



King County Flood Hazard Management Plan Update
Citizen Committee Meeting
February 15, 2012



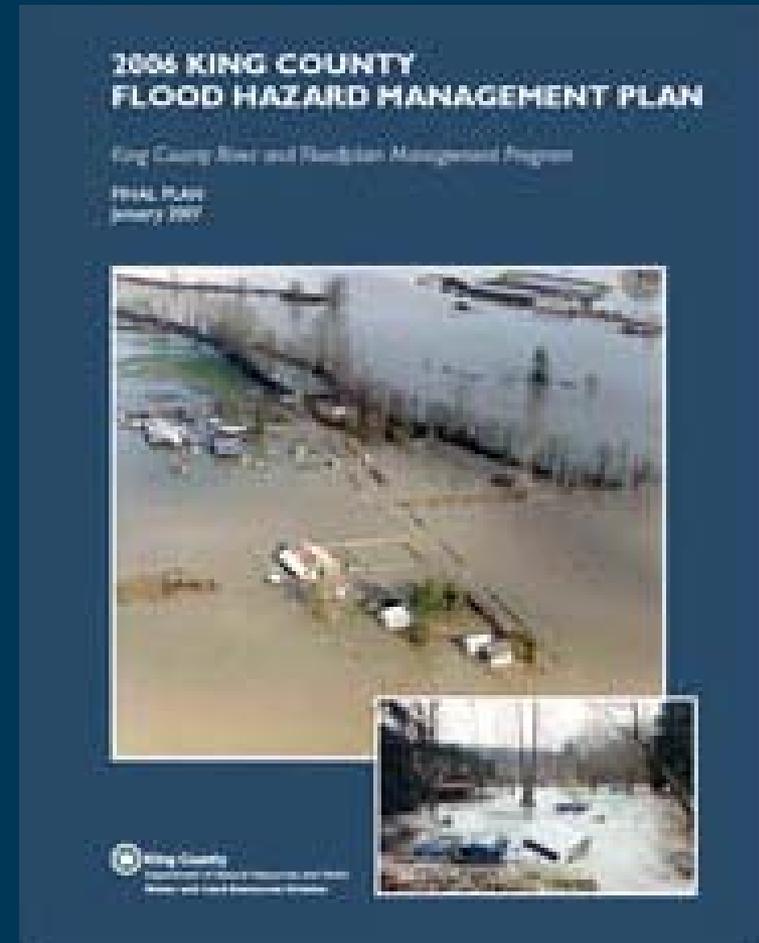
Presentation Overview

- Background and Context
- Coastal Capital Funding Issue Paper
- Urban Flooding Issue Paper



History: 2006 Flood Plan

- Scope of Plan is all of county, with a ‘focus’ on major rivers and significant tributaries
- Council interest is in addressing capital repair needs on major rivers
- Prioritization policies focus on ‘consequence, severity, and urgency’
- Funding sources pre-2008:
 - River Improvement Fund (unincorporated KC)
 - Green River Flood District
 - Inter-County (White River)



History: Flood District Formation (2007)

- \$350M capital program over 10 years
- State legislation for Flood Districts has broad scope
- Many non-river floodplain cities interested in seeing consideration of ‘subregional’ flooding projects.
- Over \$85 million in additional need identified by cities in 2007

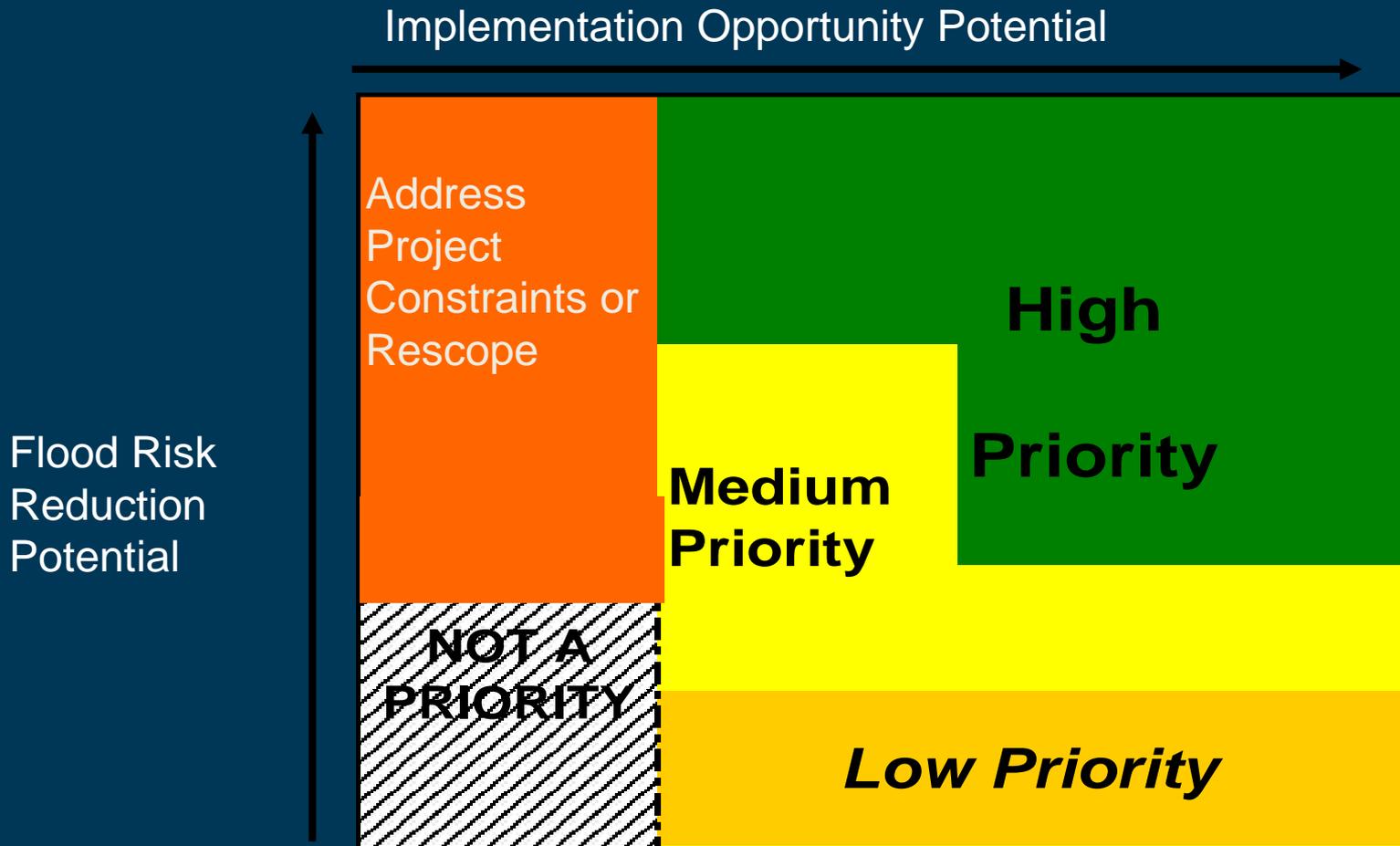


History: Early Days of the Flood District

- Add 'Regional Economic Benefit' to prioritization (2008)
- 'Flooding is flooding' use criteria to compare rivers and streams side-by-side, regardless of scale (2008)
- Seattle Seawall included as a feasibility study (2008)
- 10% Opportunity Fund created, \$3.5M/yr (2009)
- Major CIP includes Seattle Seawall and two urban streams (2008-2010)



Evaluation Criteria: Project Evaluation Approach

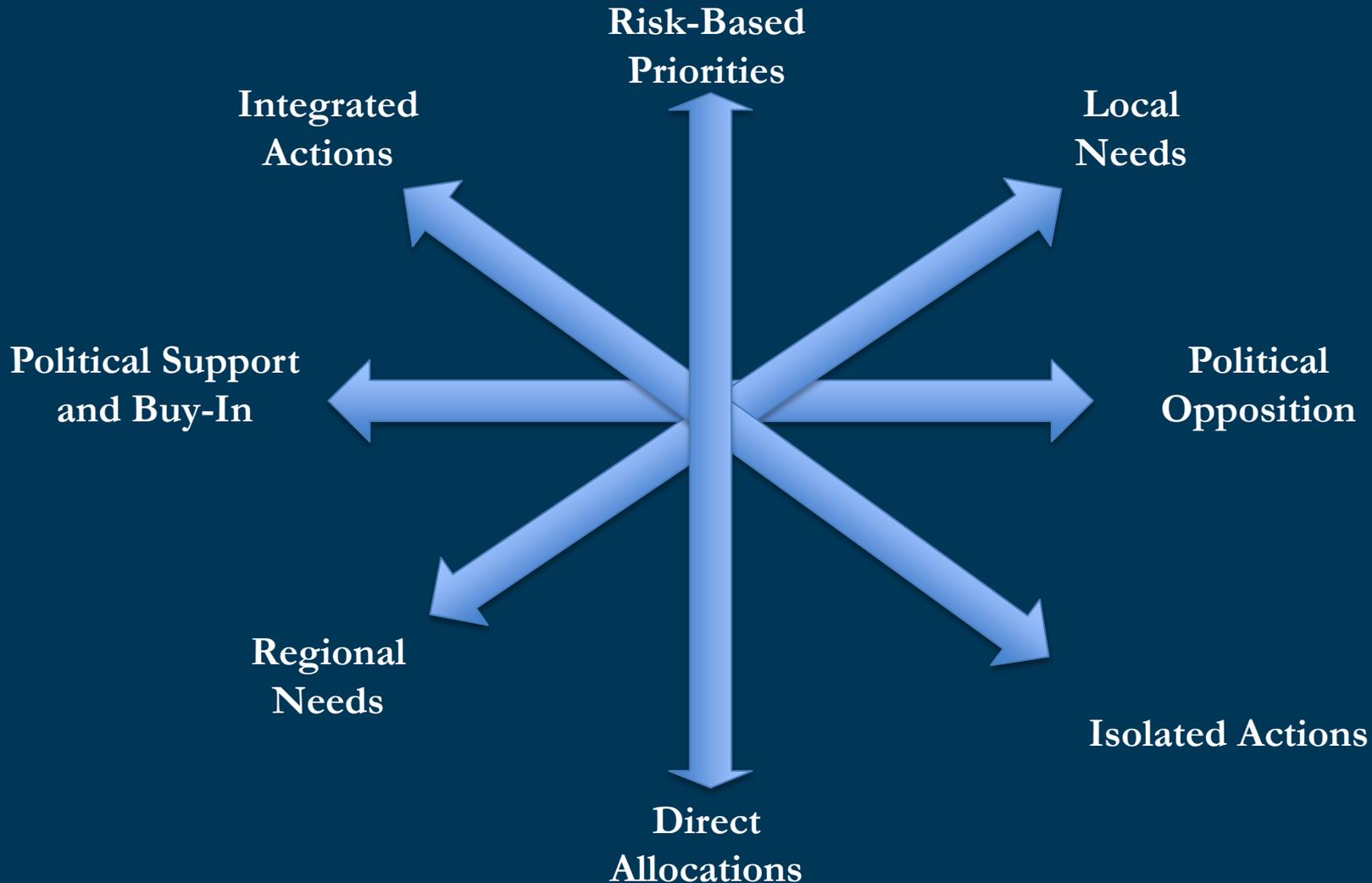


NOTE: This is a conceptual diagram and is not intended to imply clear and distinct thresholds between these categories.

Key questions for today:

- How can we clarify the geographic scope of the Plan:
 - What does it mean to ‘focus’ on major rivers?
 - When should Flood District funds be used to support coastal flood risk reduction?
 - When should Flood District funds be used to support urban flooding outside of major river floodplains?

Geographic Scope and Resource Allocation



A scenic view of a pebbly beach. On the left, there is a dense line of green trees with some autumn-colored leaves. The beach is covered in small, light-colored pebbles and shells. To the right, a calm blue body of water meets the shore. In the distance, a range of low mountains or hills is visible under a clear blue sky. The text 'Coastal Capital Funding' is overlaid in white serif font on the right side of the image.

Coastal Capital Funding

What does the 2006 Flood Plan say about coastal areas?

- Action plan includes update of FEMA flood hazard mapping in coastal areas
- Land use recommendations relevant to unincorporated and incorporated areas of King County
- No capital projects identified

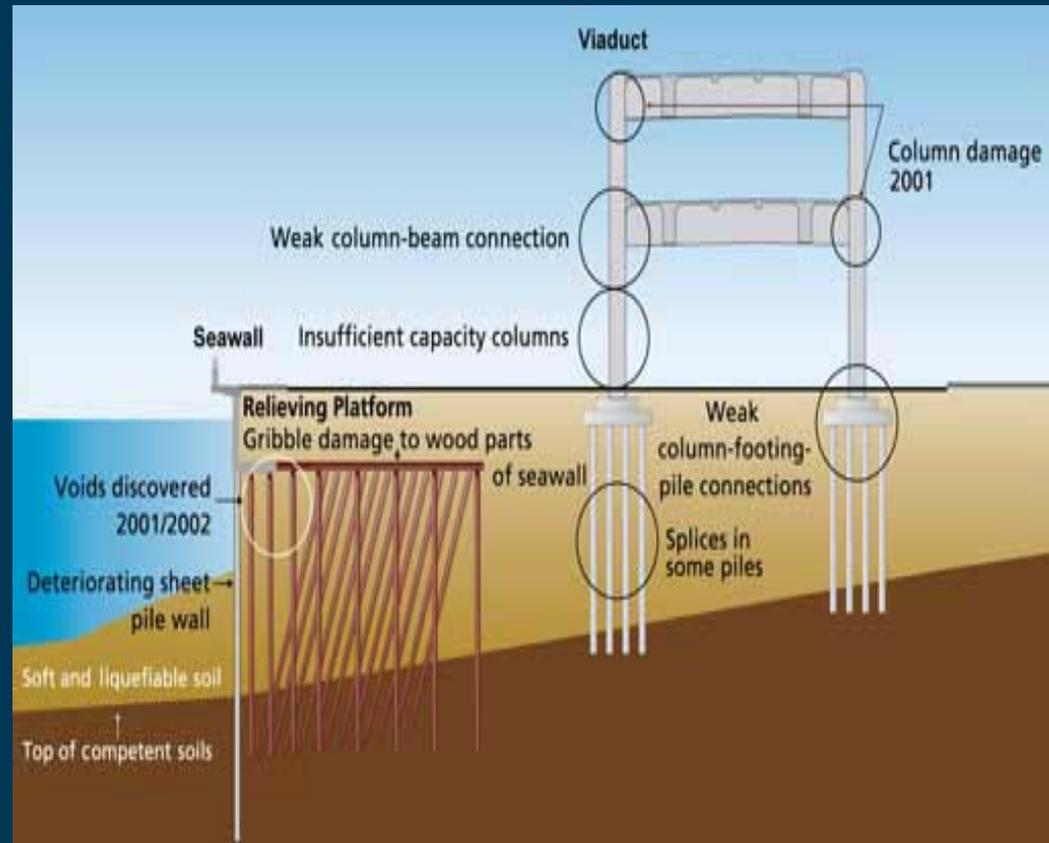
2007-2010 Actions

- Seattle Seawall Feasibility Study included in 10-year action plan: \$2M in 2008
- Extensive discussion in 2010 re: whether Seawall was appropriate use of FCD funds
- Identified need for clear policy for future funding requests



FCD Board Direction

- Cited federal interest in Seattle Seawall
- Cited impacts on regional economy from a Seawall failure
- Adopted technical amendment to 2006 Flood Plan (2011)
- Commitment to provide \$30M over 2011-2015
- FCD share @ 10%



Coastal Alternative 1

- Maintain existing commitments, but limit future projects to rivers and streams
 - Consistent with original intent of addressing backlog of major river levee rehabilitation needs
 - Coastal flooding with regional impacts would not be addressed

Coastal Alternative 2

- Funding for coastal projects if the US Army Corps of Engineers finds a 'federal interest' in the project, similar to Seattle Seawall
 - Ensures that public safety and economic benefits are clearly defined and regional in scope
 - Places a higher standard on coastal projects than on river floodplain projects.
 - Funding for coastal projects might displace existing priority projects

Coastal Alternative 3

- Capital funding for coastal projects that reduce risk to public property or infrastructure
 - Ensures public funding is not used to rebuild private bulkheads or seawalls
 - Places a higher standard on coastal projects than on river floodplain projects

Coastal Alternative 4

- Risk-based approach: Coastal projects evaluated alongside other projects based on consequence, severity, and urgency
 - Consistent treatment of risk reduction needs, regardless of freshwater versus saltwater distinctions
 - Unless additional revenue is obtained, additional coastal projects would delay existing high-priority projects

Coastal Alternative 5

- Consider coastal funding expenditures only if additional revenue available so that other projects are not delayed
 - Could combine with Alternatives 2-4
 - Matches expenditure increases with revenue increases
 - Options for additional revenue are limited

Summary of Coastal Alternatives

#1: No more Coastal projects

#3: Only if it protects public property or infrastructure

#2: Only if Corps determines 'federal interest'

#4: Risk-Based alongside other projects

#5: Only if more funding available

Urban Flooding and Small Streams

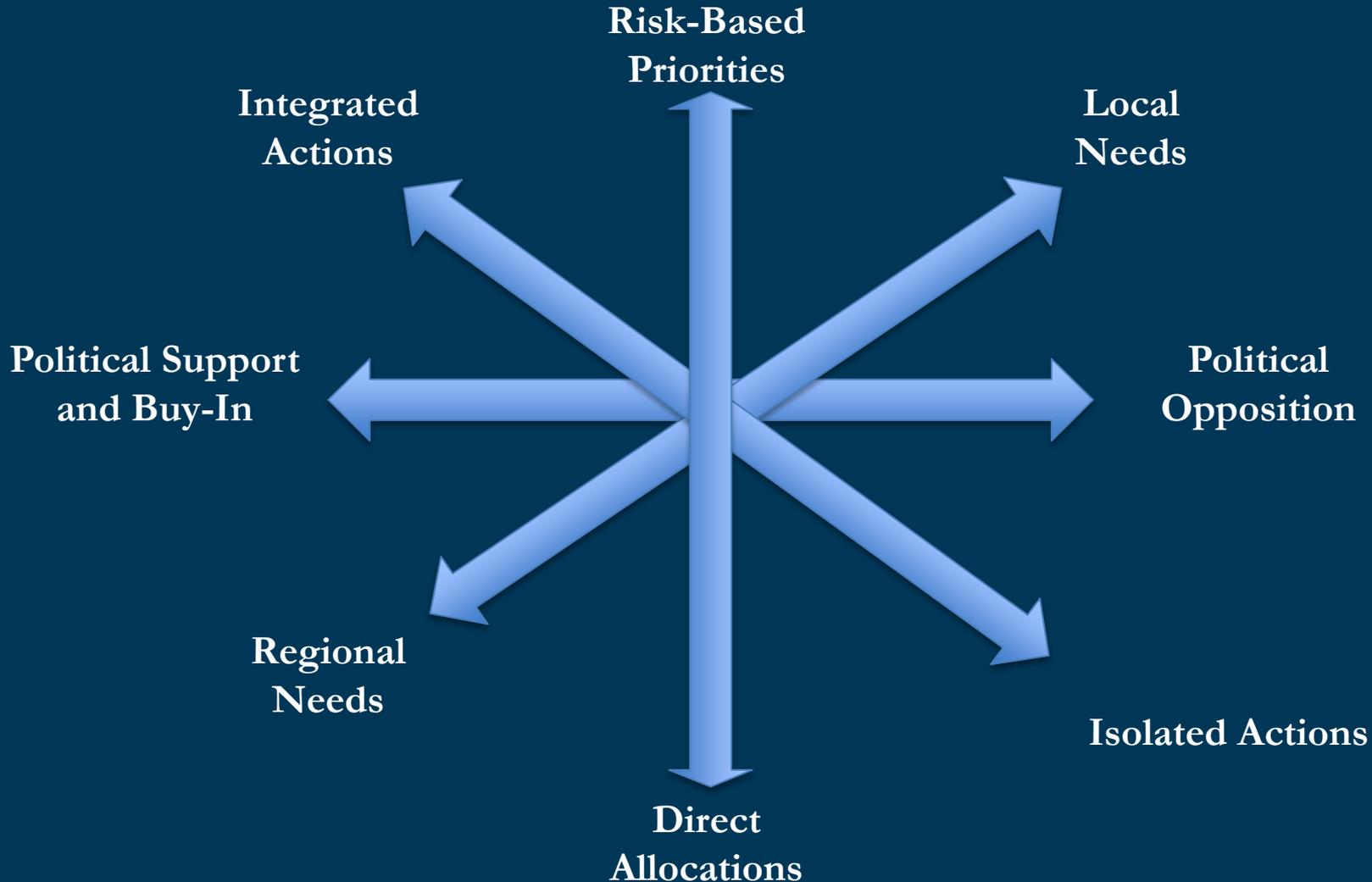
Urban Flooding Background

- 2006 Flood Plan focused on major rivers
- King County has separate programs for Stormwater and Floodplain Management
 - Stormwater for unincorporated KC only
 - River management for both incorporated and unincorporated areas
 - Cities generally do not differentiate between the two programs
- Keep river management and stormwater funding sources separate
- State legislation for Flood Districts authorizes stormwater as well as floodplain management

Urban Flooding Actions to Date

- Opportunity Fund: 10% of revenue returned to jurisdictions on a pro rated basis
 - \$3.5-3.6 million per year for 40 jurisdictions
 - \$14 million appropriated 2008-2011: \$6.6 million paid mainly for stormwater management actions such as culvert replacements, stream channel improvements, riparian plantings, etc.
 - Many small cities accrue funding over time until amount is large enough to complete project
 - Leverages significant local and grant funds
- Major CIP projects in Bellevue and Lake Forest Park (Coal Creek \$22M, McAleer Creek \$1M)

Geographic Scope and Resource Allocation



Urban Alternative 1

- Work with cities to inventory floodplain land use policies and regulations, and collaboratively identify ways to improve integration of floodplain practices



Urban Alternative 2

- Evaluate all projects based on prioritization criteria; no direct allocation for Opportunity Fund
 - Provides a more transparent and accountable allocation of funds in the capital program
 - Opportunity funds have the potential to leverage other funds for local stormwater programs



Urban Alternative 3

- Urban drainage and small stream flooding problems eligible if the basin crosses jurisdictional boundaries
 - Enables funding for drainage problems that cross jurisdictional boundaries and may not be adequately addressed by the local stormwater utility.
 - A high-priority flooding problems may be in a basin that is entirely located within a jurisdiction



Urban Alternative 4

- Opportunity funds available only for jurisdictions that do not have project funding within their jurisdiction in a given timeframe
 - Focus Opportunity Fund on areas that are not being covered by major CIP funding
 - Jurisdictions that have projects on the major CIP would not be able to access Opportunity Funds to augment local stormwater utility funds

Urban Alternative 5

- Revise Opportunity Fund to a competitive process
 - Provides more transparent and accountable expenditures based on evaluation criteria
 - Depending on size of awards, may fully rather than partially fund projects
 - Smaller jurisdictions with fewer resources may be at a disadvantage

Urban Alternative 6

- Increase Opportunity Fund allocation to jurisdictions
 - Could be applied to other alternatives 3-5
 - Increased support for urban flooding and stormwater management
 - May delay existing high-priority projects unless revenue also increased



Urban Alternative 7

- Connect eligibility for major capital program with integrated land use policies and regulations that avoid or reduce future flood risks, reducing the need for more capital projects in the future
 - Encourages jurisdictions to exceed minimum NFIP requirements
 - Need better understanding of why jurisdictions have not adopted higher regulatory standards already
 - Work program item to survey cities and propose minimum capital program eligibility criteria

Summary of Urban Flooding Alternatives

#1 and #7: Improve integration of land use policies and regulations

#2: Risk-based criteria, no Opp Fund

#4: Opp Fund only if no projects on the major CIP

#3: Risk-Based criteria if problem crosses jurisdictions

#5: Competitive Opportunity Fund

#6: Increase Opp Fund – could be combined with 4 or 5

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