

2018 Annual Report

PIERCE COUNTY
FLOOD CONTROL
ZONE DISTRICT

FCZD Projects

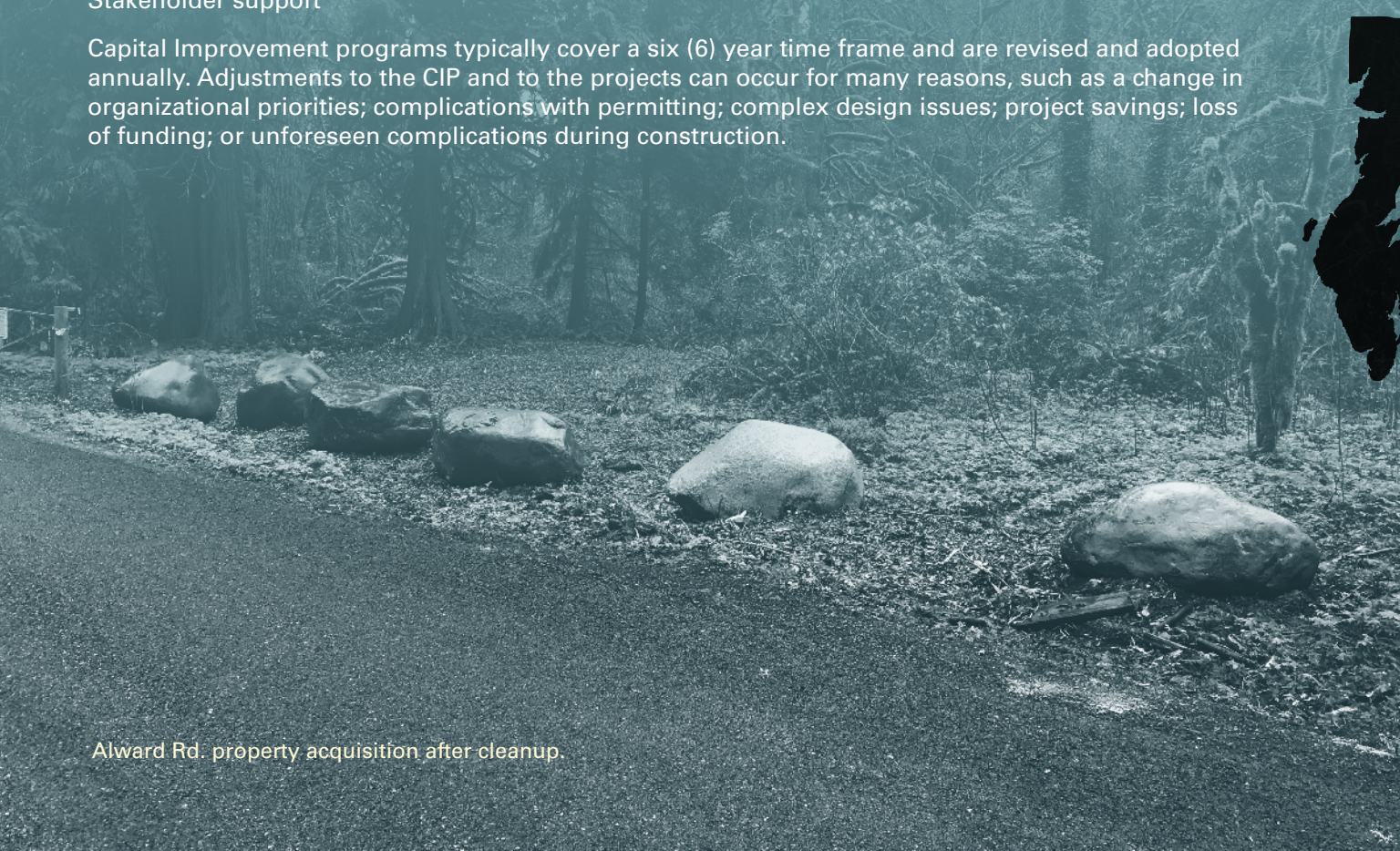
Creating a flood resilient Pierce County is the focus of the Flood Control Zone District (FCZD). The FCZD Board focuses on funding projects identified as top priorities for the community. To be considered in the district's capital budget, projects must be included within the district's Comprehensive Plan of Development (CPOD) and have received an initial project ranking number. When the CPOD was created in 2013, preliminary prioritization of capital projects was carried out by scoring the projects based on eight criteria.

Existing land use of affected area (consequences)	Spatial area of impact (consequences & severity)	Project effectiveness	Multiple project benefits
Severity of potential flood or channel migration impact	Frequency of flood or channel migration occurrence	Benefit-cost analysis of project	Partnerships & opportunity

Each year the district administrator prepares draft capital budget scenarios that follow the policy direction given by the Board of Supervisors. The administrator relies on CPOD project rankings and applies four additional criteria to recommend projects for the Capital Improvement Plan (CIP).

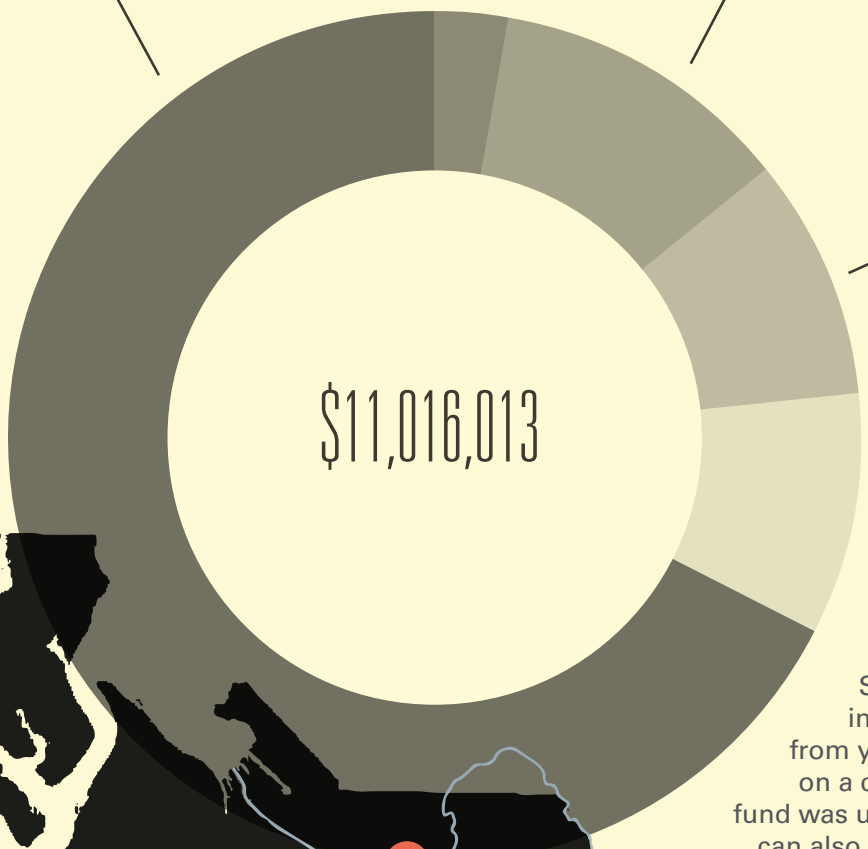
The criteria include:
Ability to leverage other funds
Readiness for construction
Avoidance of ongoing maintenance costs or repairs
Stakeholder support

Capital Improvement programs typically cover a six (6) year time frame and are revised and adopted annually. Adjustments to the CIP and to the projects can occur for many reasons, such as a change in organizational priorities; complications with permitting; complex design issues; project savings; loss of funding; or unforeseen complications during construction.



Alward Rd. property acquisition after cleanup.

2018 Budget



Strategic & Emergent Needs Fund

The Board of Supervisors created a Strategic and Emergent Needs Fund in 2017. The amount of funding varies from year to year. Projects are considered on a case by case basis. In past years the fund was used to accelerate projects. The fund can also be used to fund unexpected project opportunities or community flood response costs.



Project Prog

Alward Road Acquisition & Setback Levee

This project is part of a larger effort to reduce flood risk and improve floodplain habitat on the Carbon River. This project involves acquiring all properties along the north side of Alward Road between River Mile (RM) 6.4 and (RM) 8.4. To date, the county has acquired 57 of the 81 properties needed for the project, between the river and 177th St. E, also known as Alward Road. Once the county completes acquisition, they will remove all existing structures in the floodplain, construct a setback levee and remove the existing levee that constrains the main-stem river. Once this has been accomplished, the river will naturally function within the additional 150-acres of floodplain. The completed project will provide essential and critical habitat for Chinook, Steelhead, and other salmonids.



Orville Road Revetment

This project is in the Upper Puyallup River Watershed and will dismantle 1,500 feet of existing levee, install 3,500 feet of setback revetment, and place 40 in-stream Engineered Logjams (ELJs). The existing levee hinders habitat-forming processes and exacerbates local flooding by restricting flow from returning to the main channel. The proposed ELJs are designed to split and defect flow to protect Orville Road East in a way that significantly reduces flood risk while simultaneously enhancing juvenile salmon habitat. This will also eliminate the need for the continued re-establishment of aging levees that no longer sufficiently protect Orville Road East. This project will result in 200 acres of reconnected historic floodplain and the restoration of approximately 1.5 miles of shoreline. This project will be constructed in 3 phases:



Phase 2A—Construct 2,500 feet of setback revetment. This project was completed in 2017-2018.

Phase 2B—Construct 1,500 feet of setback revetment. This project is under final design and anticipated to be constructed in 2019.

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Phase 2C—Construct 40 in-stream ELJs and dismantle 1,500 feet of existing levee. This project is under final design and anticipated to be constructed in 2020-2021.

Habitat & Flood Capacity Creation Project

This project is a river restoration effort designed to result in significant aquatic habitat enhancement, with the added benefit of reduced risk from moderate-sized flooding events. The project team has been coordinating with the U.S Army Corps of Engineers regarding potential permitting pathways and will make a recommendation by the end of 2018.

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Puyallup Wastewater Treatment Plant

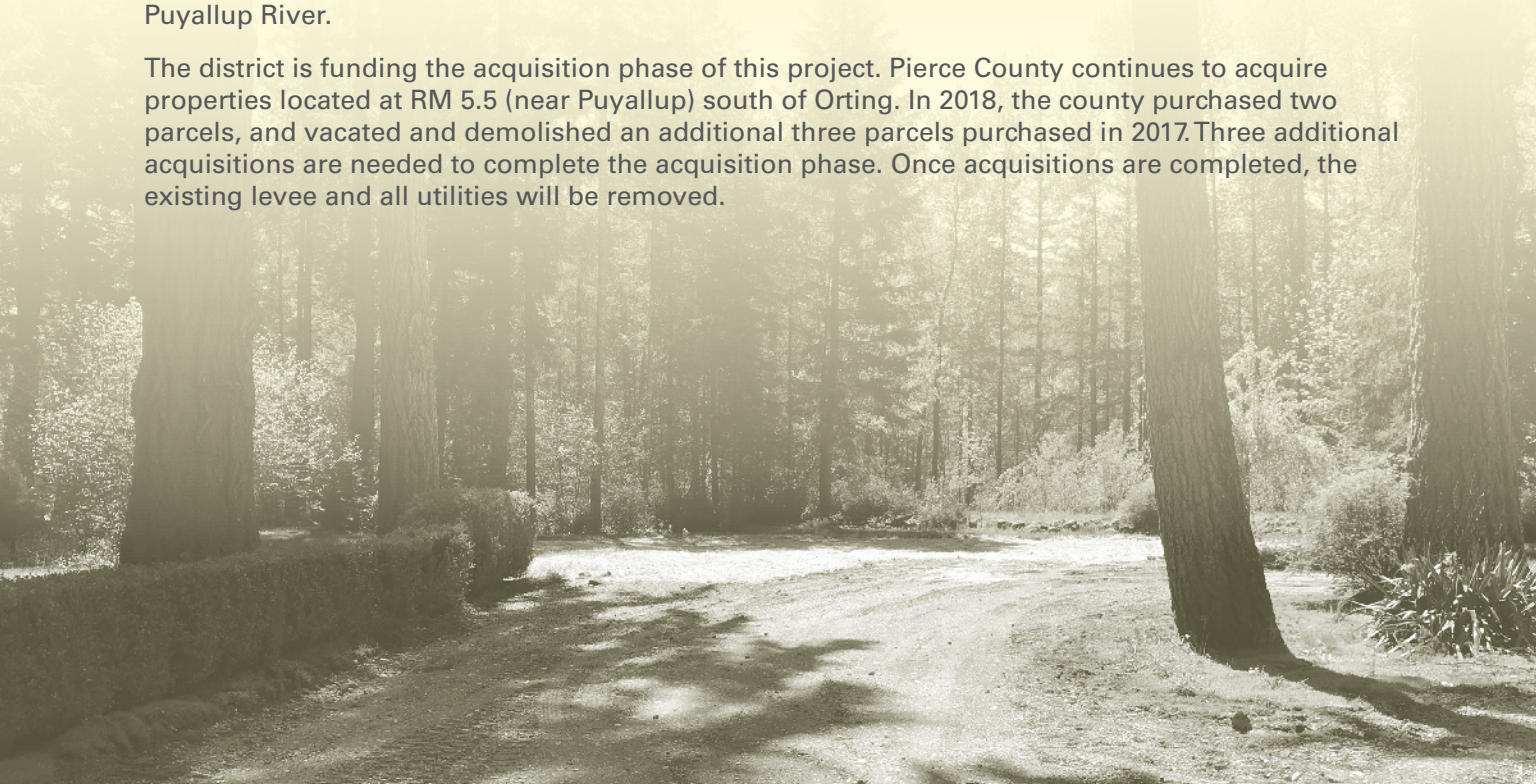
This project is designed to protect critical infrastructure and the processes that take place at each individual building at the Wastewater Treatment Plant in a 100-year flood event. This protection includes the conduit (process piping, electrical, controls, etc.) that service each building. Construction on this project began in late 2017 and is anticipated to be completed in 2018.



Neadham Road Acquisition

This project will improve floodplain storage and habitat as well as improve channel migration protection along Brooks Road in the Neadham Road area along the Upper Puyallup River near River Mile (RM) 26.5. The completed project will allow the river to access its full historical right bank floodplain for the first time in a century. This project is one step of many which will ultimately result in the reconnection of 1.3 miles of uninterrupted floodplain and riparian area along the right bank of the Puyallup River.

The district is funding the acquisition phase of this project. Pierce County continues to acquire properties located at RM 5.5 (near Puyallup) south of Orting. In 2018, the county purchased two parcels, and vacated and demolished an additional three parcels purchased in 2017. Three additional acquisitions are needed to complete the acquisition phase. Once acquisitions are completed, the existing levee and all utilities will be removed.



Opportunity Fund

Cities, towns, and unincorporated Pierce County are eligible to apply for Opportunity Fund dollars from the District for use toward flood control and storm water projects. Jurisdictions receive ten percent of the revenue generated within their jurisdiction by the Flood District's property tax levy.

Opportunity Fund Projects Expended to Date

The City of University Place recently requested to use a portion of their Opportunity Funds for the Chambers Creek Dam Acquisitions and Feasibility Planning Project. This project involves the development of a feasibility study and conceptual design to remove the Chambers Creek Dam. Additional project team members for this project are Forterra and the South Puget Sound Enhancement Group. Funding partners for this project are: the Puyallup Tribe of Indians, Pierce County Planning and Public Works, Salmon Recovery Funding, and the Open Rivers Fund of the Resources Legacy Fund. This project is 75% complete and is projected to be completed by March 31, 2019.

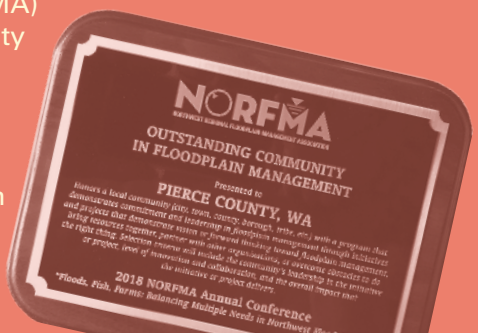
Pierce County Technical Assistance to the Cities

Pierce County Surface Water Management is offering technical assistance to interested jurisdictions to discuss project ideas, eligibility, and how to leverage other grant opportunities to maximize the Opportunity Funds available to your jurisdiction. If you are interested in scheduling a meeting, please contact Brynne' Walker at (253) 798–4671 or brynne.walker@piercecountywa.gov.



Pierce County Surface Water Management Award at NORFMA

The Northwest Regional Flood Plain Management Association (NORFMA) awarded Pierce County the designation of 2018 Outstanding Community in Floodplain Management. The award annually recognizes one community in Washington, Oregon, Idaho, Alaska, or British Columbia for its commitment and leadership in floodplain management through initiatives and projects that demonstrate vision or forward thinking toward floodplain management, bring resources together, partner with other organizations, or overcome obstacles to do the right thing.



Maintenance & Operations

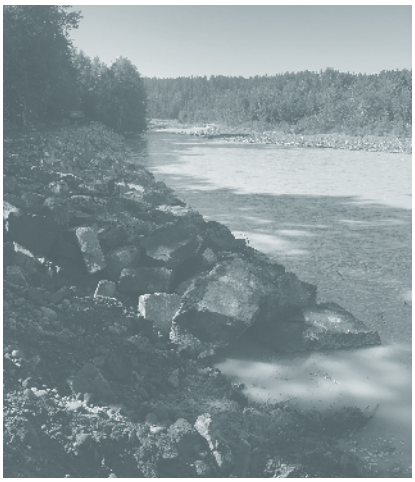
Pierce County operates and maintains over 69 miles of levees and revetments along four major rivers: Puyallup, White, Carbon, and Nisqually. The Pierce County Flood Control Zone District invests 15 percent of its annual budget in the operation and maintenance of Pierce County's flood risk reduction facilities. In 2018, almost $1.3 million was provided to Pierce County to repair and improve levees and revetments. Twelve maintenance projects were completed in 2018 at a project cost of more than $2.6 million. The county repaired more than 3,100 linear feet of levees and revetments.

Described here are some examples of projects the Pierce County Maintenance and Operations Section has worked on in 2018.

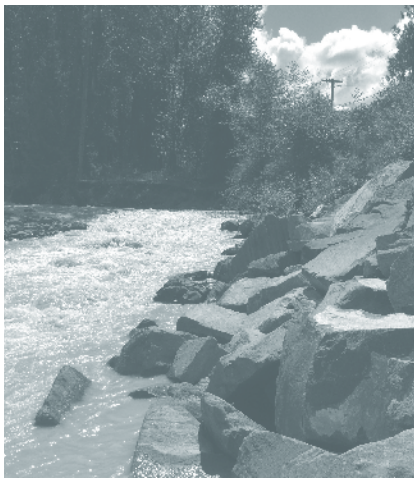
WAZZU Levee
Puyallup River
This project involved a repair of 150 linear feet of missing toe and face rock from an over steepened section.



Jones Levee
Puyallup River
This project involved repairing approximately 300 linear feet of missing toe rock.



Alward Rd. at Fish Ladder
Carbon River
This project involved repairing 220 linear feet of bank erosion that was threatening 177th St. E.





Sportsman Levee located on the Puyallup River
This project involved repairing missing toe and face rock of an over steepened section.

Looking Ahe

Left Bank Setback

The Left Bank Setback Project will provide flood control and habitat benefits on the White River. Other partners working on this project with the City of Sumner are Pierce County Surface Water Management, Puyallup Tribe of Indians, and Muckleshoot Indian Tribe.

Pacific Point Bar

The Pacific Point Bar Project will provide flood control and habitat benefits on the White River. The overall intent is to create a sustainable river system to the extent feasible in this reach of the river. Other partners working on this project with the City of Sumner are Pierce County Surface Water Management, Puyallup Tribe of Indians, and Muckleshoot Indian Tribe.

Marine Shoreline Erosion Protection Through Living Shorelines

In the upcoming 2019 budget, the FCZD approved a new pilot project in the Key Peninsula and Gig Harbor areas. This project will partner with private and public landowners along the marine shoreline to remove and replace human barriers, such as bulk heads, with living shoreline features engineered to protect the shoreline from erosion and mudslides while improving habitat for people, fish, and wildlife. Best management practices will be installed where no structures currently exist. Living shoreline features will act as a preventative measure to protect public access and upland assets.



Alward Setback Levee—Preliminary Engineering

In 2019, Pierce County Surface Water Management will take a second look at the original project proposal for the Alward Setback Levee. Since the 2013 Pierce County Flood Hazard Management Plan was adopted, changes in property ownership, rising construction costs and river conditions warrant re-looking at the original proposal. The county will compare the original proposal against other possible alternatives to find the best solution. If the solution changes, the proposal will be included in the 2023 Pierce County Rivers Flood Hazard Management Plan.

ead to 2019



24th Street Setback

The 24th Street Setback Project will create additional capacity for floodwaters by connecting the floodplain to the main stem of the White River. Other partners working on this project with the City of Sumner are Pierce County Surface Water Management, Puyallup Tribe of Indians, and Muckleshoot Indian Tribe.





Who We Are & What We Do

The Pierce County Flood Control Zone District (FCZD) is a special purpose district, created by the Pierce County Council in 2012. The district is governed by a Board of Supervisors and an Executive Committee. The Board of Supervisors meets quarterly on the second Wednesday of January, April, July, and October and the Executive Committee meets the third Wednesday of each month. They authorize plans, budgets, project funding, and program and policy guidance. All meetings are open to the public.

Members of the Pierce County Council serve as the Board of Supervisors for the district. In 2018 they included: **Rick Talbert**—Chair, **Dan Roach**—Vice Chair, **Derek Young**—Third Member of Executive Committee, **Connie Ladenburg**, **Jim McCune**, **Doug Richardson**, and **Pam Roach**.

Executive Committee

Due to term limits, 2018 is the final year of service on the County Council and District Board for Supervisors Rick Talbert and Dan Roach. In 2018 the Executive Committee members included Rick Talbert, Chair; Dan Roach, Vice Chair, and Derek Young. Supervisor Rick Talbert served on the Executive Committee since the District was formed in 2012. He served as Vice Chair from 2012-2015 and became Chair in 2016. Supervisor Dan Roach served on the Executive Committee from 2015-2018. He became Vice Chair in 2017. Supervisor Derek Young joined the Executive Committee in 2017.

Under Chair Talbert's leadership the District was established and over $48 million has been allocated for flood risk management throughout Pierce County. On the ground accomplishments included completion of flood risk management capital projects such as the Tacoma Wastewater Treatment Plant Flood Wall which received a National Public Works Association award; funding was provided for the annual operation and maintenance of the levee system by Pierce County; an Opportunity Fund grant program was established to provide District funds to local jurisdictions; a Comprehensive Plan of Development was adopted to guide District investments, and the District achieved clean financial audits from the state.

Vice Chair Roach put his emphasis on project implementation and getting the most bang for the buck. His efforts have focused on accountability and ensuring that communities are benefiting from District projects and programs. Under his watch the Calistoga Levee in Orting was completed and performed its role of protecting the community.

Supervisor Young has led initiatives since he joined the Executive Committee to increase the District's transparency and public access as well as tireless advocacy for equitable benefits county-wide from District investments.

The Executive Committee initiated policies to set a high standard of providing meeting information to the public well in advance of action by the Board; established a fund balance policy, and created a Strategic Reserve Fund to allow the District to respond to emerging needs.

Advisory Committee

The county council also created an advisory committee to make recommendations to the Board on capital projects. Their meeting dates are posted on the Flood Control Zone District website: **www.piercefloodcontrol.org**. Their meetings are also open to the public.

2018 Advisory Committee Members

Ryan Mello—Chair
Councilmember, City of Tacoma

Mike Dahlem—Vice Chair
Public Works Director, City of Sumner

Gary Brackett
Business Representative

Mike Brandstetter
Councilmember, Lakewood City, WRIA 12

Bruce Dammeier
County Executive, Pierce County

John Palmer
Mayor, City of Puyallup

Russ Ladley
Natural Resources Director, Puyallup Tribe of Indians

Jeff Langhelm
Public Works Director, Gig Harbor, WRIA 15

Dave Morell
President, National Grouting Systems

Clare Petrich
Commissioner, Port of Tacoma

Steve Pruitt
Member, Nisqually River Council, WRIA 11

James Rackley
Councilmember, Bonney Lake, WRIA 10

Kim Roscoe
Mayor, City of Fife

Chuck West
Battalion Chief, Key Peninsula Fire Department

Ken Wolfe
Building Official, City of Orting

Greg Reed
Public Works Director, City of Orting
Replaced Ken Wolfe in July 2018

Remembering Ken Wolfe

Ken Wolfe passed away on June 14, 2018. Ken was instrumental in the formation of the Pierce County Flood Control Zone District. Beginning in 2013, he served as the Flood District Advisory Committee's first Vice Chair and he served as Chair from 2014-2015. He worked for the City of Orting as a Building Official and as the city's National Flood Insurance Program Community Rating System Coordinator for 13 years. Ken helped other communities address flood risk. He generously offered his expertise and support to his colleagues.

Ken provided leadership to assemble funding partnerships to build the award-winning Calistoga Levee in the City of Orting. The Calistoga Setback Levee is a 1.5-mile setback levee on the Puyallup River in the City of Orting. The city partnered with the district, the Nature Conservancy, Washington State Department of Ecology, and the Salmon Recovery Funding Board. The total project cost was $19 million. The completed levee successfully protected the City of Orting in a series of winter storms in 2014 and 2016. This allowed floodplain managers to reduce the flood warning level in the area for minor flooding, from 10,000 cubic feet per second (cfs) to 4,500 cfs, a warning level comparable to 25 years ago.

The Calistoga Levee will be renamed Wolfe Levee in his honor.




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Taco
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