



## Working Group Meeting Summary – 2024 Critical Areas Ordinance (CAO) Update

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**Topic:** Critical Aquifer Recharge Areas (2<sup>nd</sup> meeting)

**Date:** October 31, 2023

**Time:** 1pm-4pm

**Location:** Online via Zoom

**Meeting Purpose:** *A follow up discussion of the Critical Aquifer Recharge Areas Working Group meeting held on July 27, 2023. The goal of this meeting is to engage in a comprehensive discussion of Critical Aquifer Recharge Areas ([KCC 19.600](#)). Working Group members will review and discuss the required and recommended code changes based on the [Best Available Science Summary](#), recommendations contained in the [Consistency and Gap Analysis](#), and discretionary requests made by staff.*

Working Group Members Present	Working Group Members Not Present
Squaxin Island Tribe	WA Dept. of Ecology
Port Gamble S'Klallam Tribe	Watershed Consulting Firm
Kitsap Public Health District	Puyallup Tribe
Kitsap Public Utilities District	Skokomish Tribe
Suquamish Tribe	Point No Point Treaty Council
Kitsap Environmental Coalition	Jamestown
Kitsap Builders Association	Kitsap Alliance of Property Owners
Futurewise	
DCD Staff	

**Meeting Materials:** [Agenda](#), [Meeting #1 Written Summary](#), [Seawater Intrusion Examples](#), and [DRAFT code edits for discussion](#).

*\*This is a summarization of the working group discussion, not a transcript and does not indicate formal County recommendations or updates.*

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### **Background:**

The first meeting of the Critical Aquifer Recharge Areas Working Group was held on July 27, 2023, to discuss and review the Best Available Science Summary and Gap Analysis Report provided to the county by The DCG Watershed Company. A summary of that meeting can be found [HERE](#) or by visiting the project webpage at [kcowa.us/cao](http://kcowa.us/cao). The second meeting provided draft code language based on the outcome of the first meeting, county staff requests, and recommendations made by the consultants. The working group members reviewed and discussed the following topics and proposed draft code amendments. The proposed code amendments were intended for discussion use only and do not reflect county staff recommendations at this time.



**Recommendation #1** – Add areas at risk of seawater intrusion as a type of Category I Critical Aquifer Recharge Area.

KCC 19.600.610.A identifies specific types of Category I critical aquifer recharge areas, which are those areas where the potential for certain land use activities to adversely affect groundwater is high. As noted in KCC 19.600.620.A.4, the County may add, reclassify or remove Category I critical aquifer recharge areas based on additional information.

To address areas identified at risk of seawater intrusion as a result of groundwater withdrawals and sea level rise, the County could consider adding areas at risk of seawater intrusion as a type of Category I critical aquifer recharge area in KCC 19.600.610.A. Such areas at risk are typically within one-half mile of marine shorelines with wells pumping from near or below mean sea level. A seawater intrusion risk assessment may be required for new wells in these areas. (*Gap Analysis, pg. 28*)

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**Related Code Sections:** [KCC 19.600](#)

**Recommendation #1 Discussion Summary:** Discussion began with a remark that areas at risk of seawater intrusion aren't currently mapped, and so it may not be possible to follow this recommendation. Kitsap Public Utility District (KPUD) is already required to test for *conductivity* and *chloride* when evaluating water quality and wells. The presence of these two elements would indicate saltwater intrusion. Currently KPUD identifies the presence of saltwater on a site-by-site basis and has not identified larger areas of seawater intrusion but may consider monitoring these areas between now and the next CAO update to understand if specific areas are affected. Concerns were raised about the terms *local water purveyor* and *seawater intrusion risk assessment*. Staff should consider defining or better clarifying these terms in code. Other counties have implemented seawater intrusion assessments but eventually stopped using them as they were not providing any information beyond what is already collected by local health department testing. Question raised about when the tests would be initiated in the development/permitting process. Member highlighted the importance of recognizing the threat of seawater intrusion to shallow aquifer recharge areas. It was noted that another section of Kitsap County Code allows the county to classify areas as CARAs as needed, so we may already have the ability to do this as we identify areas at risk. Question was asked about where in the CAO is the means to prevent a well from going in? If we had an at-risk area, the only way to prevent drilling is to say, "no more wells in this area"? This would be difficult as wells located right next to each other can have different water quality depending on which aquifer they draw from and other factors like the aquifer elevation and location. Noted that CAO may not be appropriate place for seawater intrusion code. Much of what we're discussing to identify seawater intrusion is already required by KPHD process, and KPHD also looks at CAO as part of their review. If we rely on KPHD to identify these areas, then we need to ensure a strong connection between the county and KPHD during the development process. Calling out the drilling of wells in an area is not the only issue, but also using up other recharge areas; There is a pertinent role in the CAO to prevent seawater intrusion but very difficult to define what that looks like. Member highlighted that potable water use and CARA's effect on streams was not



addressed in the GAP analysis and is going to have to be addressed at some point. Perhaps it would be better to talk about land use decisions that may contribute to existing withdrawal rates.

**Recommendation #2** – Identify specific types of Critical Aquifer Recharge Area maps that may be produced.

KCC 19.600.610.C indicates that the County, in coordination with other agencies, will produce maps indicating the location of critical aquifer recharge areas and their defining characteristics. The County could consider identifying specific types of critical aquifer recharge areas maps that may be produced by the County, Public Health District, or water purveyors, including the following:

- Maps indicating the location of existing wells and their respective aquifers, particularly for Group A and Group B wells, to use in a well monitoring program for tracking groundwater level trends and groundwater quality changes.
- Maps of abandoned or decommissioned wells to assure the wells do not become pathways for contamination of local aquifers.
- Maps indicating the location of existing activities listed in KCC Table 19.600.620 with potential threat to groundwater quality. (*Gap Analysis, pg. 29*)

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**Related Code Sections:** [KCC 19.600.610](#)

**Recommendation #2 Discussion Summary:** Discussion started with the mention that Kitsap Public Utility District (KPUD) has been mapping wells in Kitsap since 1991 and can produce a map with their existing database. Group A and B wells are mapped, but we typically don't want to put public well locations in public view. That being said the data is there and useable. Abandoned well locations are typically unknown and decommissioned wells are closed off so not sure if these maps would prove useful in the goal of identifying at-risk areas.

Summary of Potential Code Changes - <i>The following code sections were identified for discussion purposes and relate to the various topics and recommendations above.</i>		
Code Section	Issue	Suggested Change for Group Discussion
KCC 19.600.610.A.3	Seawater Intrusion  <i>(Related to Consistency and Gap)</i>	A. Category I Critical Aquifer Recharge Areas. Category I critical aquifer recharge areas are those areas where the potential for certain land use activities to adversely affect groundwater is high. Category I critical aquifer recharge areas include: [...] <b>3. Areas identified by Kitsap Public Health or the local water purveyor as “high risk” of seawater intrusion. Development that may impact aquifers and private wells as identified by Kitsap Public Health or the local water purveyor may require a seawater intrusion</b>



	Analysis Rec. #1)	assessment conducted by a licensed hydrologist. [...]
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**General Discussion:**

- 19.700.730 - consider adding spill response plan; abbreviated review process vs full geo report in certain situations?
- Tribes may have requests to expand what goes into reports regarding CARAs
- The primary purpose of a CARA Chapter is to protect water quality and drinking water, however, now might be a good time to look at thresholds for water *quantity* impacts.
- Regarding Table 19.600.620, row L (potential threats) large on-site septic systems is listed. Member noted that the table is missing smaller systems and bigger systems. Should have on-site, large on-site and sewage treated effluent. How would we get this into the conversation?
  - Another member responded that those septic types are two different things - LOSS system = 3500 gal/day vs home which is max of 360 gal/day. This suggestion would have every single-family residence within CARA 1 to go through this process which seems burdensome and challenging.
  - Can have issues with small systems infiltrating near surface aquifers and create problems; have seen issue outside Kitsap, not sure what Kitsap looks like. CAO doesn't deal with marine discharges so thinking of land discharges. Treated effluent can also be a source of potential pollutants.