Meeting to Inform
Re-Adoption of
Drought Emergency
Regulation for
Scott River and
Shasta River
Watersheds

State Water Resources Control Board and California Department of Fish and Wildlife Staff

May 4, 2022 – Virtual Meeting





Meeting Logistics

- This meeting is being recorded
- Make sure your screen name reflects your actual name and affiliation, if applicable
- Participants will be able to unmute themselves once called upon
- Chat is disabled. You can email your comments.

Ground Rules

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Meeting Overview

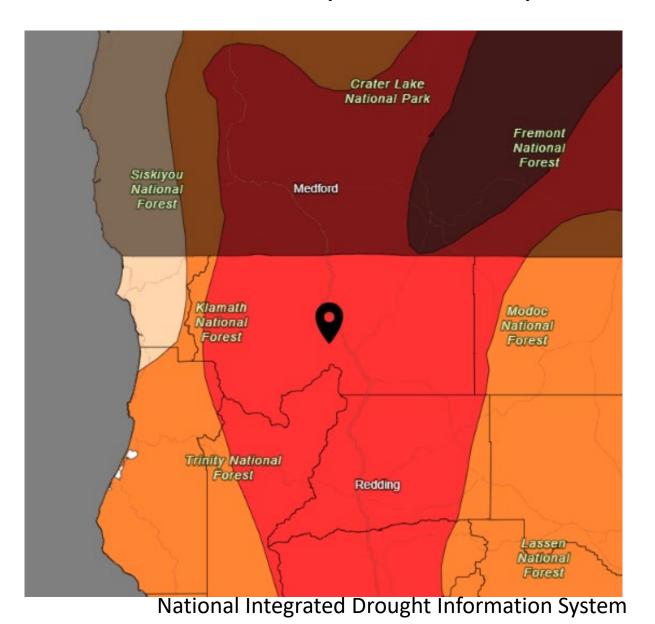
- Purpose of Meeting
- Conceptual Potential Updates to Drought Emergency Regulation + Re-adoption Timeline (State Water Board staff)
- California Department of Fish and Wildlife Recommendations (CDFW staff)
- Comments (Interested Persons)

Kidder Creek 3/17/2022

Drought Conditions Persist



Siskiyou County In Severe Drought







- · Soil is dry; irrigation delivery begins early
- Dryland crop germination is stunted
- Active fire season begins

D1 - Moderate Drought



- Dryland pasture growth is stunted; producers give supplemental feed to cattle
- Landscaping and gardens need irrigation earlier; wilk patterns begin to change
- · Stock ponds and creeks are lower than usual

D2 - Severe Drought



- . Grazing land is inadequate
- Fire season is longer, with high burn intensity, dry fur and large fire spatial extent
- Trees are stressed; plants increase reproductive mechanisms; wildlife diseases increase

D3 - Extreme Drought



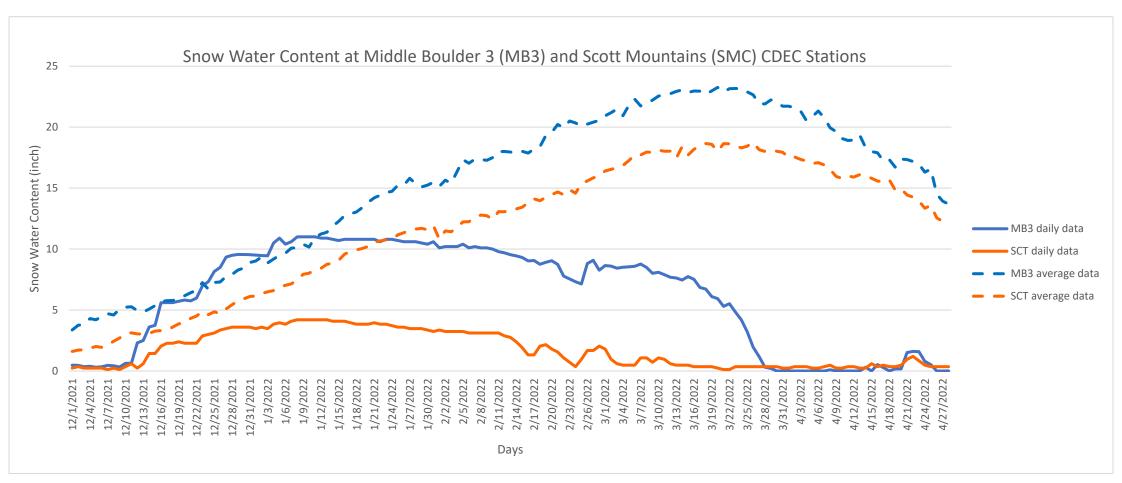
- Livestock need expensive supplemental feed; cattle a horses are sold; little pasture remains; fruit trees bud early; producers begin irrigating in the winter
- Fire season lasts year-round; fires occur in typically w parts of state; burn bans are implemented
- Water is inadequate for agriculture, wildlife, and urbineeds; reservoirs are extremely low; hydropower is restricted

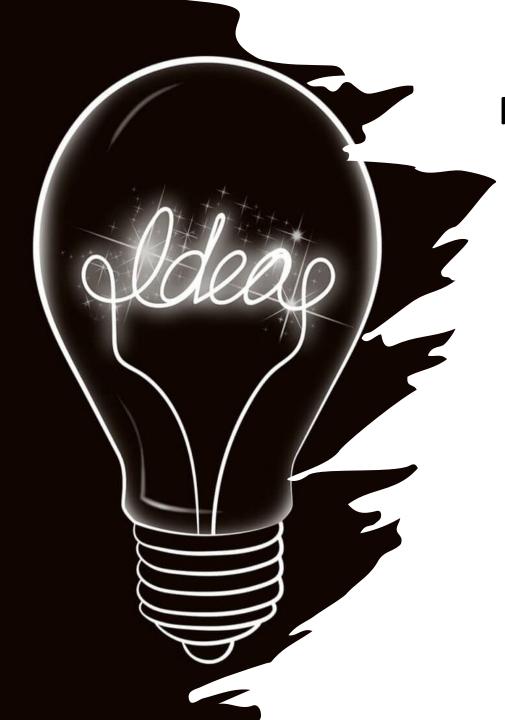
D4 - Exceptional Drought



- Fields are left fallow; orchards are removed; vegetabl yields are low; honey harvest is small
- Fire season is very costly; number of fires and area burned are extensive
- Fish rescue and relocation begins; pine beetle infestation occurs; forest mortality is high; wetlands our; survival of native plants and animals is low; fewer wildflowers bloom; wildlife death is widespread; algal blooms appear

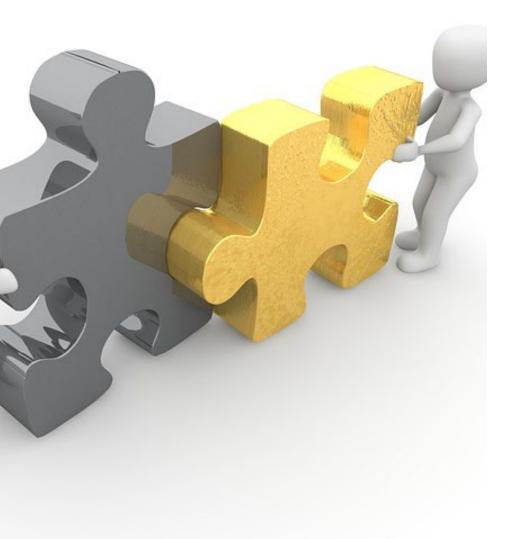
Snow Water Content Middle Boulder 3 and Scott Mountain Stations December 2021 - April 2022





Conceptual Potential Updates to Regulation proposed by Board staff (soliciting feedback)

- Include updated CDFW flow recommendations
- Local Cooperative Solutions
- Inefficient livestock watering-related provisions
- Other minor updates (definitions)

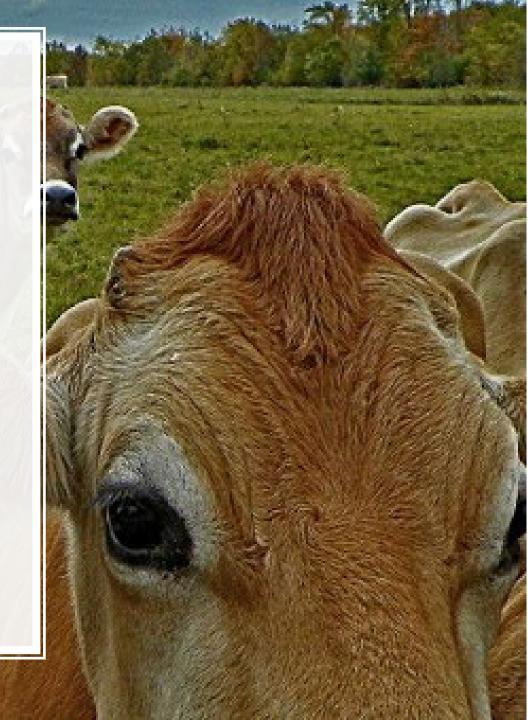


Local Cooperative Solutions: Potential Updates

- Groundwater: Watershed-wide acreage minimum rather than individual 400-acre minimum
- Protect Dedicated Flows: Clarify that dedicated flows that are part of local cooperative solution from senior water rights shall be allowed to remain instream to gage and are not available for diversion by other water users
- Inefficient Livestock Watering: See next slide

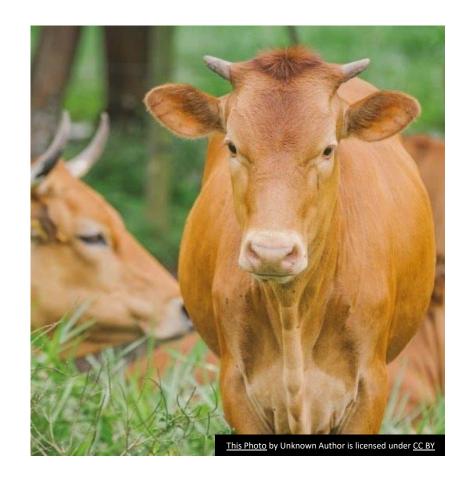
Inefficient Livestock Watering: Potential Conceptual Updates

- Add local cooperative solution option for livestock watering during prohibition period – would provide for coordinated diversions during high flow events
 - Include all or most diverters at tributary level
 - Avoid impacts to fish (e.g., ensure redds are not dewatered, allow fish movement, etc.)
 - Include gaging or other monitoring of flows at tributary scale to ensure high flow events and diversions are monitored



Inefficient Livestock Watering: Potential Conceptual Updates

- Extend prohibition until March 31 (rather than January 31) to help protect fish and limit curtailments of more efficient diversions during this period
 - Maintain ability to lift prohibition early with recommendation from CDFW and a finding that lifting prohibition will not result in issuance of curtailments
 - Prohibition concluded early (January 21) in Shasta River watershed



Updated Definitions:Potential Updates

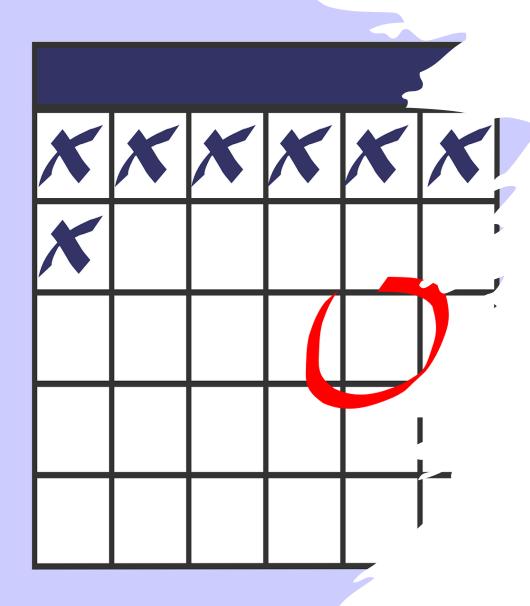


Definitions

• De Minimis Groundwater Use: less than two acre-feet per year for domestic use (consistent with Sustainable Groundwater Management Act)

<u>This Photo</u> by Unknown Author is licensed under CC BY-SA-NC

 Coordinating Entity: an entity is not an individual, and relevant experience is required



Anticipated Next Steps

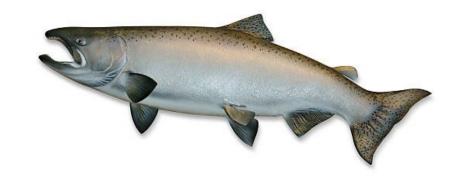
- Review feedback from this meeting and develop proposed regulation updates
- Release draft regulation week of May 16
- Public meeting on draft regulation May 25
- Release notice of proposed rulemaking, including final proposed regulation and digest – week of June 6
- Board meeting for consideration June 21



Re-adoption of the Drought Emergency Regulation for the Scott River and Shasta River watersheds

Overview of CDFW Recommendations

May 4, 2022



Summary and Outline

Regulation Benefits

Update on Migration Monitoring

Adjustment to Shasta River Winter Flows

Retention of Minimum Summer Flow

Extension of Inefficient Livestock Watering Prohibition

Request for Expanded Coordination

Regulation Benefits

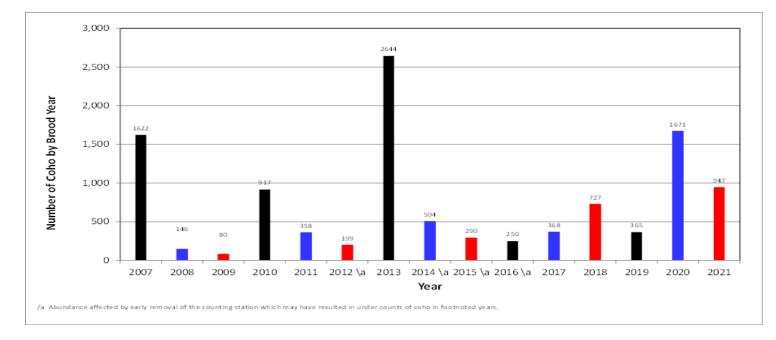
- Improved Communication
- Information Gathering
- Local Cooperative Solutions
- Expanded Stream Gaging
- Resolution 6

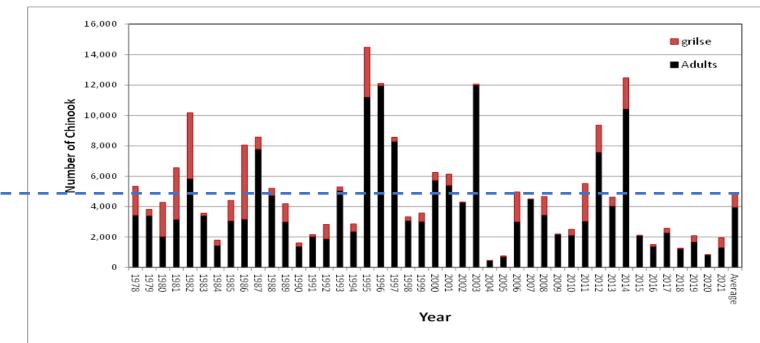


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Coho Salmon

Scott River Adult Salmon

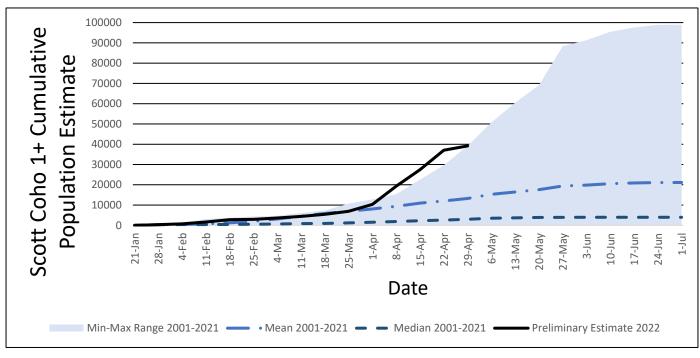


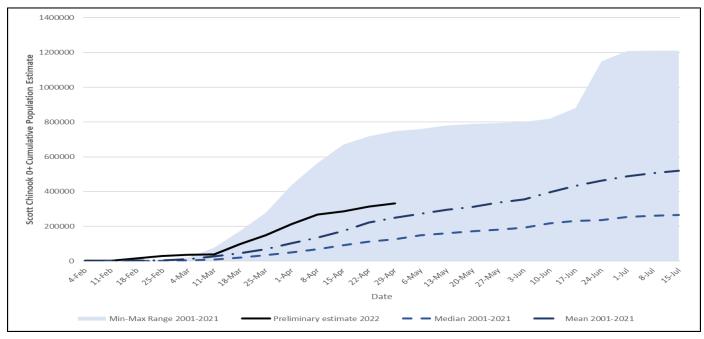


Average = ~5,000

Coho Salmon

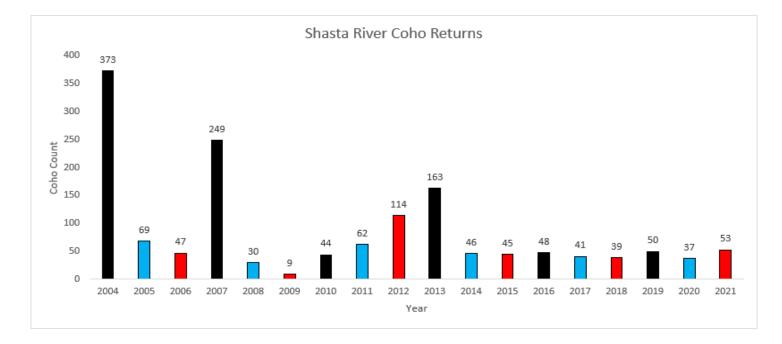
Scott River Juvenile Salmon

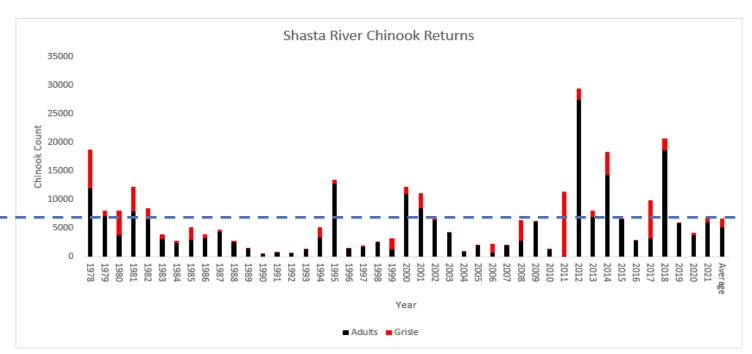




Coho Salmon

Shasta River Adult Salmon

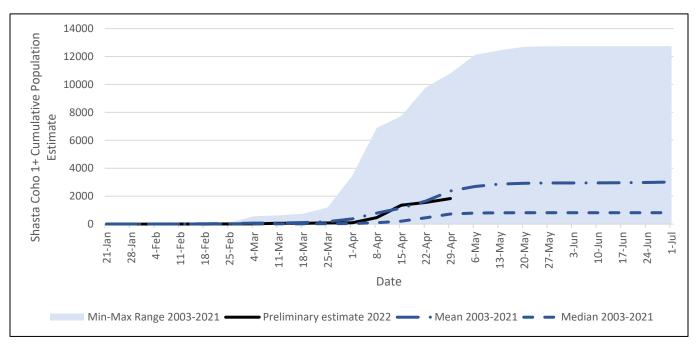


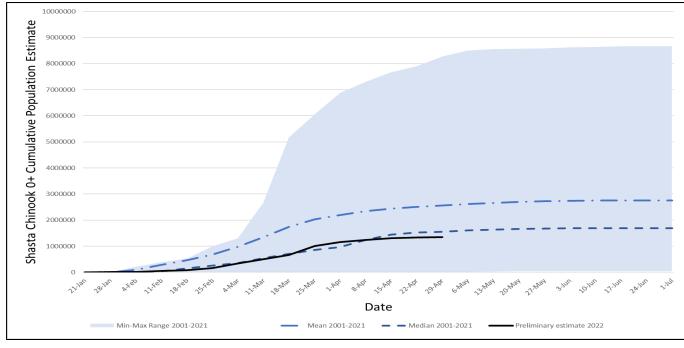


Average = $^{\circ}6,700$ -

Coho Salmon

Shasta River Juvenile Salmon





Shasta River Winter Flows

Flow-habitat results from the three sites in McBain and Trush Shasta River Canyon Instream Flow Needs Assessment (2014) were composited to calculate spawning habitat availability during a critically dry water year winter-flow scenario on the Shasta River.

The overall flow-habitat relationships display a relative peak of spawning habitat at 125 cfs in a critically dry water year.

Redd dewatering/water quality is influenced by changes in redd and tailspill depths.

Retain Minimum Summer Flow



Based on best available information to support salmon and steelhead



Need dry season flows to support stream function and fall migration



Flow values are intended to minimize lethal water quality conditions

Inefficient Livestock Watering to March 31

- Drought emergency flow values do not represent adequate flows for all salmon and steelhead life history needs.
- We are concerned about redd mortality when the prohibition is lifted on January 31.
- The value of groundwater recharge from diversions is still relatively unknown to us.
- Streams and their tributaries re-charge groundwater too.

What is a cubic foot per second (cfs)?

- * 1 cubic foot = 7.48 gallons.
- * 1 cubic foot per second is equivalent to 448.8 gallons of water flowing per minute
- * 1 cfs = 646,320 gallons, or 1.98 acre-feet per day
- * 5 cfs = ~3.2 million gallons per day, or 9.9 acre-feet per day
- * 10 cfs = ~6.4 million gallons per day, or 19.8 acre-feet per day

Coordination

- The focus of this recommendation is on critically-needed local coordination.
- A community-based coordination group with local subject matter expertise might be even better. A community-based group would need to include or coordinate with the SWB, Tribes, fish agencies, Watermaster District, and the GSA.

2004 Recovery Strategy for California Coho Salmon

The Recovery Strategy emphasizes cooperation and collaboration at many levels, and recognizes the need for funding, public and private support for restoration actions, and maintaining a balance between regulatory and voluntary efforts....The success of this Recovery Strategy will ultimately be determined by the long-term commitment and efforts of all who live in, or are involved with, coho salmon watersheds.





Final CDFW Slide

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How to Participate



1. Provide verbal comments:

Raise your hand to be placed in the speaker queue. When it is your turn, the facilitator will call your name and invite you to unmute yourself. Please introduce yourself with your name and title/affiliation.

Telephone callers:

- Press *9 to raise hand
- Press *6 to unmute when prompted

2. Email written comments to:

ScottShastaDrought@waterboards.ca.gov

How to Stay Informed

Visit: Scott and Shasta River Drought webpage:

https://www.waterboards.ca.gov/drought/scott _shasta_rivers/

Visit: State Water Board's Drought webpage:

www.waterboards.ca.gov/drought

Subscribe: State Water Board Email Subscription List titled "Scott-Shasta Drought"

https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows

Contact: Email:

ScottShastaDrought@Waterboards.ca.gov

