

Enhancing the Quality and Access to Long-term Monitoring Data Sets: CTAG Recommendations

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Background

- Clean Water Act 40 Year Retrospective Report
 - Lessons learned:
 - Lots of data of various types
 - Much of it not electronic and hard to access
- Many monitoring activities in Southern California
- Knowledge base is retiring
- SCCWRP Commission urged CTAG to assess the efficacy of making regional **historical data** accessible to all.



Goal of this Presentation

- CTAG formed a committee to assess the cost-benefit of establishing a repository for regional historical data.
- The committee has developed a strategy for implementation.
- The goal is to share this strategy with the Commission and determine if the course of action is in line with Commission goals.



Problem Statement

- CTAG supports making monitoring data more accessible and useful
 - The Clean Water Act report demonstrated the need to bring the monitoring data from different agencies/entities into a single repository.
- Challenges
 - Coalescing the data is much harder than it would seem
 - Very labor intensive
 - A long-term project
 - Done in addition to core work duties
 - Requires agency management buy-in
 - Many issues to work through



Data Issues

- Cost Challenges
 - Data formatting from hardcopy to electronic
 - Taxonomic changes over time and between agencies
- Interpretation Challenges
 - Method changes and new technologies
 - Intercalibration studies
- Documentation Challenges
 - Changes in analytes, detection and reporting limits
 - Changes in station locations and sampling frequencies



Data Types

POTW

- Offshore water quality
- Benthos
- Sediment pollutants and toxicity
- Trawl fish and invertebrates
- Fish tissue chemistry
- Shoreline microbiology
- Kelp and algae
- Marine debris

Stormwater

- Mass emission chemistry, toxicity, flows
- Land use chemistry, toxicity, flows, coverage
- Stream bioassessment
- Dry weather IC/ID Outfall
- Dry weather IC/ID receiving waters
- Precipitation



Approach

- Cost vs. Benefit
 - Costs
 - Staff time per agency
 - Data housing
 - Costs of not proceeding with this project
 - Benefits
 - How may the data be used?



Costs

- POTWs
 - Major cost is getting data into electronic format
 - Estimations range from 400 to 4,000 staff hours
 - Resolving taxonomic changes and differences
 - Requires expertise
 - SCAMIT, SCAITE
- Stormwater Agencies
 - Most data already in electronic format
 - minimal staff time required (<100 hours)
 - Data standardization



Benefits

- Ability to address regional-scale environmental management issues more efficiently
 - Climate change
 - Nutrients
- Monitoring programs knowledge is retiring
- Linking onshore to offshore data
- Examples:
 - UCI Study
 - LACSD Study



Proposed Strategy

- Begin project with a few prioritized data types for each sector
 - What data types would provide the most useful information
- Stormwater
 - Dissolved oxygen and stream flow
- POTW
 - Benthos, Trawl fish and invertebrates, fish tissue chemistry
- Once the initial effort is completed, reassess the effort required to complete with remaining data types



Where to store the data?

- Individual agencies maintain their own data in a common format
 - May provide a level of comfort for how the data will be used
 - Users would need to collate data from different sources
- SCCWRP
 - A common data repository for the region
 - SCCWRP has offered to house the data
- SCCOOS
 - A common data repository for the region
 - All data types?
 - Cost?



Summary and Conclusion

- CTAG finds value in establishing a regional repository for southern California monitoring data
 - Cost to benefit worthwhile in the long-term
- Significant costs associated with this project
 - Staff time
 - Repository
 - Depending on where data is housed
- CTAG seeking Commission direction on how to proceed



Questions?

