

Flood Hazard Certification – Application Information & Guidance

The following provides information needed to complete the Flood Hazard Certification Application for properties located in unincorporated King County. See the <u>Floodplain Development Permit Information packet</u> for additional guidance.

Section A (to be completed by an applicant or applicant's engineer)

The purpose of Section A is to identify the type and location of the flood hazards on the parcel with the proposed floodplain development and identify study requirements. A specific analysis must be provided, accompanied by an explanation in Section B of which analytical methodologies were used, for all proposed floodplain development unless the project meets the conditions that don't require analyses in each subsection. If an analysis was required by section 4.4.2 of the King County Surface Water Design Manual, attach the relevant documentation to this Flood Hazard Certification.

King County code requires that floodplain development comply with regulations based on the effective flood hazard data shown on the effective FEMA Flood Insurance Study and accompanying Flood Insurance Rate Maps, but if there are better available data showing higher regulatory standards, then those must be used. King County Code 21A.24.230 identifies the sources of better available data that can be used.

A.1. Flood Information

Floodplain map information can be found on <u>King County iMap</u> (under the bookmarks tab in the upper right-hand corner, toggle "Floodplain Management") or go to FEMA's <u>Map Service Center</u>.

A.2. FEMA Floodway

Based on section 21A.24.260 of the King County Code and section 4.4.2 of the King County Surface Water Design Manual, the proposed floodplain development in the FEMA floodway must have documentation certifying no-rise, which shall demonstrate NO impact on the 1% annual chance (100-year) floodway elevations when compared to the existing conditions or pre-project conditions model. This certification shall be determined and certified by a registered professional engineer using standard methods and practices and will be referred to as a "FEMA Floodway no-rise analysis".

A.3. King County Zero-Rise Floodway

Based on section 21A.24.250 of the King County Code and section 4.4.2 of the King County Surface Water Design Manual, the proposed floodplain development cannot create a measurable increase to

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the water surface elevations or energy grade line for the 1% annual chance (100-year) flood when compared to the existing conditions or pre-project conditions. This certification of no measurable increase to water surface elevations or the energy grade line is to be determined and certified by a registered professional engineer using standard methods and practices accepted by the King County Department of Natural Resources and Parks and will be referred to as a "King County zero-rise analysis".

A.4. Compensatory Storage

Based on section 21A.24.240 of the King County Code, the proposed floodplain development cannot reduce the effective base flood storage volume of the floodplain and must provide compensatory storage if grading or other floodplain development displaces any effective flood storage volume. Compensatory storage must be provided at equivalent elevations. Compensatory storage is to be determined and certified by a registered professional engineer using standard methods and practices accepted by the King County Department of Natural Resources and Parks and will be referred to as a "compensatory storage analysis".

A.5. Base Flood Depth and Base Flood Velocity Analysis

Based on section 21A.24.240 of the King County Code, proposed floodplain developments are not allowed if the base flood depth exceeds three feet and the base flood velocity exceeds three feet per second. This is to be determined and certified by a registered professional engineer using standard methods and practices accepted by the King County Department of Natural Resources and Parks and will be referred to as a "base flood depth and base flood velocity analysis".

Section B

Section B.1. FEMA Floodway No-Rise Certification

Section B.1 is used to identify, and present which analytical methodologies were used to demonstrated compliance with King County Code 21A.24.260. This section shall be completed by an engineer licensed in the state of Washington when an analysis is required per Section A. If the proposed floodplain development is not located in a FEMA floodway, proceed to Section B.2.

<u>Section B.2. King County Zero-Rise Floodway Certification, Compensatory Storage, and Base Flood Depth and Velocity</u>

Section B.2 is used to identify, and present which analytical methodologies were used to demonstrate compliance with King County Code 21A.24.230, 21A.24.240, and 21A.24.250. This section shall be completed by an engineer licensed in the state of Washington when an analysis is required per Section A.

Section C. Department of Natural Resources and Parks Review

Section C shall be completed by the reviewer from the King County Department of Natural Resources and Parks' River and Floodplain Management Section (DNRP, RFMS).

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Additional Resources

King County

Department of Natural Resources and Parks (DNRP)

Water and Land Resources Division (WLRD)

Department of Local Services, Permitting Division

Floodplain Development Permit Information, Forms and Application packet

Property Research and Mapping Resources

On-line Permit Status, Invoice Payment and Inspection Scheduling

IVR Inspection Scheduling, phone number and codes

Federal Emergency Management Agency (FEMA)

National Flood Hazard Layer Viewer

Map Service Center