

To: Lisa Estrin, Multnomah County Land Use and Planning

From: Lauren Courter
36610 SE Dodge Park Blvd
Boring OR 97009

Date: June 29, 2023

RE: Testimony Against Multnomah County Application #T-3-2022-162220

This written testimony is in response to the City of Portland's proposed water filtration project at SE Carpenter Lane.

Our family of eight, spanning three generations, lives on ten acres adjacent to the property that the City of Portland proposes to build a water filtration project. The proposed site is located to the northwest of our property. Immediately northeast of our property, along our driveway, the City intends to acquire a 100 ft easement to install their 200-300ft deep pipeline (9 foot diameter pipe) to pump approximately 135 million gallons of water per day. Immediately to the west along our property line, the City is proposing a construction and emergency easement to build a thoroughfare for the thousands of trucks needed during construction to dirt, rock, and construction materials over the course of five to seven years.

§ 39.7015 CONDITIONAL USE APPROVAL CRITERIA.

The proposed project does not meet any of the conditional use criteria. Below, I have provided the justification for three of the eight criteria. Under each of the three criteria, I have provided the justification to why I am able to confidently and adequately testify:

(1) Is consistent with the character of the area;

I have lived in this community for 10+ years. My children are enrolled in the Oregon Trail School District and the Gresham Barlow School District. I am an active member of the community as the Secretary of the Cottrell Community Planning Organization. I am a distance runner and run and walk regularly on our rural roads and surrounding trails along the Sandy River. I recreate on the Sandy River throughout all seasons, including but not limited to fishing, rafting, and kayaking.

There are several aspects of our pastoral community that we greatly value. These aspects help define the character of the area which set us apart from urban areas and other rural areas. These include, natural sounds and quiet, the sound of the Sandy River, wildlife – including big game, safe roads for running and cycling, and the night sky.

The sounds around our home are mostly natural and include wind blowing through our forest of Douglas Fir and Cedar. We love to hear our resident owls and other birds of prey at all hours of

the day and night, including Great Horned owl, barn owl, red tailed hawk, bald eagle. In the early mornings and evenings we can hear the rushing sounds of the Sandy River. We enjoy the sounds of the farm activity in the neighboring nursery, including the occasional hum of tractors and the farm workers whistling and singing in the fields. We are also happy that farm activity is not loud nor is it sustained throughout the day. All agricultural sounds end between 3 and 4pm and the natural sounds return for us to enjoy after a long day at work.

In the fall we regularly hear the calling and movements of elk. For as long as we've lived at our home, the elk bed down in our front pasture and our neighbors pasture in the middle of the night through the early mornings. For the last few years, we were able to count upwards of 20 head of elk from our wildlife cameras. In addition to the elk, we have deer that feed on our fallen apples. They also bed down in our fields with their young. Black bears visit our blueberry farm at the end of the season and climb our apple trees throughout the fall to get their fill for the winter. On occasion they help themselves to the honey and the brood in our honeybee boxes.

We are an active, running and cycling family. We run the roads almost everyday and all of our children run on their own as they train for cross country and track seasons. We feel safe running on our roads, including Dodge Park Blvd, Lusted Rd, Altman Rd, Cottrell/347th, and Carpenter Lane, which lack sidewalks or other protections from cars. We feel safe allowing our children to run on their own on our roads. Our children also walk the rural roads to visit friends and visit the local convenience store for snacks. Neighbors, the only people who regularly use the roads in the area, are aware of runners, walkers, cyclists, and children and take great care in ensuring a safe environment for those of us on the roads.

The night sky is incredible. There are no street lights or industrial lights near us. We see so many stars similar to what is seen if you were camping in the wilderness. Just 3 miles toward Gresham or Sandy will result in a different night sky – more light pollution, less stars. The evening also brings a variety of bat species that we enjoy watching feed in the skies around our home.

Given Portland Water Bureau's proposal to build and operate an industrial facility on the 96 acres next to our family's property is inconsistent with the character of our area. If this facility is approved and is in full operation 24 hours a day and 7 days a week, our community's quiet rural nature, the safety on our roads for runners and bikers, the migration and rearing patterns of wildlife, and the subtle natural sounds that we cherish would be taken away from this community forever.

(2) Will not adversely affect natural resources;

Professionally, I am an environmental toxicologist. I have a degree in biology and an Ph.D in toxicology. My educational training is in molecular biology, cancer research, and developmental neuroscience. I am well published in peer-reviewed journals and regularly develop technical reports and publications for my clients. Currently, I am a consultant with Mount Hood Environmental, which I co-own with my husband Ian Courter who is a fisheries scientist. I have almost 15 years of experience as a scientific consultant. My work focuses on land and water use impacts to aquatic and human health. I have worked on a variety of projects including water sampling, water quality testing, reviews of biological assessments, reviews of biological opinions, and risk assessments. My clients include landowners, small and large private companies/corporations, local municipalities, state agencies, the federal government, and attorneys.

The construction and operation of the proposed project will threaten the surrounding wildlife habitat and the water quality of the rivers and streams proximate to the filtration site. This written testimony will largely focus on the natural resource impacts around the site itself, as Mr. Ciecko's written testimony describes the habitat impacts along the raw and finished pipeline routes. It is clear from the technical reports submitted by the Portland Water Bureau to Multnomah County that no formal, in-depth biological assessment has been completed. There has been no data gathering efforts and no analysis of existing species and habitat data available from ODFW and the Oregon Conservation Strategy (OCS). There is no mention of the opinions of the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries (NMFS) agencies which oversee ESA-listed species whose habitat are known to be directly impacted by this project.

Fish and Wildlife

The proposed site is located at the headwaters of the Johnson Creek watershed, home to listed salmon and steelhead and Northern Spotted Owl under the EPA's Endangered Species Act. The riparian area serves as habitat for numerous avian, mammalian, and amphibian species which have been designated as sensitive or threatened under the Oregon Conservation Strategy (Table 1). A riparian habitat buffer of 20+ feet consists of Douglas Fir, Western Red Cedar, Big leaf maple, holly, thimbleberry, among others.

The headwaters of the Johnson Creek border the proposed site to the west, and the creek flows west for 26 miles to the Willamette River in Portland. Numerous springs and 50 inches of annual rainfall over a 54 square-mile watershed provide stream flow to the creek and its tributaries. Salmon, trout, and diverse wildlife inhabit the Johnson Creek Watershed (JCW), with several mammalian and avian species utilizing the watershed as a migration corridor (see Table 1). The creek also provides water for agriculture and recreation.

Designated habitat for Federally protected, ESA-listed salmon and steelhead are found less than one mile downstream of the proposed site, near the corner Orient Dr. and Bluff Rd for Coho

Salmon and Winter Steelhead (Compass Coho Salmon and Winter Steelhead overlays¹). In addition, Coastal Cutthroat habitat is located approximately 0.2 miles downstream of the proposed site. Furthermore, the ESA-listed Northern spotted owl and Columbia white-tailed deer habitat are located on and near the proposed site and across the raw and treated pipeline routes (Figure 1), which are designated “crucial habitat” for both species by the Oregon Department of Fish & Wildlife (ODFW) and included in the State of Oregon’s Conservation Strategy² (OCS). The purpose of OCS is to identify and conserve habitat known to benefit the survival and success of those strategy species. Species listed under the OCS are considered “Species of Greatest Conservation Need” that are defined as having small or declining populations, are at-risk, and/or are of management concern. Construction and operation of the Project threatens federally protected and species which utilize crucial habitat identified by OCS. The presence of many of these species is seasonal and utilizes the watershed and the proposed site as a migration corridor (Table 1), particularly mammals and birds. In the case of Johnson Creek fish, it is established that although in low numbers coastal cutthroat are most abundant in the small headwater tributaries³.

The proposed Bull Run Communication Tower specified in Multnomah County Exhibits A.134, A.136, and A.138 will be constructed to a height of 180 feet. No mention of potential impacts of the Tower to avian species has been documented. Given that the tower will be constructed in a sensitive and threatened habitat of several migratory avian species, it is prudent that the application provide an assessment of the habitat and species present in the areas surround the proposed Tower. In particular, an assessment of the night-migrating birds, such as the chipping sparrow (*Spizella passerine*) is known to have utilize the habitat around the proposed Tower (Figure 2). According to the Biological Diversity Guide for the Greater Portland-Vancouver Region published by Intertwine:

“Communication towers and the aviation lighting and high tension lines or guy wires that are sometimes associated with them pose a hazard to birds in flight, especially night-migrating birds. Communication towers kill an estimated 4 to 5 million birds in the United States each year.”

¹ <https://compass.dfw.state.or.us>

² Oregon Conservation Strategy. 2016. Oregon Department of Fish and Wildlife, Salem, Oregon

³ <https://www.portlandoregon.gov/bes/article/214247>

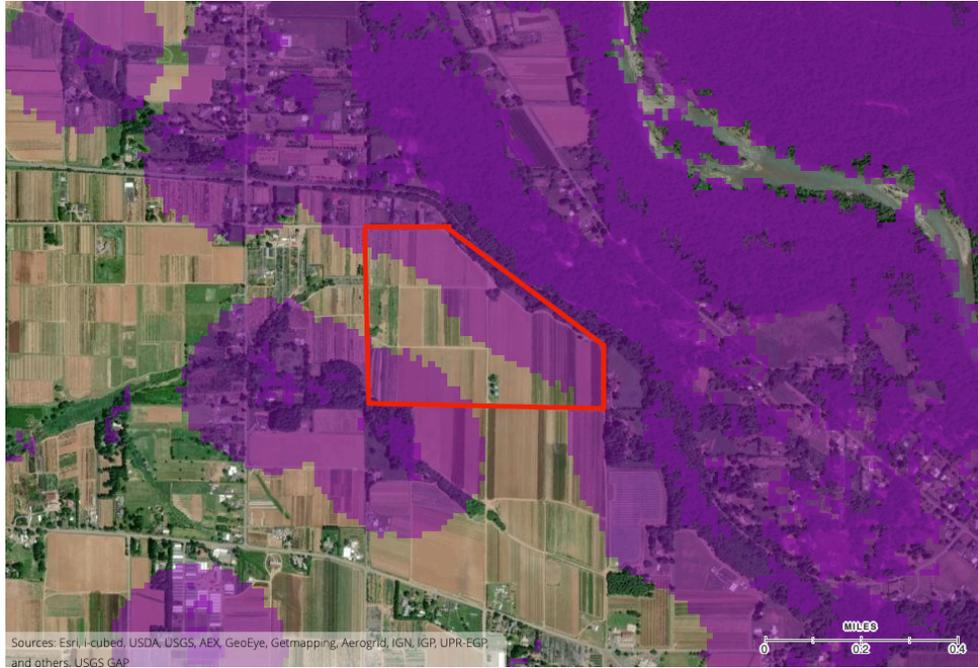


Figure 1. State designated “Crucial Habitat” of federally threatened or endangered Northern Spotted Owl (*S.o. caurina*), Columbia white-tailed deer, under the Oregon Conservation Strategy (OCS) by the ODFW. Purple denotes crucial habitat designations within the Johnson Creek and Sandy River watersheds for resident species. Species are listed in Table 1.

Source: <https://dfw.state.or.us/maps/compass>

Red lines = City property, proposed facility site.

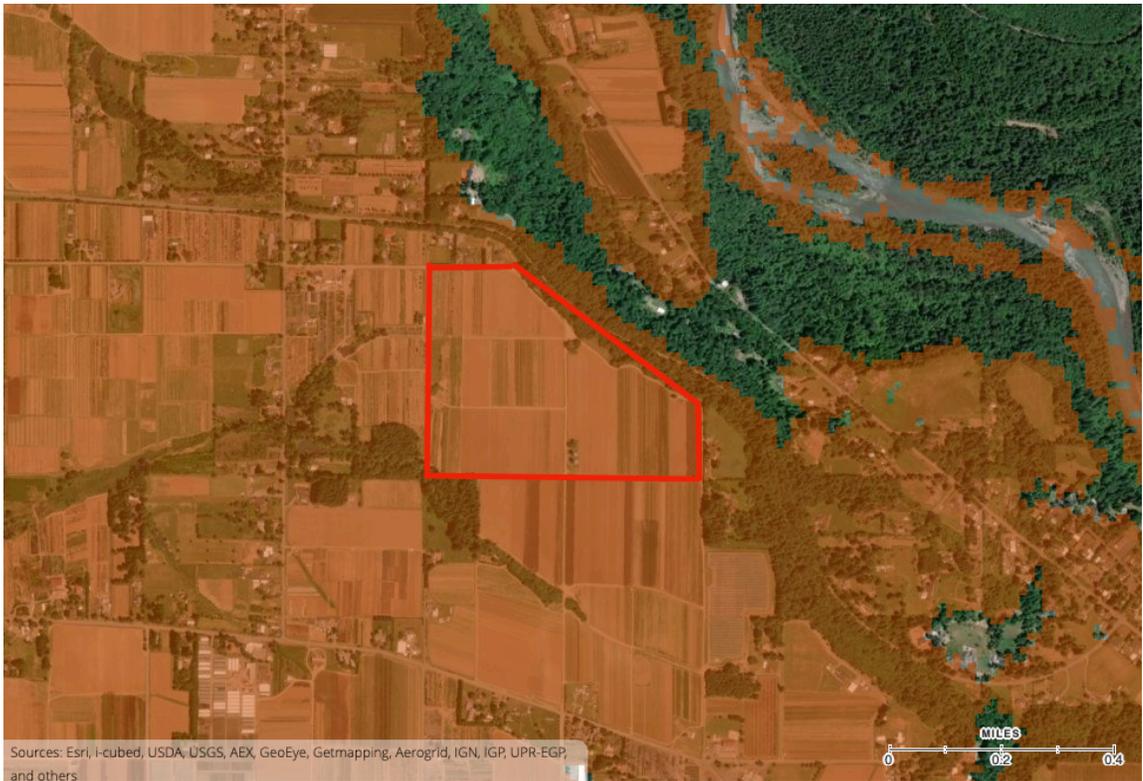


Figure 2. State designated “Crucial Habitat” of the night-migrating Chipping Sparrow (*Spizella passerina*) listed under the Oregon Conservation Strategy (OCS) by the ODFW. Orange denotes crucial habitat designations within the Johnson Creek and Sandy River watersheds for resident species. Species are listed in Table 1.

Source: <https://dfw.state.or.us/maps/compass>

Red lines = City property, proposed facility site.

Table 1. Identified habitats for select native species associated with the upper Johnson Creek watershed (JCW) and Sandy River watershed

	COMMON NAME	SPECIES	MIGRATION CORRIDOR	UPPER JCW*	SANDY RIVER WATERSHED**	FEDERAL, STATE PROTECTION STATUS	
SALMONID	Coastal cutthroat trout	<i>O. clarkii</i>	✓	✓		Sensitive - ODFW; OCS	
	Steelhead trout	<i>O. mykiss</i>	✓	✓	✓	ESA-Threatened - NMFS	
	Coho Salmon	<i>O. kisutch</i>	✓	✓	✓	ESA-Threatened - NMFS	
	Chinook Salmon	<i>O. tshawytscha</i>	n/a		✓	ESA-Threatened - NMFS	
AMPHIBIAN	Cascade torrent salamander	<i>R. cascadae</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
	Cascades frog	<i>R. cascadae</i>	n/a		✓	Sensitive - ODFW; OCS	
	Clouded salamander	<i>A. ferreus</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
	Coastal tailed frog	<i>A. truei</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
	Copes giant salamander	<i>D. copei</i>	n/a		✓	Sensitive - ODFW; OCS	
	Larch Mountain salamander	<i>P. larselli</i>	n/a	✓	✓	Sensitive-Critical - ODFW; OCS	
	Western toad	<i>A. boreas</i>	n/a		✓	Sensitive - ODFW; OCS	
	Western red-backed salamander	<i>P. vehiculum</i>	n/a	✓	✓	Sensitive, ODFW	
	Ensatina salamander	<i>E. eschscholtzii</i>	n/a	✓	✓	Sensitive, ODFW	
	Oregon slender salamander	<i>B. wrighti</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
	Long-toed salamander	<i>A. macrodactylum</i>	n/a	✓	✓	Sensitive, ODFW	
	Northwestern salamander	<i>A. gracile</i>	n/a	✓	✓	Sensitive, ODFW	
	Columbia torrent salamander	<i>R. kezeri</i>	n/a	✓	✓	Sensitive, ODFW; OCS	
	Pacific tree frog	<i>P. regilla</i>	n/a	✓	✓	Sensitive - ODFW	
	Northern Red-legged frog	<i>R. aurora</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
	AVIAN	Bald Eagle	<i>H. leucocephalus</i>	n/a	✓	✓	Protected, Threatened USFWS
		Acorn Woodpecker	<i>M. formicivorus</i>	n/a	✓	✓	Sensitive - ODFW; OCS
Chipping sparrow		<i>S. passerina</i>	✓	✓	✓	Sensitive - ODFW; OCS	
Great horned owl		<i>B. virginianus</i>	n/a	✓	✓		
Canada Goose		<i>B. canadensis</i>	✓	✓	✓	Sensitive - ODFW; OCS	
Pileated woodpecker		<i>D. pileatus</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
Great blue heron		<i>A. herodias</i>	n/a	✓	✓		
Purple martin		<i>P. s. arboricola</i>	✓	✓	✓	Sensitive-Critical - ODFW; OCS	
Short-eared owl		<i>A. flammeus</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
Northern spotted owl		<i>S.o. caurina</i>	n/a	✓	✓	Threatened - ODFW; OCS Threatened, ESA	
Olive-sided flycatcher		<i>C. cooperi</i>	✓	✓	✓	Sensitive - ODFW; OCS	
Common nighthawk		<i>C. minor</i>	✓	✓	✓	Sensitive-Critical - ODFW; OCS	
White-breasted nuthatch			n/a	✓	✓	Sensitive - ODFW; OCS	

	Willow flycatcher	<i>E. trailii</i>	✓		✓	
	Yellow-breasted chat	<i>I.v. auricollis</i>	✓	✓	✓	Sensitive-Critical - ODFW; OCS
MAMMAL	Columbia white tailed deer	<i>O.v. leucurus</i>		✓	✓	Threatened - ODFW; OCS Endangered -USFWS
	Black tailed deer	<i>O. columbianus</i>	✓	✓	✓	
	American black bear	<i>E. americanus</i>	✓	✓	✓	
	Coyote	<i>C. latrans</i>	n/a	✓	✓	Sensitive, ODFW
	Cougar	<i>P.c. concolor</i>	✓	✓	✓	
	Elk	<i>C. canadensis</i>	✓	✓	✓	
	Bobcat	<i>L. rufus</i>	✓	✓	✓	
	Beaver	<i>C. canadensis</i>	n/a	✓	✓	
	River otter	<i>L. canadensis</i>	n/a	✓	✓	
	Townsend's Big-eared bat	<i>C. townsendii</i>	n/a	✓	✓	Sensitive-Critical - ODFW; OCS
	Silver-haired bat	<i>L. noctivagans</i>	n/a	✓	✓	Sensitive - ODFW; OCS
	Pallid bat	<i>A. pallidus</i>	n/a	✓	✓	Sensitive - ODFW; OCS
	Long-legged myotis	<i>M. volans</i>	n/a	✓	✓	Sensitive - ODFW; OCS
	California myotis	<i>M. californicus</i>	n/a	✓	✓	Sensitive - ODFW; OCS
	Fringed myotis	<i>M. thysanodes</i>	n/a	✓	✓	Sensitive - ODFW; OCS
Silver-haired bat	<i>L. noctivagans</i>	n/a	✓	✓	Sensitive - ODFW; OCS	
OTHER	Winged floater mussels	<i>A. nuttalliana</i>	n/a	✓	✓	Threatened - ODFW
	Pacific lamprey	<i>E. tridentatus</i>	✓		✓	Sensitive - ODFW; OCS

Adapted from <https://www.portlandoregon.gov/bes/article/214247>

ODFW- Oregon Department of Fish & Wildlife; ESA- Endangered Species Act; NMFS- National Marine Fisheries Service; USFWS- U.S. Fish & Wildlife Service; OCS- Oregon Conservation Strategy (<https://compass.dfw.state.or.us/visualize/>)

*Proposed Project site location is in Upper watershed. Upper watershed presence is based on existing studies and community observations

**Species marked under the Sandy River column refer to those documented to be present in the area most proximate (directly east) of the proposed filtration site

Water Quality and Stormwater

In the *Potential Discharges to Johnson Creek* Technical Memorandum (Multnomah County Exhibit A.57), the applicant states that although the proposed plant is located near the headwaters of the Johnson Creek, the design of the facility and the stormwater management plan ensures that:

“...the only discharge to Johnson Creek will be stormwater from the site, which will not exceed pre-development flows of stormwater from the site.”

The applicant acknowledges that there are potential impacts from accidents, emergencies, and structural failure, but are confident that the design team made:

“..significant efforts to avoid or mitigate any potential risks to Johnson Creek water quality and habitat.”

This technical memorandum does not provide any details to support such claims. It lacks any of the following scientific evidence to establish what pre-development and baseline conditions are:

1. Seasonal baseline water quality conditions of Johnson Creek.
2. Pre-development stormwater and runoff conditions through seasonal stormwater sampling (e.g. first freshet, first major storm event, etc) coupled with rainfall measurements
3. Overland flow monitoring to determine baseline runoff contribution
4. Seasonal baseline soil moisture and infiltration conditions through piezometer data
5. Surveys of current habitat conditions (e.g. vegetation surveys, riparian habitat surveys)
6. Surveys of wildlife, including avian, amphibian, mammalian, and aquatic species. Seasonal surveys are necessary due to the variety of migratory avian, mammalian, and aquatic species that utilize the Johnson Creek.
7. Johnson Creek Wetland delineation surveys

Without establishing pre-development conditions, it will be impossible for the applicant to support any claims that they are not exceeding pre-development flows as the facility is under construction and during operation. The applicant has not provided technical details nor an analysis by water quality, stormwater, soil, riparian habitat, or wildlife experts. In the *Potential Discharges to Johnson Creek* technical memorandum, the applicant concludes that their *Stormwater Drainage Report* (Multnomah County Exhibit A.73) verifies that their stormwater management system will project Johnson Creek’s water quality and habitat, thereby satisfying MCC 39.6235. However, the *Stormwater Drainage Report* is not a scientific report offering scientific rationale to support the protection of Johnson Creek’s water quality and habitat,

rather it is solely a certification by a stormwater engineer. A stormwater engineer is not an acceptable expert on pre-development conditions for water quality, soil, and habitat.

The applicant also fails to mention the potential effects and mitigation plan for the significant removal of over a 1 million cubic yards of soil from the property prior to facility construction. The excavation and movement of soil will be occurring along the riparian buffer of the Johnson Creek, and the applicant fails to demonstrate potential impacts of years of soil movement through data collection and modeling.

With the potential for chemical spills coupled with heavy rains or secondary containment overflow, the applicant has not provided potential toxic effects to species present in the Johnson Creek watershed, including amphibian and aquatic species. Furthermore, they have not mentioned potential take on ESA-listed salmonids which are known to be downstream of the proposed project. The applicant has not documented any consultation with USFWS and NMFS on the potential take of salmonids.

The applicant acknowledges potential overflow of water due to equipment failure and has described a two hour window that would be "*sufficient time to detect and correct the cause of the overflow under all scenarios.*" The assumption that a two hour window is sufficient to detect and correct the cause of overflow is not reasonable. Equipment failure has the potential to require longer than two hours to detect and repair. The applicant has not provided a mitigation plan or potential impacts to water quality, fish and wildlife for a worse case scenario where the overflow from approximately ~7 million gallons per hour beyond the two hours drains directly into the Johnson Creek. It is reasonable to assume that 7 million gallons of water per hour to the Johnson Creek will have sedimentation/turbidity and habitat impacts.

The applicant has failed provide:

1. Baseline and pre-development conditions for Johnson Creek fish and wildlife and water quality
2. Consultation with the appropriate state agencies on potential impacts to species of concern within the Johnson Creek watershed known to be sensitive or threatened according to the OCS
3. Consultation with federal agencies on the potential impacts to ESA-listed species in the case of stormwater or accidental chemical spill or emergency overflow

Therefore, there is evidence to support the claims that the proposed project will not exceed pre-development conditions.

(3) The use will not:

(a) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; nor

(b) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

West Slope Farms, Inc. at 36610 SE Dodge Park Blvd.

Although we are immediately adjacent to the proposed site, pipeline, and transportation route, the Portland Water Bureau and their agricultural consultant, Globalwise, Inc., did not interview us nor include our farm in their agricultural impact study (Multnomah County Exhibit A.33 – D.1 Agricultural Compatibility Study). Our farm is located within Globalwise’s “Core Analysis Area” (Figure 3), but no effort was put forth to investigate potential effects to our farm. Furthermore, Figure 4 of their study indicates that our farm cultivates nursery crop, which is inaccurate.

Our family owns West Slope Farms, LLC. We have farmed blueberries on our ten acres zoned Exclusive Farm Use in Clackamas County for the entire time we have lived on our property, since 2013. We know what successful cultivation of blueberries requires. We also understand how environmental conditions impact the growth and development of healthy bushes and abundant fruit production. Extreme dust generation from large scale excavation, the movement and hauling of soil, transportation of construction materials, and the transportation of workers across a five to seven year construction period will certainly impact crop growth, berry production, and crop processing. Given the amount of traffic anticipated to frequent the access road directly west of our property along the property line, no mitigation can adequately alleviate the dust aerosolization, dispersement, and settlement on my blueberry crop. Poor air quality from the dust will prevent us from tending to the bushes in the fall and winter for pruning, amending the soil and applying herbicide in the spring, and harvesting in the summer. Dust would settle on the leaves and branches of our well-established, highly productive 40+ year old bushes and inhibit bud and leaf growth, photosynthesis, flower production, pollination by our honeybees, and berry development. The berries that do emerge will take longer to ripen and once harvested will require extra time for processing. Normal processing requires rinsing the berries once before sale and consumption. Added accumulated dust will require extra time for additional rinsing to ensure clean berries. Decreased production will also decrease revenue for our farm.

In addition to blueberries, we also raise goats, pigs, and chickens. We currently have five total goats for purposes of brush control, two pigs on regular rotation for meat production, and one dozen chickens for egg production. Of the animals we raise, our goats are very sensitive to noise and will hide with any loud disturbances. Sustained and loud noises from construction and operation will undoubtedly frighten and stress out our animals, specifically the goats. We have one breeding female and she will not nurse her young kids with loud noises occurring.

Figure 3. "Core Analysis Area" designated by Globalwise, Inc, consultant for the Portland Water Bureau's Agricultural Compatibility Study (Multnomah County Exhibit A.33, page 21). The yellow star denotes our property.

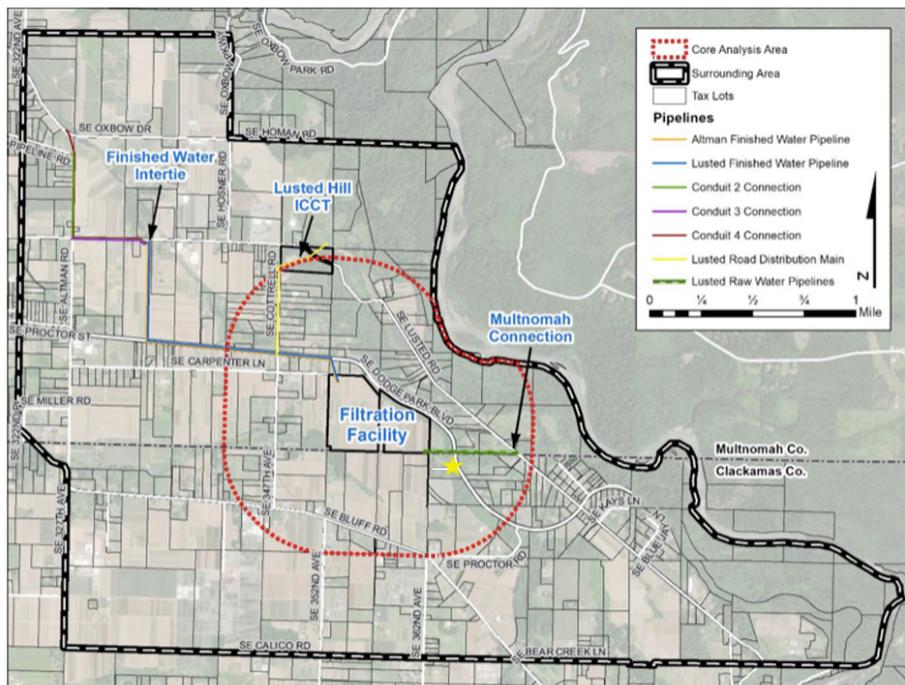
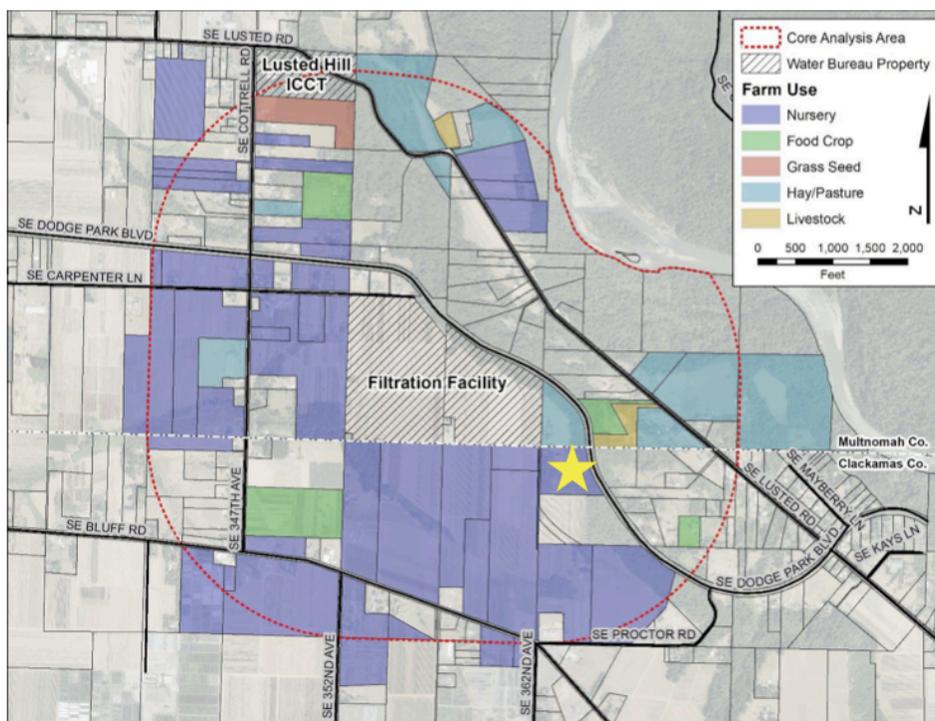


Figure 4. Types of farm uses within the “Core Analysis Area” designated by Globalwise, Inc, consultant for the Portland Water Bureau’s Agricultural Compatibility Study (Multnomah County Exhibit A.33, page 23). The yellow star denotes our property.



General Agricultural Impacts

This proposal will convert the current parcel of farmland, designated by the State of Oregon as “farmland of statewide importance,” to industrial, non-agricultural use for the Bull Run Water Filtration facility. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use as defined under the Farmland Protection Act U.S.C. 4201 et seq.

The proposed site for the filtration facility is located on 90+ acres of existing farmland with active, productive farming situated within a large residential and agricultural community. If this proposal is approved, this land will be converted from residential-agriculture use under MUA-20 to industrial use. This would be a significant and devastating impact to farming productivity spanning two counties.

According to the United States Department of Agriculture, over 95% of the proposed site contains Class 2 soil⁴. The State of Oregon considers Class 2 soil “High-Value Farmland” and Farmland of Statewide Importance” (OAR§660-033-200 (8)(a)).⁵ Prior to construction, the City estimates approximately 1,225,000 cubic yards of soil to be removed, of which it is estimated 245,200 cubic yards of High-Value Class 2 topsoil will be removed across 75 to 80 acres.⁶ Similarly, approximately 4 miles of proposed pipeline routes for both the raw and treated water spans through high value soils of existing farmland. Furthermore, it will negatively impact and permanently destroy future farmland production in these areas. Local farmers and soil scientists with the Oregon Department of Agriculture agree that the valuable topsoil will not recover from the dredging of trenches, construction, and heavy equipment needed to establish the connectivity of redundant 7-9 foot diameter pipes. As a result, the raw and treated water pipeline alone will destroy approximately 10-15 acres of valuable soil across two counties. Maps provided in Figure 5 and Figure 6 illustrate the spatial extent of high value farmland within the agricultural community which the City wishes to build the facility and its pipeline network.

⁴ <http://websoilsurvey.sc.egov.usda.gov/>.

⁵ https://oregon.public.law/rules/oar_660-033-0020;

https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1338623.html#top.

⁶ Portland Water Bureau, 2020 Draft Filtration Facility Overview March 2020, Section 7.1.1 Site Grading and Earthwork.

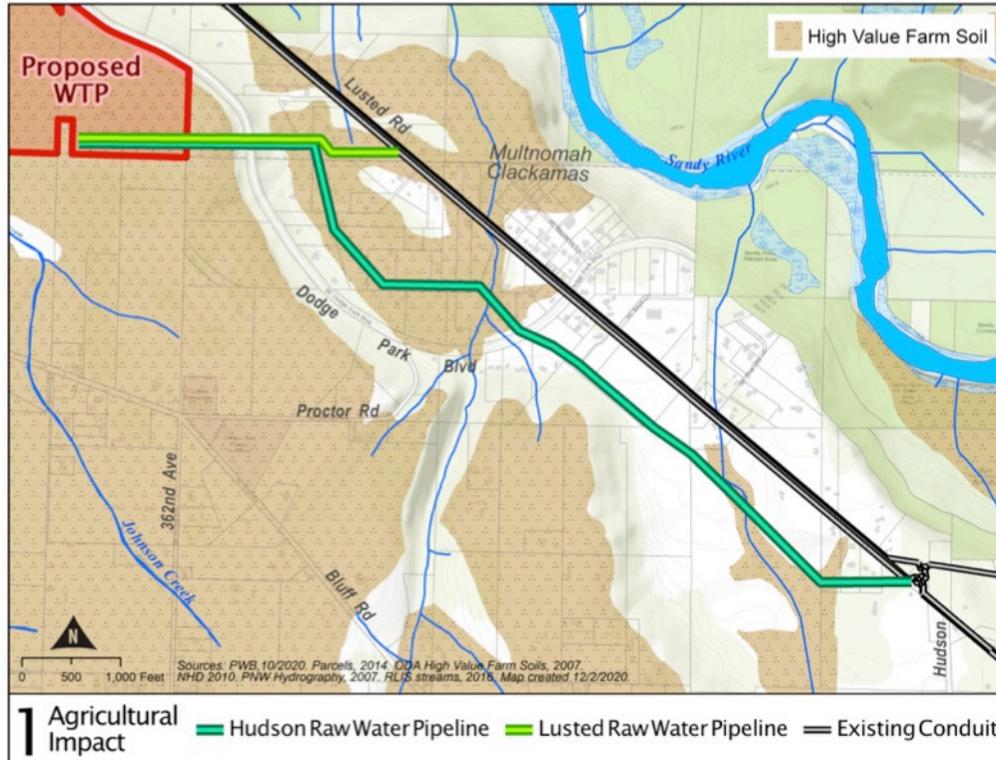


Figure 5. USDA Class 2, Oregon “High-Value Farmland” soil at risk by the City’s proposed Raw Pipeline and Filtration Project. *Source:* Soils layer - Oregon Explorer; Pipeline – City of Portland

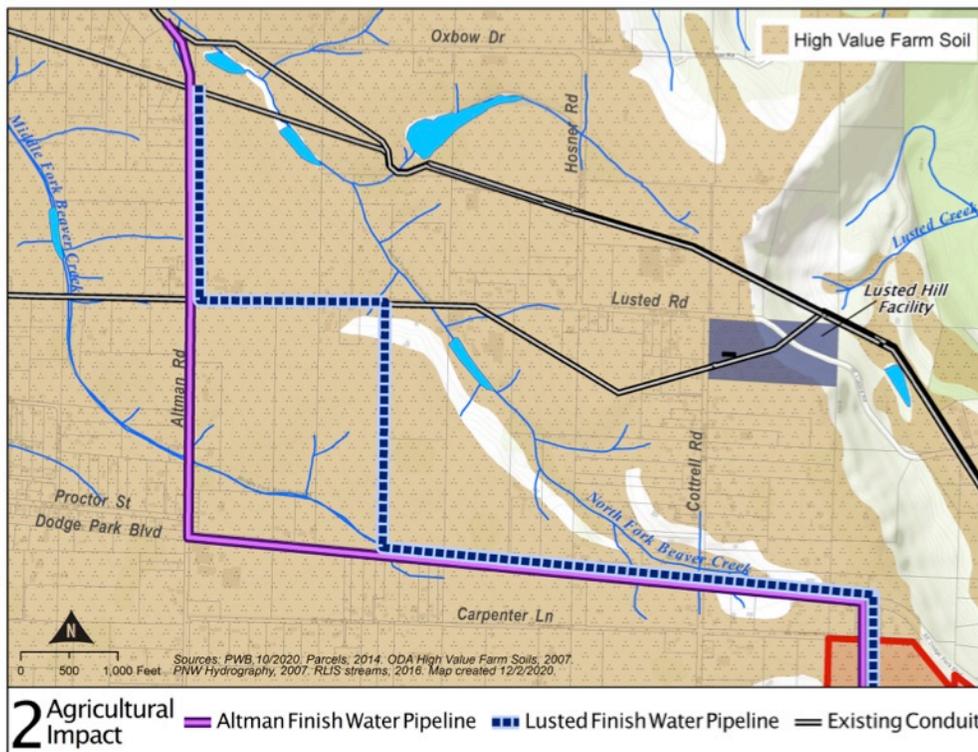


Figure 6. USDA Class 2, Oregon “High-Value Farmland” soil at risk by the City’s proposed Finished Pipeline and Filtration Project. *Source:* Soils layer - Oregon Explorer; Pipeline – City of Portland