Capital Investment Strategy Prepared for the Cedar River Corridor Planning Process

Briefing for the Flood Control District Executive Committee

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Department of Natural Resources and Parks Water and Land Resources Division River and Floodplain Management Section





Cedar River Corridor Study Area



Overview of Planning Process



Gather information:

- How the Cedar River functions
- How people interact with the river corridor
- Flood and Channel Migration Risk Data
- Public Outreach Advisory Committee
- Habitat Opportunities
- Recreation Work Group

Evaluate:

- Types of hazards and risks
- Identify focal "problem areas" with highest risks
- Identification and ranking of problem areas

Develop:

- Strategies for on-the-ground risk reduction
- Site specific alternative solutions
- Proposed sequencing of projects

Risk Analysis - Methods



Map overlay of flood and erosion hazards:

- Homes and businesses
- Infrastructure
- **Demographics**
- Habitat and Recreation

Information **Gathering**:

- Maps, Data, Reports
- **Advisory Committee**
- **Technical Experts**
- **Field Observations**



Risk Reduction Approaches







Elevation of Structure





Risk Analysis – Three Categories

Lower Cedar – Downtown Renton (mouth to I-405) Middle Cedar – Rural Residential (Upstream of I-405)

Regional Infrastructure (Corridor-wide)







Risk Analysis – Downtown Renton

100 Year Flood

Flood Depths

Post Dredge

Pre-Dredge









500 Year





Risk Analysis – Regional Infrastructure

13 Hot Spots

- Major Roadways
- Cedar River Trail
- Utilities

Risk Considerations

- Channel
 Migration Zone
- Vulnerability
- Proximity to river



Risk Analysis – Middle Cedar



One third of corridor:

- 100-year floodplain
- Channel Migration Zone (CMZ)



- Over 500 homes in 100year floodplain or CMZ – 170 homes in both
- 11 miles of local roads underwater in 100-year flood – isolates 320

homes

Risk Analysis – Neighborhood Problem Areas

Risk Prioritization

Problem Areas

Byers Road Neighborhood Lower Jones Road Neighborhood Jan Road Neighborhood **Dorre Don Neighborhood** Elliott Bridge Reach Neighborhood **Rhode and Getchman Neighborhood Orchard Grove Neighborhood Riviera Apartments Arcadia Reach** Rafter's Park – Doris Creek Neighborhood SE Bain Road Neighborhood Maplewood Neighborhood

Project Sequencing

Flood Plan Policy on Priorities:

- Threats to public safety
- Damage to infrastructure
- Impacts to the regional economy
- Damage to private structures

Implementation Factors

- Project readiness (e.g., available right-of-way)
- Funding and partnership opportunities



Capital Investment Strategy - DRAFT

- Flood risk reduction project concepts
- Range of possible alternative approaches
- Sequenced by risk and readiness
 - Near term (6-yr CIP) \$16.8 23.8M
 - Medium term (7-10 yrs) \$16.8 27.0M
 - Long term (10+ yrs) \$21.8 35.4M

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