

# **Klamath Basin Water Update and Operations Planning Meeting**

**March 22, 2019**

**Jeff Nettleton, Klamath Basin Area Office Manager**

# Overview

1. Introductions & Opening Statements
2. Current Water Conditions, Operational Parameters, & Anticipated Klamath Project Water Allocations
3. Status on Endangered Species Act (ESA) Section 7 Reinitiation of Consultation (ROC) on Klamath Project Operations
4. Status on National Environmental Policy Act (NEPA) Analysis on Klamath Project Operations
5. Next Steps
6. Public Statement Session
7. Closing & Adjourn

# Introductions / Opening Statements

- Bureau of Reclamation

- Ernest Conant, Mid - Pacific Regional Director
- Jeff Nettleton, Klamath Area Manager

- U.S. Fish and Wildlife Service

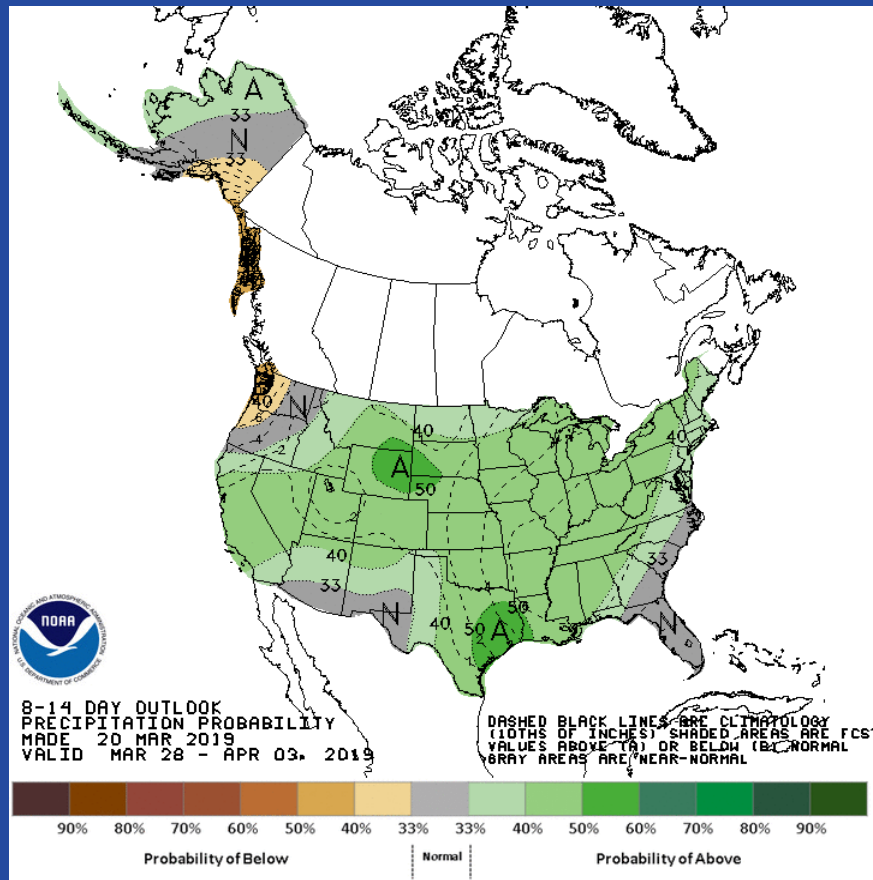
- Paul Souza, Southwest Regional Director
- Dan Blake, Klamath Field Supervisor
- Greg Austin, Klamath Basin Refuge Complex Project Leader

- National Marine Fisheries Service

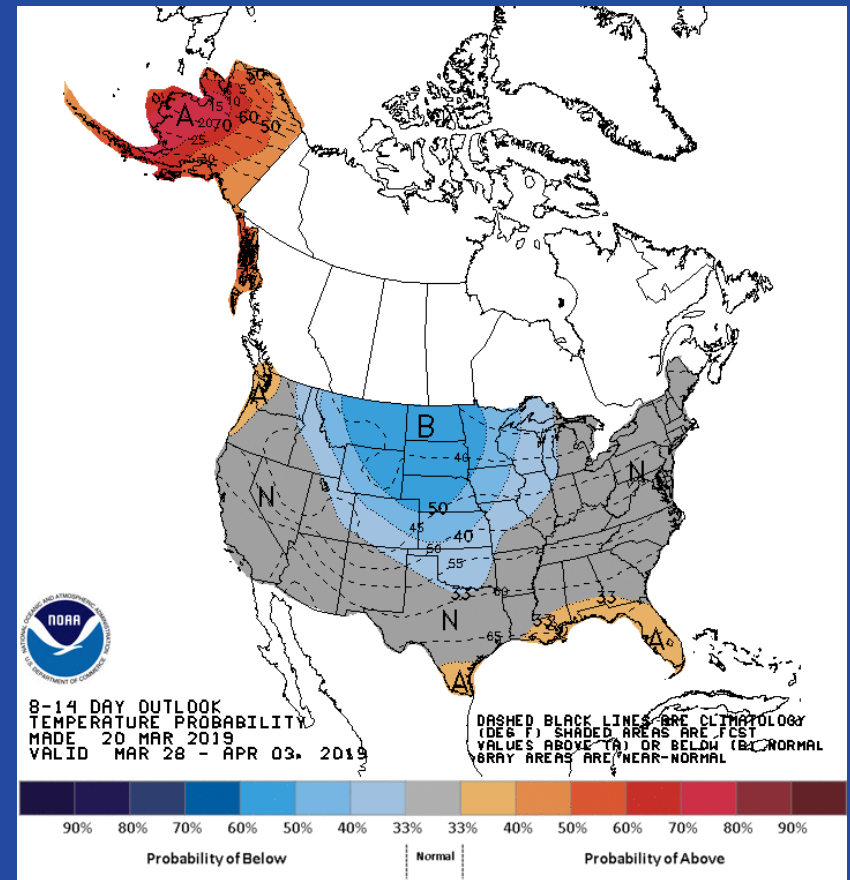
- Barry Thom, West Coast Regional Administrator

# Current Water Conditions

## Precipitation Outlook (8-14 Days)

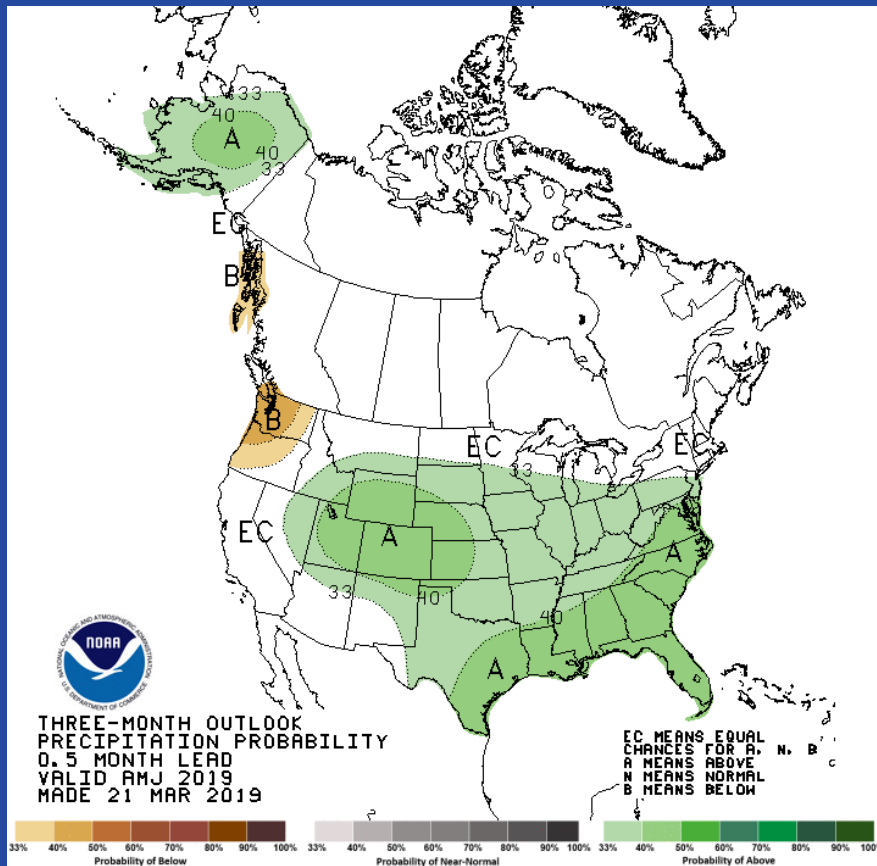


## Temperature Outlook (8-14 Days)

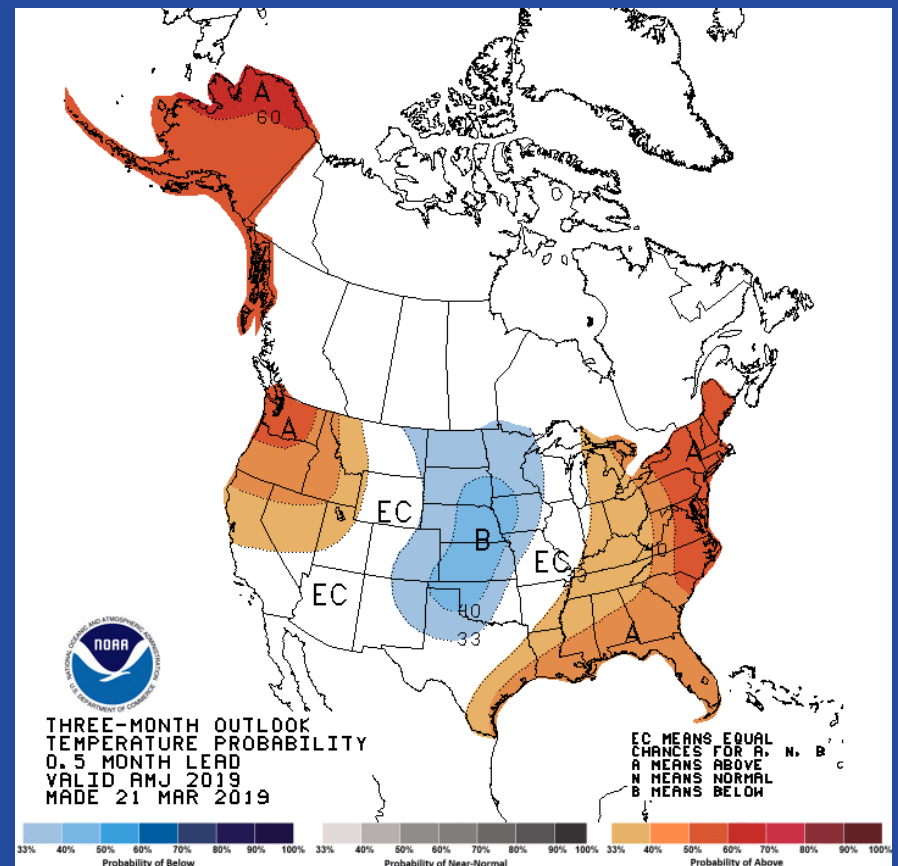


# Current Water Conditions

## April – June (3 Month Outlook)



Precipitation

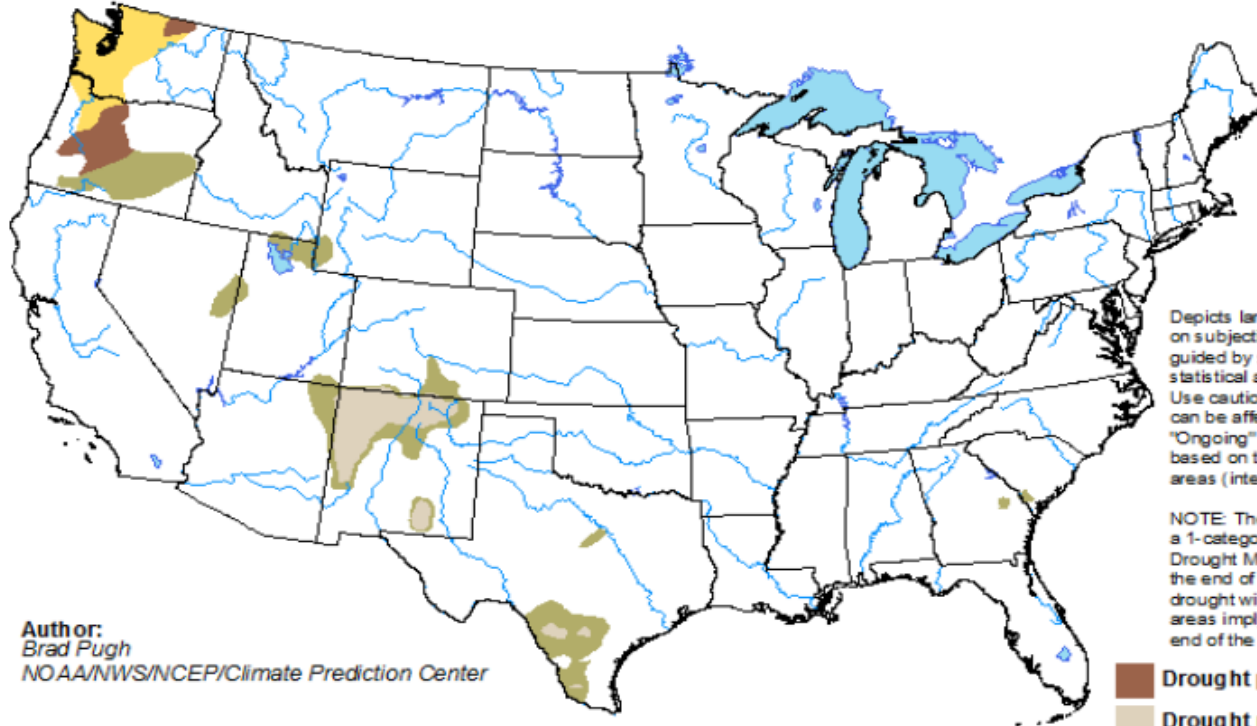


Temperature

# Current Water Conditions

## U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period





Valid for March 21 - June 30, 2019  
Released March 21

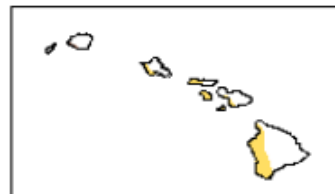


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Brad Pugh  
NOAA/NWS/NCEP/Climate Prediction Center

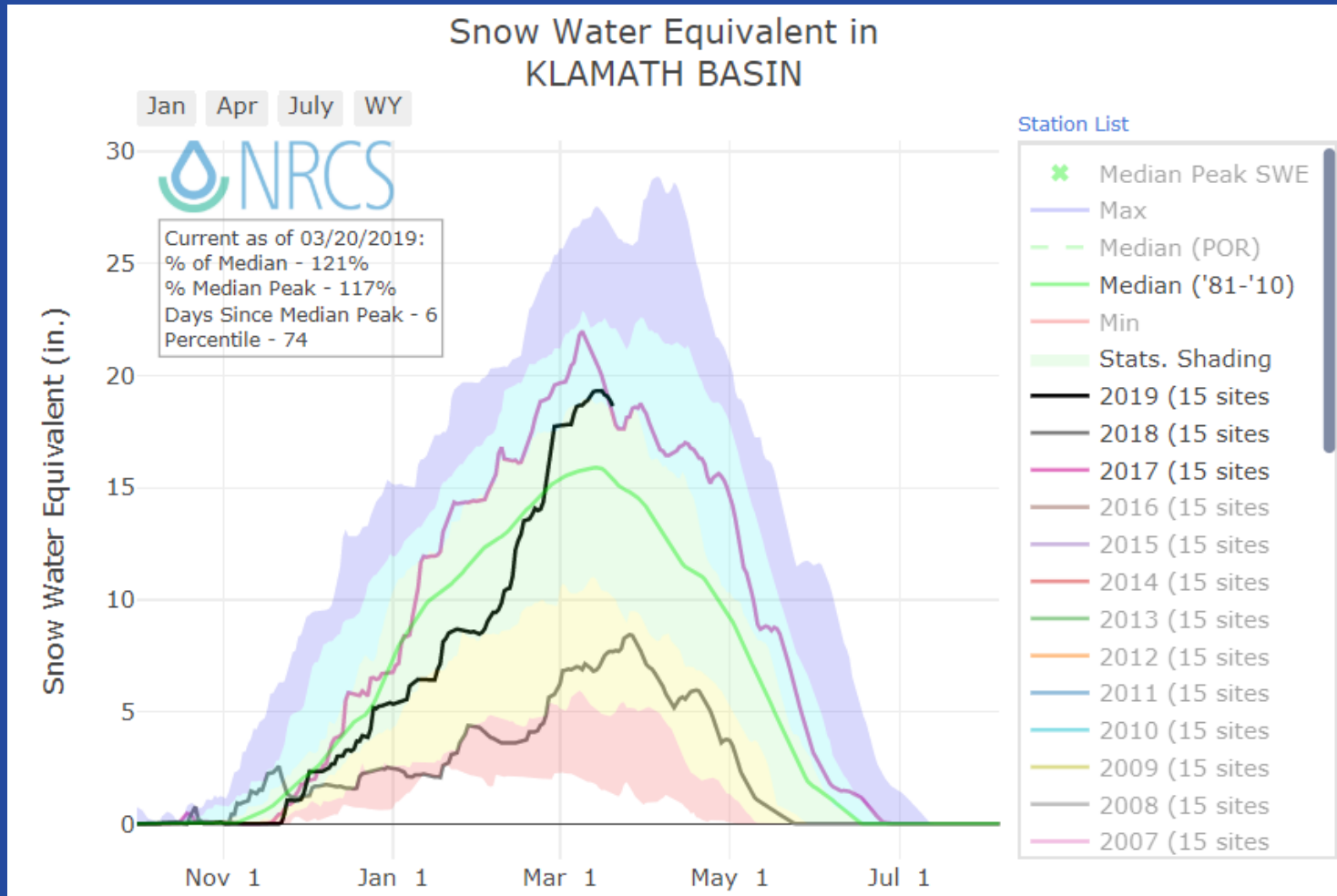
-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>

# Current Water Conditions

## Upper Klamath Basin Snowpack



121% of median snowpack

100% of water year to date precipitation

# Current Water Conditions

Update	Forecast period	Forecasted inflow (TAF)	% of historical avg
Jan 2019	Apr-Sept	360	75
mid-Jan 2019	Apr-Sept	330	69
Feb 2019	Apr-Sept	390	81
mid-Feb 2019	Apr-Sept	460	96
Mar 2019	Apr-Sept	550	115
mid-Mar 2019	Apr-Sept	585	122

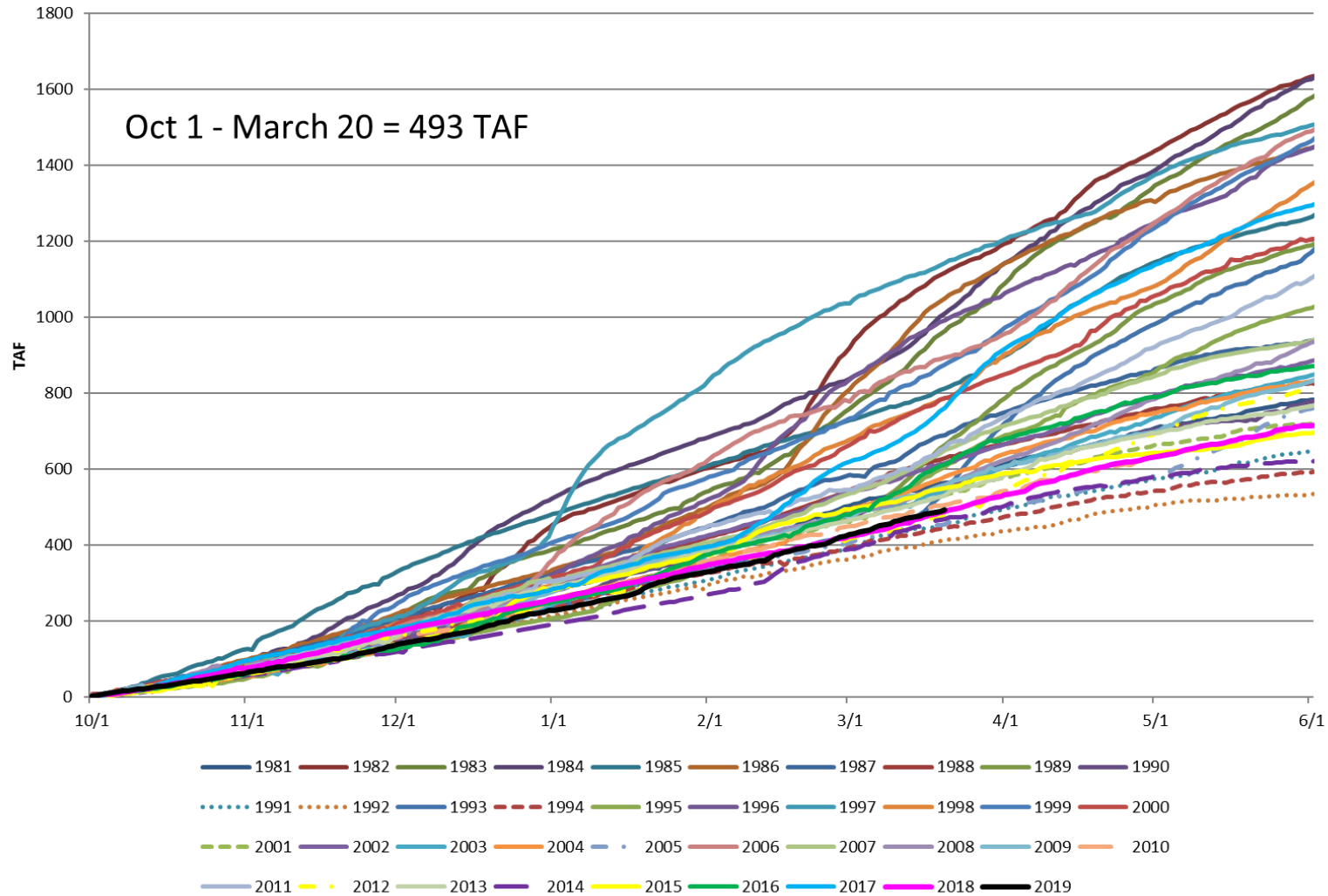
Data type	Time period	Inflow (TAF)	% of historical avg
mid-March 2018 forecast	Apr-Sept	270	56
2018 observed	Apr-Sept	327	68
mid-March 2019 forecast	Apr-Sept	585	122

**NRCS  
Inflow  
Forecast –  
Upper  
Klamath  
Lake**



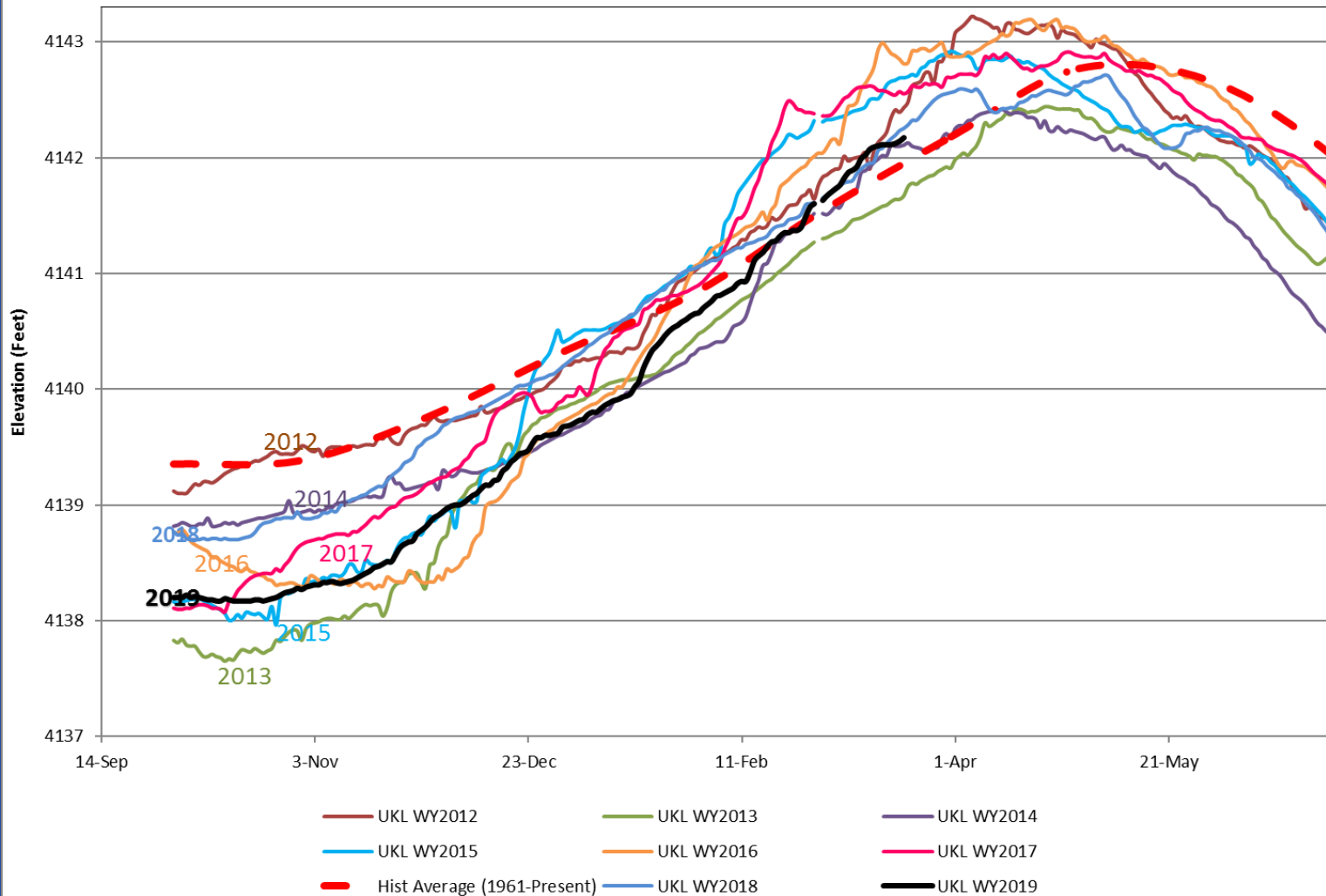
# Current Water Conditions

## Cumulative UKL Inflow by Water Year



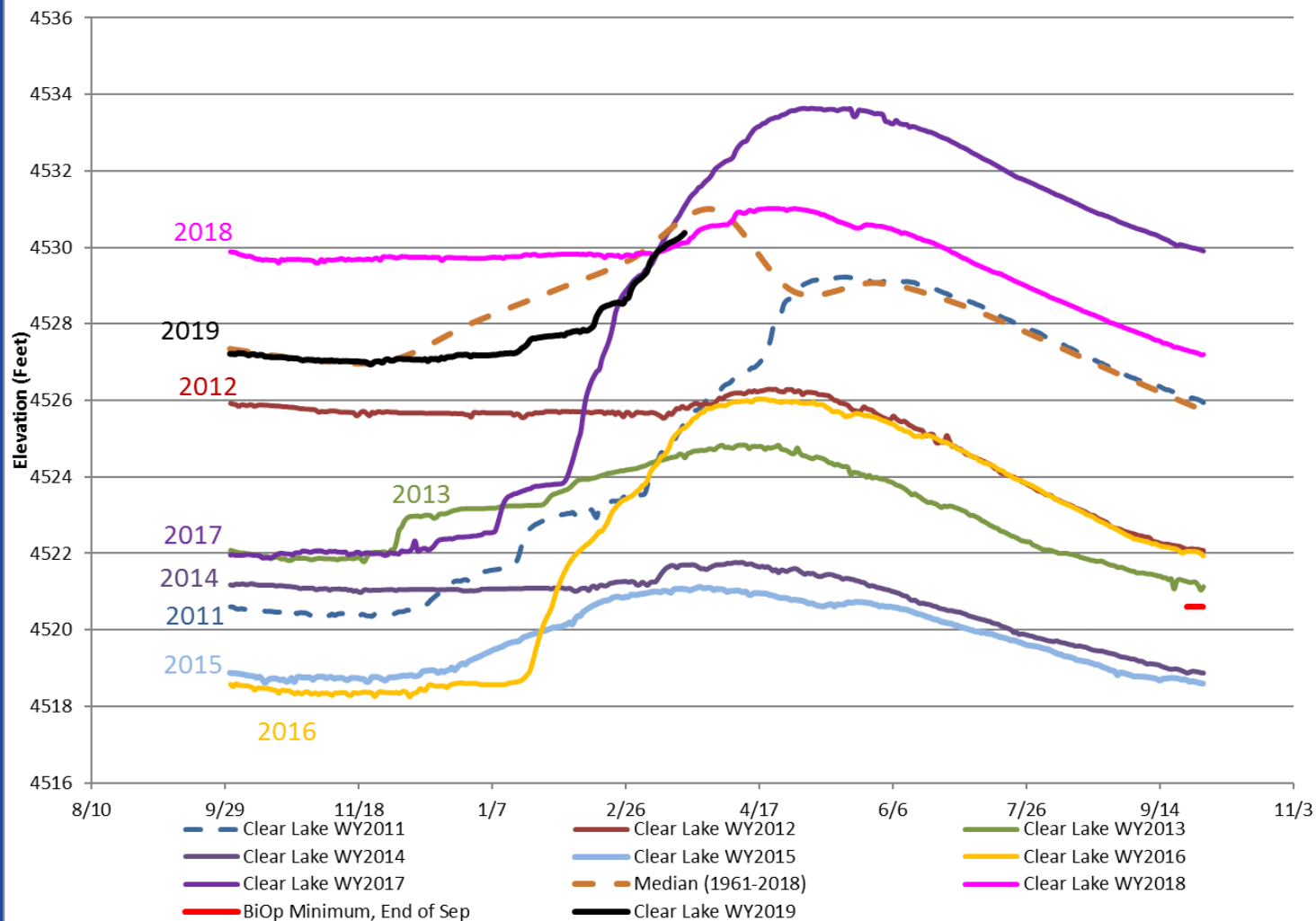
# Current Water Conditions

## UKL Elevations



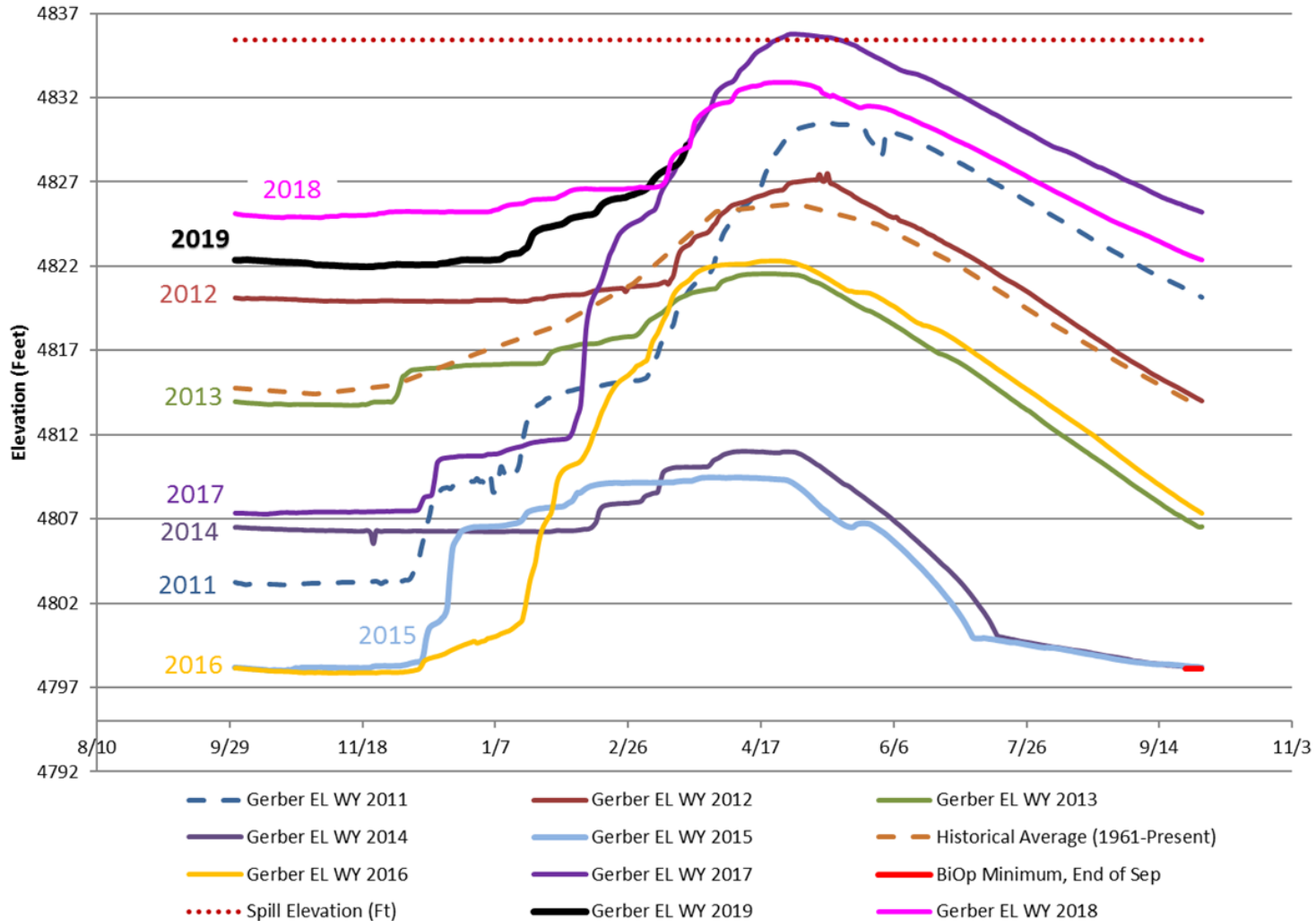
# Current Water Conditions

## Clear Lake Elevations



# Current Water Conditions

## Gerber Elevations



# Current 2019 Water Operational Parameters

## 2013 Joint Biological Opinion

- End of month lake elevation thresholds on Upper Klamath Lake
- Environmental Water Account – Klamath River Flows

## 2017 Court Injunction

- Surface flushing flow of 6,030 cubic feet per second (cfs) for 72 hours (*November 1 – April 30*) (annually)
- Deep flushing flow of 11,250 cfs for 24 hours (February 15 - May 31) (every other year if hydrology allows)
- Reserve 50,000 acre-feet (AF) by April 1 for emergency dilution flows (*April 1 - June 15 or 80% outmigration*) (annually)

# Klamath Project Allocations under 2013 BiOp + 2017 Court Order

<i>Source of Supply</i>	<i>Acre-Feet</i>
Upper Klamath Lake/Klamath River	390,000 AF (100% of full supply) 50,000 - 100,000 AF (2017 Court Order) 290,000 AF - 340,000 (with Court Order)  <i>Projected Project start date unknown, possibly as late as June</i>
Lost River Diversion Channel	Range: 35,000 AF to 65,000 AF
Gerber Reservoir	35,000 AF (100% of full supply)
Clear Lake	35,000 AF (100% of full supply)

# Status on ESA ROC on Klamath Project Operations

Jan. 2017: Formal ROC with National Marine Fisheries Service and U.S. Fish and Wildlife Service

July-Dec. 2017: ROC Kick-off with Tribes and Key Stakeholders

Nov./Dec. 2018: Release of Proposed Action (PA) with Tribal/Key Stakeholder Technical Team Meetings

Dec. 2018: Reclamation transmits 2018 Biological Assessment (BA) to the Services

Feb. 2019: Reclamation transmits the modified 2018 PA

March 2019: Reclamation transmits Essential Fish Habitat Assessment to the NMFS

April 2019: Anticipated receipt of separate, but coordinated Biological Opinions

# Anticipated 2019 Klamath Project Allocations under the Modified 2018 PA

<i>Source of Supply</i>	<i>Acre-Feet</i>
Upper Klamath Lake/Klamath River	325,000 AF (93% of full supply)  Projected Project start date is early April, dependent on completion of ESA and NEPA compliance requirements
Klamath Straits Drain & Lost River Diversion Channel	Range: 60,000 AF to 90,000 AF
Gerber Reservoir	35,000 AF (100% of full supply)
Clear Lake	35,000 AF (100% of full supply)



# ***Continued* - Status on ESA ROC on Klamath Project Operations**

## Ongoing Biological Opinion Development

- ***NMFS***
  - NMFS draft Biological Opinion evaluates effects of Reclamation's proposed action on four species: southern DPS Green Sturgeon, Pacific Eulachon, Southern Oregon Northern California Coast coho salmon, and Southern Resident killer whale.
  - Our analysis includes new information regarding flow management and disease effects to coho salmon. We are also analyzing effects of the proposed action on Chinook salmon, given their importance to Southern Resident killer whales as a food source.
  - We expect to sign our BiOp by April 1.

# ***Continued* - Status on ESA ROC on Klamath Project Operations**

## Ongoing Biological Opinion Development

- ***USFWS***
  - Under the ESA, all federal agencies have a special obligation to conserve listed plants and animals and their critical habitat
  - FWS' draft BiOp evaluates effects of Reclamation's proposed action on all life stages of Lost River and shortnose suckers
  - The analysis particularly focuses on adult and larval suckers critical to the continued survival of the species
  - We expect to sign the BiOp by April 1

# Status of Compliance with NEPA on Modified 2018 PA

## Components of the modified 2018 PA outside the range of historic operations triggering NEPA:

- 1) Reductions to Project Supply from Upper Klamath Lake
- 2) Use and accounting of natural and irrigation return flows
- 3) Implementation of forced surface flushing flows in the Klamath River
- 4) Changes to the minimum elevations in Tule Lake Sump 1A

March 5, 2019: Draft Environmental Assessment released for public review/comment

March 19, 2019: Public review/comment period ended

Early April: Issuance of a Finding of No Significant Impact or a Notice of Intent to prepare an Environmental Impact Statement

# Next Steps

- April 2019: Services transmit the 2019 Coordinated Biological Opinions completing ESA Section 7 Consultation
- Reclamation issues FONSI or NOI completing NEPA compliance
- Reclamation issues 2019 Klamath Project Operations Plan (anticipated on April 8)
- Reclamation will provide updates via public meetings, email, or by posting to <https://www.usbr.gov/mp/kbao/>
- Anticipated next water update from Reclamation on April 8 at the KWUA Annual Meeting

# Public Statement Session

# Closing Statements and Adjourn

- Bureau of Reclamation
  - Ernest Conant, Mid-Pacific Regional Director
  - Jeff Nettleton, Area Manager
- U.S. Fish and Wildlife Service
  - Paul Souza, Pacific Southwest Regional Director
  - Dan Blake, Klamath Field Supervisor
  - Greg Austin, Klamath Basin Refuge Complex Project Leader
- National Marine Fisheries Service
  - Barry Thom, West Coast Regional Administrator

# Thank You

Bureau of Reclamation

Mid-Pacific Region

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