#### PUBLIC WORKSHOP TO RECEIVE COMMENTS ON DROUGHT CONTINGENCY PLAN AND TEMPORARY URGENCY CHANGE PETITION & RELATED ORDER



STATE WATER RESOURCES CONTROL BOAR

REGIONAL WATER QUALITY CONTROL BOARDS

**FEBRUARY 18, 2015** 

#### **PRESENTATION OVERVIEW**

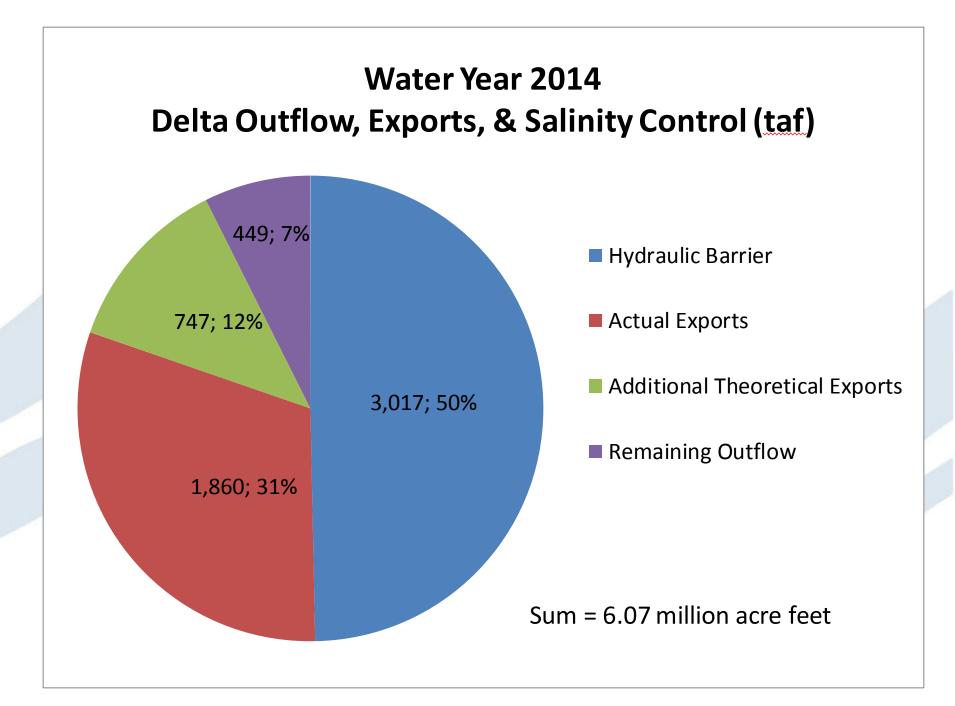
- 1. Lessons from 2014
- 2. Drought Contingency Plan
- 3. Temporary Urgency Change Petition (TUCP)
- 4. Required TUCP Findings
- 5. Delta Cross Channel (DCC) Gate Closure
- 6. San Joaquin River Flows (SJR)
- 7. Delta Outflows
- 8. Exports
- 9. Sacramento River Temperature Issues
- 10. Benefits of TUCP Approval
- 11. Next Steps

## Lessons from 2014-Impacts on People

- Direct costs to ag totaled \$1.5 billion
  - 3% of state's total ag value
- Total economic costs of drought \$2.2 billion
- Loss of 17,100 jobs
  - 3.8% of farm employment
- 428,000 acres out of production (5%) in Central Valley, Central Coast & Southern California
- Central Valley, Tulare Basin hardest hit
  - \$800 mil in lost revenue & \$447 mil added pumping cost

# Lessons from 2014-Impacts on the Ecosystem

- 95% winter-run mortality due to high temp
- High spring-run mortality due to high temp
- Delta smelt at lowest level on record
- Longfin smelt at 2<sup>nd</sup> lowest level on record
- Striped bass, American shad, threadfin shad population indices at near record lows
- Potential impacts to commercial and recreational fishing, recreation, etc.



## **Drought Contingency Plan**

- Prepared by Bureau of Reclamation (Reclamation) & Department of Water Resources (DWR)
- Required by Board Order 2014-0029 on petitions for reconsideration & objections
- Received by Board on Jan. 15, 2015
- Purpose: Identify and justify future operations during drought

#### **2015 TUCP Request**

- Submitted January 23 to modify Decision 1641 (D-1641) Water Right Terms
- Requested changes for Feb. & March:
  - DCC Gate Closures
  - SJR Flows
  - Delta Outflows
  - Export Limits
  - Potential future requests

## **Required TUCP Findings**

- Urgent need to make the changes
- No injury to other lawful user of water
- No unreasonable effect on fish, wildlife, or other instream beneficial uses
- Changes are in the public interest

#### **DCC Gates**

- D-1641 requires gates to be closed Feb.-March
- TUCP proposed real-time flexible operations
- Same as 2014 TUCP
- Reduces water needed for salinity control when DCC Gates open
- Also increases risk of salmon moving into the central Delta when DCC Gates open

## **SJR Flows**

• D-1641 requires 710 cfs or 1,140 cfs

 Higher flows required when "X2" required to be at or west of Chipps Island per Table 4

- No request for Feb. and March in 2014
- TUCP requests 500 cfs Feb. and March
- Request made to reduce storage releases
  New Melones at 25% of cap. and 41% of avg.
- Increases risks to out-migrating salmon

## **Delta Outflows**

- D-1641 requires outflow of 7,100 cfs or salinity of 2.64 mmhos/cm at Collinsville (81 km)
- Table 4 requires number of days of higher outflow or salinity of 2.64 further downstream based on previous month's 8-River Index
  - Salinity of 2.64 at Chipps Island (74 km) or outflow of 11,400
  - Salinty of 2.64 at Port Chicago (65 km) or outflow of 29,200
- 1 Chipps day required in Feb. (correction from Order)
  - No water savings in Feb. due to storms
- 10-20 Chipps days expected in March
  - Change could conserve 85-170 thousand acre-feet (TAF)

#### Delta Outflows cont.

- D-1641 outflows provide reasonable protection for estuarine resources
  - Based on consistent relationships with outflow and abundance of diverse species assemblages
- TUCP requests 4,000 cfs outflow
- Conditions are expected to have an adverse effect on estuarine resources, similar to last year

## **Exports**

- D-1641 allows exports of 35-45% in Feb. and exports of 35% in March
  - Assumes other D-1641 requirements met
- 2014 TUCP
  - Outflow = 4,000 to 7,099 exports up to 1,500
  - Outflow = 7,100 or more exports of natural and abandoned flows up to D-1641
  - Exception for transfers and SJR pulse flows

#### **Exports cont.**

- 2015 TUCP includes same requests as last year with added tiered export level
  Outflow = 5,500 to 7,099 exports up to 3,500
- Tiered exports not approved
  - Would reduce outflows on 1 to 1 basis at already low flows and may increase entrainment risk for already impacted species
- Non-Project post-1914 transfers exempted – considering proposals for modifications

#### Water Supply Costs of Not Approving "Tiered" Exports TAF

	Feb 3 to Feb 5 (Actual)	Feb 6 to Feb 18	Feb 18 to Feb 28	March
Low Estimate	5.1	0	0	69
High Estimate	5.1	0	17	84

The amount would be less if there is another significant storm event

Theoretical minimum = 0 af/day Theoretical maximum = 3,200 af/day

## **Sacramento River Temperature**

#### • Perform WY 2014 hindcast modeling

- Identify discrepancies: modeled vs. observed
- Final Report to Board & Sac Temp Group (STG) by Mar. 4
- Perform WY 2015 forecast modeling and prepare Temperature Management Plan
  - Plans for Reclamation preferred, fishery agencies preferred, and optimal ops for temp control
  - Draft Report to STG by Mar 15, 2015
  - Final Report to Board by Jun 1, 2015
- Meet weekly with STG, as needed
- Report monthly to Board during drought

# **Benefits of TUCP Approval**

- Multiple benefits to non-consumptive uses
  - Reservoir storage (supply, recreation, fish)
  - Temperature control (fish, fishing)
  - Downstream flows (recreation, fish etc.)

## **Benefits of TUCP Approval cont.**

- Multiple benefits to consumptive uses
- Benefits to those with the lowest water right priority still receiving water
  - New Melones: SEWD, OID/SSJID
  - Shasta/Folsom: CVP exporters, Friant contractors, refuges, potentially settlement contractors
  - Oroville: SWP exporters, potentially settlement contractors
  - Water Markets- transfers, exchanges

## **Comments on TUCP**

- More than 50 comment letters, objections, petitions for reconsideration
- Commenters include:
  - Elected representatives
  - The general public
  - Water agencies
  - Non-governmental organizations
  - Other agencies

## **Next Steps**

- Recommend prepare an order for Board consideration in March
- Assess the need for a hearing
- Expect another TUCP request will be filed for April and subsequent months for additional modifications

## **Additional Information**

 State Water Board Drought Webpage: http://www.waterboards.ca.gov/waterrights/ water\_issues/programs/drought/index.shtml

 Covers State Water Board Drought Year Water Actions

## **Future Updates**

• To receive future updates sign up to receive emails online at:

http://www.waterboards.ca.gov/resources/email\_ subscriptions/

- Select "State Water Resources Control Board"
- Enter email address and full name
- Under Categories, select "Water Rights"
- Select box for "Drought Updates"
- Click "Subscribe" button at top