SacPAS
CENTRAL VALLEY PREDICTION AND ASSESSMENT OF SALMON

https://cbr.washington.edu/sacramento/

DATA INVENTORY (updated 2026-10-28)

Environmental Conditions

Dataset	Data Owner	Data Location	Frequency	Date Range	Description
Air Quality	EPA	AQS	Daily	2014-2026	The Air Quality System (AQS) contains ambient air pollution data with 7 sites around the Central Valley river system loaded into our database.
	EPA	AirNow	Daily	2024-2026	AirNow is a Real Time Air Quality data set with 6 sites around the Central Valley river system loaded into our database.
Air Temperature	NOAA/NCEI	GHCN	Daily	1990-2026	Air Temperature in both hourly and daily formats from 187 sites in and around California.
Discharge/Flow	DWR	CDEC	Daily	1948-2026	Hourly and daily discharge measurements from 103 sites for River Discharge, 11 sites for Full Natural Flow, 10 sites for Regulating Discharge, 7 sites for Pumping Discharge, 9 sites for Spillway Discharge, and 4 sites for Tidally Filtered Discharge.
	USGS	Water Data	Daily	1900-2026	Hourly and daily discharge measurements from 121 sites for River Discharge, 41 sites for Tidally Filtered Discharge, and 39 sites for Water Velocity.
Dissolved Oxygen	DWR	CDEC	Daily	1989-2026	Hourly and daily Dissolved Oxygen measurements from 42 sites in the Central Valley.
Electrical Conductivity	DWR	CDEC	Daily	1987-2026	Hourly and daily electrical conductivity measurements from 69 sites in the Central Valley.
Stage/Elevation	DWR	CDEC	Daily	1984-2026	Hourly and daily River Stage measurements from 103 sites in the Central Valley.
	USGS	Water Data	Daily	1913-2026	Hourly and daily stream level measurements from 103 sites in the Central Valley.
Turbidity	DWR	CDEC	Daily	1988-2026	Hourly and daily Turbidity measurements from 38 sites for NTU and 18 sites for FNU in the Central Valley.
	USGS	Water Data	Daily	2007-2026	Hourly and daily FNU Turbidity measurements from 48 sites in the Central Valley.
Water Temperature	DWR	CDEC	Daily	1987-2026	Hourly and daily Water Temperature measurements from 105 sites in the Central Valley.
	USGS	Water Data	Daily	1971-2026	Hourly and daily Water Temperature measurements from 78 sites in the Central Valley.
OMR	USGS	Water Data	Daily	1987-2026	Combination of Old River Tidally Filtered Discharge and Middle River Tidally Filtered Discharge (OMR).
OMRI	SacPAS	OMR Index Calculations	Daily	2016-2026	An index for OMR Calculated from USGS and CDFW data. Follow the link for more details on the calculations.
Hydrologic Classification Indices (HCI)	DWR	HCI Historical	Annually	1901-2026	Reconstructed Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices based on measured unimpaired runoff.
		HCI Current			Official Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices based on measured unimpaired runoff for October-March and using predicted flows for April-July as of May 1st.
River Forecast Data	NOAA/SWFSC	CVTEMP	Daily	2017-2024	Predicted river water temperatures. No longer published as of 2024.
	NOAA/CNRFC	CNRFC	Daily	2022-2026	Predicted and observed river flows.
Delta Hydrology	CDFW	Delta Operations	Daily	2016-2026	Flows and operations in the Delta area. Data is parsed from PDF reports daily.

Juvenile Salmon

Dataset	Data Owner	Data Location	Frequency	Date Range	Description
Hatchery Releases	CDFW	FTP site with permissions	Periodically	1973-2026	Hatchery release info available from CDFW via FTP site.
	CDFW	CDFW Fish Planting and Stocking Data	Annually		Files released on the website annually that contain finalized data from the CDFW hatchery releases.
	USFWS	Via Email	On Release		Email with hatchery release info from USFWS staff.
Acoustic Data	NOAA	CalFishTrack	Seasonally	2013-2024	Juvenile Salmon are tagged and tracked with Acoustic Telemetry through the Central Valley.
Red Bluff Passage Estimates	USFWS	Via Email	Weekly	2004-2026	Passage estimates for Fry, Smolt, and Fry Equivalent at RBDD using trap efficiency estimates.
Red Bluff Diversion Dam RSTs	USFWS	Red Bluff Diversion Dam EDI	Seasonally	2012-2024	Actual trap catch counts at the Red Bluff Diversion Dam Rotary Screw Traps (RST) are reported to EDI
Juvenile Stranding	CDFW	CDFW Salmonid Monitoring	Weekly	2019-2026	Juvenile stranding surveys observe and report on locations that could contain stranded salmonids that were isolated by flow reductions.
Yuba River RST	CDFW	Yuba River EDI	Biweekly	1999-2026	Rotary screw trap catch and trapping data at Yuba River are uploaded to EDI.
Caswell RST	FishBio	CalFish	Weekly	2022-2026	In-season rotary screw trap catch and trapping data at Caswell are uploaded to CalFish.
	PSMFC	Caswell EDI	Annually	2017-2026	Finalized rotary screw trap catch and trapping data at Caswell are uploaded to EDI.
Lower American River RST	FishBio	CalFish	Weekly	2013-2025	In-season rotary screw trap data at Lower American River are uploaded to CalFish.
	PSMFC	Lower American River EDI	Annually	2014-2026	Finalized rotary screw trap data at Lower American River are uploaded to EDI.
Tisdale RST	CDFW	CalFish	Weekly	2010-2026	In-season rotary screw trap data at Tisdale are uploaded to CalFish.
	CDFW	Tisdale EDI	Annually	2010-2024	Finalized rotary screw trap catch and trapping data at Tisdale are uploaded to EDI.
Lower Feather River RST	CDFW	CalFish	Weekly	2022-2026	In-season rotary screw trap data at Lower Feather River are uploaded to CalFish.
	CDFW	Lower Feather River EDI	Seasonally	2022-2023	Finalized rotary screw trap catch and trapping data at Lower Feather River are uploaded to EDI.
Feather River RST	CDFW	Feather River EDI	Seasonally	1997-2026	Rotary screw trap catch and trapping data at Feather River are uploaded to EDI.
Wallace Weir RST	CDFW	CalFish	Weekly	2017-2024	Rotary screw trap catch and trapping data at Wallace Weir are uploaded to CalFish.
Battle and Clear Creek RSTs	USFWS	Battle and Clear Creek EDI	Biweekly	1998-2026	Rotary screw trap catch and trapping data at Battle and Clear Creeks are uploaded to EDI.
Butte Creek RST	CDFW	CalFish	Weekly	2017-2024	In-season rotary screw trap data at Butte Creek are uploaded to CalFish.
	CDFW	Butte Creek EDI	Seasonally	1995-2026	Finalized rotary screw trap catch and trapping data at Butte Creek are uploaded to EDI.
Deer and Mill Creek RSTs	CDFW	Deer and Mill Creek EDI	Seasonally	1992-2023	Rotary screw trap catch and trapping data at Deer and Mill Creeks are uploaded to EDI.
Knights Landing RST	FishBio	CalFish	Daily	2003-2026	In-season rotary screw trap data at Knights Landing are uploaded to CalFish.
	CDFW	Knight's Landing EDI	Seasonally	2003-2026	Finalized rotary screw trap catch and trapping data at Knights Landing are uploaded to EDI.

Juvenile Salmon (continued)

Dataset	Data Owner	Data Location	Frequency	Date Range	Description
Lower Sacramento River RST	CDFW	CalFish	Weekly	2022-2026	In-season rotary screw trap data at Lower Sacramento are uploaded to CalFish.
	CDFW	Lower Sacramento River EDI	Annually	2022-2023	Finalized rotary screw trap catch and trapping data at Lower Sacramento are uploaded to EDI.
Delta Juvenile Fish Monitoring Program (DJFMP)	USFWS	USFWS	Daily	1976-2026	In-season catch, environmental, and survey data from Sacramento Trawls, Chipps Island Trawls, and Beach Seines are shared with SacPAS in-season through a USFWS web service .
	USFWS	DJFMP EDI	Seasonally		Finalized catch, environmental, and survey data from Sacramento Trawls, Chipps Island Trawls, and Beach Seines are uploaded to EDI.
	USFWS	DJFMP Genetic Study	Seasonally	2018-2026	Selective genetic data from samples taken from DJFMP trawls and seines are processed and the results are uploaded to EDI.
Mossdale Trawl	CDFW	Streamnet Daily Data	Seasonally	2022-2026	Catch, environmental, and survey data from the Mossdale trawl are uploaded to CalFish.
Salvage	CDFW	CDFW FTP	Daily	1993-2026	Exported water from the State Water Project can cause fish to become entrained in the diversion and data is collected in Fish Facilities to calculate the Salvage and Loss
Juvenile Production Estimate (JPE) Letter	NOAA	JPE Letters	Annually	1992-2025	Data from the JPE letters are parsed from the pdfs. Data includes Total Eggs, Fry-to-Smolt survival, Total Natural production entering the Delta, Hatchery production entering the Delta, etc.
		Via Email			

Adult Salmon

Dataset	Data Owner	Data Location	Frequency	Date Range	Description
Abundance, Impact and Harvest rates	PFMC	PFMC Reports	Annually	2000-2026	Ocean Abundance, Impact and Harvest rates on salmon published in reports by the Pacific Fishery Management Council (PFMC).
Coded Wire Tag (CWT)	RMPC	RMIS API Documentation	Daily	1972-2026	CWT Releases and Recoveries are uploaded to the RMIS data repository by reporting agencies, and the data is accessible by a web query or the RMIS API.
Grandtab	CDFW	Via Email	Annually	1951-2025	Escapement estimates for all four Central Valley runs of Chinook Salmon, separated by major basin (Sacramento and San Joaquin) and then sub-basin (tributary streams and rivers).
Carcass	CDFW	CDFW Salmonid Monitoring	Weekly	2017-2026	Upper Sacramento River winter-run Chinook Salmon carcass counts with detailed information for each sampled carcass.
Aerial Redds	CDFW	CDFW Salmonid Monitoring	Weekly	1969-2026	Aerial redd counts from planes and helicopters for all runs of salmon in the Upper Sacramento River Basin.
Redd Dewatering	CDFW	CDFW Salmonid Monitoring	Weekly	2010-2026	Monitoring of shallow redds in the upper Sacramento River for dewatering before the fry have emerged.

Other Fishes

Dataset	Data Owner	Data Location	Frequency	Date Range	Description
20mm Survey	CDFW	CDFW FTP	Annually	1995-2025	San Francisco Estuary 20-mm Survey for information on abundance and distribution of Juvenile Delta Smelt.
Delta Smelt Larva Survey	CDFW	CDFW FTP	Annually	2005-2007	A study of larval Smelt abundance in the upper San Francisco Estuary. No longer active.
North Bay Aqueduct Survey	CDFW	CDFW FTP	Annually	1992-2004	A study of larval smelt loss in the North Bay Aqueduct due to entrainment. No longer active.
Spring Kodiak Trawl Survey	CDFW	CDFW FTP	Annually	2002-2023	Survey on pre-spawning and spawning Delta Smelt in the upper San Francisco Estuary. No longer active.
Smelt Larva Survey	CDFW	CDFW FTP	Annually	2009-2026	A survey for larval Longfin Smelt abundance and distribution as well as losses due to entrainment.
Enhanced Delta Smelt Monitoring (EDSM)	USFWS	EDSM Daily Report	Daily	2016-2026	A program to estimate the abundance of Delta Smelt and their distribution weekly data is uploaded daily to USFWS website.
	USFWS	EDSM EDI	Seasonally		A program to estimate the abundance of Delta Smelt and their distribution weekly. Finalized data is available from EDI annually.
Fall Midwater Trawl	CDFW	CDFW FTP	Annually	1967-2025	Trawl survey used for relative abundance and distribution of many fish species including Striped Bass, Smelt, and Shad.
Townet Survey	CDFW	CDFW FTP	Annually	1959-2025	Townet survey used for relative abundance and distribution of many fish species including Striped Bass, Smelt, and Shad.
Bay Study	CDFW	CDFW FTP	Annually	1980-2025	Trawl survey used for relative abundance and distribution of many fish species including Striped Bass, Smelt, and Shad in the San Francisco Bay.