



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
West Coast Region  
650 Capitol Mall, Suite 5-100  
Sacramento, California 95814-4700

**March 7, 2018**

Mr. Jeff Rieker  
Operations Manager, Central Valley Project  
U.S. Bureau of Reclamation  
3310 El Camino Avenue, Suite 300  
Sacramento, California 95821

Re: Old and Middle River flow management action

Dear Mr. Rieker:

This letter is to inform you that a first stage older juvenile Chinook salmon loss density trigger has been exceeded, pursuant to reasonable and prudent alternative Action IV.2.3 of NOAA's National Marine Fisheries Service's (NMFS) June 4, 2009, biological and conference opinion on the long-term operation of the Central Valley Project (CVP) and State Water Project (SWP), as amended in 2011<sup>1</sup> (NMFS BiOp). Based on the number of natural juvenile Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*) expected to enter the Delta from broodyear 2017, the minimum juvenile production estimate-based loss density trigger of 2.5 fish per thousand acre-feet (TAF) exported is in effect for water year 2018<sup>2</sup>. On March 6, 2018, the combined older juvenile Chinook salmon loss density at the Tracy Fish Collection Facility (CVP) and Skinner Fish Protection Facility (SWP) was 3.48 fish/TAF. The action response for exceeding the first stage trigger is to reduce combined exports to achieve an average net Old and Middle River flow (OMR) of -3,500 cfs for a minimum of 5 consecutive days. NMFS defers to DWR and Reclamation to determine whether the OMR index expected today allows March 7, 2018, to be considered day 1 of the action response.

For Water Year (WY) 2018, implementation of the older juvenile Chinook salmon-based triggers in Action IV.2.3 has been refined to include information from rapid genetic testing of unclipped Chinook salmon that result in exceedance of an Action IV.2.3 trigger based on race identification using the length-at-date criteria. NMFS's December 18, 2017 letter<sup>3</sup>, states that:

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<sup>1</sup> See pages 74-79 at

[http://www.westcoast.fisheries.noaa.gov/publications/Central\\_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711\\_ocap\\_opinion\\_2011\\_amendments.pdf](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711_ocap_opinion_2011_amendments.pdf)

<sup>2</sup>

[http://www.westcoast.fisheries.noaa.gov/publications/Central\\_Valley/Water%20Operations/Delta%20Operations%20for%20Salmonids%20and%20Sturgeon/DOSS%20WY%202018/winter-run\\_juvenile\\_production\\_estimate\\_jpe\\_for\\_brood\\_year\\_2017\\_-\\_january\\_29\\_2018\\_1\\_.pdf](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Delta%20Operations%20for%20Salmonids%20and%20Sturgeon/DOSS%20WY%202018/winter-run_juvenile_production_estimate_jpe_for_brood_year_2017_-_january_29_2018_1_.pdf)

<sup>3</sup>

[http://www.westcoast.fisheries.noaa.gov/publications/Central\\_Valley/Water%20Operations/nmfs\\_response\\_to\\_reclamation\\_s\\_request\\_to\\_implement\\_rapid\\_genetic\\_analysis\\_in\\_wy\\_2018\\_-\\_december\\_18\\_2017.pdf](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/nmfs_response_to_reclamation_s_request_to_implement_rapid_genetic_analysis_in_wy_2018_-_december_18_2017.pdf)



“...when RPA action triggers are exceeded, based on the initial determinations by length at date, the implementation of the appropriate RPA action response will be carried out immediately and NMFS notified of this action. Upon determination of the genetic identity of the fish collected that triggered the action, loss density of winter-run Chinook salmon will be recalculated (if necessary) based on genetically-determined run assignments. If the loss density based on genetic determination(s) exceeds the adjusted, genetic based, loss density trigger, then no changes in the implemented action are required. However, if the loss density based on genetic determination(s) does not exceed the adjusted, genetic based, trigger, or exceeds a different trigger (e.g., requiring an OMR limit of -3,500 cfs rather than -2,500 cfs), operations may be modified to implement the action response (if any) appropriate for the genetics-based loss density.”

The two winter-run-sized fish that resulted in the exceedance on March 6, 2018, have been sent for analysis and results are expected the afternoon of Thursday, March 8, 2018.

Also in consideration during WY 2018 are the various provisions of Subtitle J of the Water Infrastructure Improvements for the Nation (WIIN) Act<sup>4</sup>. The WIIN Act provision relevant to exceedance of a loss density trigger is §4002, which notes:

- (a) IN GENERAL.—In implementing the provisions of the smelt biological opinion and the salmonid biological opinion, the Secretary of the Interior and the Secretary of Commerce shall manage reverse flow in Old and Middle Rivers at the most negative reverse flow rate allowed under the applicable biological opinion to maximize water supplies for the Central Valley Project and the State Water Project, unless that management of reverse flow in Old and Middle Rivers to maximize water supplies would cause additional adverse effects on the listed fish species beyond the range of effects anticipated to occur to the listed fish species for the duration of the applicable biological opinion, or would be inconsistent with applicable State law requirements, including water quality, salinity control, and compliance with State Water Resources Control Board Order D-1641 or a successor order.

Recent real-time distributions of ESA-listed salmonids are provided in the most recent summary from the Delta Operations for Salmonids and Sturgeon (DOSS) technical team meeting on March 6, 2018 (Enclosure). This summary (full meeting notes not yet available) includes monitoring at rotary screw traps in the Sacramento and San Joaquin River, trawls and seines throughout the Delta, as well as recent salvage, estimates of population distribution, and estimates of entrainment risk into the CVP and SWP facilities.

Significant fractions of ESA-listed salmonid populations are currently present in the Delta. March is a peak month for winter-run salvage based on historical records. The recent salvage of late-fall-run hatchery Chinook salmon known to have been released in the Sacramento River basin is evidence that at least some Sacramento-origin fish are present in the south Delta and vulnerable to entrainment into the Delta export facilities. If the rapid genetic analysis confirms that either of the winter-run-sized Chinook salmon salvaged on March 6, 2018 are genetic winter-run, that will be direct evidence that genetic winter-run are present in the south Delta and

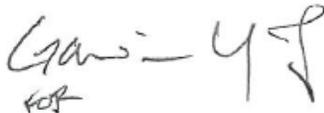
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<sup>4</sup> <https://www.congress.gov/bill/114th-congress/senate-bill/612/text>

vulnerable to entrainment into the Delta export facilities. For these reasons, NMFS concludes that the 5-day action response managing OMR to a -3,500 cfs limit is necessary (unless results determine that genetic winter-run loss density does not exceed the Action IV.2.3 trigger threshold of 2.5 fish/TAF) to avoid additional adverse effects on the listed fish species beyond the range of effects anticipated to occur to the listed fish species for the duration of NMFS' 2009 biological opinion.

If you have any questions regarding this letter, please feel free to contact me or Mr. Garwin Yip, of my staff, at (916) 930-3611, or via e-mail at [Garwin.yip@noaa.gov](mailto:Garwin.yip@noaa.gov).

Sincerely,



Maria C. Rea  
Assistant Regional Administrator  
California Central Valley Office

Enclosure

cc: To the File: 151422SWR2006SA00268

Electronic copy only:

- Mr. Paul Souza, Regional Director, Pacific Southwest Region, U.S. Fish and Wildlife Service, 2800 Cottage Way, Sacramento, California 95825
- Ms. Kaylee Allen, Field Supervisor, Bay-Delta Fish and Wildlife Office, U.S. Fish and Wildlife Service, 650 Capitol Mall, Suite 8-300, Sacramento, California 95814
- Mr. Chuck Bonham, Director, California Department of Fish and Wildlife, 1416 Ninth Street, Sacramento, California 95814
- Ms. Karla Nemeth, Director, California Department of Water Resources, 1416 Ninth Street, Sacramento, California 95814
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- Mr. John Leahigh, Operations Control Office, California Department of Water Resources, 3310 El Camino Ave, Suite 300, Sacramento, California 95821
- Ms. Molly White, Operations Control Office, California Department of Water Resources, 3310 El Camino Ave, Suite 300, Sacramento, California 95821
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- Mr. Dave Mooney, Area Manager, Bay-Delta Office, Bureau of Reclamation, 801 I Street, Suite 140, Sacramento, California 95814
- Ms. Eileen Sobek, Executive Director, State Water Resources Control Board, 1001 I St, Sacramento, California 95814



Garwin Yip - NOAA Federal &lt;garwin.yip@noaa.gov&gt;

**Re: DOSS Bulleted Highlights from 3/6/18 call**

1 message

**J. Stuart - NOAA Federal** <j.stuart@noaa.gov> Wed, Mar 7, 2018 at 9:59 AM  
 To: DWR WOMT <womt@water.ca.gov>, "DWR Data Assessment Team (DAT)" <calfedda@cawater.onmicrosoft.com>, Barbara Byrne - NOAA Federal <barbara.byrne@noaa.gov>, "acollins@mwdh2o.com" <acollins@mwdh2o.com>, Allison Febbo <AFebbo@swc.org>, Ara Azhderian <azhderian@panochewd.org>, Barry Nelson <barry@westernwaterstrategies.com>, "Baxter, Randy@Wildlife" <Randy.Baxter@wildlife.ca.gov>, "Bobker, Gary" <bobker@sbcglobal.net>, Brad Cavallo <bcavallo@fishsciences.net>, "Brewster, Frances@Valleywater" <FBrewster@valleywater.org>, Bruce DiGennaro <bruce@essexpartnership.com>, "Castleberry, Dan@fws" <Dan\_Castleberry@fws.gov>, "Coulston, Patrick@Wildlife" <Patrick.Coulston@wildlife.ca.gov>, "cphillis@mwdh2o.com" <cphillis@mwdh2o.com>, "Cwang@mwdh2o.com" <Cwang@mwdh2o.com>, "Dave Osti (david@34north.com)" <david@34north.com>, "Dean.Messer@water.ca.gov" <Dean.Messer@water.ca.gov>, "dfullerton@mwdh2o.com" <dfullerton@mwdh2o.com>, "Dibble, Chad@Wildlife" <Chad.Dibble@wildlife.ca.gov>, "dobegi@nrdc.org" <dobegi@nrdc.org>, "dsereno@ccwater.com" <dsereno@ccwater.com>, "dvanrijn@usbr.gov" <dvanrijn@usbr.gov>, "Eakin, Michael@Wildlife" <Michael.Eakin@wildlife.ca.gov>, "Edwards, James@DWR" <James.Edwards@water.ca.gov>, "ekiteck@usbr.gov" <ekiteck@usbr.gov>, "eleitterman@valleywater.org" <eleitterman@valleywater.org>, "Ford, John@DWR" <John.Ford2@water.ca.gov>, "frances.mizuno@sldmwa.org" <frances.mizuno@sldmwa.org>, "Garwin.Yip@noaa.gov" <Garwin.Yip@noaa.gov>, "Giorgi, Bryant@DWR" <Bryant.Giorgi@water.ca.gov>, "Greg Reis (reis@bay.org)" <reis@bay.org>, Griffin Goldstein Hill <gghill@mosaicassociates.net>, "Hassrick, Jason" <Jason.Hassrick@icf.com>, "Holland, Matthew@Waterboards (Matthew.Holland@waterboards.ca.gov)" <Matthew.Holland@waterboards.ca.gov>, "J.Stuart@noaa.gov" <J.Stuart@noaa.gov>, "JAIsrael@usbr.gov" <JAIsrael@usbr.gov>, Jason Peltier <jason.peltier@sldmwa.org>, "Jason.Hassrick@icfi.com" <Jason.Hassrick@icfi.com>, "jcain@americanrivers.org" <jcain@americanrivers.org>, Jennifer Pierre <JPierre@swc.org>, "jnishijima@valleywater.org" <jnishijima@valleywater.org>, Jon Rubin <Jon.Rubin@sldmwa.org>, "jpayne@friantwater.org" <jpayne@friantwater.org>, "jrieker@usbr.gov" <jrieker@usbr.gov>, "karly@34north.com" <karly@34north.com>, "Katherine\_Sun@fws.gov" <Katherine\_Sun@fws.gov>, Kevin Fung <kevin.fung@ebmud.com>, "Kundargi, Kenneth@Wildlife" <Kenneth.Kundargi@wildlife.ca.gov>, "Leahigh, John@DWR" <John.Leahigh@water.ca.gov>, "LeCocq, Philip@DWR" <Philip.LeCocq@water.ca.gov>, "Linander, Duane@Wildlife" <Duane.Linander@wildlife.ca.gov>, "Lshih@ccwater.com" <Lshih@ccwater.com>, "LValoppi@sfcwa.org" <LValoppi@sfcwa.org>, "lwinternitz@geiconsultants.com" <lwinternitz@geiconsultants.com>, "Messer, Cindy@DWR" <Cindy.Messer@water.ca.gov>, "phutton@mwdh2o.com" <phutton@mwdh2o.com>, "Purdy, Colin@Wildlife" <Colin.Purdy@wildlife.ca.gov>, "Rea, Maria@NOAA" <Maria.Rea@noaa.gov>, "Reece, Kevin@DWR" <Kevin.Reece@water.ca.gov>, "RMILLIGAN@usbr.gov" <RMILLIGAN@usbr.gov>, "rosenfield@bay.org" <rosenfield@bay.org>, "Ryan,Russell E" <rryan@mwdh2o.com>, "SAcuna@mwdh2o.com" <SAcuna@mwdh2o.com>, "Schreier, Brian@DWR" <Brian.Schreier@water.ca.gov>, Sheila Greene <sgreene@westlandswater.org>, "Spanglet, Harry@DWR" <Harry.Spanglet@water.ca.gov>, "Squires, Kim@fws.gov" <kim\_squires@fws.gov>, "Stein, Russell@DWR" <Russell.Stein@water.ca.gov>, Stephanie Fong <sfong@sfcwa.org>, "Stephen H. Ottemoeller" <sottemoeller@friantwater.org>, "Sujoy.Roy@tetrattech.com" <Sujoy.Roy@tetrattech.com>, "tboardman@apex.net" <tboardman@apex.net>, "tpatton@usbr.gov" <tpatton@usbr.gov>, "Uding, Dena@DWR" <Dena.Uding@water.ca.gov>, "Valerie Connor (valerieconnor@att.net)" <valerieconnor@att.net>, "Wilcox, Carl@Wildlife" <Carl.Wilcox@wildlife.ca.gov>, "Yamanaka, Dan@DWR" <Dan.Yamanaka@water.ca.gov>

Errata to the DOSS bulleted highlights from the 3/6/18 call as follows:

Under Action IV.2.3: Fish loss density for 3/2/18 should be 2.52 fish/TAF **not** 3.52 fish/TAF.

Jeff

On Tue, Mar 6, 2018 at 12:32 PM, J. Stuart - NOAA Federal <j.stuart@noaa.gov> wrote:

Highlights from 03/06/18 DOSS meeting:

DOSS Advice to NMFS and WOMT:

- None, no changes to current operations based on exceeding triggers or thresholds described in the RPA actions.

RPA Implementation (current):

- **Action IV.1.2 (DCC Gate operations)-**
  - *No changes since last week*
  - Gates will remain closed from February 1 through May 20, per D-1641 mandatory gate closures and the description of RPA IV.1.2 actions.
- **Action IV.2.3 Old and Middle River Flow Management**
  - *Preliminary fish loss density triggers for older juvenile Chinook salmon were met on 3/1/18 (3.75 fish/TAF) and 3/2/18 (3.52 fish/TAF). OMR values were already more positive than the required -3,500 cfs, thus no changes to exports required. Rapid DNA results indicated that none of the fish identified as winter-run by length at date were indeed winter-run, highest probability placed them in the fall-run population.*
  - Implementation of this action in WY 2018 is from 1/1/18 through 6/15/18, and requires that Old and Middle River (OMR) flow be no more negative than -5,000 cfs.
  - OMR flows are reported weekly with the OMR index and the tidally filtered USGS gauges at the 5-day and 14-day running averages.
  - Since the action went into effect on 1/1/18, no salvage-based triggers that would require OMR to be more positive than -5,000 cfs have been exceeded based on rapid DNA testing results.
- **Action IV.3 (Reduce likelihood of entrainment or salvage at the export facilities, including alert that indicates that export operations may need to be altered)**
  - *No changes since last week*
  - The third alert [March 1 through April 30: Knights Landing Catch Index (KLICI) or Sacramento Catch Index (SCI) >15] was not triggered during the past week.
  - Since the action went into effect on 11/1/17, no salvage-based triggers that would require export reduction have been exceeded.

#### Weather

- Seasonably warm ~60's during the day, lows in the 30's and 40's at night. Warmer storm system expected this weekend, bringing rain to lower elevations and snow to higher elevations in the mountains of Northern and Central California.

#### Fish Monitoring: Salvage

- Over the past week (2/26 -3/04/25) at the CVP and SWP (combined): 14 wild winter-run Chinook salmon (WRCS) by length at date (LAD) salvaged (loss of 64 fish), 16 fall-run CS by LAD salvaged (loss of 12 fish), 24 clipped CS (CLCS) salvaged (loss of 97 fish). 4 unclipped steelhead (SH) salvaged (loss of 3 fish) and 141 clipped SH salvaged (loss of 581 fish)

#### Fish Monitoring: RSTs, trawls, seines

- During the last week (2/26 -3/05/26), 2 FRCS and 1 spring-run (SRCS) were observed in the Tisdale RST. For the period of 2/26 -3/05/26) no salmonids were observed in the Knights Landing RST.
- Butte Creek fyke trap for the period of 2/20 to 2/28/18 reported 1,251 juvenile SRCS and for the period of 2/20 through 2/28/18 the Butte Creek RST reported 2,289 juvenile SRCS.
- During the last week (2/28 -3/04/18), 6 juvenile FRCS, 5 juvenile SRCS, 1 smolt WRCS, and 959 CLCS (presumed to be hatchery WRCS) were observed at the GCID. Cones raised on 03/04/18 due to high catch of hatchery fish.
- The reported DAT fish data for this past week:
  - **Chippis (02/18 -02/24/18):** 4 WRCS, 2 wild steelhead (SH), and 32 clipped SH
  - **Mossdale (02/18 -02/23/18):** 3 FRCS

**ENCLOSURE**

- **Sac Trawl (02/18 -02/24/18):** 9 FRCS, 2 SRCS, 1 wild SH. and 36 clipped SH
- **Beach Seines (02/20 -02/23/18):** 147 FRCS, 32 SRCS, 2 WRCS, and 3 clipped SH
- No RBDD data this week.
- DOSS expects to see an increase in the level of fish observed in the next week due to a storm systems moving through the Central Valley this weekend bringing rain to the region..

**Other Discussions:**

- Stuart (NMFS) informed the DOSS group that the release of hatchery produced winter-run slated for the Sacramento River on Friday 3/2/18 was postponed until better flow conditions occurred. The release on Thursday (3/1/18) occurred and approximately 114,400 hatchery WRCS were released.

DOSS estimates of current fish distribution:

<u>Location</u>	<u>Yet to Enter Delta (Upstream of Knights Landing)</u>	<u>In the Delta</u>	<u>Exited the Delta (Past Chipps Island)</u>
<i>Young-of-year (YOY) winter-run Chinook salmon (last week)</i>	16-24%	64-73%	11-12%
<i>Young-of-year (YOY) winter-run Chinook salmon (this week)</i>	11-19%	64-73%	16-17

*(Increasing catches of winter-run in the GCID, Tisdale, and Knights Landing RSTs, indicate that a continuing flux of fish are moving downstream in the past week. DOSS estimated that ~5% of the population moved during this period downstream and into the Delta.)*

<u>Location</u>	<u>Yet to Enter Delta (Upstream of Knights Landing)</u>	<u>In the Delta</u>	<u>Exited the Delta (Past Chipps Island)</u>
<i>Young-of-year (YOY) spring-run Chinook salmon (last week)</i>	36-54%	46-64%	0%
<i>Young-of-year (YOY) spring-run Chinook salmon (this week)</i>	28-46%	54-72%	0%

*A steady low number of SRCS sized fish have been observed in monitoring during the past week. Doss estimates that 8% of the spring-run population moved downstream and into the Delta in the past week.*

**DOSS Feedback on Entrainment Risk**

DOSS provides weekly entrainment risk outlooks by considering (a) two different categories of entrainment risk based on listed fish distribution and (b) factors that influence their potential for entrainment. The two entrainment risk categories considered include:

- **Interior Delta Entrainment Risk**- fish in the Sacramento River that have the potential to be entrained into the Interior Delta through the Delta Cross Channel (when open) and/or Georgiana Slough; and
- **CVP/SWP Facilities Entrainment Risk**- fish in the Interior Delta that have the potential to be entrained into the CVP/SWP facilities.

-

Influencing factors considered include:

- **Exposure Risk** (both categories)- estimated scale (low, medium, high) of fish anticipated to be in vicinity of an entrainment risk,
  - **Routing Risk** (Interior Delta Entrainment Risk)- estimated scale (low, medium, high) that flow split conditions could result in fish migrating into the interior delta instead of remaining in main channel, and
  - **OMR/Export Risk** (CVP/SWP Facilities Entrainment Risk)- for fish in the Interior Delta, estimated scale (low, medium, high) that OMR and/or Export levels could result in entrainment into the CVP/SWP facilities.
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**Interior Delta Entrainment Risk for listed salmonids in the Sacramento River over the next week**

- **Exposure Risk: MEDIUM-HIGH** (higher than last week's risk estimate)
  - Increased flows and turbidities from recent storms are expected to stimulate fish movement.
  - Winter-run continue to be present in the Delta and are likely to continue rearing there for the next several weeks, elevating their exposure risk.
  - Approximately 64-73% of WRCS population is downstream of Knights Landing at this time, a few WR have been seen in the lower Sacramento River section between Sacramento and DCC and several more WRCS have been observed in the catch at Chipps Island over the past few weeks, indicating that most of the population is in the Delta and not upstream, and that increasing numbers are beginning to move out of the Delta past Chipps Island (16-17% of the population).
  - ~54-72% of spring run population is in Delta
  - Surrogate spring-run Chinook salmon hatchery releases of late-fall run Chinook salmon are in the system. The last release occurred on 1/25/18. CWTs from captured clipped Chinook salmon are being read from fish collected during monitoring.
  - Wild Chinook salmon and steelhead as well as clipped Chinook salmon and steelhead have been observed in the Chipps Island trawls.
  - Wild and clipped Chinook salmon have been observed in beach seines from the North Delta and Liberty Island regions.
  - Wild and clipped Chinook salmon as well as clipped steelhead have been observed in the EDSM efforts.
  - Wild and clipped salmonids have been seen in salvage.
- **Routing Risk: MEDIUM**
  - River flows not high enough to mute tidal influence at Georgiana Slough and Three Mile Slough allowing redirection of fish into these route on flood tides.
  - Delta Cross Channel is closed.
- **Overall Entrainment Risk: MEDIUM-HIGH**
  - Increased movement of WRCS, SRCS and steelhead into Delta and remaining within the Delta increase the overall risk of entrainment into the interior Delta

**CVP/SWP Facilities Entrainment Risk for listed salmonids in the Interior Delta over the next week:**

ENCLOSURE

- **Exposure Risk:** -MEDIUM-HIGH (higher than last week)
  - Clipped steelhead and wild steelhead have been observed in salvage.
  - Clipped and wild Chinook salmon have been seen in salvage.
  - Continuing to see Chinook salmon and steelhead in lower Sacramento River and western Delta monitoring efforts (Chippis Island and in the river confluence region)
  - Greater proportions of the WRCS and SRCS populations are estimated to have moved into the Delta than remain upstream
  
- **OMR/Export Risk:**
  - OMR -2,500 cfs: LOW
  - OMR -3,500 cfs: LOW
  - OMR -5,000 cfs: MEDIUM
  - OMR -6,250 cfs: MEDIUM-HIGH
  - OMR -7,500 cfs: MEDIUM-HIGH (incrementally higher risk if Vernalis flows decrease)
  - OMR -9000 cfs HIGH (Full export capacity, footprint of export effects extend into western Delta and lower San Joaquin River). Different DOSS members ranked the risk as either a medium or high risk.
  
- **Overall Entrainment Risk:**
  - OMR -2,500 cfs: MEDIUM (but higher than last week)
  - OMR -3,500 cfs: MEDIUM (but higher than last week)
  - OMR -5,000 cfs: MEDIUM-HIGH (but higher than last week)
  - OMR -6,250 cfs: MEDIUM-HIGH (but higher than last week)
  - OMR -7,500 cfs: MEDIUM-HIGH (but higher than last week)
  - OMR -9,000 cfs: HIGH

These assessments are based on current hydrology and fish distributions.

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**Jeffrey S. Stuart, M.S.**  
*Fishery Biologist*

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*Fishery Biologist*

**ENCLOSURE**

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