



KITSAP COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT

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Following is a summary of recommendations to the Critical Areas Ordinance, based on Technical Review Committee discussion since November 2003.

Frequently Flooded Areas

1. ***Introduce channel migration zone (CMZ) protection to the existing flood ordinance.*** Pierce County has identified portions of three large rivers for CMZ protection: the Puyallup, White and Carbon Rivers. While Kitsap County does not have rivers of that size, it is recognized that the larger county streams do contain CMZ's. These could be mapped using LiDAR data, and existing studies such as the May and Peterson 2003 Refugia report.
2. ***Provide further direction for new or replacement septic drainfields in flood hazard areas.*** Chapter 15.12.050(3) currently reads "*New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.*" Discussions with Health District staff indicate that they rarely encounter such situations, and are not aware of any recently approved drainfields that have become inundated with surface waters in flood hazard areas. When areas are recognized to have at least seasonal saturation, the effluent is normally required to be pumped to drainfield at a higher elevation. Current state law requires that septic drainfields maintain 100 feet of separation from standing or flowing water.
3. ***Retain existing flood ordinance as amended by the Board of County Commissioners in October 2003 (Ordinance no. 310-2003).*** Discussion of CMZ's may also be addressed during the review of Section 300 of the CAO (Fish and Wildlife Habitat Conservation Areas), scheduled for January 21 and February 4, 2004. As an alternative, any CMZ language could be incorporated into that portion of the CAO. *Note: Mike Gustavson's specific recommendations for language revisions will be taken under consideration.*

Geologically Hazardous Areas

1. ***Utilize Kitsap County's Land Information System (LIS) to track parcels that have had geotechnical reports prepared.*** This would create a database so existing geotechnical information could be accessed in the vicinity of a new project. While this may not entirely eliminate the need for additional studies, it could reduce the amount of new research necessary.

2. ***Utilize LiDAR to more precisely determine steep slope areas.*** Existing and future LiDAR mapping provides a more accurate picture of county-wide topography than the existing U.S. Geological Survey maps.
3. ***Allow slope buffers to be utilized as “management zones”, rather than strict non-clearing buffers.*** Management zones typically differ from strict non-clearing buffers by allowing some limited use in the buffer, such as lawn or garden areas. The existing CAO does allow for this if the site-specific geotechnical report indicates no additional slope hazard, but further clarification language could be inserted into the CAO.
4. ***Provide opportunities for pre-engineered approaches to development on or near slopes.*** The CAO currently offers a pre-established minimum setback in order to waive the requirement for a site-specific geotechnical report. Because each site may vary in soil type, drainage and stability, pre-engineered solutions may not be feasible until the soil conditions are known for each specific parcel.

Critical Aquifer Recharge Areas (CARA)

1. ***Classifying/designating recharge areas***
 - Make no changes in the methodology of identifying as Category 1 and 2 Critical Aquifer Areas but update map with revised soils data and WDOH wellhead data.
 - Use DRASTIC or some other index-based modeling effort to refine where CARAs exist.
 - Determine aquifer vulnerability based on actual data similar to the USGS Nitrate study.
 - Utilize the existing detailed maps (e.g. USGS Bangor Study, UW/USGS quad mapping) to identify CARAs within those study areas.
 - In addition to addressing groundwater quality concerns, designate CARAs based upon groundwater quantity concerns.
 - Use density of septic systems as a factor in identifying CARAs.
2. ***Regulating land use activity within identified CARAs.***
 - Retain existing list of operations that potentially threaten groundwater.
 - Update the list of operations that potentially threaten groundwater using the latest EPA list modified for our area.
 - Continue to allow any activity based on results of a geohydrologic report.
 - Prohibit certain activities outright (e.g. landfills, mining, wood treatment facilities) within CARAs.

- In addition to regulating land use for groundwater quality concerns, regulate land use within CARAs for groundwater quantity concerns.
- Regulate land use to achieve an acceptable density of septic systems.

3. ***Site Specific Evaluation***

- Maintain existing hydrogeologic reports.
- Modify hydrogeologic report to facilitate entering information into a regional database (such a database does not currently exist).

Wetlands

1. ***Reevaluate non-regulated wetland size criteria.*** Kitsap County does not regulate Category III wetlands that are isolated and less than 2,500 square feet or Category IV wetlands that are isolated and less than 10,000 square feet. Literature submitted by Alison O’Sullivan suggests that smaller wetlands harbor populations of amphibians that are capable of migrating out to equally small wetlands in the surrounding landscape. These deemed “metapopulations” provide individuals within and outside its homesteaded wetland area. Loss of these small wetlands severs connectivity of suitable habitat, removing crucial corridors within the region and may be putting the species at risk. Further research into available literature is warranted on the subject.
2. ***Consistency in buffer control when multiple parcels border a common wetland.*** Development is addressed on a parcel-by-parcel basis. Acquired wetland information is recorded in reference to that particular parcel, leaving gaps in extending the viable information to surrounding parcels affected. Kitsap Counties LIS permit tracking database may allow for better tracking or tagging of adjacent parcels. A process or policy, independent from the CAO, may be developed.

In addition, staff has identified the following issues for further analysis:

1. ***Establish distance limitations for Category I wetlands affected by Class I Salmon habitat.*** Wetland areas associated with Kitsap County streams automatically define the outer limits of critical stream habitat, *Class I Salmon Habitat*. This requires a 200-foot native vegetation buffer along its delineated boundary. Some cases the wetland extends 300-feet or greater, beyond the stream channel. Further investigation is needed to determine whether there is some **distance** (greater than 300 feet) or **circumstance** (slope or severed) where wetlands no longer establish “*critical*” status for stream function, allowing for the Class I Salmon Habitat status to fall out, making the DOE Category rating prudent?

2. ***Review Best Available Science for wetland buffers.*** Pursuant to the Growth Management Act, staff will review BAS relative to current wetland buffers. Current CAO requirements are: Category I - 200 feet; Category II - 100 feet; Category III - 50 feet; Category IV - 25 feet.
3. ***Mitigation standards and guidelines.*** Successful mitigation relies on many factors including construction methodologies, performance standards, maintenance requirements and monitoring time lines. In order to achieve a consistent degree of success in Kitsap County mitigation projects strict guidelines must be developed. Instructions for the adopted guidelines must be developed. Past mitigation projects and their shortcomings must be evaluated for understanding current policy deficiencies.

Fish and Wildlife Conservation Areas

1. ***Watershed Analysis for UGA expansions.*** Impacts to watershed functions are often overlooked during discussions of UGA expansions. Watershed analysis prior to UGA expansion discussions would help to identify important habitats and functions and help site expansion in the areas that would have the least impacts.
2. ***Reduce impacts to aquatic habitats through better site design, Best Management Practices (BMP's) and low impact standards.*** Many stormwater and non-point source impacts to streams and estuaries could be improved through implementing BMP's and siting development where it would have the least impact. Low Impact Development standards would accomplish both reduction in stormwater volumes and pollution.
3. ***Implement a CAO monitoring program.*** Develop a program that monitors how well the CAO is complied with, how many applications are granted variances or reasonable use exemptions and which requirements are most or least likely to be in compliance. This type of program would allow analysis of the CAO effectiveness and aid in enforcement.
4. ***Increase and Improve Enforcement.*** Currently Kitsap County has three enforcement officers to enforce all the county codes and they act on reports of violations. Increasing the number of enforcement officers and increasing penalties would act as a stronger deterrent.
5. ***Designate species and habitats of local importance.*** Terrestrial wildlife habitat is fragmented and lost as logging, road construction and development occurs across the landscape. Identifying and designating species and habitats of concern for CAO protection would allow for a more comprehensive approach to wildlife and natural resource management.

6. ***Designate shellfish, eelgrass and kelp beds.*** Additional layer of review for areas already identified on the 303d list. Consider closer scrutiny of development occurring in areas identified as contaminated.
7. ***Marine shoreline considerations.*** Vegetated buffers on saltwater shorelines need special consideration in CAO.