

King County Channel Migration Public Rule Update and Revisions

June 2024 Report per Ordinance 17485, Section 50.O

May 2024

Introduction

Channel migration, a type of flood hazard from riverbank erosion and channel shifting, can threaten people and property. King County regulates land uses within mapped channel migration hazard areas to reduce these risks. Channel migration, however, can be present outside of the mapped floodplain areas.

In 1999, King County adopted criteria for mapping channel migration hazard areas and mapped four river areas (Raging, Tolt, Middle Green, and the area of the Three Forks of the Snoqualmie) that were most at risk of channel migration. Other major rivers were not mapped at that time. The County also adopted development regulations to control development within these mapped channel migration hazard areas.

This report includes a summary of work accomplished since January 2024 and lists upcoming milestones for the first and second quarters of 2024.

Ordinance Text

Ordinance 17485, Section 50.O included a King County Comprehensive Plan work program item directing that:¹

By June 1, 2013, the executive shall provide a report detailing the progress of the rule making process, as required by this ordinance, which will develop the criteria for the designation and mapping of the channel migration zone areas in unincorporated King County. Additional reports to provide updates on the progress on the rule making process and implementation of the designation and mapping of channel migration zones shall be provided each January 1 and June 1, until the mapping is completed. The reports required by this subsection shall be transmitted to the council in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all councilmembers and to the lead staff for the transportation, economy and environment committee, or its successor.

Background

In 2012, the County updated its Shoreline Master Program and the King County Code with respect to channel migration zones (CMZ) as required by the Washington State Department of Ecology to comply with the Shoreline Management Act, Revised Code of Washington (RCW) Chapter 90.58.^{2,3} With these code changes, the Department of Local Services (DLS), formerly the Department of Permitting and

¹ [Link to Ordinance 17485](#)

² [Link to Shoreline Management Act](#)

³ [Link to RCW Chapter 90.58](#)

Environmental Review, and the Department of Natural Resources and Parks (DNRP) were required to adopt, by public rule, criteria for channel migration designation, classification and mapping, and channel migration zone studies and maps (K.C.C. 21A.24.274A).⁴ Both functions were accomplished by updating the existing King County channel migration public rule in March 2014.⁵

CMZ studies were completed and adopted on the Cedar (2015), South Fork Skykomish (2017), Tolt (2017), Raging (2019), Middle White (2019), and Greenwater (2022) rivers.

Once adopted via the public rule process, the studies are deemed “effective” and used to review land-use proposals.⁶ Studies of the remaining rivers are proceeding using the new mapping criteria specified in the public rule. The Lower Snoqualmie River study has been in progress since the second quarter of 2020. The Issaquah Creek study was initiated after a February 2020 flood event resulted in widespread inundation, damage, and channel migration.

This report constitutes the required progress report.

Summary

The public rule serves as the administrative mechanism for adopting completed channel migration studies and the resulting mapping. DNRP applied the mapping criteria in the public rule to prepare a CMZ study and maps for applicable King County stream segments along Issaquah Creek beginning in 2022. After the study and mapping are prepared, DNRP and DLS will present information at a public meeting to engage the landowners and stakeholders in the areas covered by the CMZ study and maps. Work on the Lower Snoqualmie River CMZ had been delayed due to a staffing shortage and has now restarted.

Accomplishments during the first and second quarters of 2024 include the following:

Issaquah Creek CMZ

- Data synthesis and analysis continued in Q1 and Q2 2024.

Lower Snoqualmie River CMZ

- The data and analyses were reviewed and checked, and report preparation was completed.
- The draft map and study report underwent internal review in Q2 of 2024.
- Preparation for public process necessary for map adoption and rule amendment began.

Next Steps

- The Water and Land Resources Division (WLRD) will continue to complete technical analyses and report preparation for the Issaquah Creek CMZ study in Q3 and Q4 of 2024.

⁴ [Link to K.C.C. 21A.24.274A](#)

⁵ [Link to King County Channel Migration Public Rule](#)

⁶ [Link to Public Rule LUD-17-1-3-PR](#)

- WLRD will complete internal reviews of the Lower Snoqualmie River CMZ draft map and study report in Q3 and release them to the public for review in Q4 2024.
- Planning for the public process for the Lower Snoqualmie River CMZ, including preparation and review of public meeting materials and coordination with DLS, began in Q1 2024 and will conclude with a public meeting in Q4 2024.
- The next required status report, due to the King County Council on January 1, 2025, will include a schedule update of draft and final study reports and mapping conducted in the second half of 2024.

Information prepared in these CMZ studies is being used in conjunction with flood and landslide hazard mapping to improve information about flood-related hazards along river corridors. The studies also provide information about dynamic habitat-forming river processes and may be useful in planning efforts for regional habitat restoration.