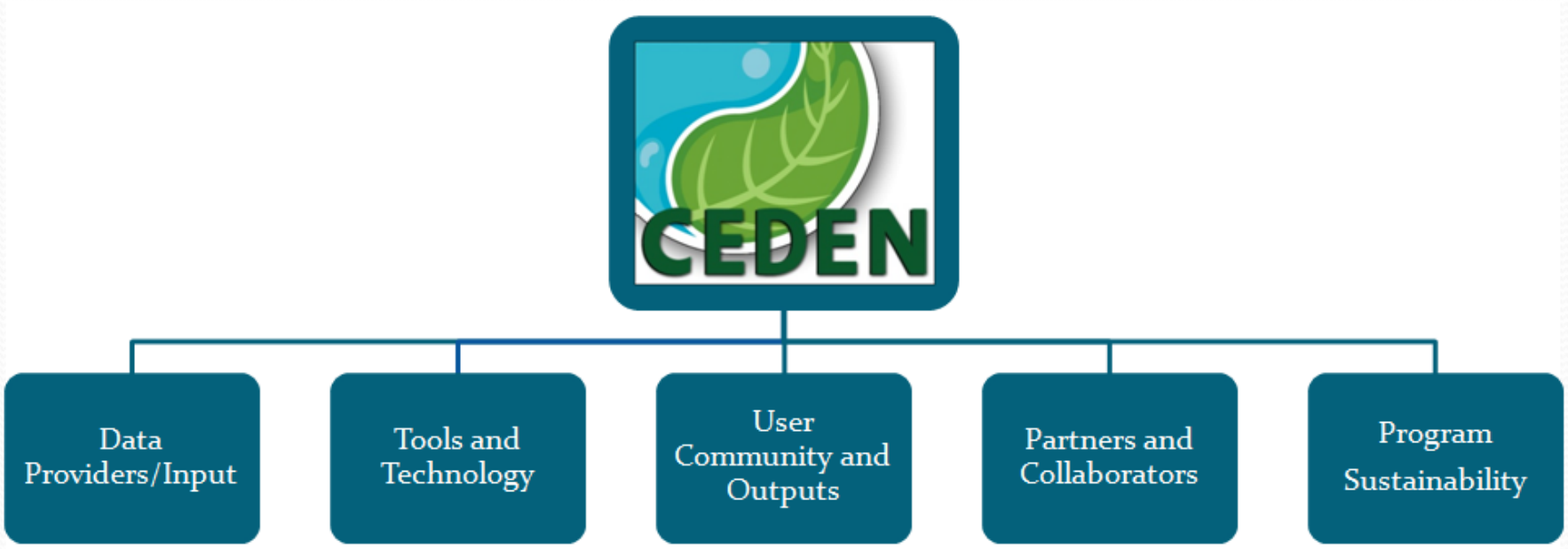
CEDEN
CALIFORNIA ENVIRONMENTAL DATA EXCHANGE NETWORK

Update on the California Environmental Data Exchange Network (CEDEN)

Steven J. Steinberg, Ph.D., GISP
Principal Scientist – Information Management and Analysis
CEDEN Program Manager
714-755-3260
steves@sccwrp.org

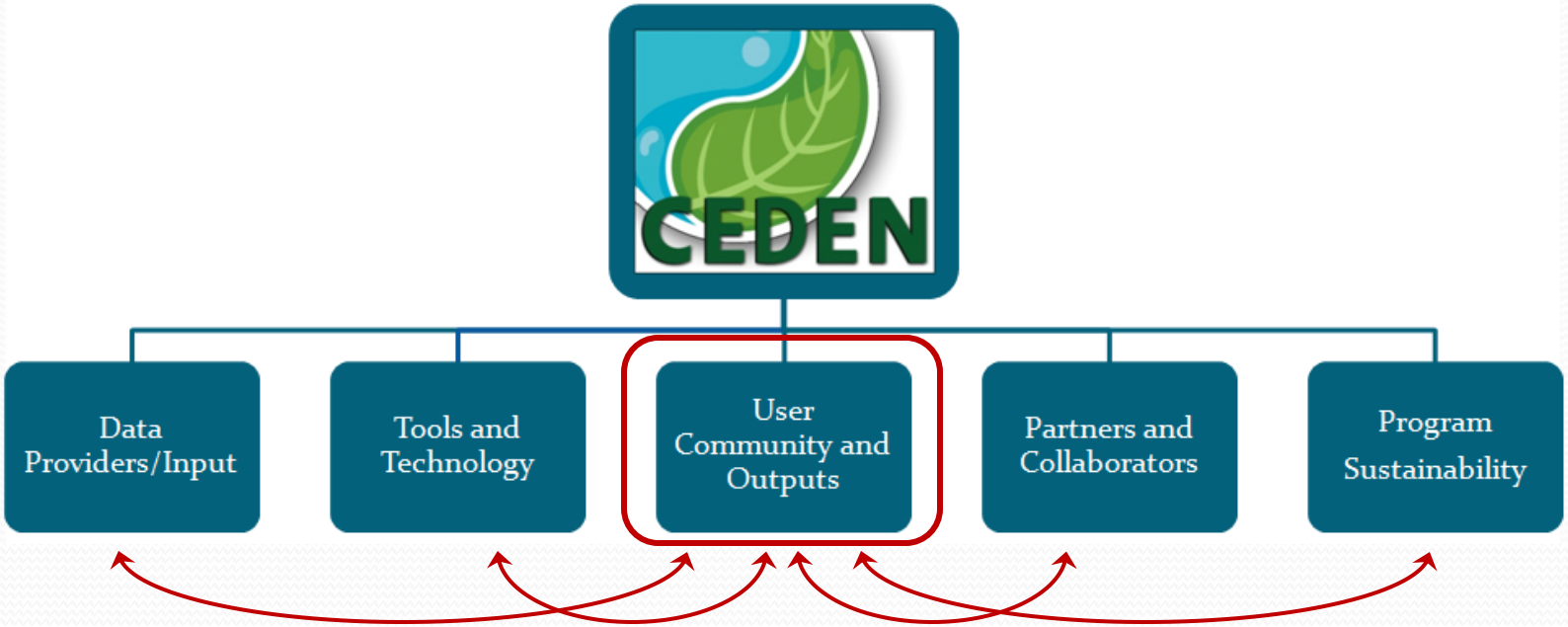
Components of CEDEN



Metrics of success

- Our primary metric of success:
  - CEDEN becomes the definition of **readily available data** for the Integrated Report [303(d) & 305(b)]
  - Provide everyone access to the **same data** the State Board uses in their decision making
- Our primary clients are:
  - Water Board Staff making 303(d) decisions
  - Data providers (who's participation is essential to success)
  - People interested in a transparent 303(d) process

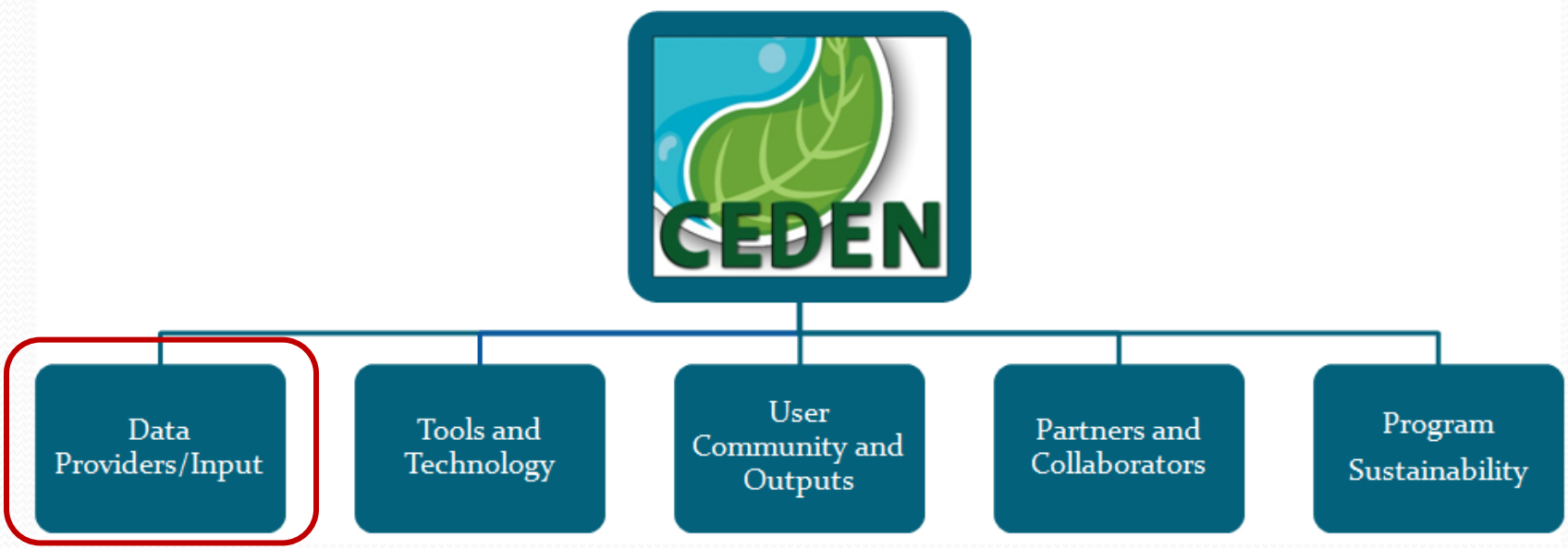
Our user community is primary



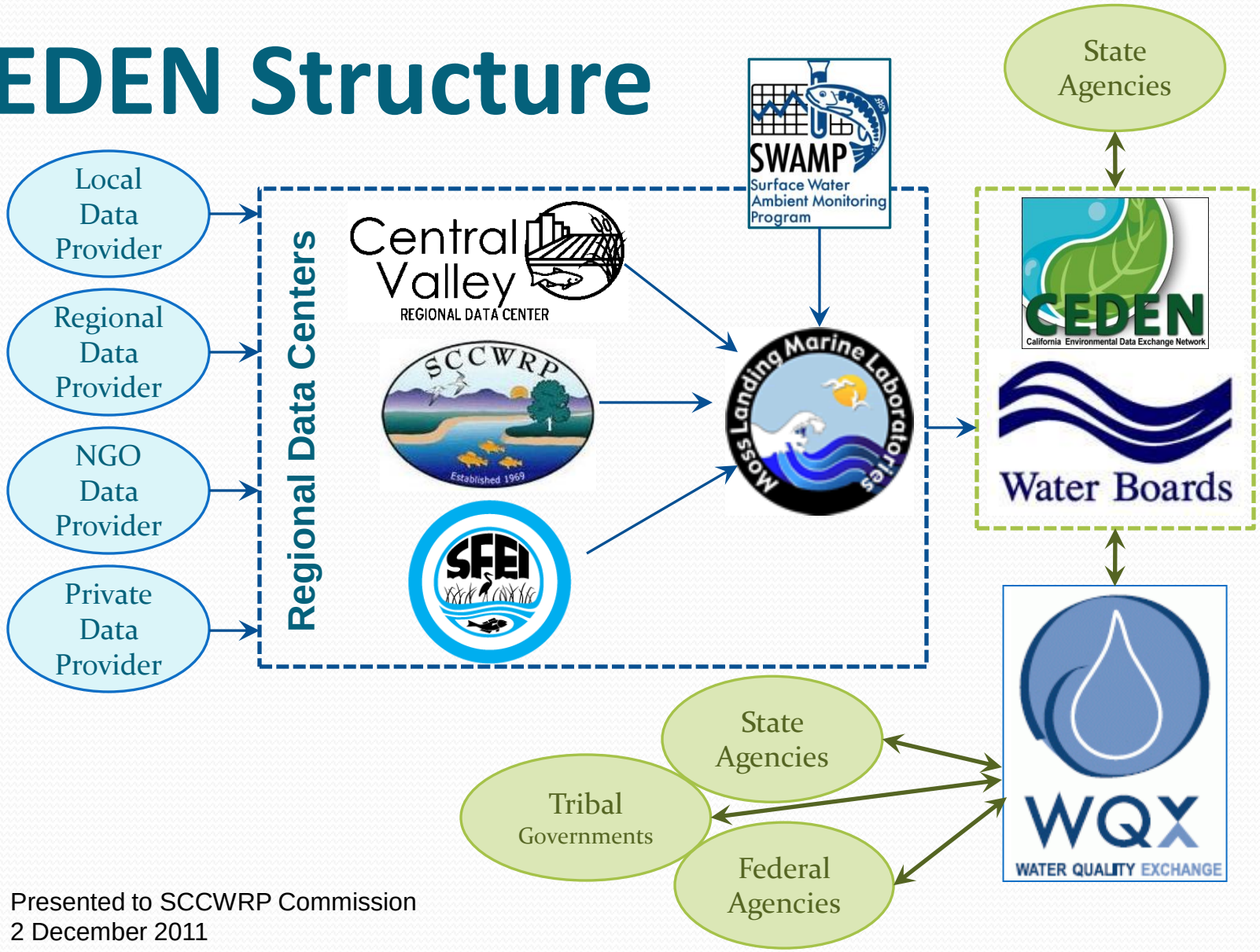
My vision:

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

Incorporating Data



CEDEN Structure



Incorporating Data

- Our (primary) focus is data for 303(d) process
- Last cycle, about 100 data providers participated
  - We're contact these (many, but not all, responsive)
  - We'd like most of these to submit via CEDEN
- Additionally, we'd like to bring new data providers into the process for the next integrated report

What data are in CEDEN?

- Sixteen programs

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- Sixteen programs

APMP
BeachWatch
CFCP
Delta
FMP
ILRP
PRISM
PROP50
QA
RMP
SCBP
SCSMC
SWAMP
TMDL
TSMP
WEMAP

What data are in CEDEN?

- Sixteen programs
- 300+ projects
- Spanning 20+ years

APMP
BeachWatch
CFCP
Delta
FMP
ILRP
PRISM
PROP50
QA
RMP
SCBP
SCSMC
SWAMP
TMDL
TSMP
WEMAP

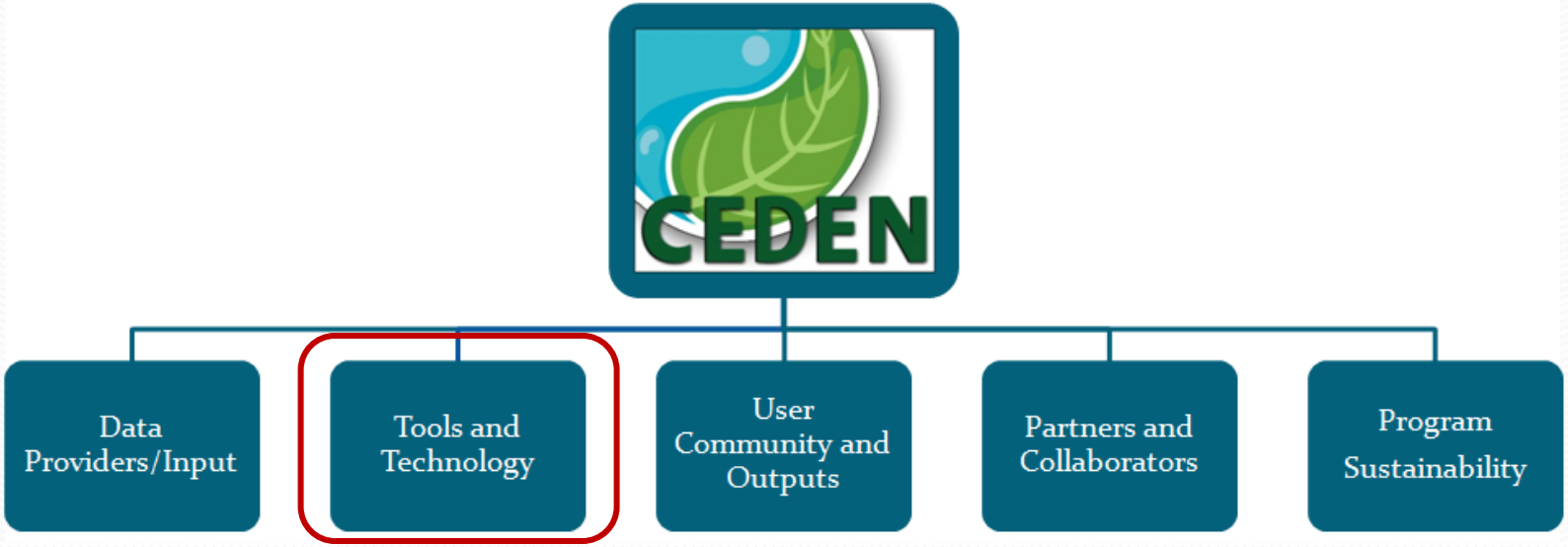
What data are in CEDEN?

	Total Results Count
Samples	550,200
Lab Results	3,358,371
Field Results	125,592
Habitat Results	834,279
Benthic Results	26,061
Toxicity Results	254,204
TOTAL Results	**5,148,707**

Making provision of data easier

- Templates to support a variety of data types
- Regional Data Centers assist data providers
- CEDEN help desk

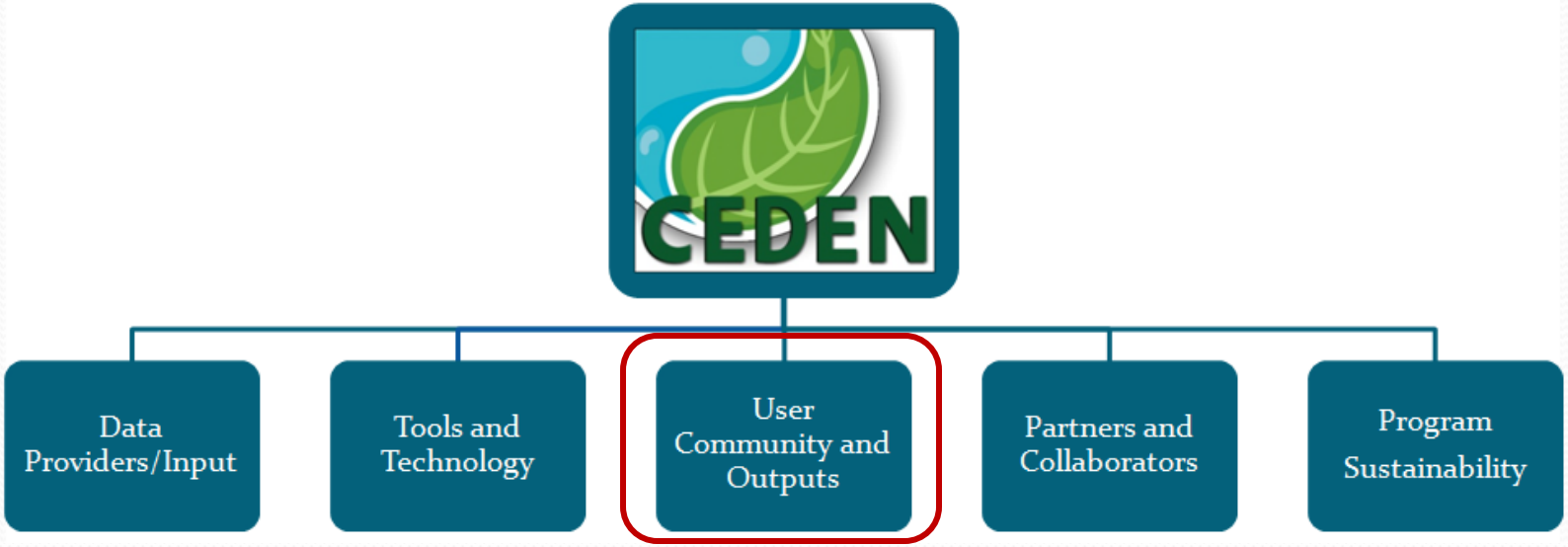
CEDEN Technology



CEDEN System

- Overall, base system is in good shape
- Database contains many data types
- Additional data are being added:
  - New variants of existing categories
  - Other biotic communities (focus has been freshwater)
  - New methods (gear, QA protocols)
  - Chemicals State is reporting that are not currently in dbase (new chemicals, emerging contaminants)
  - New categories: marine debris, invasive species

Improving Data Output



Improving Data Output

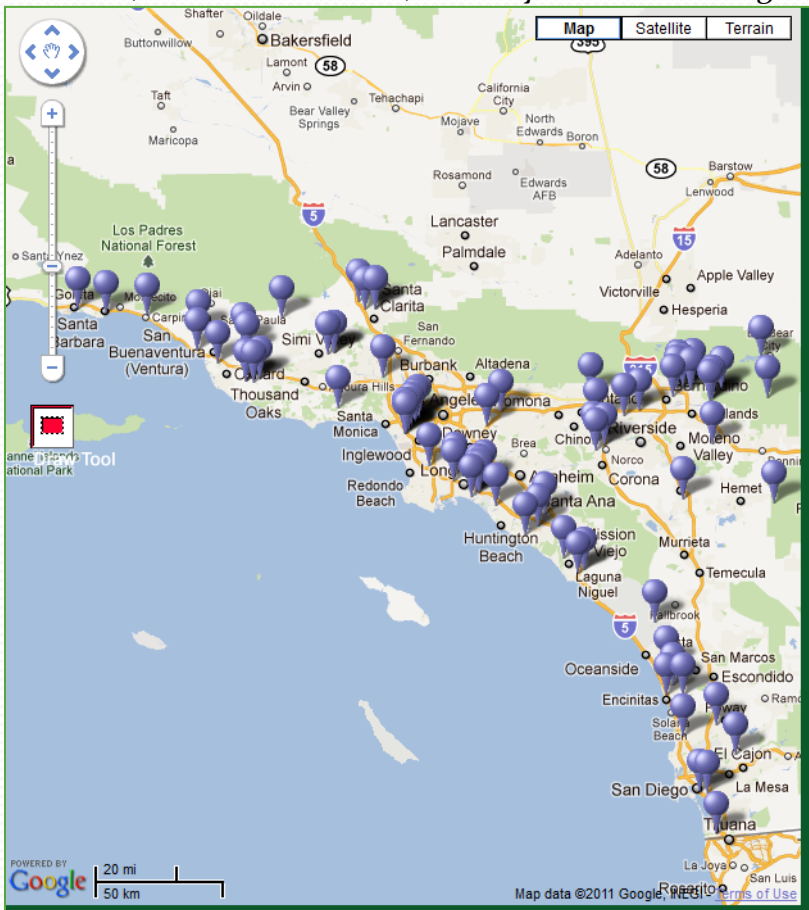
- Problem:
  - Currently CEDEN is only designed for data download

CEDEN

CALIFORNIA ENVIRONMENTAL DATA EXCHANGE NETWORK

Find Data | Submit Data | About CEDEN | contact us | site map | Search

CEDEN houses data about California's aquatic habitats and other ambient waters, including lakes, streams, rivers, wetlands, stormwater, treated wastewater, and recycled water dating back to 1950.



RESULT CATEGORY: Water Quality | Toxicity | Tissue

Turn on automatic station mapping.

Click **Map Stations** at any time to show stations on the map

START OVER | MAP STATIONS | HELP

Programs	SELECT	Southern Ca. Stormwater Monitoring Coalition Surface Water Ambient Monitoring Program
Projects	SELECT	So. Ca. Stormwater Monitoring Coalition Project SWAMP Monitoring SWAMP Stream Pollution Trends
Parameter Groups	SELECT	Do not limit search by Parameter Groups
Parameters	SELECT	Do not limit search by Parameters
Matrixes	SELECT	Do not limit search by Matrixes
Stations	SELECT	A-1 ACJ01 Agua Hedionda Creek 6 Arroyo Simi @ Tapo Upper Atascadero Creek at Ward Drive Ballona Creek @ Centinela Ballona Creek Downstream of Sawtelle (Centinella) Belmont Pump Bouquet Canyon Creek Bouton Creek

Include stations that are missing lat/lngs

Available date range: **Feb-17-1994 to Jun-10-2008**

From: Mar 01 1994 To: Sep 31 2008 [Clear Dates]

Show QA Lookup
Show Controlled Vocabulary

RETRIEVE DATA

All Rows
First 1000 Records Only
First 30000 Records Only

Record Count: 18279
Download Format: excel
Include QA Data

Note: If number of records exceeds 30000, the data will be zipped and emailed to you.

Improving Data Output

- Expose data for use by new applications "Powered by CEDEN"
  - e.g. Monitoring Council portals
- Develop additional tools within the CEDEN framework and website
  - Data filtering tools to facilitate spatial, temporal and attribute based queries
  - Analytical tools to provide assessments and calculated indices

Summary

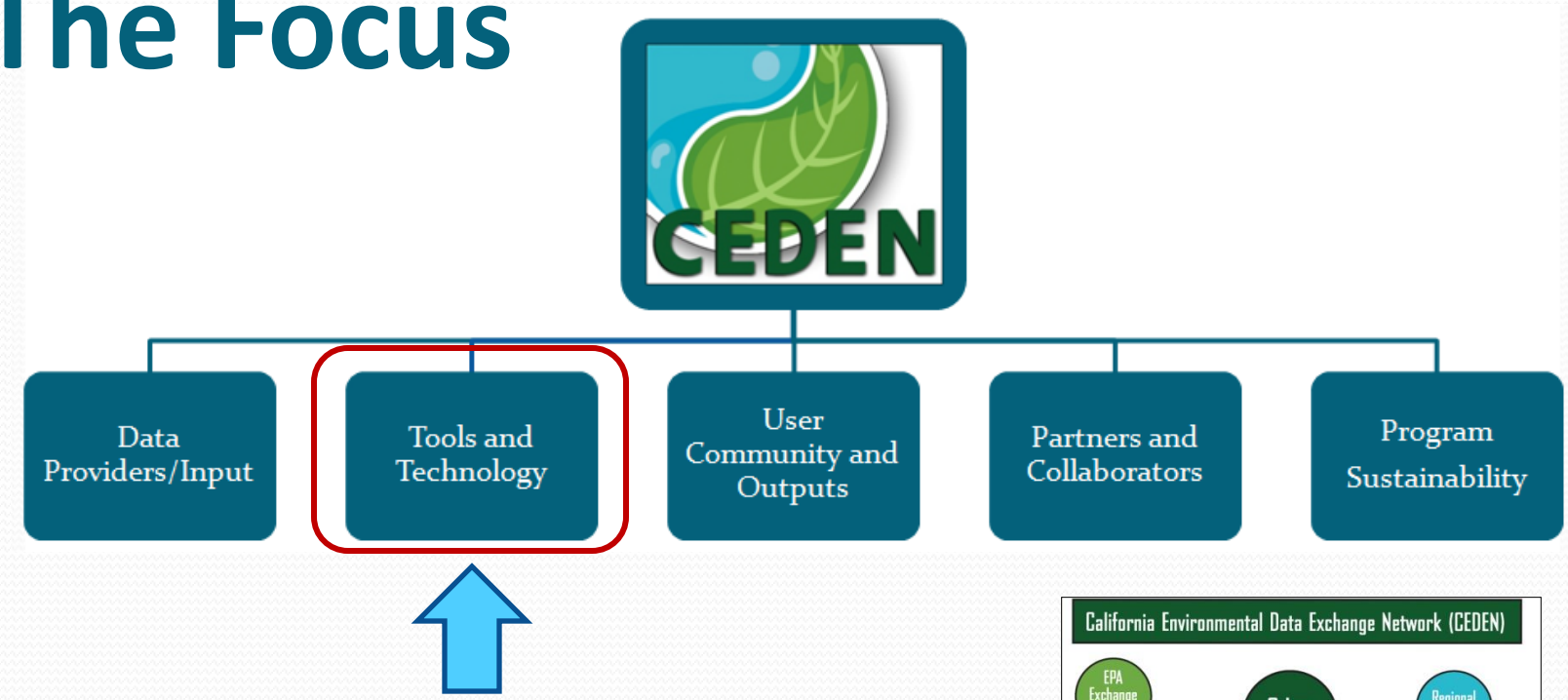
- CEDEN provides the infrastructure for:
  - Management
  - Storage
  - Conveyance

  …of standardized and documented data
- As we go forward our primary tasks include:
  - Continue to integrate additional data
  - Provide tools for selection and assessment of data
  - Expose CEDEN data for use by others

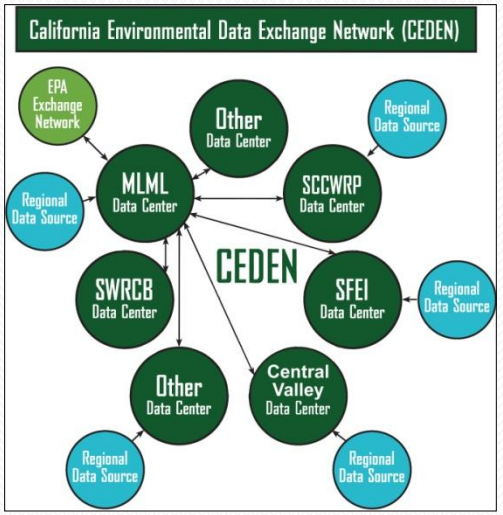
Thank You!
Questions?

Steven J. Steinberg, Ph.D., GISP
Principal Scientist, Information and Analysis
CEDEN Program Manager
Southern California Coastal Water Research Project
Costa Mesa, CA 92626
(714) 755-3260
steves@sccwrp.org
www.ceden.org

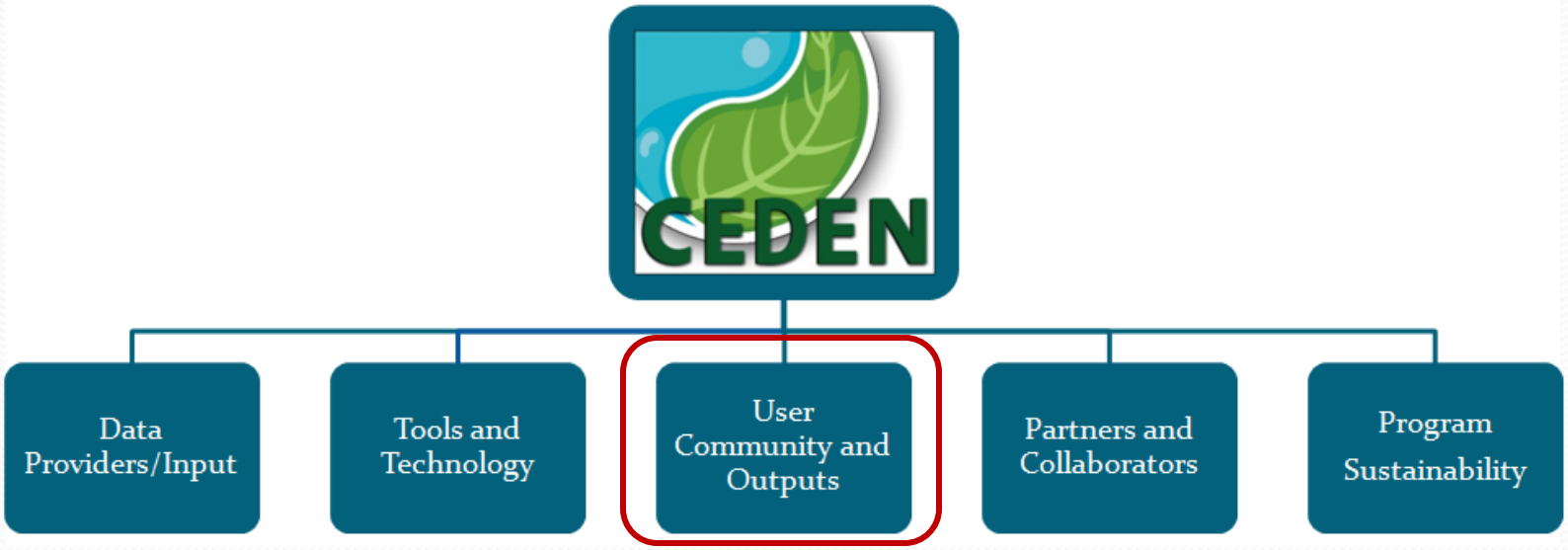
The Focus



Before I came on board CEDEN's focus was almost entirely on development of the infrastructure



The Root Problem



- Lacked definition of the end-user community
- No clear metrics of success