



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

July 17, 2018

FCDEC Motion 2018-03

Proposed No. FCDECM2018-03.1

Sponsors

1 A MOTION approving a framework of goals, objectives
2 and conceptual approaches for preparation of a capital
3 investment strategy for the Middle Fork Snoqualmie River.

4 WHEREAS, the scope of the proposed Middle Fork Snoqualmie River Corridor
5 Plan ("the Corridor Plan") is the lower five miles of the Middle Fork Snoqualmie River
6 ("the Study Area"), where communities are most impacted by flooding and channel
7 migration and where King County maintains a discontinuous system of flood protection
8 levees and revetments, and

9 WHEREAS, the Corridor Plan will recommend a prioritized and sequenced suite
10 of actions for the river and its floodplain, channel migration zone, and riparian areas ("the
11 Capital Investment Strategy"), and

12 WHEREAS the Study Area is subject to flood hazards including local bank
13 erosion as well as channel migration and potential avulsion, and

14 WHEREAS, there is over \$40 million of residential development within the Study
15 Area, and

16 WHEREAS, there are 14 King County flood facilities within the Study Area
17 including 11 bank protection revetments and three training levees, and

18 WHEREAS, the levees in the Study Area overtop at approximately a 30-year
19 flood event, and

20 WHEREAS, approximately 300 structures in the Study Area are at risk of
21 inundation at a 100-year flood event, and

22 WHEREAS, approximately 20 structures in the Study Area are located in the
23 severe channel migration zone;

24 NOW, THEREFORE, BE IT MOVED BY THE EXECUTIVE COMMITTEE OF
25 THE KING COUNTY FLOOD CONTROL ZONE DISTRICT:

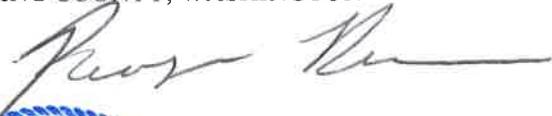
26 A. The executive committee adopts the "Middle Fork Snoqualmie River Corridor

27 Plan Capital Investment Strategy Floodplain Management Goals and Objectives," which
28 is Attachment A to this motion.
29

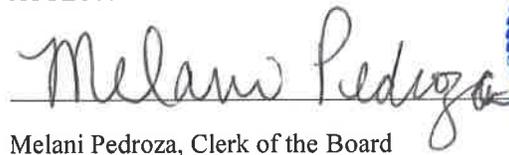
FCDEC Motion 2018-03 was introduced on and passed by the King County Flood Control District Executive Committee on 7/16/2018, by the following vote:

Yes: 4 - Mr. von Reichbauer, Ms. Lambert, Mr. Dunn and Mr. Upthegrove
No: 0
Excused: 0

KING COUNTY FLOOD CONTROL ZONE
DISTRICT
KING COUNTY, WASHINGTON



ATTEST:


Melani Pedroza, Clerk of the Board

Attachments: A. Middle Fork Snoqualmie River Corridor Plan Capital Investment Strategy Floodplain Management Goals and Objectives

Middle Fork Snoqualmie River Corridor Plan
Capital Investment Strategy

FLOODPLAIN MANAGEMENT GOALS AND OBJECTIVES
July 16, 2018

Overview

The scope of the Middle Fork Snoqualmie River Corridor Plan is focused on the lower five miles of the Middle Fork Snoqualmie River. This is a residential area where communities are most impacted by flooding and channel migration, and where King County maintains a discontinuous system of flood protection levees and revetments. Upstream of this five-mile river segment, the floodplain is predominantly undeveloped forest lands.

The result of this planning effort will be the Middle Fork Snoqualmie River Capital Investment Strategy (the Middle Fork CIS). The Middle Fork CIS will recommend a prioritized and sequenced suite of actions for the river and its floodplain, channel migration zone, and riparian areas to achieve the goals and objectives outlined below. The Plan is being conducted under the auspices of the King County Flood Control District, in partnership and collaboration with the Cities of North Bend and Snoqualmie, local residents and other stakeholders, tribes, and others affected by floodplain management actions. The Plan will have a significant emphasis on reducing risks to public safety and public and private infrastructure associated with flooding and river processes.

A characterization of existing conditions is underway to evaluate flooding and channel migration conditions along this corridor. This characterization is based on extensive data collection, computer modeling, technical analysis, and consultation with local residents and interested stakeholders. Together this information describes existing and potential future conditions and provides a basis for recommending a prioritized and sequenced capital investment strategy.

Goals and Objectives

The following goals and objectives are intended to provide clarity about desired outcomes for the Capital Investment Strategy (CIS) and its recommendations. The goals are consistent with adopted County floodplain management goals from the 2006 Flood Hazard Management Plan. The objectives provide targets for the Middle Fork CIS, against which approaches and potential actions at specific sites can be evaluated. The final CIS may not be able to fully meet every objective, but it should include an evaluation of tradeoffs among the various objectives in order to recommend a corridor-scale floodplain management approach that meets them to the maximum extent possible.

Goal 1: Reduce risks from flood and channel migration hazards

Objectives:

- Mitigate risks associated with inundation and deep and fast flow hazards in consideration of future sediment aggradation and uncertainties due to climate change.
- Mitigate risks from channel migration and avulsion hazards predicted within the next 50 years in areas with homes and infrastructure.

Rationale

Increasing public safety by reducing flood risks should be the primary consideration when comparing alternative approaches. Middle Fork Snoqualmie River flood protection facilities do not provide complete or consistent flood containment. Risk reduction should consider both flood inundation and the river's high potential to shift courses or rapidly meander across its floodplain, creating hazards related to channel migration, potential avulsions, areas of deep and fast flows, and isolation due to inundated roadways. Risk reduction measures in these areas should address this full range of hazards. A minimum 50-year time frame should be used for considering and reducing risks associated with gravel accumulation, channel migration, and avulsion hazards and accounting for uncertainties due to climate change and other factors.

Goal 2: Reduce long-term repetitive costs of flood hazard management

Objectives:

- Implement sustainable cost-effective floodplain management solutions.
- Reduce long-term costs of floodplain management.

Rationale

Floodplain management solutions should be evaluated for both their short- and long-term cost effectiveness to reduce life-cycle floodplain management costs over time. Costs should be compared among alternative approaches and this comparison should evaluate costs and benefits over the complete life cycle of implementation and maintenance.

Goal 3: Integrate sound and sustainable flood hazard management projects/practices that benefit the natural environment to the degree practicable.

Objectives:

- Protect and improve floodplain habitats and off-channel connectivity, when appropriate.

- Protect and improve instream aquatic habitat quality and quantity.
- Protect and improve riparian habitat quality and quantity.

Rationale

Protecting and restoring the natural environment of the Middle Fork Snoqualmie River corridor is a high priority among various stakeholders and tribes, and achieves several adopted King County Comprehensive Plan goals. Floodplain management and habitat protection and restoration needs often comprise the same geographic footprints, and can often be achieved through complementary actions. Habitat conditions along portions of the Middle Fork Snoqualmie River corridor is significantly degraded, in large part due to the levees, roads, and development disconnecting the river from its floodplain and riparian areas. In some locations, modifications to potentially obsolete flood protection facilities may provide significant aquatic and riparian habitat improvements and reduce flood hazards.

Goal 4: Incorporate stakeholder and community input into the Corridor Planning process in an equitably and socially just manner.

Objectives:

- Incorporate stakeholder input into the Corridor Plan through community and stakeholder engagement from those affected by floodplain management actions.
- Strive to provide equitable flood risk reduction outcomes throughout the river corridor to the degree practicable.

Rationale

The Middle Fork Snoqualmie River flows through and near communities with a range of interests and demographic characteristics. In addition, many organizations and individuals are affected by floodplain management decisions for the river, including the Cities of North Bend and Snoqualmie, the Tulalip Tribes, the Snoqualmie Tribe, community organizations, local and regional non-governmental organizations, King County, and state and federal agencies. Engagement will be built through neighborhood and public meetings, technical stakeholder workshops, as well as through many discussions with individuals and organizations. Meaningful engagement can lead to a Plan that better achieves equitable outcomes and seeks to improve the quality of life for those living along the River.