

## TITLE 19 ZONING

### CHAPTER 19.300 USE ZONES

#### Section 19.322 Water Quality and Natural Resource Regulations

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##### 19.322.1 Intent

- A. This Section provides protection for water quality resources under Statewide Land Use Planning Goal 6 and Sections 1 - 4 of Title 3 of the Metro's Urban Growth Management Functional Plan (UGMFP). This Section also provides protection for natural resources that have been identified for the purposes of implementing Statewide Planning Goal 5 relating to significant natural riparian, wildlife, and wetland resources and Title 13 of the UGMFP
- B. Many of Milwaukie's riparian, wildlife, and wetland resources have been adversely affected by development over time. These regulations seek to minimize additional adverse impacts and to restore and improve resources where possible while balancing property rights and development needs of the city.
- C. It is the intent of this Section to:

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1. Establish Water Quality Resource (WQR) areas to protect the functions and values of WQR areas at the time of development.
  2. Protect and improve the functions and values that contribute to water quality and to fish and wildlife habitat in urban streamside areas. These functions and values include, but are not limited to:
    - a. Vegetated corridors to separate protected water features from development.
    - b. Microclimate and shade.
    - c. Stream flow moderation and water storage.
    - d. Water filtration, infiltration, and natural purification.
    - e. Bank stabilization and sediment and pollution control.
    - f. Large wood recruitment and retention and channel dynamics.
    - g. Organic material resources.
  3. Establish Habitat Conservation Areas (HCAs) to implement the performance standards of Title 13 of the UGMFP for riparian areas and fish and wildlife habitat and to protect significant local Goal 5 resources such as wetlands.
  4. Provide non-discretionary (clear and objective) standards as well as a discretionary review process, applicable to development in HCAs, in accordance with Goal 5.
  5. Allow and encourage habitat-friendly development while minimizing the impact on water quality and fish and wildlife habitat functions.
  6. Provide mitigation standards for the replacement of ecological functions and values lost through development in wetlands, water quality resources, and HCAs.
  7. Preserve existing native vegetation against removal and replacement with lawns or gardens or other non-native plantings.
- D. It is not the intent of this Section to:
1. Impose any obligation on property owners to restore existing developed sites to pre-development or natural conditions when no new activity is proposed.
  2. Impose any hardship or limitation against the continued maintenance of existing legal site conditions.
  3. Apply to activities that do not affect WQR areas or HCAs.
  4. Prohibit normal lawn and yard landscape planting and maintenance. Normal lawn and yard planting and maintenance does not include the planting of invasive non-native or noxious vegetation, including but not limited to species listed as nuisance plants or prohibited plants on the Milwaukie Native Plant List.
- This Section is to be interpreted consistently with this intent.
- E. The Milwaukie Water Quality and Natural Resource Area Map (hereafter WQNR Map) is incorporated by reference as part of this Section.
- F. The water quality and natural resource area regulations allow development in situations where adverse impacts from the development can be avoided or mitigated and where the strict application of these rules would deny reasonable economic use of property.

- G. Conditions legally existing as of December 17, 2002, with regard to WQR areas and as of *[insert new adoption date]* with regard to HCAs, that are inconsistent with this Section shall not be considered “nonconforming” and shall not be subject to the limitations of Chapter 19.800 if the nonconformity is solely the result of the standards of this Section. However, any expansion of a nonconforming condition or development shall, for the expanded portion thereof, be subject to the standards of this Section.
- H. A document or other list used to identify native, nuisance, and prohibited plants shall be maintained by the Planning Director and shall be referred to as the “Milwaukie Native Plant List.”

### 19.322.2 Coordination with Other Regulations

- A. Implementation of this Section is in addition to and shall be coordinated with Milwaukie Municipal Code Title 19 Zoning, Title 18 Flood Hazard Regulations, and Chapter 16.28 Erosion Control.
- B. For properties along the Willamette River, nothing in this Section shall prohibit the maintenance of view windows authorized under Section 19.320 Willamette Greenway Zone.
- C. Except as provided for in Subsection 19.322.2.B, provisions of this Section shall apply where they are more restrictive than Section 19.320 Willamette Greenway Zone.
- D. Development in or near wetlands and streams may require permits from the Oregon Department of State Lands (DSL) and the U.S. Army Corps of Engineers (Corps). If a federal permit is required, a water quality certification from the Oregon Department of Environmental Quality may also be required. The Planning Director shall notify DSL and the Corps when an application for development within streams and wetlands is submitted. Because these agencies may have more restrictive regulations than the City, applicants are encouraged to contact them before preparing development plans.
- E. The requirements of this Section apply in addition to all applicable local, state, regional, and federal regulations, including those for wetlands and flood management areas.

### 19.322.3 Applicability

- A. The regulations in this Section apply to all properties containing a WQR area and/or HCA (including any locally significant Goal 5 wetlands or habitat areas identified by the City of Milwaukie) as shown on the City's official WQNR Map.
- B. The regulations in Subsections 19.322.9 Construction Management Plans and Subsection 19.322.17 Boundary Verification and Map Administration also apply to properties that do not contain but are within 100 feet of a WQR area and/or HCA.
- C. Proposed activities which occur more than 100 feet from a WQR area or HCA do not require review under the provisions of this Section.
- D. Natural resources are designated on the City's official WQNR Map as follows:
  - 1. Water Quality Resource (WQR) Areas, which include protected water features and their associated vegetated corridors, as specified in Table 19.322.17-1. The vegetated corridor is a buffer around each protected water feature, established to prevent damage to the water feature. The width of the vegetated corridor varies depending on the type of protected water feature, upstream drainage area served, and slope adjacent to the protected water feature. The WQNR Map is a general indicator of the

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location of vegetated corridors; the specific location of vegetated corridors must be determined in accordance with Table 19.322.17-1.

2. Habitat Conservation Areas (HCAs), which include significant Goal 5 wetlands, riparian areas, and fish and wildlife habitat. HCA locations on the WQNR Map are assumed to be correct until demonstrated otherwise; verifications and corrections must be processed in accordance with Subsection 19.322.17.

E. The requirements of this Section apply as shown in Table 19.322.3-1.

<b>Table 19.322.3-1 Applicability of Requirements of Section 19.322</b>			
<b>Situations/activities that trigger 19.322</b>	<b>Prepare Construction Management Plan (19.322.9)</b>	<b>Prepare Boundary Verification (19.322.17)</b>	<b>Comply with the rest of 19.322</b>
<b>On properties that include a designated resource (WQR area and/or HCA)</b>			
Activities within WQR area or HCA that are exempted by 19.322.4.A	No	No	No
Activities within HCA that are exempted by 19.322.4.B	Yes, but only if within 100 ft of WQR area	Yes, but only if within 100 ft of WQR area	No
Non-exempt activities outside of WQR area and HCA	Yes, but only if within 100 ft of WQR area or HCA	Yes, but only if within 100 ft of WQR area or HCA	No
Non-exempt activities within WQR area or HCA	Yes	Yes	Yes
<b>On properties that do not include a designated resource but are within 100 ft of a WQR area or HCA</b>			
Activities exempted by 19.322.4.A	No	No	No
Activities exempted by 19.322.4.B, proposed where land slopes away from WQR area	No	No	No
Activities exempted by 19.322.4.B, proposed within 100 ft of WQR area and where land slopes toward WQR area	Yes	Yes	No
Non-exempt activities within 50 ft of a designated resource	Yes	Yes	No
Any activities separated from designated resource by paved roadway	No	No	No

- F. Following the completion of a construction management plan and boundary verification, when required, an applicant may utilize the Adjustments to Use Zone Standards in Subsection 19.322.16.A in order to avoid impacts to a WQR area or HCA.

### 19.322.4 Exempt Activities

#### A. Exemptions within all Designated Resource Areas

The following activities are exempt from the provisions of this Section:

1. A building permit for a phased development project for which the applicant has previously met the application requirements of this Section, so long as the building site for new construction was identified on the original permit and no new portion of the WQR area and/or HCA will be disturbed.
2. Stream, wetland, riparian, and upland enhancement or restoration projects and development in compliance with a natural resource management plan or mitigation plan approved by the City or by a state or federal agency.
3. Landscape planting and maintenance that does not involve the removal of native plants or plants required as mitigation, does not involve the planting of vegetation identified as “nuisance” or “prohibited” species on the Milwaukie Native Plant List, or does not produce an increase in impervious area or other changes that could result in increased direct stormwater discharges to the WQR area.
4. Removal of plants identified on the Milwaukie Native Plant List as “nuisance” or “prohibited” species and/or the planting or propagation of plants identified on the list as “native” plants. After removal of nuisance or prohibited plants, all open soil areas must be replanted and/or protected from erosion.
5. Removal of manmade debris during the allowable windows for in-stream water work as designated by the Oregon Department of Fish and Wildlife.
6. Farming practices or farm uses, excluding buildings and structures, provided that such activities or uses do not increase direct stormwater discharges to WQR areas.
7. Maintenance, alteration, expansion, replacement, repair, and/or change of use of existing legal buildings or structures, provided that:
  - a. There is no change in the location of the existing area of disturbance within the WQR area or HCA.
  - b. There is no increase in building footprint or size, impervious surface, or outdoor storage area(s) within the WQR area or HCA.
  - c. There are no other site changes proposed that could result in increased direct stormwater discharges to the WQR area.
8. Maintenance, alteration, and repair of existing utilities, access, streets, driveways, and parking improvements, including asphalt overlays, provided there is no increase in impervious area, reduction in landscaped areas or tree cover, or other changes that could result in increased direct stormwater discharges to the WQR area.
9. Emergency procedures or activities undertaken which are necessary to remove or abate hazards or for the protection of public health, safety, and welfare; provided that such remedial or preventative action must take place within a timeframe too short to allow for compliance with the requirements of this Section. After the emergency, the person or agency undertaking the action shall repair any impacts to the natural resources resulting from the emergency action (e.g., remove any temporary flood protection such as sandbags, restore hydrologic connections, replant disturbed areas with native vegetation).

10. Maintenance of public and private storm drainage facilities in accordance with a stormwater management plan approved by the City.
11. Activities and improvements in public rights-of-way, which are subject to MMC Title 12 and the Milwaukie Public Works Standards and related stormwater management requirements.
12. Removal of trees under any of the following circumstances:
  - a. The tree is downed by natural causes and no earth disturbance will occur during the removal of the tree.
  - b. The tree is classified as a “prohibited” or “nuisance” species on the Milwaukie Native Plant List and no more than three such trees will be removed from one property during any 12-month period.
  - c. The tree presents an immediate danger to public health, safety, and welfare as described in Subsection 19.322.4.A.9. Any damage or impacts to the designated natural resource area shall be repaired after the emergency has been resolved.
  - d. Removal of the tree is in accordance with an approved natural resource management plan per Subsection 19.322.18.

**B. Additional Exemptions within HCAs**

In addition to the activities listed in Subsection 19.322.4.A, within an HCA the following activities are exempt from the provisions of this Section, as long as activities within 100 feet of a WQR area meet the requirements to complete a construction management plan and boundary verification as per Subsections 19.322.9 and 19.322.17, respectively:

1. The alteration, expansion, or replacement of existing structures, provided that both of the following standards are met:
  - a. The alteration, expansion, or replacement of a structure shall not intrude more than 500 square feet into the HCA, in addition to the area defined as the building footprint as of *[insert new adoption date]*.
  - b. No new intrusion into the HCA shall be closer to a protected water feature than the pre-existing structure or improvement.
2. Minor encroachments not to exceed 120 square feet of impervious surface, such as accessory buildings, patios, walkways, retaining walls, or other similar features.
3. Temporary and minor clearing or excavation not to exceed 200 square feet for the purpose of site investigations, pits for preparing soil profiles, installing underground utilities or other infrastructure, or similar activities, provided that such areas are restored to their original condition when the investigation is complete.
4. Low-impact outdoor recreation facilities for public use, including, but not limited to, multi-use paths, access ways, trails, picnic areas, or interpretive and educational displays and overlooks that include benches and outdoor furniture, provided that such a facility meets the following requirements:
  - a. It contains less than 500 square feet of new impervious surface.
  - b. Its trails shall be constructed using non-hazardous, pervious materials, with a maximum width of 5 feet.
5. Facilities that infiltrate stormwater onsite, including the associated piping, may be placed within the HCA so long as the forest canopy and the areas within the driplines

of the trees are not disturbed. Such facilities may include, but are not limited to, vegetated swales, rain gardens, vegetated filter strips, and vegetated infiltration basins. Only native vegetation may be planted in these facilities.

### 19.322.5 Prohibited Activities

The following activities are prohibited within WQR areas and HCAs:

- A. New structures, development, or activity other than those allowed by this Section.
- B. Uncontained areas of hazardous materials.
- C. Planting any vegetation listed as “prohibited” or “nuisance” on the Milwaukie Native Plant List.
- D. Outside storage of materials, unless such storage began before the *[insert new adoption date]*; or, unless such storage is approved according to the provisions of this Section.
- E. Application of pesticides with any of the following active ingredients is prohibited within WQR areas (sample trade names are listed in parentheses for reference): 2,4-D (in various Weed ‘n Feed products, but prohibited only for direct aquatic application), Azinphos-methyl (Guthion), Bensulide (Prefar), Bromoxynil (Buctril), Carbaryl (Sevin), Chlorpyrifors (Dursban, Lorsban), Diazinon (many brand names), Dimethoate (Cygon), Diuron (Direx, Karmex), Fenbutatin-oxide (Vendex), Malathion (many brand names), Methomyl (Lannate), Methyl-parathion (Penncap-M), Metolachlor (Dual), Naled (Dibrom), Phorate (Thimet), and Triclopyr BEE (Garlon-4). This prohibition shall extend to include any other limitations enacted by federal or state agencies that ban the use of pesticides with certain active ingredients within at least 50 feet of protected water features.

### 19.322.6 Activities Permitted Under Type I Application Review

The following activities are allowed within either WQR areas or HCAs, subject to Type I review as per MMC 19.1011.1:

- A. Construction management plans and boundary verifications, as outlined in Subsections 19.322.9 and 19.322.17.
- B. Limited Tree Removal
  1. The Planning Director shall approve an application for limited tree removal or significant pruning within WQR areas and HCAs under any of the following circumstances:
    - a. The tree removal is necessary to eliminate an imminent hazard to person or property.
    - b. The tree is diseased or dying and cannot be saved, as determined by a certified arborist.
    - c. A certified arborist has determined that the tree will survive the proposed significant pruning as defined in MMC 19.103.
    - d. The proposal would remove 4 or more trees classified on the Milwaukie Native Plant List as “prohibited” or “nuisance” species from a particular location during any 12-month period. This Subsection does not apply to tree removal associated with development or other activities that are subject to either the standards for non-discretionary review in 19.322.12 or the discretionary review standards in 19.322.15.

2. Any tree that is removed in accordance with this Subsection shall be replaced with a new tree, at least 1/2 inch in caliper. An exception to this requirement may be granted if the applicant can demonstrate that a replacement tree has already been planted in anticipation of tree removal or if the existing site conditions somehow preclude tree replacement (e.g., due to inadequate space, dense canopy coverage, etc.).
3. The replacement tree(s) shall be located in the general vicinity of the removed tree(s), somewhere within the designated resource area (WQR area or HCA). The replacement tree(s) does not have to be a native species, but, in accordance with Subsection 19.322.5.C, the replacement tree(s) shall not be a species categorized as “prohibited” or “nuisance” on the Milwaukie Native Plant list. The property owner shall ensure that the replacement tree(s) survives at least two years beyond the date of planting.

**C. Activities within HCAs in Compliance with Non-Discretionary Standards**

Within HCAs, but outside of WQR areas, development that is in compliance with the non-discretionary standards of Subsection 19.322.12 is subject to Type I review.

**D. Natural Resource Management Plans**

Natural resource management plans that meet the standards outlined in Subsection 19.322.18.A are subject to Type I review. These are typically plans that have already been approved by a qualified agency.

**E. Nuisance Abatement**

Measures to remove or abate nuisances or any other violation of state statute, administrative agency rule, or city or county ordinance shall be subject to Type I review of a construction management plan, to be approved by the Planning Director prior to the abatement activity. The person or agency undertaking the action shall repair any impacts to the natural resources resulting from the nuisance or violation (e.g., restore disturbed soils, restore hydrologic connections, replant disturbed areas with native vegetation, etc.), unless subsequent development has been approved.

**19.322.7 Activities Permitted Under Type II Review**

Unless otherwise exempt or permitted as a Type I activity, the following activities are allowed within either WQR areas or HCAs, subject to Type II review and approval by the Planning Director as per MMC 19.1011.2:

**A. Special Uses**

If in compliance with the Special Use standards provided in Subsection 19.322.13, the activities listed below are subject to Type II review:

1. Improvement of existing public utility facilities
2. New stormwater pre-treatment facilities
3. Walkways and bike paths
4. New public or private utility facility construction
5. Stormwater management plans

If the proposed activity is not in compliance with the standards in Subsection 19.322.13, it shall be subject to minor quasi-judicial review and the discretionary standards of 19.322.15.

**B. Natural Resource Management Plans**



Natural resource management plans that do not meet the Type I review standards provided in Subsection 19.322.18.A but that meet the standards provided in Subsection 19.322.18.B are subject to Type II review. These are typically plans that have been prepared independently of a qualified agency but that are in accordance with particular standards and guidelines related to enhancing natural resources.

C. Other Uses and Activities

The activities listed below are subject to Type II review and the discretionary standards in Subsection 19.322.15:

1. Farming practices or farm uses, excluding buildings and structures, that increase direct discharges to WQR areas.
2. Landscape planting and maintenance that would increase impervious area within the WQR area by less than 100 square feet and/or result in increased direct stormwater discharges to the WQR area.
3. Alteration, expansion, and/or replacement of existing legal buildings or structures, provided that the proposed alteration or expansion does not disturb more than 100 square feet within the WQR area and does not encroach closer to the protected water feature than the existing buildings or structures.
4. Alteration and repair of existing utilities, access, streets, driveways, and parking improvements, including asphalt overlays, provided that the proposed improvements do not disturb more than 100 square feet within the WQR area and do not encroach closer to the protected water feature than the existing improvements.

D. Partitions that meet the standards provided in Subsection 19.322.14.E.

**19.322.8 Activities Permitted Under Minor Quasi-Judicial Review**

Unless otherwise exempt or permitted as a Type I or Type II activity, the following activities are allowed within either WQR areas or HCAs, subject to minor quasi-judicial review and approval by the Planning Commission under MMC 19.1011.3:

- A. The activities listed below shall be subject to the discretionary standards in Subsection 19.322.15:
1. Any activity allowed in the base zone that is not otherwise exempt or permitted as a Type I or Type II activity.
  2. Within HCAs, development that is not in compliance with the non-discretionary standards of Subsection 19.322.12.
  3. New roads to provide access to protected water features; necessary ingress and egress across WQR areas; or the widening an existing road.
  4. Improvement of existing public utility facilities that cannot meet the standards of Subsection 19.322.13.
  5. New stormwater pre-treatment facilities that cannot meet the standards of Subsection 19.322.13.
  6. New public or private utility facility construction that cannot meet the standards of Subsection 19.322.13.
  7. Walkways and bike paths that cannot meet the standards of Subsection 19.322.13.

8. Tree removal in excess of that permitted under Subsections 19.322.4 or 19.322.6.
  9. Landscape planting and maintenance that would increase impervious area by more than 100 square feet.
  10. Maintenance, alteration, expansion, replacement, repair, and/or change of use of existing legal buildings or structures that would disturb more than 100 square feet within the WQR area or would encroach closer to the protected water feature than the existing buildings or structures.
  11. Maintenance, alteration, and repair of existing utilities, access, streets, driveways, and parking improvements, including asphalt overlays, that would disturb more than 100 square feet within the WQR area or would encroach closer to the protected water feature than the existing improvements.
- B. The activities listed below shall be subject to the discretionary standards in Subsection 19.322.14:
1. The partitioning of land containing a WQR area or HCA that cannot meet the standards in Subsection 19.322.14.E.
  2. The subdividing of land containing a WQR area or HCA.

### **19.322.9 Construction Management Plans**

- A. Construction management plans are required in the following situations:
1. On properties that contain a WQR area and/or HCA, in either of the following situations:
    - a. Where the proposed activity is within, or within 100 feet of, the verified boundary of the designated resource and is not exempted by Subsection 19.322.4.
    - b. Where the proposed activity is within the verified boundary of the HCA and is exempted by Subsection 19.322.4.A but is also within 100 feet of the WQR area.
  2. On properties that do not contain a WQR area and/or HCA, in either of the following situations:
    - a. Where the proposed activity is exempted by Subsection 19.322.4.B but is within 100 feet of the verified boundary of a WQR area and where the property slopes in the direction of the WQR area.
    - b. Where the proposed activity is not exempted by Subsection 19.322.4 and is within 50 feet of the verified boundary of the designated resource.

No construction management plan is required for any proposed activity on a property that does not contain a designated resource, where the proposed activity is separated from the designated resource by a paved roadway as defined in MMC 19.103.

- B. Construction management plans shall provide the following information:
1. Description of work to be done.
  2. Location of site access and egress that construction equipment will use.
  3. Equipment and material staging and stockpile areas.
  4. Erosion and sediment control measures.

5. Measures to protect trees and other vegetation located within the potentially affected WQR area and/or HCA.

When required for properties that do not include designated resources, construction management plans shall show protective measures that will be established on the property that is the subject of the application.

- C. To ensure that trees and vegetation within a WQR area or HCA are not damaged during construction, construction management plans shall ensure that:
  1. Prior to construction, the WQR area and/or HCA shall be flagged, fenced, or otherwise marked and shall remain undisturbed except as may be allowed by this Section. Such markings shall be maintained until construction is complete.
  2. A root protection zone shall be established around each tree in the WQR area or HCA that is adjacent to any approved work area. The root protection zone shall extend from the trunk to the outer edge of the tree's canopy, or as close to the outer edge of the canopy as is practicable for the approved project. The perimeter of the root protection zone shall be flagged, fenced, or otherwise marked and shall remain undisturbed. Material storage and construction access is prohibited within the perimeter. The root protection zone shall be maintained until construction is complete.
  3. Site preparation and construction practices shall be followed that prevent drainage of hazardous materials or erosion, pollution, or sedimentation to the adjacent WQR area.
  4. Storm water flows as a result of proposed development within and to natural drainage courses shall not exceed pre-development flows.
  5. The construction phase of the development will be done in such a manner to safeguard the resource portions of the site that have not been approved for development.
- D. Construction management plans are subject to Type I review as per MMC 19.1011.1.

### **19.322.10 Submittal Requirements**

#### **A. Requirements for All Applications**

Except for boundary verifications and construction management plans, all Water Quality and Natural Resource applications shall include the following, in addition to the information contained in the submittal requirements and site plan requirements forms prescribed by the Planning Director:

1. For that portion of the subject property within, or within 100 feet of, a WQR area or HCA, applicants must submit a site plan of the property that includes all information listed on the City's site plan checklist.
2. If grading will occur within a WQR area or HCA, a grading plan showing the proposed alteration of the ground at 2-foot vertical contours in areas of slopes less than 15%, and at 5-foot vertical contours of slopes 15% or greater.
3. Additional information as necessary to demonstrate compliance with the applicable standards.

#### **B. Additional Requirements for Type II and Minor Quasi-Judicial Applications**

Applications submitted for Type II and minor quasi-judicial review, other than for special uses identified in Subsection 19.322.7.A, shall provide the following additional information:

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1. Where wetlands are identified, the applicant shall follow the DSL wetlands delineation process. The delineation shall be prepared by a professional wetlands specialist and will be accepted only after approval by DSL.
2. An inventory and location of existing debris and noxious materials within the WQR area or HCA.
3. An inventory of vegetation, including the percentage of ground and canopy coverage materials within the WQR area or HCA.

### 19.322.11 Approval Criteria

All applications that require review according to this Section shall demonstrate compliance with the applicable approval criteria as outlined in Table 19.322.11-1.

<b>Table 19.322.11-1 Approval Criteria for Various Activities</b>			
<b>Activity</b>	<b>Subsection(s) outlining Applicable Criteria</b>		
	<b>Type of Review</b>		
	<b>Type I (19.1011.1)</b>	<b>Type II (19.1011.2)</b>	<b>Minor Quasi- Judicial (19.1011.3)</b>
Construction management plan	19.322.9		
Boundary verification	19.322.17		
Limited tree removal	19.322.6.B		
Activities within HCA that meet non-discretionary standards	19.322.6.C 19.322.12		
Non-emergency abatement of nuisances or violations	19.322.6.D 19.322.9		
Special use activities		19.322.7.A 19.322.13	
Limited disturbance to WQR areas		19.322.7.C 19.322.15	
Partitions that put designated resource in separate tract		19.322.7.D 19.322.14	
Other partitions, subdivisions, and development activities			19.322.8 19.322.14.F or G 19.322.15
Agency-approved natural resource management plans	19.322.18.A and C		
Independent natural resource management plans		19.322.18.B and C	

### 19.322.12 Standards for Non-Discretionary Review for Habitat Conservation Areas (HCAs)

The non-discretionary standards may be applied to proposals that are subject to Type I review and located within HCAs only. These standards do not apply to projects within WQR areas.

- A. Disturbance Area Limitations to Minimize Impact to HCA

## 1. Detached and attached single-family residential uses

The amount of disturbance allowed within an HCA is determined by subtracting the area of the lot or parcel outside of the HCA from the maximum disturbance area calculated as described in Figure 19.322.12-1. Such disturbance is subject to the mitigation requirements described in Subsection C, below.

<b>Figure 19.322.12-1 Method for Calculating Allowable Disturbance within an HCA</b>
<p><b>X</b> = The net amount of disturbance area allowed within the HCA (<math>X = Y - Z</math>)</p> <p><b>Y</b> = The maximum potential disturbance area is 50% of the total HCA, up to a maximum of 5,000 square feet.</p> <p><b>Z</b> = The area of the lot or parcel outside the HCA.</p> <p>If the area of the lot or parcel outside the HCA (Z) is greater than the maximum potential disturbance area (Y), then development shall not be permitted within the HCA; otherwise the applicant may disturb up to the net amount of disturbance area allowed (X).</p>
<p><u>Example 1:</u> 8,000-sq-ft lot with 3,000 sq ft of HCA and 5000 sq ft outside of HCA</p> <p><math>Y = 1500</math> sq ft (50% of HCA)</p> <p><math>Z = 5000</math> sq ft outside of HCA</p> <p><math>X = - 3500</math> sq ft (<math>1500</math> sq ft – <math>5000</math> sq ft)</p> <p><b>Conclusion:</b> Z is greater than Y; therefore, development is not permitted within the HCA.</p>
<p><u>Example 2:</u> 8,000-sq-ft lot with 6,000 sq ft of HCA and 2000 sq ft outside of HCA</p> <p><math>Y = 3000</math> sq ft (50% of HCA)</p> <p><math>Z = 2000</math> sq ft outside of HCA</p> <p><math>X = 1000</math> sq ft (<math>3000</math> sq ft – <math>2000</math> sq ft)</p> <p><b>Conclusion:</b> Z is not greater than Y; therefore, the applicant may disturb up to the value of X (1000 sq ft) within the HCA).</p>

## 2. All Other Uses

A net amount of disturbance area of 10% of the HCA on the site is allowed by right, subject to the mitigation requirements described in Subsection 19.322.12.C.

## 3. Disturbance Area Will Not Change HCA Status

Development within an HCA in accordance with these provisions shall not result in a change of the HCA status of such developed areas on a property. In the case of a later development request seeking to develop within a previously undisturbed HCA on a property where a prior development request was subject to these provisions, the calculation of the net amount of disturbance area allowed on the property shall be based on the location of the HCA, notwithstanding the location of any authorized development within the HCA.

## 4. Disturbance in Excess of that Allowed by this Section

## Proposed Code Amendment

In accordance with Subsection 19.322.8, proposed development that would disturb more HCA than allowed by Subsections 19.322.12.A.1 and 19.322.12.A.2 shall be subject to minor quasi-judicial review.

### B. Protection of Habitat During Site Development

During development of any site containing a HCA, the following standards shall apply:

1. Work areas shall be marked to reduce potential damage to the HCA.
2. Trees in HCAs shall not be used as anchors for stabilizing construction equipment.
3. Native soils disturbed during development shall be conserved on the property.
4. An erosion and sediment control plan is required and shall be prepared in compliance with requirements set forth in the City's Public Works Standards.
5. Prior to construction, the HCA that is to remain undeveloped shall be flagged, fenced, or otherwise marked and shall remain undisturbed.
6. All work on the property shall conform to a construction management plan prepared according to Subsection 19.322.9.
7. Where practicable, the types, sizes, and intensities of lights shall be placed so that they do not shine directly into the WQR area and/or HCA locations.

### C. Mitigation Requirements for Disturbance in HCAs

To achieve the goal of reestablishing forested canopy that meets the ecological values and functions described in Subsection 19.322.1, when development intrudes into a HCA, tree replacement and vegetation planting are required according to the following standards, unless the planting is also subject to wetlands mitigation requirements imposed by state and federal law:

#### 1. Required Plants and Plant Densities

All trees, shrubs and ground cover must be native plants as identified on the Milwaukie Native Plant List. An applicant must meet Mitigation Option 1 or 2, whichever results in more tree plantings; except that where the disturbance area is 1 acre or more, the applicant shall comply with Mitigation Option 2.

##### a. Mitigation Option 1

This mitigation requirement is calculated based on the number and size of trees that are removed from the site. Trees that are removed from the site shall be replaced as shown in Table 19.322.12-1. Conifers shall be replaced with conifers. Bare ground shall be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

<b>Size of tree to be removed (inches in diameter)</b>	<b>Number of trees and shrubs to be planted</b>
6 to 12	2 trees and 3 shrubs
13 to 18	3 trees and 6 shrubs
19 to 24	5 trees and 12 shrubs
25 to 30	7 trees and 18 shrubs

over 30	10 trees and 30 shrubs
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b. Mitigation Option 2

This mitigation requirement is calculated based on the size of the disturbance area within a HCA. Native trees and shrubs are required to be planted at a rate of 5 trees and 25 shrubs per 500 square feet of disturbance area. This is calculated by dividing the number of square feet of disturbance area by 500, multiplying that result times 5 trees and 25 shrubs, and rounding all fractions to the nearest whole number of trees and shrubs. For example, if there will be 330 square feet of disturbance area, then 330 divided by 500 equals 0.66, and 0.66 times 5 equals 3.3, so 3 trees must be planted, and 0.66 times 25 equals 16.5, so 17 shrubs must be planted. Bare ground shall be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

2. Plant Size

Replacement trees must be at least 1/2 inch in caliper, measured at 6 inches above the ground level for field-grown trees or above the soil line for container-grown trees (the 1/2-inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round), unless they are oak or madrone, which may be 1-gallon size. Shrubs must be in at least a 1-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.

3. Plant Spacing

Trees shall be planted between 8 and 12 feet on-center and shrubs shall be planted between 4 and 5 feet on center, or clustered in single species groups of no more than four plants, with each cluster planted between 8 and 10 feet on center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing measurements.

4. Plant Diversity

Shrubs must consist of at least two different species. If 10 trees or more are planted, then no more than 50% of the trees may be of the same genus.

5. Location of Mitigation Area

a. On-site Mitigation

All mitigation vegetation must be planted on the applicant's site within the HCA or in an area contiguous to the HCA; provided, however, that if the vegetation is planted outside of the HCA then the applicant shall preserve the contiguous planting area by executing a deed restriction such as a restrictive covenant.

b. Off-site Mitigation

Mitigation vegetation may be planted off-site within an area contiguous to the subject-property HCA, provided there is documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site. If the off-site mitigation is not within an HCA, the applicant shall document that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.

6. Invasive Vegetation

Invasive non-native or noxious vegetation must be removed within the mitigation area prior to planting.

7. Tree and Shrub Survival

A minimum of 80% of the trees and shrubs planted shall remain alive on the fifth anniversary of the date that the mitigation planting is completed.

a. Required Practices

To enhance survival of the mitigation plantings, the following practices are required:

- (1) Mulch new plantings a minimum of 3 inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.
- (2) Water new plantings 1 inch per week between June 15th and October 15th for the first three years following planting.
- (3) Remove or control non-native or noxious vegetation throughout the maintenance period.

b. Recommended Practices

To enhance survival of tree replacement and vegetation plantings, the following practices are recommended:

- (1) Plant bare root trees between December 1st and February 28th, and potted plants between October 15th and April 30th.
- (2) Use plant sleeves or fencing to protect trees and shrubs against wildlife browsing and the resulting damage to plants.

c. Monitoring and Reporting

Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind. The developer shall submit a two-year maintenance bond covering the continued health and survival of all plantings.

8. Light Impacts

Where practicable, the types, sizes, and intensities of lights shall be placed so that they do not shine directly into the WQR area and/or HCA locations.

**19.322.13 Standards for Special Uses**

Special uses listed in Subsection 19.322.7.A are subject to Type II review if they comply with the applicable standards in this Section. Otherwise, the special uses listed in Subsection 19.322.7.A are subject to minor quasi-judicial review and the discretionary standards of Subsection 19.322.15.

A. Except for stormwater management plans, all Type II special uses listed in Subsections 19.322.13.B through 19.322.13.E shall comply with the following standards:

1. A mitigation plan shall be submitted as per Subsections 19.322.12.C or 19.322.15.A for HCAs, as applicable, or as per Subsection 19.322.15.B.2.e for WQR areas. WQR areas and HCAs shall be restored and maintained in accordance with the approved mitigation plan.



2. Existing vegetation outside of approved work areas shall be protected and left in place. Work areas shall be carefully located and marked to reduce potential damage to WQR areas and HCAs. Trees in WQR areas or HCAs shall not be used as anchors for stabilizing construction equipment.
3. 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 by the City, 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 native plants by the next growing season.

**B. New Stormwater Pre-treatment Facilities**

In addition to the requirements of Subsection 19.322.13.A, new stormwater pre-treatment facilities shall not encroach more than 25 feet into the outside boundary of the WQR area of a primary protected water feature.

**C. Improved Pedestrian and Bike Paths**

In addition to the requirements of Subsection 19.322.13.A, pedestrian and bike paths that are proposed to be constructed or improved with gravel, pavement, pavers, wood or other materials, shall comply with the following standards:

1. Pedestrian and bike paths within WQR areas or HCAs shall not exceed 10 feet in width.
2. If the proposed path will be located within a WQR area and will be paved, then, for the purposes of evaluating the proposed project, the vegetated corridor shall be widened by the width of the path.
3. The path shall be designed to avoid WQR areas and HCAs and shall be constructed so as to minimize disturbance to existing vegetation and slope stability.
4. The path shall be a minimum of 10 feet from the boundary of the protected water feature.
5. Where practicable, the types, sizes, and intensities of lights shall be placed so that they do not shine directly into the WQR area and/or HCA locations.

**D. New Public or Private Utility Facility Construction**

In addition to the requirements of Subsection 19.322.13.A, the following disturbance area limitations apply to new utilities, private connections to existing or new utility lines, and upgrades:

1. The disturbance area for connections to utility facilities shall be no greater than 10 feet wide.
2. The disturbance area for the upgrade of existing utility facilities shall be no greater than 15 feet wide.
3. The disturbance area for new underground utility facilities shall be no greater than 25 feet wide and shall disturb no more than 200 linear feet of WQR area within any 1,000-linear-foot stretch of WQR area; provided that this disturbance area shall be restored with the exception of necessary access points to the utility facility.

4. No fill or excavation is allowed within the ordinary high water mark of a stream, unless a permit is obtained from the U.S. Army Corps of Engineers through the Standard Local Operating Procedures for Endangered Species (SLOPES) process.
- E. Stormwater management plans that authorize disturbance within the WQR area or HCA may be approved subject to the following standards:
1. Stormwater facilities will be designed to provide an environmentally beneficial hydrological impact on protected water features.
  2. Protected water features will be protected from erosion by implementing a stream protection strategy and quantity control strategies.
  3. Watershed health will be improved through the use of vegetated facilities to meet pollution reduction, flow control, and infiltration goals and these facilities will be maintained in a manner which ensures a continued benefit to watershed health.
  4. Proposed stormwater management facilities will correct or improve conditions caused by past management and/or disturbance events, if any are present.
  5. Where no reasonable expectation of returning to natural conditions exists, beneficial habitat, vegetation, and stream function and hydrology will be restored to the fullest extent possible within developed areas.

#### **19.322.14 Standards for Partitions and Subdivisions**

These standards apply in addition to the other land division requirements provided in Title 17 Land Division and Title 19 Zoning.

A. Boundary Verification

The applicant shall verify the boundaries of the WQR area and HCA on the property according to Subsection 19.322.17.

B. Construction Management Plans

1. Subdivision and partition applications that will require physical improvements (e.g., grading and/or the construction of structures, streets, or utilities) within, or within 100 feet of, a WQR area or HCA shall include a construction management plan in accordance with Subsection 19.322.9.
2. Subdivision and partition applications that do not require grading or constructing structures, streets, or utilities or making other physical improvements to the site are not required to submit a construction management plan.

C. Impacts from Site Improvements

Subdivision and partition applications that will require site improvements (e.g., grading and/or the construction of streets, sidewalks, culverts, bridges, or utilities) within a WQR area or HCA shall comply with the applicable standards in Subsections 19.322.12, 19.322.13, and 19.322.15.

D. Mitigation for Future Structures

Applications that propose partitioning or subdividing land on which future construction may impact a WQR area or HCA must choose to comply with one of the following standards:

1. Complete the mitigation requirements for any impacts to the WQR area or HCA in accordance with the requirements of this Section and thereby exempt all subsequent development on lots containing a WQR area and/or HCA from further review.
2. Not complete the mitigation requirements, thus requiring that any subsequent development be subject to review under this Section.

E. Low-impact Partitions

Applications for partitions are subject to Type II review if they demonstrate compliance with the following standards:

1. For properties that contain HCAs but no WQR areas, the partition shall achieve either of the following results:
  - a. There shall be no more than a 30-point difference in the percentage of HCA coverage on each of the new parcels. For example, a two-lot partition that produces one parcel that is 55% HCA and the other that is 30% HCA is permissible; whereas a two-lot partition that produces one parcel that is 75% HCA and the other that is 40% HCA is not permissible.
  - b. At least 90% of the original property's HCA is on a separate unbuildable parcel, protected by a conservation restriction.
2. For properties that contain WQR areas, the applicant must place 100% of the WQR area in a separate unbuildable tract, protected by a conservation restriction.
3. For properties that contain both WQR areas and HCAs, the applicant must comply with both of standards listed in this Subsection.

F. All Other Partitions

Applications for partitions that cannot comply with Subsection 19.322.14.E are subject to minor quasi-judicial review and the following standards:

1. For properties that do not contain any WQR areas but for which it is not practicable to comply with the partition standards in Subsection 19.322.14.E.1, the application shall meet the following standards:
  - a. The partition plan shall result in the smallest practicable percentage point difference in the percentage of HCA on the parcels created by the partition.
  - b. To the extent possible, the parcel configuration shall mitigate the potential future impacts to the HCA from access and development.
2. For properties that contain WQR areas but cannot comply with Subsection 19.322.14.E.2, or that contain both WQR areas and HCAs but cannot comply with Subsection 19.322.14.E.3, the application will be reviewed against the following standards:
  - a. To the extent possible, the parcel configuration shall mitigate the potential future impacts to WQR areas from access and development.
  - b. An Impact Evaluation and Alternatives Analysis shall be prepared in accordance with Subsection 19.322.15.

G. Subdivisions

Applications for subdivisions are subject to minor quasi-judicial review and the following standards:

1. At least 90% of the property's HCA and 100% of the property's WQR area shall be located in a separate tract.
  2. If a subdivision cannot comply with standard in Subsection 19.322.14.G.1, the application will be reviewed against the following standards:
    - a. All proposed lots shall have adequate buildable area outside of the WQR area and HCA.
    - b. To the extent possible, the lot configuration shall mitigate the potential future impacts to the WQR area and HCA from access and development.
    - c. An Impact Evaluation and Alternatives Analysis shall be prepared in accordance with Subsection 19.322.15.
- H. Where required by this Section, the new subdivision or partition plat shall delineate and show all WQR areas and HCAs as a separate unbuildable tract(s) according to the following process:
1. For residences, if the separate tract is adjacent to the rear yard, the minimum rear yard requirement is reduced to 10 feet.
  2. Prior to preliminary plat approval, the designated natural resource area (whether WQR area or HCA, or both) shall be shown as a separate tract(s), which shall not be part of any lot or parcel used for construction of any structures.
  3. Prior to final plat approval, ownership of the separate natural resource tract(s) shall be identified to distinguish it from lots or parcels intended for sale. The tract(s) may be identified as any one of the following:
    - a. Private natural area held by the owner or homeowners association by a restrictive covenant and/or conservation easement.
    - b. For residential subdivisions, private natural area subject to an easement conveying storm and surface water management rights to the City of Milwaukie, Clackamas County Water Environment Services, and/or any other relevant jurisdiction, and preventing the owner of the tract from activities and uses inconsistent with the purpose of this Section.
    - c. Public natural area where the tract has been dedicated to the City of Milwaukie or a private non-profit with the mission of land conservation.

### **19.322.15 Standards for Discretionary Review**

The standards in this Section apply to all applications for discretionary review. Uses and activities listed in Subsection 19.322.7 are subject to Type II review; all other applications for discretionary review are subject to minor quasi-judicial review.

- A. Discretionary Review to Approve Mitigation that Varies the Number and Size of Trees and Shrubs within an HCA

An applicant seeking discretionary approval to proportionally vary the number and size of trees and shrubs required to be planted under Subsection 19.322.12 (for example, to plant fewer larger trees and shrubs or to plant more smaller trees and shrubs) but who will comply with all other provisions of Subsection 19.322.12 may seek review under this Subsection if the all of the following standards are met:

1. The applicant has provided all of the following information:

- a. A calculation of the number of trees and shrubs the applicant would be required to plant under Subsection 19.322.12.
  - b. The numbers and sizes of trees and shrubs that the applicant proposes to plant.
  - c. An explanation of why the numbers and sizes of trees and shrubs that the applicant proposes to plant will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of Subsection 19.322.12. Such explanation shall be prepared and signed by a knowledgeable and qualified natural resources professional or a certified landscape architect and shall include discussion of site preparation including soil additives and removal of invasive and noxious vegetation, plant diversity, plant spacing, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control.
  - d. A mitigation site-monitoring and -reporting plan.
2. The proposed planting will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of Subsection 19.322.12.
  3. The proposed mitigation adequately addresses the plant diversity, plant survival, and monitoring practices in Subsection 19.322.12.
- B. General Discretionary Review

This Subsection provides a discretionary process by which the City analyzes the impacts of development on WQR areas and HCAs, as well as measures to prevent negative impacts, and also provides mitigation and enhancement requirements.

1. Professional Consultation

The Planning Director may consult with a professional with appropriate expertise to evaluate an application, or may rely on appropriate staff expertise to properly evaluate the report's conclusions.

2. Impact Evaluation and Alternatives Analysis

An impact evaluation and alternatives analysis is required to determine compliance with the approval criteria and to evaluate development alternatives for a particular property. The alternatives must be evaluated on the basis of their impact on WQR areas and HCAs, the ecological functions provided by the resource on the property, and off-site impacts within the subwatershed (6<sup>th</sup> Field Hydrologic Unit Code) where the property is located. The evaluation and analysis shall include the following:

- a. Identification of the ecological functions of riparian habitat found on the property as described in Subsection 19.322.1.C.2.
- b. An assessment of the water quality impacts related to the development, including sediments, temperature and nutrients, sediment control, and temperature control, or addressing any other condition with the potential to cause the protected water feature to be listed on DEQ's 303(d) list.
- c. An alternatives analysis demonstrating that:
  - (1) No practicable alternatives to the requested development exist that will not disturb the WQR area or HCA.

- (2) Development in the WQR area and/or HCA has been limited to the area necessary to allow for the proposed use.
- (3) The WQR area can be restored to an equal or better condition in accordance with Table 19.322.15-1.
- (4) Road crossings will be minimized as much as possible.

The analysis shall provide an explanation of the rationale behind choosing the alternative selected, including how adverse impacts to natural resource areas will be avoided and/or minimized.

- d. For applications proposing an alteration, addition, rehabilitation, or replacement of existing structures located within the WQR area, the applicant shall do the following:
  - (1) Demonstrate that no reasonably practicable alternative design or method of development exists that would have a lesser impact on the WQR area than the one proposed. If no such reasonably practicable alternative design or method of development exists, the project shall be conditioned to limit its disturbance and impact on the WQR area to the minimum extent necessary to achieve the proposed addition, alteration, restoration, replacement, or rehabilitation.
  - (2) Provide mitigation to ensure that impacts to the functions and values of the WQR area will be mitigated or restored to the extent practicable.
- e. A WQR area mitigation plan that contains the following information:
  - (1) A description of adverse impacts that will be caused as a result of development.
  - (2) An explanation of how adverse impacts to WQR areas will be avoided, minimized, and/or mitigated in accordance with, but not limited to, Table 19.322.15-1.
  - (3) A description of how the following standards will be achieved:
    - (a) Where existing vegetation has been removed, the site shall be revegetated as soon as practicable.
    - (b) Where practicable, the types, sizes, and intensities of lights shall be placed so that they do not shine directly into the WQR area and/or HCA locations.
    - (c) Areas of standing trees, shrubs, and natural vegetation will remain connected or contiguous, particularly along natural drainage courses, except where mitigation is approved, so as to provide a transition between the proposed development and the natural resource area and to provide opportunity for food, water, and cover for animals located within the WQR area.
  - (4) A map showing where the specific mitigation activities will occur. Offsite mitigation related to WQR areas shall not be used to meet the mitigation requirements of this Section.
  - (5) An implementation schedule, including a timeline for construction, mitigation, mitigation maintenance, monitoring, and reporting, as well as a contingency

plan. All in-stream work in fish-bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife in-stream timing schedule.

<b>Table 19.322.15-1 Restoration and Mitigation Requirements for WQR Areas</b>	
<b>Existing Condition of WQR Area</b>	<b>Requirements Applicable to Portions of the WQR Area Disturbed During Development or Land Disturbance</b>
<b>Good Existing Corridor</b>	
Combination of trees, shrubs and groundcover are 80% present, and there is more than 50% tree canopy coverage in the vegetated corridor.	<ul style="list-style-type: none"> <li>• Submit an inventory of vegetation in areas proposed to be disturbed and a plan for mitigating water quality impacts related to the development, including: sediments, temperature and nutrients, sediment control, and temperature control, or addressing any other condition that may have caused the protected water feature to be listed on DEQ's 303 (d) list.</li> <li>• Inventory and remove debris and noxious materials.</li> </ul>
<b>Marginal Existing Vegetated Corridor</b>	
Combination of trees, shrubs and groundcover are 80% present, and 25 - 50% canopy coverage in the vegetated corridor.	<ul style="list-style-type: none"> <li>• Vegetate disturbed and bare areas with non-nuisance plantings from the Milwaukie Native Plant List.</li> <li>• Revegetate with native species using a City-approved plan developed to represent the vegetative composition that would naturally occur on the site. Revegetation must occur during the next planting season following site disturbance. Annual replacement of plants that do not survive is required until vegetation representative of natural conditions is established on the site.</li> <li>• Restore and mitigate according to approved plan using non-nuisance plantings from the Milwaukie Native Plant List.</li> <li>• Inventory and remove debris and noxious materials.</li> </ul>
<b>Degraded Existing Vegetated Corridor</b>	
Less vegetation and canopy coverage than Marginal Vegetated Corridors, and/or greater than 10% surface coverage of any non-native species.	<ul style="list-style-type: none"> <li>• Vegetate disturbed and bare areas with non-nuisance plantings from the Milwaukie Native Plant List.</li> <li>• Remove non-native species and revegetate with non-nuisance plantings from the Milwaukie Native Plant List.</li> <li>• Plant and seed to provide 100% surface coverage.</li> <li>• Restore and mitigate according to a City-approved plan using non-nuisance plantings from the Milwaukie Native Plant List.</li> <li>• Inventory and remove debris and noxious materials.</li> </ul>

### 19.322.16 Adjustments and Variances

#### A. Adjustments to Base Zone Standards

Following the completion of a construction management plan pursuant to Subsection 19.322.9 and boundary verification pursuant to Subsection 19.322.17, an applicant may utilize the adjustments established in this Subsection to avoid or minimize impacts to a WQR area or HCA. These adjustments may not be used to avoid the requirement to submit a construction management plan or boundary verification but may be used with a Type I, Type II, or minor quasi-judicial application. The allowable adjustments are as follows:

1. The required building setback of the base zone may be reduced the minimum amount necessary to any distance between the base-zone minimum and 0 feet, unless this reduction conflicts with applicable fire or life safety requirements.
2. Landscaping requirements, apart from those required for parking lots, may be met by preserving the WQR area and/or HCA.
3. To accommodate the allowable residential density, dimensional standards and lot sizes may be adjusted by up to 30%.

**4. Include language for density bonus, from 30% to 50%.**

~~4. All area within a WQR area or HCA, or any portion of it, may be subtracted from the calculations of net acreage for purposes of determining the minimum number of units that must be built on the property, provided that such area is protected, such as by making a public dedication or executing a restrictive covenant.~~

**B. Variance**

A variance to avoid the unreasonable loss of economically viable use of a lot that contains a WQR area and/or HCA may be granted by the Planning Commission through minor quasi-judicial review. Such a variance request is not subject to the requirements of Chapter 19.700 but shall be reviewed as part of the related Water Quality and Natural Resources application.

1. A variance request must demonstrate that without the proposed variance, the reasonable economic use of the property would be denied. The applicant must show that no other development proposal could result in permission for an economically viable use of the property.
2. In granting a variance request, the Planning Commission may impose such conditions as are deemed necessary to minimize adverse impacts that may result from granting relief from provisions of this Section. Examples of such conditions include, but are not limited to, maintaining a minimum width of the vegetated corridor alongside a primary protected water feature and limiting the amount of WQR area for which the adjacent vegetated corridor width can be reduced.

**19.322.17 Boundary Verification and Map Administration**

The preparation of the Milwaukie Water Quality and Natural Resources (WQNR) Map did not include specific field observations of every individual property. The map is designed to be specific enough to determine whether further review of a development proposal is necessary. If any portion of the development or alteration of the land (except those exempted by this Section) is located within the boundary of a designated natural resource area, then map verification is required before any development permit can be issued.

**A. Boundary Verification for WQR Areas**

To verify the boundary of a WQR area, the applicant shall provide a topographic map of the site at contour intervals of 5 feet or less, showing a demarcation of the WQR area, which includes protected water features and vegetated corridors as outlined in Table 19.322.17-1.



**Table 19.322.17-1  
Vegetated Corridor Measurement by Protected Water Feature Type**

Protected Water Feature Type	Slope Adjacent to Protected Water Feature	Starting Point for Measurements from Protected Water Feature	Width of Vegetated Corridor <sup>2</sup>
Primary Protected Water Features <sup>1</sup>	< 25%	<ul style="list-style-type: none"> <li>• Edge of bankful flow or 2-year storm level</li> <li>• Delineated edge of Title 3 wetland</li> </ul>	50 ft
Primary Protected Water Features <sup>1</sup>	> 25% for 150 ft or more <sup>3</sup>	<ul style="list-style-type: none"> <li>• Edge of bankful flow or 2-year storm level</li> <li>• Delineated edge of Title 3 wetland</li> </ul>	200 ft
Primary Protected Water Features <sup>1</sup>	> 25% for less than 150 ft <sup>3</sup>	<ul style="list-style-type: none"> <li>• Edge of bankful flow or 2-year storm level</li> <li>• Delineated edge of Title 3 wetland</li> </ul>	Distance from starting point of measurement to top of ravine (break in > 25% slope) <sup>4</sup> , plus 50 ft. <sup>5</sup>
Secondary Protected Water Features <sup>6</sup>	< 25%	<ul style="list-style-type: none"> <li>• Edge of bankful flow or 2-year storm level</li> <li>• Delineated edge of Title 3 wetland</li> </ul>	15 ft
Secondary Protected Water Features <sup>6</sup>	> 25% <sup>3</sup>	<ul style="list-style-type: none"> <li>• Edge of bankful flow or 2-year storm level</li> <li>• Delineated edge of Title 3 wetland</li> </ul>	50 ft

<sup>1</sup> Primary Protected Water Features include: all perennial streams and streams draining greater than 100 acres, Title 3 wetlands, and natural lakes and springs. See MMC 19.103 for the full definition.

<sup>2</sup> Vegetated corridor width shall be applied to the outer boundaries of water features, such as the edge of a wetland and both banks of a watercourse.

<sup>3</sup> Vegetated corridors in excess of 50 feet for primary protected features, or in excess of 15 feet for secondary protected features, apply on steep slopes only in the uphill direction from the protected water feature.

<sup>4</sup> Where the Protected Water Feature is confined by a ravine or gully, the top of ravine is the break in the > 25% slope.

<sup>5</sup> A maximum reduction of 25 feet may be permitted in the width of the vegetated corridor beyond the slope break if a geotechnical report demonstrates that slope is stable. To establish the width of the vegetated corridor, slope should be measured in 25-foot increments away from the water feature until slope is less than 25% (top of ravine).

<sup>6</sup> Secondary Protected Water Features include intermittent streams draining 50 to 100 acres. See MMC 19.103 for the full definition.

## B. Boundary Verification and Correction of HCAs

The boundary verification approaches described below are available for applicants to address potential inaccuracies in the WQNR map, such as a simple incongruity between the WQNR map and the lot-line boundaries of a property, existing development on a property prior to *[insert new adoption date]*; or other inaccuracies.

### 1. Simple Incongruities

In some cases, the vegetative cover data shown on the WQNR map might not align with the location of existing legally established development or existing established tree cover. An applicant who believes that the WQNR map is inaccurate based on such an obvious misalignment shall submit the following information regarding the real property lot or parcel:

- a. The information required for basic verification of the natural resource area boundary:
  - (1) A detailed property description and site plan of the property that includes all existing conditions information listed on the City's site plan checklist.
  - (2) A copy of the applicable WQNR map section.
  - (3) A summer 2005 aerial photograph of the property, with lot lines shown, at a scale of at least one map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of one map inch equal to 100 feet for larger lots.
  - (4) Any other factual information that the applicant wishes to provide to support boundary verification.
- b. A documented demonstration of the misalignment between the WQNR map and the property's tax lot boundary lines and/or the location of existing legally established development.

2. Development Prior to Adoption Date

Where a property was developed between the summer of 2002 (when the aerial photo used to determine the regional habitat inventory was taken) and *[insert new adoption date]*, the applicant shall submit the following information regarding the real property lot or parcel:

- a. The information described in Subsection 19.322.17.B.1.a.
- b. A summer 2002 aerial photograph of the property, with lot lines shown, at a scale of at least one map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of one map inch equal to 100 feet for larger lots.
- c. Any approved building permits or other development plans and drawings related to the development of the property that took place between summer 2002 and *[insert new adoption date]*.
- d. A clear explanation and documentation, such as supporting maps or drawings or a more recent aerial photograph, indicating the new development that has occurred and where previously identified habitat no longer exists because it is now part of a developed area.

3. WQNR Map is Inaccurate for Other Reasons

An applicant who believes that an HCA shown on the WQNR map is inaccurate for a reason other than those described in Subsections 19.322.17.B.1 or 19.322.17.B.2 may request a detailed verification. The applicant shall submit a report prepared and signed by either a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist; or by a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. The report shall include:

- a. A description of the qualifications and experience of all persons that contributed to the report and, for each person that contributed, a description of the elements of the analysis to which the person contributed.
  - b. The information described in Subsection 19.322.17.B.1.a.
  - c. The information described in Subsections 19.322.17.B.1.b and/or 19.322.17.B.2.b through 19.322.17.B.2.d, if the applicant believes such information is relevant to the verification of habitat location on the subject lot or parcel.
  - d. Additional aerial photographs if the applicant believes they provide better information regarding the property, including documentation of the date and process used to take the photos and an expert's interpretation of the additional information they provide.
  - e. A map showing the topography of the property shown by two-foot vertical contours in areas of slopes less than 15%, and at 5-foot vertical contours of slopes 15% or greater.
  - f. Any additional information necessary to address each of the verification criteria in Subsection 19.322.17.B.4, a description of where any HCAs are located on the property based on the application of the verification criteria, and factual documentation to support the analysis.
4. Detailed Verification Criteria

A boundary verification request submitted under Subsection 19.322.17.B.3 shall be evaluated according to the following three-step process:

- a. Step 1 - Verify the Boundaries of Inventoried Riparian Habitat

Locating habitat and determining the riparian habitat class of the designated resource is a four-step process:

- (1) Locate the water feature that is the basis for identifying riparian habitat.
  - (a) Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.
  - (b) Locate all flood areas within 100 feet of the property.
  - (c) Locate all wetlands within 150 feet of the property based on the WQNR Map. Identified wetlands shall be further delineated consistent with methods currently accepted by DSL and the Corps.
- (2) Identify the vegetative cover status of all areas on the property that are within 200 feet of the top of bank of streams, rivers, and open water, are wetlands or are within 150 feet of wetlands, and are flood areas and within 100 feet of flood areas.
  - (a) Vegetative cover status shall be as identified on the Metro Vegetative Cover Map, available from the City and/or the Metro Data Resource Center.
  - (b) The vegetative cover status of a property may be adjusted only if: (1) the property was legally developed prior to the time this Section was adopted (see Subsection 19.322.17.B.2), or (2) an error was made at the time the vegetative cover status was determined. To assert the latter type of error, applicants shall submit an analysis of the vegetative cover on their

property using summer 2002 aerial photographs and the definitions of the different vegetative cover types identified in Table 19.322.17-2.

- (3) Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 feet of the property is greater than or less than 25% using the methodology outlined in Table 19.322.17-1.
- (4) Identify the riparian habitat classes applicable to all areas on the property using Table 19.322.17-2 and the data identified in Subsections 19.322.17.B.5.a.1 through 19.322.17.B.5.a.3.

<b>Table 19.322.17-2</b>			
<b>Method for Determining Classification of Riparian Areas</b>			
<b>Distance from Protected Water Feature</b>	<b>Development/Vegetation Status<sup>1</sup></b>		
	<b>Low structure vegetation or open soils<sup>2</sup></b>	<b>Woody vegetation (shrub and scattered forest canopy)<sup>3</sup></b>	<b>Forest Canopy (closed to open forest canopy)<sup>4</sup></b>
<b>(a) Surface Streams</b>			
0 to 50 ft	Class I <sup>5</sup>	Class I	Class I
50 to 100 ft	Class II <sup>6</sup>	Class I	Class I
100 to 150 ft	Class II <sup>6</sup> if slope>25%	Class II <sup>6</sup> if slope>25%	Class II <sup>6</sup>
150 to 200 ft	Class II <sup>6</sup> if slope>25%	Class II <sup>6</sup> if slope>25%	Class II <sup>6</sup> if slope>25%
<b>(b) Wetlands (Wetland feature itself is a Class I Riparian Area)</b>			
0 to 100 ft	Class II <sup>6</sup>	Class I	Class I
100 to 150 ft			Class II <sup>5</sup>
<b>(c) Flood Areas</b>			
Within 300 ft of river or surface stream	Class I	Class I	Class I
More than 300 ft from river or surface stream	Class II <sup>6</sup>	Class II <sup>6</sup>	Class I
0 to 100 ft from edge of flood area		Class II <sup>6,7</sup>	Class II <sup>6</sup>
<p><sup>1</sup> The vegetative cover type assigned to any particular area was based on two factors: the type of vegetation observed in aerial photographs and the size of the overall contiguous area of vegetative cover to which a particular piece of vegetation belonged.</p> <p><sup>2</sup> "Low structure vegetation or open soils" means areas that are part of a contiguous area one acre or larger of grass, meadow, crop-lands, or areas of open soils located within 300 feet of a surface stream. Low structure vegetation areas may include areas of shrub vegetation less than one acre in size if they are contiguous with areas of grass, meadow, crop-lands, orchards, Christmas tree farms, holly farms, or areas of open soils located within 300 feet of a surface stream and together form an area of one acre in size or larger.</p> <p><sup>3</sup> "Woody vegetation" means areas that are part of a contiguous area one acre or larger of shrub or open or scattered forest canopy (less than 60% crown closure) located within 300 feet of a surface stream.</p> <p><sup>4</sup> "Forest canopy" means areas that are part of a contiguous grove of trees of one acre or larger in area with approximately 60% or greater crown closure, irrespective of whether the entire grove is within 200 feet of the relevant water feature.</p> <p><sup>5</sup> Except that areas within 50 feet of surface streams shall be Class II riparian areas if their vegetation status is "Low structure vegetation or open soils," and if they are high gradient streams. High gradient streams are identified on the Metro Vegetative Cover Map. If a property owner believes the gradient of a stream was incorrectly identified, then the property owner may demonstrate the correct classification by identifying the channel type using the methodology described in the Oregon Watershed Assessment Manual, published by the Oregon Watershed Enhancement Board, and appended to the Metro's Riparian Corridor and Wildlife Habitat Inventories Report, Attachment 1 to Exhibit F to Metro Ordinance No. 05-1077C.</p> <p><sup>6</sup> Areas that have been identified as habitats of concern, as designated on the Metro Habitats of Concern Map (on file in the Metro Council office), shall be treated as Class I riparian habitat areas in all cases, subject to the provision of additional information that establishes that they do not meet the criteria used to identify habitats of</p>			

concern as described in Metro's Technical Report for Fish and Wildlife. Examples of habitats of concern include: Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, and important wildlife migration corridors.

<sup>7</sup> Only if within 300 feet of a river or surface stream.

b. Step 2 - Determine the Urban Development Value of the Property

The urban development value of property designated as regionally significant habitat is depicted on the Metro Habitat Urban Development Value Map (available from the Metro Data Resource Center).

- (1) A property's urban development value designation shall be adjusted upward if the Metro 2040 Design Type designation for the property lot or parcel has changed from a category designated as a lower urban development value category to one designated as a higher urban development value category. 2040 Design Type designations are identified on the Metro 2040 Applied Concept Map (available from the Metro Data Resource Center).
- (2) Properties in areas designated on the 2040 Applied Concept Map as the Central City, Regional Centers, Town Centers, and Regionally Significant Industrial Areas are considered to be of high urban development value; properties in areas designated as Main Streets, Station Communities, Other Industrial Areas, and Employment Centers are of medium urban development value; and properties in areas designated as Inner and Outer Neighborhoods and Corridors are of low urban development value.
- (3) As designated in Title 13 of Metro's Urban Growth Management Functional Plan, properties owned by a regionally significant educational or medical facility are designated as high urban development value.

c. Step 3 - Cross-Reference Habitat Class with Urban Development Value

City verification of the locations of HCAs shall be consistent with Table 19.322.17-3.

<b>Fish &amp; wildlife habitat classification</b>	<b>High Urban development value<sup>1</sup></b>	<b>Medium Urban development value<sup>2</sup></b>	<b>Low Urban development value<sup>3</sup></b>	<b>Other areas: Parks and Open Spaces, no design types outside UGB</b>
Class I Riparian	HCA	HCA	HCA	HCA / HCA+ <sup>4</sup>
Class II Riparian	No HCA	No HCA	HCA	HCA / HCA+ <sup>4</sup>
Class A Upland Wildlife	No HCA	No HCA	No HCA	No HCA / HCA <sup>5</sup> / HCA+ <sup>4</sup>
Class B Upland Wildlife	No HCA	No HCA	No HCA	No HCA / HCA <sup>5</sup> / HCA+ <sup>4</sup>

## Proposed Code Amendment

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NOTE: The default urban development value of property is as depicted on the Metro Habitat Urban Development Value Map. The Metro 2040 Design Type designations provided in the following footnotes are only for use when a city or county is determining whether to make an HCA adjustment.

<sup>1</sup> Primary 2040 design type: Regional Centers, Central City, Town Centers, and Regionally Significant Industrial Areas

<sup>2</sup> Secondary 2040 design type: Main Streets, Station Communities, Other Industrial areas, and Employment Centers

<sup>3</sup> Tertiary 2040 design type: Inner and outer neighborhoods, Corridors

<sup>4</sup> Cities and counties shall give Class I and II riparian habitat and Class A and B upland wildlife habitat in parks designated as natural areas even greater protection than that afforded to High Habitat Conservation Areas.

<sup>5</sup> All Class A and B upland wildlife habitat in publicly-owned parks and open spaces, except for parks and open spaces where the acquiring agency clearly identified that it was acquiring the property to develop it for active recreational uses, shall be considered High HCAs.

### C. Water Quality and Natural Resource Area Map Corrections: Deletions

1. Improperly mapped protected water features shown on the WQNR Map may be deleted by Type II administrative review, subject to the following criteria:

- a. In the case of wetlands, submission of a wetland delineation prepared by a professional wetland scientist in accordance with the 1996 Oregon Freshwater Wetland Assessment Methodology, demonstrating that the site does not contain wetlands.
- b. In the case of drainages, submission of a hydrology report prepared by a professional engineer, demonstrating that the drainage does not meet the definition of a protected resource.

2. The Planning Director shall confer with DSL and Metro to confirm delineation and hydrology reports as may be needed prior to issuing a notice of decision on a requested map deletion.

3. The City shall amend the WQNR Map if the wetland or hydrology report demonstrates any of the following:

- a. That a primary protected water feature no longer exists because the area has been legally filled, culverted, or developed prior to the adoption of this Section.
- b. That the boundaries of the WQR area have changed since adoption of the WQNR Map.
- c. An error in the original mapping.

### D. Water Quality and Natural Resource Area Map Corrections: Additions and Modifications

1. Map corrections that require the addition of a protected water feature to the WQNR map shall be made in accordance with MMC 19.900 Amendments.

2. To modify a WQR area on the WQNR map, the applicant shall demonstrate that the modification will offer the same or better protection of the protected water feature, WQR area, and flood management area by doing all of the following:

- a. Preserving a vegetated corridor that will separate the protected water feature from proposed development.
- b. Preserving existing vegetated cover or enhancing the WQR area sufficient to assist in maintaining or reducing water temperatures in the adjacent protected water feature.

- c. Enhancing the WQR area sufficient to minimize erosion, nutrient and pollutant loading into the adjacent protected water feature.
- d. Protecting the vegetated corridor sufficient to provide filtration, infiltration, and natural water purification for the adjacent protected water feature.
- e. Stabilizing slopes adjacent to the protected water feature.

### **19.322.18 Natural Resource Management Plans**

Natural resource management plans that authorize limited disturbance within the WQR area or HCA may be approved with Type I or Type II review, subject to the following standards:

A. Plans Eligible for Type I Review

The plan has already been approved by the U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife (ODFW), Oregon Division of State Lands (DSL), Oregon Watershed Enhancement Board (OWEB), Metro, Clackamas County Soil and Water Conservation District, or other agency approved by the Planning Director.

B. Plans Eligible for Type II Review

The plan has been prepared in accordance with particular standards and guidelines promulgated by a natural resource agency, such as OWEB's Oregon Aquatic Habitat Restoration and Enhancement Guide, ODFW's Western Oregon Stream Restoration Program, or DSL's Hydrogeomorphic (HGM) approach of assessment for wetland and riparian functions.

C. Approval Criteria

Every plan prepared for approval under this section, the plan must demonstrate that it encourages restoration activities that have any of the following effects:

1. Changes the trend of habitat function from one of a diminishing ability to support salmonids and other organisms to one that supports a complex, self-sustaining system.
2. Corrects or improves conditions caused by past management and/or disturbance events.
3. Maximizes beneficial habitat in the short term where watershed degradation has been extensive and natural processes will need substantial time to restore habitat.
4. Creates beneficial habitat and restores stream function and hydrology to the fullest extent possible within developed areas where no reasonable expectation of returning to natural conditions exists.

D. A construction management plan prepared in accordance with Subsection 19.322.9 is required with each natural resource management plan.

E. Natural resource management plans shall address a minimum activity period of five years and must demonstrate how ongoing maintenance is part of the associated restoration or enhancement activities.

F. Expiration of plans. The approval of a natural resource management plan shall be valid for five years. Approved plans may be renewed through the Type I review process by demonstrating xxxxx.

## CHAPTER 19.100 INTRODUCTORY PROVISIONS

### Section 19.103 Definitions

#### Definitions to be amended (related to natural resources):

“Bankful stage” means the stage or elevation at which water overflows the natural banks of a stream or other waters of the state and begins to inundate upland areas. In the absence of physical evidence, the two-year ~~recurrent~~ recurrence interval flood elevation may be used to approximate the bankful stage. Also referred to as “top of bank.”

“Downed Tree” means any tree that is no longer standing upright, as the result of natural or human forces, and that has come to rest either directly within a protected water feature, a WQR area, or an HCA.

“Habitat Conservation Area (HCA)” means significant Goal 5 wetlands, riparian areas, and fish and wildlife habitat, as established in MMC Section 19.322.

“Native vegetation or native plant” means any vegetation native to the Portland metropolitan area or listed on the Milwaukie Native Plant List, provided that it is not listed as a nuisance plant or a prohibited plant on the Milwaukie Native Plant List.

“Protected water features”:

“Primary protected water features” means and includes any of the following:

- a. Title 3 wetlands, which means wetlands of metropolitan concern as shown on the Metro Water Quality and Flood Management Area Map and other wetlands added to City-adopted Water Quality and Flood Management Area maps consistent with the criteria in Title 3 of Metro’s Urban Growth Management Functional Plan, Section 3.07.340(E)(3). Title 3 wetlands do not include artificially constructed and managed stormwater and water quality treatment facilities.
- b. Rivers, streams and drainages downstream from the point at which 100 acres or more are drained to that water feature (regardless of whether it carries year-round flow).
- c. Streams carrying year-round flow.
- d. Springs which feed streams and wetlands and have year-round flow.
- e. Natural lakes.

“Secondary protected water features” means and includes intermittent streams and seeps downstream of the point at which 50 acres are drained and upstream of the point at which 100 acres are drained to that water feature.

“Significant Pruning” means removal of more than 20% of a tree’s canopy, or injury or cutting of over 10% of the root system, during any 12-month period.

“Tree” means a living or dead, standing or downed, woody plant characterized by one main stem or trunk and many branches, or a multi-stemmed trunk system with a definitely formed crown, and having a trunk 4 inches or more in diameter (maximum cross section) at a point 24 inches above mean ground level at the base of the trunk.

“Vegetated corridor” means the area of setback between the top of the bank of a protected water feature or the edge of a delineated wetland and the delineated edge of the WQR water quality resource area as defined in Table 19.322.17-1 Table 4.



“Water quality resource (WQR) areas” means a protected water feature(s) and the adjacent vegetated corridors and the adjacent water feature as established in Chapter MMC Section 19.322. The following definitions relate to WQR areas and Habitat Conservation Areas in particular:

“Mitigation” means the reduction of adverse effects of a proposed project on the natural environment by considering, in this order: (1) avoiding the impact altogether by not taking a certain action or parts of an action; ~~(42)~~ minimizing impacts by limiting the degree or magnitude of the action and its implementation; ~~(23)~~ rectifying the impact by repairing, rehabilitating, or restoring the affected environment; ~~(34)~~ reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and/or ~~(45)~~ compensating for the impact by replacing or providing comparable substitute WQR water quality resource areas or HCAs.

“Significant negative impact” means an impact that affects the natural environment, considered individually or cumulatively with other impacts on the WQR water quality resource area and/or HCA, to the point where the existing water quality functions and values of water quality and/or fish and wildlife habitat are degraded.

“Water quality and floodplain management area” means the area that identifies where the WQR water quality resource area and floodplain management area overlay zone is applied.

“Wetlands” means those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by a qualified wetland specialist as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.

**Other Definitions related to natural resources (no proposed changes):**

“Restoration” means the process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function and/or diversity to that which occurred prior to impacts caused by human activity.

“Watershed” means a geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake, or wetland.