







October 2, 2015

VIA EMAIL: pedersen.dick@deq.state.or.us

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Director Pederson,

Thank you for offering an opportunity to comment on the Oregon Department of Environmental Quality ("DEQ") and Oregon Health Authority ("OHA," and together with DEQ, the "Agencies") recent publication entitled Oregon Coastal Drinking Water Protection Planning: A Resource Guide (the "Resource Guide"). These comments are submitted jointly by the Oregon Forest Industries Council, Oregon Farm Bureau, Oregonians for Food and Shelter, and the Oregon Small Woodlands Association.

As you know, we were surprised to learn of DEQ's watershed planning efforts for the first time during public testimony at the Oregon Board of Forestry's meeting on July 23, 2015. At that meeting, Meg Eastman Thompson appeared on behalf of the Oceanside Water Protection Committee and the North Coast Basin Coalition. Ms. Eastman Thompson stated:

Good morning. I'm Meg Eastman Thompson and I'm here on behalf of the Oceanside Water Protection Committee and the North Coast Basin Coalition. We are a group of citizens representing the drinking surface watersheds in the North Coast basin working to develop full Bull Run type protections for our drinking watersheds and the exciting news since I testified last fall for the Board is that we've had great response from Ed Armstrong of the Environmental Quality Commission and DEQ Director Dick Pedersen to help our water districts develop full protective plans and we have an exciting project coming thanks to them in Tillamook County to work with our drinking watersheds. DEQ will be releasing water risk assessment handbooks in the next month and Jennifer Purcell of Regional Solutions will be working with our small water districts to develop protection plans. This includes Tierra del Mar, Beaver, Tillamook, Oceanside, Netarts, Rockaway, Nehalem, and Arch Cape drinking watersheds. So, we're excited that there's been attention to this and these are very tiny acreages ranging from about 200 acres to 12 to 1600 acres but they are the source of our drinking water and we're hoping that eventually using the technical support of DEQ and our source water risk assessments that we can develop full protective plans.

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¹ Because her testimony has some bearing on our comments below, we have provided a a direct transcription of the audio file as an appendix to these comments.

Ms. Eastman Thompson's comments were alarming because, by calling for "full Bull Run type protections," she is, in effect, calling for a moratorium on all human activities in these watersheds. Moreover, Ms. Eastman Thompson is sharing publicly the "exciting news" that DEQ's work, in collaboration with Regional Solutions, will produce these "full protective plans." She then asked for Oregon Department of Forestry ("ODF") to put these drinking watersheds in "conservancy," and to impose a moratorium on all herbicide use. While fringe elements have, over the years, occasionally called publicly for broad prohibitions on logging in coastal drinking watersheds, the thought that DEQ and Regional Solutions may be facilitating that outcome is alarming.

Of course, Ms. Eastman Thompson appeared on behalf of the North Coast Basin Coalition, a private group of "concerned citizens" who are vocal in their opposition to forestland practices in northwest Oregon. Likewise, the Oceanside Water Protection Committee is not formally affiliated with the Oceanside Water District, or any other drinking water system. Rather, again, it's a collection of private citizens who object to agricultural and forest practices that they view as compromising their local drinking water. Though the organizational titles sound formal, we are relatively certain that Ms. Eastman Thompson's comments do not represent the sentiment of a broad swath of the Oceanside community, much less the north coast region.

Nevertheless, because Ms. Eastman Thompson represented that DEQ's efforts were well under way, we reached out to DEQ staff and learned of the draft Resource Guide. Prior to this, none of our organizations were aware of the work being done on this document so were unable to provide critical input. So, while the document shared with us on August 7, 2015, was marked "Final Draft," we appreciate the assurances that this is a working draft, and that you will consider our comments prior to publishing a final copy.

Generally speaking, we believe the Resource Guide should be revised to recognize that "threat assessment" is not a casual exercise, and that planning and prioritization of watershed regulation and investment should be informed by robust science and area-specific data. Otherwise, communities risk spending money on the wrong projects and imposing needless costs on landowners. Watershed management creates risk to both drinking water systems and upstream landowners, and DEQ should be working with water system managers (and not local activists) to develop plans supported by strong science and data, not politics and anecdote.

A. DEQ Should Focus on Local Drinking Water Districts and Other Governmental Entities

As an initial matter, we fear that the Resource Guide signals a movement by DEQ to engage particular constituencies in manner that threatens to upset collaborative watershed planning efforts. The Executive Summary of the Draft Resource Guide states:

"DEQ and OHA strongly support the work of non-profit organizations or citizen groups to work on projects to improve water quality. In fact, we believe many water quality initiatives are far more effective when implemented on a voluntary basis. With their collaborative approaches, we believe organizations not associated with local government are uniquely positioned to offer expertise and support to implement strategic restoration and stabilization techniques that will lead to better source water for Oregon public water systems. For this reason we will provide in-depth information in this guidance document to assist water systems to reach out to citizen groups and non-profit organizations."

Page 2 (emphasis in original).

Generally speaking, we agree with the sentiment expressed here that local citizens (including landowners) can work collaboratively to address drinking water quality issues. However, facilitating these conversations is very different than offering technical assistance directly to motivated local citizens not otherwise affiliated with a drinking water system, as DEQ appears to have done with Ms. Eastman Thompson.²

To remedy this concern, we would encourage DEQ to include in the Resource Guide suggested methods for water systems to reach out not only to local citizen groups and non-profit organizations, but also to affected landowners. The Resource Guide should include explicit guidance to local water systems on how best to facilitate productive conversations with community interests, and how to approach threat assessment in an unbiased and objective manner. This effort must include engaging qualified environmental consultants – not citizen activists – in collecting and analyzing any data required to undertake threat assessment. Finally, going forward, DEQ should, itself, avoid directly facilitating the efforts of local activists, and focus instead on helping local water systems navigate a potentially divisive issue.

B. DEQ Should Not Facilitate Uninformed and Politicized Threat Assessments

The Resource Guide repeatedly conflates hazard with risk, and encourages the reader to identify "threats" with little data. The Resource Guide not only identifies hazards, but it then presumes that those hazards actually pose a risk to the drinking water system. We believe the Resource Guide should devote more attention to methods for assessing the likelihood that the identified hazard is contributing meaningfully to drinking water degradation.

For example, the paragraph beginning on the bottom of page 4 catalogs a number of human activities that "can disturb watersheds and streamside areas" The Resource Guide then makes a series of sweeping generalizations: "clearcut timber harvesting is known to increase landslide rates," "narrow riparian buffers are subject to frequent windthrow . . . a fraction of which will become a source of fine sediment to the stream, "[r]oads are a well-known source of fine sediment, petroleum products and other pollutants," "bank disturbance by development, agricultural practices and grazing animals, and forest harvest can also contribute sediment and organic matter to stream systems." The author cites a number of articles that are loosely related to each statement, but fails to include any representation of probability or magnitude of influence. For instance, while roads may in some circumstances contribute fine sediment, not all roads do, and in fact some roads *reduce* fine sediment delivery. A local plan that identifies "roads" as a "threat," merely by virtue of the fact that some roads contribute sediment, may waste resources on a "problem" that does not exist, and unfairly target a landowner with a road designed at great expense specifically to avoid sediment delivery.

Similarly, in the middle of page 5, the author identifies "human factors affecting water quality," and lists a series of anthropogenic activities, including forest harvest, roads, quarries, agriculture, construction sites, and industrial sites, all without any representation of probabilities, materiality, or relative risk. The only exception in the entire document is a statement on page 11 that "septic systems also present a risk but information on location and density is not readily available in GIS layers for

³ Arismendi, I., J.D. Groom, S.L. Johnson, M. Reiter, and L. Dent. In Revision. Suspended sediment concentrations and turbidity responses from contemporary road crossings in the Trask River watershed. Water Resources Research. 2013.

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² Personal communication with Josh Seeds, Nonpoint Source Specialist, Oregon Department of Environmental Quality (August 3, 2015).

analysis." Of course, this implies that there is readily available data on the other identified risk factors (e.g., forest roads, riparian grazing, quarries, etc.), which there is not.

This politicized and precautionary approach is best illustrated on page 18. There, in the context of pesticides, the Resource Guide asserts that "[1]ow-level detections of chemicals in drinking water sources are important priorities for prevention because we lack health standards for many individual chemicals and there is no toxicity data for synergistic effects when multiple chemicals are present in finished drinking water." Of course, in the admitted absence of data, these become "important priorities" only because the author presumes that they must be "bad," notwithstanding abundant testing of most forestry and agricultural pesticides by EPA that indicates they are safe. A more appropriate approach for DEQ guidance is to identify a lack of data without specifically characterizing the elimination of all detectible chemicals as "important priorities," or otherwise editorializing about hypothesized risks. These statements also falsely conflate the presence of pesticides pre-treatment with a problem in treated drinking water.

Another example appears on page 21 where, in the context of turbidity, the author indicates that "[s]everal systems are impacted so severely that the intake must be shut down regularly due to water with extremely high turbidity. Disinfection by-products are also problematic for many communities, and the organic matter precursors may be related to land management and nonpoint source pollution." Of course, it is also true that these are some of the most turbid waters in the state because of the abundant rainfall and lithology of the north Coast (i.e., natural factors). But, the author leaves the reader to conclude that upstream management is contributing in a meaningful way to turbidity challenges for drinking water systems. This is, at best, unknown, and arguably a misrepresentation of the data we do have.

Maybe the most shocking illustration of the Resource Guide's casual approach to threat assessments appears on page 24. There, the Resource Guide suggests that "identifying degraded sites could be as simple as asking local residents, workers, and landowners if they know where areas may be contributing to water pollution " The Resource Guide then suggests that perusing Google Earth may be a valid method for identifying "sediment movement." We do not believe that threat assessment is appropriately conducted by community survey or casual online research. As highlighted in the preceding section, we fear that guidance such as this threatens to reduce local watershed planning to little more than a political exercise. Instead, local water systems should engage qualified, licensed environmental consultants to help them conduct scientifically defensible threat assessments that rely on actual data, not conjecture. This is the approach that was utilized in the earlier source water assessment efforts, and which OHA has agreed to continue to use for conducting contaminant source inventories pursuant to the July 1, 2015 Interagency Agreement. Indeed, in our August meeting, DEQ confirmed that it intended for threat assessment work to be conducted by licensed consultants hired by the water systems who were undertaking such work. The Resource Guide must clearly reflect this intent, and should plainly state that popular opinion does not form a valid basis for concluding that any particular activity is threatening a drinking water system.

Given the generalized nature of the Resource Guide, we suggest that it be modified to eliminate subjective statements about the relative priority of threats in these water basins. The Resource Guide appropriately identifies *potential* hazards, but it should also include explicit qualifications that the named activities may not be a *material risk* to any particular drinking water system. Again, this is the only approach that is consistent with the 1999 Oregon Source Water Assessment Plan and the Interagency Agreement. What these communities need most is not a list of threats, but rather, technical help in assessing the magnitude of the impact and their relative probabilities. We also suggest that the Resource Guide include specific methodologies for testing hypothesized threats, and should encourage local

planners to engage licensed consultants to help them specifically identify those threats for which there is little data supporting the assessment.

C. DEQ Should Remove Figures 5, 6a, and 6b from the Resource Guide

On page 11, the Resource Guide indicates that "[i]ndividual maps detailing landslide potential are available for each coastal public water system upon request." It then directs the reader to examples in Figures 5 and 6. Those figures include maps that appear to represent "shallow landslide potential." However, the author also includes a number of revealing disclaimers. A note in small text, shaded in green, reads as follows:

"The landslide potential model results displayed here is based on unpublished work by OR DEQ's Water Quality Program TMDL staff. The modeling technique is still under development and was designed specifically for the mid-coast area of Oregon. This work is unpublished; please contact Oregon DEQ's Environmental Solutions Division/Water Quality Program for further information on the model."

A separate note provides that:

"The landslide potential analysis uses the February 1996 rainfall/flood event in Oregon as a worst case hydrologic scenario."

Then, at the bottom of each figure, in even smaller text, the author includes the following disclaimer:

"This data analysis was conducted for strategic planning purposes in drinking water protection. If other uses are considered for the data, please contact DEQ's Drinking Water Protection Program for details on how this query was performed. It is important to understand the limitations and qualifications of queries to ensure appropriate interpretation of this data. No warranty express or implied is made regarding the accuracy or utility. This disclaimer applies both to individual use of the data and aggregate use with other data."

To the extent that DEQ cannot make any representation regarding the "accuracy or utility" of the data in these figures, then they have no place in a Resource Guide to local water districts.

We believe the reason for the disclaimers is that the modeling methodology that DEQ uses to identify landslide potential is the subject of some debate. As indicated in the first note, DEQ's TMDL program developed this modeling in connection with its work with the Mid-Coast TMDL sediment Technical Working Group. The landslide modeling is a subcomponent of a larger modeling effort to link deviations from expected macroinvertebrate biodiversity to upstream sediment sources. Though the sediment TWG has discussed the modeling, the actual landslide model has not, until this publication, been shared publicly. We were surprised to see that the model has already been reduced to graphical landscape-scale representations not only in the Mid-Coast basin, but also in these North Coast drinking watersheds. Though we have few details, we've expressed our concern about using the model to inform the biocriteria analysis. We strongly object to using the model to make direct public representations about landslide potential. Frankly, we suspect that the TMDL division would also be uncomfortable distributing these maps in this manner.

Fledgling analysis such as this, developed in-house at DEQ, without any public review, much less peer review, should not be offered to the public for purposes of watershed planning or threat assessment. Robust disclaimers are no remedy for poor science. Until DEQ's work is reviewed and validated, the offer on page 11 to prepare individual landslide maps should be deleted, as should both Figures 5 and 6.

D. DEQ Should Collaborate with Designated Management Agencies Prior to Publishing

One of the more disturbing facets of the Resource Guide is that it appears to have been developed by a small team within DEQ without any collaboration or outreach to ODF or ODA. These agencies have developed robust expertise on the subject of nonpoint source pollution, and DEQ's threat assessment methodology would benefit greatly from their input. For instance, ODF has worked with the Department of Geology and Mineral Industries to develop landslide hazard maps that are significantly more sophisticated than the modeling developed for the Mid-Coast TMDL. Likewise, the Resource Guide would benefit from the Department of Agriculture's expertise in assessing riparian conditions. While DEQ adeptly identifies potential *hazards* in watersheds, both ODF and ODA have significantly more experience in assessing actual *risk*. Going forward, we would encourage DEQ to work collaboratively with, and leverage the expertise of, its sister agencies. This is more than good policy; it is a requirement of the Interagency Agreement between DEQ and OHA, which on page 4 requires DEQ to "[s]erve as lead agency in coordinating drinking water source protection activities with other state and federal agencies in Oregon," including ODF and ODA. DEQ should have engaged ODF and ODA in its efforts from the inception of this project, and should utilize their expertise in crafting the next draft of the document.

E. Conclusion

Again, we appreciate the opportunity to comment on the Resource Guide. We firmly believe that drinking water is a precious resource deserving of careful protection. It is worth noting that many of our members live in these very north coast communities. Our only ask is that DEQ focus its efforts on providing local water systems with the necessary tools to make unbiased and objective assessments of their watersheds, with appropriate input from the community, including landowners. To that end, thank you for considering our comments above.

Very truly yours,

Kristina McNitt, President

Oregon Forest Industries Council

Dave Dillon, Executive Vice President

Oregon Farm Bureau

Katie Fast, Executive Director

Oregonians for Food and Shelter

Jim James, Executive Director

Oregon Small Woodlands Association

Appendix 1: Transcript of Eastman Thompson Comments to Board of Forestry

"Good morning. I'm Meg Eastman Thompson and I'm here on behalf of the Oceanside Water Protection Committee and the North Coast Basin Coalition. We are a group of citizens representing the drinking surface watersheds in the North Coast basin working to develop full Bull Run type protections for our drinking watersheds and the exciting news since I testified last fall for the Board is that we've had great response from Ed Armstrong of the Environmental Quality Commission and DEQ Director Dick Pedersen to help our water districts develop full protective plans and we have an exciting project coming thanks to them in Tillamook County to work with our drinking watersheds. DEQ will be releasing water risk assessment handbooks in the next month and Jennifer Purcell of Regional Solutions will be working with our small water districts to develop protection plans. This includes Tierra del Mar, Beaver, Tillamook, Oceanside, Netarts, Rockaway, Nehalem, and Arch Cape drinking watersheds. So, we're excited that there's been attention to this and these are very tiny acreages ranging from about 200 acres to 12 to 1600 acres but they are the source of our drinking water and we're hoping that eventually using the technical support of DEQ and our source water risk assessments that we can develop full protective plans. The risks we have are landslides, which is a significant risk for Oceanside, as Highway 131 next to our drinking watershed has already been closed for two years because of landslides and we've had significant costs for doing a \$7 million upgrade to our water treatment system. Oceanside has also had quarry operations illegally dumping their discharge water into our drinking watershed. Other districts have had problems with clearcut and herbicide spray that have concerned the citizens.

"I became involved in this issue as a child psychologist after Rockaway citizens got notices in their bill that the chlorine byproducts from disinfecting the water due to increased turbidity after their 82% clearcut which you'll see on page 2 overloaded their system and the notice the citizens got in their bill is you have cancer causing elements in your drinking water. If you have concerns, please call your doctor. And I'm asking you and DEQ and the EQC to take action because we as doctors really can't do a lot. If I had a family coming in to my office with a pregnant mother and a young child that had possible developmental problems and the family was anxious "does this chemical causing agent harm our children? Do these herbicides harm our children?" I would have to say, the risk is there. The research on child development shows that they are uniquely vulnerable to these types of risks. It's paralleling what we've seen in earlier research related to lead in paint and lead in gasoline and alcohol exposure in the fetus. These are toxins, they do cause potential harm. Whether incident A results in incident B even with lung cancer we can't say but we do know the risk is there. And our goal is to protect our drinking watersheds on the coast from all risks and we will be working to try to get full protection such as the Bull Run watershed in Portland has so that we also have safe drinking water.

"We ask for the Board of Forestry to work with the landholders to develop options, perhaps land use options, creative options for land exchanges, and so forth so we can put our drinking watersheds in conservancy. We're asking for Forest Practices Acts to be more protective so that we don't have another 82% clearcut of a watershed all at once. We're asking for a possible moratorium on herbicide spraying and having manual methods of removal until each water district as a community working with our water commissioners and our various agencies can come up with safe protective plans.

"The North Coast Basin Coalition has been a very collaborative group working with agencies, landholders, our commissioners, our legislature, and trying to develop positive solutions, but we're really looking to the Board of Forestry to take a leadership role here. We know our forests are very valuable resources and we support that. We are not anti-logging but we do feel the public health and our drinking water is the most precious resource we have in Oregon and we look to your leadership to provide protection." Source: Audio file available at http://goo.gl/WSjALY: