



## Flood money: levee improvements needed

**1** By: Garrett Andrews ■ in Scrolling Box ⊙ December 8, 2016 2:23 pm



A levee along the Columbia River bordering Northeast Marine Drive is part of an extensive system of flood control in the Portland area. Significant improvements and fixes are needed in some areas of the levee system in order to maintain federal flood insurance. (Sam Tenney/DJC)

Portland's extensive system of flood control measures along the Columbia and Sandy rivers has been found to require significant fixes and upgrades. Now, the group charged with ensuring continued security in the Columbia Corridor is entering perhaps its choppiest straits yet.

Climate change and (likely) a soon-to-be-renegotiated Columbia River Treaty will raise water levels along the Columbia Corridor. And perhaps the greater issue to the stakeholders committee is remaining in good standing with the federal government. It's now getting to the tough questions – who will pay, and how much?

## We have levees

When Jules Bailey was approached to chair the Levee Ready Columbia effort, he said his initial reaction was, "We have levees?"

"And of course, I dug into it, and of course, yes, we have levees, and they've been doing a great job for a while," said Bailey, a Multnomah County commissioner nearing the end of his first term.

Massive flood control measures are more commonly associated with subtropical cities like New Orleans than blustery Portland. But as the tragic Vanport flood of 1948 demonstrates, major inundations are natural – and potentially devastating – in the low-lying stretches of the lower Columbia River.

The Portland-metro area bordering the Columbia is now heavily industrial and home to low-density uses like golf courses and wetlands. A wide-ranging system of dikes, culverts, ditches and cross levees has been in place to protect this valuable real estate since the early 20th century.

But because Portland's levees are so integrated into the landscape of Northeast Portland, people forget they're there, said Corky Collier of the Columbia Corridor Association. They're covered with everything from trees to roads to houses. But they are critically important.

"People driving down Marine Drive forget they're driving on top of a levee," Collier said. "And this one's protecting over \$10 billion worth of infrastructure. And even though I know they're there, I sometimes forget until I stumble on 'em. It's amazing. They're just part of the landscape now."

Two Portland levee districts – Peninsula Drainage District Nos. 1 and 2 – lost their certification with the U.S. Army Corps of Engineers in 2013. Certification for two others – Sandy Drainage Improvement Company and Multnomah County Drainage District (MCDD) are due to expire next year.

Lack of certification jeopardizes the city's flood insurance rating set by the Federal Emergency Management Agency. FEMA upped safety requirements for flood control districts in response to destruction caused by Hurricane Katrina in 2006. Now, to remain active in the National Flood Insurance Program, the levees need to be engineer-certified to protect against a 1 percent annual chance flood.

In 2013, then-Gov. John Kitzhaber brought together regional stakeholders to address the questions of recertification and reaccreditation, tapping Bailey and Portland Mayor Charlie Hales to convene it. Now that committee is getting down to brass tacks. What improvements are needed? How much will they cost? Who will pay?

The MCDD has estimated that upgrades will cost between \$100 million and \$286 million. But Bailey said that number has been revised down.

"It should be millions, not hundreds of millions," he said.

## Victim of its own success

A major goal of Levee Ready Columbia (LRC) is informing property owners and residents, and this has been a struggle, according to Maryhelen Kincaid, one of two neighborhood representatives on the LRC. She says MCDD and other entities have been so good at maintaining the flood control features, like the culverts and ditches on her street in East Columbia, that not many people understand the underlying issue.

Kincaid, a retired AAA project manager, often represents her neighborhood at public meetings.

"We tend to have a reactionary kind of governance, whether it's the city or the United States; we just tend to wait until something bad happens and then fix it," she said. "I jokingly say, maybe we should start a fight to get people to notice us. It may be redundant, but a complaint I have is that the city operates on complaints. So you don't hear about the good things that go on, and how things run smoothly or instances when we've averted danger. And this process is a victim of this.

"Nobody wants to read good news anymore, I guess."

To that end, levee people pointed out the Army Corps of Engineers has extended some deadlines in response to the good work done by the stakeholders group.

## Four areas of concern

It's not all good news. Major improvements are needed and the drainage districts don't have the revenue capacity to pay for them. Three sites will likely require major earthwork and other attention. Furthermore, and of greatest concern to the group is a berm used as embankment by the Union Pacific Railroad and Burlington Northern Railroad at the Western edge of Peninsula Drainage District No. 1. Engineers have so far not been able to inspect the berm, due to a dispute with the railroads over whether the formation is a "berm" or an "embankment."

(Bailey's policy coordinator, Henry Burton, explained the railroads would rather it be considered an embankment because of the added liability a being a berm would involve.)

The investigative process has also yielded a few surprises. Historical data revealed structural issues with the railroad berm where the Union Pacific Railroad connects with the Burlington Northern near the BNSF Railroad Bridge.



A railroad embankment near North Portland Road was the location of the breach that caused the Vanport flood in 1948. Parts of the berm have been identified by Levee Ready Columbia as needing improvement. (Sam Tenney/DJC)

"We found out that was originally built on wood trestles and they just kind of filled in the trestles with dirt, so it wasn't really packed in and made into a flood levy; there's just filled dirt sort of tossed in there," Collier said. "There could be all sorts of garbage in there. Who knows?"

District rates will likely increase to pay for the improvements, and other jurisdictions will likely kick in as well.

"There probably won't be much choice, but my sense is most people would be quite agreeable, partly because the districts have an excellent history of producing results – good levees on a good budget," Kincaid said. "This is not the PERS program."

LRC has applied for numerous federal grants. Gov. Kate Brown has a \$10 million item in her budget to pay for levees statewide.

But in the end, citizens are going to pay, and the cohesion LRC has so far enjoyed might meet discord as taxpayers in other parts of the city question the need for such large expenditures.

"Those fights might be coming, but so far we've managed to keep the focus on how do we do this properly," Collier said.

Kincaid said the biggest challenge ahead is in educating the public.

"Once people grach it it should go forward successfully," she said. "Many people travel through the airport. Many This post has been shared!

Yellow people grach it it should go forward successfully," she said. "Many people travel through the airport. Many yellow people travel through the airport yellow people through the airport yellow people through the airport yellow people t

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The levee districts were originally formed to pump water out of farmland so it could be cultivated. But now five separate drainage districts are charged with keeping water out if the river rises.

Currently, MCDD staff administers operations for the other three districts, though they're overseen by their respective boards of directors, and funding originates through different formulas.

Part of examining the districts involves asking a fundamental question: Would managing the levees be more effective if the districts were consolidated?

"It's a question we've explored," said Joel Schoening, MCDD community affairs manager. "The potential benefits and drawbacks haven't fully been determined."

Bailey plans to start a full-time job with Oregon Beverage Recycling Cooperative when his term as commissioner ends in three weeks. He said his place on Levee Ready Columbia will be one of the only public positions he will retain after he leaves office.

"I've certainly invested a lot of time into this over the years," he said. "It's real important to me. I really hope we see other leadership, including my successor at the county, take this on."

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