The Columbia Corridor Levee System

History and Current Challenges

Presented by:
Kayla Mullis, Project Manager
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Columbia Corridor Drainage Districts

PEN 1 (PENINSULA DRAINAGE DISTRICT #1)

PEN 2 (PENINSULA DRAINAGE DISTRICT #2)

MCDD (MULTNOMAH COUNTY DRAINAGE DISTRICT)

SDIC (SANDY DRAINAGE IMPROVEMENT COMPANY)

CITY OF PORTLAND

CITY OF FAIRVIEW

CITY OF GRESHAM

CITY OF WOOD VILLAGE

CITY OF TROUTDALE

MCDD Flood Protection
Local Operations, Regional Significance

40% of Port of Portland facilities
12 Million tons of goods move through Facilities

$5.3 billion in assessed property value
Across four cities

Columbia South Shore Well Field
Backup water supply for Portland and other jurisdictions

10% of jobs in Multnomah County
Majority in industrial, manufacturing, and transport.
History of Flooding

1948: Vanport Floods expose vulnerabilities.

1996: High water tests modern system and shows continued threat of flooding.
The Columbia Corridor Levee System

27 miles of levee

Typical Cross Section
Stormwater Management

Survey Map of 1852

Current Challenges

- Preserving public safety
- Funding and governance
- Maintaining status in federal programs
Flood Protection Infrastructure

- ASCE Report Card gives levees D- nationally
- Historically, improvements have been reactionary
- Cities are learning that investment pays dividends
Funding & Governance

Metro Area Watersheds
State of the Watersheds Report
Metro - 2008

Approx. Drainage District Boundaries
Table 1: Comparison of flood control organization, jurisdictional boundaries, and funding in western US Metropolitan Cities (Environmental Scan of Flood Control Funding in the Western US, J. Jubera, 2013)

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Jurisdictional Boundary</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multnomah County Drainage District, Portland, OR</td>
<td>Special District</td>
<td>Drainage District</td>
<td>Property Assessment</td>
</tr>
<tr>
<td>Regional Flood Control District, Clark County, NV</td>
<td>Special District</td>
<td>County</td>
<td>Sales tax</td>
</tr>
<tr>
<td>Urban Drainage and Flood Control, Denver, CO</td>
<td>Special District</td>
<td>Seven Counties</td>
<td>Property tax</td>
</tr>
<tr>
<td>West Sacramento Flood Control Agency, West Sacramento, CA</td>
<td>Joint Powers Authority</td>
<td>City</td>
<td>Sales tax, property tax, in-lieu fee on new development</td>
</tr>
<tr>
<td>Sacramento Area Flood Control District, Sacramento, CA</td>
<td>Joint Powers Authority</td>
<td>City / Counties</td>
<td>Sales tax, property tax, in-lieu fee on new development</td>
</tr>
<tr>
<td>Trinity River Watershed, Dallas, TX</td>
<td>City Agency</td>
<td>City</td>
<td>Utility fee</td>
</tr>
<tr>
<td>King County Flood Control District, Seattle, WA</td>
<td>Special District</td>
<td>County</td>
<td>Property tax</td>
</tr>
<tr>
<td>Salt Lake City and County, UT</td>
<td>City / County Agency</td>
<td>City / County</td>
<td>Utility fee/Property tax</td>
</tr>
<tr>
<td>Flood Control District of Maricopa County, Phoenix, AZ</td>
<td>Special District</td>
<td>County</td>
<td>Property tax</td>
</tr>
<tr>
<td>Bexar Regional Watershed Management San Antonio, TX</td>
<td>Special District</td>
<td>City / Four Counties</td>
<td>Utility fee/Property tax</td>
</tr>
<tr>
<td>Watershed Protection Department, Austin, TX</td>
<td>City Agency</td>
<td>City</td>
<td>Utility fee</td>
</tr>
</tbody>
</table>
We are the local sponsor for the Columbia River levees, which were built and are maintained according to national standards.

- **Flood Control Act of 1936**: First general flood control bill. Establishes cost sharing between federal and local governments and gives USACE clear role in flood control.

- **Flood Control Act of 1950**: Authorizes improvements to existing projects across the nation, including Columbia Corridor.

- **National Flood Insurance Act of 1968**: Creates the National Flood Insurance Program (NFIP)
Federal Levee Oversight

U.S. Army Corp of Engineers Levee Safety Program

Rehabilitation & Inspection Program  Current Status: Minimally Acceptable  Challenges: Encroachments Process Changes Vegetation
Federal Levee Oversight

Federal Emergency Management Agency
National Flood Insurance Program

| City & County voluntarily participate in the program. | Current Levee Status: Accredited but not certified | USACE plays a limited and defined role. |
Balancing Priorities

Community Interests

Public Safety
Questions?

Contact me directly at:
Kayla Mullis
503-281-5675
kmullis@mcdd.org