

Weekly Fish and Water Operations Outlook 10/5/2021

Strong north winds (with accompanying fire weather danger) on Monday and Tuesday. A slight warming trend begins Wednesday into this weekend. No significant precipitation is forecast for week.

Tributary/ Division	Anticipated Weekly Ranges	Related Environmental and Fish Conditions
Clear Creek	<ul style="list-style-type: none"> • Current Release: 200 cfs • Anticipated weekly range: 200 cfs 	<ul style="list-style-type: none"> • Adult spring-run Chinook Salmon spawning, eggs and alevin in gravel • Juvenile and adult Steelhead present
Sacramento River	<ul style="list-style-type: none"> • Shasta Storage: 1,025 MAF • Current Release: 6,800 cfs • Anticipated Weekly Range of Releases to Sacramento: 6,800-6,000 cfs 	<ul style="list-style-type: none"> • Winter-run Chinook Salmon eggs and alevin in gravel, juveniles present • Adult spring-run Chinook Salmon spawning, eggs in gravel • Fall-run Chinook Salmon holding • Green Sturgeon adults and juvenile present • Adult steelhead present
Feather River	<ul style="list-style-type: none"> • Oroville Storage: 793 TAF • Current Release: 1,250 cfs • Anticipated Weekly Range of Releases: 1,250 to 950 cfs • Daily temperature targets: 51°F (±4°F) at Fish Hatchery 	<ul style="list-style-type: none"> • Fall-run Chinook Salmon holding • Juvenile and Adult steelhead present • Adult spring-run Chinook Salmon spawning, eggs and alevin in gravel
American River	<ul style="list-style-type: none"> • Folsom Storage: 223 TAF • Current Release: 550 cfs • Anticipated Weekly Range of Releases to American: 550 cfs 	<ul style="list-style-type: none"> • Fall-run Chinook Salmon holding • Juvenile and adult steelhead expected to be present.
Stanislaus River	<ul style="list-style-type: none"> • New Melones Storage: 837 TAF • Current Release to Stanislaus: 200 cfs • Anticipated Range of Weekly Releases to Stanislaus: 200 to 1,500 cfs 	<ul style="list-style-type: none"> • Juvenile and adult steelhead expected to be present • Adult fall-run present
Delta	<ul style="list-style-type: none"> • Freeport: 6,000 to 8,000 cfs • Vernalis: 200 to 500 cfs 	<ul style="list-style-type: none"> • Juvenile winter-run Chinook Salmon 99-100% yet to enter Delta, 0-1% in Delta, 0% exited Delta past Chipps Island

Tributary/ Division	Anticipated Weekly Ranges	Related Environmental and Fish Conditions
	<ul style="list-style-type: none"> • Delta Outflow index: 2,750 to 3,750 cfs • Combined Exports: 1,000 to 3,200 cfs • JPP: 1,700 cfs (anticipated range 2,700 to 800 cfs) • CCF: 200 to 500 cfs • Expected OMR Index Values: -2,000 to -3,500 cfs • DCC Gates: Closed 10/11. Further operation for Rio Vista flow and salinity possible. 	<ul style="list-style-type: none"> • YOY spring-run Chinook Salmon: have not yet emerged • Juvenile Steelhead: 100% yet to enter Delta, 0% in Delta, 0% exited Delta past Chipps Island • Adult fall-run Chinook Salmon entering Delta and migrating upstream towards spawning grounds • Adult steelhead present • Adult and juvenile Green Sturgeon present • Juvenile Delta Smelt expected to be present in the Deep Water Ship Channel and Lower Sacramento River.

Table 2a-b: WY 2022 relevant Fish and Environmental Criteria and Status in 2019 Reclamation LTO Action Cumulative loss for the duration of 2019 Biological Opinion began upon signature of ROD, 2/19/2020.

Table 2a-b: WY 2022 Salmonid Current Loss and Delta Smelt Abiotic Conditions. Additional Real-Time OMR Restrictions and Performance Objectives (4.10.5.10.2) and Onset of OMR Management (4.10.5.10.1).

Species/run	Threshold	Current Status	Weekly Trend	Updated
Green sturgeon	WY 2022 salvage = 74	WY 2022 salvage = 0 (0%)	No change expected	10/11/2021
Natural winter-run Chinook Salmon	WY 2022 loss = TBD *	WY 2022 loss = 0	No change expected	10/11/2021
Natural Steelhead	Dec 1 – Mar 31 = 707 (50% of 1,414) Apr 1 – June 15 = 776 (50% of 1,552)	Dec 1 – Mar 31 = 0 (0%) Apr 1 – June 15 = 0 (0%)	No change expected	10/11/2021

* TBD – no draft JPE produced, ITL and performance thresholds are TBD currently

Table 2b. 10-Year Salmonid Cumulative Loss

Species/run	Threshold	Current Status	Updated
Natural winter-run Chinook salmon	Loss = 8,738	Cumulative loss = 204.9 (2.3%)	10/11/2021
Hatchery winter-run Chinook salmon	Loss = 5,356	Cumulative loss = 0 (0%)	10/11/2021
Natural steelhead	Loss = 6,038 (Dec 1–Mar 31) Loss = 5,826 (Apr 1–June 15)	Cumulative loss = 443.19 (7.3%, Dec 1–Mar 31) 374.8 (6.4%, Apr 1– June 15)	10/11/2021

Table 3a-c: Relevant Water Year 2021 Fish Criteria and Status for Listed Fish under the SWP Long-Term Incidental Take Permit. Table 3a: Chinook Salmon

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
OMR Mgmt. triggered (8.3.2)	Jan. 1 -Jun. 30 (when ≥ 5% of spring-run or winter- run in Delta)	Not in effect	-5% of the Winter-run or Spring-run population in Delta	N/A	N/A	10/4/21	N/A
Winter-run yearly loss (8.6.1)	Nov. 1 -Jun. 30	Not in effect (Based on JPE Value)	TBD (Based on JPE guidance)	N/A	N/A	10/4/21	N/A
Winter-run discrete daily loss (8.6.2)	Nov. 1 -Dec. 31	Not in effect	11/1-11/30: loss of 6/day unclipped older juv. Winter-run 12/1-12/31: loss of 26/day unclipped older juv. Winter-run	N/A	N/A	10/4/21	N/A

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
Spring-run surrogate protection (8.6.4)	Feb. 1 -Jun. 30	Not in effect	TBD (based on the number of fish released)	N/A	N/A	10/4/21	N/A

Table 3d: OMR

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
OMR Mgmt. Offramp (8.3.2)	Jun. 1 – Jun. 30	Not in effect	>95% of the Winter-run and Spring-run populations have migrated past Chipps Island AND Current daily average water temperature at Mosssdale exceeds 22.2°C for 7 nonconsecutive days in June AND Current daily average water temperature at Prisoners Point exceeds 22.2°C for 7 non-consecutive days in June. Current daily mean water temperature at CCF is greater than 25°C for three consecutive days	N/A	NA	10/4/21	NA

Table 4. Fish monitoring gear efficiency and disruptions: COVID-19 impacts.

Monitoring Survey	Notes (as of 10/12/2021)	Status*
Delta	N/A	N/A
SWP regular counts, CWT reading, and larval sampling	Active (No disruptions)	1
CVP regular counts, CWT reading, and larval sampling	Active (No disruptions)	1

Monitoring Survey	Notes (as of 10/12/2021)	Status*
Smelt Larval Survey	Not Active	4
20mm Survey	Not Active	4
Spring Kodiak Trawl	Not Active	4
Fall Mid-water Trawl	Active (No disruptions)	1
Summer Townet Survey	Not Active	4
Bay Study	Active (No disruptions)	1
20mm Survey	Not Active	4
Spring Kodiak Trawl	Not Active	4
Fall Mid-water Trawl	Active (No disruptions)	1
Summer Townet Survey	Not Active	4
Bay Study	Active (No disruptions)	1
20mm Survey	Not Active	4
Sacramento River	N/A	N/A
Red Bluff Diversion Dam screw trap	Active (No disruptions)	1
Knights Landing screw trap	Active (No disruptions)	1
Tisdale screw trap	Active (No disruptions)	1
GCID screw trap	Active (No disruptions)	1
Redd dewatering and stranding surveys	Not Active	4
Sacramento Carcass and Redd Surveys	Not Active	4
Feather River	N/A	N/A
Feather River screw trap	Not Active (anticipate starting mid to late November 2021)	4
San Joaquin River	N/A	N/A
SJRRP CDFW Field Monitoring	Active (No disruptions)	1
SJRRP USFWS and USBR Field Monitoring	Active (No disruptions)	1

Monitoring Survey	Notes (as of 10/12/2021)	Status*
Stanislaus Fish Weir	Active (No disruptions)	1
Stanislaus, Merced, Tuolumne Carcass Surveys	Active (No disruptions)	1

* Status: Weekly categories include:

[1] Active (ongoing sampling)

[2] Partial Interruption (some sampling interruptions)

[3] Interrupted (sampling fully suspended), and

[4] Not Active (sampling not scheduled)