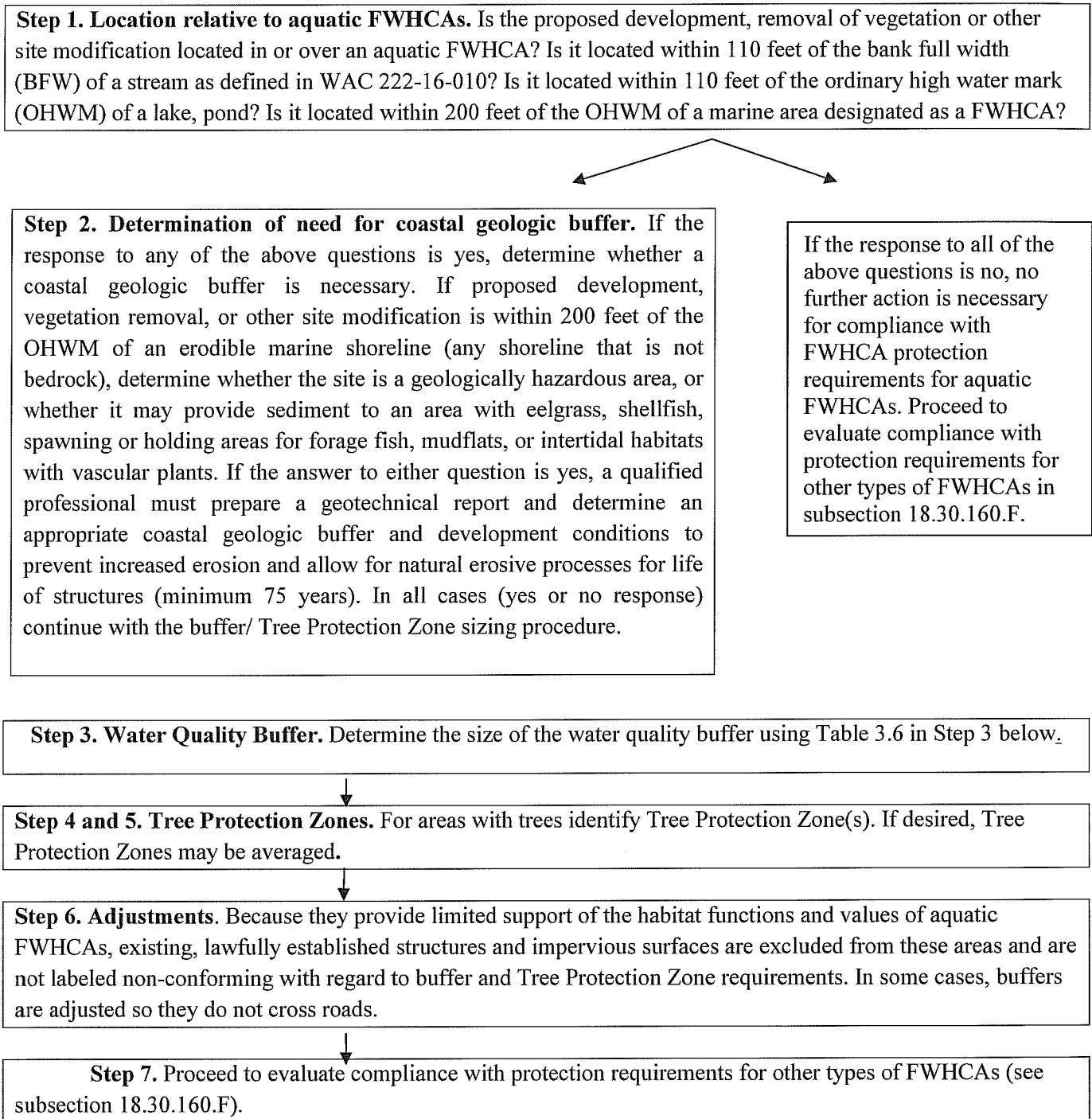
Aquatic FWHCAs are those that contain or are inundated with water at some time during a normal year as follows:

- Streams.
- Lakes.
- Naturally occurring ponds that provide fish and wildlife habitat.
- Shellfish areas.
- Kelp and eelgrass beds.
- Spawning and holding areas for forage fish.
- Mudflats.
- Intertidal habitats with vascular plants.
- Pocket beaches.
- Bluff backed beaches including associated feeder bluffs.
- Areas with which the following have a primary association: brown pelican; common loon; marbled murrelet; peregrine falcon; southern resident orca; Steller sea lion; humpback whale; gray whale; sea otter; designated stocks of steelhead and chinook and chum salmon; bocaccio rockfish; canary rockfish; yelloweye rockfish; black oystercatcher; great blue heron; and pigeon guillemot.

1. **Sizing Procedures for Buffers and Tree Protection Zones.** This subsection provides a site specific procedure for determining the size of vegetative buffers and Tree Protection Zones necessary to protect aquatic FWHCAs. Three separate components are considered: a water quality buffer that applies in all cases, Tree Protection Zones that apply to areas with trees, and a coastal geologic buffer that applies to areas subject to erosion caused by currents, tidal action, or waves. For properties with characteristics that vary, (e.g. a portion of the parcel has trees or a geologically hazardous area, and other areas of the parcel do not), the size of required buffers and Tree Protection Zones may vary, resulting in buffers and Tree Protection Zones that are larger in some areas and smaller in others. (Note: SJCC 18.50.330 also contains setback standards for marine shorelines and lakes over 20 acres).

The procedure for sizing buffers and Tree Protection Zones is illustrated in the following flow chart and step by step assessment process.

Figure 3.1
Procedure for Determining Buffers and Tree Protection Zones for Aquatic FWHCAs



Site-Specific Procedure for Sizing Buffers and Tree Protection Zones

Step 1. Location relative to aquatic FWHCAs. Is the proposed development, removal of vegetation or other site modification located in or over a designated aquatic FWHCA? Is it located

within 110 feet of the bank full width (BFW) of a stream as defined in WAC 222-16-010? Is it located within 110 feet of the ordinary high water mark (OHWM) of a lake or pond? Is it located within 200 feet of the OHWM of a marine area designated as a FWHCA? If the answer to any of these questions is yes, continue to the next question. If the answer to all of these questions is no, no further action is necessary for compliance with requirements for aquatic FWHCAs; proceed to subsection 18.30.160.F to evaluate compliance with protection requirements for other types of FWHCAs.

Step 2. Determine if coastal geologic buffer is necessary. If proposed development, vegetation removal or other site modification is within 200 feet of the OHWM of an erodible marine shoreline (any shoreline that is not bedrock), determine if the site is a geologically hazardous area (see SJCC 18.30.120), or if it may provide sediment to an area with eelgrass, shellfish, spawning or holding areas for forage fish, mudflats, or intertidal habitats with vascular plants. If yes, a qualified professional must prepare a geotechnical report in accordance with SJCC 18.30.120, determine erosion causes and rates, and determine appropriate buffers and other measures to prevent increased erosion and allow for natural erosive processes for life of the structure (minimum 75 years). If collection and direct discharge of stormwater is recommended, the stormwater, including runoff from the roof, must first be treated to remove contaminants.

Step 3. Determine the size of the Aquatic FWHCA water quality buffer using Table 3.6. The director may reduce the standard buffer widths in an Urban Growth Area when impacts to critical areas are mitigated according to SJCC 18.30.110(E) and the buffer reduction is consistent with all other applicable requirements of this section provided that the buffer of an Aquatic FWHCA shall not be reduced to less than 75 percent of the required buffer or 50 feet, whichever is greater.

Table 3.6 Aquatic FWHCA Water Quality Buffers²

Land Use Intensity ¹		
Low	Medium	High
50 feet	75 feet	100 feet

¹See Table 3.3A for a list of land uses that are considered low, medium or high land use intensity.

²Buffers shall be increased by 50 percent on slopes greater than 30 percent.

The water quality buffer extends landward horizontally from the bank full width of streams (as defined in WAC 222-16-010) and the OHWM of lakes, ponds, and marine shorelines.

Step 4. For areas with trees, including individual trees, identify Tree Protection Zones. Trees and the wood, leaves, needles and insects that are associated with trees, help support the aquatic food chain and aquatic FWHCAs. Use Table 3.7 to determine the landward extent of the area to be evaluated for Tree Protection Zone requirements. If any trees are in these evaluation areas, they must be protected with a Tree Protection Zone. Tree Protection Zones include the area within the drip line of each tree along with the area between the drip line and the bank full width of streams or the OHWM of lakes, ponds, or marine shorelines. For individual trees, the Tree Protection Zone must be at least as wide as the drip line of the tree being protected. For example, for a type F stream with one tree with the trunk located 80 feet from the bank full width of the stream, with a drip line

30 feet in diameter, the dimensions of the Tree Protection Zone would be 30 ft. by 80 ft. plus the area within the drip line on the uphill side of the tree. For a tree with the trunk located 20 feet from the shoreline, with a drip line 30 feet in diameter, the dimension of the Tree Protection Zone would be 30 ft. by 20 ft. plus the area within the drip line on the uphill side of the tree.

**Table 3.7
Tree Protection Zone Evaluation Area**

Type of Water Body ¹	Tree Protection Zone Evaluation: Area (measured horizontally)
Type F (Type 2 or 3) streams, lakes, ponds designated as FWHCAs, and marine waters (Type S) designated as FWHCAs	110 feet from Ordinary High Water Mark or Bank Full Width ²
Type Np (Type 4) streams	50 feet from Bank Full Width
Type Ns (Type 5) streams	30 feet from Bank Full Width
Type Ns (Type 5) streams flowing less than 6 months per year	Stream banks must be vegetated.

¹ Stream types under both the new and old classification systems shown (see WAC 222-16-030 and 031).

² Within urban growth areas this may be reduced to 50 feet if adverse impacts are identified and mitigated in accordance with SJCC 18.30.110.E.

Step 5. Averaging of Tree Protection Zones. Averaging of Tree Protection Zones allows reduction of the zone in specified locations on the property proposed for development, vegetation removal or other site modification, in conjunction with increases of the zone in other areas, so that the total area of the zone is unchanged. The applicant may average the Tree Protection Zone if all of the following criteria are met:

- a. Averaging is necessary to accomplish the purposes of the proposal, and no reasonable alternative is available;
- b. The total area contained within Tree Protection Zones after averaging is no less than that contained within the Zones prior to averaging;
- c. Only areas with trees located within 200 feet of the OHWM or bank full width will be counted toward the required area of the Tree Protection Zones; and
- d. In no case shall the Tree Protection Zones be reduced to less than the water quality buffer or 70 feet, whichever is greater.

Step 6. Adjustments.

Buffers and Tree Protection Zones Do Not Cross Some Roads. Buffers and Tree Protection Zones do not extend across public roads. For private roads, buffers and Tree Protection Zones do not extend across the road when the road design, flow of runoff, quantity of traffic, and/or gap in tree canopy result in an area that does not support functions and values of the FWPCA to be protected, as determined by a qualified professional.

Step 7. Proceed to evaluate compliance with protection requirements for other types of FWHCAs in subsection 18.30.160.F.

E.2. Structures, Uses and Activities Allowed and Prohibited in and over Aquatic FWHCAs and their Water Quality Buffers and Tree Protection Zones.

Development activities, removal of vegetation and other site modifications are limited or prohibited within aquatic FWHCAs and their water quality buffers and Tree Protection Zones. Allowable

activities vary depending on whether the activity is within a Tree Protection Zone or a water quality buffer, and are described separately below.

a. Tree Protection Zones are divided into two sections: Zone 1 consists of the first 35 feet adjacent to the water, beginning at the OHWM, or for streams, the bank full width. Zone 2 is the remainder of the Tree Protection Zone.

To allow for a view or for fire hazard reduction, minor trimming and pruning of the foliage of trees within both Zone 1 and Zone 2 is permitted provided the health of the trees is maintained, trees are not topped, and all branches and foliage overhanging aquatic FWHCAs is retained. In no case shall more than 20% of the foliage of a tree be removed during one 12 month period

Within Zone 1 no tree removal is allowed (though pruning is allowed in conformance with the above requirements). Within Zone 2 construction of one primary structure, and/or limited tree removal to allow for a filtered view from the primary structure, are allowed in conformance with all of the following:

- i. The structure, impervious areas, and areas where soils will be graded, compacted or where the organic soil horizon will be removed, are located landward of the water quality buffer;
- ii. Appropriate BMPs are used to minimize erosion, sedimentation, and soil disturbance;
- iii. No more than 40% of the volume of trees over 6 inches dbh are removed in any 10 year period;
- iv. Stocking levels for trees \geq six inches dbh will not be reduced to less than:
 - (A) Softwood stands such as Douglas fir (>66% softwood volume): 80s.f. basal area per acre including the area covered by any structures (approximately equivalent to 21% canopy cover);
 - (B) Mixed wood stands (34%-66% softwood volume): 70 s.f. basal area per acre including the area covered by any structures; and
 - (C) Hardwood stands such as maple (<34% softwood volume): 50 s.f. basal area per acre including the area covered by any structures;
- v. The remaining forest consists of trees that are multi-aged and are well distributed across the Tree Protection Zone;
- vi. All vegetation overhanging aquatic FWHCAs is retained; and
- vii. For primary structures to be located in Zone 2, there is a low probability of increased windthrow of trees within Tree Protection Zones as determined by a qualified professional.

b. Water Quality Buffers. Structures, uses and activities that are listed as “Yes” uses in Table 3.8 below are allowed within aquatic FWHCAs and required water quality buffers, subject to compliance with other sections of the San Juan County Code. State or federal requirements, administered by the WA Department of Ecology, WA Dept. of Fish and Wildlife, WA Dept. of Natural Resources, and U.S. Army Corps of Engineers, may also apply to these areas.

**Table 3.8
Structures, Uses and Activities Allowed in and over Aquatic FWHCAs and Their Water Quality Buffers**

Activity	Aquatic FWHCA (the area within the water)	Buffer
a. Outdoor uses and activities that do not involve modifying the land or vegetation, and that will not adversely affect the functions and values of FWHCAs.	YES	YES
b. The harvesting of wild plants and foods in conformance with applicable regulations and in a manner that is not injurious to the natural reproduction of native plants, provided the harvesting does not require tilling soil, planting, or changing existing topography, water conditions, or water sources, except when allowed as an agricultural activity under (e) below.	YES	YES
c. Removal of invasive plants; planting of native plants; vegetation management activities intended to preserve and maintain specific habitats for rare species; and vegetation management activities implemented as part of a habitat management plan developed or approved by a local, state or federal agency.	YES	YES
d. Agricultural activities conducted in accordance with a voluntary stewardship program developed pursuant to RCW 36.70A.705, with the exception of the construction of agricultural structures which are subject to the same provisions as other structures.	YES	YES
e. With the exception of the construction of agricultural structures, agricultural activities, including seasonal and recurrent activities, existing or in development during the year prior to the effective date of this ordinance, provided they do not result in additional adverse impacts to the functions and values of FWHCAs. This can include changing the type of farming, management practices, and crops within the existing geographic area already in use (such as in the rotational management of farmland) as long as the change does not result in additional adverse impacts to FWHCA functions and values. Agricultural structures are subject to the same provisions as other structures. (Note: See definition of “garden” in SJCC 18.20.070.)	YES	YES
f. Aquacultural activities including seasonal and recurrent activities, existing or in development during the year prior to the effective date of this ordinance, provided they do not result in additional adverse impacts to the functions and values of aquatic FWHCAs. This can include changing the type of aquaculture, management practices, and products within the existing geographic area already in use, as long as the change does not result in additional adverse impacts to FWHCA functions and values. Aquacultural structures are subject to the same provisions as other structures. Aquacultural activities are also subject to the requirements of SJCC Chapter 18.50.	YES	YES
g. Temporary development activities defined in SJCC 18.20.200 provided that reasonable efforts are made to avoid impacts to wetland FWHCA functions and values and any adverse impacts are mitigated in accordance with SJCC 18.30.110(E).	NO	YES
h. New and expanding aquacultural activities that are consistent with appropriate best management practices (BMPs) approved by the Dept. of Ecology. The BMPs must be described in a management plan. New and expanding aquacultural activities must not result in additional adverse impacts to FWHCA functions and values. New aquacultural structures are subject to the same provisions as other structures. Aquacultural activities are also subject to the requirements of SJCC Chapter 18.50.	YES	YES

i. Non-compensatory Enhancement. Restoration or enhancement activities not required as project mitigation, provided the activity is approved by the U.S. Fish and Wildlife Service, the Washington State Department of Ecology, Washington State Department Fish and Wildlife, or other responsible local, state, federal, or tribal jurisdiction.	YES	YES
j. Within the water quality buffers of aquatic FWHCAs, the establishment and expansion of orchards and gardens, cultivated and managed with appropriate BMPs, and without the use of synthetic chemicals, provided that: <ul style="list-style-type: none"> i. They will occupy no more than 4,000 square feet of the buffer; ii. They are installed within the outer 25% of the buffer; iii. Other than fences, no structures or impervious surfaces are constructed or created, and fences will not impede the flow of water or prevent wildlife access to streams, ponds, lakes or shorelines designated as FWHCAs; iv. A buffer of at least 30 feet is retained. v. Trees within Tree Protection Zones are protected in accordance with this section. 	NO	YES
k. The construction of trails, stairs, or raised walkways, provided that the improvement: <ul style="list-style-type: none"> i. Is designed to direct sheet flow runoff into adjacent vegetation; ii. Does not exceed five feet in width; iii. Is constructed of non-toxic materials; iv. Does not include the placement of fill; v. Is consistent with the applicable requirements of subsection 18.30.160.E.5; and vi. For areas within shoreline jurisdiction, the improvement is consistent with the requirements of SJCC Chapter 18.50 and subsection 18.30.160. E.7. 	YES	YES
l. Temporary wildlife watching blinds.	YES	YES
m. Drilling and digging of wells, provided they are located within the outer 25% of the water quality buffer, that there are no anticipated adverse impacts to adjoining FWHCAs, that measures are taken to avoid compaction of soils during drilling and development of the well, and that disturbed areas are immediately stabilized.	NO	YES
n. To allow for a view or for fire hazard reduction, minor trimming and pruning of the foliage of trees and shrubs, provided the health of the trees and shrubs is maintained, trees are not topped, and all vegetation overhanging aquatic FWHCAs is retained. In no case shall more than 20% of the foliage of individual trees or shrubs be removed during one 12 month period.	NO	YES
o. Components of stormwater management facilities in conformance with local and State stormwater management requirements and the Tree Protection Zone requirements of this section, provided that reasonable efforts are made to avoid impacts to Aquatic FWHCA functions and values and any adverse impacts are mitigated in accordance with SJCC 18.30.110(E).	NO	YES
p. Fences provided they do not impede the flow of water or prevent wildlife access to the shoreline.	NO	YES
q. Stream crossings, and roads and trails in water quality buffers and Tree Protection Zones, in conformance with subsection 18.30.160.E.5.	YES	YES
r. Storage of chemicals.	NO	NO
s. Components of on-site sewage disposal system in conformance with local and state requirements: <ul style="list-style-type: none"> i. Water-tight septic tanks and pump chambers; 	NO	YES
<ul style="list-style-type: none"> ii. Sleeved and water-tight sewer lines; and/or 	YES	YES
<ul style="list-style-type: none"> iii. Drainfields. These components are allowed provided reasonable efforts are made to avoid impacts to Aquatic FWHCA functions and values, and: 	NO	YES, outside

(A) BMPs are used to minimize erosion, sedimentation and soil disturbance; (B) For new systems, trees within Tree Protection Zones are retained in accordance with subsection E.2 of this section; (C) Any adverse impacts to critical areas are mitigated in accordance with SJCC 18.30.110(E); and (D) For replacement of existing, failing system where there is no other alternative that will meet State requirements (including locating the new system in the same place as the old system, trees within the Tree Protection Zones are retained to the greatest extent possible).		of the water quality buffer
t. Development, vegetation removal, or other modification allowed pursuant to an exemption, a reasonable use exception, and provisions for non-conforming uses, structures and activities outlined in SJCC 18.30.110.	YES	YES
u. Structures, uses and activities allowed pursuant to an approved variance (see SJCC 18.80.100).	YES	YES
v. Shoreline modifications in conformance with SJCC 18.50 and subsection 18.30.160.E.7.	YES	YES
w. Other uses that will not adversely impact the functions and values of aquatic FWHCAs, considering the Best Available Science.	P/C ¹	P/C ¹

¹ "P/C" means Provisional or Conditional Use Permit depending on the level of impacts (see SJCC 18.80.090).

E.3. Field Marking of Buffers and Tree Protection Zones. Prior to building permit approval, the location of the outer extent of buffers and Tree Protection Zones adjacent to the area that will be developed shall be marked in the field, and the Director may require field approval prior to the commencement of permitted activities. Markings for buffers and Tree Protection Zones shall be maintained throughout the duration of construction activities.

E.4. For recorded plats, short plats, and binding site plans the applicant shall show the boundary of required buffers and Tree Protection Zones on the face of the plat or plan.

E.5. Stream Crossings, Roads, and Trails in Water Quality Buffers and Tree Protection Zones. The construction of new or expanded roads, driveways, trails and associated culverts and bridges across streams, buffers and Tree Protection Zones are allowed in conformance with SJCC 18.60.080 - 100 and the following:

a. New roads and driveways may only be constructed across streams, or through buffers or Tree Protection Zones, if there is no practicable alternative.

b. For type F streams, bridges, culverts and crossings shall be designed according to the Washington Dept. of Fish and Wildlife "Design of Road Culverts for Fish Passage, 2003". For streams that support fish that are designated for protection under the Federal Endangered Species Act, the following may also apply as determined by the agencies with jurisdiction: the National Marine Fisheries Service "Guidelines for Salmonid Passage at Stream Crossings, 2000"; and "Washington State Fish Passage and Habitat Enhancement Restoration Programmatic", National Marine Fisheries Service Tracking No. 2008-03598.

c. When practicable, new roads, driveways, trails and walkways shall be located on existing road grades, utility corridors or previously disturbed areas.

d. When required, permits and approvals must be obtained from appropriate state and federal agencies, including but not limited to: Washington Department of Fish and Wildlife; Washington State Department of Ecology; Washington State Department of Natural Resources; U.S. Army Corps of Engineers; U.S. Coast Guard; NOAA Fisheries Service; and U.S. Fish and Wildlife Service.

- e. The road, culvert or bridge shall be located and designed to minimize adverse impacts, and shall not interfere with fish passage, the movement of water, large woody debris, gravel, or other stream processes. Roads must cross aquatic FWHCAs and buffers at, or as close as possible to, a ninety degree angle. Crossings shall not occur in salmonid spawning areas unless no other feasible crossing site exists. In streams with salmonid breeding habitat, bridges, bottomless culverts or other alternatives that will allow for fish passage are required, and bridge piers or abutments may not be placed within the stream or stream banks unless there is no feasible alternative. The length of conventional culverts shall be the minimum necessary.
- f. The location and design of the road or driveway crossing must be evaluated by a qualified professional to ensure that ecological processes will not be adversely affected.
- g. Construction must occur during work windows and time limits established by the state and federal agencies with jurisdiction.
- h. All stream crossings shall be designed to accommodate 100-year projected flood flows.
- i. When practicable, crossings shall serve multiple properties;
- j. When expanding existing crossings that do not meet these standards, the crossing shall be upgraded as necessary to reduce stream impacts and meet the requirements of this subsection. For purposes of this section, an expansion is an increase in the footprint of the crossing structures or the associated roads and trails.
- k. Roads and driveways must be crowned, in-sloped, out-sloped or otherwise designed to direct runoff from the road surface into vegetated areas.

E.6. Within shoreline jurisdiction, reduced water quality buffers and Tree Protection Zones when views of the water are blocked by existing houses on adjoining waterfront parcels. If existing houses on adjoining waterfront parcels are closer to the water than what is specified in this section, reduced buffer and Tree Protection Zones shall be authorized if:

- a. Adverse impacts to aquatic FWHCAs, if any, are identified by a qualified professional;
- b. Adverse impacts are mitigated in conformance with SJCC 18.30.110; and
- c. The authorized buffer and Tree Protection Zones are the greater of:
 - i. The waterward side of a line drawn between the most waterward points of the houses on the adjoining parcels; and
 - ii. The average of the distances from the OHWM to the most waterward points of the houses on the adjoining parcels.

E.7. Standards and Requirements for Shoreline Modifications. Shoreline modifications, including shoreline stabilization measures, are allowed within and over aquatic FWHCAs and their buffers subject to this section and SJCC chapter 18.50. These requirements remain in effect until they are replaced with an approved comprehensive update of the Shoreline Master Program. Unless specifically allowed by this section and SJCC chapter 18.50, construction of new shoreline modifications is prohibited.

a. General Standards.

- i. Definitions. Definitions applicable to this subsection (18.30.160.E.7) are found in RCW 90.58.030, WAC 173-26-020, and WAC 173-27-030.
- ii. Mitigation Sequencing. Per WAC 173-26-201(2)(e) adverse impacts associated with new, expanded or replacement shoreline modifications must be mitigated consistent with the requirements of SJCC 18.30.110 and the following mitigation sequence:
 - (A) Avoiding the impact altogether by not taking the action or part of the action.

(B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.

(C) Rectifying the impact by using appropriate technology or by repairing, rehabilitating or restoring the affected environment.

(D) Reducing or eliminating the impact over time by preservation and maintenance operations.

(E) Compensating for the impact by replacing, enhancing or providing substitute resources or environments.

(F) Monitoring the impact and compensation projects and taking appropriate corrective measures.

iii. In accordance with WAC 173-26-221(2)(c)(iii)(C), if inventories of critical saltwater habitats have not been completed, overwater and near shore developments in marine waters designated as FWHCAs may not be approved without an inventory of the site and adjacent shoreline parcels to assess the presence of these habitats and their functions. The methods and extent of the inventory shall be consistent with accepted research methodology, in consultation with Department of Ecology technical assistance materials.

iv. Public docks and docks serving five or more single family residences, piers, bulkheads, bridges, fill, floats, jetties, utility crossings, lifts, stairs, ramps, and other human-made structures shall not intrude into or over critical saltwater habitats unless all of the following conditions are satisfied:

(A) The public's need for such an action or structure is clearly demonstrated and the proposal is consistent with protection of the public trust as embodied in RCW 90.58.020.

To show the project protects the public trust the application shall include a narrative that;

(1) Demonstrates the proposal is consistent with the goals, policies and regulations of the County's SMP and is appropriate for the location;

(2) Itemizes the project's benefits for the public, such as providing physical or visual access to the shoreline; and

(3) Shows that the development will not have an adverse impact on the navigability of adjacent waters.

(B) Avoidance of impacts to critical saltwater habitats by an alternative alignment or location is not feasible or would result in an unreasonable and disproportionate cost to accomplish the same general purpose;

(C) The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat; and

(D) The project is consistent with the State's interest in resource protection and species recovery.

v. When feasible, public access and ecological restoration shall be incorporated into publicly financed projects.

b. Additional Standards for docks

i. Private, noncommercial docks and associated piers and floats for individual residential use, or for community use by the owners of no more than four adjacent or nearby residences, will be permitted over critical salt and freshwater habitats if the application complies with the applicable federal and state regulations and shows that:

(A) Avoidance of impacts to critical salt and fresh water habitats by an alternative alignment or location is not feasible; and

(B) The project, including any required mitigation, will result in no net loss of ecological functions associated with critical saltwater habitat.

ii. Application requirements. In addition to applicable requirements of SJCC 18.50, applications for approval of docks listed in this section shall include the following:

- (A) The applicable items listed in SJCC 18.80.020.C (Project Permit Applications-Forms) along with photos of the site and a map showing the approximate location of critical areas and critical salt water habitats within 200 ~~300~~ feet of the project area (existing maps may be used).
- (B) The applicable items listed in SJCC 18.80.110 (Shoreline Permits).
- (C) Any related project documents such as applications to other agencies or environmental documents prepared pursuant to the State Environmental Policy Act.
- (D) A narrative explaining how the proposal meets the requirements of this subsection 18.30.160.E.7, SJCC 18.50 and 18.30.110.
- (E) Best Available Science documents supporting the proposal.
- (F) A copy of proposed storm water and erosion control plans for the project as required by SJCC 18.60.
- (G) A report, appropriate for the scale and scope of the project, prepared by a qualified biological professional, identifying any aquatic FWHCAs located within 50 feet of the proposed project, evaluating conformance of the proposal with the requirements of this subsection 18.30.160.E.7, and describing any potential adverse impacts to the ecological function of aquatic FWHCAs that may result from the proposal.

c. Additional Standards for Shoreline Stabilization Measures

i. In order to avoid the individual and cumulative net loss of ecological functions attributable to shoreline stabilization, the following standards shall apply to shoreline stabilization measures:

- (A) New development on bedrock shorelines should be located and designed to avoid the need for future shoreline stabilization to the extent feasible.
- (B) New development on all shorelines other than bedrock shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure (minimum 75 years), as demonstrated by a geotechnical analysis
- (C) Using geotechnical analysis of the site and shoreline characteristics, subdivision of land must assure that the lots created will not require shoreline stabilization in order for development to occur.
- (D) With the exception of areas located on bedrock, shoreline stabilization measures are not allowed to protect vegetated areas.

ii. When structural shoreline stabilization measures are demonstrated to be necessary, the following are required:

- (A) The size of stabilization measures shall be limited to the minimum necessary. Measures designed to assure no net loss of shoreline ecological functions shall be used. Soft approaches shall be used unless they are demonstrated to be insufficient to protect primary structures, dwellings, and businesses.
- (B) Publicly financed or subsidized shoreline stabilization control measures shall not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. Where feasible, ecological restoration and public access improvements shall be incorporated into the project.
- (C) New shoreline stabilization measures, including replacement structures on feeder bluffs and other actions that affect beach sediment-producing areas, shall be mitigated

and, if that is not possible, designed and constructed to minimize adverse impacts to sediment conveyance systems.

iii. An existing shoreline stabilization structure may be replaced with a similar structure if a geotechnical report demonstrates the need to protect principal uses or structures from erosion caused by currents, tidal action, or waves.

(A) The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.

(B) Replacement walls or bulkheads shall not encroach waterward of the ordinary high-water mark or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.

(C) Where a net loss of ecological functions associated with critical saltwater habitats would occur by leaving the existing obsolete structure, it shall be removed as part of the replacement project.

(D) Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high-water mark.

(E) For purposes of this subsection (18.30.160.E.7), "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be permitted as new structures.

iv. Soft structural shoreline stabilization measures that restore shoreline ecological functions without creating additional uplands, will be permitted water-ward of the ordinary high water mark subject to the provisions of this section, SJCC 18.50 and applicable federal and state requirements.

v. New structural stabilization measures shall not be allowed except when necessity is demonstrated in the following manner:

(A) To protect existing primary structures:

(1) New or enlarged structural shoreline stabilization measures for an existing primary structure such as a residence, should not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the structure is in danger and will suffer damage from shoreline erosion caused by tidal action, currents, or waves and where no alternatives, including relocation or reconstruction of existing structures, are found to be feasible and less expensive than the proposed stabilization measure.

(2) Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need.

(3) The geotechnical analysis should evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization.

(4) The shoreline stabilization structure, including any required mitigation, will not result in a net loss of shoreline ecological functions.

(B) To protect and support new nonwater-dependent development including single family residences, when all of the conditions below apply:

(1) The erosion is not being caused by upland conditions, such as drainage and the loss of vegetation;

(2) Nonstructural measures, such as placing the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

(3) No alternatives, including relocation or reconstruction of existing structures, are found to be feasible and less expensive than the proposed stabilization measure.

(4) The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as tidal action, currents, and waves.

(5) The shoreline stabilization structure, including any required mitigation, will not result in a net loss of shoreline ecological functions.

(C) To protect and support water-dependent development when all of the conditions below apply:

(1) The erosion is not being caused by upland conditions, such as the loss of vegetation and drainage.

(2) Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

(3) No alternatives, including relocation or reconstruction of existing structures, are found to be feasible and less expensive than the proposed stabilization measure.

(4) The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report.

(5) The shoreline stabilization structure, including any required mitigation, will not result in a net loss of shoreline ecological functions.

(D) To protect projects for the restoration of ecological functions or hazardous substance remediation projects pursuant to chapter 70.105D RCW when all of the conditions below apply:

(1) Nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

(2) The shoreline stabilization structure will not result in a net loss of shoreline ecological functions.

vi. Application Requirements. In addition to applicable requirements of SJCC 18.50, applications for approval of structural shoreline stabilization measures regulated by this section shall include the following:

(A) The applicable items listed in SJCC 18.80.020.C (Project Permit Applications-Forms) along with photos of the site and a map showing the approximate location of critical areas and critical salt water habitats within 300 feet of the project area (existing maps may be used).

(B) Any related project documents such as applications to other agencies or environmental documents prepared pursuant to the State Environmental Policy Act.

(C) A narrative explaining how the proposal meets the requirements of this subsection 18.30.160.E.7 and SJCC 18.50.

(D) Best Available Science documents supporting the proposal.

(E) A copy of proposed storm water and erosion control plans for the project as required by SJCC 18.60.

(F) A report, appropriate for the scale and scope of the project, prepared by a qualified biological professional, identifying any aquatic FWHCAs located within 50 feet of the proposed project, evaluating conformance of the proposal with the requirements of

this subsection 18.30.160.E.7, and describing any potential adverse impacts to the ecological function of aquatic FWHCAs that may result from the proposal. If the proposed structural stabilization measures may result in changes to longshore sediment transport, the report must include an evaluation of potential adverse impacts to aquatic FWHCAs located downdrift of the proposal.

(G) New, expanded and replacement structural stabilization measures require a geotechnical analysis and report, prepared by a qualified coastal geologic professional in accordance with SJCC 18.30.120, that includes the following:

- (1) A description of the causes for the erosion;
- (2) Past erosion rates over a period of at least 30 years;
- (3) Projection of future rates of erosion over the next 30 years;
- (4) Detailed topography from the proposed structure to the lower beach;
- (5) Evaluation of the anticipated impact of sea level rise on the structural stabilization measure, ecological functions associated with critical salt water habitat, and the development being protected, considering the most recent sea level rise predictions used by the San Juan County Public Works Department in planning road improvements.
- (6) In the case of an application for hard structural stabilization measures, the report shall contain a determination that in the absence of such measures, there is a significant possibility that the structure to be protected will be damaged by shoreline erosion within three years.
- (7) If the report shows that waiting until the need for stabilization is immediate would foreclose the opportunity to use measures that avoid impacts to ecological functions, the report may be used to justify the construction of soft structural stabilization measures.
- (8) Analysis of slope stability and mechanism for slope failure in the vicinity;
- (9) Estimate of when the structure to be protected will be undermined (including allowance for bank recession equal to the largest documented landslide in the vicinity);
- (10) Summary of factors causing threat to the structure;
- (11) Evaluation of potential effectiveness of corrective measures for on-site drainage issues as an alternative to installing hard or soft structural shoreline stabilization measures;
- (12) Detailed evaluation of the potential for relocating the structure as an alternative to hard or soft structural shoreline stabilization measures;
- (13) Description of any potential adverse impacts that may result from the proposal, including anticipated changes to the size or quantity of the substrate and/or sediment in the vicinity or down drift from the site; and
- (14) An evaluation of the conformance of the proposal with the requirements of this subsection 18.30.160.E.7 and SJCC 18.50.

(H) Mitigation and Monitoring Plans. Plans for mitigating any unavoidable adverse impacts to adjacent or nearby properties, or to the functions and values of critical salt water habitats, must be consistent with the mitigation sequence above and the requirements of SJCC 18.30.110.

F. Additional protection recommendations and requirements for specific species and habitats.

This subsection outlines additional recommendations, and in some cases requirements, for protecting particular species and habitats. Maps showing the general location of some plants, animals and habitats are available from San Juan County. Though State regulations prohibit general dissemination

of detailed habitat and species maps, County staff can provide available information on particular sites.

1. Animals.

This subsection outlines additional protection recommendations and in some cases requirements for specific animals listed in subsection 18.30.160.B. This includes animals that are currently listed under the Endangered Species Act, as well as animals designated by San Juan County as species of local importance. The requirements identified in this subsection supplement the more general requirements of this section and the San Juan County Code, including those requirements intended to protect the quantity and quality of ground and surface water, and to support the aquatic food chain.

To aid property owners in implementing effective protection measures, standardized habitat management plans based on the provisions of Table 3.9 will be attached to permits and approvals. Approval of development and project permits will be contingent on compliance with these plans.

**Table 3.9
Additional Protection Recommendations and Requirements for Specific Animals**

Species	Habitat Description	Protection Methods (Recommended unless noted as a requirement) (For additional information see http://wdfw.wa.gov/hab/phslist.htm)
Amphibians Sharp-tailed Snake	Relatively open, moist, woodlands, particularly near streams and secluded, south facing, rocky slopes. They spend most of the time under rocks and rotting woody material. Primary food source is slugs. Use communal egg laying sites in cracks between rocks, underground or in clumps of grass roots.	In areas with sharp tailed snakes: <ul style="list-style-type: none"> ● Minimize soil-disturbing activities. ● Retain rocks and down wood. ● Avoid predation by domestic cats.
Western toad	Live near springs, streams, meadows and woodlands, especially those within approximately 1,640 feet of ponds or wetlands. Feed on insects. Preferred breeding sites are water bodies with shallow, sandy bottoms. After breeding they disperse into terrestrial habitats such as forests and grasslands, preferring damp conditions. Spend much time underground, often in small mammal burrows, beneath logs, and within rock crevices. Hibernates in burrows over the winter.	In areas with western toads: <ul style="list-style-type: none"> ● Establish wetland buffers based on a Category 1 Wetland Rating. Protect buffers in accordance with SJCC 18.30.150 (required). ● Minimize soil-disturbing activities. ● Prevent pollution of runoff. ● Retain rocks and down wood. ● Avoid the introduction of aquatic predators (e.g. fish) into ponds and lakes.
Birds American dipper	Shorelines of perennial streams and lakes and ephemeral streams that flow into them.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring. ● Do not inhibit perennial flow in streams (required).

		<ul style="list-style-type: none"> ●Maintain buffers along streams and lakes (required).
American kestrel	Open habitats with perching spots, including the edges of oak woodlands, open forests, and grasslands or agricultural areas with utility wires, fence posts or trees. Nest in tree cavities, cliffs, openings in man-made structures, and nesting boxes.	<ul style="list-style-type: none"> ●Protect snags and trees used for nesting (required).
Black Oystercatcher	These birds nest on the ground above the rocky intertidal zone in areas without predatory mammals.	<ul style="list-style-type: none"> ●Maintain forage fish populations and protect kelp and eelgrass beds in conformance with the Unified Development Code. ●Discourage human presence near active nesting areas during the spring.
Chipping sparrow	Savannas, orchards, low-density residential areas.	<ul style="list-style-type: none"> ●Prevent disturbance of active nesting areas during the spring. ●Maintain mix of open land and wooded areas.
Common nighthawk	Rocky balds and flat areas with minimal vegetation	<ul style="list-style-type: none"> ●Prevent disturbance of active nesting areas during the spring.
Fox sparrow	Nesting occurs in dense shrub thickets with little or no forest canopy. The only suspected nesting is on small outer islands.	<ul style="list-style-type: none"> ●Prevent disturbance of active nesting areas during the spring.
Great Blue Heron	Feeding occurs in large ponds and wetlands, small ponds and wetlands not surrounded by forest, and marine waters. Nesting occurs in tall dense stands of conifers in areas mostly isolated from humans.	<ul style="list-style-type: none"> ●Within ¼ mile of nesting colonies avoid construction and activities that may disturb nesting birds February through September. ●Protect wetlands and nearshore feeding areas in conformance with the Unified Development Code. ●Maintain a 200 foot buffer around nests in colonies (required).
Golden-crowned sparrow	Nesting occurs in dense shrub thickets with little or no forest canopy. The only suspected nesting is on small outer islands.	<ul style="list-style-type: none"> ●Prevent disturbance of active nesting areas during the spring.
Golden Eagle	Nesting usually occurs on cliffs, but may also occur in trees, on the ground, or on human made structures.	<ul style="list-style-type: none"> ●Within 1,000 feet of nests, avoid construction and activities that may disturb nesting birds February 15 – July 15. ●Protect trees used for perching and nesting (required). ●Maintain food sources and habitat for animals that are food sources (e.g. rodents, small mammals, birds). ●Minimize disturbance of nesting areas during the spring. ●See protection measures for peregrine falcon. ●Avoid use of rodenticides in hunting areas.

		<ul style="list-style-type: none"> ● Avoid construction of wind turbines near nesting and hunting areas. ● Avoid construction of multiple phase transformers in hunting and nesting areas.
Horned lark	Prairie/savanna and other flat areas with minimal vegetation.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Lazuli bunting	Edges of oak woodlands, shrubby areas in forested zones, agricultural hedgerows, and shrubby habitat in residential gardens.	<ul style="list-style-type: none"> ● Protect shrubs and small trees used for nesting. ● Protect food sources including seeds, berries and invertebrates.
Long-eared owl	Woodlands. No recent nesting records.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Marbled murrelet	Nest in dense, mossy, wet, old growth conifer forests at least 7 acres in size and within 50 miles of marine waters. Nesting sites very difficult to identify. Nesting trees are at least 32 in. diameter and the nest itself is typically located in a depression in the moss and lichen. Murrelets feed year round on small, schooling fish and other small sea creatures found in calm, shallow (< 100 ft.), nearshore waters in the San Juans. Concentrations of birds are found on Lopez Island and the area between Orcas and Blakely Islands. They are not currently known to nest in the San Juans, but that could change as second growth forests mature.	<ul style="list-style-type: none"> ● Maintain forage fish populations and protect kelp and eelgrass beds in conformance with the Unified Development Code. ● Protect old growth coniferous forests more than 7 acres in size that have trees more than 32 dbh that are used by nesting birds (see Chapter 222-16 WAC for guidance on determining the presence of nesting birds). (required) ● If areas used for nesting are identified, County staff will work with the landowner and the Dept. of Fish and Wildlife to develop a site specific protection plan.(required)
Merlin	Edges of conifer woodlands.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Northern goshawk	Mature forest on main islands.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Northern harrier	Infrequently mowed pastures, prairie, and herbaceous wetlands without trees.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring. ● In areas used for nesting or feeding, establish wetland buffers based on a Category I Wetland Rating. Protect buffers in accordance with SJCC 18.30.150. (required)
Northern pygmy-owl	Mature conifer forest on main islands.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Peregrine falcon	Year-round resident in SJ County (≈ 21 nesting pairs). Nests on cliffs and ledges. Feed on birds, especially shorebirds and waterfowl.	<ul style="list-style-type: none"> ● Within ¼ mile of nests, avoid construction and activities that may disturb nesting birds March 1 – June 30. ● If possible locate structures at least 1,500 feet back from cliffs with nests.

		<ul style="list-style-type: none"> ● Prevent pesticide and chemical contamination of prey. Chemicals of particular concern include: lead, mercury, organochlorides, organophosphates, carbofuran, and famphur. <ul style="list-style-type: none"> ▪ Near nesting and feeding areas, do not use lead shot, avoid use of insecticide, and avoid use of pesticides that will be injected by birds that are food sources (e.g. pigeons). ▪ Follow County stormwater and buffer requirements. ● Avoid construction of power lines near nests or feeding areas. ● Maintain trees along shorelines in conformance with this section.
Pigeon Guillemot	This seabird nests in colonies in burrows on sandy and rocky cliffs.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Short-eared owl	Infrequently mowed pastures, prairie, and herbaceous wetlands without trees.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring. ● In areas with nesting or feeding short eared owls, establish wetland buffers based on Category I Wetland Rating. Protect buffers in accordance with SJCC 18.30.150. (required)
Sooty grouse	Extensive conifer forest on main islands.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring. ● Minimize fragmentation of forest by roads, driveways, and tree removal.
Vesper sparrow	Savanna, prairie, and fields with scattered shrubs.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.
Western bluebird	Oak woodland and fields with nest boxes or many standing dead trees.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring. ● Avoid pesticide use in or near active nesting areas. ● Avoid removal of dead standing trees in or near active nesting areas.
Western meadowlark	Savanna, prairie, and fields with scattered shrubs.	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring. ● Avoid pesticide use in or near active nesting areas.
Western screech owl	Open woodlands, especially along streams. Nests in holes in cliffs and tree cavities, particularly cottonwood and big leaf maple.	<ul style="list-style-type: none"> ● Protect snags and trees used for nesting (required).
Wilson's snipe	Herbaceous wetlands and wet fields with scattered shrubs	<ul style="list-style-type: none"> ● Prevent disturbance of active nesting areas during the spring.

		<ul style="list-style-type: none"> ● Avoid pesticide use in or near active nesting areas. ● In areas with nesting or feeding Wilson’s snipe, establish wetland buffers based on a Category I Wetland Rating. Protect buffers in accordance with SJCC 18.30.150. (required)
Insects		
Great arctic butterfly	Only recorded US population located on Orcas Island. Dependent on forest openings and rocky balds.	<p>In areas with great arctic butterflies:</p> <ul style="list-style-type: none"> ● Avoid the use of insecticides and herbicides. ● Protect rocky balds.
Island Marble Butterfly	Only remaining populations on San Juan (American Camp) and Lopez Islands. Dependent on Puget Sound Peppergrass and other native mustards and non-native mustards.	<p>In areas with island marble butterflies:</p> <ul style="list-style-type: none"> ● Avoid the use of insecticides and herbicides. ● Limit grazing and agricultural land disturbance. ● During land development protect areas with food sources including Puget Sound peppergrass and other native and non-native mustards.
Sand verbena moth	Only recorded US populations on San Juan Island and in Clallam County. Dependent on native sandy coastal habitat and Sand Verbena (<i>Abronia</i>) for larval food plant.	<p>In areas with sand verbena moths:</p> <ul style="list-style-type: none"> ● Avoid the use of insecticides and herbicides. ● Limit grazing and agricultural land disturbance. ● During land development protect areas with food sources including Sand Verbena (<i>Abronia</i>).
Taylor’s Checkerspot butterfly	Extremely rare and declining throughout range. Associated with maritime prairies and shorelines along the Strait of Juan De Fuca, the post-glacial gravelly outwash and mounded prairies of the Puget Trough, and open island prairies with a dominance of original vegetation. Host plants include the native seaside plantain (<i>Plantago maritima macrocarpa</i>) and the nonnative English plantain (<i>P. major lanceolata</i>). Concentrations have been found in SJ County on Long Island, and possibly Lopez Island. Current status unknown.	<p>In areas with Taylor’s checkerspot butterflies:</p> <ul style="list-style-type: none"> ● Avoid the use of insecticides and herbicides. ● Limit grazing and agricultural land disturbance. ● During land development, protect areas with plantain.
Valley silverspot butterfly	Dependent on Western Blue Violet (<i>Viola adunca</i>). Declining populations in San Juan Islands. Extinct in many locations.	<p>In areas with valley silverspot butterflies:</p> <ul style="list-style-type: none"> ● Avoid the use of insecticides and herbicides. ● Limit grazing and agricultural land disturbance. ● During land development, protect areas with western blue violet.
Mammals		

Areas with roosting concentrations of all bat species.	Sites used for roosting include caves, mines, snags, large trees, buildings and barns.	In areas with roosting concentrations of bats: ● Avoid pesticide use. ● Avoid removal of large dead trees (e.g. those over 12” dbh).
Townsend's big eared bat	Found where there are suitable roosting sites and fresh water. Sites used for roosting include caves, mines, snags, large trees, buildings and barns. Roosting during the winter is generally in caves, but may also occur in the cavities of large trees, and in buildings. Primary food source is moths, but they will consume other arthropods.	In areas with roosting or feeding Townsend's big eared bats: ● Avoid pesticide use. ● Avoid removal of large dead trees.
Flying squirrel	Mature forests and woodlands with many dead standing trees.	● Avoid removal of large dead trees in or near known areas.
Other animal species listed under the Endangered Species Act or found to have a primary association with habitats in San Juan County after the effective date of this ordinance		Until this code is amended to include new species, appropriate protection recommendations will be developed in consultation with the Washington Department of Fish and Wildlife, US Fish and Wildlife Service and National Marine Fisheries Service.

2. Plants. For designated plants, informational materials will be provided with development and project permits, including photos of the plants, actions that can be taken to preserve them, and descriptions of how to reestablish plants that are displaced or destroyed during development, vegetation removal or other site modification activities. In addition, for designated plants that are located in a wetland, wetland water quality buffers shall be determined from Table 3.10. Habitat buffer widths shall be determined from Table 3.4 using the Category I Wetland buffer width for the proposed type of land use intensity. These buffers must be protected in accordance with SJCC 18.30.150. Buffers are measured horizontally from the edge of the wetland. The director may reduce the standard buffer widths in an Urban Growth Area when impacts to critical areas are mitigated according to SJCC 18.30.110(E) and the buffer reduction is consistent with all other applicable requirements of this section provided that the buffer of a Category I or II wetland shall not be reduced to less than 75 percent of the required buffer or 50 feet, whichever is greater.

Table 3.10
Wetland Water Quality Buffer Widths for Protecting Designated Plants²

Land Use Intensity ¹		
Low	Medium	High
50 feet	75 feet	100 feet

¹See Table 3.3A for a list of land uses that are considered low, medium, or high land use intensity.

²Buffers shall be increased by 50 percent on slopes greater than 30 percent.

- 3. Habitats of Local Importance.** This subsection outlines additional protection requirements and recommendations for habitats of local importance. The requirements identified in this subsection supplement the more general requirements of this section and the San Juan County Code, including those requirements intended to protect the quantity and quality of ground and surface water, and to support the aquatic food chain.

To aid property owners in implementing effective protection measures, standardized habitat management plans based on the provisions of Table 3.11 will be attached to permits and approvals. Approval of development and project permits will be contingent on compliance with these plans.

Table 3.11
Additional Protection Recommendations for Habitats of Local Importance

Species or Habitat	Habitat Description	Protection Measures
Bluff Backed Beaches	Includes erosional depositional beaches at the base sediment bluffs, sediment-covered rock beaches, and seeps/small streams that enter beaches via a bluff rather than via a pronounced stream valley. Bluff backed beaches do not form lagoons (though they may be a sediment source to barrier beaches that do form lagoons).	Minimize and encourage removal of hard shoreline stabilization measures. Compliance with the San Juan County Code.
Garry oak (<i>Quercus garryana</i>) woodlands and savannas	Garry oak is a type of Oregon White Oak found in warmer, drier areas within the Puget Sound and southern British Columbia. They are associated with what is becoming an increasingly rare ecosystem that supports a variety of rare wildflowers, butterflies (such as the Duskywing (<i>Erynnis propertius</i>)) and other plants and animals. Garry oak ecosystems are highly varied and are found in areas with rock outcrops, coastal bluffs, maritime meadows, and treeless grasslands as well as seasonal wetlands, and are sometimes found in mixed stands with other trees including arbutus and Douglas fir. Acorns from the oaks provide a key food for many birds, and other wildlife. Areas in the County that contain Garry oak include English Camp, Cady Mountain, San Juan Valley, the west side of San Juan Island, Point Disney, Turtleback Mountain, West Sound.	In conjunction with new development and vegetation removal, minimize disturbance of areas with Garry oak and associated native grasslands and wildflowers. Removal of Douglas fir and other conifers is encouraged and authorized in Tree Protection Zones to allow adequate sunlight for the oak, grasses and wildflowers. If disturbance cannot be avoided mitigate by replanting suitable areas with Garry oak, native grasses and wildflowers.
Herbaceous Balds and Bluffs	Herbaceous Balds and Bluffs. These are native plant areas located on shallow soils over bedrock, often on steep, exposed slopes with few trees. They support grasses, herbaceous plants, dwarf shrubs,	In conjunction with new development and vegetation removal, minimize

	Brittle prickly pear cactus, mosses and lichens that are adapted for survival on shallow soils amid seasonally dry conditions. Trees that may be present include Douglas fir, Pacific madrone, and Garry oak. In San Juan County this habitat supports many plant species that are rare or that grow in few other land cover types. They are the preferred habitat of the Taylor’s Checkerspot butterfly, which is a listed species. Information on the plants associated with herbaceous balds and bluffs can be found at http://www1.dnr.wa.gov/nhp/refdesk/communities/pdf/balds_veg.pdf .	disturbance of herbaceous balds and bluffs.
Pocket Beaches	Beaches that are contained between two bedrock headlands that essentially functions as a closed system in terms of littoral sediment transport. Pocket beaches do not typically occur within a drift cell and there is little or no exchange of sediment between a pocket beach and adjacent shores. They can be found waterward of a rocky bank or cliff, or they may form barriers, sometimes partially or completely isolating a back-barrier lagoon or wetland. Pocket beaches are typically swash aligned, or oriented perpendicular to the direction of predominant wave approach. They are relatively short in length, as compared to the length of a barrier beach. In plan view their shape is crescent shaped and they often have well-sorted sediment.	Minimize and encourage removal of hard shoreline stabilization measures. Compliance with the San Juan County code.
West Side Prairie	These are relatively undisturbed, uncultivated meadows and fallow fields that are mostly treeless, and ideally have a significant presence of native forbs (herbaceous flowering plants such as Camas) and grasses (e.g. Danthonia californica and Festuca rubra). West side prairies in San Juan County include parts of Mt. Constitution and Turtleback Mountain on Orcas Island, the west side of San Juan Island, Iceberg Point on Lopez Island, and Yellow Island.	In conjunction with new development and vegetation removal, minimize disturbance of native grasslands and Camas prairies. If disturbance cannot be avoided mitigate by replanting suitable areas with native grasses and wildflowers.

G. Nomination of Species or Habitats of Local Importance.

San Juan County has the option of protecting species and habitats of local importance. If not included in the adoption of this Critical Areas Ordinance, these species or habitats may be added by nominating the species or habitat and amending the ordinance through the following process:

1. A petition to nominate a habitat or a species to this category shall contain the following:
 - a. Documentation demonstrating that local populations of native species are sensitive to habitat manipulation, declining, or are in danger of extirpation based on existing trends;
 - b. An explanation of whether specific habitat features are being nominated for protection (for example, nest sites, breeding areas, or nurseries), or whether a habitat or ecosystem is being nominated in its entirety;
 - c. A map showing known locations of nominated species or habitats.
 - d. Proposed management and protection strategies for the species or habitats, supported by the Best Available Science.

2. The Director shall determine whether the nomination proposal is complete, and if complete, shall request that State and Federal agencies and local conservation organizations review the proposal and provide comments and recommendations. These comments, the application, the recommendation of the Director, and a draft code amendment incorporating the species and/ or habitat shall be forwarded the Planning Commission for a public hearing.
3. Following the recommendation of the Planning Commission, the County Council shall hold a public hearing and make a decision on the request and associated code amendment, and if approved shall add the species and/or habitat to subsection 18.30.160.B.
4. Removal of Species or Habitats of Local Importance. Species and habitats may be removed by amending subsection 18.30.160.B in accordance with applicable requirements, including a public hearing before the Planning Commission and County Council.

SECTION 4. Severability: If any provision of this ordinance or its application to any person is held invalid, the remainder of this ordinance and the application to other persons or circumstances shall not be affected. Remaining sections of the ordinance shall be interpreted to give effect to the spirit of the ordinance prior to removal of the portions declared invalid.

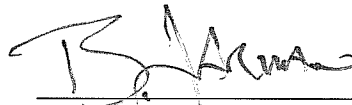
SECTION 5. Savings Clause: This ordinance shall not affect any pending suit or proceeding; or any rights acquired; or liability or obligation incurred under the sections amended or repealed; nor shall it affect any proceeding instituted under those sections. All rights and obligations existing prior to adoption of this ordinance shall continue in full force and effect.

SECTION 6. Effective Date: This ordinance shall take effect ten working days after the date of adoption.

SECTION 7. Codification: Sections 1, 2 and 3 of this ordinance shall be codified.

ADOPTED this 27th day of January 2015.

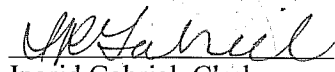
COUNTY COUNCIL
SAN JUAN COUNTY, WASHINGTON



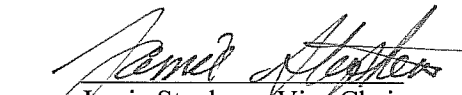
Bob Jarman, Chair
District 2

Ingrid Gabriel, Clerk


ATTEST: Clerk of the Council



Ingrid Gabriel, Clerk
Date: 01.27.2015



Jamie Stephens, Vice Chair
District 3



Rick Hughes, Member
District 1

REVIEWED BY COUNTY
MANAGER



Michael J. Thomas

Date: 1/20/15

RANDALL K. GAYLORD
APPROVED AS TO FORM ONLY

By: gk

Date: 1-22-2015