



**Addendum to
The King County
Surface Water Design Manual**

**Effective Date
January 8, 2017**

Introduction

This addendum to the 2016 King County, Washington Surface Water Design Manual (KCSWDM) applies to development and re-development proposals within the City of Federal Way. The KCSWDM has been adopted to meet the requirements of the Clean Water Act, the Endangered Species Act, State Growth Management Act, and the City's NPDES Permit. This addendum includes minor revisions to the KCSWDM to address the differences between King County's and the City's organization and processes. No major substantive changes have been made to the KCSWDM in order to maintain equivalency in review requirements and level of protection provided by the manual.

Addendum Organization

The information presented in this addendum is organized as follows:

Section 1: Terminology: At times King County and City of Federal Way use different terminology to describe or to refer to equivalent subject matter. This section identifies these terms and the City of Federal Way's equivalent terminology.

Section 2: Key Revisions: This section specifically identifies the modifications the City has made to the KCSWDM.

Section 3: Code Reference Tables: King County code is referenced in many places throughout the KCSWDM. This section identifies these code references and equivalent City Code where applicable.

Section 4: Reference Materials: This section identifies which reference materials provided in the KCSWDM are applicable and which are not. It also identifies if equivalent City of Federal Way reference materials are available.

Section 5: Mapping: City of Federal Way equivalents to the Flow Control Applications Map and the Water Quality Applications Map are included in this section. The City's equivalent to the County Landslide Hazard Drainage Areas Map is the City Sensitive/Critical Areas Map available from the Community Development Planning Division.

Note: Clarifications and interpretations to the KCSWDM or this addendum will be documented and made available through policy statements within the City's Development Standards.

Section 1: Terminology:

At times King County and City of Federal Way use different terminology to describe or to refer to equivalent subject matter. This section identifies these terms and the City of Federal Way's equivalent terminology.

Critical Drainage Areas (CDA's) - City of Federal Way (CFW) code has no equivalent term or designation. Additional requirements to those outlined in the KCSWDM, if any, will be determined based on information provided in the Technical Information Report for an individual project by the Public Works Director or their designee.

Department of Development and Environmental Services (DDES) = City of Federal Way Public Works Department.

Department of Natural Resources and Parks (DNRP) = City of Federal Way Community Development Department.

Director = City of Federal Way Public Works Director.

Drainage facilities restoration and site stabilization guarantee and drainage defect and maintenance guarantee = CFW Performance/Maintenance Bond.

King County = City of Federal Way (CFW).

King County Code (KCC) = Federal Way Revised Code (FWRC). Check code reference table for equivalent code sections.

King County Designated/Identified Water Quality Problem - This determination is made based on review of historic problems at the subject site by the Public Works Director.

King County Road Standards = City of Federal Way Development Standards Manual.

Master Drainage Planning - Not applicable, no CFW equivalent.

Redevelopment (*FWRC 16.05.180*)

See Federal Way Revised Code, Section 16.05.180 for the purposes of determining water quality review requirements

For the purposes of determining flow control and other stormwater review requirements, the definition of "redevelopment project" identified in the KCSWDM applies.

Sensitive Area Folio = See Sensitive/Critical Areas Map available from the Community Development Planning Division.

Urban Planned Development = Not applicable, no CFW equivalent.

Water and Land Resources (WLR) Division = City of Federal Way Surface Water Management Division.

Zoning Classifications: Where the KCSWDM references Agricultural (A) Zoning, Forest (F) Zoning, or Rural (R) Zoning - These zoning classifications are intended for areas outside of the Urban Growth Boundary, therefore the City of Federal Way contains no equivalent zoning. Refer to city zoning maps to determine which zoning classifications applies to the subject property.

Section 2: Key Revisions:

This section includes minor revisions to the KCSWDM to address the differences between King County's and the City's organization and processes, as well as to ensure equivalency.

Chapter 1: Drainage Review and Requirements

The following steps replace Section 1.1.1 of the KCSWDM:

Section 1.1.1 Projects Requiring Drainage Review

Introduction

The following steps shall be used instead of Section 1.1.1 of the KCSWDM to determine drainage review requirements within the City of Federal Way. This process has been modified to meet the City of Federal Way water quality review requirements and thresholds for redevelopment identified in Federal Way Revised Code (FWRC) 19.30.120, Nonconforming water quality improvements.

Determining Drainage Review Requirements:

Step 1

Is the project or proposed activity subject to City Code Title 16 (Surface Water Management) pursuant to FWRC 16.15.010?

16.15.010 Regulated activities.

The following projects or activities are subject to the provisions of this title, unless exempted in FWRC 16.15.020:

- (1) Single-family residential; or*
- (2) Projects that add 2,000 square feet or more of new impervious surface, replaced impervious surface or new plus replaced impervious surface; or*
- (3) Projects that propose 7,000 square feet or more of land disturbing activity; or*
- (4) Projects that propose to construct or modify a drainage pipe/ditch that is 12 inches or more in size/depth, or receives surface and stormwater runoff from a drainage pipe/ditch that is 12 inches or more in size/depth; or*
- (5) Collection and concentration of surface and stormwater runoff from a drainage area of more than 5,000 square feet; or*
- (6) Projects which contain, are adjacent to or directly discharge to a floodplain, stream, lake, wetland, or closed depression, groundwater recharge area, or other water quality sensitive area, or a receiving water with a documented water quality problem as determined by the Public Works Director, based on a written map, policy, water quality monitoring data or plan in existence or implemented by the director prior to submission of a redevelopment application which is determined to trigger application of this subsection, or based on information developed during review of a particular redevelopment application; or*
- (7) Projects that involve a change in use, and the changed use has a potential to release a new pollutant(s) to surface water systems within the city. For the purposes of this subsection, "new pollutant(s)" means a pollutant that was not discharged at that*

- location immediately prior to the change in use, as well as a pollutant that was discharged in less quantities immediately prior to the change in use;*
- (8) *Projects other than normal maintenance or other than tenant improvements, but including any increase in gross floor area, in any one consecutive 12-month period which exceeds 50 percent of the assessed or appraised value (whichever is greater) of the structure or improvement; or*
- (9) *Project proposing \$100,000 or more of improvements to an existing high use site.*

[Note: the dollar amount indicated can be adjusted based on the consumer price index as identified in the KCSWDM in section 1.1.1.]

Redevelopment projects that are subject to water quality improvements may phase construction of the improvements as described in FWRC 19.30.120, Non-conforming water quality.

Step 2

Projects Subject to Title 16

Projects subject to Title 16 (Surface Water Management) shall determine water quality and stormwater review requirements using Sections 1.1.1.A (Step 3) and 1.1.1.B (Step 4) of this addendum.

Projects Not Subject to Title 16

Projects not subject to Title 16 (Surface Water Management) may still be subject to clearing and grading review requirements pursuant to International Building Code (IBC) Appendix J and FWRC 19.120.

Projects which are subject to clearing and grading permit requirements, but do not meet the thresholds identified in 1.1.1.B, are subject to the Erosion and Sedimentation Control (ESC) requirements and BMPs of Core Requirement #5 and C.1.4 of the KCSWDM as applicable.

Specific ESC requirements shall be determined on a project by project basis during clearing and grading review.

Those projects exempt from clearing and grading permit requirements, although not required to be reviewed, are still responsible for implementing Erosion and Sedimentation Control (ESC) measures to maintain a stable site and mitigate offsite impacts.

Step 3

1.1.1.A PROJECTS REQUIRING WATER QUALITY REVIEW

Water Quality Review (Core Requirement #8) is required for any proposed project (except those proposing only **maintenance**) that is subject to a City of Federal Way **development** permit or approval, AND that meets any one of the following conditions:

New Development

1. The project adds or will result in 2,000 square feet or more of ***new impervious surface***; OR

2. The project proposes 7,000 square feet or more of *land disturbing activity*; OR
3. The project proposes to *construct or modify* a drainage pipe/ditch that is 12 inches or more in size/depth, or receives surface and stormwater runoff from a drainage pipe/ditch that is 12 inches or more in size/depth; OR
4. The project contains or is adjacent to “frequently flooded areas” or “special flood hazards” as defined in FWRC 14.05 and 19.142.050; OR
5. The project is located within a *Critical Drainage Area*, OR

Redevelopment ¹ (meeting the definition identified in FWRC 19.30.120)

6. Redevelopment which involves the creation or addition of impervious surfaces having an area of 5,000 square feet or more; OR
7. Redevelopment which involves the construction or replacement of a building footprint or other structure having a surface area of 5,000 square feet or more, or which involves the expansion of a building footprint or other structure by 5,000 square feet of surface area or more; OR
8. Redevelopment which involves the repair or replacement of 5,000 square feet or more of an impervious surface, when such redevelopment is not part of a routine maintenance activity; OR
9. Redevelopment which involves the collection and/or concentration of surface and/or stormwater runoff from a drainage area of 5,000 square feet or more; OR
10. Redevelopment which contains or directly discharges to a floodplain, stream, lake, wetland, or closed depression, groundwater recharge area, or other water quality sensitive area determined by the Public Works Director, based on a written map, policy, water quality monitoring data or plan in existence or implemented by the Public Works Director prior to submission of a redevelopment application which is determined to trigger application of this subsection, or based on information developed during review of a particular redevelopment application;
11. Redevelopment which involves a change in use, and the changed use has a potential to release a new pollutant(s) to surface water systems within the city. For the purposes of this subsection, “new pollutant(s)” means a pollutant that was not discharged at that location immediately prior to the change in use, as well as a pollutant that was discharged in less quantities immediately prior to the change in use;

¹ “Redevelopment” means a project that proposes to add, replace, or modify impervious surface (for purposes other than a residential subdivision or maintenance) on a site that is already substantially developed in a manner consistent with its current zoning, or with a legal nonconforming use, or has an existing impervious surface coverage of 35 percent or more. Water quality for the entire subject property must be brought into compliance with FWRC Title [16](#), where the proposed redevelopment meets or exceeds the thresholds set forth, and shall be done in accordance with the approved King County, Washington Surface Water Design Manual or equivalent, as amended. FWRC 19.30.120)

12. Redevelopment, other than normal maintenance or other than the tenant improvements, but including any increase in gross floor area, in any one consecutive 12-month period which exceeds 50 percent of the assessed or appraised value (whichever is greater) of the structure or improvement being redeveloped. The applicant may provide an appraisal of the improvement. The appraisal must be from a source acceptable to the City. The Public Works Director may require the applicant to provide an appraisal from a second source acceptable to the City if the assessed valuation appears to be inaccurate or inappropriate. If more than one appraisal is provided by the applicant or required by the City, the greater of the two amounts shall be used. For purposes of determining value under this section, improvements required pursuant to FWRC 19.30.090 (nonconforming development), FWRC 19.30.110 (street/sidewalk improvements), this section (nonconforming water quality improvements) and FWRC 19.135.030 (street/sidewalk improvements) shall not be counted towards the 50 percent threshold which would trigger application of this subsection;
13. Redevelopment of property which drains or discharges to a receiving water that has a documented water quality problem, as determined by the Public Works Director based on a map, plan, water quality monitoring data or a written policy in existence or implemented by the Public Works Director prior to submission of a redevelopment application determined to trigger application of this subsection, where the Public Works Director determines that the redevelopment requires additional specific controls to address the documented water quality problem.

Water Quality Review for “Redevelopment”

Projects meeting the “redevelopment” definition and thresholds identified in this section are subject to Core Requirement #8 for the entire *site*² pursuant to the city’s Nonconformance code (FWRC 19.30.120). Please note that application of Core Requirement #8 differs between redevelopment and new development as indicated in Section 1.2.8 of this addendum.

Step 4

1.1.1.B PROJECTS REQUIRING STORMWATER REVIEW

Stormwater Review (KCSWDM’s Small Project Drainage Requirements, Core Requirements 1-9 and Special Requirements 1-5) is required for any proposed project (except those proposing only **maintenance**) that is subject to a City of Federal Way **development** permit or approval, AND that meets any one of the following conditions (see Figure 1.1.1.B for flow chart):

1. The project adds or will result in 2,000 square feet or more of *new impervious surface*, *replaced impervious surface*, or *new plus replaced impervious surface*; OR

² **Site** (a.k.a. **development site**) means a single parcel as established by the King County Department of Assessments, or two or more contiguous parcels that are under common ownership or documented legal control, used as a single parcel for purposes of applying for authority from King County to carry out a development/project proposal. For projects located primarily within dedicated rights-of-way, **site** includes the entire width of right-of-way within the total length of right-of-way subject to improvements proposed by the project.

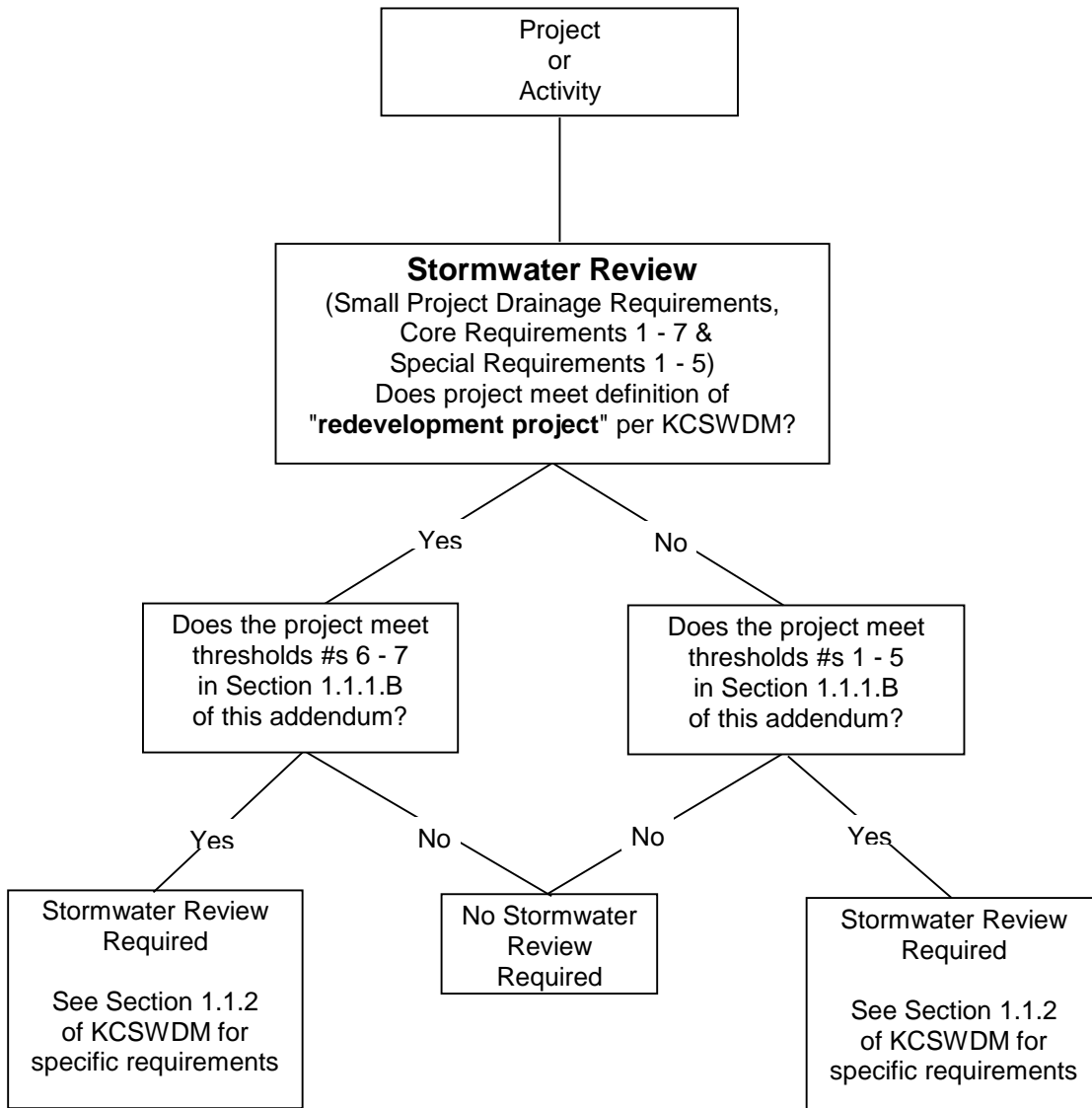
2. The project proposes 7,000 square feet or more of *land disturbing activity*; OR
3. The project proposes to *construct or modify* a drainage pipe/ditch that is 12 inches or more in size/depth, or receives surface and stormwater runoff from a drainage pipe/ditch that is 12 inches or more in size/depth; OR
4. The project contains or is adjacent to “frequently flooded areas” or “special flood hazards” as defined in FWRC 14.05.030 and 19.142.050; OR
5. The project is located within a *Critical Drainage Area*; OR
6. The project is a *redevelopment project*³ proposing \$100,000⁴ or more of improvements to an existing *high-use site*; OR
7. The project is a *redevelopment project* on a single- or multiple-parcel *site* in which the total of *new plus replaced impervious surface* is 5,000 square feet or more and whose valuation of proposed improvements (including interior improvements and excluding required mitigation and frontage improvements) exceeds 50% of the **assessed value** of the existing *site* improvements.

If stormwater review is required for the proposed project, the type of review must be determined based on project and site characteristics as described in Section 1.1.2 of the KCSWDM.

³ For the purposes of this section “*Redevelopment project*” means a project that proposes to add, replace, or modify impervious surfaces for purposes other than a residential subdivision or maintenance on a *site* that is already substantially developed in a manner consistent with its current zoning or with a legal non-conforming use, or has an existing impervious surface coverage of 35% or more. The following examples illustrate the application of this definition. (KCSWDM Chpt. 1)

⁴ This is the "project valuation" as declared on the submitted permit application. The dollar amount of this threshold is considered to be as of January 8, 2001 and may be adjusted on an annual basis using the local consumer price index (CPI). *Note: January 8, 2001 is the effective date of the ESA 4(d) Rule for Puget Sound Chinook salmon.*

**FIGURE 1.1.1.B
Stormwater Review Flow Chart ***



* The requirement to complete a stormwater review is separate from the requirements to conform to the Water Quality Review (1.1.1.A). If water quality is triggered, but a stormwater review is not, the applicant is still required to conform to the Water Quality requirements.

The following items amend the identified sections of the KCSWDM:

1.1.3 Drainage Review Required by Other Agencies

In addition to the Muckleshoot Indian Tribe, CFW is required to notify the Puyallup Indian Tribe.

The City of Federal Way administers its own Forest Practices Class IV-General Permits.

The City of Federal Way does not administer Class IV-Special Forest Practices Permits.

1.2.5 Core Requirement #5

Projects subject to clearing and grading permit requirements, but which do not meet the thresholds identified in 1.1.1.B, are subject to the ESC requirements and BMPs of Core Requirement #5 and C.1.4 of the KCSWDM as applicable. Specific ESC requirements shall be determined on a project by project basis during clearing and grading review. Those projects exempt from clearing and grading permit requirements, although not required to be reviewed, are still responsible for implementing Erosion and Sedimentation Control (ESC) measures to maintain a stable site and mitigate offsite impacts

1.2.5.3 (F) - City of Federal Way does not assume lead agency status for Class IV Special Forest Practices Permits

1.2.6 Drainage Facilities to be Maintained by City of Federal Way - See FWRC 16.35.010.

1.2.8 Core Requirement #8 Water Quality – Guide to Applying Core Requirement #8

1. Redevelopment
 - a. When water quality improvements are required, the entire *site* must be brought up to current water quality standards for all impervious surfaces.
 - i. This includes all impervious surfaces regardless of when they were created, including impervious surfaces created before 2001.
 - ii. Any applicable additional provisions in KCSWDM 1.2.8.1(B & C) - Target Surfaces, also apply.
 - b. See KCSWDM for pervious surface requirements.
 - c. Exemptions identified in 1.2.8 of the KCSWDM do not apply to redevelopment.
2. New Development
 - a. See KCSWDM for both impervious and pervious surface requirements

The following item replaces the identified section of the KCSWDM:

1.4 Adjustment Process - See FWRC Section 16.30.020 through 16.30.070.

Chapter 2: Drainage Plan Submittal

The following items amend the identified sections of the KCSWDM:

2.3.1.1 TIR Section 3, Scope of Analysis: Task 2. Resource Review - Maps of the City's sensitive areas, drainage basins, streams, topography, zoning, survey control points, Flow Control Applications, Water Quality Applications, and more are available on the City's website at www.cityoffederalway.com, through the City's Public Works Development Services Division and through the City's Community Development Planning Division.

For information on existing drainage complaints and conditions within the city, as-built drawings, and Technical Information Reports, please contact the Surface Water Management Engineering Technician at 253.835.2754.

2.3.1.2. Site Improvement Plan

Vertical Datum - KCAS or NGVD-29.

General Plan Format - Refer to City of Federal Way Development Standards Manual, Construction Checklist.

Plan Sheet Size - City of Federal Way only accepts "D-size" (24" x 36") for construction drawings.

Drawing Scale - Refer to City of Federal Way Development Standards Manual.

2.4.2 Final Corrected Plan Submittal

Engineering Plan Review - Upon completion of the engineering review process, the engineering plans shall be provided for Public Works Department approval and signature.

As-built Drawings - As-built drawings are required at the conclusion of the project, prior to release of the performance bond. All as-built drawings shall be prepared by a land surveyor licensed in the State of Washington and shall conform to all state and local statutes. See Development Standards Manual, As-built Review Checklist, for details.

Chapter 3: Hydrologic Analysis & Design

The following items amend the identified sections of the KCSWDM:

3.1.2 Low Impact Development (LID) Performance Standard – Low Impact Development is the required approach to site development and all permitted projects must demonstrate compliance with the LID Performance Standard as outlined in Section 1.2.9.4. If infiltration is proposed, testing must be completed as outlined in the Manual.

For all projects less than 5 acres, the pre-engineered BMPs in Appendix #C of the KCSWDM may be used instead of modeling. In the event that LID BMPs cannot be utilized for a specific site given site limitations, the applicant may demonstrate why the BMPs within Appendix #C are not suitable, for either the whole or a part of the site, the City may then allow use of non-LID BMP infrastructure to meet the Core Requirements.

1.2.9.1.B & 3.1.2 Where the LID Standard is Required – The Low Impact Development Standard outlined in Section 1.2.9.1.B is required for all projects where permits are required in accordance with the amended Section 3.1.2.

Section 3: Code Reference Table:

King County Code is referenced in many places throughout the KCSWDM. The following table identifies these code references and equivalent city code where applicable:

King County Code to Federal Way Revised Code (FWRC) Reference Table			
King County Code Reference	Subject of Reference	FWRC Equivalent	Comment
KCC 2.98	Adoption Procedures	16.05.290	
KCC 2.98	Critical Drainage Areas, adoption procedures	Not applicable	
Title 9	Surface Water Management	16	
KCC 9.04	Surface Water Run-off Policy: Variances	16.30	See Adjustments
KCC 9.04.030	Definitions: Targeted Drainage Review / abbreviated evaluation	16.25.020	See Drainage Review
KCC 9.04.030	Drainage Review	16.25.020	
KCC 9.04.030	Large Project Drainage Review	16.25.020	
KCC 9.04.050	Drainage Review - Requirements	16.25.020	
KCC 9.04.070	Engineering plans for the purposes of drainage review	See Development Standards	
KCC 9.04.090	Construction timing and final approval	See Development Standards	
KCC 9.04.100	Liability Requirements	16.25.030	
KCC 9.04.115	Drainage facilities accepted by King County	16.35	
KCC 9.04.120	Drainage facilities accepted by King County	16.35	
KCC 9.12	Prohibited discharges in the Water Quality Section	16.50.020	
KCC 9.12	Water Quality	16.20 & 16.45	
KCC 9.12	Water Quality: Stormwater Pollution Prevention Manual Adoption	16.20.10	
KCC 16.62	Erosion and Sediment Control	16.25.10.1.e	
KCC 16.82	Clearing and Grading Code: Bridge Design	No Equivalent	The City follows WSDOT and King County Standards
KCC 16.82	Clearing and Grading Code: Clearing Limit	19.120	City of Federal Way uses both Chapter 19.120 and Appendix J of the International Building Code.

King County Code to Federal Way Revised Code (FWRC) Reference Table

King County Code Reference	Subject of Reference	FWRC Equivalent	Comment
KCC 16.82.095(A)	Erosion and sediment control standards: Seasonal limitation period	No Equivalent	The City follows the King County standards manuals per Code Section 16.20.010
KCC 16.82.100(F)	Grading Standards: Preservation of Duff Layer	No Equivalent	The City follows the King County standards manuals per Code Section 16.20.010
KCC 16.82.100(G)	Grading Standards: Soil Amendments	No Equivalent	The City follows the King County standards manuals per Code Section 16.20.010
KCC 16.82.150	Clearing standards for individual lots in the rural zone	Not applicable	FWRC does not contain rural zoning classification
KCC 20.20	Land Use Review Procedures	Chapter 19	
KCC 20.70.020	Critical Aquifer Recharge Area	19.145.450	
KCC 21A	Critical Areas Requirements	19.145	
KCC 21A.14.180.D	On-site recreation - space required	Chapter 19	The requirements vary by Zoning District. Refer to the applicable District.
KCC 21A.24	Critical Areas Code: 100 year floodplain	19.142	
KCC 21A.24	Critical Area Code: Bridge Design	No Equivalent	The City follows WSDOT and King County Standards
KCC 21A.24	Critical Areas Code: Bridge pier and abutment locations	No Equivalent	The City follows WSDOT and King County Standards
KCC 21A.24	Critical Areas Code: Building Setbacks	19.145	
KCC 21A.24	Critical Areas Code: Channel Migration Zone	No Equivalent	The City follows the King County standards manuals per Code Section 16.20.010
KCC 21A.24	Critical Areas Code: Definition Streams	19.05.190	
KCC 21A.24	Critical Areas Code: Definition Wetlands/Wetland Soils	19.05.230	
KCC 21A.24	Critical Areas Code: Fish Passage Requirements	19.145.390	
KCC 21A.24	Critical Areas Code: Flood Hazard Area Regulations	19.142	
KCC 21A.24	Critical Areas Code: Floodplain/Floodway Delineation	19.142.160	

King County Code to Federal Way Revised Code (FWRC) Reference Table

King County Code Reference	Subject of Reference	FWRC Equivalent	Comment
KCC 21A.24	Critical Areas Code: Floodplain Data	19.142.050	
KCC 21A.24	Critical Areas Code: Flood Protection facility	No Equivalent	The City follows the King County standards
KCC 21A.24	Critical Areas Code: Notice on Title	19.145.170	
KCC 21A.24	Critical Areas Code: Regulation of Wetlands	19.145.410	
KCC 21A.24	Critical Areas Code: zero-rise and compensatory storage provisions	No Equivalent	The City follows the King County standards
KCC 21A.24	Definitions: Critical Area Ordinance (CAO)	19.145	
KCC 21A.24	Farm Management Plans	No Equivalent	The City does not have Farm Management Plan requirements
KCC 21A.24	Floodplain Development Standards: Bridges	No Equivalent	The City follows WSDOT and King County Standards
KCC 21A.24	Notice on Title: Erosion Hazard Area	19.145.170	
KCC 21A.24	Rural Stewardship Plan or Farm Management Plan	No Equivalent	The City does not have Rural Stewardship Plan requirements
KCC 21A.24	Sensitive Area	14.05 & 19.05	The City does not have a broad definition, instead each specific area is defined separately
KCC 21A.24	Sensitive Area Tract	18.55.060	Sensitive areas can be placed in a conservation open space tract
KCC 21A.24.100	Critical Area Review	19.145	
KCC 21A.24.110	Critical Area Reports	19.145.080	
KCC 21A.24.170	Notice on Title	19.145.170	
KCC 21A.24.230	Floodplain and Flood Hazard Areas	19.142	
KCC 21A.24.270	Notice on Title	19.145.170	
KCC 21A.24.275	Channel migration zone development standards	No Equivalent	The City follows the King County standards

King County Code to Federal Way Revised Code (FWRC) Reference Table

King County Code Reference	Subject of Reference	FWRC Equivalent	Comment
KCC 21A.38	Property specific development standards or special district overlays	No Equivalent	The City does not have one code section that lists all of the property specific development standards or overlays, instead they are contained throughout code based on land use and property characteristics
KCC 23.20	Code Compliance: Citations	1.15	
KCC 23.24	Code Compliance: Notice and Orders	1.15.040	
KCC 23.28	Code Compliance: Stop Work Orders	1.15.030	
KCC 23.40	Code Compliance: Lien references on declaration of covenants form	Not applicable	FWRC does not contain an equivalent requirement
KCC 25	Shoreline Management: Bridge Design	No Equivalent	The City follows WSDOT and King County Standards

Section 4: Reference Materials:

Cited Federal Way Revised Code

The following are applicable excerpts from the City of Federal Way Revised Code and provided for convenience. In the event of discrepancies or subsequent code updates, the adopted City code governs.

16.05.180 R definitions.

“Redevelopment”

For the purposes of determining water quality review requirements “redevelopment” means, a project that proposes to add, replace, or modify impervious surface (for purposes other than a residential subdivision or maintenance) on a site that is already substantially developed in a manner consistent with its current zoning, or with a legal nonconforming use, or has an existing impervious surface coverage of 35 percent or more. Water quality for the entire subject property must be brought into compliance with FWRC Title [16](#), where the proposed redevelopment meets or exceeds the thresholds set forth, and shall be done in accordance with the approved King County, Washington Surface Water Design Manual or equivalent, as amended. (FWRC 19.30.120)

For the purposes of determining flow control and other stormwater review requirements, the definition of “redevelopment project” identified in the KCSWDM applies.

16.15.010 Regulated activities.

The following projects or activities are subject to the provisions of this title, unless exempted in FWRC 16.15.020:

- (1) Single-family residential; or
- (2) Projects that add 2,000 square feet or more of new impervious surface, replaced impervious surface or new plus replaced impervious surface; or
- (3) Projects that propose 7,000 square feet or more of land disturbing activity; or
- (4) Projects that propose to construct or modify a drainage pipe/ditch that is 12 inches or more in size/depth, or receives surface and stormwater runoff from a drainage pipe/ditch that is 12 inches or more in size/depth; or
- (5) Collection and concentration of surface and stormwater runoff from a drainage area of more than 5,000 square feet; or
- (6) Projects which contain, are adjacent to or directly discharge to a floodplain, stream, lake, wetland, or closed depression, groundwater recharge area, or other water quality sensitive area, or a receiving water with a documented water quality problem as determined by the Public Works Director, based on a written map, policy, water quality monitoring data or plan in existence or implemented by the director prior to submission of a redevelopment application which is determined to trigger application of this subsection, or based on information developed during review of a particular redevelopment application; or
- (7) Projects that involve a change in use, and the changed use has a potential to release a new pollutant(s) to surface water systems within the city. For the purposes of this subsection, “*new pollutant(s)*” means a pollutant that was not discharged at that

- location immediately prior to the change in use, as well as a pollutant that was discharged in less quantities immediately prior to the change in use; or
- (8) Projects other than normal maintenance or other than tenant improvements, but including any increase in gross floor area, in any one consecutive 12-month period which exceeds 50 percent of the assessed or appraised value (whichever is greater) of the structure or improvement; or
 - (9) Project proposing \$100,000 or more of improvements to an existing high use site.

[Note: the dollar amount indicated can be adjusted based on the consumer price index as identified in the KCSWDM in section 1.1.1.]

Redevelopment projects that are subject to water quality improvements may phase construction of the improvements as described in FWRC 19.30.120, Non-conforming water quality.

16.15.020 Exemptions.

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

- (1) Commercial agriculture, and forest practices regulated under WAC Title 222, except for Class IV General Forest Practices that are conversions from timber land to other uses; and
- (2) Development undertaken by the Washington State Department of Transportation in state highway rights-of-way is regulated by Chapter 173-270 WAC, the Puget Sound Highway Runoff Program.

All other new development and redevelopment is subject to the requirements of this title.

19.30.120 Nonconforming water quality improvements.

This section sets forth the standards when and under what circumstances a subject property that does not conform to the development regulations in FWRC Title [16](#) relating to water quality must be brought into compliance.

- (1) *Redevelopment.* For the purposes of this section, “*redevelop*” or “*redevelopment*” means a project that proposes to add, replace, or modify impervious surface (for purposes other than a residential subdivision or maintenance) on a site that is already substantially developed in a manner consistent with its current zoning, or with a legal nonconforming use, or has an existing impervious surface coverage of 35 percent or more. Water quality for the entire subject property must be brought into compliance with FWRC Title [16](#), where the proposed redevelopment meets or exceeds the thresholds set forth below pursuant to this chapter, and shall be done in accordance with the approved King County, Washington Surface Water Design Manual or equivalent, as amended.
 - (a) Redevelopment which involves the creation or addition of impervious surfaces having an area of 5,000 square feet or more;
 - (b) Redevelopment which involves the construction or replacement of a building footprint or other structure having a surface area of 5,000 square feet or more, or which involves the expansion of a building footprint or other structure by 5,000 square feet of surface area or more;

- (c) Redevelopment which involves the repair or replacement of 5,000 square feet or more of an impervious surface, when such redevelopment is not part of a routine maintenance activity;
 - (d) Redevelopment which involves the collection and/or concentration of surface and/or stormwater runoff from a drainage area of 5,000 square feet or more;
 - (e) Redevelopment which contains or directly discharges to a floodplain, stream, lake, wetland, or closed depression, groundwater recharge area, or other water quality sensitive area determined by the Public Works Director, based on a written map, policy, water quality monitoring data or plan in existence or implemented by the Public Works Director prior to submission of a redevelopment application which is determined to trigger application of this subsection, or based on information developed during review of a particular redevelopment application;
 - (f) Redevelopment which involves a change in use, and the changed use has a potential to release a new pollutant(s) to surface water systems within the city. For the purposes of this subsection, “*new pollutant(s)*” means a pollutant that was not discharged at that location immediately prior to the change in use, as well as a pollutant that was discharged in less quantities immediately prior to the change in use;
 - (g) Redevelopment, other than normal maintenance or other than the tenant improvements, but including any increase in gross floor area, in any one consecutive 12-month period which exceeds 50 percent of the assessed or appraised value (whichever is greater) of the structure or improvement being redeveloped. The appraisal must be from a state-certified general appraiser. For purposes of determining value under this section, improvements required pursuant to FWRC [19.30.090](#) (nonconforming development), [19.30.110](#) (street/sidewalk improvements), this section (nonconforming water quality improvements) and FWRC [19.135.030](#) (street/sidewalk improvements) shall not be counted towards the 50 percent threshold which would trigger application of this subsection;
 - (h) Redevelopment of property which drains or discharges to a receiving water that has a documented water quality problem, as determined by the Public Works Director based on a map, plan, water quality monitoring data or a written policy in existence or implemented by the Public Works Director prior to submission of a redevelopment application determined to trigger application of this subsection, where the Public Works Director determines that the redevelopment requires additional specific controls to address the documented water quality problem.
- (2) *Timing.* All improvements required by this section shall be constructed or installed concurrent with the redevelopment triggering application of this section, unless an applicant for redevelopment opts to pursue incremental construction of required improvements. In that event, the applicant shall develop and submit to the Public Works Director a stormwater management plan detailing all of the improvements required by this section, and proceed according to the following subsections:
- (a) *Extent of construction of required water quality improvements.* Where the Public Works Director determines that incremental construction is physically feasible, the applicant shall construct that portion of the required improvements according to the following schedule:

% of Redevelopment	% of Water Quality Improvements
0 – 24	25
25 – 49	50
>50	100

Where construction of 100 percent of water quality improvements is required under this subsection, the improvements may be constructed over a period extending no more than five years from the date of approval of the redevelopment. A person choosing to utilize such extended construction shall provide, prior to approval of the stormwater management plan, a performance bond and bond agreement that:

- (i) Have a term equal to the construction schedule proposed in the plan; and
 - (ii) Comply with the applicable requirements of Chapter [19.25](#) FWRC, as amended.
- (b) *Incremental construction not feasible.* Where the Public Works Director determines that incremental construction is not physically feasible, 100 percent of the required water quality improvements must be installed, concurrent with the redevelopment.
- (c) *Calculation of redevelopment value.* For purposes of calculating the value of redevelopment in order to apply subsection (2)(a) of this section, the Public Works Director shall consider the cost of the proposed redevelopment as a percentage of the assessed or appraised value of all structures on the subject property. The appraisal must be from a state-certified real estate appraiser.
- (d) *Subsequent redevelopment.* Whenever any person seeks approval for redevelopment on property for which incremental construction of required water quality improvements was previously authorized pursuant to this subsection (2), any additional water quality improvements to be required shall be determined by application of the schedule in subsection (2)(a) of this section based on the stormwater management plan prepared as part of the first request for authorization of incremental construction. If water quality requirements have changed since preparation of the initial stormwater management plan, a new plan shall be prepared detailing improvements required to comply with any existing and new requirements, and the schedule in subsection (2)(a) of this section shall also be applied to the new plan.
- (3) *Location of water quality improvements.* A person proposing redevelopment on a property or site having a Federal Way comprehensive plan designation of CC-F (city center frame) or CC-C (city center core) may construct water quality facilities required by this section below grade.

19.120.030 Exemptions.

Nothing in this section shall be interpreted to allow clearing, grading, and/or the removal of trees or other vegetation within sensitive areas or sensitive area buffers where prohibited under FWRC Title [19](#), Division IV, Critical Areas, or in designated native growth protection areas. Clearing and grading activities are also subject to review under Appendix Chapter J of the International Building Code.

The following actions shall be exempt from the provisions of this article:

- (1) Digging and filling for cemetery graves.
- (2) Clearing and grading in a right-of-way authorized in writing by the director of the department of public works for pothole and square cut patching; overlaying existing asphalt or concrete pavement with asphalt or concrete without expanding the area of coverage; shoulder grading; reshaping/regrading drainage systems; crack sealing; resurfacing with in-kind material without expanding the road prism; and vegetation maintenance.
- (3) Mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate, or clay where a permit has been issued by the State Department of Natural Resources.
- (4) Exploratory excavations under the direction of a professional engineer licensed in the state; provided, that the extent of the clearing and grading does not exceed the minimum necessary to obtain the desired information.
- (5) Normal maintenance and repair of the facilities of a common carrier by rail in interstate commerce within its existing right-of-way.
- (6) Excavations for utility service connections to serve existing and/or new structures and that is outside any area that is within the jurisdiction of Chapter [19.145](#) FWRC.
- (7) Actions which must be undertaken immediately, or within a time too short to allow for compliance with the requirements of this article, to avoid an imminent threat to public health or safety; to prevent an imminent danger to public or private property; or to prevent an imminent threat of serious environmental degradation. This determination will be made by the Public Works Director.
- (8) Clearing and grading actions that are an integral part of an ongoing agricultural or horticultural use on the subject property.
- (9) Tree and vegetation removal actions conducted on a residential lot that contains a detached dwelling unit together with any contiguous lots under the same ownership that are being maintained for the use and enjoyment of the homeowner that comply with the following criteria:
 - (a) Any trees or vegetation removed must be outside any area that is within the jurisdiction of Chapter [19.145](#) FWRC.
 - (b) No trees or vegetation will be removed if that vegetation was required to be retained by or through any development permit issued under this chapter or any prior zoning code.
 - (c) Tree and vegetation removal will not change the points where the stormwater or groundwater enters or exits the subject property and will not change the quality, or velocity of stormwater or groundwater.
 - (d) Trees with a diameter at breast height (dbh) of up to six inches and vegetation may be removed without city review and approval if criteria (9)(a) through (c) of this section are met.
 - (e) Trees with a dbh of six inches or greater may be removed subject to the minimum tree units per acre standard established by Table 19.120.130-1 and subject to criteria (9)(a) through (c) of this section.
 - (f) Removal of trees with a dbh of six inches or greater that will result in the subject property falling below the minimum tree units per acre standard per Table 19.120.130-1 shall require planting of replacement trees as necessary to meet the

minimum tree units per acre standard, or the existing tree units per acre represented by the trees proposed for removal, whichever is less.

- (g) Hazard trees and nuisance vegetation may be removed without city review and approval if criteria (9)(a) through (c) of this section are met.
- (10) Clearing and grading actions that comply with all of the following criteria:
- (a) The subject property contains a permanent building or an active use.
 - (b) The clearing or grading activity will not change the points where the stormwater or groundwater enters or exits the subject property, and will not change the quality or velocity of stormwater or groundwater.
 - (c) The clearing or grading activity is outside any area that is within the jurisdiction of Chapter [19.145](#) FWRC.
 - (d) Grading, filling, and excavation totals less than 100 cubic yards. Quantities of excavation and fill are calculated separately and then added together to determine total excavation and fill.
 - (e) No trees or vegetation will be removed if that vegetation was required to be retained by or through any development permit issued under this chapter or any prior zoning code.
- (11) Routine maintenance of trees and vegetation necessary to maintain the health of cultivated plants. Topping of trees as defined in Chapter [19.05](#) FWRC is considered tree removal, not maintenance.
- (12) Removal of overhanging vegetation and fire hazards, or removal of invasive species, hazard trees, nuisance vegetation, or dead, dangerous, or diseased trees when authorized by the director or his/her designee.
- (13) Removal of trees in easements and rights-of-way for the purposes of constructing public streets and utilities. Protection of trees shall be a major factor in the location, design, construction, and maintenance of streets and utilities. These activities are subject to the purpose and intent of this article.
- (14) Removal of trees on sites zoned city center core (CC-C) and city center frame (CC-F).

Section 5: Mapping:

The City of Federal Way equivalents to the Flow Control Applications Map and the Water Quality Applications Map are attached, as periodically updated. The current versions of the maps are available from the Public Works Department. The City's equivalent to the County Landslide Hazard Drainage Areas Map is the City Sensitive/Critical Areas Map available from the Community Development Planning Division.