

# **Critical Areas Ordinance Revision and Best Available Science Review**

## **Meeting Summary**

**Meeting date:** November 12, 2003

**Location:** Silverdale Community Center, Silverdale WA

### **Attendance:**

Technical Review Committee (TRC) Members:  
Mike Gustavson, Kitsap County Planning Commission  
John Nantz, West Sound Conservation Council  
Art Castle, Home Builders Assoc. of Kitsap County  
Ted Labbe, Port Gamble S'Klallam Tribe  
Tom Ostrom, Suquamish Tribe  
Jeff Davis, WA Dept. of Fish & Wildlife  
Dave Jones, Kitsap County Association of Realtors  
Monty Mahan, Kitsap County Planning Commission

Kitsap County Department of Community Development Staff:  
Dave Greetham, Environmental Review  
Rick Kimball, Environmental Review  
Jim Bolger, Natural Resources  
Paul Nelson, Natural Resources

### **Other:**

Samantha Torpey, Home Builders Assoc. of Kitsap County  
Jack Hamilton, Central Kitsap Community Council  
Don Flora, Interested Citizen (Kitsap Alliance of Property Owners)

The meeting convened at approximately 2:10 with introductions by meeting attendees.

Rick reminded the committee to please complete the vitae form that was emailed with along with the meeting summary from Nov. 5. Jim explained how these forms are necessary to document TRC credentials. They can either be brought to future meetings or emailed to Rick or Jim.

There were no questions or corrections to the Nov. 5 Meeting Summary.

Dave G. updated the group on his on-going follow-up from the last meeting to gather CAO-BAS information from Snohomish and Clallam Counties.

Rick reviewed the purpose of the TRC for new members present. This was followed by several questions from various committee members.

John Nantz asked about more frequent CAO reviews given the high rate of local development and rapidly advancing scientific information? Shouldn't the ordinance be revised more frequently?

Rick explained that there is on-going administrative revision of the ordinance and in instances like the newly adopted flood ordinance, changes to other ordinances affect the CAO. Jim added that the Growth Management Act (GMA) also requires a deliberate evaluation of comprehensive plans and associated development ordinances at prescribed periods following adoption to ensure that subsequent amendments to the GMA are addressed.

Ted Labbe asked about a meeting to address more general questions related to the CAO that are not specific to sections being addresses in the BAS review? He suggested a meeting to discuss these. Rick indicated that is a possibility and invited folks to submit their comments on the CAO at anytime.

Tom Ostrom asked if there would be a point where the County will compile all the BAS it uses for any revisions into a report that will be available for comment? Jim responded that the BAS it considers will be in the record and that no BAS product is neither required nor envisioned at this point. (Note: development standards and assessments will be referenced within the ordinance identifying sources of BAS considered, but there will probably not be a specific report)

Dave Greetham handed out some additional materials for consideration as an evaluation of BAS for the Frequently Flooded Areas section of the CAO. One source was a review of ecological issues in floodplains and the other was a draft study looking at the effects of tsunamis in Sinclair Inlet.

Dave provided a presentation on frequently flooded areas including a brief history of the County's Flood Ordinance, including the current information on the updated ordinance. He also indicated that the primary purpose of the Flood Ordinance is to prevent loss of life and property and that little or no consideration of anadromous fish is given in the existing ordinance. Other jurisdictions such as King County have identified the ecological importance of areas like channel migration zones (CMZ) in floodplains, but concludes that specific delineation of floodplains for the protection of fish and riparian habitat protects land areas considerably larger than proposed aquatic area buffers (King Co. BAS assessment provided in resource binders). However, Pierce County has identified seven streams and rivers for CZM protection. Tom Ostrom pointed out that riparian buffers start at the ordinary high water, with an inundation frequency of 1-2 years, while floodplains include 100-year flood areas (or areas with a 1% chance of inundation every year).

The County currently uses Flood Insurance Rate Maps (FIRM) provided by the Federal Emergency Management Agency (FEMA) to determine frequently flooded areas. Dave explained how these maps are fairly coarse and have been digitized and provided as a data layer on the County's LIS/GIS system. When development proposals are received, they are located on a building limitations map. If the project location falls within a FIRM identified flood area, this triggers a site visit for confirmation. (Permit processing procedures are included in resource binders.) Dave explained that in Kitsap County, there are relatively few frequently flooded areas associated with streams, but the majority of areas are along marine shorelines.

Dave then reviewed the materials provided in the resource binders and introduced the two additional studies mentioned above. He finished by reviewing BAS determinations from other jurisdictions included in the binders and by raising the question of considering anadromous fish within the frequently flooded section. He suggested that perhaps CMZ considerations could be made.

The discussion following the presentation included several questions and consideration of how local systems functions. Tom and Ted inquired about how the flood ordinance addresses development of on-site septic systems within the flood areas and the possible impacts such as hydrologic continuity with surface waters and potential eutrophication or increased oxygen demand. Dave said he'd follow-up with the Health District on this issue since they have jurisdiction over development standards for on-site systems.

The remainder of the discussion focused primarily on CMZs – assessment, ecological function and local conditions. There was agreement among several TRC members that based on their professional field experiences that there are active CMZs for some of the lower reaches of the larger streams including Chico Creek and several west Kitsap streams (Stavis, Seabeck, and Little Anderson Creeks). Jeff Davis explained that one tree falling into Chico Creek has caused 30' to 40' lateral changes to the channel. Streams, like Clear Creek, historically had floodplains and an associated CMZ, but management and encroachment of development have diminished the ecological functions of these areas and processes.

Mike Gustavson asked if there are any studies that have measured adverse effects to salmon from encroachment on the CMZ?

Jeff Davis indicated the new *Integrated Streambank Protection Guidelines* (WDFW, 2003) manual identifies increased channel incision, with associated higher flows and scour, and affects on gravel quality as some of the adverse impacts to salmon.

[**Note:** The summary of the White Paper: *Ecological Issues in Floodplains and Riparian Corridors* (Bolton and Shellberg, 2001) provided by Dave for resource binders includes a review of several studies examining the adverse biological effects of channelization. This paper meets the requirements of BAS as determined by multiple jurisdictions and by the WA Dept. of Community, Trade and Economic Development. Copies of the entire paper can be obtained at the website: <http://www.wa.gov/wdfw/hab/ahg/floodrip.htm>]

The possibility to use the County's LiDAR data to better identified areas of channel migration was discussed as a method for more accurately mapping/identifying local CMZs. The latest refugia report (May and Peterson, 2003) was also identified as a source for identifying local channel migration areas and their relationship to salmonid habitat. Ted also described a rough method developed and used by US Forest Service field staff that estimates flood prone areas as twice the bank-full depth of a river.

Don Nantz suggested that looking into a book called *Puget Sound Rivers* would be useful for examining these living systems from a historical perspectives since Govt. Land Office maps are included that illustrate river features from the late 1800s.

Other issues discussed:

- Mike proposed specific Flood Ordinance changes that included removing KCC Chapter 15.12.120.2(b); amending 15.12.130 to remove references to “high velocity zones,” and “wind loads;” and revising 15.20.030.1 to remove 0.5 acre or less variance prerequisite.
- Art raised the issue of rain harvesting and the creation of regional storm water facilities.

Paul Nelson distributed materials for the next meeting on Geologically Hazardous Areas, on Nov. 19<sup>th</sup> at the Silverdale Community Center in the Evergreen Room, from 2 to 4 p.m.

Meeting adjourned at 4:00 p.m.