



City of Stevenson

Planning Department

(509)427-5970

7121 E Loop Road, PO Box 371
Stevenson, Washington 98648

TO: Eric Hansen, Public Works Director; Nick Hogan, City Administrator; Karl Russell, Building Official/Water Manager

FROM: Ben Shumaker, Planning Director

DATE: February 16th, 2017

SUBJECT: 2017 Critical Areas Update—Critical Aquifer Recharge Areas Intra-Office Report

Introduction

This memo introduces the state-required regulation of development within or likely to affect Critical Aquifer Recharge Areas (CARAs), summarizes my discussions with the Department of Ecology regarding the City's existing regulations, and asks for broader staff collaboration on potential amendments to improve our regulations. There are 5 specific decision points that are necessary before an updated regulatory approach can be developed.

Background

Critical Aquifer Recharge Areas are 1 of the 5 types of Critical Areas Stevenson is required to plan for and regulate under the Washington Growth Management Act. Unlike other types of Critical Areas, this one is really all about people. Aquifers in this case are important because they are a source of drinking water for our people, and an effective Critical Areas Ordinance will protect the quality and quantity of that water. In my view, our existing ordinance is far too complex to be effective. However, a simplified version of this would be most effective if it relied on one or both of the City Building and Public Works departments.

For additional information see the general background on the [Critical Areas Ordinance](#) and the specific page for [Critical Aquifer Recharge Areas](#) that are now available on the City website.


























Regulatory Review

Hoping that CARAs would be an "easy win" for the Planning Commission's review and update, the Planning Department chose to focus first on this topic before moving into the more widespread and controversial Critical Area types. It has become apparent, however, that I underestimated the scope of the amendment we really need to make our CARA regulations effective. As I said above, it seems too complex for our scenario. This was the topic of my email to Laurie Morgan with the Department of Ecology where I also asked for examples of better regulatory models from other communities. Her response (Attachment 1) far exceeded anything I was expecting, and her follow-up phone call also clarified a lot about how we might approach our update. Much of that conversation gave depth to the Stevenson-specific presentation (Attachment 2) she created, but her main points focused on *preserving our ability to act* if a source of pollution is discovered. On this topic she is really impressed with the [City of Vancouver's](#) regulations. She also likes the BMP design concepts the [City of Spokane](#) includes as part of their handbook approach to aquifer protection.

I've compared their approaches with our own and those of our closest neighbors: Bingen, North Bonneville, Skamania County, Washougal and White Salmon. The graphic on the next page details 1) what

areas of these communities are covered by the regulations, 2) which uses the regulations apply to, 3) when the regulations are applied to those uses, 4) what regulated uses need to do in order to comply, and 5) which department reviews proposals and ensures compliance.

Approaches to Critical Aquifer Recharge Areas

	Stevenson	Vancouver	Spokane	Bonneville*	Washougal
Coverage Area	 Citywide (unless)	 Citywide & Special Protection Areas	 Citywide & Special Protection Areas	 Citywide	 Special Protection Areas
Applicable Uses	 Nonexistent List	 List	 List and Storage Tanks	 List	 List
Regulatory Trigger	 Construction	 Construction or Investigation	 Construction or Investigation	 Construction	 Construction
Regulatory Response	 BMPs/Site-Specific Design	 BMPs/Site-Specific Design	 BMPs/Site-Specific Design	 Site-Specific Design	 BMPs/Site Specific Design
Responsible Official	 Planning	 Public Works	 Fire Official	 Planning	 Public Works

*Skamania County only has the authority to protect well heads by requiring a 100' setback from lot lines. Bingen & White Salmon do not identify/regulate CARAs.

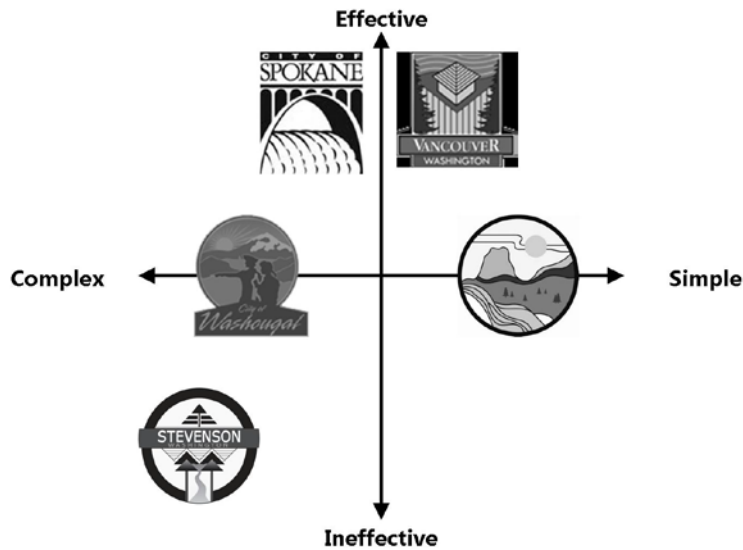
Unique Regulatory Features

Stevenson's code is the clearest on the type of analysis a user must prepare as part of their CARA report. Vancouver's is the most broadly applicable and serves a dual role to protect groundwater (as required by the Growth Management Act) and surface water (as required by their municipal stormwater NPDES permit). As a result, Vancouver relies heavily on Ecology's [Stormwater Management Manual for Western Washington](#). Spokane's handbook is similar to the Western Washington manual but provides better examples of how projects might be designed to comply with identified BMPs. North Bonneville's approach appears intended only to raise a red flag and let proponents figure out how to protect aquifers. Department of Health time-to-travel to wellheads helps Washougal define their CARAs. In addition to their preventative actions, both Vancouver and Spokane have a clearly defined authority to act to prevent pollution that is actually occurring.

Complexity vs. Effectiveness

Beyond the special features of each code, I've also taken a look at how well the presentation of each code might actually facilitate understanding of those regulations, judged the level of protection each provides, and combined those to speculate about the overall effectiveness of each City's Code. Vancouver's and Spokane's programs are clearly the most robust, and their citywide coverage and ability to ensure compliance from existing facilities make them the most likely to be effective. Vancouver's relative simplicity is based solely on its references to the Western Washington stormwater manual, which would be understood by any professional engineer working in the state. North Bonneville's simplicity is apparent, however its effectiveness is limited by a lack of clarity regarding acceptability of analyses and mitigation proposals. Washougal's has clarity in this regard, but its relatively small coverage area likely

limits its effectiveness, as does its reliance on a well-functioning multi-departmental determination process. Stevenson's leaves a lot to be desired. It is complex in areas it needn't be, lacking in areas that would add clarity, focuses solely on new development proposals, and is not backed up by appropriate mapping or lists.



Amendments & Improvements

At the end of the day, I came away clearly preferring Vancouver's approach over the others I reviewed. However, there are some barriers that would prevent us from a wholesale import of their code into ours and other impediments that might limit our effectiveness even if we adopt what can be applied. Dealing with these impediments is the heart of this memo, and I'm hoping you can help me better assess whether they'll lead me to recommend a different approach to the Planning Commission.

Coverage Area

Vancouver's citywide coverage is based more on its desire to protect *all* water resources than its desire to protect *groundwater* aquifers. As stated above, that approach suits their needs because it allows them to meet the regulatory requirements of their stormwater NPDES permit. Since Stevenson doesn't have such a mandate, we are left to choose whether we want to 1) continue with a citywide coverage, 2) limit coverage to protect drinking wellheads, or 3) take a hybrid approach to protect both surface and ground *drinking* water resources. Attachment 3 presents what the hybrid approach might look like, displaying the time-to-travel areas and surface water protection areas for Group A water systems serving the Stevenson Urban Area. Group B systems were considered for this map, but the location of those wells was clearly inaccurate on Department of Health's [online mapping portal](#).

Decision Point #1- What coverage area does the Public Works/Water Department desire in Stevenson?

Regulatory Trigger

Though I didn't present it in the simplified comparison graphic, Vancouver also benefits from its regulatory history reviewing changes in occupancy/use under the building code. This provides them 3 levels of review: new construction, new occupants of existing construction, and existing occupants of existing construction. Importing their approach to Stevenson would add the ability to investigate existing occupants, but on its own, it wouldn't trigger review of new occupants of existing construction. That would depend on program-wide changes to the way we implement and enforce changes in occupancy under the building code. Even without that, the CARA program would be far more effective than it currently is, however that lack of review may be a disservice for new tenants whose pro formas and business plans could be thrown off by added unforeseen expenses.

Decision Point #2- Is improving implementation of the CARA regulations adequate justification for the Building Department to increase their regulatory efforts? (**Note:** the potential for new tenants in CARAs—and therefore the pertinence of this question—depends on the coverage area decision made above.)

Regulatory Response

The 2012 *Stormwater Management Manual for Western Washington* underpins Vancouver's regulations. That document is successor to the 1992 *Stormwater Management Manual for the Puget Sound Basin*, however, Stevenson still relies on the older manual. Both manuals identify BMPs based on different land uses or construction proposals. While the difference between the actual BMPs within each manual is beyond my scope here, I am aware that fewer and fewer engineers are familiar with the older manual and, if my memory serves me correctly, more and more projects proposed by or in Stevenson are designed and permitted based on analysis and review under the newer manual.

Decision Point #3- Does the Public Works Department accept use of the newer *Stormwater Management Manual for Western Washington* as the basis for regulation of proposals within CARAs?

Decision Point #4- If the newer manual is used within CARA's, is the Public Works Department ready to use that manual as the basis for all stormwater regulation?

Responsible Official

In Spokane, the Fire Official is responsible for ensuring compliance in CARA's and does so as part of that official's review and regulation of hazardous substances and materials. In Vancouver, the Public Works Director assumes the duty of CARA regulation as part of that department's duty to ensure NPDES compliance for its stormwater system. Each of those city's officials have a vested interest in ensuring compliance with the regulations, and are able to do so as part of their department's other duties. Stevenson's current combined position of Building Official/Fire Marshal/Water Manager would seem to fall directly in line with the effective approach of those cities, yet, CARA compliance currently falls to the Planning Department for review.

Decision Point #5- Do the Building and Public Works departments have the desire and/or capacity to accept responsibility for CARA regulations?

Discussion and Decisions

I am providing this memo and it's linked and attached information in this long format to provide you with the ability to review, absorb, process, and develop opinions on the above decision points at your own pace. However, I would be more than willing to have a joint departmental meeting with you all to go over anything that is unclear or any decision points that may be especially problematic. Please just let me know. Regardless of the answers to the above questions, I would be happy to continue as the point person preparing the draft ordinances and staff reports for the Planning Commission and City Council.

Prepared by,

Ben Shumaker

Attachments

1. Email Correspondence with Ecology
2. Ecology's Stevenson-Specific CARA Review
3. Potential Coverage Areas Map