PRODUCT FEATURES	DESCRIPTION	Comments
PROJECTS		
Add and Manage Project and Project Pages	Add projects, add project metadata	
Invite team members	Invite team members and share all work with members	
Create project document catalogs	Add any documents to project catalog	
Create project maps	Create custom maps and save to project map room	
Project Images and Video	Project Image and Video Carousel	
Geo-reference projects	Drag and drop project icon on map or double click on map for lat/long coordinates	
Create custom project fields	Add new fields for project metadata and database	
Create project posts	Users can comment as members	
Follow Projects	Follow Projects for updates	
Designate projects public/private	Allow the public or just team member to see project information	
Embed Project Lists/Pages (RSS)	Ability to publish URL to embed a list of projects or project page anywhere	
LIVE CONDITIONS		
Admin for consuming Real Time Data	Interface to allow adminstrators to link directly to live condition data from CDEC, NWIS	
Station Query	Ability to search remote station information based on station ID, parameter type, watershed, region etc.	
Comprehensive Rollovers	Improved access to instant real-time information: CDEC graphs, Discrete Data: EMP, CEDEN	
Historic Data	Access to historic data	
Load Optimization	Optimized loading of all station data	
OPERATIONS DATA BROKERING (Custom)		
Delta News	Aggregating all Delta news across various websites	
Snow Water Content, Precipitation, Operation Matrix	Graphical User Interface for Tabular Data aggregated by DWR	
Daily Turbidity Dashboard	3-Day Data Visualization, Station Graphs, Daily Badges	
Salinity Dashboard	Important salinity information displayed in dashboard format	
Salvage	Daily Salvage Data	
Weather	All California weather forecasts	
Water Quality Reports, Model Runs and Forecasts	Department of Water Resources, Municipal Water Quality Investigations.	
DELTA COMMUNITY		
	Bait Shops	
	Bike Path	
	Boat Ramp	
	Bridges	
	Businesses	
	Camping/RV	
	Conservation Land	
	Fishing	
	Marinas	
	Point of Interest	
	Recreational Area/Parks	
	Resort	
	Restaurants	
	Trailhead	
	Waterskiing	
	Windsurfing	
Project Pages, Business Directory	Wineries	
DELTA MAPPING AND GIS TOOLS	(Build, Publish and Share Interative Maps)	
Access Base Maps	Ability to Access Base Maps: Google Maps, Virtual Earth Base Maps, Open Street Maps, Additional Map Options	
Basic Map Tools	Full Screen, Default View, Share View, Save View	
Advanced Map Tools	Draw, Measure, Create PDF, Add GeoRSS, Add WMS	
Basic Query Tool	Top, Layer, All Layers meta data	
Advanced Query Tool	Control Transparencies, layer colors, title on/off and more	
Uber Layer Manager	Layers, access to ArcGIS Online, custom layers, legend,	
Layer Ordering	User Layer Ordering	
120 GIS Data Layers	General Layer set: CaSIL, DWR Atlas	
Organized WMS Service	Tie into any WMS Service using an admin	
Basic Search	Keyword, Point, Address, Lat/Long	
Advanced search	Using advanced search techniques: Boolean etc	
Exploda Map	Full presentation size map view	
Associate Map Views to Topics	Assign maps views to a topic via the CMS	
Add all public map layers to layer manager	Add more layers	
Transparancy Slider	Control transparency of Imagery, map layers	
My Map Layers Tab	User can add custom map layer tab to layer manager	
Add and save points	Add points using map editor and allow for saving with other map data	

REAL TIME MODELING/SIMULATIONS

Automate animated display of tabular data (Administrator)	Ability to automate display tabular data on a map using a timeline and player
Interactive Timeline	JavaScript timeline with metatags
Topics of Interest	Create topic for display, manage via CMS
User Generated California WIKI	Add a topic, edit, share
Extensive Data Import Utilities	Net CDF, CSV, Hydrolic Engineering Center's Data Storage System
Chart and Grids	For viewing EMP, IEP, CEDEN, Water Quality Data

GENERAL APPLICATION FEATURES

User interface	Rich, interactive, web-based interface for end user function (HTTP or HTTPS)
Rich GUI for RSS feeds	Comprehensive feed reader drives site content
Real Time usage information	Site content updates in real time as changes are made or content is updated
Online end user help	Help accessible from the end-user interface

COMMUNITY

Community Access	Ability to view snapshots and invite all website members. Profiles private until member accepts
Controlled communities	Ability to create project teams
Administer Teams	Ability for project team leader to administer team pages and team members
Organization Profiles	Ability to create a community page for your organization. Contain organizations documents, maps, profile, projects and more.
Add photo to profile	Add photo or logo to profile
Save Map Layers specific to a group	Admin option to a a map to a project page
Profile CMS	Control Profile via CMS
Share with Internal Users & Groups	Ability to share projects, documents and maps
Share with Public	Ability to publish and share projects, maps and documents with the public

MESSAGING

Inbox	Controlled container for all messaging from community members
Push Messaging Admin	Ability to send custom push messages to mobile devices

DOCUMENT MANAGEMENT/LIBRARY

Create and Manage Document Libraries	Varying file types: manage, share, associate
Rich web document authoring	Ability to create rich web documents (project pages, wiki pages etc) with WYSIWYG or HTML editing or data collection forms.
Add documents to catalog	Ability to upload, add metadata and manage all document mime types
Share Documents	Ability to share all documents
Geo reference document	Ability to georeference a document using map double click in CMS
Assign documents	Assign documents to pages, projects, wikis
Geocode on ingest	Geo-reference and encode files on ingest

ASSET/CONTENT MANAGEMENT

Project Management Tools	Add project data, location, real time data stations, discrete data, project teams
Document Library	Build data libraries
Wiki	Knowledge libraries
Manage Assets	Manage all website assets via CMS easy to user interface
Manage Homepage	Manage Topics and all homepage widgets and content
Embed PDF	Embed PDF on all asset pages
Custom Metadata	Create custom metadata fields
Tags	Incorpoarte Tagging and reference into libraries
Video Player Library	Video library interface, indexed and accessible from player window.
Video Manager	Extended content management for managing video. Includes management of all video formats, remote URL feeds, auto grab thumbnails
Photostream	Import photostreams from social media websites

SEARCH

Server side indexing	Server side indexing of content, enabling fast and efficient search from the web interface
Filter	Ability to filter content based on database categories
Text-based search queries	Ability to use text commands to execute searches

SYSTEM HEALTH, STORAGE AND SECURITY

Native anti-virus	Clam anti-virus for virus protection
SMTP authentification	Ability to enforce client authentification to SMTP server
HTTPS implementation	Secure transfer

MOBILE APPLICATIONS

Comprehensive Mobile Version of Website	Access important project data, real time data and operations data via mobile app
My Live Conditions Mobile App	Ability to save real time station data and graphs to My Favorites
Template for mobile applications for all RSS enabled content	Mobile app ability to take a RSS feeds from BDL website

HELP & DOCUMENTATION

Product Docs	In development

DELTA DATASETS

Environmental Monitoring program (EMP)

The EMP - The Environmental Monitoring Program (EMP) for the Sacramento-San Joaquin Delta, Suisun Bay, and San Pablo Bay is conducted under the auspices of the Interagency Ecological Program (IEP). The EMP was initiated in 1971 in compliance with California State Water Resources Control Board (SWRCB) Water Right Decision D-1379 and continued from 1978 through 1999 under D-1485. Currently it is mandated by Water Right Decision D-1641. The program is carried out jointly by the two water right permittees operating the California water projects, the United States Bureau of Reclamation (USBR) and the California Department of Water Resources (DWR). Assistance is provided by the California Department of Fish and Game (CDFG) and the United States Geological Survey (USGS). The primary purpose of the IEP EMP is to provide necessary information for compliance with flow-related water quality standards specified in the water right permits. In addition, the EMP also provides information on a wide range of chemical, physical and biological baseline variables. EMP's discrete water quality stations are sampled monthly using a research vessel and a laboratory van. EMP also operates eight multi-parameter continuous "real-time" water quality stations. In addition, the EMP collects and analyzes benthos, phytoplankton, and zooplankton samples. Monitoring listed as "continuous recorder sites" in D-1641 is not part of the EMP, these sites are operated by the USBR, the USGS or DWR.

Added via SFWA and EPA contract

Discrete Water Quality Data
- Lab Data 1996-Oct 2011 — Added via SFWA and EPA contract
- Lab Data 1985-1995 — Added via SFWA and EPA contract
- Lab Data 1975 to 1984 — Added via SFWA and EPA contract
- Field Data 2007-Oct 2011 — Added via SFWA and EPA contract
- Field Data 1988-2006 — Added via SFWA and EPA contract
- Field Data 1975-1987 — Added via SFWA and EPA contract

The phytoplankton monitoring program is one element of DWR's and USBR's Bay-Delta Monitoring and Analysis Section (EMP) conducted under the Interagency Ecological Program (IEP) umbrella. The EMP also includes monitoring of water quality, zooplankton, and benthic organisms. The overall objective of the phytoplankton monitoring program is to determine the impacts of water project operations on the estuary. These impacts are interpreted by changes in phytoplankton diversity, abundance, and distribution associated with physical and other biological factors in the estuary.

Added via SFWA and EPA contract
Added via SFWA and EPA contract

Phytoplankton and Chlorophyll a

In 1971, the SWRCB established Water Right Decision 1379 (D-1379). This Decision contained new water quality requirements for the San Francisco Bay-Delta Estuary. D-1379 was also the first water right decision to provide terms and conditions for a comprehensive monitoring program to routinely determine water quality conditions and changes in environmental conditions within the estuary. The monitoring program described in D-1379 was developed by the Stanford Research Institute through a contract with the SWRCB. Implementation of the monitoring program began in 1972, as SWRCB, DWR, and USBR met to define their individual responsibilities for various elements of the monitoring program. In 1978, amendments to water quality standards were implemented and resulted in Water Right Decision 1485 (D-1485). More recently these standards were again amended under the 1995 Water Quality Control Plan and Water Right Decision 1641 (D-1641) established in 1999. The SWP and CVP are currently operated to comply with the monitoring and reporting requirements described in D-1641. D-1641 requires DWR and USBR to conduct a comprehensive environmental monitoring program to determine compliance with the water quality standards and also to submit an annual report to SWRCB discussing data collected.

Added via SFWA and EPA contract
Added via SFWA and EPA contract

The phytoplankton monitoring program is one element of DWR's and USBR's Bay-Delta Monitoring and Analysis Section (EMP) conducted under the Interagency Ecological Program (IEP) umbrella. The EMP also includes monitoring of water quality, zooplankton, and benthic organisms. The overall objective of the phytoplankton monitoring program is to determine the impacts of water project operations on the estuary. These impacts are interpreted by changes in phytoplankton diversity, abundance, and distribution associated with physical and other biological factors in the estuary.

- All Data from 2008 to 2010 — Added via SFWA and EPA contract
- All Data fom 1975 to 2007 — Added via SFWA and EPA contract
- 2007 Common Name Data — Added via SFWA and EPA contract
- Flat File for 1970-2000 — Added via SFWA and EPA contract
— Added via SFWA and EPA contract

Zooplankton

The zooplankton monitoring program is one element of the Bay-Delta Monitoring and Analysis Section (EMP) conducted under the Interagency Ecological Program (IEP) umbrella. The EMP also includes monitoring of water quality, benthos, and phytoplankton. Mysid shrimp and zooplankton are important food organisms for larval, juvenile, and small fishes, including delta smelt, juvenile salmon, striped bass, and small splittail. Initiated to investigate the population trends of pelagic organisms consumed by young striped bass, the original Neomysis-Zooplankton Project sought to determine the annual and seasonal population levels of Neomysis mercedis, other mysids, and various zooplankton taxa in order to assess the size of the food resource for fishes. The study also seeks to detect the presence of exotic species recently introduced to the estuary, to monitor the distribution and abundance of these exotics, and to determine their impacts on native species.

Added via DWR contract

Discrete Benthic Data

The benthic monitoring program is one element of DWR's and USBR's Environmental Monitoring Program (EMP) conducted under the Interagency Ecological Program (IEP) umbrella. The EMP also includes monitoring of water quality, zooplankton and phytoplankton. The overall objective of the benthic monitoring program is to determine the impacts of water project operations on the estuary. These impacts are interpreted by changes in benthic fauna presence, abundance and distribution associated physical factors in the estuary. Data collected from the benthic monitoring program is also used to detect newly introduced species in the estuary. To date, 436 species in ten phyla (Cnidaria, Platyhelminthes, Nemertea, Nematoda, Annelida, Arthropoda, Mollusca, Chordata, Phoronida and Echinodermata) have been collected from the study area. Sediment composition data are also collected as part of the benthic monitoring program to document general trends in sediment composition for all sites where benthic samples are collected.

Added via DWR contract

Continuous Water Quality (CDEC QA/QC)

Continuous water quality monitoring is one element of the Environmental Monitoring Program (EMP) conducted by DWR and USBR with assistance from the USGS under the Interagency Ecological Program (IEP) umbrella. The overall objective of the water quality monitoring program is to provide information for water resource management in compliance with flow-related water quality standards set forth in the series of Water Right Decisions described above. These decisions permit the USBR and DWR to appropriate water for operation of the CVP and the SWP. In return, the two agencies are required to monitor the effects of diversions and flow manipulations resulting from project operations and ensure the compliance with existing water quality standards

Ca DFG ERP Project Database
POD 2005 Docs
Elevation Data
California Elevation Data (From National Dataset)
Delta Levee Conditions Maps
 Impervious Surface
 Land Cover
 Land Cover
 NAIP
 NED 1
 NED 1/3
 NED 1/9
 Passage Assessment Database
http://www.dfg.ca.gov/biogeodata/vegcamp/
BLM California - GeoSpatial Data Downloads
California Environmental Information Catalog (CEIC)
California Lakes
California Lakes (Points)
California Natural Diversity Database (CNDDB)
California Spatial Information Library (CaSIL)
California Wild and Scenic Rivers (State and Federal Designations)
California Wildlife Habitat Relationships System (CWHR)
CalTrans GIS Data Library
DFG GIS Clearinghouse
DFG Owned and Operated Lands
DFG Program-Specific Data
DFG Regions (High Resolution)
DFG Regions (Medium Resolution)
FSGeodata Clearinghouse
Gap Analysis of Mainland California (GAP)
Geospatial One Stop (GOS)
http://www.mpa.gov/dataanalysis/mpainventory/
Marine Region GIS Data
National Biological Information Infrastructure (NBII)
Orthoimagery
Other Biogeographic Data
Public Datasets in DFG's BIOS application
Review, update and report feasibility for integrating the following Datasets:
Sea Level Rise
Scanned USGS Topographic Maps - "DRGs"
Update Delta Atlas
Update Midwater Trawl, Townet Surveys
USDA NRCS Geospatial Data Gateway
USFWS Carlsbad Office GIS Division (Species Occurrence and Critical Habitat
USFWS Critical Habitat Portal
NWIS
Wildlife Conservation Board (WCB) Approved Projects
Landsat historical, MODIS timeseries
  TIGER 2010 Primary Roads by State, 1 map 3.862 MB
  TIGER 2010 Primary and Secondary Roads, 1 map 0.131 MB
  TIGER 2010 Streets, 1 map 5.755 MB
  NRCS Counties by State, 1 map 2.326 MB
  NRCS States by State, 1 map 0.512 MB
  TIGER/ESRI 112th Congress Districts by State, 1 map 5.741 MB
  TIGER 2010 Urban Areas by State, 1 map 7.439 MB
  Federal, State, Tribal, etc. Protected Areas Land Ownership, 1 map 1.170 MB
  TIGER 2010 Census Blocks, 1 map 8.711 MB
  TIGER 2010 Census Block Groups, 1 map 0.923 MB
  TIGER 2010 Census Tracts, 1 map 0.619 MB
  National Hydrography Dataset 1:24,000, 8 maps 162.050 MB
  12 Digit Watershed Boundary Dataset 1:24,000 (AK 1:63,360), 8 maps 8.513 MB
  8 Digit Watershed Boundary Dataset (HUC12 subset), 8 maps 1.039 MB
  Digital Raster Graphic County Mosaic by NRCS, 1 map 118.852 MB
  Quadrangle Index 1:12,000, 1 map 0.057 MB