



9311 SE Butte Avenue
Vancouver, WA 98664-3623

Telephone: (360) 696-3888
Mobile: (360) 904-3015
Facsimile: (360) 696-3888

marketing and economic services

To: Multnomah County Hearings Officer

From: Bruce Prenguber, Globalwise Inc.

Date: April 15, 2025

Subject: Agricultural Resources Review with Reference to Adverse Impacts

As part of the Portland Water Bureau (PWB)'s Bull Run Water Treatment Project (including the filtration facility, intertie, pipelines, and all aspects of the project, referred to as the "Project"), I conducted an extensive analysis to evaluate farm impacts on surrounding farmland. The details of that analysis are in the prior record from the 2023 proceedings in this case, as detailed in Section II below.

The Oregon Land Use Board of Appeals (LUBA) remanded the 2023 approval to Multnomah County, finding that the Multnomah County Hearings Officer "misconstrued the community use natural resources criterion [in MCC 39.7515(B)] and, based on that misconception, failed to adopt adequate findings supported by substantial evidence." (Page 7, Multnomah County Staff Report on Remand, Exhibit N.7, the "2025 Staff Report").

I. Agricultural Resources Are Not "Natural Resources"; No Farmer Considered Them Natural Resources in The 2023 Proceedings

The 2025 Staff Report provides a proposed definition of the term "natural resources" that includes "agricultural resources" as a natural resource. In my professional experience, agricultural resources are not considered "natural

resources” Instead, that term is read to mean wetlands, streams, wildlife habitat, and other environmental resources which are set apart from agricultural operations, particularly as agricultural operations can have negative impacts on those wildlife and aquatic habitats, particularly through the use of pesticides and fertilizers. Agriculture relies on soil, but that does not make the agricultural interest in utilizing soil for agricultural operations the relevant lens for evaluating an adverse effect on soil as a natural resource. Instead, agriculture’s use of soil may cause an adverse effect on soil.

It is notable that in the 2023 process, which resulted in the more than 8,000 page LUBA record (now Exhibit M.2 of this record), no farmer read MCC 39.7515(B)’s six words – “will not adversely affect natural resources” – and thought that meant their agricultural resources. That is, none of the many farmers who submitted extensive testimony in that 8,000-page record¹ read the words “natural resources” and interpreted those words include their agricultural resources. Nor did their attorneys, who presumably would have a legal view of the meaning of “natural resources” as well as the farmers’ view of the meaning of “natural resources.”² Not even the Multnomah County Farm Bureau thought MCC 39.7515(B) was a relevant approval criterion for farmers to comment on.³ Finally, the Oregon Department of Agriculture did not think that MCC 39.7515(B)’s “natural resources” standard was a relevant approval criterion for the “agriculture” department to comment on.⁴ This is strong evidence, and consistent with my professional experience, that the term “natural resources” is not understood in the industry or farming community or farm regulation agencies to include agricultural resources.

II. Scope of Analysis; Prior Reports In Record

Nevertheless, PWB requested that I analyze whether the Project could adversely affect agricultural inputs if they *were* considered natural resources under MCC 39.7515(B). This memorandum looks at the potential for adverse effects to off-site “agricultural resources”, which include only those outside of the Project areas (including the filtration facility site and pipelines and other easement areas

¹ My prior exhibits (described in Section II of this memorandum) summarize and respond to these comments. The cumulative impact analysis in Exhibit J.88 (LUBA Record Pg. 675) has an extensive chart beginning at page 9 (LUBA Record Pg. 683) that lists all farmers who testified or were referenced in the testimony of others, such as the Oregon Association of Nurseries, and where that testimony is in the record. I re-reviewed all of this evidence and additional comments that were submitted in Exhibit J (second open record period, simultaneously with the cumulative analysis submission) in determining that no farmer raised concerns about agricultural inputs as “natural resources” under MCC 39.7515(B).

² Exhibit H.2, LUBA Record Pg. 3557 (attorney discussing R&H Nursery in context of specific farm practices approval criterion only).

³ Exhibit H.21, LUBA Record Pg. 3292 (Multnomah County Farm Bureau addressing specific farm practices approval criterion only).

⁴ Exhibit E.24 (LUBA Record Pg. 3733).

necessary for the Project).⁵ This memorandum addresses the operation of the Project. The comparison for adverse impacts is before the Project (pre-development) with after the Project commences operations (post-development).

I have extensively studied farming in east Multnomah and north Clackamas counties since 2020 for the Project design development and land use permit applications. I prepared the following analyses which have been entered in the Multnomah County record:

- 1) Compatibility of Proposed Portland Water Bureau Filtration Facility and Pipeline Operations With Surrounding Agriculture, dated September 2022 to Multnomah County (the “Compatibility Study”).
 - Exhibit A.33 (LUBA Record Pg. 7128).
 - This analysis is a farm property-by-farm property evaluation of the Surrounding Multnomah County and Clackamas County agricultural lands for potential farm use impacts due to operation of the Project, including the filtration site, the water pipelines, access roads, and pipeline appurtenances.
 - This analysis considered 14 potential sources of externality impacts on farming in the Surrounding Lands as well as two sensitivities for accepted farm practices from operation of the Project. See pages 123 – 163 for the discussion of farm impacts on a farm property-by-farm property basis.
- 2) Compatibility of Proposed Portland Water Bureau Filtration Facility & Pipelines Construction with Farm Traffic, dated June 2023.
 - Attachment 5 to the Applicant’s Pre-Hearing Statement, at Exhibit H.3 (LUBA Record Pg. 3498); Resubmitted for Readability at Exhibit J.84 (LUBA Record Pg. 526).
 - This analysis considered the impacts of construction traffic (which are no longer relevant after LUBA’s order).
 - Exhibit H.3 also includes responses to particular farms in Attachment 6. (LUBA Record Pg. 3536.)
- 3) Bull Run Filtration Facility and Pipelines Project - Response to Public Comments Related to Farm Use Impacts in Multnomah County, Memorandum dated August 5, 2023, to Multnomah County Hearings Officer.

⁵ On-site (inside the filtration facility site or other Project easement areas) are inherently covered by the approval of the use of that land for a different land use, and are not relevant to an adverse effect of that proposed use.

- Exhibit I.80 (LUBA Record Pg. 2006).
 - This analysis reviewed and responded to all public comments related to potential impacts from construction and operation of Project on farm practices.
- 4) Bull Run Filtration Facility and Pipelines Project – Response to Second Open Record Period, Memorandum, dated September 6, 2023, to Multnomah County Hearings Officer.
- Exhibit J.86 (Mislabelled J.87 in LUBA record, at page 617)
 - This analysis responds to farmer comments principally related to construction traffic concerns and construction truck traffic noise. My responses address each comment and explain why there is no significant change in accepted farm practices and no significant increase in the cost of accepted Farm practices caused by the project.
- 5) Bull Run Filtration Facility and Pipelines Project - Response to Public Comments Related to Cumulative Farm Use Impacts in Multnomah County, Memorandum, dated September 6, 2023, to Multnomah County Hearings Officer.
- Exhibit J.88 (LUBA Record Pg. 675)
 - Previous analyses referenced above address the potential impacts of Project externalities and sensitivities for individual farms from both construction and operation of the Project. Some of those farm use impacts analyses are cumulative (additive). This memorandum gives more detailed farm-by-farm analysis and in particular addresses cumulative impacts on accepted farm practices in the Surrounding Lands.

III. Potential for the Project to Adversely Affect Agricultural Resources

Soils provide crop producing capacity and are one input for agricultural production. Other inputs are water and sunlight, labor, as well as material inputs such as seeds, fertilizers, pesticides, feed, and machinery. Water quality is covered by BioHabitat's report. There is no possibility that the Project will impact the availability of sunlight to agricultural operations. Accordingly, this report will focus on farmed soils.

PWB pipelines were first constructed in the 1890's to deliver municipal water from the Bull Run reservoir to Portland water users. Since 1992, the PWB has also operated the Lusted Hill Treatment Facility in the project area, initially to support

disinfection, and later to reduce lead exposure from home plumbing as well as reduce other pipe corrosion. Continuously for 135 years the PWB pipelines have operated for miles through this area of East Multnomah County farmland at the same time farming activity has intensified and prospered. This is literally “on the ground” evidence that operating pipelines and water treatment facilities do not cause off-site adverse impacts on farmed soils.

The analysis contained in the Compatibility Study identified above reviews potential impacts on farming during Project operations. The Project’s potential effects on farming are considered in detail. This includes all possible externalities of the Project, including noise, vibration, odor, light and glare, air quality, and water quantity and quality (see particularly Exhibit A.33, Section 12, pages 97 to 105, for the filtration facility, and Section 17, pages 118 to 123, for the pipelines). The Compatibility Study analysis determined that the proposed Project, considering all potential externalities and sensitivities of the proposed use, was not incompatible with farming in the Surrounding Lands. The Multnomah County Hearings Officer accepted this analysis in their final decision (Case File T3-2022-16220, page 21, Decision of the Hearings Officer). I have reviewed the updated materials being submitted into the record in this remand proceeding and conclude that my prior analysis and conclusions in the reports referenced above are still accurate.

The agricultural uses in the Project area are covered in detail in the Compatibility Study (see particularly Exhibit A.33, pages 32 - 89, and pages 123 – 163). In general, the key surrounding farm uses near the filtration facility site are:

- 1) R&H Nursery, with headquarters and field nursery operations directly west of the filtration facility site. No Project component passes through R&H Nursery land.
- 2) Surface Nursery, with a large field of ornamental nursery production directly south of the filtration facility (in Clackamas County). An emergency access road and utilities under the road in an easement area will provide an emergency access only route to the filtration site.

With only two exceptions, the pipeline alignments follow the public road right-of-way to bypass farm fields. The two exceptions are:

- 1) The raw water pipeline will pass under a farm road on the Bissell property in an easement with some above ground appurtenances. The Bissell property (R1 and R2 in the Compatibility Study) has some use as pastureland for raising two head of cattle. The raw water pipeline will then pass more than 150 feet under the Walters property (R3 in the Compatibility study).
- 2) The finished water pipeline alignment turns north from Dodge Park and follows a farm road on Ekstrom & Schmidt Nursery property (F11 in the

Compatibility Study) to the northeast corner of that property, where the Intertie will be located.

The question is whether the Project, as it operates, would have an adverse effect on the soils or other inputs into the area farm operations. Note that the pipelines are buried a minimum of six feet below the land surface. A careful review of all of the externalities previously reviewed in my reports clearly indicates that there are no external impacts on the soil or other agricultural inputs by operating the Project.

IV. Conclusion

Even if soils or other agricultural inputs are considered a natural resource, which I believe they should not be, I conclude that the Project operations will not adversely affect off-site agricultural resources.