

# US Army Corps of Engineers

## Project Updates

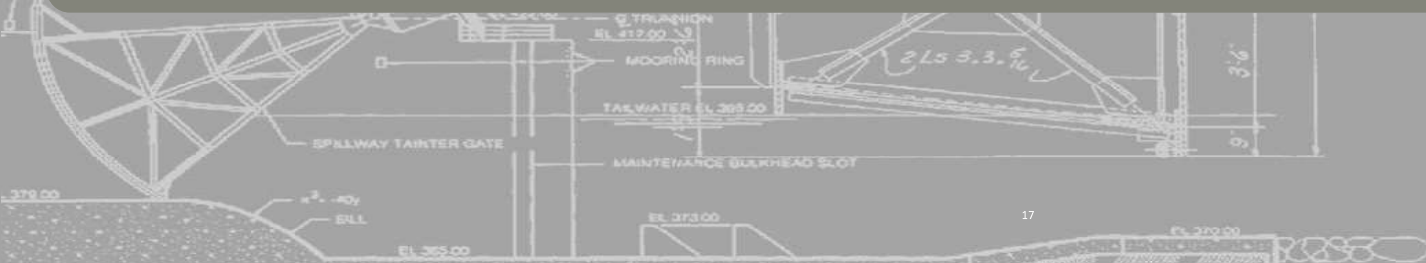
Erik Petersen

# USACE PORTLAND DISTRICT WILLAMETTE VALLEY PROJECT UPDATE

10<sup>th</sup> Anniversary North Santiam Summit

Erik Petersen  
Operations Project Manager  
Portland District, Willamette Valley Project

30 April 2020



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## WILLAMETTE VALLEY UPDATE AGENDA

- COVID-19 – Willamette Valley Operations, Portland District & USACE activities.
- Water Year 2020 – Where we are, how we got here, and where we're heading.
- Recap of the April 2019 high water event - what we did and what we learned.
- Big Cliff Remedial Action – latest news.
- Willamette EIS & Willamette BiOp Consultation - process, key milestones, alternatives and way ahead.
- Detroit Temperature Control and Downstream Passage - progress to date, and possible path forward.
- Willamette Basin Review – status update.
- Summary - Q&A.

# COVID-19 RESPONSE



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## COVID-19 RESPONSE - CONTINUITY IN THE WILLAMETTE VALLEY

- **Supporting the emergency** – operating facilities – moving water and making power while taking care of people (max telework / personal hygiene / social distancing / PPE).
  - **Monitoring facilities** – sustaining security / safety / reliability / environmental compliance.
  - **Accomplishing high priority work** (FEM 6 or above work items), parallel criticality for TR's & agreed upon capital support work.
  - **Complying with the ESA** – sustain BiOp actions.
  - **Protecting resources** – monitor and protect critical natural and cultural resources.
- **Supervisors ensure clarity** of your part of the mission's priorities to staff (NCE and those working from home).
  - **Supervisors maintain accountability** for people - start of shift, meaningful telework, monitoring & documenting work expectations & progress.

U.S. ARMY CORPS OF ENGINEERS (AS OF: 27-APR 0730)

# COVID-19 CORONAVIRUS

COVID-19

RESPONSE DAY

45

USACE

ENGAGEMENT 50/5

States / Territories

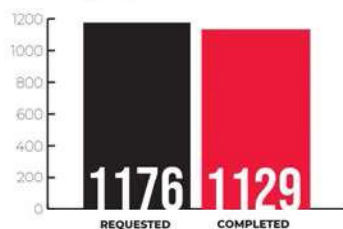
## ADMINISTRATIVE

MISSION ASSIGNMENTS 62 OPEN: 50  
CLOSED: 12

CUMULATIVE FUNDING \$1.8B MA: \$1.8B  
NEPP FUNDING: \$4M

ENGAGED PERSONNEL / DEPLOYED: 1,573  
SUPPORTING: 15,000

## ASSESSMENTS



## ALTERNATE CARE FACILITY TOTAL BED COUNT

14,544

## ALTERNATE CARE FACILITY CONSTRUCTION



### ARENA TO HEALTHCARE (A2HC)

597 Assessments Complete 23 Sites Selected 12,084 Beds 3 Pending Contracts 20 Contracts Awarded



### HOTEL/DORMS TO HEALTHCARE (H2HC)

532 Assessments Complete 15 Sites Selected 2,460 Beds 3 Pending Contracts 12 Contracts Awarded

## ARENA TO HEALTHCARE (A2HC)

597/620  
Assessments  
Complete



12,084

Potential Beds

## HOTELS/DORMS TO HEALTHCARE (H2HC)

532/556  
Assessments  
Complete



2,460

Potential Beds



## ENGINEERED SOLUTION PLANS

Approved site adaptations must be accomplished in as little as 5 days and at most 2 weeks to align with state projected virus infection peaks.

## 4 STANDARD DESIGNS



College Dorm



Hotel



Sports Arena



Convention Center

All 4 designs can be adapted to serve COVID and NON-COVID patients.

## PROJECT COMPLETION



20 OF 32  
COMPLETE



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## BUILDING STRONG®

SIMPLE SOLUTIONS FOR A COMPLEX PROBLEM

For more information about what the Corps is doing in response to COVID-19 visit: <https://www.usace.army.mil/coronavirus/>

USACE works in conjunction with the entire federal eco-system during responses like COVID-19 through FEMA learn more about their mission here: <https://www.fema.gov/coronavirus>



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# WATER YEAR 2020



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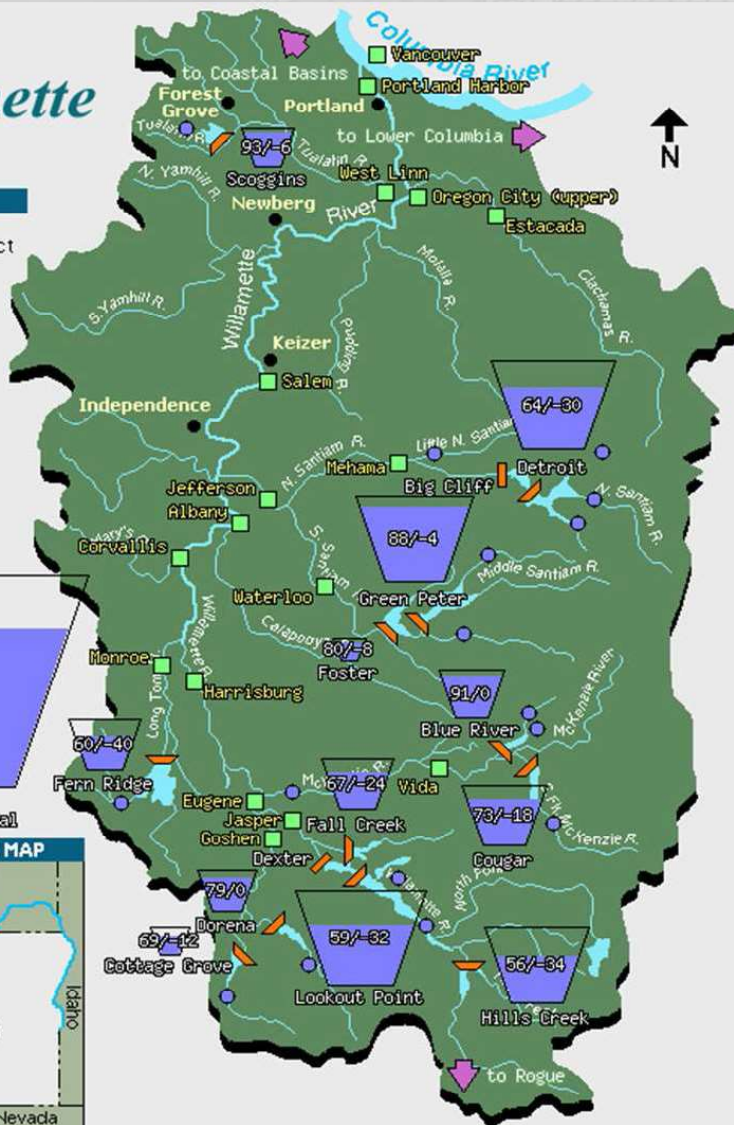
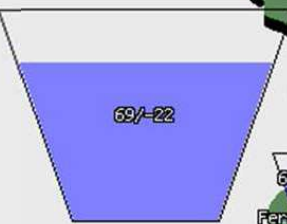
# The Willamette Basin

## LEGEND

-  Storage Project
-  Run of River
-  Gage
-  No Alerts
-  Bank Full
-  Flood Stage

Overview

Annual



## How did we get here?

- Refill started 1 February
- Basin relies heavily on rain for refill
- Basin wide precipitation below ~50% since Feb
- Snowpack peaked on 5 April: 18.6 inches of water; 110% of mean – was 76% on 28 April
- Construction activities, such as spillway gate repairs did not impact refill

## Forecast

- 1-3 month Climate outlook indicates average precipitation and above average temperatures
- Most reservoirs not expected to fill
- Reservoirs will draft fast once used for augmentation per 2008 Biological Opinion
- USACE is collaborating with BPA, NMFS, & ODFW to manage the Willamette System to meet the 2008 Biological Opinions objectives



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# FLOW MANAGEMENT

**Difficult water year – less storage to work with.**

## **Reduced Mainstem Willamette BiOp Flow Targets.**

- No mainstem flow targets for the month of April.
- Cooler spring has helped.
- Mainstem flow target adjustments – focal point for conservation season.
- Saved water from being released from reservoir storage; allows continued refill.
  - Stored water can be used for augmentation later in the summer when baseflows are at their lowest and temperatures are at their highest.
  - Increased storage prolongs access to boat ramps extending recreation season.

## **Reduced North and South Santiam Tributary BiOp Flow Targets**

- Increases storage potential for meeting later summer tributary flow targets.
- Increases probability for temperature operations at Detroit by increasing storage potential. Otherwise unlikely that the reservoir would fill above spillway crest.



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# WATER QUALITY

## Annual Synoptic Surveys

- Water quality conditions assessments to meet the Clean Water Act and regulation.
- Unable to collect samples, COVID-19 restrictions.

## Harmful Algal Blooms (HAB)

- HAB sampling (cyanotoxin analysis) may be impacted.
- USACE staff and partners will continue to report any blooms.
- Remote sensing tools are being evaluated to observe blooms.
- Collaboration with City of Salem, EWEB, and USGS early HAB detection progresses.

## Cooperative Gauging

- USGS monitoring and maintenance of Corps' flow and water quality gages have not been affected.

## Temperature Management

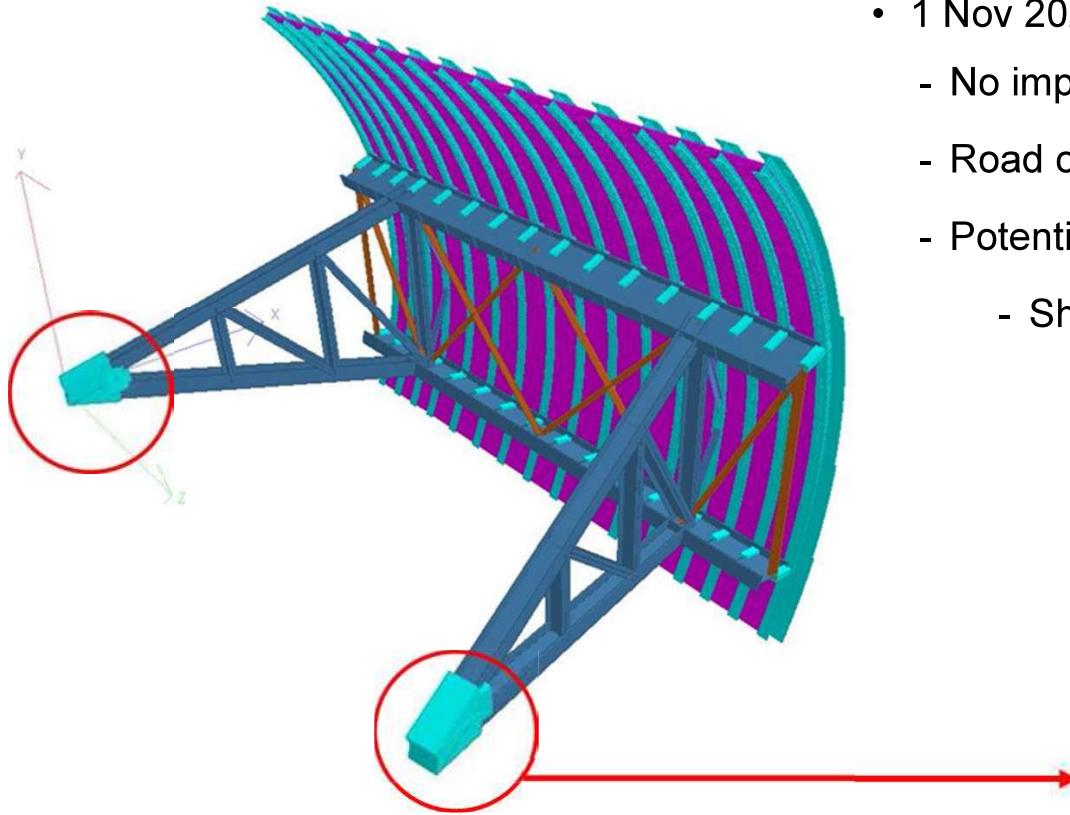
- Cougar - likely to provide temperature operations through the summer.
- Detroit - temperature operations may be impacted due to insufficient water.



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# DETROIT SPILLWAY GATE WORK



Spillway Gate Repairs (2020-2022) will affect water management

- 15 Oct 2020 – 1 Mar 2021 (Gates 3-6)
- 1 Nov 2021 – 15 Feb 2022 (Gates 1-2)
  - No impacts to conservation season (refill or drawdowns)
  - Road over dam closed
  - Potential closures to Mongold boat ramp (El. 1450 ft)
    - Short duration drawdowns to elevation 1425 ft

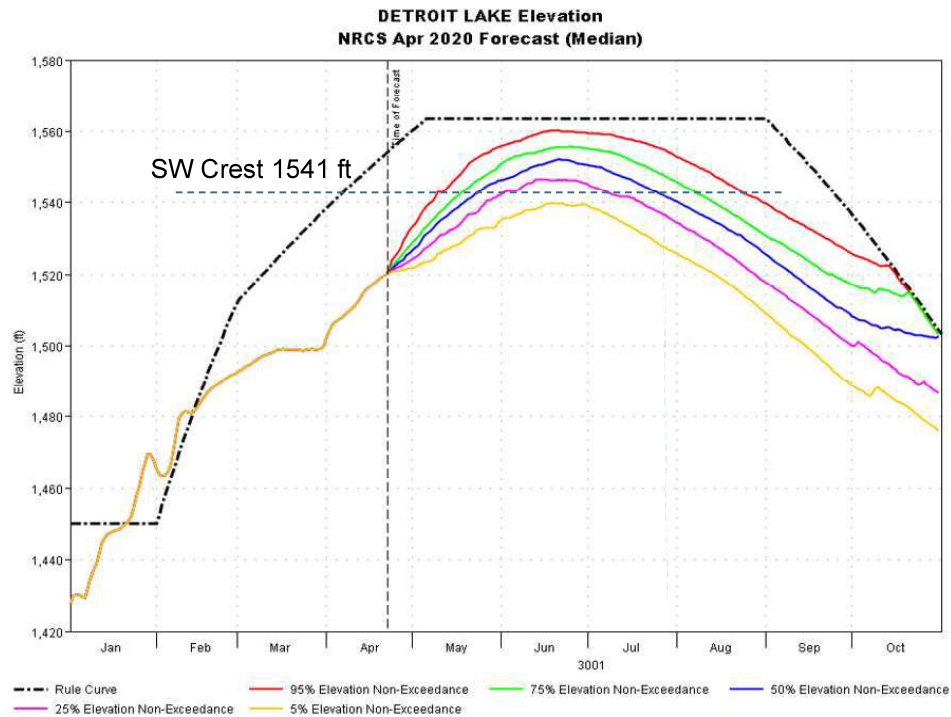


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# DETROIT PROJECTED RESERVOIR ELEVATIONS

## 27 APRIL 2020



- Lower N. Santiam targets (1,200 cfs vs 1,500 cfs) allows Detroit pool to continue to fill potentially above spillway crest, extending temperature control spill operations.



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