



SACRAMENTO
SAN JOAQUIN
BAY-DELTA



SWRCB MY
WATER QUALITY
PORTALS



CALIFORNIA
ESTUARY
PORTAL



SAN JOAQUIN
REAL TIME
MANAGEMENT



DWR 1641
WATER
QUALITY



SACRAMENTO
RIVER
WATERSHED

California Environmental Data Federations

A Collaborative Effort
Regional and Statewide Programs

Data and Data Component Catalog

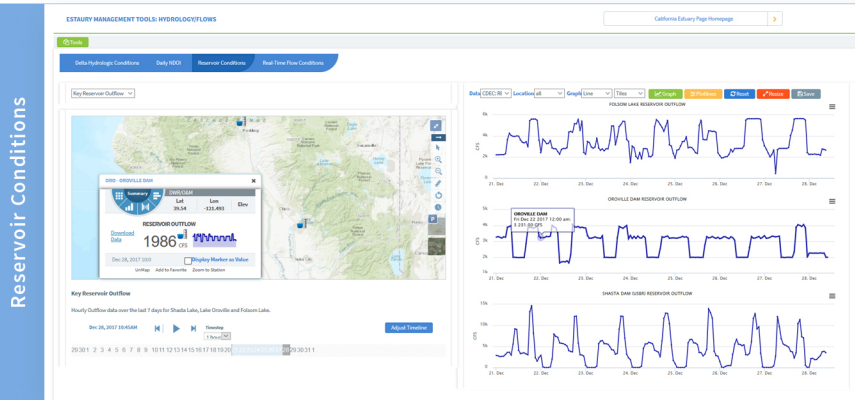
DATA

Hydrology/Flow
Management Tools



DATA COMPONENT

DESCRIPTION

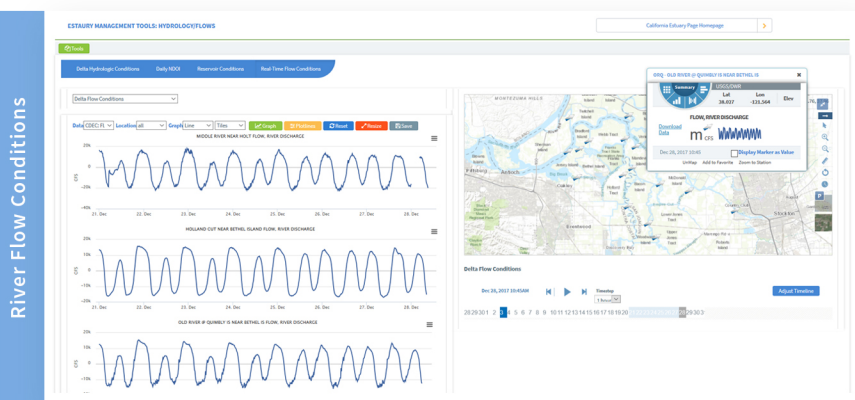


Title: Reservoir Conditions at Key Reservoirs

Duration: Hourly data for the last 7 days or customizable

Data: Outflow, storage and inflow.

Source: California Data Exchange Center

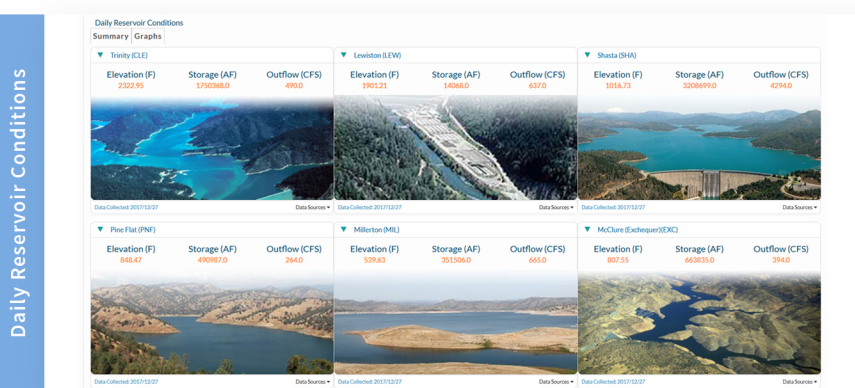


Title: River Flow Conditions (CFS)

Duration: 15-minute data for the last 7 days or customizable

Data: Flow, River Discharge in the Sacramento-San Joaquin Bay Delta, Lower Sacramento River, and Lower San Joaquin River

Source: California Data Exchange Center

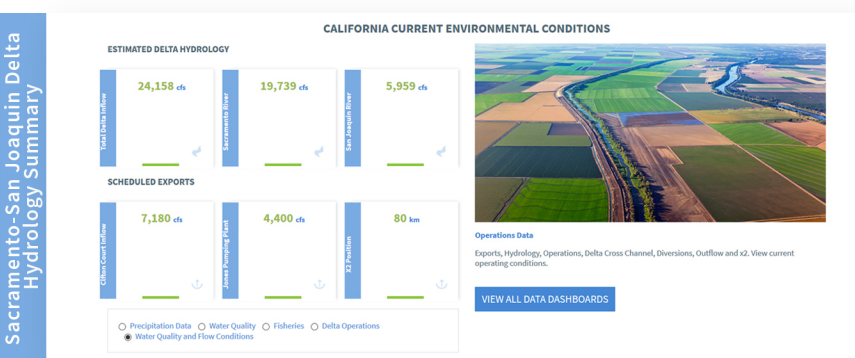


Title: Daily Reservoir Conditions

Duration: Daily

Data: Reservoir Elevation, Storage and Outflow

Source: California Data Exchange Center



Title: Sacramento-San Joaquin Delta Hydrology Summary

Duration: Daily

Data: Delta Inflow, Exports and X2

Source: CA Department of Water Resources and the United States Bureau of Reclamation

Data Providers:



DATA

Hydrology/Flow Management Tools

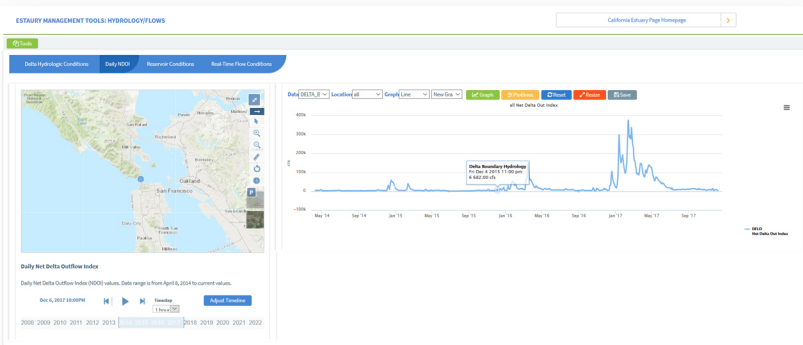
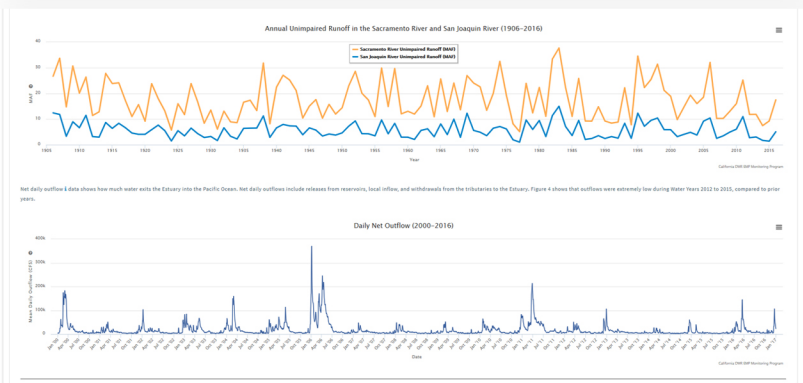
Hydrologic Reporting Summaries

Hydrologic Reporting Summaries

Daily Net Delta Outflow Index

DATA COMPONENT

DESCRIPTION



Title: Hydrologic Conditions
Duration: Water year summaries from 1905-2016
Data: Water year classification, unimpaired runoff, net delta outflow index
Source: California Department of Water Resources and the United States Bureau of Reclamation

Title: Hydrologic Conditions
Duration: Water year summaries from 1905-2016
Data: Water year classification, unimpaired runoff, Net Delta Outflow Index
Source: CA Department of Water Resources and United States Bureau of Reclamation.

Title: Daily Net Delta Outflow Index
Duration: Daily data from 2014 to current or customizable
Source: CA Department of Water Resources

Data Providers:

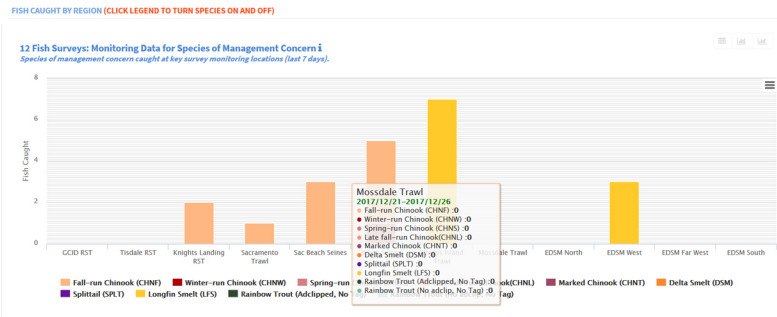


DATA

Fisheries Management Tools

DATA COMPONENT

12 Fish Survey Summary



DESCRIPTION

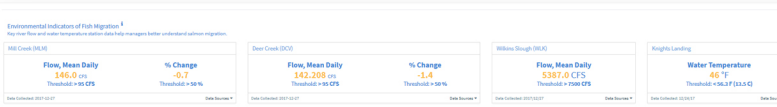
Title: Fish Survey Catch Summary From 12 California Surveys
Duration: Past 7 days
Description: Aggregated catch data for species of management concern at key locations.
Source: US Fish and Wildlife Service (Delta Juvenile Fish Monitoring Program and Enhanced Delta Smelt Monitoring), CA Department of Fish and Wildlife, and Glenn Colusa Irrigation District.

Fish Survey Catch Indices



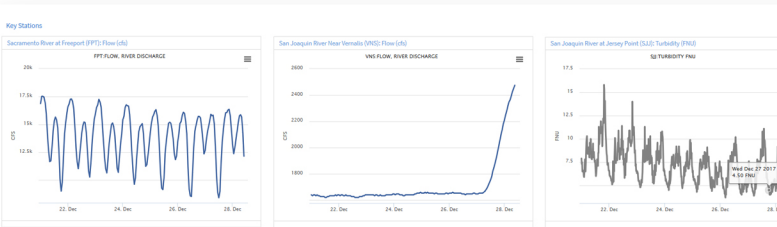
Title: Catch Indices for Delta Cross Channel Operations
Duration: Daily
Data: Juvenile Chinook catch indices for the Sacramento Trawl, Knights Landing and Sacramento Beach Seines.
Source: US Fish and Wildlife Service Delta Juvenile Fish Monitoring Program and CalFish

Environmental Indicators of Migration



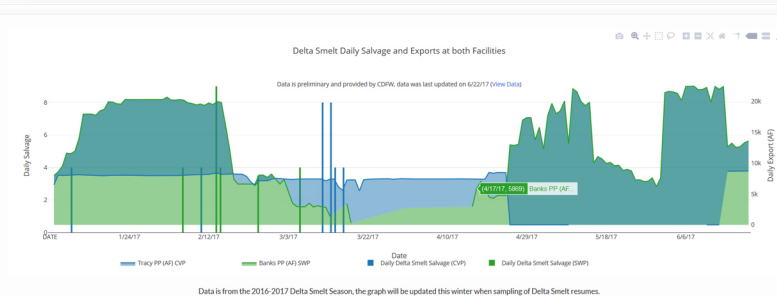
Title: Environmental Indicators of Fish Migration
Duration: Daily
Data: Flow, Mean Daily and the percent change and water temperature at upstream locations along the Sacramento River.
Description: Indicator parameters as monitored by the Delta Operations for Salmonid and Sturgeon technical team used to trigger changes in Delta Cross Channel Gate Operations.
Source: California Data Exchange Center and CalFish

Key Monitoring Station Graphs



Title: Key Monitoring Stations for Fisheries Management
Duration: Last 7 Days
Data: Flow at Freeport and Vernalis and Turbidity at Jersey Point
Source: California Data Exchange Center

Delta Smelt Salvage and Export



Title: salvage and Exports
Duration: Year to Date
Data: Delta Smelt Salvage and exports at the Banks and Tracy pumping plants
Source: CA Department of Fish and Wildlife and California Data Exchange Center

Data Providers:



DATA

Fisheries Monitoring



Can be made for any species



DATA COMPONENT

DESCRIPTION

Fisheries Monitoring Programs

WHERE AND HOW FISH ARE SURVEYED IN THE SAN FRANCISCO ESTUARY
The San Francisco Estuary fish fauna is surveyed regularly by numerous state and federally operated sampling programs. The methods used to survey fishes vary depending on fish behavior and size as well as by the habitat (depth, substrate, vegetation) where they live. A brief description of the fish sampling programs are provided in this report.

U.S. FISH AND WILDLIFE SERVICE

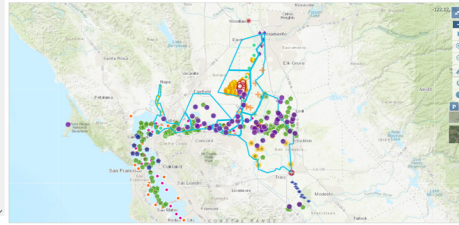
Delta Juvenile Fish Monitoring Program (DJFMP)

The abundance of juvenile Chinook salmon (fall smolt) migrating from the Central Valley's tributaries on their way to the ocean is estimated by the U.S. Fish and Wildlife Service Delta Juvenile Fish Monitoring Program that operates in and around the Delta. The Delta Juvenile Fish Monitoring Program (DJFMP) conducts annual monitoring of juvenile fishes, participates in multi-agency research activities, and contributes to several technical and management committees within the region.

Survey Name: Delta Juvenile Fish Monitoring Program
Agency: U.S. Fish and Wildlife Service
Start Year: 1976
Method: Beach Seine, Midwater Trawl, Kallish Trawl
Survey Duration: Year Round
Survey Frequency: Varies by location and time of year
Number of Stations: 58 Beach Seines
3 Trawl Locations

Quick Links

USFWS DJFMP Monitoring USFWS EDGM Monitoring CDFW Fall Mid Water Trawl CDFW Spring Kallish Trawl CDFW 2016 Trawl CDFW Smelt Larval Survey CDFW Bay Study CDFW Summer Trawl Survey CDFW Fish Salvage Monitoring UC Davis Arc Study All Fisheries Monitoring



Fisheries Monitoring Programs

Fisheries Monitoring

Scroll through the article to see where fish are monitored in the San Francisco Estuary.

Fisheries Map Legend:		Fish Salvage Facility	
EDGM Phase 3 Strata	SKT Station	DJFMP Region 1 Seines	
DJFMP Region 2 Seines	EDGM Delta Smelt Model Subregions	DJFMP Region 4 Seines	
DJFMP Region 3 Seines	DJFMP Region 3 Seines	DJFMP Region 7 Seines	
DJFMP Liberty Island Seines	DJFMP Region 6 Seines	DJFMP Prisoners Point Trawl	
DJFMP Jersey Point Trawl	DJFMP Sherwood Harbor Trawl	DJFMP Mossdale Trawl	
DJFMP Sandy Beach Trawl	DJFMP Chipps Island Trawl	DJFMP Site 711 Trawl	
DJFMP Site 707 Trawl	DJFMP Site 725 Trawl	Smelt Larval Survey Location	
Fall Midwater Trawl Location	Summer Trawl Survey Location	Bay Study Open Water Boat Station	
Bay Study Beach Seine Location	Bay Study Open Water Boat Station		
Arc Sampling Sites	20mm Trawl Station		

Fisheries Monitoring Programs

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE SURVEYS

Fall Midwater Trawl

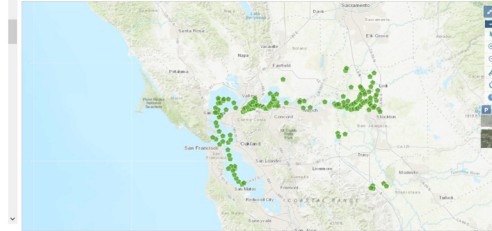
Since 1987, California Department of Fish and Wildlife has sampled 100 fixed locations that range from San Pablo Bay upstream to Shasta on the San Joaquin River, head on the Sacramento River, and the Sacramento Deep Water Ship Channel, once a month between September and December. A single tow behind a boat, throughout the water column, is conducted at each location. This survey counts, identifies, and measures mostly small (30-100 mm) resident and migratory fishes that occupy open water habitats. The FMT was initiated to determine the relative abundance and distribution of age 0-100 mm (Morone saxatilis) in the estuary, but the data has also been used for other upper estuary pelagic species, including Delta smelt (Hypomesus transpacificus), longfin smelt (Squalius taylori), American shad (Alosa sapidissima), Pacific herring (Clupea pallasii), and steelhead trout (Salmo gairdneri).

Survey Name: Fall Midwater Trawl
Agency: CDFW
Start Year: 1987
Method: Midwater Trawl
Survey Duration: September to December
Survey Frequency: Once a month
Number of Stations: 100
Time Information: One 12 minute tow at each location
Survey Metadata: CDFW FMT

Spring Kallish Trawl

Quick Links

USFWS DJFMP Monitoring USFWS EDGM Monitoring CDFW Fall Mid Water Trawl CDFW Spring Kallish Trawl CDFW 2016 Trawl CDFW Smelt Larval Survey CDFW Bay Study CDFW Summer Trawl Survey CDFW Fish Salvage Monitoring UC Davis Arc Study All Fisheries Monitoring



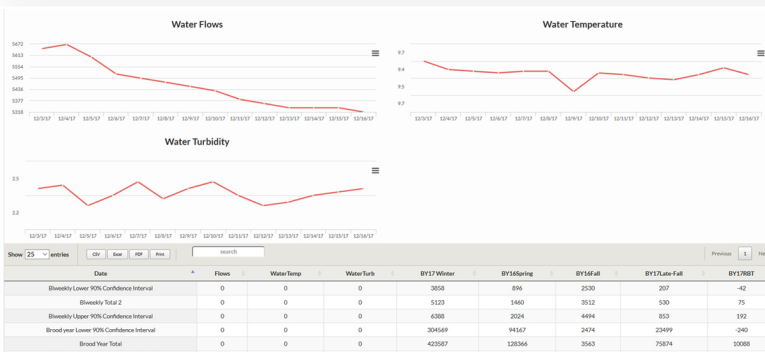
Red Bluff Diversion Fish Catch Summary

Red Bluff Diversion Dam

Preliminary data, subject to change. [Download the Data.](#)

Date	Flows	Water Temp	Water Turb	BY17 Winter	BY16 Spring	BY16 Fall	BY17 Late Fall	BY17 MBT
12/3/17	5448	10.5		260	26	76	0	0
12/4/17	5670	10	2.8	177	126	126	25	0
12/5/17	5604	9.9	2.2	711	158	158	0	27
12/6/17	5556	9.8	2.5	779	285	322	105	0
12/7/17	5494	9.9	2.9	646	223	174	74	25
12/8/17	5473	9.9	2.4	653	153	537	26	0
12/9/17	5451	8.7	2.7	423	25	399	75	0
12/10/17	5479	9.8	2.9	364	48	138	0	0
12/11/17	5384	9.7	2.5	365	97	292	0	0
12/12/17	5382	9.5	2.2	283	47	165	23	23
12/13/17	5340	9.4	2.3	125	51	376	76	0
12/14/17	5340	9.7	2.5	101	76	406	25	0
12/15/17	5340	10.1	2.6	75	125	225	25	0
12/16/17	5338	9.7	2.7	201	0	326	76	0

Red Bluff Diversion Fish Catch Summary



Date	Flows	Water Temp	Water Turb	BY17 Winter	BY16 Spring	BY16 Fall	BY17 Late Fall	BY17 MBT
Biweekly Lower 90% Confidence Interval	0	0	0	3858	896	2530	207	42
Biweekly Total 2	0	0	0	5123	1460	3512	530	75
Biweekly Upper 90% Confidence Interval	0	0	0	6388	2024	4494	853	192
Brood year Lower 90% Confidence Interval	0	0	0	2065.9	1616.7	2474	2349	240
Brood Year Total	0	0	0	42582	13256	3563	75874	3088

Title: Red Bluff Diversion Dam Data

Duration: 2 Weeks

Data: Flow, Temperature, Turbidity, Salmonid Catch (by run), and Brood Year Biweekly totals.

Source: US Fish and Wildlife Service

Title: Red Bluff Diversion Dam Data

Duration: 2 weeks Data: Flow, Temperature, Turbidity, Salmonid catch (by run), and Brood year biweekly totals. Source: US Fish and Wildlife Service

Data Providers:



DATA
**Fisheries
Management Tools**
Daily Salvage Summary
DATA COMPONENT
DESCRIPTION
Daily Summary for 12/24/2017

Clicking on a value will produce a bar graph and daily salvage table for the last 22 days

Export	SWP	CVP
(Accepted)	4949	6977

Name	SWP	CVP
Striped Bass	28	36
White Catfish	2	80
Channel Catfish	0	5
American Shad	351	528
Threespot Shad	282	252
Sprat	8	0
Black Crayfish	8	0
Bluegill	28	118
Longmouth Bass	0	5
Yellowfin Goby	29	60
Inland Silverside	5	68
Western Mosquitofish	0	8

NO: No export or salvage

Please note these results may be preliminary and are thus subject to change.

Note: Click on values above to view graphs and download data from California Department of Fish and Game

Title: Daily Salvage Summary
Duration: Daily
Data: Exports and salvage by species for both the State Water Project and the Central Valley Project
Source: CA Department of Fish and Wildlife

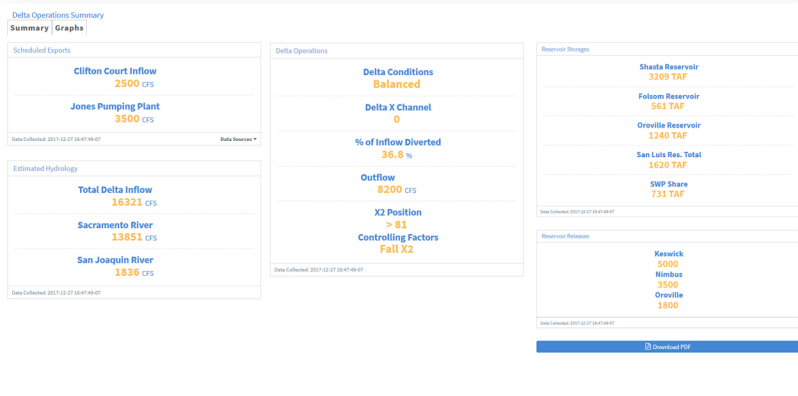
Data Providers:


DATA



Delta Operations

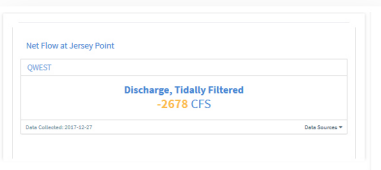
Daily Water Operations Summary



Title: Delta Operations Summary
Duration: Daily
Data: Exports, Hydrology, Operational Conditions, Reservoir Storages and Releases, X2 and Net Delta Outflow Index
Description: These parameters give an overview of conditions in the Delta.
Source: Department of Water Resources and the United States Bureau of Reclamation.



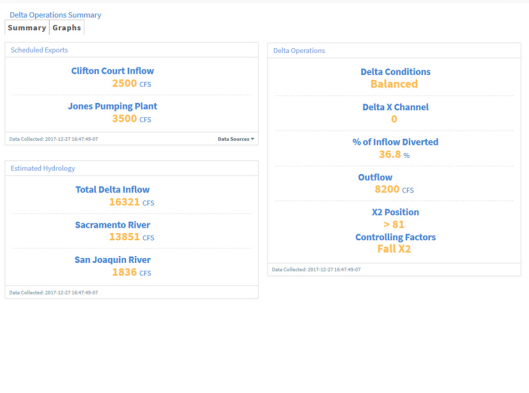
QWEST



Title: QWEST
Duration: Daily
Data: Net Flow at Jersey Point
Description: A broad indication of the net direction and quantity of flow in the San Joaquin River at Jersey Point.
Sources: CA Department of Water Resources



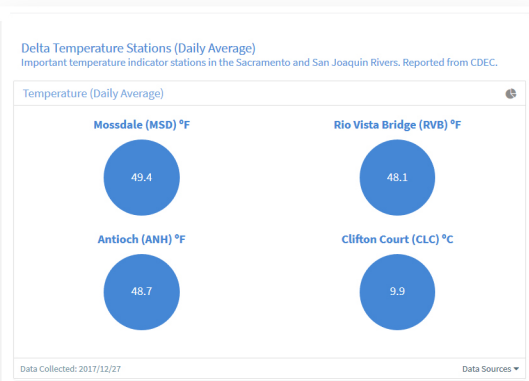
Daily Water Operations Summary



Title: Delta Operations Summary
Duration: Daily
Data: Exports, Hydrology, Operational Conditions, Reservoir Storages and Releases, X2, Net Delta Outflow Index
Description: These parameters give an overview of conditions in the Delta
Source: Department of Water Resources and the United States Bureau of Reclamation



Temperature Monitoring



Title: Temperature Monitoring Stations
Duration: Current Conditions
Data: Temperature at Mossdale, Rio Vista, Antioch and Clifton Court
Description: Temperature stations used to monitor indications of spawning or migration of listed species.
Source: California Data Exchange Center

Data Providers:



DATA



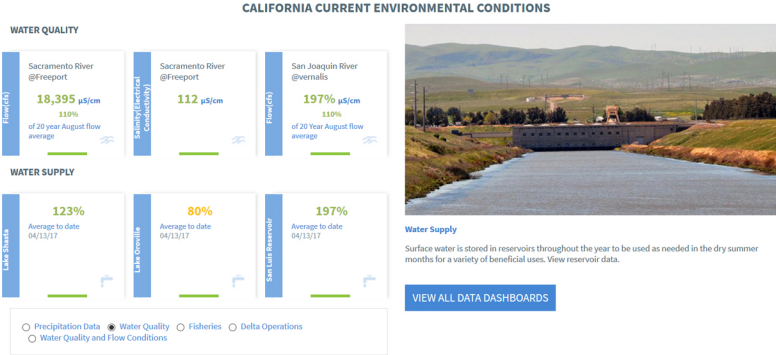
Delta Operations



Water Quality and Water Supply Snapshot

DATA COMPONENT

DESCRIPTION



Title: Water Quality and Water Supply Summary
Duration: Daily
Data: Flow at Freeport and Vernalis, Electrical Conductivity at Freeport, and Reservoir Storage at Key Reservoirs
Source: CA Department of Water Resources

Data Providers:



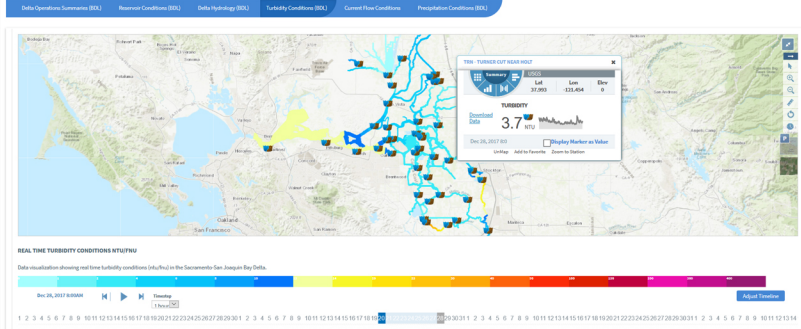
DATA



Water Quality Monitoring



Real-Time Turbidity Spatial Data Interpolation



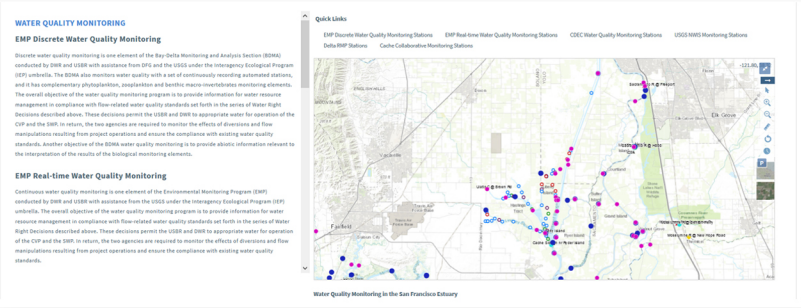
DATA COMPONENT

DESCRIPTION

Title: Real-time Turbidity Spatial Data Interpolation
Duration: Last 7 Days
Description: Turbidity model created from real-time values interpolated and transformed to create color gradients of turbidity values throughout the Delta
Source: California Data Exchange Center



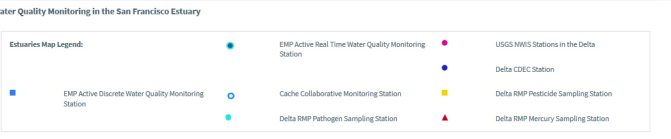
Water Quality Monitoring Programs



Title: Water Quality Monitoring
Description: Map based visualization displaying water quality monitoring locations by program in the Sacramento-San Joaquin Delta.



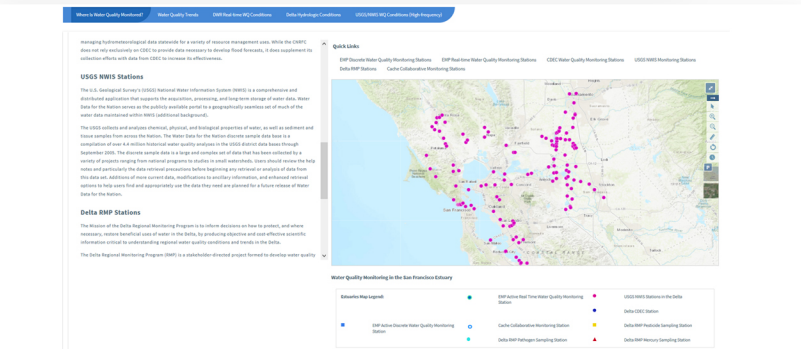
Water Quality Monitoring Programs



Title: Water Quality Monitoring Legend
Description: Icon legend to accompany Water Quality Monitoring Program map story.



Water Quality Monitoring Programs



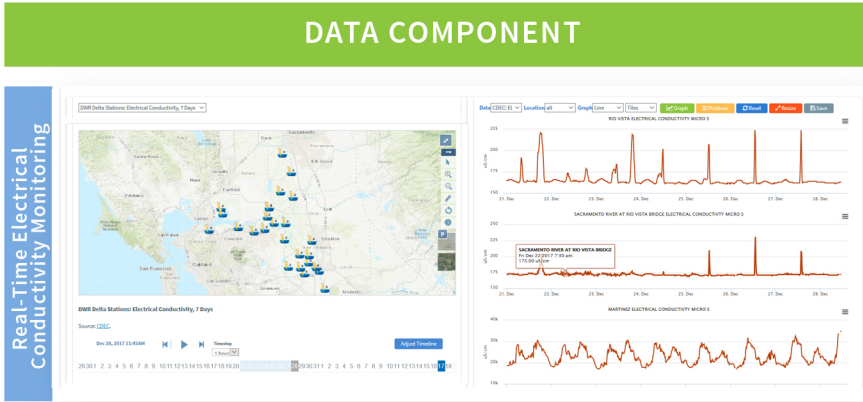
Title: Water Quality Monitoring
Description: Map based visualization displaying water quality monitoring locations by program in the Sacramento-San Joaquin Delta.

Data Providers:



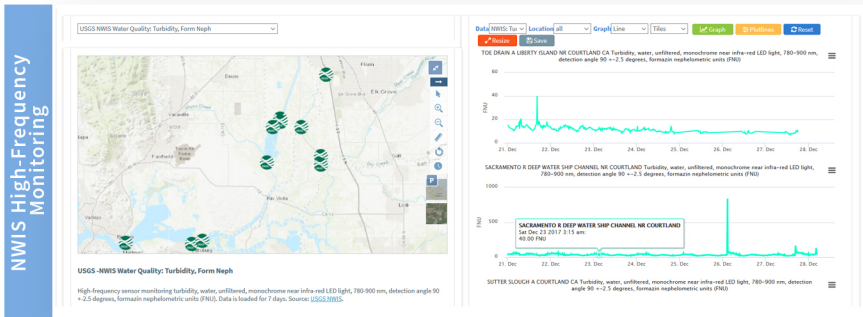
DATA

Water Quality Monitoring

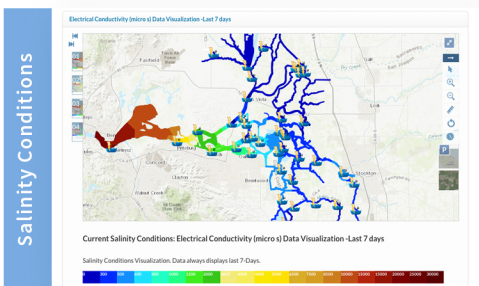


DESCRIPTION

Title: Real-Time Electrical Conductivity Monitoring
Duration: 7 Days
Source: California Data Exchange Center and United States Geological Survey National Water Information System



Title: National Water Information System High-Frequency Monitoring
Duration: 7 Days
Data: Chlorophyll, Nitrates, Dissolved Oxygen, pH, Specific Conductance, and CDOM
Source: United States Geological Survey National Water Information System



Title: Real-Time Salinity Conditions Visualization
Duration: Last 7 Days
Description: Salinity model created from real-time electrical conductivity station data, interpolated and transformed to create color gradients of salinity conditions throughout the Delta.
Source: California Data Exchange Center

Data Providers:





DATA COMPONENT

DESCRIPTION

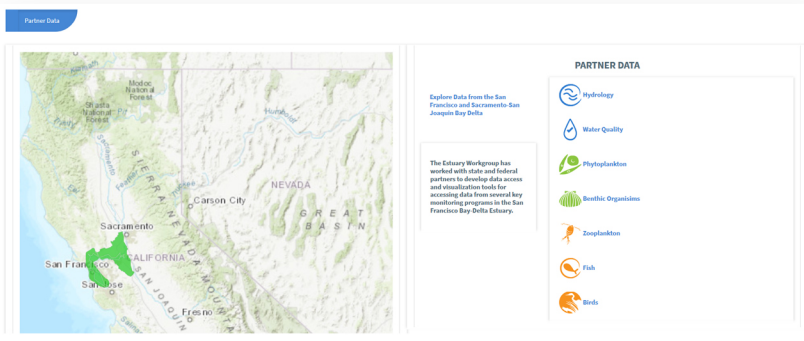
Regional Data Portal Discovery



Title: Regional Data Portal Discovery

Description: Interface of California data portals alongside their geographic data coverage.

Monitoring Program Discovery



Title: Monitoring Program Discovery

Description: Interface of California monitoring programs alongside the geographical extent of parameter/species monitoring.

Data Providers:



DATA

Custom UI /Presentation



Topic Highlight Widget

DATA COMPONENT

DESCRIPTION


Title: Topic highlight
Description: Content Highlight from any regional portal.

LEARN THE ISSUES

What are "Total Maximum Daily Loads" (TMDLs) for pollutants and why are they important to the San Francisco Estuary?

In California TMDLs are created for a stream or body of water that has been listed as impaired through section 303(d) of the Clean Water Act. A TMDL must account for all sources of the pollutants that caused the water to be listed. Federal regulations require that the TMDL, at a minimum, account for contributions from point sources (federally permitted discharges) and contributions from nonpoint sources.

[LEARN MORE](#)



How are Estuaries Monitored?

Estuary monitoring occurs at varying spatial and temporal scales and can be grouped by data collection type. Data assessments for large or remote areas typically rely on existing GIS for analysis. The second type of monitoring utilizes rapid assessments or photo surveys. Site specific monitoring, the third and most intensive monitoring type, employs targeted data collection for parameters or species of interest.

[LEARN MORE](#)

What laws, regulations, and policies protect California's Estuaries?

California's estuaries, and the organisms that live in them, are protected by many state and federal laws, regulations, and policies designed to prevent the degradation and destruction of water quality, habitat, living resources, and ecological processes.

[LEARN MORE](#)



Custom GIS Viewer

☐ National Estuary Restoration Inventory
[Download](#) [Attribute Table](#)


☒ US West Coast Marine Protected Area Boundaries
☐ Cultural Heritage Focus
☐ Natural Heritage Focus
☐ Sustainable Production Focus
[Download](#) [Attribute Table](#)

☐ TNC Estuary Assessments
☐ Wetlands
☒ Embayment/Delta
☒ Regional Estuary
☒ Marine Estuary
☒ Sound
[Download](#) [Attribute Table](#)

☐ Shoreline Armoring
[Download](#) [Attribute Table](#)

☐ Delta Waterways
[Download](#) [Attribute Table](#)

☐ Key Key Locations
[Download](#) [Attribute Table](#)



Site_ID	Area_XM_To	Date_SPL_U	Shape_Leng	Shape_Area	Site_Name	Site_Label	Gov_Level	State	NS_Full	Prot_Lvl	Mgmt_Plan	M
CASD	2.09622		0.07728343902	0.00031048239	Martin Islands State Marine Park	Martin Islands SMP	State	California	Eligible	Uniform Multiple Use	NRA Programmatic Management Plan	1

Title: Custom GIS Viewer
Description: Create a custom GIS layer list from a selection of over 600 map layers to combine with an interactive map and attribute table to view the layer and metadata side by side.



Real Time Station Data

FALSE RIVER (FAL) - EC

Summary | USGS | Lat: 38.056 | Lon: -121.667 | Elev: 0

ELECTRICAL CONDUCTIVITY MICRO S

Download Data | **827** uS/cm | Jan 03, 2018 0:00 | ☐ Display Marker as Value

UnMap | Add to Favorite | Zoom to Station

SACRAMENTO RIVER AT RIO VISTA (USGS) - EC

Summary | USGS | Lat: 38.16 | Lon: -121.686 | Elev: 0

ELECTRICAL CONDUCTIVITY MICRO S

Download Data | **173** uS/cm | Jan 03, 2018 0:00 | ☐ Display Marker as Value

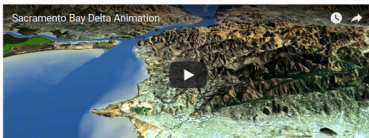
UnMap | Add to Favorite | Zoom to Station

Title: Real-time Station Data
Description: Choose any CDEC, NWIS, CIMIS, or NOAA sensor. Current value and 3-day time series are reported on your dashboard.



Video and Text Widget

Sacramento Bay Delta Animation



EXPLORE THE SAN FRANCISCO ESTUARY

The San Francisco Estuary is the largest in western North America, encompassing San Francisco Bay and the Delta of the Sacramento and San Joaquin rivers in California. Unlike most estuaries that spread out into a wide delta of braided channels where rivers meet the sea, the San Francisco Estuary's Delta is more than 60 miles inland, trapped behind coastal ridges after rising seas flooded the Bay 10,000 years ago.

[LEARN MORE](#)

Title: Video and Text Widget
Description: Ability to display videos and accompanying text for a topic highlight.

Data Providers:



DATA

Custom UI
/Presentation




Asset Lists


DATA COMPONENT

DESCRIPTION


RECENT DOCUMENTS



Ecological Implications of hydrodynamic changes San Francisco Estuary.
San Francisco Estuary Institute: Samuel M. Saffran, Letitia Greenlee, Robin Grossinger




A Model to Estimate Combined Old & Middle River Flows
Paul Hutton, Ph.D., P.E. Metropolitan Water District of Southern California




Modeling Salinity in Suisun Bay and the Western Delta using Artificial Neural Networks
Limin Chen, John S. Rath, and Sujoy B. Roy Tetra Tech Inc.

[VIEW ALL DOCUMENTS](#)
[ADD A DOCUMENT](#)


ENVIRONMENTAL DATASETS



Red Bluff Diversion Dam Juvenile Salmonid Monitoring U.S....
The Red Bluff Fish and Wildlife Office (RBFWO) established a juvenile fish monitoring program using...



EMFIEP Bay-Delta Monitoring: Discrete Water Quality Datasets
The overall objective of the water quality monitoring program is to provide information for water resource...




Enhanced Delta Smelt Monitoring
U.S. Fish and Wildlife Service

[VIEW ALL DATASETS](#)
[ADD A DATASET](#)


Title: Catalog List
Description: Custom and embeddable project and document lists for dashboards.

Spotlight


WHAT'S NEW ON BDL




Fisheries
Aggregating more than 40 disparate data sets, these fisheries dashboards support water managers to make real time decisions...



Salinity Management in The Delta
The BDL Salinity Dashboard and Data Story conditions data visualization and...



Water Quality Conditions in the Sacramento-Pablo Bays
This web enabled interactive report summarizes and provides a platform to explore water ...




Ecosystem Restoration Projects
Explore more than 200 projects to restore and improve Delta habitat and infrastructure...

[VIEW DIRECTORY](#)

Title: Card Widget
Description: Spotlight widget to showcase any project, document, report, asset, program, agency or collaborative effort.


Project Highlight Widget

BROWSE ALL PROJECTS



Yolo Bypass Fish Passage Projects Information Hub
This project page is designed to showcase the number of projects in the Yolo Bypass to ease...

[LEARN MORE](#)



Lake Oroville Flood Zones and Conditions
This data story overviews current conditions, past conditions and flood zones around...

[LEARN MORE](#)

[VIEW ALL PROJECTS](#)

Title: Project Highlights
Description: Highlight information of projects, programs, monitoring, or reporting.

Data Providers:



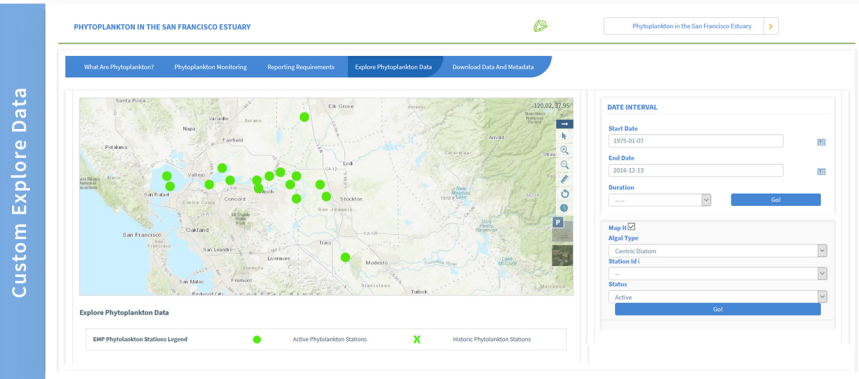
DATA

Custom UI
/Presentation

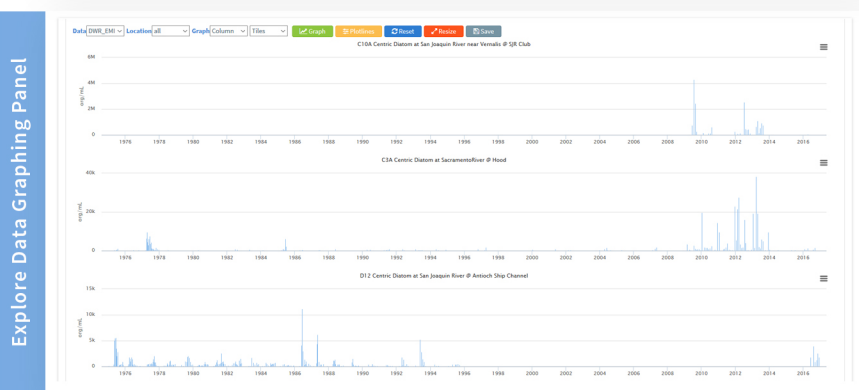


DATA COMPONENT

DESCRIPTION



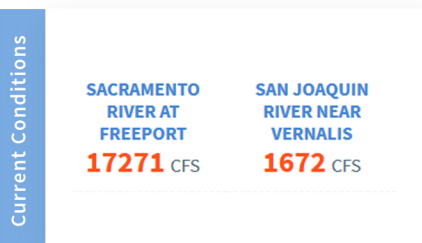
Title: Custom Explore Data Filter
Duration: Defined by data set
Data: California Data Exchange Center, California Irrigation Management Information System, National Water Information System, US Fish and Wildlife Service, and California Environmental Data Exchange Network
Description: User ability to explore a data set and create



Title: Custom Explore Data Graphs
Duration: Defined by data set
Data: California Data Exchange Center, California Irrigation Management Information System, National Water Information System, US Fish and Wildlife Service, California Environmental Data Exchange Network.
Description: User ability to explore a data set and create graphs.



Title: Custom Dual Axis Graphs
Description: Dual Axis graphs created with two parameters to allow for greater comparison.

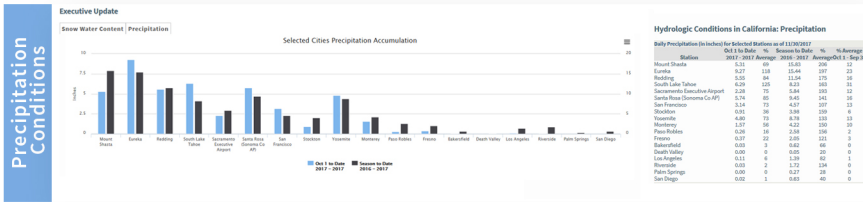


Title: Current Conditions
Description: Display of real-time numerical values and graph toggle for any parameter at multiple

Data Providers:

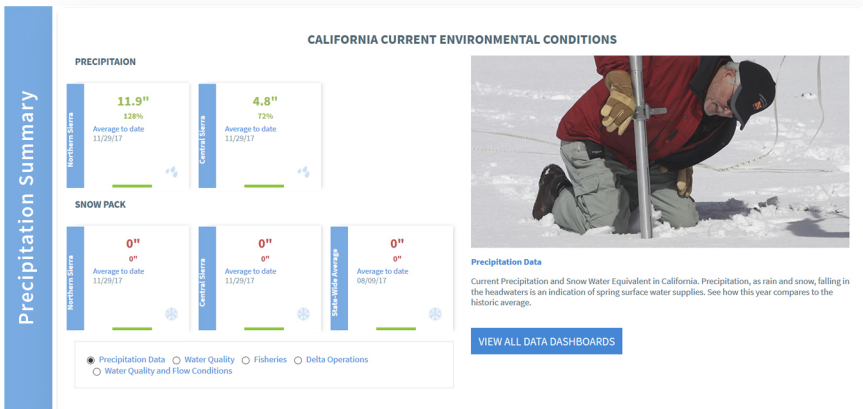


DATA COMPONENT



DESCRIPTION

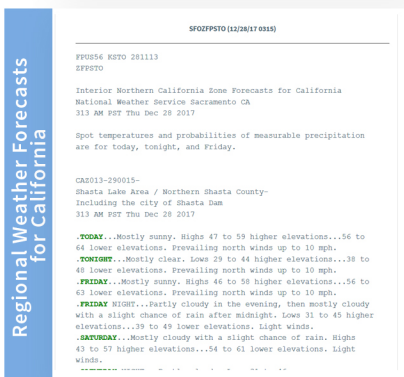
Title: California Precipitation
Duration: Season to Date and Previous Season Total
Source: Department of Water Resources



Title: California Precipitation Summary
Duration: Water year to date
Data: Northern and Central Sierra Precipitation Index, and Snow Water Content regional averages
Source: California Department of Water Resources



Title: Regional Weather Forecasts for Souther to Southern, Central and Northern California
Duration: Next 7 Days
Source: Department of Water Resources.



Title: Regional weather Forecasts for Southern, Central, and Northern California
Duration: Next 14 days
Source: Department of Water Resources.

Data Providers:

DATA COMPONENT

DESCRIPTION

NOAA Tide and River Forecast



Title: NOAA River and Tide Forecasting

Duration: Next 14 days
























Description: Tide and river forecasting graphs are used by fisheries agencies for timing of sampling events.

Source: National Ocean and Atmospheric Administration (NOAA).

Data Providers:















California Environmental Data Inventory

Regional Data Portal

Data Source	Data Category	Data Description	Data Access					
 Department of Water Resources CALIFORNIA DATA EXCHANGE CENTER		Weather forecasts, river bulletins, full weather data	Public	✓	✓	✓	✓	✓
		Reservoir operations, reservoir summary reports, water quality, hydrodynamic data	Public	✓	✓	✓	✓	✓
		Precipitation, snow water content, reservoir operations, water quality, hydrodynamic data	Public	✓	✓	✓	✓	✓
		Precipitation, reservoir operations	Public	✓	✓	✓	✓	✓
		Precipitation, reservoir operations	Public	✓	✓	✓	✓	✓
		Water quality, reservoir operations, precipitation, hydrodynamic information, snow water content	Public	✓	✓	✓	✓	✓
		Water quality, hydrodynamic information, snow water content	Public	✓	✓	✓	✓	✓
 U.S. Fish & Wildlife Service	Delta Juvenile Fish Monitoring Program (DJFMP) Trawl and Seine Data	Web services for long-term Delta Juvenile fish monitoring program catch and environmental data for trawls and seines	Portal Specific*	✓				
	Enhanced Delta Smelt Monitoring (EDSM) Catch Data and Mapping	Data display of catch information for key species through the Enhanced delta Smelt Monitoring Program	Portal Specific*	✓				
	USFWS Red Bluff Diversion Dam Data	Red Bluff Diversion Dam Rotary Screw Trap and Environmental Monitoring Data	Portal Specific*	✓	✓	✓	✓	
	Critical Habitat (GIS)	Critical habitat spatial data for threatened and endangered species in California	Public	✓	✓			
 USGS science for a changing world	USGS (National Water Information System)	National Water Information System includes data regarding: flow, inflow, flooding, freezing, and stage	Public	✓	✓	✓	✓	
	National Hydrography Data set (GIS)	Nationwide GIS layer which includes: flowlines, watershed boundaries, and surface water bodies	Public	✓	✓	✓	✓	
	Special Studies	Acoustic Telemetry Fish Tracking, Water Quality	Portal Specific*	✓				
	Abandoned Mine Lands Initiative	Location and information data for Abandoned Mines	Portal Specific*		✓			
	EMMMA (GIS)	Environmental Mercury Mapping, Modeling and Analysis (EMMA) GIS data layer	Public	✓	✓	✓	✓	✓
 CEDEN California Environmental Data Exchange Network		SWAMP monitoring evaluates the physical, chemical, and biological integrity of the State's waters.	Public	✓	✓	✓	✓	✓
		The Central Valley Regional Data Center collects and manages water and sediment quality data collected throughout the Central Valley	Public	✓	✓	✓	✓	✓
		The California State Water Resources Control Board collects data related to stream pollution trend monitoring, regional board monitoring, nutrient concentration, TMDL enforcement, pesticides monitoring, bioaccumulation monitoring, and special studies	Public	✓	✓	✓	✓	✓
		The U.S. EPA collects data related to stream pollution trend monitoring, nutrient concentration, TMDL enforcement, pesticides monitoring, bioaccumulation monitoring, and special studies	Public	✓	✓	✓	✓	✓
		San Francisco Estuary Institute (SFEI) collects and manages water and sediment quality data collected throughout the San Francisco Bay-Delta and northern montane regions	Public	✓	✓	✓	✓	✓
		Southern California Coastal Water Research Project (SCCWRP) collects and manages water and sediment quality data collected throughout Southern California	Public					
		Moss Landing Marine Labs collects and manages water and sediment quality data collected in Coastal Regions of California	Public					

California Environmental Data Inventory

Regional Data Portal

Data Source	Data Category	Data Description	Data Access					
	River Forecast	River stage forecast, flood stage forecast, record high and low flow/stage, current river stage	Protal Specific*	✓	✓	✓	✓	
	Weather Forecast	Air temperature forecast (min and max); hourly temperature forecast; wind speed; wind direction; sky cover; and weather watches, warnings and advisories	Protal Specific*	✓	✓	✓		
	Tides and Currents	Tide predictions and historic tide information	Protal Specific*	✓	✓	✓		
	CIMIS (California Irrigation Management Information System)	Precipitation, air temperature, solar radiation pressure, wind information, dew point	Public	✓	✓	✓	✓	✓
	Water Data Library (WDL)	Historic and current groundwater data, water quality (continuous and discrete)	Protal Specific*					
	Environmental Monitoring Program (EMP)	Water quality data (discrete and continuous), benthic macroinvertebrate monitoring, phytoplankton sampling, chlorophyll a, and hydrological conditions	Public	✓		✓	✓	✓
	California Cooperative Snow Surveys	Snow water equivalent, snow depth, snow water content, long-term monitoring for analysis	Public	✓	✓	✓	✓	✓
	Interagency Ecological Program (IEP)	Water quality conditions, vessel calendar, discrete water quality, fish monitoring, phytoplankton, benthic, zooplankton, aquatic ecology studies, and special studies	Public	✓	✓	✓	✓	✓
	DWR Municipal Water Quality	Water quality, flow, salinity, mean daily pumping, bromide, power generation, turbidity, net Delta outflow, unimpaired runoff, and X2	Public	✓	✓	✓	✓	✓
	Sacramento Watershed Coordinated Monitoring Program	The SWCMP is designed to meet the monitoring needs of the Regional Board's Surface Water Ambient Monitoring Program (SWAMP) and the DWR Northern District's Water Quality and Biology section.	Public	✓	✓	✓	✓	✓
	Central Valley Operations	Reservoir operations, water deliveries, water accounting report, fish reports, OMR index calculation, pumping and exports	Public	✓	✓	✓	✓	✓
	WARMF Model Results	Watershed Analysis Risk Management Framework (WARMF) for predicting salinity (EC) in the San Joaquin River Watershed	Public				✓	
	Salvage at SWP and CVP Pumps	Salvage data from the Skinner Fish Facility and the Tracy Fish Facility	Protal Specific*	✓				
	Trawl Data	Trawl data for 20 MM, Spring Kodiak Trawl (SKT), Fall Midwater Trawl (FMWT), Smelt Larva Survey (SLS), and Summer Townet	Protal Specific*	✓				
	Environmental Monitoring Program (EMP) Zooplankton Data	Long-term zooplankton monitoring data as part of the Environmental Monitoring Program (EMP)	Public	✓		✓	✓	✓
	Rotary Screw Trap Salmonid Monitoring	Catch summaries from CDFW Rotary Screw Traps (RST) at Knights Landing and Tisdale on the Sacramento river	Protal Specific*	✓	✓			
	STORET	Water quality, biological, and physical data	Protal Specific*	✓				
	WQX	Ambient Water Quality Data Exchange Platform	Protal Specific*	✓				
	Regional Data Platform	This Regional Data Platform aggregates data, maps, visualizations, GIS, documents, reports, projects, and images with the focus on the San Francisco-San Joaquin Bay Delta.	Protal Specific*		✓	✓		✓
	Regional Data Platform	The Sacramento River Watershed Data Platform presents stakeholder driven topics through the use of current and historic environmental monitoring data, data dashboards, data and map stories, maps, GIS, written content, reports, and images.	Protal Specific*	✓			✓	✓
	Regional Data Platform	The California Estuaries Portal is one of the My Water Quality Portals and is used to communicate information on California's Estuaries through the use of maps, GIS, questions answered, data stories, reports, and images.	Protal Specific*	✓			✓	✓
	Regional Data Platform	Using model outputs and real-time water quality conditions this platform synthesizes and displays water quality conditions for salinity management.	Protal Specific*	✓	✓	✓		✓
	Regional Data Platform	Monitoring and reporting of water quality conditions and trends in the San Francisco-San Joaquin Bay Delta using biological data, water quality data (discrete and continuous), hydrologic data, reports, images, maps, and visualizations.	Protal Specific*	✓		✓	✓	

California GIS Inventory

Layer Name	Organization	Layer Description
Eastern Shasta Trinity National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Eastern Shasta Trinity National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
El Dorado National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
FRID_ElDoradoNF_simp200_RP	U.S. Forest Service and The Nature Conservancy	The mean reference fire return interval is an approximation of how often, on average, a given PFR likely burned in the three or four centuries prior to significant Euroamerican
FRID_TahoeNF_simp200_currentFRI	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Klamath National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Klamath National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Lassen National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Lassen National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Mendocino National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Mendocino National Forest Mean Reference Fire Return Interval	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Modoc National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Modoc National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Plumas National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This is a subset of the mercury commodity features from the California-wide mineral resource layer
Plumas National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This is a subset of the mercury commodity features from the California-wide mineral resource layer
Tahoe National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This is a subset of the mercury commodity features from the California-wide mineral resource layer
Tahoe National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This is a subset of the mercury commodity features from the California-wide mineral resource layer
Western Shasta Trinity National Forest Current Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Western Shasta Trinity National Forest Mean Reference Fire Return Intervals	U.S. Forest Service and The Nature Conservancy	This polygon layer consists of information compiled about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions
Historic Fire Perimeters	U.S. Forest Service Pacific Southwest Region	Historic Fire Perimeters in the Sacramento River Watershed
Fire Management Zones	U.S. Forest Service Pacific Southwest Region	U. S. Forest Service Fire Management Zones
CalVeg	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
CalVeg - American Subregion	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
CalVeg - Eastside Subregion	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
CalVeg - Feather Subregion	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
CalVeg - Northeast Subregion	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
CalVeg - SacValley	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
CalVeg - Westside	U.S. Forest Service Pacific Southwest Region*	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California
1945 Timberland Resources	U.S. Forest Service*	1945 Timber stand assessments
Tree Mortality High Priority Counties	U.S. Forest Service*	High Priority Counties were identified by the Tree Mortality Taskforce as most in need of assistance in addressing tree mortality issues and include Amador, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare, and Tuolumne
California Reservoirs	U.S. Geological Survey	Reservoirs in California as Designated by the U.S. Geological Survey
Carson, Truckee, and Walker Watershed NHD Flowlines	U.S. Geological Survey	NHD Flowlines for the Carson, Truckee, and Walker River Watersheds
Delta Waterways	U.S. Geological Survey	Delineation of Waterways in the Legal Delta
Gold Resources	U.S. Geological Survey	This is a subset of the gold commodity features from the California-wide mineral resource layer

California GIS Inventory

Layer Name	Organization	Layer Description
Final Critical Habitat for Conservancy fairy shrimp (Branchinecta conservation) OR Branchinecta conservation (Conservancy fairy shrimp)	U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office	These data identify, in general, the areas of final critical habitat for Conservancy fairy shrimp (Branchinecta conservation) OR Branchinecta conservation (Conservancy fairy shrimp)
Yosemite Toad Critical Habitat	U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office, http://criticalhabitat.fws.gov/docs/crithab/zip/PCH_ANAXYRUSCANORUS_YYYYMMDD.zip	These data identify, in general, the areas of PROPOSED critical habitat for Anaxyrus canorus (Yosemite toad)
Delta Smelt Critical Habitat	U.S. Fish and Wildlife Service	The Wetlands mapper is designed to deliver easy-to-use, map like views of America's Wetland resources
U.S. Fish and Wildlife Service Wetlands Web Service	U.S. Fish and Wildlife Service	Historic Range of Central Valley Winter-run Chinook Salmon in California
U.S. Fish and Wildlife Service Red Bluff Diversion Dam Rotary Screw Trap	U.S. Fish and Wildlife Service	Red Bluff Diversion Dam Rotary Screw Trap, U.S. Fish and Wildlife Service
U.S. Fish and Wildlife Service Riparian Data Web Service	U.S. Fish and Wildlife Service	Web Mapping Services for Riparian Data Provided by the U.S. Fish and Wildlife Service
U.S. Fish and Wildlife Service Delta Smelt	U.S. Fish and Wildlife Service	U.S. Fish and Wildlife Service designated Delta Smelt habitat
U.S. Fish and Wildlife Service Wetlands Data (1:250,000 scale) Web Service	U.S. Fish and Wildlife Service	The National Wetlands Inventory (NWI) has been producing wetland maps and geospatial wetland data for the United States since the mid-1970s
Jersey Point Trawl Location	U.S. Fish and Wildlife Service Delta Juvenile Fish Monitoring Program	Location of the Early Warning Survey Jersey Point Trawl Location
Chippis Island Trawl	U.S. Fish and Wildlife Service Delta Juvenile Fish Monitoring Program*	Location of the DJFMP Chippis Island Trawl
Delta Juvenile Fish Monitoring Program Key Locations	U.S. Fish and Wildlife Service Delta Juvenile Fish Monitoring Program*	Key Regions, Landmarks, Survey, and Sample Locations for the U.S. Fish and Wildlife Services Delta Juvenile Fish Monitoring Program
Enhanced Delta Smelt Monitoring 20 MM Weekly Catch Summaries	U.S. Fish and Wildlife Service*	Weekly Catch Summaries of Longfin and Delta Smelt as part of the Enhanced Delta Smelt Monitoring
Enhanced Delta Smelt Monitoring Far West Region	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring Far West Region
Enhanced Delta Smelt Monitoring High Risk High Density Strata	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring High Risk High Density Strata
Enhanced Delta Smelt Monitoring High Risk Low Density Strata	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring High Risk Low Density Strata
Enhanced Delta Smelt Monitoring Low Risk High Density Strata	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring Low Risk High Density Strata
Enhanced Delta Smelt Monitoring Low Risk Low Density Strata	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring Low Risk Low Density Strata
Enhanced Delta Smelt Monitoring Modified Catch per 10 min tow	U.S. Fish and Wildlife Service*	Enhanced Delta Smelt Monitoring Modified Catch per 10 min tow summed by Subregion
Enhanced Delta Smelt Monitoring North Region	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring North Region
Enhanced Delta Smelt Monitoring South Region	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring South Region
Enhanced Delta Smelt Monitoring Stations and Catch	U.S. Fish and Wildlife Service*	This layer displays the results of the Enhanced Delta Smelt Monitoring Program that was initiated on December 15, 2016
Enhanced Delta Smelt Monitoring Stratum	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring Stratums
Enhanced Delta Smelt Monitoring Subregions	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring Subregions
Enhanced Delta Smelt Monitoring Weekly Catch Summary of Key Species	U.S. Fish and Wildlife Service*	This layer displays the results of the Enhanced Delta Smelt Monitoring Program that was initiated on December 15, 2016
Enhanced Delta Smelt Monitoring West Region	U.S. Fish and Wildlife Service*	Delineation of the Enhanced Delta Smelt Monitoring West Region
Enhanced Delta Smelt Monitoring Most Recent Daily Catch	U.S. Fish and Wildlife Service*	This layer displays the results of the Enhanced Delta Smelt Monitoring Program that was initiated on December 15, 2016
MODIS Current Fire Detections Web Service	U.S. Forest Service	MODIS fire detections for the continental United States categorized by occurrence within the last 6, 12 and 24 hours, and all detections previous to the last 24-hour period
MODIS v3 Map Service	U.S. Forest Service	Active fire map web services
National Insect and Disease Risk Map Data Web Service	U.S. Forest Service	Web services for the National Insect and Disease Risk Map Data
National Forests in the Sacramento River Watershed	U.S. Forest Service	Delineation of National Forest Land in the Sacramento River Watershed
U.S. Forest Service Web services	U.S. Forest Service	Web mapping services provided by the U.S. Forest Service
Wild and Scenic Rivers	U.S. Forest Service	Delineation of Wild and Scenic Rivers in the U.S.
Sacramento River Watershed Vegetation	U.S. Forest service - Pacific Southwest Region - Remote Sensing Lab	CALVEG is a hierarchical classification system of actual vegetation designed to assess vegetation-related resources throughout California

California GIS Inventory

Layer Name	Organization	Layer Description
Hass Slough	U.S. Geological Survey	Delineation of Hass Slough
Hastings Tract	U.S. Geological Survey	Delineation of Hastings Tract
Holland Island	U.S. Geological Survey	Delineation of Holland Island
Nevada Lakes and Reservoirs	U.S. Geological Survey	Delineation of lakes and Reservoirs in the State of Nevada
Mercury Mines	U.S. Geological Survey	Data for 1100 mercury mine locations were extracted from the USGS's Minerals Availability and Mineral Industry Location Database (MAS/MILS)
Mercury Resources	U.S. Geological Survey	This is a subset of the mercury commodity features from the California-wide mineral resource layer
MRDS California Geologic Map Data Web Service	U.S. Geological Survey	Mineral Resources Data System Geological map web service
Groundwater Information Network Web Services	U.S. Geological Survey	Web Services for the Groundwater Information Network
Principle Areas of Mine Pollution	U.S. Geological Survey	Delineation of Principle Areas of Mine Pollution
Topographically Occurring Mines	U.S. Geological Survey	Map of Topographically occurring mines
Ulati Creek	U.S. Geological Survey	Delineation of Ulati Creek
USGS California Geology	U.S. Geological Survey	Map of California Geology
USGS Mineral Resource Data System	U.S. Geological Survey	Mineral resource occurrence data covering the world, most thoroughly within the U.S.
Yolo Bypass	U.S. Geological Survey	Delineation of the Yolo Bypass
California Reservoirs	U.S. Geological Survey	This is a California subset of a point coverage of dams in the United States and Puerto Rico, which originally was derived from the national inventory of dams data base (U.S. Army Corps of Engineers, 1982)
Central Valley Hydrologic Model Regions	U.S. Geological Survey California Water Science Center	The CVHM is an extensive, detailed three-dimensional (3D) computer model of the hydrologic system of the Central Valley (Faunt, 2009)
Campgrounds	U.S. Geological Survey Geographic Names Information System	Map layer of California Campgrounds
Mercury in Soils	U.S. Geological Survey Mineral Resource Data System	Mapping of Mercury in soils
Major Rivers	U.S. Geological Survey National Hydrography Dataset	Using the USGS NHD GIS this is a layer showing only large rivers
Barker Slough	U.S. Geological Survey*	Layer delineating the boundary of Barker Slough
Cache Collaborative Geographical Features	U.S. Geological Survey*	Combination of geographic features in the Cache Slough Complex
Cache Collaborative Islands	U.S. Geological Survey*	Delineation of Delta Islands in the Cache Slough Region
Cache Slough	U.S. Geological Survey*	Delineation of the Cache Slough Geographical feature
Calhoun Cut	U.S. Geological Survey*	Delineation of Calhoun Cut
Delta X Channel Location	U.S. Geological Survey*	Delineation of the Delta Cross Channel Gates
Fremont Weir	U.S. Geological Survey*	Delineation of the Fremont Weir
Liberty Cut	U.S. Geological Survey*	Delineation of Liberty Cut
Liberty Island	U.S. Geological Survey*	Delineation of Liberty Island
Lindsey Slough	U.S. Geological Survey*	Delineation of Lindsey Slough
Maine Prairie Slough	U.S. Geological Survey*	Delineation of Maine Prairie Slough
Prospect Island	U.S. Geological Survey*	Delineation of Prospect Slough
Prospect Slough	U.S. Geological Survey*	NHD Flowlines for the Carson, Truckee, and Walker River Watersheds
Sacramento River Deepwater Ship Channel	U.S. Geological Survey*	Mapped location of the Sacramento River Deepwater Ship Channel
Shag Slough	U.S. Geological Survey*	Delineation of Shag Slough

California GIS Inventory

Layer Name	Organization	Layer Description
NRCS Soil Types	Soil Survey Staff, Natural Resources	NRCS soil types and information produced by the National Cooperative Soil Survey
Sudden Oak Death Lab Confirmed Infected	Sudden Oak Death Lab	The SODMAP Project is a partnership of scientists and citizens, working together to create the most complete distribution map of a forest disease ever produced in North America
Sudden Oak Death Lab Confirmed Uninfected	Sudden Oak Death Lab	The SODMAP Project is a partnership of scientists and citizens, working together to create the most complete distribution map of a forest disease ever produced in North America
Central Valley Winter-Run Chinook Historic Range	U.C. Davis	Historic Range of Central Valley Winter-run Chinook Salmon in California
Natural Resources Project Inventory	U.C. Davis	The Natural Resource Projects Inventory (NRPI) synthesizes project related data on natural resources
Arc Study Monitoring Locations	U.C. Davis*	U.C. Davis Extending the Arc monitoring locations
Arc Study Boundary	U.C. Davis*	Study Boundary of the U.C. Davis Extending the Arc monitoring
Suisun Marsh Study Monitoring Locations	U.C. Davis*	Sampling locations for the Suisun Marsh Fish monitoring program
Sierra Nevada Meadows	U.C. Davis*	Survey of meadows in the northern Sierra Nevada
2016 US Forest Service Aerial Survey of Tree Mortality	U.S. Forest Service	Tree mortality from prolonged drought and bark beetles increased more than eight fold in California forests in 2015 and continues to increase
Fire Activity Web Service	U.S. Forest Service	This is a map of US wildfire locations (active/recent) and other sources of information related to wildfires, including social media
Insect and Disease Risk Map Web Services	U.S. Forest Service	The goal of NIDRM is to summarize landscape-level patterns of potential insect and disease activity, consistent with the philosophy that science-based, transparent methods should be used to allocate pest-management resources across geographic regions and individual pest distributions
1896 Sacramento River Channel	U.S. Army Corps of Engineers	The Sacramento River channel in 1896 as mapped from the U.S. Army Corps of Engineers mapping program
State and Federal Water Projects Canals	U.S. Bureau of Reclamation and California Department of Water Resources*	This layer displays the State and Federal Water Project canals
State-Federal Water Project Reservoirs (polygon)	U.S. Bureau of Reclamation and California Department of Water Resources*	This layer displays the locations of reservoirs that serve both the State Water Project and Central Valley Project in California
State and Federal Reservoirs (point)	U.S. Bureau of Reclamation and California Department of Water Resources*	This layer displays the locations of reservoirs that serve both the State Water Project and Central Valley Project in California
Central Valley Project Canals	U.S. Bureau of Reclamation*	This layer represents the locations of canals that are part of the Central Valley Project
Central Valley Project Canals	U.S. Bureau of Reclamation*	This layer represents the canals and aqueducts that are part of the Central Valley Water Project, operated by the US Bureau of Reclamation
Central Valley Project Reservoirs	U.S. Bureau of Reclamation*	This dataset displays the locations of reservoirs in California that are part of the Central Valley Project, operated by the US Bureau of Reclamation
Central Valley Project Reservoirs (point)	U.S. Bureau of Reclamation*	This layer represents the locations of reservoirs that are part of the State Water Project and the reservoir points are sized relative to their storage capacity
CA, OR, NV Hydroelectric Power Plants	U.S. Energy Information Administration*	This is a point dataset representing operable hydroelectric generating plants in the United States by energy source
California Hydroelectric Power Plants	U.S. Energy Information Administration*	This is a point dataset representing operable hydroelectric generating plants in the United States by energy source
Superfund Mines	U.S. Environmental Protection Agency	Location of Superfund Mines in the Sacramento River Watershed
Final Critical Habitat for Deltistes luxatus (Lost Riversucker)	U.S. Fish & Wildlife Service, Klamath Falls Fish and Wildlife Office	These data identify, in general, the areas of final critical habitat for Deltistes luxatus (Lost Riversucker)
Final Critical Habitat for Modoc sucker (Catostomus microps) OR Catostomus microps (Modoc sucker)	U.S. Fish & Wildlife Service, Klamath Falls Fish and Wildlife Office	These data identify, in general, the areas of final critical habitat for Modoc sucker (Catostomus microps) OR Catostomus microps (Modoc sucker)
Final Critical Habitat for delta green ground beetle (Elaphrus viridis) OR Elaphrus viridis (delta green ground beetle)	U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office	These data identify, in general, the areas of Final critical habitat for Elaphrus viridis (delta green ground beetle)
Final Critical Habitat for vernal pool fairy shrimp (Branchinecta lynchei) OR Branchinecta lynchei (vernal pool fairy shrimp)	U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office	These data identify, in general, the areas of final critical habitat for vernal pool fairy shrimp (Branchinecta lynchei) OR Branchinecta lynchei (vernal pool fairy shrimp)
Final Critical Habitat for vernal pool tadpole shrimp (Lepidurus packardii) OR Lepidurus packardii (vernal pool tadpole shrimp)	U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office	These data identify, in general, the areas of Final critical habitat for Lepidurus packardii (vernal pool tadpole shrimp)
Final Critical Habitat for California red-legged frog (Rana draytonii) OR Rana draytonii (California red-legged frog)	U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office	These data identify, in general, the areas of final critical habitat for Rana draytonii (California red-legged frog)

California GIS Inventory

Layer Name	Organization	Layer Description
ESRI Water Boards Water Quality	ESRI Water Boards Water Quality	Water Boards Water Quality Web services
Federal Emergency Management Agency Hazard Mitigation Planning Portal Web Services	Federal Emergency Management Agency	The Mitigation Planning Portal (MPP) is an online portal for tracking and reporting the status of mitigation plans across all 10 Federal Emergency Management Agency (FEMA) Regions
Federal Emergency Management Agency National Flood Hazard Layers	Federal Emergency Management Agency	Federal Emergency Management Agency (FEMA) provides access to the National Flood Hazard Layer through web mapping services. The National Flood Hazard Layer is a computer database that contains FEMA's flood hazard map data
United States Drought Monitor	From the National Drought Mitigation Center (NDMC), the U.S. Department of Agriculture (USDA) and the National Oceanic and Atmospheric Administration.	The U.S. Drought Monitor is a weekly map of drought conditions that is produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln
Glenn-Colusa Irrigation District Rotary Screw Trap	Glenn-Colusa Irrigation District	Location of the Glenn-Colusa Irrigation District Rotary Screw Trap
California Protected Areas Database	GreenInfo Network	The California Protected Areas Database (CPAD) contains data on lands owned in fee by governments, non-profits and some private entities that are protected for open space purposes
Native American Reservation Lands	GreenInfo Network	Delineation of Native American reservation land in California
MODIS NASA 2 Web Service	National Aeronautics and Space Administration	Active fire web services
California Central Coast Steelhead Distribution	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts Steelhead presence as well as habitat type and quality in the Central California Coast Evolutionary Significant Unit (ESU)
Chinook Critical Habitat Central Valley Spring-run Evolutionary Significant Unit (ESU)	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts areas designated for Chinook Critical Habitat as well as habitat type and quality in the Central Valley Spring-run Evolutionary Significant Unit (ESU)
Chinook Distribution in the Central Valley Spring-run Evolutionary Significant Unit (ESU).	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts Chinook presence as well as habitat type and quality in the Central Valley Spring-run Evolutionary Significant Unit (ESU)
Chinook Presence, Habitat Type and Quality in the California Coastal Evolutionary Significant Unit (ESU)	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts Chinook presence as well as habitat type and quality in the California Coastal Evolutionary Significant Unit (ESU)
Chinook Critical Habitat Central Valley Spring-run Evolutionary Significant Unit (ESU)	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts areas designated for Chinook Critical Habitat as well as habitat type and quality in the Central Valley Spring-run Evolutionary Significant Unit (ESU)
Steelhead Critical Habitat in the South-central California Coast Evolutionary Significant Unit (ESU)	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts areas designated for Steelhead Critical Habitat as well as habitat type and quality in the South-central California Coast Evolutionary Significant Unit (ESU)
Steelhead Distribution in the California Central Valley Evolutionary Significant Unit (ESU)	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts steelhead presence as well as habitat type and quality in the California Central Valley Evolutionary Significant Unit (ESU)
Central California Coast Steelhead Critical Habitat in the Evolutionary Significant Unit (ESU)	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts areas designated for Steelhead Critical Habitat as well as habitat type and quality in the Central California Coast Evolutionary Significant Unit (ESU)
CA Coast Chinook Habitat	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts areas designated for Chinook Critical Habitat as well as habitat type and quality in the California Coastal Evolutionary Significant Unit (ESU)
California Central Valley Steelhead Habitat	National Marine Fisheries Service (NMFS) National Oceanic and Atmospheric Administration (NOAA)	Depicts areas designated for Steelhead Critical Habitat as well as habitat type and quality in the California Central Valley Evolutionary Significant Unit (ESU)
Nexrad	National Oceanic and Atmospheric Administration (NOAA)	The Next Generation Weather Radar web services
California Nevada River Forecast Center, National Oceanic and Atmospheric Administration	National Oceanic and Atmospheric Administration (NOAA)	Hydrologic weather data and river forecasts for California and Nevada
Hourly Precipitation Map Service	National Oceanic and Atmospheric Administration (NOAA)	Hourly Precipitation Data (HPD) is digital data set DSI-3240, archived at the National Climatic Data Center (NCDC)
NWS 6 to 10 Day Precipitation and Temperature Outlooks	National Oceanic and Atmospheric Administration (NOAA)	A CPC forecaster creates the 6-10 day temperature and precipitation outlooks. Shading starts at 33%, with contours at 33%, 40%, 50%, 60%, 70%, 80% and 90%
SRW National Parks	National Parks Service	National Parks wholly or partially within the Sacramento River Watershed
NWS Watches and Warnings Web Service	National Weather Service	National Weather Service Watches and Warnings web services
OEHHA Fish Advisories	Office of Environmental Health Hazard Assessment	Map of Fish Advisories as outlined by Office of Environmental Health Hazard Assessment (OEHHA)
CalFish Abundance Lines	Pacific States Marine Fisheries Commission	The CalFish Abundance Database contains a comprehensive collection of anadromous fisheries abundance information
CalFish Abundance Points	Pacific States Marine Fisheries Commission	The CalFish Abundance Database contains a comprehensive collection of anadromous fisheries abundance information
CalFish Chinook Abundance - Lines	Pacific States Marine Fisheries Commission	The CalFish Abundance Database contains a comprehensive collection of anadromous fisheries abundance information, this layer is specific to Chinook salmon

California GIS Inventory

Layer Name	Organization	Layer Description
CalFish Chinook Abundance - Points	Pacific States Marine Fisheries Commission	The CalFish Abundance Database contains a comprehensive collection of anadromous fisheries abundance information, this layer is specific to Chinook salmon
CalFish Steelhead Abundance - Lines	Pacific States Marine Fisheries Commission	The CalFish Abundance Database contains a comprehensive collection of anadromous fisheries abundance information, this layer is specific to Steelhead
CalFish Steelhead Abundance - Points	Pacific States Marine Fisheries Commission	The CalFish Abundance Database contains a comprehensive collection of anadromous fisheries abundance information, this layer is specific to Steelhead
Fish Passage Barriers Dataset	Pacific States Marine Fisheries Commission and California Department of Fish and Wildlife	The Passage Assessment Database (PAD) compiles currently available fish passage information from many different sources, and allows past and future barrier assessments to be standardized and stored in one place
1908 Sacramento River Channel	Sacramento River Watershed Program*	Sacramento River channel location for the year 1908 based on aerial photography
1923 Sacramento River Channel	Sacramento River Watershed Program*	Historic Sacramento River channel from the year 1923
1935 Sacramento River Channel	Sacramento River Watershed Program*	Historic Sacramento River channel from the year 1935
1937 Sacramento River Channel	Sacramento River Watershed Program*	Historic Sacramento River channel from the year 1937
1946 Historic Sacramento River Channel	Sacramento River Watershed Program*	1946 Historic Sacramento River Channel
1955 Historic Sacramento River Channel	Sacramento River Watershed Program*	1955 Historic Sacramento River Channel
1956 Historic Sacramento River Channel	Sacramento River Watershed Program*	1956 Historic Sacramento River Channel
1960 Historic Sacramento River Channel	Sacramento River Watershed Program*	1960 Historic Sacramento River Channel
1964 Historic Sacramento River Channels	Sacramento River Watershed Program*	1964 Historic Sacramento River Channel
1969 Historic Sacramento River Channel	Sacramento River Watershed Program*	1969 Historic Sacramento River Channel
1976 Historic Sacramento River Channel	Sacramento River Watershed Program*	1976 Historic Sacramento River Channel
1981 Historic Sacramento River Channel	Sacramento River Watershed Program*	1981 Historic Sacramento River Channel
1991 Historic Sacramento River Channel	Sacramento River Watershed Program*	1991 Historic Sacramento River Channel
1997 Historic Sacramento River Channel	Sacramento River Watershed Program*	1997 Historic Sacramento River Channel
2007 Historic Sacramento River Channel	Sacramento River Watershed Program*	2007 Historic Sacramento River Channel
Partners Map	Sacramento River Watershed Program*	Sacramento River Watershed Partners Map
Sacramento River Watershed Subregions (point)	Sacramento River Watershed Program*	Sacramento River Watershed Subregions (point)
Sacramento River Watershed Boundary with 10 mi Buffer	Sacramento River Watershed Program*	Boundary of the Sacramento River Watershed with a 10 mi Buffer
EcoAtlas	San Francisco Estuary Institute	California EcoAtlas provides access to information for effective wetland management
San Francisco Estuary Institute WFS	San Francisco Estuary Institute	WFS Map Services Provided by San Francisco Estuary Institute
Butte Forest Doe Mill Ridge Forks of Butte Units	Sierra Nevada Conservancy and Sacramento River Watershed Program*	The Butte Forest Thin Doe Mill Ridge Watershed Project will use forest thinning and follow-up low intensity prescribed fire to treat 200 acres on public land administered by the Bureau of Land Management (BLM)
Butte Forest Doe Mill Ridge Roadside Thin Areas	Sierra Nevada Conservancy and Sacramento River Watershed Program*	The Butte Forest Thin Doe Mill Ridge Watershed Project will use forest thinning and follow-up low intensity prescribed fire to treat 200 acres on public land administered by the Bureau of Land Management (BLM)
Prop 84 Grant Projects	Sierra Nevada Conservancy*	Mapping of Sierra Nevada Conservancy's Prop 84 Grant Projects
Sierra Nevada Conservancy Prop 84 Grant Awards	Sierra Nevada Conservancy*	Map of Sierra Nevada Conservancy Prop 84 Grant Programs with circles sized by Award Amount
Sierra Nevada Conservancy Propositions 84 and 1 Grants	Sierra Nevada Conservancy*	This map shows the location of Sierra Nevada Conservancy (SNC) grants awarded through June 2016 by the SNC Board, which represent the total \$54 million in grant awards by the SNC under Proposition 84, and the funding awarded through Proposition 1 through June 2016
Sierra Nevada Conservancy Boundary	Sierra Nevada Conservancy*	Boundary of the Sierra Nevada Conservancy
Sierra Nevada Conservancy Subregions	Sierra Nevada Conservancy*	Delineation of Subregions within the Sierra Nevada Conservancy Region
Sierra Nevada Conservancy Prop 1 Grant Awards	Sierra Nevada Conservancy*	Prop 1 funded project locations through the Sierra Nevada Conservancy grant program
Sierra Nevada Conservancy Prop 1 and Prop 84 Grant Awards	Sierra Nevada Conservancy*	Prop 1 and Prop 84 funded project locations through the Sierra Nevada Conservancy grant program