



Planning & Development Services

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Memorandum: Seawater Intrusion Amendment

To: Planning Commission
From: Robby Eckroth, Senior Planner
Date: April 16, 2024
Re: Guemes Island Seawater Intrusion Amendment

Recommendation

The Department recommends **approval** of this proposed amendment.

Summary

Planning and Development Services (PDS) is providing this staff report in advance of the April 23, 2024, Planning Commission work session. Last year, a docket petition (# C23-1) that would amend SCC 14.24.380 – Seawater Intrusion Areas within the critical areas ordinance was considered by the Planning Commission and the Board of County Commissioners (BOCC). The BOCC passed an ordinance adopting the 2023 docket but remanded C23-1 for further analysis. The BOCC established the 2024 legislative work plan by resolution and requested that the seawater intrusion amendment be considered separately from the 2024 docket and requested that the amendment be completed by the third quarter of 2024.

The Growth Management Act requires that cities and counties designate and protect critical areas, including aquifer recharge areas, using best available science. This petition would require county review prior to drilling a well in a sole source aquifer (SSA) area with documented seawater intrusion. Guemes Island is the only area which is currently designated a sole source aquifer (SSA) in Skagit County and has documented issues of seawater intrusion. The Environmental Protection Agency (EPA) is who designates sole source aquifers (SSA). The petition will add language to [SCC 14.24.380\(2\)](#) to require the following information listed in [SCC 14.24.380\(2\)\(a\)](#) to be submitted to the Department prior to drilling any new well in a sole source aquifer:

- A site plan, including:
 - A dedicated inland well site location;
 - Estimated depth of proposed well;
 - An estimated land elevation of the well, except that if the well is within 250 feet of the shoreline, or if determined a hydrogeologist engaged or employed by the County, the elevation of the well must be surveyed by a licensed surveyor; and
 - Depth and chloride levels of surrounding wells;
- A drilling plan; and
- Payment of applicable fees.

Background and History

There have been two previous citizen-initiated petitions regarding well drilling in seawater intrusion areas and one county-initiated petition. A similar petition was docketed in 2018 as P-2 Guemes Island Wells. The 2018 petition intent was to ensure that new wells do not undermine the senior water rights of the existing wells on Guemes Island. The petitioners specifically requested three changes:

1. Require the county to review and approve of all new wells prior to drilling, not just new wells that are linked to a development permit;
2. Require assessment of hydrogeological impacts of any new well as part of the review process; and
3. Clarify that rainwater catchment can be permitted on Guemes Island without first drilling a well to prove that using a well is not feasible.

The Planning Commission recommended P-2 be denied in part due to questions of authority over well drilling.

A second petition was submitted in 2021 to amend Skagit County health code to implement a seawater intrusion protection monitoring system on Guemes Island. When considering a new well in a sole source aquifer, the new regulations would require the county health department to determine if the proposed well would be likely to have chlorides higher than 100 ppm, or to cause chlorides higher than 100 ppm on the aquifer and/or neighboring wells. If the county determines the well would meet the 100-ppm threshold, the request for a new well would be denied. The petitioner modeled the suggested code amendments after Island County Code 8.09.099 Seawater Intrusion Protection. The 2021 petition was not docketed by the BOCC because the petition requested to amend Skagit County health code which is not permitted through the docketing process. Only changes to development code and the Comprehensive Plan may be approved through the docketing process.

Last year, a third docket petition (# C23-1) that would amend SCC 14.24.380 – Seawater Intrusion Areas within the critical areas ordinance was considered by the Planning Commission and the Board of County Commissioners (BOCC). November 28, 2023, the Planning Commission recommended denial of the petition to the BOCC. December 19, 2023, the BOCC passed an ordinance¹ adopting the 2023 docket but remanded C23-1 for further analysis. On March 4, 2024, the BOCC established the 2024 legislative work plan by resolution² and requested that the seawater intrusion amendment be considered separately from the 2024 docket and requested that the amendment be completed by the third quarter of 2024.

¹ Ordinance O20230007

<https://www.skagitcounty.net/Common/Documents/LFDocs/COMMISSIONERS000027/00/00/55/000055eb.pdf>

² Resolution R20240047

<https://www.skagitcounty.net/Common/Documents/LFDocs/COMMISSIONERS000028/00/00/4f/00004f8a.pdf>

Analysis

The Growth Management Act requires that cities and counties designate and protect critical areas using best available science³. Cities and counties are required to adopt development regulations that protect critical areas. RCW 36.70A.030(11)⁴ includes “areas with a critical recharging effect on aquifers used for potable water” in the critical areas definition. Sole source aquifers and areas effected by seawater intrusion are regulated under SCC 14.24 – Critical Areas Ordinance as aquifer recharge areas. Review of environmental impact to groundwater, including potential impacts related to seawater intrusion, are unrelated to water rights (which are regulated by Ecology). Skagit County staff contacted the Department of Ecology to see if the department can review seawater intrusion impacts to sole source aquifers (SSA). The Department of Ecology responded that their staff is unable to offer review or advice on seawater intrusion.

Guemes Island has documented seawater intrusion on its wells for decades. The island is a SSA which makes it crucial to protect the water source for Guemes residents, as there are no other options for potable water on the island. A sole source aquifer designation is made by the Environmental Protection Agency (EPA). The EPA defines a sole source aquifer (SSA) as “an aquifer that supplies at least 50 percent of the drinking water for its service area; and that has no reasonably available drinking water sources, should the aquifer become contaminated.”⁵ The EPA’s authority to designate aquifers as sole source is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93-523, 42 U.S.C. 300 et. Seq), which states: “If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination to the Federal Register.”

Skagit County Code [14.24.380\(2\)\(a\)](#) regarding seawater intrusion areas currently requires “an application proposing use of a well” to be “submitted for review prior to drilling any new well.” Currently, these requirements are only applicable when a development application is submitted which includes the use of a well on site. As a result, a well can be drilled without any county review if it is not associated with a development permit. Then later when a development permit is requested, because the well is not “new”, there is no review under SCC 14.24.380. Skagit County Code 14.24.030(3) allows additional site assessments for expansions of existing uses that will result in additional water withdrawal.

RCW 18.104.043 requires a property owner or the owner’s agent to notify the Washington Department of Ecology (Ecology) of their intent to begin well construction, reconstruction, or decommissioning procedures at least 72 hours prior to commencing work. At this time, Ecology does not share this information with the County directly prior to the well permit being approved or denied. Therefore, the rationale for this docket item is to assure notification to the County of any new well drilled at the same time that the Department of Ecology is notified. Given that this is a sole source aquifer (SSA) this

³ [RCW 36.70A.172 – Designation and Protection – Best available science used.](#)

⁴ [RCW 36.70A.030 – Growth Management Act – Definitions](#)

⁵ https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#What_Is_SSA

notification assures that proper data and monitoring is done with whatever wells are drilled whether or not they are separate from development.

The new proposed language would now require any applicant who wishes to drill a well in a sole source aquifer to submit an application regardless of a development proposal. Previously, Skagit County has not regulated well drilling prior to development because the impact on the aquifer generally occurs with the use of the water; however, with seawater intrusion the siting, depth, and the other information required for the drilling of a well is necessary to protect against the well negatively affecting the aquifer. The Growth Management Act requires counties to protect critical areas and sole source aquifers. The new code language would require applicants to work with staff prior to the well being drilled to ensure the well incurs the least amount of impact on the aquifer.

Findings of Fact

Consistency Review with Skagit County Code 14.08

1. Is the amendment consistent with the vision statements, goals, objectives, and policy directives of the Comprehensive Plan and the does the proposal preserve the integrity of the Comprehensive Plan and assure its systematic execution?

The proposal is consistent with the following Comprehensive Plan goals and policies:

Goal 5A “Protect aquifer recharge areas, and well-head areas, ground and surface water quality and quantity for supplying all needs within Skagit County, including potable water for human use.”

Policy 5A-5.1 “Critical Areas shall be designation and protected to prevent their continued loss and degradation. Furthermore, priority shall be given to the avoidance of impacts to Critical Areas, followed by the minimization of impacts and full mitigation respectively.”

Policy 5A-1.3(b) “Aquifer recharge areas shall be classified based on their vulnerability, susceptibility to contamination, and potable water quality and quantity.

(b) Aquifer Recharge Areas

(i) Water resources shall be protected using natural systems and non-structural methods wherever possible.

(ii) Ground Water Management Areas (according to WAC 173-100) Wellhead Protection Areas and Significant Use Zones shall be established to further protect the quality and quantity of ground and surface water.

(iii) Skagit County will review and update its Saltwater Intrusion Policy for the islands and those coastal areas of the mainland where seawater intrusion has been documented.

(iv) Skagit County will update the county code to address instream flow, mandated sewage code changes and water code changes. Aquifer recharge areas will be evaluated and protected under the revisions to the Critical Areas Ordinance.

(v) Consistent with State law (RCW 19.27.097), Skagit County will not issue a permit for a building requiring potable water unless the applicant can demonstrate they have a legal and adequate source of water and the source meets drinking water standards.”

Policy 5A-5.2 “Land uses that are incompatible with critical areas shall be discouraged.”

The petition would require additional materials from the applicant prior to a well being drilled in a sole source aquifer with documented seawater intrusion issues. This new requirement will help the County protect areas with vulnerable water resources and ensure current and future residents in these areas will have access to potable water.

2. Is the proposal supported by the Capital Facilities Plan (CFP) and other functional Plans?

This proposal will not have an impact on the Capital Facilities Plan or other functional plans.

3. Is the proposal consistent with the Growth Management Act (GMA), the Countywide Planning Policies (CPPs), and applicable provisions of the Comprehensive Plan?

The Growth Management Act Goal 10 requires the County to protect the environment and enhance the state’s high quality of life, including air and water quality, and the availability of water.

The proposal is consistent with the following Countywide Planning Policies:

CPP 10.2 “Land use decisions shall take into account the immediate and long-range cumulative effects of proposed uses on the environment, both on- and off-site.”

CPP 10.4 “Wetlands, woodlands, watersheds, and aquifers are essential components of the hydrologic system and shall be managed to protect surface and groundwater quality.”

CPP 10.6 “Rural character shall be preserved by regulatory mechanisms through which development can occur with minimal environmental impact.”

The proposal is consistent with the Growth Management Act and Countywide Planning Policies as the new regulations would ensure that new development in protected critical areas will not have an impact on current or future residents and ensures good management of groundwater quality.

4. Does the proposal bear a substantial relationship to the public general health, safety, morals, or welfare?

The proposal will have a positive benefit on the general health, safety, and welfare of the public by providing protections for groundwater quality and sole source aquifers for future drinking water needs.

Recommendation

As the proposed amendment meets the consistency criteria listed in SCC 14.08, the Department recommends **approval** of this proposed amendment.

How to Comment

The public may submit written comments via email to pdscomments@co.skagit.wa.us (preferred) or via US mail starting May 2nd. All paper comments must be submitted on 8½" x 11" paper to the address below:

Skagit County Planning & Development Services
re: Comments "Skagit County's Proposed Guemes Island Seawater Intrusion Amendments"
1800 Continental Place
Mount Vernon, WA 98273

All comments must be received by **May 30th, 2024, at 4:30 p.m.** and include (1) your full name, (2) your mailing address. Comments not meeting these requirements will not be considered.

You may also provide verbal comments at the Public Hearing. The public hearing is scheduled for **May 28, 2024, at 6:00 p.m** in the Skagit County Commissioners Hearing Room at 1800 Continental Place, Mount Vernon, WA 98273.

If you wish to provide testimony via the online meeting option, please send an email to pdscomments@co.skagit.wa.us, with your name, phone number, and include a request to be added to the speakers list in the body of the email. All requests must be received 24 hours prior to the public hearing date. Public hearing testimony is usually limited to three minutes, so written comments are preferred.

Attachment 1 – Proposed Seawater Intrusion Amendments