

White Paper

Integrated Floodplain Management & Capital Project Prioritization

DRAFT as of 3/13/2025

The King County Flood Control District ("District") is committed to providing flood risk reduction capital projects and programs to the residents of King County. The District works to accomplish this critically important purpose by efficiently, effectively, and transparently reducing flood risks and enhancing community and environmental resilience through a comprehensive approach to floodplain management. Projects and programs designed to reduce flood risks are developed and implemented in collaboration with Tribes, federal, state, and local governments, environmental and community organizations, interested parties, and the public, reflecting shared values and priorities. As driven by the District's Mission of implementing flood risk reduction policies and projects to protect life and property while advancing various benefits including equity and social justice, sustainable livelihoods, habitat protection, salmon recovery, recreation, resilient communities, and others, this White Paper is intended to clarify the District's position regarding Integrated Floodplain Management and associated efforts to prioritize and fund the District's capital improvement projects.

Integrated Floodplain Management

The District was established in 2007 to provide dedicated funding and policy oversight for flood risk reduction capital projects and programs across King County. The District operates under the guidance of the 2006 King County Flood Hazard Management Plan, which serves as a foundational framework for developing a comprehensive approach to floodplain management. While the terms "Comprehensive Floodplain Management" and "Integrated Floodplain Management" are often used interchangeably, the District primarily adopted the term Integrated Floodplain Management following the passage of District Motion FCD2020-07 (Multi-Benefit Motion) in 2020.

As a foundational framework, the 2006 King County Flood Hazard Management Plan established criteria for taking action to reduce flood risks. When evaluating flood and channel migration risks, the potential consequences of inaction must be assessed. Some risks require immediate attention based on their severity and the vulnerability of affected communities, infrastructure, and ecosystems. In certain cases, there is a legal obligation to address flooding risks, such as when contractual agreements with property owners or partner agencies require the maintenance of flood protection facilities.

To ensure resources are directed where they are most needed, the 2006 King County Flood Hazard Management Plan prioritizes actions to mitigate flood and channel migration risks based on the following criteria, in order of importance:

- Consequences of Inaction The potential impacts if no intervention occurs, including threats to public safety, property damage, environmental degradation, and disproportionate effects on vulnerable populations.
- Urgency (or risk) The immediacy of the threat and how quickly action must be taken to prevent the risk from escalating.
- Legal Responsibility and Authority The presence of contractual agreements or statutory obligations requiring King County to maintain a flood protection facility.
- Funding and Partnership Opportunities The availability of financial resources or collaborative opportunities that enhance the feasibility and effectiveness of flood risk reduction efforts.

Furthermore, the District's Integrated Floodplain Management position incorporates District Motion FCD2020-07 (Multi-Benefit Motion) and District Motion FCD2021-16 (Capital Project Delivery Motion). These motions provide a robust framework for accomplishing the District's strategic goals, and Integrated Floodplain Management, as clarified in this White Paper, aligns with these motions without introducing changes, ensuring continuity and consistency in capital project planning and implementation.

Building on the criteria established in the 2006 King County Flood Hazard Management Plan and previously approved motions, this White Paper clarifies the District's position on Integrated Floodplain Management. The District's approach is structured around three key components that serve as the foundation for managing flood risks and strengthening community resilience. These components are designed to not only enhance flood safety but also align with broader social, environmental, and economic objectives. By integrating these priorities, the District ensures a holistic, adaptive strategy that promotes sustainability and enables communities to thrive amid future uncertainties.

Key Components

The three key components of the District's Integrated Floodplain Management position and associated efforts to prioritize and fund the District's capital improvement projects are as follows:

1. Flood Risk Reduction

- Upgrading and modernizing King County's aging flood risk reduction facilities to meet current and future demands, ensuring these structures provide reliable mitigation against flooding events.
- Providing support to jurisdictions and organizations to design and implement projects primarily related to flood and stormwater management. Water quality and habitat-related projects are eligible for District support when connected to flooding or stormwater solutions.
- To ensure the District's limited resources are directed toward addressing the most critical vulnerabilities in the flood risk reduction system, the District utilizes a "worst-first" paradigm prioritizing flood risk reduction projects based on an assessment of risk, severity, and consequence.

- o Risk (or urgency) is a criterion used to describe how soon the flood risk needs to be addressed to avoid its occurrence or reoccurrence.
- o Severity and consequence, combined, are prioritized using two criteria.
 - The first criterion is intended to evaluate the nature and severity of the impacts, irrespective of the scale at which the impact will occur.
 - The second criterion is intended to describe the scale of the problem is the problem manifest over a large area or in a manner that will affect a large number of people, or is it largely localized? In instances where the physical impact is over a small area, but a larger number of people will be affected, prioritization is based on the impact rather than just the physical area.
- Consequence has an additional criterion intended to differentiate between types of land uses. If more than one type of land use is at risk, prioritization will be given to the higher ranked applicable land use, as ranked by King County:
 - Critical Facilities
 - Residential
 - Commercial (some commercial structures are critical facilities)
 - Agriculture (Farmland Preservation Program [FPP] land should be given a higher priority than non-FPP lands)
 - Developed Recreational (those with regional importance should receive higher prioritization)
 - Undeveloped land in floodplain or Moderate Channel Migration Zone (CMZ)
 - Undeveloped land in floodplain or Severe CMZ
- During the evaluation of capital projects, additional prioritization may be determined based on:
 - o Project readiness;
 - o Project's ability to leverage District funds with external resources or funding;
 - o Project's support of multiple floodplain objectives;
 - o Project's cost effectiveness;
 - o Project's meeting or exceeding floodplain management regulations;
 - Project's score in FEMA's Community Rating System;
 - o Project's relation to an active CIP program for flooding and/or stormwater drainage; and
 - o Project's relation to an active O&M program for flooding and/or stormwater drainage.
- Prioritizing assessments may be done quantitatively, qualitatively, or a combination thereof, and input may be received from the Advisory Committee, Joint Basin Technical Committee, and service providers. Final approval of flood risk reduction priorities and projects resides solely with the District's Board of Supervisors.

2. Advancing Multi-Benefits

• The District is committed to the interconnectedness of flood risk reduction, environmental stewardship, equity and social justice, and environmental justice and supports advancing interrelated community interests with multi-benefits including:

- Equity and Social Justice;
- o Environmental Justice;
- Habitat Protection and Salmon Recovery;
- o Resilient Communities and Ecosystems;
- o Productive and Viable Agriculture;
- Sustainable Development;
- Jobs and Sustainable Livelihoods;
- Open Space conservation;
- o Sustainable and Clean Water; and
- o Recreation and Other Opportunities to Connect People with Nature.
- Balancing flood risk reduction with the multi-benefits identified above, where applicable, reflects the principles of resilience. This approach ensures that floodplain strategies not only reduce immediate risks but also support long-term sustainability and adaptive capacity to meet future challenges.

3. Other Considerations

- The District follows all Tribal Treaty Rights and applicable federal, state, and local laws when implementing its Integrated Floodplain Management approach.
- The Integrated Floodplain Management principles employed by the District also seeks equitable distribution of the District's resources geographically to serve residents countywide and across both rural and urban areas as well as incorporated and unincorporated.

Commitment to Collaboration

The District is committed to working with Tribes, local, county, state, and federal governments, environmental and community organizations, interested parties, and the public, to develop and implement Integrated Floodplain Management solutions that reflect shared values and priorities. This includes honoring all Tribal Treaty Rights and applicable federal, state, and local laws. Through these efforts, the District aims to enhance community safety, foster ecological health, and promote a more equitable and sustainable future for all residents of King County. It is important to note, these partnerships are essential not only during the planning and design phases of capital projects but also in funding collaborations.

Recognizing that the District's finite revenue resources are primarily focused on implementing flood risk reduction projects and programs, this collaborative approach allows the District to achieve the maximum benefits for each project. By engaging partners in both strategic and financial capacities, the District ensures that multi-benefit projects—incorporating elements such as habitat restoration and recreational spaces, for example—are realized to their fullest potential. This shared investment approach underscores the importance of leveraging resources and expertise to create impactful, sustainable outcomes for King County communities.

By adhering to this principle of collaboration, the District ensures that its Integrated Floodplain Management initiatives are effective, equitable, and forward-looking, helping to protect people, property, infrastructure, and the environment for generations to come.

Conclusion

This White Paper clarifies the District's position regarding the principles of Integrated Floodplain Management, representing a forward-thinking and inclusive approach to addressing flood risks and enhancing resilience throughout King County. Integrating equity and social justice, environmental justice, sustainability, and environmental stewardship ensures that floodplain strategies and capital projects prioritize public safety and ecological health while promoting resilience.

By building upon and adding clarity to the 2006 King County Flood Hazard Management Plan criteria for taking action to reduce flood risks and aligning seamlessly with District Motions FCD2020-07 and FCD2021-16, the Integrated Floodplain Management position strengthens the District's commitment to multi-benefit projects, helping to deliver flood safety while advancing social, environmental, and economic goals.

Collaboration remains at the heart of this approach, leveraging partnerships and shared funding opportunities to maximize the benefits of each project. Fostering inclusivity and equity lays the foundation to help accomplish the District's Vision of building a future to withstand flood risks where thriving King County communities and healthy ecosystems coexist in harmony with area rivers.

Glossary

- 1. **Consequence**: The potential outcomes of a flood event, including threats to public safety, damage to infrastructure and property, economic disruptions, environmental degradation, and disproportionate impacts on vulnerable populations.
- 2. **Environmental Justice**: All people, regardless of race, color, national origin, or income (historically disadvantaged populations), enjoy the same degree of protection from environmental and health hazards.
- 3. **Environmental Stewardship**: The responsible management and protection of natural resources and ecosystems to ensure their sustainability for present and future generations. It involves proactive efforts to conserve, restore, and enhance the environment through practices that minimize human impact, promote biodiversity, and support ecological balance. Environmental stewardship can be carried out by individuals, communities, organizations, and governments through policies, conservation initiatives, sustainable land and water management, and advocacy for environmental justice.
- 4. **Equity**: Ensuring fair treatment and meaningful involvement of all people, regardless of race, color, ethnicity, religion, income, or education by providing resources to community members that are proportionate to what they need to thrive.
- 5. **Flood Risk Reduction**: An action taken to decrease exposure of people and property to flood or channel migration hazards.

- 6. **Habitat Protection and Salmon Recovery**: Restore and protect riparian and in-stream habitats to benefit fish and aquatic organisms and to support long-range recovery goals for Endangered Species Act (ESA)-listed Chinook and steelhead.
- 7. **Jobs and Sustainable Livelihoods**: Diversity and number of jobs that are retained and increased in areas suitable for development that support residents and employees.
- 8. **Open Space Conservation**: Retain priority open space in the floodplains and advance regional conservation plans. The U.S. Forest Service defines open space as land that is valued for natural processes and wildlife, agricultural and forest production, aesthetic beauty, active and passive recreation, and other public benefits. Locally based, long-term open space conservation plans help communities protect their environment, improve quality of life, and preserve critical elements of the local heritage, culture, and economy.
- 9. **Productive and Viable Agriculture**: Create, support, and implement policies and actions that support continued production of crops and livestock on the remaining farmland.
- 10. Recreation and Other Opportunities to Connect People with Nature: Leverage existing plans and fill known gap areas in recreation in an equitable manner.
- 11. **Resilience**: The ability of communities, ecosystems, and infrastructure to recover quickly and effectively from flooding events while adapting to changing conditions over time.
- 12. **Resilient Communities and Ecosystems**: Create, support, and implement policies and actions that reduce climate change vulnerabilities equitably and increase the resilience of communities, natural systems, and the built environment.
- 13. **Risk**: The estimated impact that a hazard would have on people, services, facilities, and structures in a community. Risk measures the likelihood of a hazard occurring and resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to occurrence of a specific type of hazard. Risk also can be expressed in terms of potential monetary losses associated with the intensity of the hazard. Synonymous with urgency.
- 14. **Severity**: The potential magnitude of flood impacts, including the depth and velocity of floodwaters, the extent of inundation, the duration of flooding, and the resilience of the affected community, acknowledging historically underserved communities may have limited resilience. Severity is typically identified by river basin in terms of phases based on historical flood events.
- 15. **Social Justice**: Ensuring fair treatment and meaningful involvement of historically repressed people who have disproportionately faced institutional discrimination or systemic racism.
- 16. **Sustainability**: The capacity to meet present flood protection needs without compromising the ability of future generations to address their own needs, emphasizing long-term ecological health, community well-being, and climate adaptability.
- 17. **Sustainable and Clean Water**: Create, support, or implement policies and actions to improve water quality (temperature and chemistry).
- 18. **Sustainable Development**: A development pattern that recognizes ecosystem values, is resilient to climate change and natural hazards, sustains a viable economy, creates livable communities, and advances equity. Economic development conducted without depletion of natural resources. It is an organizing principle for meeting human development goals while sustaining the ability of natural systems to provide the natural resources and

ecosystem services on which the economy and society depend. It can also be defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

