The Cedar River flows from the Cascade Mountains to Lake Washington. The lower populated reach of the river covers 22 miles from Lansdown to the City of Renton. The dam operated by the City of Seattle, primarily for water supply and power generation, provides incidental flood protection.

**Scope:** Through the corridor planning process, support decision makers in setting flood risk reduction priorities:
- Define flood and erosion hazards in three corridor planning areas
- Focus on critical "worst first" public safety risks in each corridor
- Propose conceptual 6-yr CIP consistent with budget placeholder

**Summary of Risk:**
People and infrastructure in the Cedar River valley face risks of inundation by flood water as well as risks of gradual
Summary of Risk

<table>
<thead>
<tr>
<th>Downstream of I-405 (Downtown Renton):</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Leves and floodwalls</td>
</tr>
<tr>
<td>- 2,890 people live in 500-year floodplain</td>
</tr>
<tr>
<td>- $423M in taxable retail sales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upstream of I-405 (Residential):</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1,060 people in 100-year floodplain</td>
</tr>
<tr>
<td>- 770 people in CMZ</td>
</tr>
<tr>
<td>- 370 homes isolated by road flooding</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regional Infrastructure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 60 training levees and revetments</td>
</tr>
<tr>
<td>- 10 locations where river flows against highway (SR-169)</td>
</tr>
<tr>
<td>- 11 miles of local roads underwater in 100-year flood</td>
</tr>
</tbody>
</table>

**Proposed Risk Reduction Actions:**
Below is a draft sequenced action plan for implementing risk reduction projects in the Cedar River Corridor. The projects are proposed based on urgency, severity, consequence, responsibility or authority, and funding or partnership opportunities. The current 2017-2022 adopted King County Flood Control District CIP budget includes:

- $13.2M for Lower Cedar River Maintenance Dredging Project - 2016
- $5.4M for Cedar River Corridor Implementation (Specific Projects TBD)
- $9.5M for Strategic Acquisitions in support of planned Cedar River CIP projects
- $1.7M for Acquisitions of high risk and repetitive loss homes
- $27.7M for countywide corridor plan implementation, some of which could be allocated to Cedar River priorities (specific projects TBD)

**PROJECT** | **PROBLEM** | **APPROACH** | **COST ESTIMATES**
---|---|---|---
A. Lower Cedar River Maintenance Dredging - 2016 | Sediment accumulation near the river mouth reduces flood protection provided by levees and flood walls. | Dredge sediment / mitigate impacts. | TOTAL: $13.2M
B. Floodplains by Design Grant Acquisitions | First steps in implementing CIPs include feasibility analysis, preliminary design and right-of-way acquisition. | Funding awarded to acquire key parcels in CIP target areas. Grant also provides pass through funding to WL RD for design efforts in Riverbend and preliminary design efforts for Herzman. | Fbd: $2.2M  
$1.03M Allocated below  
$1.17 Unallocated pending FCD Staff discussions  
TOTAL: $260K
C. State Route 169 Flood Reduction Feasibility Study | During large flood events, local drainage combined with high river stages, causes overtopping of State Route (SR) 169 near the intersection of Cedar Grove Road, forcing closure of SR 169. Numerous residences are also isolated during these conditions. | Conduct feasibility study in coordination with WDOT to evaluate flood risk reduction opportunities, such as elevating SR 169, upgrading the local drainage infrastructure, and/or installation of back flow prevention gates. | TOTAL: $260K  
FCD 6-Yr: $260K
D. Maplewood Neighborhood Improvements | Neatly 40 homes are located within the severe or moderate channel migration zone along the right bank of Cedar River. During 100-year flood, the river may overtop the bank and flood the neighborhood. The steep slope on the left bank is identified as a potential landslide hazard area. | Conduct site specific landslide risk assessment study; conduct a feasibility study to evaluate opportunities to modify Erickson Levee. | TOTAL: $110K – $440K  
FCD 6-Yr: $440K
Note: funding allocation has not been made

**Proposed Near Term Actions (Years 0 – 6)**

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>FCD 6-Year Request:</th>
<th>FCD 6-Year secured:</th>
<th>6-Year CIP Placeholder:</th>
<th>Total Project Cost:</th>
</tr>
</thead>
</table>
| E. Lower Jones Road Neighborhood Improvements | $22.3M  
$1.1M  
$5.6M | | $15.9M | $21.8M – $28.8M
| F. Herzman Levee Setback and Trail Stabilization | Raise in place or setback Jones Road; excavate and stabilize right bank to increase conveyance capacity; reinforce one revetment; remove portion of another revetment; acquire 8 at risk properties (additional partial acquisitions will be required if road is setback). (Budget note: Requesting $36,000 in 2017). | | | $11.1M
| G. Jan Road Neighborhood Improvements | $5.0M  
FCD 7-Yr: $700K | | | $5.6M

**Notes:**

1 Cost estimates include best available projections regarding right-of-way acquisition, design, construction, 10-year site establishment, 10-year effectiveness monitoring. Corridor Planning cost estimates do not include maintenance and monitoring beyond 10 years.

2 Fbd 6-Yr is a secured state funding source.

3 Budget allocation approved in 2017 6-year CIP.

4 Requested to add priority projects which exceed existing placeholder funding.
Proposed Medium Term Actions (Years 7 – 10) ▲

Proposed Long Term Actions (Beyond 10 Years) ▲

R. Arcadia Reach Neighborhood Improvements – Landslide Study (Phase II)

S. Arcadia Reach Neighborhood Improvements – Acquisitions (Phase II)

T. Lower Cedar River Maintenance Dredging - Future

U. Orchard Grove Neighborhood Improvements

V. SE Bain Road Neighborhood Improvements

Cost estimates include best available projections regarding right-of-way acquisition, design, construction, 10-year site establishment, 10-year effectiveness monitoring. Corridor Planning cost estimates do not include maintenance and monitoring beyond 10 years.

1 FdB 6-Yr is a secured state funding source.

2 Budget allocation approved in 2017 6-year CIP.

3 Requested to add priority projects which exceed existing placeholder funding.

Indicates a project with a nexus to a WRIA 8 habitat restoration opportunity area.