CALIFORNIA CITIZEN MONITORS

Ensuring A Legacy
For Your Citizen Science
Environmental Monitoring Data
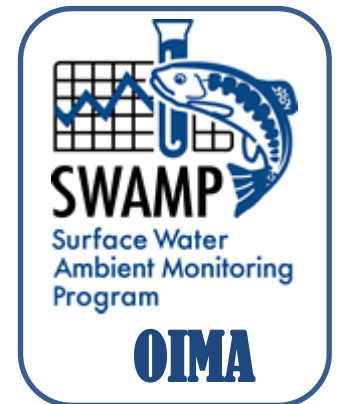
Clean Water Team
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www.waterboards.ca.gov/water_issues/programs
/swamp/cwt_volunteer.shtml

SWAMP
Surface Water
Ambient Monitoring
Program

OIMA

LEGACY:

- a thing handed down by a predecessor

  - something that someone has achieved that continues to exist after they stop working or die

  - the principle that a thing which exists as a result of something that happened in the past can later be used in a different way

7 Steps to Ensure Data Legacy

- What ever you are going to do, do it well
- Do it with a goal in mind
- Use acceptable, standardized or validated, instruments and or methods
- Employ sound QA/QC
- Document everything (metadata) !
- Validate all data
- Data communication (storage, sharing...)through an acceptable repository

1 – Know what you are doing & do it well !!!

Formulate a specific study question.

Support your own science and then look to how you can add value for others.

Be ethical.

usable, reliable, and scientifically defensible data of known quality.

Actionable data :

- Values our volunteers time and our funders support.

- Builds community involvement with environmental stewardship.

- Helps improve and protect the environment and beneficial uses.

2 - Manage your program with a goal in mind

Do you have a goal?

Will you be focused on education or actionable data?

Citizen scientists what to know how the data they are collecting is being used and the story it is telling. Will you be able to tell them?

3 - Methodologies

Select characteristic (analyte) to measure for generation of data that will answer your question

- Use standard methods and technologies that will provide useable data supporting your primary interests of study.

- Novel methods are ok but must be validated.

- Comparable methods should produce comparable and useable data by the community at large.

4 - QA/QC

Select quality objectives (accuracy, precision, representativeness, comparability...) that are adequate to answer the question.

- Apply frequent Quality Assurance and Quality Control checks
  - Calibration & accuracy checks
  - Training & retraining (certification)
- Used certified traceable standards
- Document training
- Even qualitative methods benefit from using QA/QC

5 -

- Document everything

- Help tell your data's story and fully document your QA/QC activities

6 - Validation

- Calculate measurement error

- How close do your measurements match "reality".

7 - Data Communication

Do not create a data orphan

Select a responsible partner to retain your data indefinitely
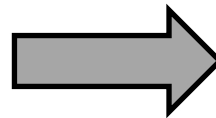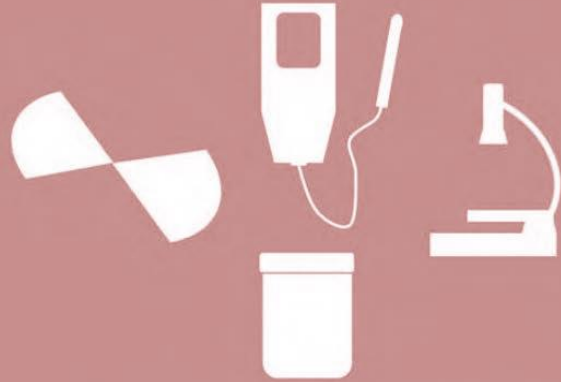
Standardization of data management

- Data storage

- Data sharing

Data is only meaningful when it becomes information.

- – Can the data that you are collecting answer your question of interest?
- – Will others be willing to use your data as well?

Transformation of data into information is a process. Let's help them get there.

KEEP CALM
AND
MONITOR
WATER QUALITY

CLEAN WATER TEAM

www.waterboards.ca.gov/water_issues/programs/swamp/cwt_volunteer.shtml

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