

**Multnomah County SEC-h, SEC-sw, and SEC-wr  
Natural Resources Assessment  
Oxbow Regional Park Welcome Center  
Waterline Upgrade Project  
Multnomah County/Portland, Oregon  
(Township 1 South, Range 4 East, Section 10)**

**Prepared for**

**Metro**

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**EXHIBIT 4**

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## 1.0 INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a natural resources assessment for a proposed installation of a new water distribution alignment and upgrade to the Oxbow Regional Park Welcome Center water system in Oxbow Regional Park, located near the lower Sandy River in Multnomah County, Oregon (Figure 1, all Figures are in Appendix A). The proposed project is located within mixed forested and cleared habitat, with most work occurring within preexisting roads in cleared, unforested areas or in areas that will not require tree removal. The proposed enhancement is entirely within area designated by Multnomah County as a Significant Environmental Concern – scenic waterway (SEC-sw), and partially within SEC - wildlife habitat (SEC-h) and SEC – water resources (SEC-wr) (Figure 2).

Since the project site is located in land zoned SEC-h, SEC-sw, and SEC-wr, Multnomah County Community Development Code requires a natural resource assessment (MCC 39.5860, 39.5600, 39.5560, and 39.5800). This report documents Wildlife Habitat Resource Area conditions and evaluates relevant SEC approval criteria. Development within an area of SEC-sw requires a letter from the Oregon Parks and Recreation Department stating that the project has been reviewed and complies with the Oregon Scenic Waterways Management Plan.

## 2.0 PROPOSED AND EXISTING DEVELOPMENT

### 2.1 Proposed Development

The proposed water system upgrade project is needed to continue to provide potable water that will service the Oxbow Park Welcome Center, Ranger's residence, maintenance facilities and recreation areas as the existing system constructed by Multnomah County is at the end of its serviceable life (Figures 3 and 4A-4G). It includes installing a new well, a pumping facility (~120 square feet (SF)) with ample storage and water treatment, a backup generator and water storage at the existing pump house, replacement of approximately 8,325 linear feet (LF) of water distribution pipe (Figures 5A-5G), along with associated valves, air valves, and hydrants. The proposed siting and system alignment minimizes impacts to trees and other natural resources by siting development in existing cleared areas, trenching in paved and graveled areas, and horizontal drilling beneath paved or vegetated areas to reduce vegetation disturbance.

No land clearing will occur as the alignment of the pipeline will be installed in already cleared disturbed areas (i.e., roadways, lawn) and the well and storage shed will be located in a cleared existing storage area. An approximately 120' section of waterline will be installed via open trenching, approximately 60' of which will require removal of shrubs and groundcover. This area will result in approximately 600 SF of vegetation disturbance, not including removal of trees. Following installation, the area will be revegetated using native shrubs and seed application. Open trenching within this vegetation area will not require tree removal, as the ground cover within this area is limited to vine maple (*Acer circinatum*), sword fern (*Polystichum munitum*), and salal (*Gaultheria shallon*). At this time during the preliminary design phase, two trees are proposed for removal: one 17-inch diameter breast height (DBH) western red cedar (*Thuja plicata*) located at the well location and one isolated 20-inch DBH Douglas fir (*Pseudotsuga menziesii*) located within the

alignment and storage area. The understory of both trees has been used for storage and/or dirt piles. There is no shrub understory or native groundcover beneath them. See Figure 4A for locations of impacted trees.

To protect water quality and habitat resources, erosion control and tree protection measures will follow Multnomah County Code standards for Best Management Practices (BMPs). Where construction will be adjacent to forested resources (e.g., well construction), construction limit boundaries will be clearly flagged and maintained and there will be no disturbances beyond the flagged limits. Tree protection fencing will be installed and maintained to protect trees in the vicinity of the construction boundary where needed. Erosion control measures will be installed and maintained throughout construction.

## **2.2 Existing Development**

The site currently contains a Welcome Center for visitors and several park maintenance buildings, maintenance and operations yard, Ranger's residence, parking areas with both paved and graveled surfaces, a woodshed, a pumphouse, existing water alignment and water taps. and restroom facilities. There is no fencing.

## **3.0 SEC – WILDLIFE HABITAT ASSESSMENT (SEC-h)**

### **3.1 Methods**

Wildlife habitat assessments were conducted on October 20 and 27, 2023 and January 4, 2024. Pacific Habitat Inc. staff evaluated site conditions, vegetation composition and cover, wildlife habitat features, and potential project impacts.

### **3.2 Existing Habitat Conditions and Impacts**

The proposed project area is located adjacent to a large multi-layered native forest and includes pockets of trees. Canopy vegetation in the adjacent forest is dominated by Douglas fir with smaller amounts of big leaf maple (*Acer macrophyllum*) and western red cedar. The shrub understory is dominated by vine maple, salal, and Oregon grape (*Mahonia nervosa*) with smaller amounts of red huckleberry (*Vaccinium parvifolium*), beaked hazelnut (*Corylus cornuta*), tall Oregon grape (*Mahonia aquifolium*), snowberry (*Symphoricarpos albus*), and baldhip rose (*Rosa gymnocarpa*). Groundcover is dominated by sword fern. Non-forested or "cleared area" vegetation is dominated by native and non-native grasses. Photographs of the areas mentioned are included in Appendix B.

For most of the proposed development, no vegetation disturbance will occur since the pipeline will be installed in existing cleared areas (i.e., roadways, lawn) and the well will be located on a graveled storage area. The extent of vegetation disturbance will be limited to the aforementioned 600 SF of disturbance. This area will be revegetated with native shrubs and groundcover. Other areas in which water distribution alignment does not fall within previously existing road will be installed via horizontal drilling and will not disturb trees or other vegetated cover.

At this time during the preliminary design phase, two trees are proposed for removal: one 17-inch DBH western red cedar located at the well location and one isolated 20-inch DBH Douglas fir located within the alignment and storage area. The understory beneath both trees is compacted, resulting in compromised root systems and has been used for storage and/or dirt piles. There is no shrub understory or native groundcover beneath either tree.

### **3.3 Mitigation & Wildlife Conservation Plan**

As the project does not require clearing within an existing forested area, mitigation is not required. The applicant meets criteria of MCC 39.5860 (B); therefore, a Wildlife Conservation Plan (WCP) is required as directed by the development standards of (C)(3). See Appendix C for Wildlife Conservation Plan.

## **4.0 SEC-h APPROVAL CRITERIA**

### ***§ 39.5560 General Requirements:***

***(A) Areas of erosion or potential erosion shall be protected from loss by appropriate means.***

**Response:** The extent of ground disturbance has been minimized by installing a new well on a disturbed, graveled storage area and routing the pipeline in existing roads or road edges. Erosion prevention measures will be installed as needed according to Multnomah County Code and will protect natural resources and any disturbed areas from potential erosion.

***(B) Outdoor lighting shall be of a fixture type and shall be placed in a location so that it does not shine directly into undeveloped water resource or habitat areas.***

**Response:** Not applicable; no lighting is proposed.

***(C) Nuisance plant species shall not be used as landscape plantings.***

**Response:** No nuisance plant species will be planted, and existing nuisance plant species will be removed.

### ***§ 39.5860 Criteria for Approval of SEC-h Permits***

***(B) Development standards:***

***(1) Where a parcel contains any non-forested "cleared" areas, development shall only occur in these areas, except as necessary to provide access and to meet minimum clearance standards for fire safety.***

**Response:** The criterion is met; project is proposed primarily within existing “cleared” areas. Sections of water alignment falling within forested areas will be restricted to horizontal drilling that will not result in above ground disturbance or removal of trees.

- (2) *Development shall occur within 200 feet of a public road capable of providing reasonable practical access to the developable portion of the site.*

**Response:** The criterion is met: all proposed developments occur within 200 feet of public road.

- (3) *The access road/driveway and service corridor serving the development shall not exceed 500 feet in length.*

**Response:** Not applicable; proposed development is an upgrade to existing water system, no access road/driveway or service corridors are required or proposed.

- (4) *For the purpose of clustering access road/driveway approaches near one another, one of the following two standards shall be met: a) The access road/driveway shall be located within 100 feet of a side property line if adjacent property on the same side of the road has an existing road/driveway approach within 200 feet of that side of the property ; or b) The access road/driveway approach onto a public road shall be located within 50 feet of either side of an existing access road/driveway on the opposite side of the road.*

**Response:** Not applicable; the project does not include development of roadways/driveways or service corridors.

- (5) *The development shall be within 300 feet of a side property line if adjacent property has structures and developed areas within 200 feet of that common side property line.*

**Response:** Not applicable; the proposed development is within 300 feet of a side property line, but adjacent property is not developed within 200 feet of that common side property line.

- (6) *Fencing within a required setback from a public road shall meet the fencing criteria.*

**Response:** Not applicable; the proposed development does not include construction of fencing.

- (7) *The nuisance plants in MCC 39.5580 Table 1 in addition to the nuisance plants defined in MCC 39.2000 shall not be planted on the subject property and shall be removed and kept removed from cleared areas of the subject property.*

**Response:** The criterion is met; near the Welcome Center, three nuisance plants were observed adjacent to a Douglas fir (see Figure 4A) including two bull thistle rosettes (*Cirsium vulgare*) and one Scotch broom seedling (*Cytisus scoparius*). Elsewhere within the proposed development project area, some areas of reed canarygrass (*Phalaris arundinacea*), Canada thistle (*Cirsium vulgare*), and Robert geranium (*Geranium robertianum*). Nuisance plants will be removed, and no nuisance plants will be planted.

**(C) Wildlife Conservation Plan.** *An applicant shall propose a wildlife conservation plan if one of two situations exist.*

- (1) *The applicant cannot meet the development standards of subsection (B) because of physical characteristics unique to the property. The applicant must show that the wildlife conservation plan results in the minimum departure from the standards required in order to allow the use; or*

**Response:** Not applicable; the proposed development meets the development standards of subsection (B).

- (2) *The applicant can meet the development standards of subsection (B), but demonstrates that the alternative conservation measures exceed the standards of subsection (B) and will result in the proposed development having a less detrimental impact on forested wildlife habitat than the standards in subsection (B).*

**Response:** All criteria of subsection (B) are met; a Wildlife Conservation Plan is proposed in accordance with the standards outlined in subsection (C)(3), see Appendix C.

- (3) *Unless the wildlife conservation plan demonstrates satisfaction of the criteria in subsection (C)(5) of this section, the wildlife conservation plan must demonstrate the following:*

*(a) That measures are included in order to reduce impacts to forested areas to the minimum necessary to serve the proposed development by restricting the amount of clearance and length/width of cleared areas and disturbing the least amount of forest canopy cover.*

**Response:** The criteria are met; the proposed water system improvements are designed to minimize impacts to trees and forested areas by installing pipelines in existing roadways, disturbed areas (i.e., lawn), and by horizontal drilling within “cleared” non-forested areas. The new well and pipeline system will require removing one 17-inch DBH redcedar and one isolated 20-inch DBH Douglas fir tree within the non-forested area. The location of the drilling and trenching has been designed to minimize clearing and impacts to forested areas.

*(b) That any newly cleared area associated with the development is not greater than one acre, excluding from this total the area of the minimum necessary accessway required for fire safety purposes.*

**Response:** The criterion is met; no existing forested areas will be cleared as a result of the proposed development.

*(c) That no fencing will be built and existing fencing will be removed outside of areas cleared for the site development except for existing cleared areas used for agricultural purposes. Existing fencing located in the front yard adjacent to a public road shall be consistent with subsection (B)(6).*

**Response:** Not applicable; no fencing is proposed.

*(d) That revegetation of existing cleared areas on the property at a 2:1 ratio with newly cleared areas occurs if such cleared areas exist on the property.*

**Response:** Not applicable; no areas will be cleared as a result of the proposed development.

*(e) That revegetation and enhancement of disturbed stream riparian areas occurs along drainages and streams located on site.*

**Response:** Not applicable; as the alignment will be installed in the existing road, no streams or riparian areas will be disturbed. All stream crossings exist as culverts and will not be disturbed during installation of proposed development.

## **5.0 SEC-sw APPROVAL CRITERIA**

### **§ 39.5600 General Requirements:**

*Except as otherwise provided in this Subpart, all development within the SEC-sw shall be subject to the following:*

*(a) The application for the SEC-sw permit shall include a letter from the Oregon Parks and Recreation Department indicating that the proposed development has been reviewed and is, or can be, consistent with the provisions of the Oregon Scenic Waterways Management Plan.*

**Response:** A letter from Oregon Parks and Recreation Department (OPRD) will be provided. The applicant, Metro, is taking responsibility for acquiring the letter from OPRD.

*(b) The maximum possible landscaped area, scenic and aesthetic enhancement, open space or vegetation shall be provided between any use and a river, stream, lake, or floodwater storage area.*

**Response:** The criterion is met; much of the proposed development will occur at the Oxbow Regional Park Welcome Center, which lies over 1000 feet from the Sandy River. Installation of a frost-free tap is proposed in the recreational use area east of the Welcome Center, which is approximately 700 feet from the Sandy River. Additional replacement of pipe along SE Oxbow Park Road occurs within approximately 250 feet of top of bank of the Sandy River at its closest points.

*(c) Agricultural land and forest land shall be preserved and maintained for farm and forest use.*

**Response:** The criterion is met; proposed development requires the removal of two individual trees from within a non-forested “cleared” area. The overall use of forested areas will not be impacted.



***(d) A building, structure, or use shall be located on a lot in a manner which will balance functional considerations and costs with the need to preserve and protect areas of environmental significance.***

**Response:** The criterion is met; the proposed development includes a 120 SF pumping facility located on the lot in a manner which will balance functional considerations and costs with the need to protect areas of environmental significance. The pumping facility is the minimum size needed to perform its function.

***(e) The natural vegetation along rivers, lakes, wetlands and streams shall be protected and enhanced to the maximum extent practicable to assure scenic quality and protection from erosion***

**Response:** The criterion is met; no areas of the proposed development occur within rivers, lakes, wetlands, or streams. All areas of disturbance near stream crossings exist as culverts and will not be disturbed during installation of proposed development.

***(f) Archaeological areas shall be preserved for their historic, scientific, and cultural value and protected from vandalism or unauthorized entry.***

**Response:** Not applicable; no known archaeological areas will be impacted within the proposed work areas.

***(g) Areas of erosion or potential erosion shall be protected from loss by appropriate means. Appropriate means shall be based on current Best Management Practices and may include restriction on timing of soil disturbing activities.***

**Response:** An erosion and sediment control plan will be prepared in compliance with Multnomah County regulations and will utilize BMP to maintain surface water quality.

***(h) The design, bulk, construction materials, color and lighting of buildings, structures and signs shall be compatible with the character and visual quality of areas of significant environmental concern.***

**Response:** The proposed pumping facility and all associated design, bulk, construction materials, color, and lighting will be compatible with the character and visual quality of the area. All other proposed developments consist of water system upgrade and will not be visible upon completion.

***(i) An area generally recognized as fragile or endangered plant habitat or which is valued for specific vegetative features, or which has an identified need for protection of the natural vegetation, shall be retained in a natural state to the maximum extent possible.***

**Response:** Not applicable; no known fragile or endangered plant habitat is included within the proposed development work area.

## 6.0 SEC-wr APPROVAL CRITERIA

***§ 39.5560 General Requirements for approval in the west of Sandy River Planning Area designated as SEC-wr or SEC-h:***

***(A) Areas of erosion or potential erosion shall be protected from loss by appropriate means. Appropriate means shall be based on current Best Management Practices and may include restriction on timing of soil disturbing activities.***

**Response:** An erosion and sediment control plan will be prepared in compliance with Multnomah County regulations and will utilize BMPs to maintain surface water quality.

***(B) Outdoor lighting shall be of a fixture type and shall be placed in a location so that it does not shine directly into undeveloped water resource or habitat areas. Where illumination of a water resource or habitat area is unavoidable, it shall be minimized through use of a hooded fixture type and location. The location and illumination area of lighting needed for security of utility facilities shall not be limited by this provision.***

**Response:** Not applicable, no lighting will be installed as a part of the proposed development.

***(C) The nuisance plants in MCC 39.5580 Table 1, in addition to the nuisance plants defined in MCC 39.2000, shall not be used as landscape plantings within the SEC-wr and SEC-h Overlay Zone.***

**Response:** No nuisance plant species will be planted, and existing nuisance plant species will be removed.

***§ 39.5800 General Requirements:***

***(A) Except for the exempt uses listed in MCC 39.5515 and the existing uses pursuant to MCC 39.5550, no development shall be allowed within a Water Resource Area unless the provisions of subsections (B) or (C) or (D) below are satisfied. An application shall not be approved unless it contains the site analysis information required in MCC 39.5520(A) and (B) and meets the general requirements in MCC 39.5560.***

**Response:** The proposed development satisfies all criteria described in Subsection (C) due to its low impact on Water Resource Areas. Details of these impacts are described below.

***(C) Alternatives Analysis - Development proposed within a Water Resource Area may be allowed if there is no alternative, when the other requirements of this Overlay including the Development Standards of subsection (E) and the provisions for Mitigation in subsection (F) are met. The applicant shall prepare an alternatives analysis which demonstrates that:***

*(1) No practicable alternatives to the requested development exist that will not disturb the Water Resource Area; and*

*(2) Development in the Water Resource Area has been limited to the area necessary to allow for the proposed use;*

*(3) Development shall occur as far as practically possible from the stream; and*

*(4) The Water Resource Area can be restored to an equal or better condition; or*

*(5) Any net loss on the property of resource area, function and/or value can be mitigated.*

**Response:** No practicable alternatives exist due to the nature of the proposed development, which consists of the replacement of the water distribution system along three sections of SE Oxbow Park Road within the overlay: a 500-foot section (“west”), a 1,000-foot section (“east”), and a “north” section of alignment—the longest of which is 120-feet. All sections of replacement are restricted to preexisting roads. The alignment replacement has been designed to result in the least amount of disturbance within the SEC-wr overlay.

Within the west section, replacement will be installed via open trenching following the centerline of the road. Installation in this manner limits temporary disturbance and will not result in permanent disturbance within the overlay. A small, unnamed stream crosses the road via culvert within this section and will not be disturbed as a result of the replacement, nor will any bank of the stream on either side of the road. Staging will occur within the road. The current condition of the stream is considered “excellent”, and as no net loss of the resource area function will occur, no restoration is proposed.

Within the east section, there are no streams or wetlands. A previous report submitted to Metro determined that inclusion of this area into the overlay is in error, as no water resources occur within it (Siskiyou BioSurvey, 2014). The closest resource to the road where the proposed disturbance would occur is more than 200 feet from the top of the bank. For these reasons, this section is not being considered as subject to the conditions of development within the overlay.

Within the north section, replacement includes two side-by-side service connections. The longer of the two will encroach approximately 120-feet into the SEC-wr overlay and terminate at a standpipe assembly with a 6’ x 6’ splash pad, the other alignment will encroach 85-feet into the overlay and terminate at a hydrant and 6’ x 6’ splash pad. There are no streams or wetlands within this section of the overlay, this area is associated with the overlay covering the Sandy River. Where the alignment ends its encroachment into the SEC-wr overlay is approximately 250-feet from the bank of the Sandy River, which remains unimpacted by the proposed development.

To the south of this area, but not within the SEC-wr overlay, a drainage culvert crosses the road where proposed work is to occur. No stream was observed during the field visit, and no mapped streams exist within the Metro RLIS database. Regardless, culverts crossing the road within any section of the proposed development will not be impacted by trenching within those roads.

***(E) Development Standards- Development within the Water Resource Area shall comply with the following standards:***

***(1) Development of trails, rest points, viewpoints, and other facilities for the enjoyment of the resource must be done in such a manner so as to minimize impacts on the natural resource while allowing for the enjoyment of the natural resource.***

**Response:** Proposed development does not include development of trails, rest points, viewpoints, or other facilities and only includes horizontal drilling below existing road within the overlay.

***(2) Development in areas of dense standing trees shall be designed to minimize the numbers of trees to be cut. No more than 50 percent of mature standing trees (of 6-inch DBH greater) shall be removed without a one-for-one replacement with comparable species. The site plan for the proposed activity shall identify all mature standing trees by type, size, and location, which are proposed for removal, and the location and type of replacement trees.***

**Response:** Proposed development does not occur within areas of dense standing trees and does not require any trees to be cut within the overlay.

***(3) Areas of standing trees, shrubs, and natural vegetation will remain connected or contiguous, particularly along natural drainage courses, so as to provide a transition between the proposed development and the natural resource, to provide food, water, and cover for wildlife, and to protect the visual amenity values of the natural resource.***

**Response:** The proposed development within the overlay includes horizontal drilling below existing road or trenching within existing road and will not impact continuity between tree/shrub and natural vegetation on site. Staging of the drilling machinery will not impact continuity. See subsection (F) for detailed description of mitigation plan.

***(4) The Water Resource Area shall be restored to "good condition" and maintained in accordance with the mitigation plan pursuant to subsection (F) below and the specifications in Table 2 of this section.***

**Response:** The proposed development within the overlay will occur only within previously existing road and will not require any disturbance to canopy or vegetated areas and as such, no restoration will be required.

***(5) To the extent practicable, existing vegetation shall be protected and left in place. Work areas shall be carefully located and marked to reduce potential damage to the Water Resource Area. Trees in the Water Resource Area shall not be used as anchors for stabilizing construction equipment.***

**Response:** No removal of vegetation will occur within the overlay. Staging of machinery will occur within the existing road or parking areas and will not disturb or damage existing vegetation or the Water Resource Area.

*(6) Where existing vegetation has been removed, or the original land contours disturbed, the site shall be revegetated, and the vegetation shall be established as soon as practicable. Nuisance plants, as identified in MCC 39.5580 Table 1, may be removed at any time. Interim erosion control measures such as mulching shall be used to avoid erosion on bare areas. Nuisance plants shall be replaced with non-nuisance plants by the next growing season. Figure 3.*

**Response:** No removal of vegetation or disturbance of original land contours will occur within the overlay. Nuisance vegetation shall be removed and replaced with non-nuisance vegetation. Erosion control measures will be used at horizontal drill kickoff points.

*(7) Prior to construction, the Water Resource Area shall be flagged, fenced or otherwise marked and shall remain undisturbed except as otherwise allowed by this Overlay. Such markings shall be maintained until construction is complete.*

**Response:** The unnamed stream within the overlay will be flagged prior to construction to ensure that all contractors are aware of its presence.

*(8) Stormwater quantity control and quality control facilities:*

*(a) Stormwater management shall be conducted in a manner that does not increase the flow of stormwater to the stream above pre-development levels.*

*(b) The stormwater quantity control and quality control facility may only encroach a maximum of 25 feet into the outside boundary of the Water Resource Area of a primary water feature; and*

*(c) The area of encroachment must be replaced by adding an area equal in size and with similar functions and values to the Water Resource Area on the subject property.*

**Response:** Stormwater management will be conducted in accordance with the practices outlined above.

**(F) Mitigation - Mitigation shall be required to offset the impacts of development within the SEC-wr. This subsection section establishes how mitigation can occur.**

*(1) Mitigation Sequence. Mitigation includes avoiding, minimizing or compensating for adverse impacts to regulated natural resource areas.*

*(a) When a proposed development could cause adverse impacts to a natural resource area, the preferred sequence of mitigation as defined in 1 through 5 below shall be followed unless the applicant demonstrates that an overriding public benefit would warrant an exception to this preferred sequence.*

- 1. Avoiding the impact altogether by not taking a certain action or parts of actions on that portion of the site which contains the regulated natural resource area;*
- 2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation;*
- 3. Compensating for the impact by repairing, rehabilitating, or restoring the affected environment;*
- 4. Compensating for the impact by replacing, enhancing or providing substitute resources or environments on-site.*
- 5. Compensating for the impact by replacing, enhancing or providing substitute resources or environments off-site.*

*(b) When evaluating potential impacts to the natural resource, the County may consider whether there is an overriding public benefit, given:*

- 1. The extent of the public need for the proposed development;*
- 2. The functional values of the Water Resource Area that may be affected by the proposed development;*
- 3. The extent and permanence of the adverse effects of the development on the Water Resource Area, either directly or indirectly;*
- 4. The cumulative adverse effects of past activities on the Water Resource Area, either directly or indirectly; and*
- 5. The uniqueness or scarcity of the Water Resource Area that may be affected.*

**Response:** The Mitigation Sequence described above is acknowledged and will be enacted in the event such disturbance occurs.

*(2) Compensatory Mitigation: General Requirements. As a condition of any permit or other approval allowing development which results in the loss or degradation of regulated natural resource areas, or as an enforcement action, compensatory mitigation shall be required to offset impacts resulting from the actions of the applicant or violator.*

*(a) Any person who alters or proposes to alter regulated natural resource areas shall restore or create natural resource areas equivalent to or larger than those altered in order to compensate for resource losses.*

*(b) The following ratios apply to the creation or restoration of natural resource areas. The first number specifies the amount of natural resource area to be created and the second specifies the amount of natural resource area to be altered or lost.*

*Creation (off-site) 2:1*

*Restoration (off-site) 1.5:1*

*Creation (on-site) 1.5:1*

*Restoration (on-site) 1:1*

*(c) Only marginal or degraded water resource areas as described in Table 2 of this section may be the subject of a restoration project proposed as part of a Mitigation Plan.*

*(d) Highest priority sites for mitigation are marginal or degraded corridors that are closest to a natural drainage, and areas which will increase contiguous areas of standing trees, shrubs, and natural vegetation along drainages.*

*(e) The off-site mitigation shall be as close to the development as is practicable above the confluence of the next downstream tributary, or if this is not practicable, within the watershed where the development will take place or as otherwise specified by the County.*

*(f) Compensation shall be completed prior to initiation of development where possible.*

*(g) In order to ensure that on-site mitigation areas are established and maintained, the property owner shall record the mitigation plan approval in the deed records of Multnomah County. In order to ensure that offsite mitigation areas will be protected in perpetuity, the owner shall cause a deed restriction to be placed on the property where the mitigation is required. The deed restriction shall be irrevocable unless a statement of release is signed by an authorized representative of Multnomah County.*

**Response:** The Mitigation Sequence described above is acknowledged and will be enacted in the event such disturbance occurs.

*(3) Mitigation Plan Standards - Natural resource mitigation plans shall contain the following information:*

*(a) A description of adverse impacts that could be caused as a result of development.*

*(b) An explanation of how adverse impacts to resource areas will be avoided, minimized, and/or mitigated.*

*(c) A list of all responsible parties including, but not limited to, the owner, applicant, contractor or other persons responsible for work on the development site.*

*(d) A map drawn to scale, showing where the specific mitigation activities will occur.*

*(e) An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting and a contingency plan. All in-stream work in fish-bearing streams must be done in accordance with the Oregon Department of Fish and Wildlife in-stream timing schedule*

**Response:** No mitigation will be required as result of impacts as proposed development is limited to horizontal drilling below an existing road for the purpose of replacing the current water distribution system and is designed to result in no permanent impacts to natural resources. Temporary impacts include disturbance at the horizontal drill entry/exit points and open trenching within the roadway.

## **7.0 REFERENCES**

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Metro, 2021. Regional Land Information System (RLIS). October 2021.

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Siskiyou BioSurvey, 2014. *Water Resources Area Assessment Report, Oxbow Regional Park Playground Project.*