

# Delta Watershed Options for Drought-Related Diversion Curtailments of Post-1914 Water Rights

State Water Board Workshop  
May 21, 2014



# Workshop Purpose

- Discuss potential options for curtailing water diversions in the Delta Watershed during drought when natural and abandoned flows are inadequate to support diversions and instream beneficial uses



# Need for Curtailments in Delta Watershed

- Inadequate natural and abandoned flows to meet all uses due to drought
  - Resulted in need to relax Delta requirements
- Prevent illegal diversion of SWP/CVP (Project) storage releases for Delta requirements
- Preserve Project stored water to:
  - Provide carry-over storage levels going into 2015
    - Provide stored water to repel salinity in 2014/2015
    - Meet cold-water needs for fish
- Preserve water for health and safety, and other critical uses



# Delta Watershed Post-1914 Water Rights

- ~ 8,700 Total
  - ~ 5,800 Permits and Licenses
    - Beneficial Uses: Municipal, Industrial, Agricultural, Fish and Wildlife, Power, Recreation and more
    - ~ 2,300 (40%) =< 10 AF of face value
  - ~ 2,900 Small User Diverters =< 10 AF
    - Small Domestic Registrations
    - Livestock Stockponds



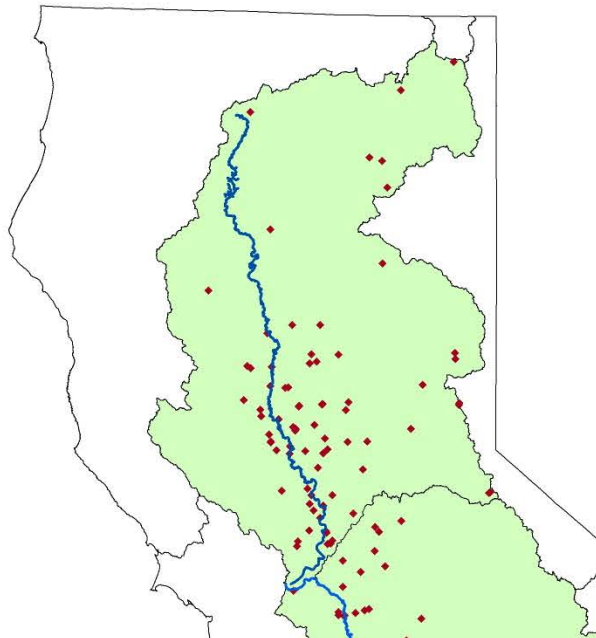
# 2014 Estimates of When Water Will Not be Available

- Term 91 water rights:
  - Notices sent May 13; curtailments begin May 20
- Others Water Rights in Delta Watershed (“Pending”):
  - between May 15 and June 1: all post-1914
  - between June 1 and June 15: junior pre-1914
  - After June 16: senior pre-1914, and correlative reduction for riparians
- Tributaries to the Delta also subject to stream-based curtailments this spring/summer

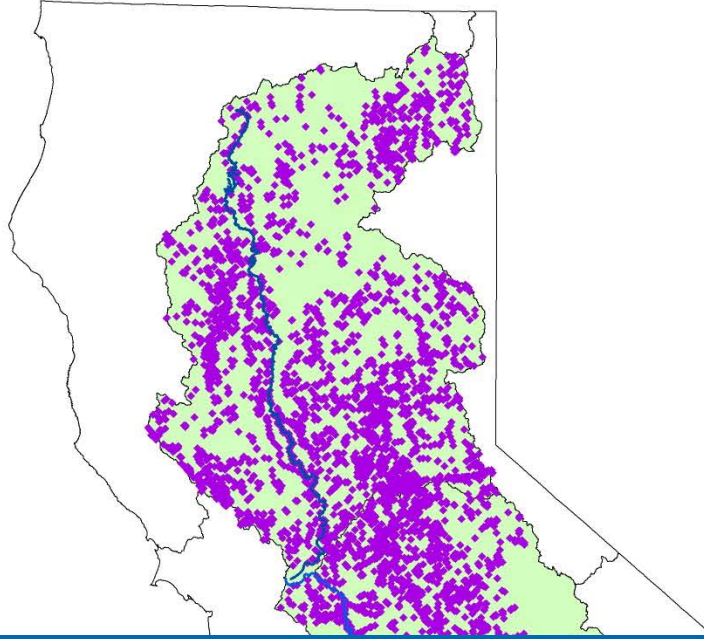
# Water Right Term 91

- Protects Project stored water releases/reduces need for releases to meet Delta requirements
- Treats Delta as an interconnected basin
- Prohibits diversion when natural & abandoned flows insufficient to meet Delta requirements:
  - When the Delta is declared to be “in balance” and
  - Stored project water is being released to meet Delta requirements and inbasin entitlements
- Limited applicability: affects only 121 larger post-1965 Delta Watershed water rights with connectivity to the Delta

Term 91 permits/licenses  
in the Delta watershed (121)

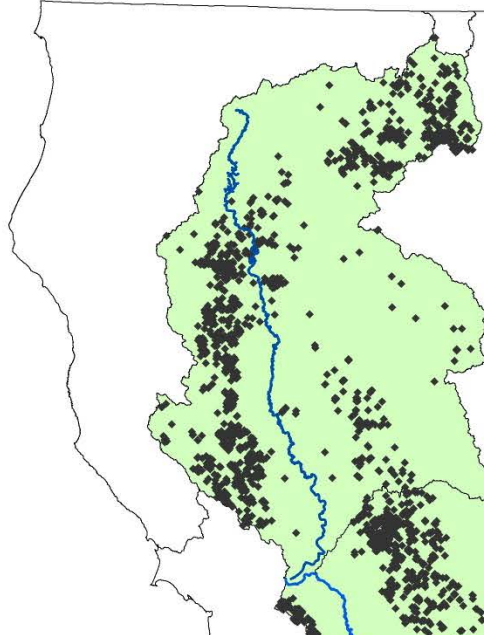


Post 1914 Appropriative  
in the Delta watershed (5,812)





Appropriative small use diverter (Face value  $\leq 10$  AF)  
in the Delta watershed (2,949)



# Water Code Section 1058.5

- Applies in critically dry years immediately preceded by 2 or more consecutive below normal or drier years or when Governor has issued a proclamation of a state of emergency based on drought
- Allows for adoption of Emergency Regulations to require curtailments
- Increases penalties for violations



# Curtailment Options

1. Existing authorities using reported use data
2. Emergency Regulation using reported use data
3. Emergency Regulation using Term 91 approach-Outflow backstopped by Projects
4. Emergency Regulation using Term 91 approach with Delta requirements met by the Projects

# Possible Curtailment Exceptions Under Alternatives

- If no hydraulic continuity with Delta in absence of diversions
- Minimum municipal and domestic use
- Run-of-the-river power
- Other critical water needs (case-by-case)
  - Sanitation, fire readiness and suppression, dust suppression, energy plant cooling for grid reliability, other imminent public health or safety threats as identified by public health agencies
- Local cooperative solutions

# Option 1: Existing Authorities Using Reported Use Data

- Based on full natural flow data and historic reported diversion data
  - Reported diversions corrected for known errors
  - Reported diversions are not real-time
- Curtailment based on water right priorities
  - Bypass for senior rights and stored water releases
  - Does not require others to contribute to Delta outflows
  - No specific exceptions to water right priorities, but could use enforcement discretion

# Option 2: Emergency Regulations Using Reported Use Data

## ➤ Same as Option #1 except:

- Relies on authority under WC section 1058.5
  - Requires curtailment when natural flows are inadequate to support priority of right unless needed for critical health and safety or other critical needs
  - In effect for 270 days, may be renewed
- Streamlined and more effective enforcement
  - Can enforce based on violation of regulation
  - Violations immediately enforceable
    - Administrative Civil Liability (ACL) of \$500 per day or Cease and Desist Order (CDO)
    - Up to \$10,000 per day for violation of CDO

# Option 3: Emergency Regulations Using Term 91 Approach

- Same as Option #2 except:
  - Based on real-time info as determined through measured data using Term 91-like calculations
    - Would require modification to Term 91 to account for inbasin contract deliveries
  - Would protect natural flows and storage releases needed to meet relaxed Delta requirements reducing the need for Project storage releases, but increasing effects on other diverters
  - Projects would continue to backstop flow requirements

# Option 4: Emergency Regulations Using Term 91 Approach with Outflow Met by Projects

- Same as Option 3 except:
  - Water users would only be curtailed when natural and abandoned flows are not available to meet their priority of right given more senior needs
  - Delta requirements would be the responsibility of the Projects, with the exception of existing Term 91 rights
  - Other water users would not be required to curtail diversions of natural and abandoned flows to meet Delta requirements
  - Would have less benefit to Project storage levels and less impact to other diverters



# Discussion

## ➤ Option 1:

- Does not require emergency regulations
- Curtailment notices not enforceable orders
- Further investigations and case specific findings may be required for CDO or ACL
- Penalties: \$1,000/day and \$2,500/acre-foot
- Diverters may request hearing and challenge determination of unavailability
- Requires significant staffing resources

# Discussion

- Option 2, 3 and 4:
  - Require Emergency Regulations
  - Streamlined and more effective enforcement
    - Immediately enforceable orders
    - Can enforce based on violation of Emergency Regulation
    - Additional penalties:
      - ACL of \$500/day or CDO
      - Up to \$10,000/day for violation of CDO
  - Could specify permissible exceptions for min H&S and other critical needs

# Workshop Questions

1. Which curtailment options would be the most effective and enforceable?
2. Are there any other curtailment options that should be considered?
3. How can human health and safety needs be addressed under the various approaches to curtailments?
4. How can the Board ensure that Delta needs will be met? The needs of fish and wildlife? The need to maintain adequate end-of-month storage levels?

# Workshop Questions, cont.

5. How can voluntary water-sharing agreements be accommodated? What criteria should be used to determine whether voluntary agreements are viable alternatives to mandatory curtailments?
6. Which curtailment option would be the most responsive to changing conditions?



# Questions?

