
MEMORANDUM

To: Liz Fancher, Hearings Officer – T3-2022-16220

Date: 5/5/2025

From: Ian Courter, Lauren Courter

RE: Rebuttal to "Potential for Aquatic Natural Resources Effects" Memorandum by Biohabitats, Inc.

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SUMMARY

This rebuttal addresses shortcomings in the memorandum prepared by Biohabitats, Inc. titled *“Potential for Aquatic Natural Resources Effects.”* That memo, submitted April 15, 2025 in support of the Portland Water Bureau’s (PWB) Bull Run Filtration Project, concludes that the proposed industrial-scale facility and associated infrastructure will not adversely affect aquatic natural resources. However, this conclusion is unsupported by empirical data, fails to meet legal standards under MCC 39.7515(B), and ignores clear and ongoing evidence of harm.

Major deficiencies include:

- No field surveys or quantitative aquatic assessments were conducted.
- Critical baseline data regarding habitat, species presence, and water quality were omitted.
- Agricultural land use impacts were mischaracterized to falsely elevate the project’s relative benefit.
- The report improperly relies on unverified Best Management Practices (BMPs) and future “adaptive management.”
- The scale and scope of construction and operational impacts were downplayed or ignored.
- Already documented ecological and hydrologic harm was entirely overlooked.

Evidence from the Natural Resources Remand Report (2025) submitted to Multnomah County by Cottrell Community Planning Organization (CPO) and Pleasant Home Community Association (PHCA) — including field surveys, photographic documentation, and site-specific observations — demonstrates that aquatic habitats have already been degraded by filtration project construction. Further impacts from sedimentation, flow alteration, and temperature increases are inevitable unless project activities are halted.

The Biohabitats memorandum does not meet scientific or regulatory standards, and its conclusions are not credible. This rebuttal demonstrates that adverse impacts to natural resources have occurred, continue to occur, and will worsen with continued construction and future operation of the water treatment plant.

INTRODUCTION

The purpose of this rebuttal is to demonstrate that the Biohabitats memorandum fails to meet both the scientific and regulatory standards required under Multnomah County Conditional Use Criteria MCC 39.7515(B), which prohibits projects that would adversely affect natural resources. The Biohabitats memo provides a conjectural narrative detached from observed field conditions and legally required natural resource protections.

The Bull Run Filtration Project is a massive industrial undertaking—over 90 acres of construction, 24/7 operations, pipelines, chemical storage, and groundwater discharge—yet Biohabitats concludes, without empirical data, that it will result in no ecological harm. Moreover, the Biohabitats memo makes the unsupported and implausible claim that constructing and operating an industrial water treatment facility will improve creek conditions relative to the prior agricultural use of the site. This rebuttal addresses Biohabitats claims and provides a substantive critique to inform land use proceedings.

LACK OF FIELD SURVEYS AND BASELINE NATURAL RESOURCE INVENTORY

Biohabitats did not conduct a single aquatic species survey to inform its conclusions. No fish surveys, no amphibian sampling, no macroinvertebrate assessments, and no seasonal water quality monitoring were included. The entire analysis is speculative. These types of species surveys are customarily included in any aquatic habitat evaluation. For example, fish surveys typically include **electrofishing** (NOAA NMFS, 2000. Electrofishing Guidelines; USFWS, 2013. Region 3 Electrofishing Protocols), **snorkel surveys** (ODFW, 2009. Aquatic Inventory Project Methods; NOAA NMFS, 2010. Monitoring Salmon Habitat), **minnow traps** (WDFW, 2009. Salmonid Field Protocols Handbook), **spawning surveys** (ODFW, 2007. Salmon and Steelhead Spawning Survey Procedures; NMFS, 2011. Species-Specific Monitoring Guidance), **eDNA sampling** (USGS, 2018. Environmental DNA Sampling Protocols; USFWS, 2020. eDNA Technical Guidance). Surveys for other aquatic species would typically include **amphibians and reptiles** (USFWS, 2006. Standard Survey Protocol for Amphibians and Reptiles; BLM, 2015. AIM Riparian and Wetland Monitoring Protocol), **macroinvertebrates** (EPA, 1999. Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers; USGS, 2002. Biological

Monitoring of Aquatic Resources), **aquatic and riparian birds** (USFWS, 2000. Bird Monitoring Protocols; BLM, 2003. Technical Reference 1730-1: Avian Inventory Methods), **aquatic mammals** (USFWS, 2013. Riparian Mammal Survey Guidelines; USGS, 2011. Monitoring Mammal Populations with Camera Traps), and **shellfish and mollusks** (USFWS, 2011. Freshwater Mussel Survey Protocol for the Midwest Region; CDFW, 2015. Mollusk Monitoring Guidelines).

In contrast to materials submitted by Biohabitats, the *Natural Resources Remand Report* (Exhibit N.43) submitted by Cottrell CPO and PHCA includes:

- Snorkel surveys (August 22, 2023) and citations to agency reports documenting native cold-water fish—including juvenile salmonids—adjacent to the project site.
- Amphibian surveys confirming red-legged frogs and Cascades frogs within the impacted wetlands.
- Photographic evidence of sediment discharge and habitat damage.

It should be noted that none of these findings were disputed by Biohabitats. Without direct field observation, Biohabitats has no basis to assert that aquatic habitats “will not be adversely affected.” Its reliance on third-party design intentions and assumed BMP effectiveness fails to meet the burden of proof required by MCC 39.7515(B). Moreover, Biohabitats’ characterization of Johnson Creek as degraded is misleading. The headwater segment of Johnson Creek adjacent to the proposed construction site is not representative of an urban stream. Suggesting that further impacts are acceptable simply because the stream has already experienced disturbance reflects flawed reasoning. This kind of rationale promotes incremental habitat degradation—the very outcome that MCC 39.7515(B) is designed to prevent.

MISREPRESENTATION OF AGRICULTURAL IMPACTS

Biohabitats frames existing agricultural land use as the primary source of habitat degradation in the area and implies that conversion to industrial development would be an ecological improvement. This is factually incorrect and intentionally misleading.

The Cottrell CPO and PHCA Remand Report shows that:

- Agricultural lands at the site were low-intensity and buffered by mature hedgerows and forested edges.
- Creek sections adjacent to agriculture were in better condition than those now exposed to industrial runoff and stormwater discharge.
- Upland vegetation and riparian cover were substantially more intact before PWB’s land clearing activities.

Biohabitats uses site photos that are intended to distort perceptions of pre-construction conditions. It was dishonest for them to use photos classified as “pre-construction,” though they were taken long after the farmers were evicted from the land (December 2021) and the property was allowed to lie fallow (Biohabitats Report page 7). Other supplemental materials submitted to

Multnomah County also include misleading photos that are unrepresentative of pre-construction conditions. In contrast, actual pre-construction photos show productive farmland, planted with nursery stock and cover crops (Figures 1-3).



Figure 1. Pre-construction view of site taken from Carpenter Lane looking south, August 2011.



Figure 2. Pre-construction view of site taken from Bluff Road looking north, July 2019.



Figure 3. Aerial photo taken post-construction (left, March 2025) and a pre-construction (right, August 2011; GoogleEarth) showing the loss of productive farmland.

Industrial development does not “restore” habitat conditions—it fragments them, introduces pollutant loads, and increases stormwater runoff. The memo's framing ignores this reality. Lacking credible, site-specific evidence, the authors relied on obscure reports from Wisconsin and Maryland—misrepresenting both the context and conclusions of those sources to support their claims. Moreover, the Biohabitats memo makes the implausible and unsubstantiated claim that building and operating a large-scale industrial water treatment facility will result in improved conditions in Johnson Creek compared to the site’s prior agricultural use. This assertion not only lacks evidence but also ignores the fact that agriculture is a permitted primary use under MUA-20 zoning. Attempting to justify a conditional industrial use by contrasting it with a lawful, baseline land use is fundamentally inappropriate. Biohabitats’ arguments are legally irrelevant and factually unsupported. Their comparison between the water treatment plant and agriculture is not just misleading—it is absurd.

OVERRELIANCE ON BEST MANAGEMENT PRACTICES AND DEFERRED ADAPTIVE MANAGEMENT

Throughout the memo, Biohabitats relies on proposed BMPs such as vegetated swales, flow spreaders, and eco-roofs as “guarantees” against environmental harm. It also cites future “adaptive management” as a remedy for unknown risks.

This approach is insufficient. MCC 39.7515(B) requires that before approval, the applicant demonstrate that resources will not be adversely affected—not that impacts will be “managed” later.

BMPs:

- Are unenforceable promises unless conditions of approval are tied to specific outcomes.
- Often fail in the field under winter storm conditions, steep slopes, and clay-heavy soils.
- Cannot offset direct habitat conversion, tree loss, and hydrologic changes already underway.

Further, adaptive management is undefined and unenforceable. The County cannot abdicate responsibility to future reviews that may never occur and that will be controlled by the same project proponents.

UNDERESTIMATION OF PROJECT SCALE AND WATER QUALITY IMPACTS

Biohabitats severely underestimates the environmental footprint of the project:

- 90+ acres of land disturbed.
- Extensive impervious surface creation with no stormwater infrastructure, nor County plan for stormwater conveyance
- Continuous groundwater pumping into Johnson Creek (>1 million gallons/day), continuing after construction
- Extensive soil and tree removal
- Storage of large volumes of hazardous chemicals, diesel fuel, cleaning agents, and the ongoing generation of highly toxic ozone.

These conditions contribute to:

- Altered stream hydrology (“flashy” flows).
- Sediment deposition and fine substrate accumulation in riffle habitats.
- Temperature increases due to reduced shade and heated surface flows.
- Chronic water quality degradation, including potential contamination from operational chemicals.

Biohabitats provides no quantitative modeling, no flow estimates, and no sediment loading analysis to support its “no effect” claim concerning water quality.

ECOLOGICAL IMPACTS ALREADY OBSERVED

The claim that the project has not and will not adversely affect aquatic resources is factually incorrect. Biohabitats relies on references to BMPs and mitigation efforts that have already been found to be ineffective.

Already documented effects include:

- **Erosion** from poorly stabilized slopes discharging into Johnson Creek.
- **Sedimentation** visible in streambed areas downstream of outfalls.
- **Loss of vegetated buffers** and forest canopy essential for stream cooling and habitat complexity.
- **Dewatering of perched aquifers**, resulting in reduced groundwater baseflow and thermal instability in the creek.

These impacts are not speculative—they are occurring now. Biohabitats' memo fails to acknowledge this reality.

CONCLUSION

The Biohabitats memorandum is not a neutral scientific assessment. It is a promotional document written to support project approval and lacks the rigor, independence, and data required for reliable decision-making. In summary, Biohabitats (1) conducted no fieldwork, (2) misrepresented baseline conditions, (3) relied on assumptions rather than evidence, (4) ignored documented impacts already occurring, and (5) failed to meet the standard of review under MCC 39.7515(B) described by LUBA's remand. For these reasons, the memorandum must not be used to justify project approval. The Multnomah County Hearings Officer should deny any interpretation of the Biohabitats memo as credible evidence of "no adverse effect."

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#T3-2022-16220: Response to N.55

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Mon, May 5, 2025 at 10:45 AM



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LUP,

With regards to the remand of T3-2022-16220, attached is our response to N.55 - Aquatic Natural Resource Effects.

Please acknowledge receipt of this email.

Thank you,
Cottrell CPO



Courter Response to N.55 - Aquatic Natural Resources Effects.pdf
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