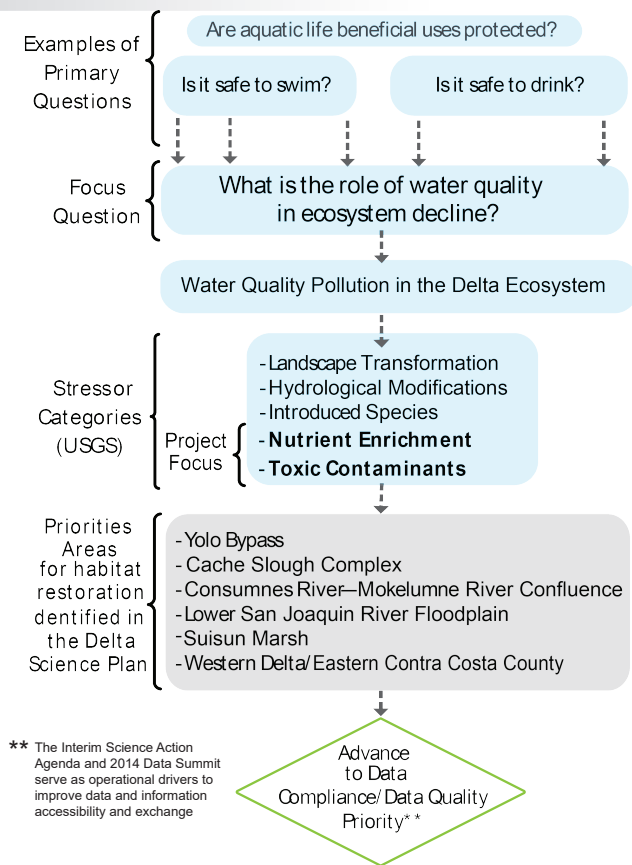


DEEDUCE

Delta Environmental Data for the Understanding of a California Estuary

By contributing the collected data to the California Environmental Data Exchange Network (CEDEN) and in turn EPA's Water Quality Exchange (WQX), the Bay-Delta Regional Data Center (RDC) ensures broad dissemination of data to support the state's mandated reforms to the Delta's water resources and ecological management. An effort of the Delta Watershed Initiative Network (Delta WIN), this estuary-wide data repository provides accessible and synthesized data for scientists and decision-makers for comprehensive policy solutions and effective management. This project leverages previous investments made to standardize and manage water quality data and adds new important datasets to better support resource-management and regulatory needs in the Bay-Delta.

MANAGEMENT QUESTIONS



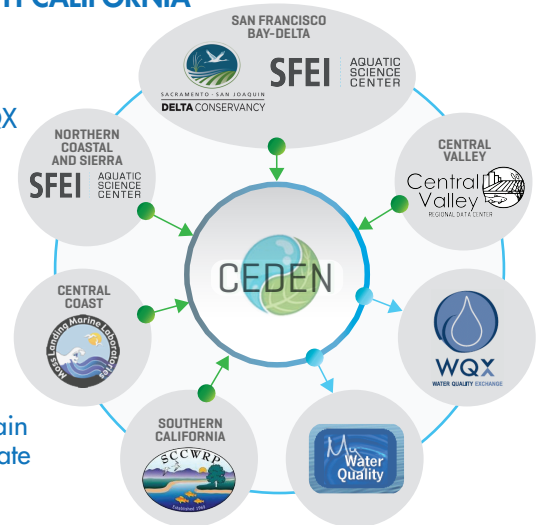
EXPAND THE SAN FRANCISCO BAY-DELTA REGIONAL DATA CENTER

GOALS

- ➔ Work with agency, program, and scientist data providers collecting data in the Delta
- ➔ Harmonize data for improved interoperability
- ➔ Increase access to, and exchange of, high-quality environmental data

CONSISTENCY WITH CALIFORNIA DATA STANDARDS

- ➔ Upload data to CEDEN and WQX
- ➔ Use consistent business rules based on the state's Surface Water Ambient Monitoring Program (SWAMP)
- ➔ Ensure data remain comparable to state standards



PROJECT PHASES

- ➔ Identified priority datasets that address water quality pollution in the Delta ecosystem and focus on nutrient enrichment and toxic contaminants
- ➔ Create new web services for geospatial data
- ➔ Developed decision frameworks for how data will be prioritized based on how data address management questions and meet data quality/data assurance measures
- ➔ Established a support framework—training, helpdesk, outreach materials—for data providers
- ➔ Ensure data integrity for all collected data
- ➔ Upload collected data to the California Environmental Data Exchange Network (CEDEN), a contributor to the US Environmental Protection Agency's (EPA) Water Quality Exchange (WQX)

DEDUCE

DATA COMPLIANCE AND DATA QUALITY

- ➔ Check priority data for completeness based on CEDEN's minimum data elements
- ➔ Confirm a QAPP or other forms of data quality objectives were applied
- ➔ Ensure data remain comparable to state and federal standards for water quality data
- ➔ Check data integrity to ensure CEDEN's standardized business rules were followed

DEDUCE data are uploaded to the new RDC and exchanged with CEDEN and WQX on a regular basis. As a result of these efforts, the data can be viewed on several public online data access and visualization tools, including the ones highlighted below.



Generate charts and filter by area of interest – cd3.sfei.org



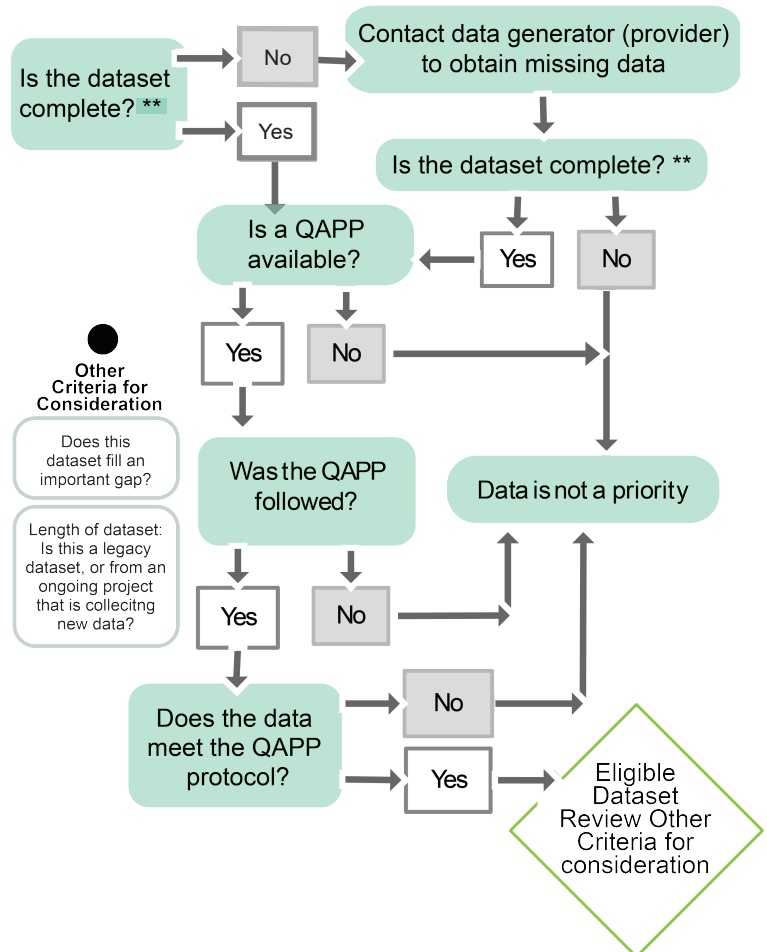
Access water quality data across the state – ceden.org



Aggregate multiple data sources at the landscape scale – ecoatlas.org



Explore data summarized by theme-based questions - mywaterquality.ca.gov



Online tools for accessing and visualizing the data provide several benefits to users including:

- ➔ an effective way to communicate highly credible and relevant science to guide policy solutions
- ➔ an opportunity to share data from the Delta and facilitate the discovery and communication of new information
- ➔ aggregation of Delta water quality data that meets stringent state and EPA standards
- ➔ information to support management actions to balance the coequal goals of a more reliable water supply and protection of the Delta ecosystem

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