

## **EXHIBIT J**

### **FINDINGS**

#### **BACKGROUND**

1. The County is required by State law to periodically update its Comprehensive Plan and Development Regulations adopted to implement the Growth Management Act (GMA). This Ordinance constitutes the County's Wetlands policy and regulations.
2. This Ordinance reflects the findings of the Department based on studies designed and conducted by Dr. Paul Adamus, a nationally known wetland scientist. In April 2005 the County commissioned Dr. Adamus to review provisions of Chapter 17.02 ICC pertaining to Wetlands, to prepare technical reports in support of that review, and to recommend any changes necessary to ensure appropriate levels of protection for Wetlands consistent with Comprehensive Plan goals and policies.
3. County staff collected data specified by Dr. Adamus from 103 County wetlands between June and November 2005. Those wetlands comprise a spatially-balanced statistical sample of the 1024 wetlands known at this time to exist in Island County (11% by number, 34% by area). The wetlands were selected systematically in collaboration with Dr. Donald Stevens, a statistician known for expertise in design of regional sampling networks. Over 2100 landowners surrounding 284 wetlands were contacted in advance of the field work, and permission was requested for property access to collect on-site wetlands data. Among the landowners contacted, more positive than negative replies were received in response to the County's request for one-time property access.
4. In collaboration with Dr. Adamus, County staff compiled data on additional characteristics of all known County wetlands using existing maps of various themes, and Geographic Information Systems (GIS).
5. County staff also reviewed information from over 720 of the County's permit files/on-site evaluations, as well as information from historical accounts. Aerial photographs and satellite imagery covering multiple time periods were interpreted to identify alterations of wetlands, and results were compared with data from the field visits and permit files.
6. In a County report, "Wetlands of Island County, Washington: Profile of Characteristics, Functions, and Health" published in August 2006, Dr. Adamus summarized and interpreted the data. Methods that were used to collect and compile the data are described in appendices to that report. This report, referred to as the Phase I Report is R 9564 in the County's Record. The Phase I Report was distributed for both agency and public comment and presented to the Planning Commission at a public meeting in August 2006. Minutes of that meeting are at R 8945.

7. As required by the Growth Management Act (GMA), Dr. Adamus also conducted a Best Available Science (BAS) review of over 200 technical publications relevant to wetland buffers and other protective measures. His review is contained in the County report, "Best Available Science for Wetlands of Island County, Washington: Review of Published Literature" The review emphasized literature from the Pacific Northwest and literature published subsequent to literature reviews by the Washington Department of Ecology (WSDOE) and others. A draft of this report was circulated for Agency and public comment in June 2007. The final report was published in November 2007 and is referred to as the Phase II Report, R 9565 in the County's Record.
8. The County has also completed a number of other reports, studies or memos prior to preparing the changes in Wetlands policy and regulation. They include a Wetland Vegetation Monitoring Protocol; and, trends studies for land use and clearing and grading. The documents were circulated for public and agency comment in June 2007 and are included at R 9566.

## **PUBLIC OUTREACH AND REVIEW**

1. In early 2005, the County began its public outreach and review process for the Wetlands Update with a request for comment on its existing regulations. R 7743.
2. Wetland newsletters were mailed county-wide in August 2006 (R 8870); and again in May 2007 (R 9319).
3. There were two formal public comment periods for the Wetland Update. The first began in May 2007. The second began in October 2007. The Phase I Report and a draft of the Phase II Report (R 9590); a draft of the wetland Identification Guide (R 9591); and a bound document that contained both drafts of Comp Plan and Development Regulation revisions as well as a number of studies and technical reports were all distributed for public review (R 9566). These documents were viewed and discussed in six public workshops conducted in May and June 2007.
4. During 2005, 2006 and 2007, the County hosted or participated in more than 16 public discussions of the Wetland Update; 5 radio programs were devoted to the Update and more than 26 newspaper articles covered the Update. All of the above are documented in R 9589 and R 9584.
5. The County's final public review period began late October 2007 and terminated on November 30, 2007, after three workshops and public hearings. The Planning Commission then met in three public meetings to consider its recommendations to the Board of Commissioners and on December 18, 2007, acted on its recommendations. R 9567 contains the documents available for public review during this second public comment period. In addition, both the Phase I and Phase II Reports were also available (R 9564 and R 9565). Minutes of the Planning Commission's Hearings and Meetings are at R 9568 - 9573. The final recommended composite ordinance is at R 9588.
6. The Wetlands Update amendments and new proposed standards were revised twice after the June workshops. The first revision occurred after the June workshops and before the sixty day agency review. The second review was completed after the sixty day review.

## **AGENCY REVIEW**

1. With the assistance of CTED in 2005, the County established an Agency Review Panel to advise on its update of critical area regulations. Agency representatives met several times informally in 2005 and 2006 to provide the County guidance and met on June 8, 2007 to address specific questions regarding the Workshop Drafts (R 9593). R 9595 lists Agency review participants.
2. After the Peer and Agency Review and the May-June Public Workshops, the County revised Wetlands Update documents and transmitted review documents to CTED for sixty day agency review (R 9594). Sixty day comments were received from DFW and DOE. R 9575 and 9576)

## **PEER REVIEW**

1. This Ordinance and the County reports referenced above were reviewed independently by a Professional Peer Review Panel that included three academic scientists, two private wetland consultants with expertise in water quality and habitat functions of wetlands, and a wetland specialist who once worked for Island County and now works for Pierce County.
2. Formal Peer Review occurred in two all-day meetings; the first in June 2007 in Seattle and the second in August 2007 in Coupeville. The Planning Commission and Board of Commissioners were invited to the Coupeville meeting and interested members of the public attended the afternoon session in Coupeville. R 9579 includes a list of participants and questions prepared for the June meeting.
3. The June Peer Review comments are summarized in R 9579 and list of specific changes made in the workshop drafts is at R 9601.
4. For the August meeting, a binder was prepared for each Panel member (R 9602). Comments of individual members of the Peer Review Panel are included in the County's Record (R 9603). A video recording of the June meeting is included in the County Record, R 9604, as well as a tape recording of the August meeting (R 9605).

## **EXISTING CONDITIONS**

1. Measured in terms of lack of recent alterations and dominance of native plants, most County wetlands are in good condition. The area surrounding most County wetlands is also in good condition. State and federal laws require measures to ensure that the wetlands remain in good condition, so that they continue to provide services beneficial to local residents and the national interest. The County has committed to funding a long-term program to monitor water quality throughout the County, and to initiate source identification and adaptive management where necessary, in order to help ensure that the condition of wetlands and other surface waters remains good.
2. Almost all the alterations to County wetlands occurred prior to the mid-1900s. Since the adoption of the County's wetland rules in 1984, relatively few wetlands have been filled or irreversibly impacted. The very small number of alterations that have been permitted by the County, mainly in response to Reasonable Use legal requirements, are more than offset by the regeneration of vegetation in wetlands altered before 1984.

3. Island County's wetlands differ from those of other counties partly in the fact that none are along rivers or in river flood plains. Where the wetlands connect to streams, the streams travel a short distance before reaching the Puget Sound. Thus, in Island County the usual runoff-retaining functions of wetlands are of little or no importance in reducing flood damages to downstream structures during storms.
4. The County's review of the wetlands provisions of the existing Critical Areas Ordinance indicated that its previous regulatory categories, minimum size thresholds for regulation, and associated buffer width requirements did not represent best available science. All changes the County now proposes are recommended after considering best available science.
5. The County's wetlands update includes amendments to the County's Comp Plan and Chapter 17.02 ICC (referred to hereafter as the "Old CAO"), Chapter 17.03, 16.06, 16.15, 16.17, 16.19 and 3.40. The update also includes a new chapter, 17.02A ICC. This chapter is referred to hereafter as the "New CAO." All of these documents have been incorporated in composite ordinance found at R 9588 in the County's Record.

#### **BUFFER FACTORS – INTENSITY, SENSITIVITY AND IMPORTANCE**

1. Consistent with the guidance offered by the Washington State Department of Ecology (WSDOE) and the County's BAS review, the new CAO uses three factors in making site-specific buffer determinations for wetlands: (a) the *impact intensity* of the proposed activity, especially, the potential for generating pollutants and affecting suitability of the wetland as habitat, (b) the intrinsic *sensitivity* of the Wetland and its surroundings, and (c) wetland *importance*, as reflected by functions, values, and scarcity. Use of these three factors is also consistent with guidance of the Washington State Department of Community, Trade, and Economic Development (CTED).
2. Land Use Intensity will be judged on a case-by-case basis under the new CAO and will be determined based on the Use proposed, Lot Size, extent the Lot has been or will be Cleared, impervious surfaces and potential adverse impacts that may be attributed to the proposed Use or Structures.
3. With regard to wetland importance, as indicated by wetland functions, the most important of the easily-recognizable wetland types in Island County are bogs, wetlands in coastal lagoons and the delta estuary, mature forest wetlands, non-estuarine wetlands having more than about 5 acres of ponded water, wetlands in close uphill proximity to streams supporting anadromous fisheries or resident salmonid fish, wetlands dominated by native plant species, mosaic and small ponded wetlands, and wetlands with a relatively high level of habitat function as determined by use of the County's modification of the WSDOE *Wetland Rating System for Western Washington*. Because they are more reflective of local conditions, the County proposes to use these wetland types in lieu of the wetland categories (I, II, III, IV) proposed by the WSDOE.
4. Reasons for Assigning Greater Importance to the Specified Wetland Types.
  - a. **Coastal Lagoon Wetlands, Delta Estuary Wetlands, Other Estuarine Wetlands.** The WSDOE *Rating System* considers coastal lagoons a "Special Characteristic" due to the exceptional importance of their associated marine life

and anadromous fish, relative scarcity, and historically high rates of alteration or loss. Coastal lagoon wetlands comprise only 12% of the wetland acreage of Island County. The County has 1 Delta Estuary and Other Estuarine Wetlands account for less than 1% of the wetland acreage found in the County.

- b. **Bogs.** The WSDOE *Rating System* considers bogs a “Special Characteristic” due to their unusually great sensitivity to pollutants, high loss rates in Western Washington (due to peat mining and agricultural conversions), and to their unusual plants. The 26 confirmed bogs comprise only 4% of the wetland acreage of Island County. Approximately 59 additional areas may qualify as bogs, but require verification by a wetland professional during a site visit.
- c. **Mature Forested Wetland.** The WSDOE Rating System considers it a “Special Characteristic,” due to the long time period required to fully replace mature forest, relative scarcity of this habitat type in Island County, and historically high rates of loss. Wetlands of this type also provide outstanding habitat for many wildlife species, especially cavity-nesters.
- d. **Large Non-estuarine Ponded Wetlands.** Wetlands of this type are among the most important ones for water birds and amphibians. Their large area of water and long water residence times also make them particularly sensitive to nutrient inputs, warming, evaporation, and the potential for resultant blooms of nuisance algae. Many adjoin lakes or are near estuaries. There are approximately 28 such wetlands, 15% of the wetland acreage in the County.
- e. **Wetlands associated with Anadromous Fish Streams, Resident Salmonid Streams, Delta Estuary, or Coastal Lagoons.** Most wetlands filter and process pollution. Even when those wetlands are not accessible to fish, this function assumes greater importance when the wetlands are located upstream of waters heavily used by salmonids, such as anadromous fish streams, pocket estuaries, and coastal lagoons. Because streams and other channels have not been mapped comprehensively in Island County, all wetlands within 500 ft of an Anadromous Fish Stream, Resident Salmonid Stream, the Delta Estuary, Coastal Lagoon, or Bog are presumed to be functionally connected to those features if they are in the same watershed, unless contrary evidence is provided. There are approximately 126 wetlands, constituting about 25% of wetland acreage that are considered associated with these natural features.
- f. **Wetlands Dominated by Native Plants.** These wetlands are usually more sensitive to alteration of their buffer areas than ones dominated by non-native species. For more than 20 years the Old CAO has assigned them the highest level of protection (Category A). Based on a statistical sample, these wetlands may comprise 79% of the County’s wetlands. However, less than 40% of the County’s wetlands are estimated to have only this attribute. Most also fall in one of the other categories discussed above.

- 5. In all, under the proposed CAO for wetlands, of the 1,024 known wetlands in the County, about 7% of the County’s wetlands may fall into Category A, 14% in Category B, 11% in Category C, and the balance, 68%, in Categories D and E. The County expects these

wetland categories will be the basis for buffer determinations about one-half the time and habitat will be determinative for buffers for the remainder of the wetlands. The exact percentage cannot be determined conclusively without on-site inspections. The number of wetlands in the currently used Categories A, B, and C is unknown. Statistics on acreage and number are included in R 9580 and 9566.

6. Factors that predict wetland sensitivity include hydrologic connectivity, the slope and erodibility of soils surrounding the wetland.
7. Reasons for the Particular Factors Used to Assess Wetland Sensitivity
  - a. **Steep Slopes and Erodible Soils.** Excessive sediment input degrades wetlands. To filter this sediment and other pollution before it reaches wetlands, the vegetated buffers need to be wider if they are on top of potentially erodible soils and steeper slopes. Rills, gullies, and other concentrated drainage ways that render buffers much less effective are more likely to form on steep slopes and in erodible soils. The largest multiplier used is the same one (1.5) that the WSDOE recommends to account for steep buffer slopes around wetlands. The buffer widths that result from applying the multipliers to Island County wetlands are mostly within the 170 ft range supported as the maximum for forested buffers on the steepest-sloped most-erodible soils. The widths also are mostly within the range that would result from applying a widely-used rule-of-thumb of “4 ft increase in buffer width (beyond a baseline width) for every degree of slope.”
  - b. Although soil erosion in Island County seldom happens at slopes of less than 5%, the downslope (usually subsurface) movement of other nonpoint pollutants (e.g., from septic systems) is a concern even on nearly-flat slopes. Any increase in slope results in more nutrients and contaminants reaching streams and wetlands because there is less contact time between those substances and the plants and sediments that adsorb them. There are few published data that define a specific percent-slope threshold below which these pollutants are unlikely to move; it also depends on soil type, vegetation, and loading rates. The national Center for Watershed Protection cites “slopes over 5 percent” as a factor that reduces the pollutant removal performance of buffers. In the classification used in the NRCS Soil Survey for Island County, 5 percent is a common break point for classifying soil map units, making it practical to use to begin the slope adjustment.
  - c. **Presence or Absence of a Surface Water Outlet.** Other factors being equal, wetlands without outlets are more sensitive to pollution effects because whatever pollution gets carried in cannot easily be flushed out.
  - d. **Small Contributing Area.** Other factors being equal, in proportionately small contributing areas, such as the headwaters of streams and the upper margins of watersheds, buffers are more effective and whatever pollutant sources are present are proportionately larger.

## **BUFFERS – WATER QUALITY AND HABITAT**

1. The primary purpose of the buffer widths is to protect water quality within wetlands. The specifications in this table reflect generally the range of buffer widths identified in locally relevant technical literature as being necessary to retain excessive nutrients and sediments. However, in the past most buffer recommendations have been developed for hydrologically open systems such as streams and their riparian areas, rather than relatively closed systems with long retention times, such as wetlands. Pollution is more likely to accumulate, rather than pass through, in systems that are closed. Thus, closed systems such as depressional wetlands are potentially more sensitive and may require wider buffers than those recommended for streams.
2. A minimum width of 20 feet for retention of eroded soil in Washington is specified by the NRCS for buffers (filter strips) of herbaceous vegetation. The County proposes to apply that threshold to the least important wetland type (Type E) in the lowest-risk situation in terms of land use intensity and wetland sensitivity. The NRCS specifies a width of 40 feet for retention of dissolved contaminants in runoff under precipitation conditions typical of Island County. However, because the NRCS specification does not take into account the pollutant loading rates (“Impact Intensity”), wetland sensitivity, or wetland type, the County proposes to apply this specification mainly where low-intensity activities occur near the less sensitive wetlands of no outstanding importance.
3. Another threshold appears to be approximately 100 feet. That buffer width (a) is commonly specified as a minimum for protecting the water quality of wells (WAC 246-290-135), (b) is specified in WAC 222-30-010 for protecting the more important wetlands from polluted runoff associated with timber harvest in their buffers, and (c) is supported tenuously by reviews of buffer effectiveness literature conducted by several other authors, and (d) is the buffer width likely to be specified for most wetlands under the Old CAO. A maximum of 200 feet is reserved for the rare situation where high-intensity activities (e.g., urban roads) will occur within the buffer of a very important and sensitive depressional wetland with no outlet that is surrounded by erodible soils. There are no applicable studies in the published literature that support this specific number. Rather, it represents an informal extrapolation based on principles of pollutant transport and our best judgment. In general, widths greater than the 100 ft specification cited above are needed to ensure effectiveness of buffers over the long term (because pollutant processing effectiveness may decline over time) and during unusual storm events. A few studies have shown buffers to lose capacity for storing sediments and retaining phosphorus over a period of many years. Sediments that have been successfully retained in buffers for years can be flushed into wetlands by severe storms. Buffer widths of greater than 100 ft are also justified to retain pollutants where high-intensity activities occur on coarse-textured soils and/or around the more sensitive types of wetlands. Buffer requirements related to water quality protection also are subject to modification based on slope gradient. The particular multipliers used in the New CAO are not supported precisely by empirical data, but the general principle of requiring wider buffers on steeper slopes is, and the multipliers are generally consistent with WSDOE guidance.
4. For the following reasons, the County modified slightly the Habitat assessment component of the WSDOE *Wetland Rating System*, as well as some of the buffer widths

recommended by the WSDOE in their “Buffer Alternative 3”: (a) to better reflect conditions and ecological relationships unique to Island County, (b) to give greater recognition to wetlands the County considers particularly important; and (c) to simplify the components of the *Rating System* so it can be applied by a landowner in consultation with maps, aerial imagery, and databases currently available from the Department, and with subsequent verification by the Department.

5. The County compared habitat scores determined using both the unmodified and modified WSDOE *Wetland Rating System*, as applied to the countywide statistical sample of wetlands, and found there to be a highly significant and positive correlation between scores from the two methods, suggesting that overall they are operationally interchangeable. This analysis was published in June 2007 as Technical Appendix A to R 9566 and then updated in November 2007 (R 9597).
6. With regard to protecting the habitat functions of wetlands (e.g., the ability of wetlands to support species that require or have a strong affinity for wetland conditions), the County’s BAS report identified only a few studies whose conclusions are transferable to the wetland-dependent species and wetland types that occur in Island County. One study, conducted in the Seattle area, suggested that screening a wetland with a thin line of tall vegetation may be sufficient to minimize direct disturbance of water birds by people. Another study suggested a buffer width of 50-100 ft might be sufficient to limit the spread of some non-native plants into wetlands. Other studies pertain to a few wetland-dependent birds that nest in or near wooded wetlands of Island County, and suggest a minimum buffer width of about 150 ft for those species. No studies prove the need to use much wider buffers (well in excess of 200 ft) to sustain populations of Island County wetland-dependent animals that also use woodlands which surround ponded wetlands. No studies have shown that buffers must be wooded in order to support most of the County’s wetland-dependent species.

## **MONITORING AND ADAPTIVE MANAGEMENT**

1. In 2006, the County began implementation of a surface water quality monitoring program for non-tidal waters located in Island County. A report by Dr. Paul Adamus serves as the basic resource document for the Program adopted by Ordinance C-22-06.
2. Concurrent with the monitoring and surface water quality in streams and lakes, the County will initiate a wetlands water quality and vegetation monitoring program. The purpose of Wetlands Monitoring is to assess the health of wetlands in Island County. Both biological and chemical indicators will be monitored and this monitoring program will assist in determining the effectiveness of County wetlands regulations.
3. The County has developed written protocols for vegetation monitoring. These protocols are described in Technical Appendix D, R 9566.
4. It is expected that it will take five years to establish a baseline water quality condition for the non-tidal surface waters of the County.
5. Twenty-four watersheds will be monitored for this five year time period. These Baseline Watersheds will be classified as natural, agricultural or developed based on the dominant

land use pattern occurring in the Watershed. Included in the baseline monitoring are a number of watersheds where a wetland is represented.

6. The Water Quality Standards established in Chapter 173-201A WAC primarily apply to perennial streams and adjustment will be required to allow these thresholds to apply to wetlands, lakes or intermittent streams. The Water Quality Standards are established to protect human health and/or to protect aquatic life uses.
7. The Water Quality Standards in the draft report for nitrates was established based upon the drinking water standard. The program will work towards establishment of an appropriate baseline for nitrates. It is understood that some toxicological data supports this standard for protection of aquatic life uses.
8. No Water Quality Standards or Thresholds presently exist for conductivity, hardness, wetland water quality and vegetation. However, measurement of these parameters assists in the interpretation of the data for other parameters. The adopted Standards and Thresholds are generally applied to perennial flowing surface waters. Appropriate thresholds will need to be established and adopted for nitrates, conductivity, hardness and vegetation found in Island County surface waters and for wetland water quality and vegetation.
9. Compliance Assessment will typically be the first adaptive management action taken by the County once an exceedence has been established reliably. Source Identification will follow if likely contributors are not identified through Compliance Assessment.
10. For the Monitoring Program to be successful and comprehensive, the voluntary cooperation and involvement of land owners is essential. Currently, the County's efforts to obtain access to properties have been welcomed by the public. County regulations do permit the County to secure the right of access through a court order. The County will seek this authorization only when other options are simply not available.
11. In addition to the annual monitoring report on water quality, the County will also produce a wetlands monitoring report each year. This report will provide agencies and the public with both field data from the monitoring program as well as data on the CAO administrative determinations made in the prior year. The contents of the monitoring report is described in ICC 17.02A.080G.

## **DECISIONMAKING UNDER THE NEW CAO**

1. The new CAO establishes a new process for decisions the County will make regarding critical areas. All projects on land that contains or is affected by critical areas or critical area buffers must first avoid the critical area or critical area buffer. If not avoidable, then the project must be examined to determine whether it can be modified to reduce the alteration. These first two review steps are followed by a third step-restoration. After completing the first two review steps, if an alteration is still needed, then the County will determine whether the disturbed area can be restored. As a fourth decision step, the County will establish mitigation to compensate for any alteration that cannot be restored.
2. The new CAO uses two new defined terms - practical and reasonable. All critical area decision steps will be judged on whether the action proposed is practical and reasonable. The intent is to make sure that decisions under the New CAO make "common sense."

3. The new review process for Building permits has been depicted in Technical Appendix G found in R 9566. The interdepartmental review protocol is described in R 9596. The intent of the County is for the New CAO decision process to affect all decisions of the County on land that contains critical areas.

#### **SENATE BILL 5248**

1. SB 5248 was adopted by the 2007 Legislature to establish a process for considering whether, how, and to what extent agricultural activities are regulated to protect critical areas. The bill prohibits Island County from adopting new critical area regulations that affect agriculture until July 2010. The County is encouraged, however, to establish voluntary programs.
2. SB 5248 does not affect regulations adopted prior to May 2007. Therefore, the County's existing Old CAO regulations remain in effect for agriculture on lands that contain or are affected by critical areas. This means existing and on-going Ag may comply with the County's Ag BMP Program and new Ag must comply with otherwise applicable CAO standards.
3. The Ag BMP program contained in the Old CAO has been included verbatim in the New CAO. This was done so new Ag activities have the option of also applying the Ag BMP Program when these activities intrude into critical areas or critical area buffers. Under the New CAO, new agriculture will be classified by intensity and then depending on intensity level, required to comply with the standard or custom farm plan requirements.
4. However, not all new Ag activity can volunteer under the new CAO. Only activities on lands that have historically been used for agriculture can use Ag BMPs. If a clearing and grading permit is required for this Ag activity under Chapter 11.02 ICC, then full compliance with the Old CAO will be required.

#### **SMALL WETLANDS**

1. The County understands that small wetlands play a role that is important and need to be protected. WSDOE has provided the County guidance on how to fairly and appropriately regulate small wetlands (R 9599 and R 9576). The New CAO incorporates DOE's guidance.

#### **AMENDMENTS CONSIDERED BY THE PLANNING COMMISSION**

1. The second phase for public comment ended on November 30, 2007. Public and agency comment is summarized in R 9589. All written comments are also found in the County's Record and are summarized in R 9568, 9569 and 9570.
2. On December 11 and 13, the Planning Commission considered amendments that responded to public or agency comment. Eighteen amendments were considered and all but one of the eighteen was agreed to by the Planning Commission. R 9585 contains the amendments first considered on December 11. R 9586 contains revised amendments considered on December 13. The actions of the Planning Commission are described in R 9587, R 9571 and R 9572.

## **ISLAND COUNTY'S LOCAL CIRCUMSTANCES**

1. The Board of Commissioners and the Planning Commission determined at the commencement of the Wetlands Update that any new regulation must be adapted to fit conditions found in Island County.
2. The County has mapped slightly over 1,000 wetlands. Slightly over 100 of these wetlands were studied in detail by a project team lead by Dr. Paul Adamus. The 100 were a statistically derived sample of the 1,000+ wetlands. As a consequence, the County is able to reliably predict wetland characteristics for all 1,000 wetlands from the studied wetlands.
3. What the County learned about its wetlands is documented in the Phase I Report and this information constitutes local circumstances upon which the New CAO was developed. The Phase II BAS Report focuses on the unique conditions identified by the Phase I Report.
4. The County has regulated development activity that intrudes into wetlands since 1984. This by itself constitutes a unique circumstance because the County was the first small county to do so. These regulations have proven to effectively protect wetlands using a very simple, easy to understand classification system. Because of this history of regulation, the County has fashioned the New CAO to be as simple to both understand and administer as possible.
5. The type and character of development in Island County also constitutes a unique local circumstance. Technical Appendix E found in R 9566 provides a statistical summary of permit decisions from 1985-2006. The New CAO has been developed to address the type of permit decisions the County routinely addresses.
6. Historical Clearing and grading activity in the County is another local circumstance reflected in the New CAO. Trends are documented in Technical Appendix F also found in R 9566.

## **GUIDING PRINCIPLES FOR THE WETLAND UPDATE**

1. First and foremost, the County intends that its regulations protect critical areas considering best available science and in doing so, give particular consideration to protecting anadromous fish. Under the guidance of Dr. Paul Adamus, the New CAO has been crafted to meet this guiding principle.
2. Second, the County intends that its regulations allow for common sense to be exercised in all administrative determinations that implement the New CAO. To do this, decisions will be judged to determine whether they are practical and reasonable.
3. A common theme in public comment has been -- if you tell me what I need to do to protect critical areas and why, I will do it. Therefore, the development of the New CAO was also guided by this request. To do so, the County developed regulations that both use understandable terms to describe wetlands whenever possible and use a transparent process to establish wetland buffers.
4. To the fullest extent possible, the County's New CAO establishes ways to allow a property owner to be an active, not passive, participant in the protection of wetlands. The

County believes investing an owner in the outcome, rewarding owners for voluntary actions, and not penalizing owners for the actions or nonactions of another owner are all important features of the County's New CAO.

5. Last, the County has strived to fashion regulation that is flexible and adaptable to specific site conditions. This too matches the local circumstances that have been articulated throughout the County's review process for the Wetlands Update.
6. Taken together, the guiding principles described above and the local circumstances that shaped them have led the County to develop a wetlands update that establishes an individualized set of regulations that will continue to protect the wetlands of Island County.

#### **AMENDMENTS CONSIDERED BY THE BOARD**

1. On January 7, 2008 the Board received the Planning Commission's recommendation for the wetlands update and discussed four amendments. On January 28, 2008 the Board conducted a hearing on the four amendments.
2. Amendment No. 1 deletes the reference to Chapter 173-700 WAC found in section K, page C-45 and replaces it with the following "...certified by the Department of Ecology...". This WAC has not yet been adopted and the Code Reviser requested that the reference be changed. The change is technical and is not intended to substantively change the standards for mitigation banks.
3. Amendment No. 2 changes the effective date to allow more time for staff to prepare for implementation. The Planning Director requested the amendment and provided a memo and work plan to support the request. See Record #9642.
4. Amendment No. 3 deletes an exemption added by the Planning Commission during its deliberations. The provision would exempt from the Critical Areas Ordinance certain stormwater management activities if conducted consistent with review procedures. This change was requested by Washington Department of Ecology (DOE). DOE suggested that this activity should be treated as a non-exempt activity.
5. Amendment No. 5 modifies the cleared area thresholds that are used in determining land use intensity. The Planning Commission's transmittal memo included a request that the Board reconsider cleared area thresholds due to their concern that there were inequities built into their recommendation. The Board requested that staff re-evaluate the parcel size categories and the clearing thresholds with the intent of creating a smoother and more equitable transition between categories.
6. Record #9566 consists of a table that describes clearing trends since 1999. The table summarizes clearing activities into five categories (1 to 2.49 acres, 2.5 to 4.99 acres, 5 to 9.99 acres, 10 to 19.99 acres, and 20 acres and larger). The table also describes the average percentage of land cleared for each parcel size range.
7. The Board finds that it is appropriate to further stratify the parcel size categories and to establish thresholds for clearing and impervious surface for each category. Additional stratification will lessen the dramatic difference between categories. For example, the

Planning Commission's recommendation classified a 4.5 acre parcel with 51% clearing as (2.3 acres of clearing) as High Intensity and a 4.6 acre parcel with 35% cleared area (1.61 acres of clearing) as High Intensity. The Board modified the categories to eliminate this kind of outcome.

8. Planning and Community Development prepared a memorandum that describes the net effect of the modified parcel size categories, the cleared area thresholds, and the impervious surface thresholds. The memorandum describes that, on balance, the revised system provides greater or equal levels of protection. See Record #9645.
9. When a new lot is fully covered by a Critical Area and/or Critical Area Buffer the County currently requires that a conservation easement be recorded for the lot. The amendment considered by the Board simply continues this requirement.
10. The new Critical Area Ordinance carries forward verbatim the County's adopted Agriculture BMP Program for existing agriculture. The Board has deleted the reference to new agriculture on lands historically used for agriculture at the request of CTED and other State Agencies. The Board intends to consider a voluntary program for lands that have been farmed historically during the Fish and Wildlife Update.
11. The New CAO requires review of development proposals for lots that contain or are affected by a Critical Area or Critical Area Buffer. This is a new requirement not found in the Old CAO. The purpose of the "is affected by" language is to ensure that the County's review includes both Critical Areas found on-site as well as those that are adjacent or nearby. For example, an off-site critical area may require a buffer that extends onto the property proposed for development.
12. The Old CAO very effectively protected Island County's wetlands. Since the County began protecting wetlands in 1984, the County has authorized the alteration of less than 34 acres of wetlands. These alterations have been balanced almost equally by recovery of wetlands from alterations that occurred prior to 1984. Phase I Report (R-9564).
13. Also since 1984, the County has authorized the alteration of less than 28 acres of buffer area within 100 ft of wetlands. Since 1998, alterations noticeable in aerial photographs occurred in the 100 ft buffers of only 8% of the wetlands. Most alterations affected only a small part of the buffer, with the larger and more numerous alterations consisting of vegetation clearing. Since about 1996, timber harvests have been authorized within 100 ft of about 12% of the wetlands. Nonetheless, site inspections of a sample of wetlands found that natural ground cover dominates in the areas within 100 ft of 75% of the wetlands. In buffer areas closest to the wetlands (0-25 ft), tree canopy with coverage exceeding 50% is present at more than half the sites. Moving farther out from a wetland, this percentage barely changes. Only 1% of the wetlands had more than 10% impervious surface within their 100 ft buffer, and only 2% had more than 10% bare soil there. Phase I Report (R-9564).
14. The New CAO will protect wetlands more effectively than the Old CAO. Required buffers for some low and moderate intensity uses will be smaller under the New CAO. However, buffers for high intensity uses will be uniformly larger than those required under the Old CAO. These changes all conform to best available science.

15. The New CAO protects more wetlands than the Old CAO. The Old CAO wetland size threshold ranged from 1/8 to 1/4 acre. Under the New CAO wetlands less than 1,000 square feet will, under some circumstances, be protected. This change is expected to expand the number of wetlands protected by the New CAO and also conforms to best available science.
16. The Old CAO established buffers for only two categories of wetlands. The New CAO has five wetland categories and specifically classifies twelve different wetland types. This change also conforms to best available science.
17. The New CAO also gives special consideration to the sensitivity of a wetland to changes that may occur around the wetland. The intensity of adjacent land use is accounted for by the size of buffer required to protect wetland. Whether a wetland has an outlet and whether the area surrounding the wetland is sloped or flat also affects the buffer size as does whether a wetland may be affected by erodible soils. The Old CAO did not consider wetland sensitivity.
18. Because of their special importance, buffers for bogs and estuarine wetlands have been established irrespective of the wetland's habitat value. Buffers for all other wetlands will be based on either habitat or water quality considerations. As the Planning Commission stated in Buffers, Finding 5, page 5-7, the County's modified rating system correlates with the WSDOE Wetland Rating System. In January and February, the County's system was field tested for about 1/3 of the 100 wetlands the County has evaluated, and, based on field data, the correlation was again confirmed. See R-9774 .
19. Wetland buffers may be increased by the Planning Director if any one of five conditions are found to be present. This change also provides greater protection to wetlands.
20. Given the changes described above, the Board believes the New CAO will protect wetlands more effectively than the Old CAO and will implement the Comprehensive Plan Goal for wetlands, which states expressly that there shall be no net loss in wetland functions.
21. The New CAO states at ICC 17.02A.010.B that it is to be administered flexibly so that no lot will be made unusable. The Board intends that wetlands be protected so that wetland functions are not lost while ensuring that property rights are protected. The Board believes these two objectives are not mutually exclusive and intends that the New CAO be administered to balance in a fair and equitable manner the protection of wetland functions and property rights.
22. The Board agrees with all of the Planning Commission's findings and, in particular, those that relate to local circumstances and guiding principles. The Board wishes to place special emphasis on the Planning Commission's expectation that administrative determination under the New CAO make common sense.
23. The New CAO will change the County's review of development proposals that affect wetlands very significantly. Under the New CAO, decisions of all departments of the County will now be required to consider CAO requirements.
24. All decisions affecting wetlands will be required to document specifically how the proposal has been changed to avoid, reduce, restore or mitigate for the alteration of a

wetland. These four inquiries are ranked in priority with mitigation allowed only if the proposal cannot practically and reasonably avoid, reduce, or restore the wetland. While the Board does not intend that the County require impractical or unreasonable changes in a development proposal, it does expect changes that are practical and reasonable to be carried out. If an applicant elects not to, then the Board will expect the development proposal to be denied.

25. Mitigation is the last option in the new decision making process established by the New CAO. The Comprehensive Plan amendments establish priorities for mitigation and the New CAO implements these priorities. Similar to the framework for decisions regarding the alteration of a wetland or wetland buffer, the appropriate decision regarding mitigation will be judged based on what can practically and reasonably replace wetland functions that may be lost if an alteration is permitted. For any decision, mitigation will always be the last preferred option and a fee in lieu of mitigation will be used as the last mitigation option and only after the Board adopts a fee system.