



**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

Northwest Regional Office 3190 160th SE Bellevue, Washington 98008-5452 (425) 649-7000

June 10, 2009

Ms. Shireene Hale, Senior Planner
San Juan County Community Development & Planning
P.O. Box 947
Friday Harbor, WA 98250

Dear Ms. Hale:

RE: San Juan County Critical Areas Ordinance, June 3, 2009 Draft

Thank you for giving the Department of Ecology (Ecology) the opportunity to comment on the wetland provisions of the San Juan County (County) draft Critical Areas Ordinance (CAO) (June 3, 2009 draft). Ecology understands and appreciates the effort that County staff and the CAO Citizen Review Committee have devoted to this update over the past three years. You have obviously spent considerable time trying to construct an ordinance that meets the regulatory requirements for the CAO update.

Despite that effort, however, there are a number of wetland provisions in this draft ordinance that are of serious concern to Ecology. This letter will focus on those sections that are most problematic for wetland protection. Other, less significant issues will be addressed in subsequent comments as the County works through the update. The wetland issues discussed in this letter are those that Ecology believes are not consistent with best available science (BAS) and that will not adequately protect wetlands or their functions. As such, these provisions represent a high-risk approach to wetland protection that is not scientifically or legally defensible. If the provisions in the draft CAO are adopted, Ecology would not be able to support the County upon appeal of the CAO. We look forward to continuing to work with the County in addressing these concerns and providing whatever assistance we can to resolve these issues before the proposed CAO goes to the County Council for final approval.

The purpose of this letter is two-fold: (1) to outline Ecology's remaining concerns about the CAO; and (2) to comment on areas where the Shoreline Master Program (SMP) update's reliance on the CAO will fall short of approval requirements. As currently proposed, the SMP will rely on the CAO or its provisions for protection of wetlands and other critical areas in shoreline jurisdiction. As you know, Ecology does not have an approval role in the CAO adoption process; our role is advisory. The SMP, however, is a joint document of Ecology and the County, requiring Ecology approval. Before the SMP can be approved by Ecology, the SMP may require critical-area protection measures over and above those in the current draft CAO. In its current form, the CAO does not meet the "no net loss of ecological functions" requirement because it contains provisions that represent a high level of risk to wetlands.

Ms. Shireene Hale
RE: San Juan County June 3, 2009 Draft CAO
June 10, 2009
Page 2

As you are aware, Substitute Senate Bill 5248 places a moratorium on adopting critical areas ordinance updates that pertain to agricultural lands or practices until after July 1, 2010. Until that time, agricultural practices are regulated by the existing CAO. The proposed CAO update includes a number of sections that refer to agricultural practices. These revisions are not allowed under the moratorium and need to be removed.

We would like to point out that the “*Summary of Key Scientific Findings Relative to Protection of Critical Areas*,” dated May 20, 2009, does not include Ecology’s latest guidance on wetland protection. In 2005, Ecology developed BAS documents to assist local governments in preparing critical areas regulations that effectively protect functions and values of wetlands. They are:

- *Wetlands in Washington State - Volume 1: A Synthesis of the Science* (Publication #05-06-006, March 2005)
- *Wetlands in Washington State - Volume 2: Guidance for Protecting and Managing Wetlands* (Publication # 05-06-008, April 2005)
- *Washington State Wetland Rating System for Western Washington* (Washington State Department of Ecology, 2004).
- *Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance* (Version 1, Publication #06-06-011a, March 2006)
- *Wetland Mitigation in Washington State, Part 2: Developing Mitigation Plans* (Version 1, Publication #06-06-011b, March 2006)

These peer-reviewed documents are the result of an extensive synthesis of the scientific literature on freshwater wetlands. The management strategies in Volume 2 were developed by an advisory team composed of state agency staff and planners from both city and county governments. It is in consideration of and in reference to these documents that the following comments are provided.

To comply with the Growth Management Act, critical areas ordinances must be based on BAS. Washington Administrative Code (WAC) Section 365-195-900(2) requires that jurisdictions must include the “best available science” when developing policies and development regulations to protect the functions and values of critical areas. BAS is defined in WAC 365-195-905, and guidance is provided on how to proceed with the CAO update in the absence of scientific information or uncertainty as to the potential harm to critical areas (WAC 365-195-920). Specifically, WAC 365-195-920(1) requires “a ‘precautionary or a no risk approach,’ in which development and land use activities are strictly limited until the uncertainty is sufficiently resolved.”

The County has offered no scientific research that supports the wetland provisions in its proposed CAO. Ecology believes that there is considerable uncertainty that these measures will protect wetlands and that some of the proposed allowed activities represent a high risk to wetlands and wetland functions, contrary to WAC 365-195-920(1).

Specific concerns with this draft of the CAO include:

- proposed wetland definition
- absence of language emphasizing avoidance and minimization of impacts (mitigation sequencing)
- reasonable use exception standards (18.30.110.E.)
- Critical Area Stewardship Plan provisions (18.30.110.J.)
- allowance of gardens and orchards in wetlands and pruning of up to 20% of wetland vegetation (18.30.150.E.5.) and their buffers (18.30.150.E.6)
- proposed wetland buffers and buffer reductions (18.30.150.E.1 and 7)

Proposed Wetland Definition

The wetland definition provided in Section 18.20.230 states that “ponds, including farm ponds” are artificial wetlands. This is not correct. The definition required by RCW 36.70A.030(21) states that only farm ponds that are intentionally created from nonwetland sites are artificial wetlands, not all ponds. The definition in the proposed CAO should be corrected; specifically:

... Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, ...

For legal guidance on the matter of impermissible statutory exemptions to the definition of wetlands, please refer to the Central Puget Sound Growth Management Hearings Board Case No. 05-3-0034 (Dept of Ecology et al. v. City of Kent) at <http://www.gmhb.wa.gov/central/decisions/2006/05-3-0034DOECTEDFDO20060419.pdf>.

Mitigation Sequencing

The Washington State Environmental Policy Act (SEPA) (Chapter 43-21C RCW), administered by Ecology, and Section 404 of the federal Clean Water Act (CWA) administered by the Corps and EPA, both require that a sequence of actions be taken for proposals that will impact wetlands (mitigation sequence). The following are the steps in the mitigation sequence according to the implementing rules of SEPA (Chapter 197-11-768 WAC). The purpose of mitigation sequencing is to ensure that impact avoidance and minimization are the first steps in evaluating potential project impacts and that compensatory mitigation is used only for unavoidable impacts. Additional language emphasizing the County’s interest in first avoiding and preventing impacts should be included in the CAO. We recommend that the draft CAO require applicants to demonstrate that they have taken these actions:

1. *Avoiding the impact altogether by not taking a certain action or parts of an action;*
2. *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;*

3. *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;*
4. *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;*
5. *Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or*
6. *Monitoring the impact and taking appropriate corrective measures.*

Reasonable Use Exceptions

Reasonable use exceptions are a means of allowing some development of a parcel when critical areas or other constraints leave no reasonable use of the property. Section 18.30.110.E. of the previous draft of the CAO included “denial of all reasonable use of a property” in the definition of reasonable use. The current draft states “denial of any reasonable use of a property”. The need for impact avoidance and minimization should be included in this section as well as the need to mitigate for unavoidable critical area impacts. We recommend that the review criteria in 18.30.110.E.2 include the following:

No feasible and reasonable onsite alternative to the proposed activities is possible, including possible changes in site layout, reductions in density, and similar factors that would allow a reasonable economic use with fewer adverse impacts.

The County has not offered a scientific basis for the reasonable use size thresholds proposed in Section 18.30.110.E. The proximity of the impact to the critical area determines whether functions are degraded, not the size of the parcel. Has the County assessed the potential cumulative impact to critical areas of such an allowance? How will the County monitor this impact over time? This proposed revision could be difficult for County staff to implement and interpret and is not consistent with scientifically sound resource protection. We recommend that this section of the CAO be revised to state that reasonable use exceptions be allowed only where it can be clearly demonstrated that critical areas encumber a parcel to the extent that all reasonable use is denied and only after a mitigation plan has been developed to compensate for impacts to critical areas must be mitigated.

Critical Area Stewardship Plans

Ecology supports the concept of allowing landowners to use a Critical Area Stewardship Plan (CASP) (Section 18.30.110.J.) as an alternative approach to protecting critical areas. These plans are most appropriate for rural properties of 5 acres and larger. For properties less than 5 acres, the potential habitat benefits of the CASP may not be realized because the area of habitat covered by the plan is simply too small. In addition, these plans can be costly to develop and implement and are therefore not suitable for properties smaller than 5 acres. Due to the intensity of development associated with commercial, institutional and industrial sites, a CASP is not appropriate for these land uses or in urban areas. Section 18.30.110.J.1. states that County staff will assist in CASP development and that the Director is responsible for reviewing CASPs

submitted to the County. Given that the County does not currently have any wetlands or fish and wildlife technical staff, Ecology is concerned that the County may not be able to review the adequacy of submitted plans. Compliance monitoring is also an essential element of a stewardship program. Given the County's current staffing levels, it is unclear how the County will carry out CASP compliance monitoring. We recommend that Section 18.30.110.J.2. be revised as follows (suggested changes in italics text):

- a. CASPs may be used in ~~all~~ *Agricultural Resource, Forest Resource, Rural Farm Forest and Rural Residential* land districts. *CASPS may not be used for commercial, institutional or industrial development.* ~~and for all types of development.~~
- b. They can only be applied to properties ~~1/4-acre~~ *5 acres* or larger.

Buffers

The minimum wetland buffer widths provided in Table 3.4 (Section 18.30.150.E.1.) are not consistent with the best available science and will not adequately protect wetland functions. The title of this subsection seems to imply that buffers are optional (Options for preventing negative impacts to wetlands). The CAO should clearly state that buffers are required to protect wetlands. Furthermore, the County has offered no rationale or scientific research to justify the narrower buffers proposed in the current draft.

The scientific literature is unequivocal that buffers are necessary to protect wetland functions and values. The literature consistently reports that the primary factors to evaluate in determining appropriate buffer widths are: 1) the wetland type and functions needing protection; 2) the types of adjacent land use and their expected impacts; 3) the characteristics of the buffer area (slope, soils, vegetation); and 4) the functions the buffer must perform (filtering sediment, nutrients, or toxics; screening noise and light; providing forage, nesting, or resting habitat for wetland-dependent species; etc.).

The buffer strategy in the current draft is based on wetland category alone, as determined by using the *Washington State Wetland Rating System for Western Washington* (Revised, Publication #04-06-025, August 2004). Ecology recommends that the County adopt the buffer recommendations in Alternative 3 in Tables 8C-4 through 8C-7 of *Wetlands in Washington State, Volume 2: Managing and Protecting Wetlands* (Publication # 05-06-008, April 2005). The buffer widths listed under Alternative 3 and Alternative 3A in Appendix 8-C have been peer reviewed, are based on best available science, and represent the mid-range for buffer widths reported in the scientific literature. Because the buffer widths in Alternative 3 consider wetland functions (and special characteristic wetlands) and adjoining land-use intensity, the buffer widths listed in Alternative 3 will in many cases be narrower than the standard buffer widths proposed by the County.

The proposed CAO classifies wetlands based on the current Western Washington wetland rating system developed by Ecology, and it requires that applicants submit the wetland rating forms with development applications (Section 18.30.150.B.). Determining the wetland rating is the most difficult step in using Buffer Alternative 3. Since the County will already be requiring use

of the Western Washington rating system, determining the appropriate buffer from the appropriate table (Tables 8C-4 through 8C-7) will be relatively simple.

If the County is not going to consider land use intensity in prescribing the standard buffer widths, the buffer widths in the CAO need to be wide enough to protect wetlands from the highest intensity land use (see Table 8C-1, Appendix 8C of Volume 2 as referenced above).

The proposed buffer widths are considerably narrower than the widths recommended in the best available science and pose a serious risk to wetland functions, particularly to water quality and habitat. Wetland-dependent wildlife species are most likely to be adversely effected by the narrower buffer widths currently proposed by the County. Allowing further decreases in these buffers through averaging or additional reductions will only increase the risk to wetland functions and associated species. We would like to see the scientific or other rationale that supports these higher-risk buffer widths.

Section 18.30.150.E.3.b. offers the option of having County staff determine the wetland boundary and category if sufficient information is available and if the landowner agrees to the buffer widths in Table 3.5 (buffer widths that are half again as wide as the buffers listed in Table 3.4). This also is a high-risk approach to wetland protection, particularly since the County does not currently have a wetland specialist on staff. If the County wishes to provide this option, the estimated buffers should be 50% larger than the simple buffers recommended above in Table 8C-1 in order to allow for the possibility of error in boundary and rating determination.

Allowed Activities and Buffer Reductions

There are several activities allowed within wetlands in Section 18.30.150.E.5 of the current draft CAO that have the potential to adversely impact wetlands (trails and walkways, maintenance, wildlife viewing structures). These same concerns apply to activities allowed within wetland buffers (Section 18.30.150.E.6.) The most troubling of these allowed activities is orchards and gardens in Category II, III and IV wetlands (18.30.150.E.5.a.ix.) and their buffers (18.30.150.E.6.a.ix.). The County offers no scientific research in support of this allowance. Ecology is not aware of any valid scientific research showing that planting orchards and gardens in wetlands or their buffers does not degrade wetland and buffer functions. This is not a scientifically or legally supportable proposal, and we recommend that the County strike any CAO language allowing orchards and gardens in wetlands or their buffers.

The current draft CAO also allows pruning of up to 20% of the vegetation in both wetlands and their buffers. One of the most critical elements of the buffer widths recommended in any of the buffer alternatives presented in Ecology's guidance documents is the assumption that the buffers are well-vegetated with a relatively intact, native plant community. This guidance explicitly states that, if a buffer area is not well-vegetated then the buffer should either be widened or restored with appropriate vegetation. Allowing pruning of up to 20% in the buffer, let alone the wetland, will have potentially serious impacts on wetland functions. The County will need to provide the science that supports vegetation pruning while at the same time maintaining wetland

Ms. Shireene Hale
RE: San Juan County June 3, 2009 Draft CAO
June 10, 2009
Page 7

functions. Again, given the County's current and future staffing levels, it seems unlikely that limiting pruning to 20% is enforceable.

The general buffer requirements allow for up to a 75% reduction in buffer width (18.30.150.E.7.iii.). This is not at all consistent with the scientific literature on buffer widths. Ecology recommends that at most, buffers be reduced by no more than 25%. However, the County should be aware that there is no scientific evidence indicating that buffer averaging will continue to protect wetland functions. A buffer reduction of 75% is not legally or scientifically defensible. We recommend that 18.30.150.E.7.iii. be revised to state that the buffer width is not to be reduced by more than 25%. In addition to the criteria given in the proposed CAO, it should be demonstrated that no feasible alternatives to the site design could be accomplished without buffer averaging.

Conclusion

We recognize the considerable effort that has gone into developing the current draft CAO. We also hope that you will find these comments helpful in modifying the CAO so that it is based on best available science, and practical to implement. We appreciate the County's efforts to better protect and manage wetlands in San Juan County. As we have said, there are a number of wetland provisions in the current draft that are not protective of wetlands and will not be legally defensible for the County. We look forward to continuing to work with County staff in revising the current draft CAO and crafting an ordinance that protects wetland functions and values.

Thank you for providing us the opportunity to work with you in updating the CAO and in voicing our concerns with specific wetland provisions. If you would like to discuss Ecology's concerns, or if you have any questions, please give me a call at (425) 649-7148 or send email to paan461@ecy.wa.gov.

Sincerely,



Paul Anderson, PWS
Wetland Specialist
Shorelands and Environmental Assistance Program

PSA: ca

cc: Donna Buntun, Ecology CAO Review Coordinator
Geoff Tallent, Section Manager, Shorelands & Environmental Assistance Program
Erik Stockdale, 401/Wetlands Supervisor
Bob Fritzen, Shoreline Planner
Tim Gates, CTED
Katie Knight, WDFW