An update on CEDEN

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How I break down CEDEN

CEDEN Mission

- Data Providers/Input
- Tools and Technology
- User Community and Outputs
- Partners and Collaborators
- Program Sustainability

- From a management perspective …
  - CEDEN has five major components
    - We have not paid equal attention to all of these
Where CEDEN has focused

Thus far CEDEN has focused on developing its’ infrastructure.

This is also where I believe we’re in the best overall shape.
My perspective:

*Everything we do in CEDEN must be informed by, and serve the needs of, our users.*
Understand what data are needed

- A large amount of the SWAMP data is in the system
- A number of additional data sets from other sources are coming online over the next several months
- However…
  - CEDEN contains a limited subset of currently available data
  - Lack full range of relevant data types (emerging contaminants, invasives, other biota, beach, intertidal, photos, etc.)
Data Input and Data Infrastructure

Everything we do in CEDEN must be informed by, and serve the needs of, our users.

- Understanding user needs will provide a clear prioritization of the tools CEDEN develops
Internally CEDEN has a working system that handles SWAMP and SWAMP comparable data well.

However data has not become available quickly.

CEDEN is missing data structures for other data types (must evolve to handle non-SWAMP data).

The system presents opportunities for **efficiency**.
Missing Data Structures

- Database does NOT currently contain all data types needed by users
  - The Council Data Management Workgroup will be an important partner in accomplishing this
  - Examples of additional data types:
    - Emerging contaminants
    - New variants of existing categories
    - Other biotic communities (focus has been freshwater)
    - New methods (gear, QA protocols)
    - New categories (marine debris, invasive species, etc.)
Assessing Opportunities

- **Coordination**
  - Use our time and resources effectively
  - CEDEN is working to determine the best way to structure its work, decisions and external interactions

- **Automation**
  - Data input tools/checkers
  - Data management tools
    - Internal – movement of data into/out of RDC’s to CEDEN
    - External – interaction with other systems (Council Portals, WQX, CIWQS, etc.)
  - Data output and applications
User Interactions Assessment

- User needs require clear definition
  - CEDEN serves SWAMP reasonably well
  - As CEDEN evolves, needs to serve a wider range of clients (public, agencies, scientists and other systems)
  - ‘Powered by CEDEN’

- Where CEDEN needs to develop:
  - QA screening tools
  - Data Interpretation Tools
  - Intuitive Interface design
Partners and Collaborators

Everything we do in CEDEN must be informed by, and serve the needs of, our users.

- If CEDEN serves our primary users it will simultaneously serve and encourage additional partnerships
Assessment of Partnerships

- Other entities have similar missions (data collators)
- We are working to determine who our potential partners and collaborators are
  - Identify and prioritize where CEDEN will collaborate
- Groups we don’t collaborate with have potential to become a competitor
  - Seeking same data as CEDEN
- Desire to be the place for data access

- EPA Exchange Network / WQX
- 34 North / Bay Delta Live
- CERES
- OST Monitoring Enterprise
- Marine Monitoring Enterprise
- SCCOOS, CeNCOOS
- DWR Water Data Library
- USGS NWIS
- Others…
Everything we do in CEDEN must be informed by, and serve the needs of, our users.

- CEDEN must be viewed as essential to multiple client communities for it to be sustainable.
Assessment of Program Sustainability

- We must create a user community around CEDEN
  - Provide **value** to justify CEDEN’s continuance
    - Value to data providers
    - Value to collaborators
    - Value to end users of the system and data
  - Leverage resources with others
    - Facilitate and encourage others to build cool tools and visualizations that are “Powered by CEDEN”
      - Council portals are one example of this
What’s next for CEDEN?

- Focus on integrating more data types into CEDEN
- Continued communications (internal and external)
- Identify focus/user groups to obtain input on prioritization and β-testing
Many things about CEDEN are going well
Success will necessitate addressing **all** components of the system to serve the users
A Vision for CEDEN

CEDEN will be the preferred choice for individuals and organizations seeking water quality information for the State of California