

# Flexible spill agreement: Adapting federal dam operations to new science and energy markets



Washington  
Department of  
**FISH and  
WILDLIFE**

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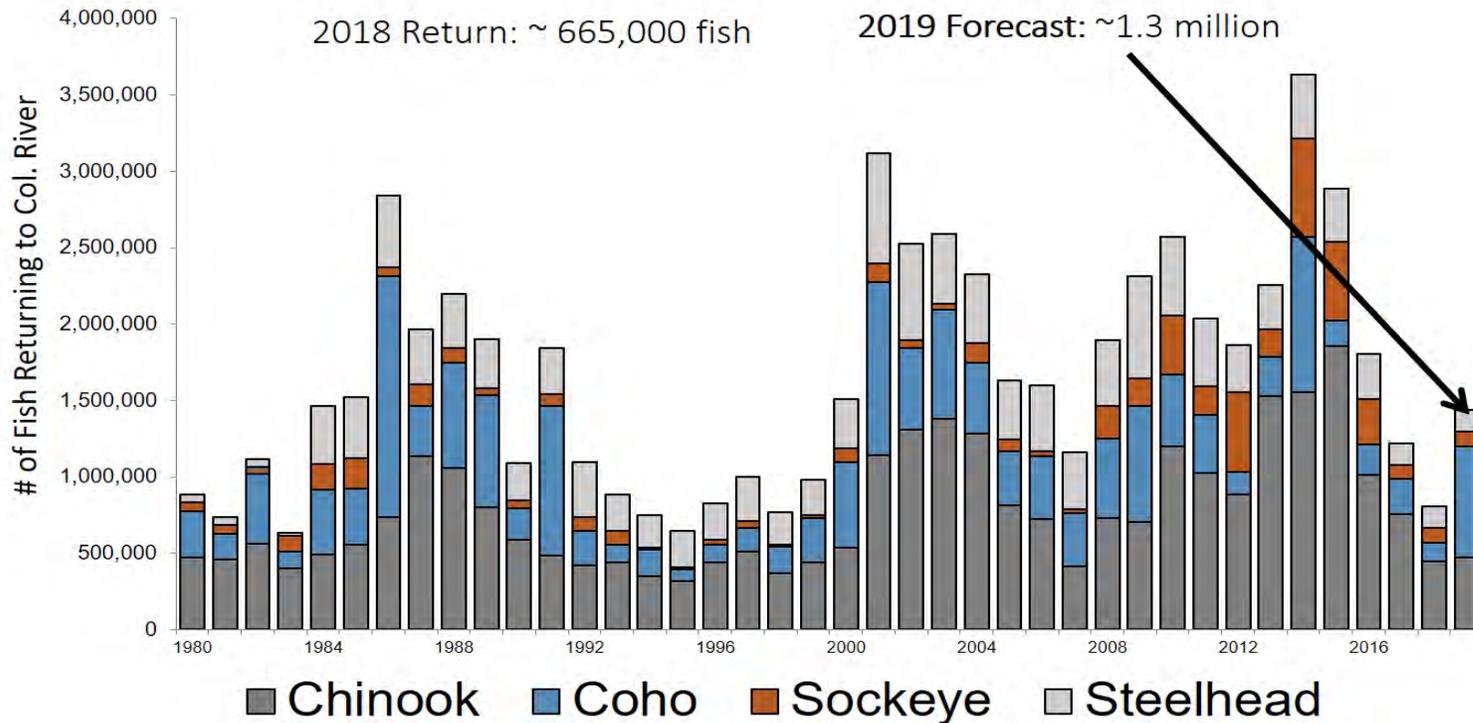
# Lower Columbia and Snake river dams



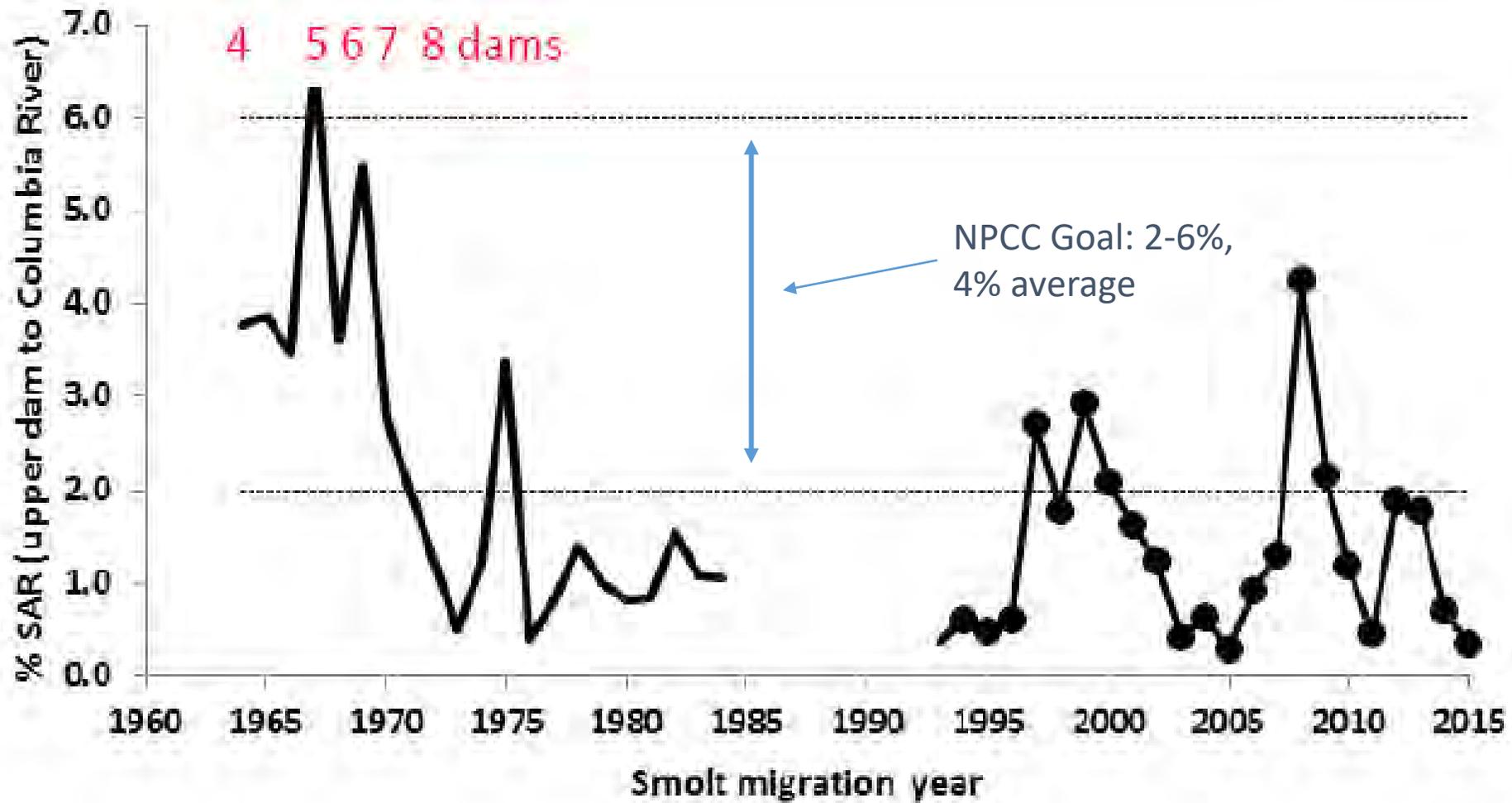
# Biological pressure point: Progress for salmon and steelhead, but not enough

## TOTAL Return of Salmonids to the Columbia River

NPPC target: 5 million →

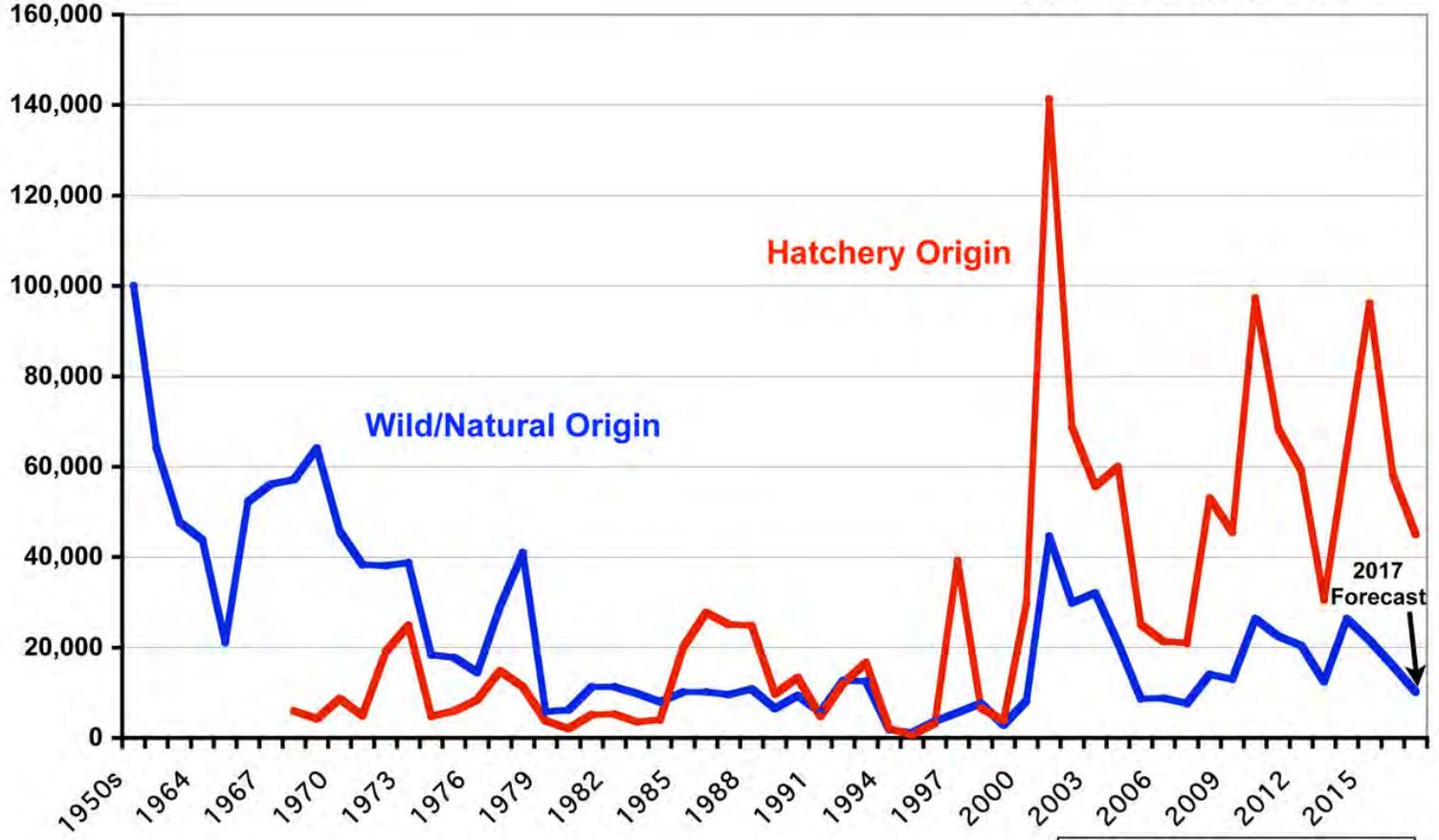


# Snake River smolt to adult returns – too low!



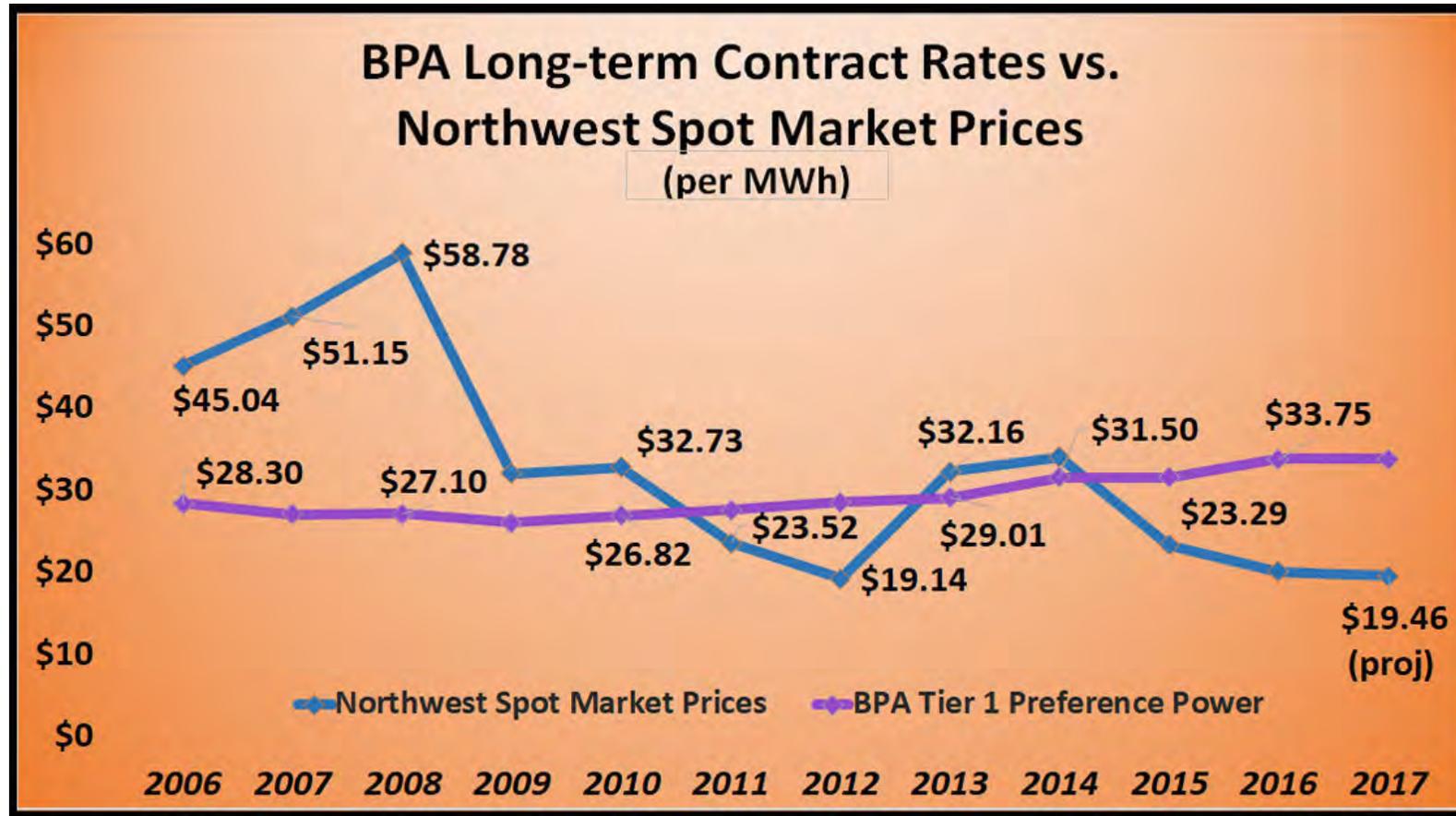
# Snake River Adult Spring/Summer Chinook

data source - Idaho Department of Fish and Game  
counts are from the uppermost dam



Snake River Salmon Solutions

# Economic/energy pressure point: BPA needs a new power marketing model



Legal pressure point: Five FCRPS BiOps invalidated since 1993 – can we get off the litigation treadmill?



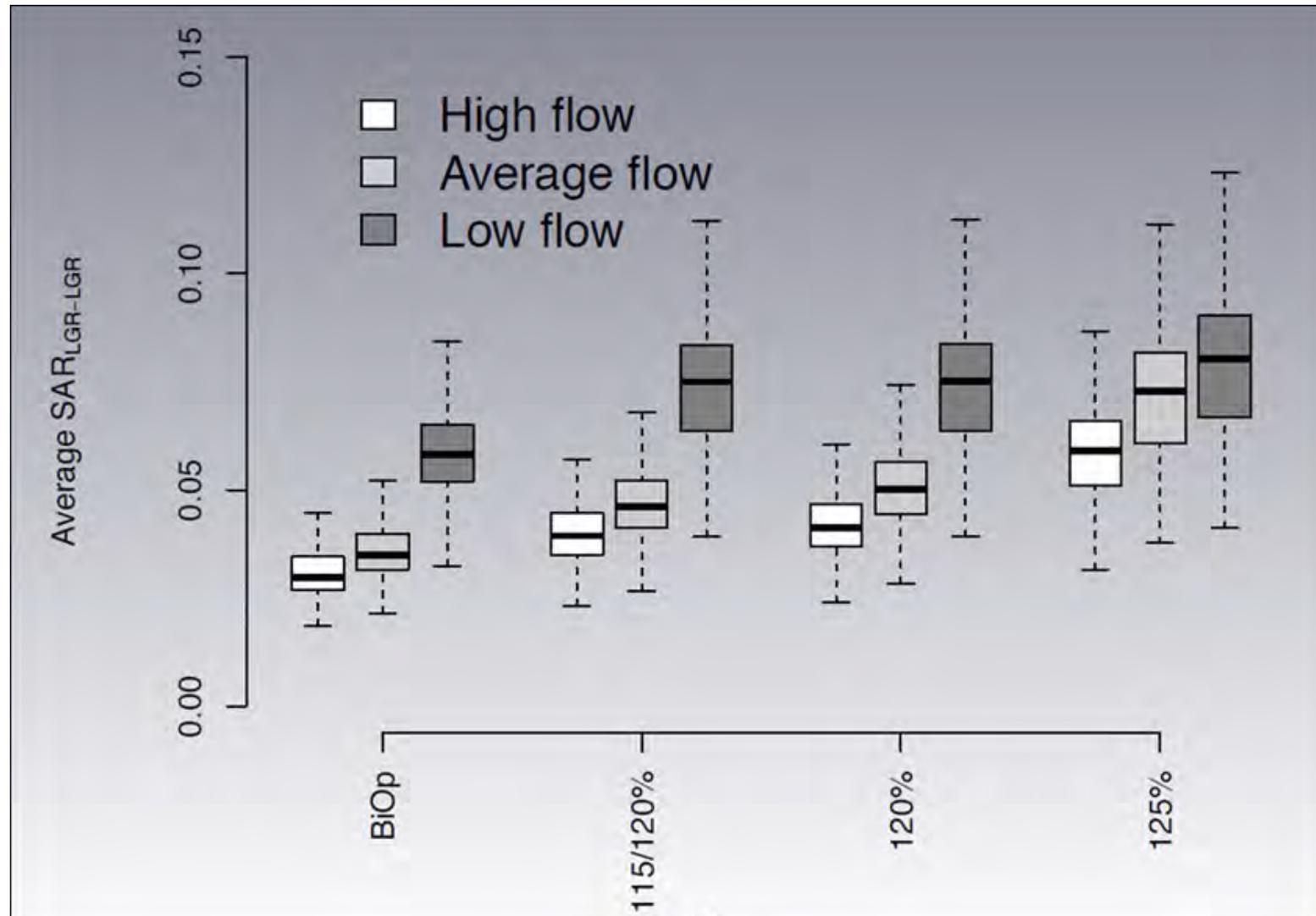
# Interim BiOp during NEPA process: a window to try something new?

## Columbia River System Operations EIS Process

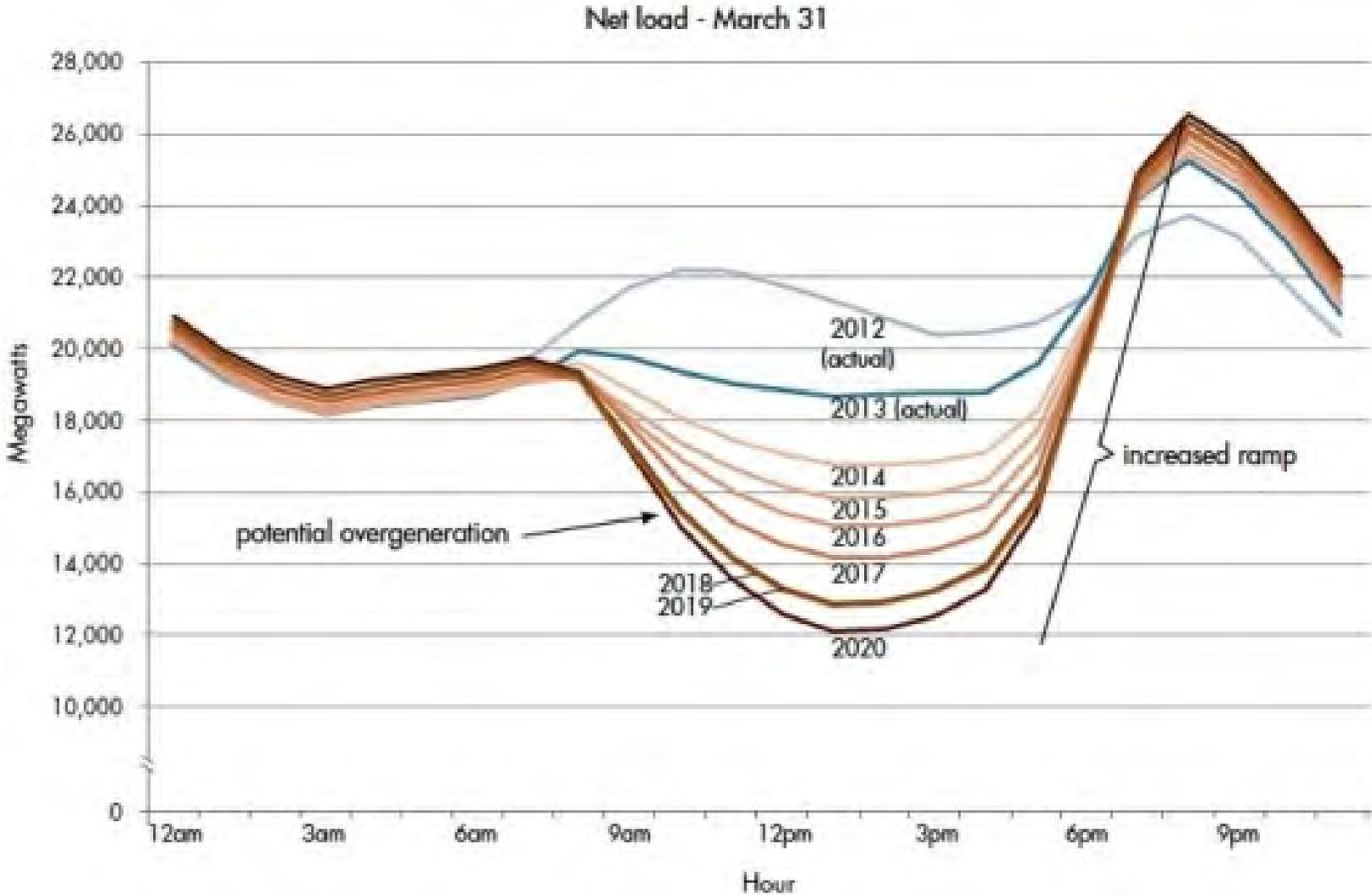


\*Dates reflect commitments to the Council on Environmental Quality based on Oct. 2018 Presidential Memorandum

CSS model suggests that increased spill will help



# Energy market shows value in capturing emerging peak demand periods



## Flex spill agreement in a nutshell

- **Who:** Agreement among **Bonneville Power Administration, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, Nez Perce Tribe, and states of Washington and Oregon**
  - Also supported by **Columbia River Inter-Tribal Fish Commission and states of Idaho and Montana**
- Potential jumping off point for broader **legal agreement** and more **stable fish and wildlife funding**

# Flex Spill Agreement, cont'd...

- **Fish benefits:** Increases total spill over next 2-3 years. Reduced “powerhouse encounters” projected by CSS to improve smolt-to-adult ratio and spring Chinook returns
- **Power benefits:** Decreasing spill during short daily periods of high energy demand may help BPA’s budget



# Flex Spill Agreement, cont'd...

- Applies at **eight lower Snake and lower Columbia dams** in springtime
  - 2019: 16 hours of spill to 120% TDG with eight hours of 2014 BiOp (lower) spill
  - 2020-21: 16 hours of spill to 125% TDG at most dams with eight hours of 2014 BiOp spill



# Discussion?

