Sammamish Plateau Water

Please see attached letter for comments to the CARA Guidance Manual from Sammamish Plateau Water.

Sammamish Plateau Water

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April 28, 2021

Laurie Morgan
Water Quality Program
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600
via eComments

Re: Draft 2021 Critical Aquifer Recharge Areas Guidance - Comments

Dear Ms. Morgan:

Thank you for the opportunity to review the update to the Critical Aquifer Recharge Area (CARA) Guidance Manual. We have the following comments for your consideration:

Guidance Manual Orientation

The draft Guidance Manual is heavily oriented for compliance with the Growth Management Act. The Guidance Manual makes minimal reference to WAC 173-200-030, Anti-Degradation Policy, which restricts and precludes the impact to and degradation of groundwater resources (see page 56 of draft manual). WAC 173-200-030 should be more prominent throughout the Guidance Manual, as compliance with the Anti-Degradation Policy should be a touchstone for CARA protection.

Local Jurisdictions Authority

The need for "Local Jurisdictions" to be involved with protection activities by implementing regulations, providing themselves with the authority to enforce the regulations, and following through with enforcement if necessary is appropriate. Local Jurisdictions are referenced in several locations throughout the document.

What appears to be missing, is acknowledgement that the water purveyor is not always a land use agency (City or County). Additional paragraphs or bullet points should be added to several sections indicating:

> ***"If the City and/or County is not the sole provider of water supply within their jurisdiction it is imperative that the water purveyor(s) be included in the regulatory decision making process, and notified of any process or individual permit requests that include work within the CARA."***

Sections that should be considered for this inclusion include, but are not limited to:

- Section 6 – UIC Wells (Pg 57-58)
- Section 6 – Identifying Gaps in Protection (Pg 67-68)

- Section 7 – Critical Aquifer Recharge Area Program (Pg 69)
  The list of items included in a good critical aquifer recharge area program should add notification of water purveyor.
- Section 10 – Interjurisdictional Coordination (Pg 74)
  Add the water purveyor to the agencies included in the coordination.
- Section 11 – Implementation – Authority, Monitoring and Program Integration (Pg 76)

Protection of Groundwater Quality

The Growth Management Act requires protection of both water quality and quantity, and the Best Available Science for CARA, therefore, should address both quality and quantity. Similar comments are provided to the following sections to enhance the protection of the groundwater quality.

Section 5 – Best Available Science should address both quality and quantity of any water intended for recharge into the CARA.

Section 9 – Critical Aquifer Recharge Area Reports are suggested to include a section on Recharge – stormwater discharge, and how recharge will be kept clean or treated, and how to inspect and maintain treatment effectiveness.

Section 11 – Monitoring – both Compliance Monitoring and Groundwater Monitoring

Additions to these sections on protection of the groundwater quality should include requirements to address:

- Monitoring of the discharge into the groundwater, not just the groundwater
  - If the groundwater monitoring indicates a reduction in the groundwater quality, it is often too late to avoid a costly cleanup or loss of the supply.
  - Monitoring should be included on the quality of the water before being discharged into the groundwater, to ensure that the presumed treatment is actually accomplishing the treatment goals.
- Protection of the groundwater quality over time, into the future.
  - For instance, it may be presumed that the vadose zone can provide treatment as the discharge travels through the vadose zone. However, over time, the treatment capacity of the vadose zone may change and decline creating a condition where the contaminants held in the vadose zone may actually become a leachate field of the contaminant. It may be possible to model this behavior over time, but setting up the system to allow for actual measurement of the water quality and components within the area being used would be even better in reducing groundwater degradation risks.

Stormwater Management

Any references to stormwater management that indicate “can be written” should be strengthened to “shall be written” or “should be written”, as this should not be discretionary. See page 57 of the Guidance Manual for an example.

References to location of UICs and treatment capacity related to stormwater management practices fail to recognize contaminants of emerging concern, such as PFAS, and should contain guidance to prohibit UICs within the CARAs associated with drinking water. Ecology's concern seems to focus on volume capacity of UICs and removal of contaminants through vadose zone treatment, and fail to note the inability of BMPs and the vadose zone to remove all contaminants, such as PFAS.

Again, thank you for the opportunity to review and provide comments to the update to Groundwater CARA Guidance Manual prior to its completion.

Sincerely

Jay Regenstreif, P.E.
Planning Engineer