

Operational Review and Closeout Meeting

Marine Water Quality 2024

Purpose

Operational review and closeout meetings are annual meetings to discuss the most recent field season and data collection activities, and to document matters related to protocol implementation. The purpose is to discuss and capture lessons learned and to make improvements for future seasons. This meeting also provides staff with an opportunity to discuss the state of the science of the protocol, and to make suggestions for changes to the protocol documents, with the goal of ensuring that the written protocol remains up to date and in sync with monitoring activities.

Important Links

- [IMD Implementation Memo – Reviewing and Revising Approved Vital Signs Monitoring Protocols](#)
- [IMD Protocol Review Guidance](#)

Objectives

1. Review the most recent field season or data collection effort;
2. Obtain feedback that may help improve implementation in future years;
3. Discuss safety concerns associated with implementation and make sure risks are appropriately mitigated;
4. Document deviations from protocol that could potentially affect data quality or utility;
5. Document suggestions for improving protocol documents, and decisions regarding suggestions;
6. Establish a path and plan (with tasks and timelines) for staff to make changes to the protocol documents and/or initiate a scientific review of proposed changes, as needed.

Evaluation Questions and Agenda

Review and discuss issues, feedback and lessons learned related to the following:

1. Preparations
 - a. Hiring/staffing, housing, onboarding, IT privileges **Sufficient.**
 - b. Training – sufficient, effective, ways of improving? **Sufficient.**
 - c. Field support – GPS, field maps, pre-printed packets, site directions, species lists, etc. **Sufficient.**
2. Logistics, Communications and Safety
 - a. Accommodations & park permits (front- and back-country) – changes needed? **Permits were reviewed and renewals submitted as needed. Should consider developing an agreement with NPS/DOH and PACN for PACN to submit its own permit for DOH and housing to reduce burden on Park Staff**
 - b. Site accessibility. **Sufficient.**
 - c. Scheduling and logistics planning. **I think attention needs to be drawn to the challenges of conducting the marine water quality samples in conjunction with benthic marine. Someone coming in fresh would have a difficult time wrapping their head around the logistics of having to do benthic marine sampling, installing and deploying temperature loggers, and ensuring both bottom and surface samples are collected at the correct sites. Also as mentioned in the anchialine pool animals protocol, 4th Q is extremely busy in West Hawaii and scheduling is a real challenge with the prescribed tidal parameters.**
 - d. Travel and communications **Sufficient for KAHO and KALA. Challenging at WAPA and NSPA at the moment.**
 - e. Was everyone satisfied with the flow of information among staff during the field season? **Yes.**
 - f. Any safety incidents or near misses? Explore concerns and suggestions for making procedures safer. Determine an appropriate means of mitigating each concern (e.g., improved training, equipment, detailed safety discussions). **No.**
 - g. Is the sampling schedule reasonable? Sufficient buffer time for schedule interruptions? **Sites have been adjusted and are to be sampled twice a year annually moving forward. Shoreline sites have been added sampled twice per year annually. See scheduling and logistics.**
3. Equipment
 - a. Any equipment, GPS or camera issues? **None.**
 - b. Any equipment changes? May any of these changes lead to a discontinuity in the data? Are side-by-side data comparisons needed? **Photo collection now in field maps.**
4. Protocol Implementation

- a. Lessons learned from this year's implementation. Surf conditions at KAHO need to be considered for safe shoreline sampling. 4th quarter logistics at KAHO are challenging and require a lot of prep work for successful implementation.
 - b. Discussion of any issues with surveying/sampling and field methods
 - c. Were all sites visited as intended/planned? If not, provide details.
 - i. WAPA- Shoreline sites completed in March and June. Near shore marine sites accessed by boat completed once in June.
 - ii. NPSA- Shoreline site completed in September. No near shore marine sites completed this year due to issues with boat maintenance.
 - iii. KAHO- All sites (shoreline and near shore marine) completed twice (April & October) as planned.
 - iv. KALA- Shoreline and nearshore marine sites completed once (July/August).
 - d. Any known deviations from protocol that could potentially affect data quality or utility? If so, do these need to be addressed with changes or clarifications to procedures? None.
 - e. Concerns related to data quality or repeatability – were there any for the year/period in question? None.
 - f. Concerns related to lab analyses. Discussions were held with UH to improve data delivery. A new agreement modification was submitted for project year 5.
 - g. Any suggestions for changes to field data sheets/forms, SOPs or other protocol documents? Need to update WQ data sheets to eliminate all the unused sections.
 - h. Any new methods or procedures that need to be considered or developed? Digitizing data collections and automating YSI and photo uploading.
5. Data Management
- a. Any changes needed to data management workflows or guidance? None.
 - b. Any problems with data entry? None.
 - c. Are linkages with SOPs and field forms sufficiently clear? Yes.
 - d. Are there other changes that need to be made to the database (including QAQC checks, validation procedures, data summaries or reporting output)? None.
 - e. Was the data entry schedule reasonable? Sufficient time to enter, verify, scan data? Yes.
 - f. Status of data and progress toward data approval/certification Mostly entered. Needs verification. Needs nutrient data.
 - g. Review the project season closeout checklist for status of other items (e.g., scans, file management)
6. Reporting and Analysis – review current plans, discuss needs and follow-up tasks as appropriate. The newly implemented shoreline sampling should be evaluated for its efficacy and subsequent discussions ensue to decide if this sampling should continue.
7. State of the Science – do changing needs, new conditions, or emerging information suggest the need for updating or revising the design, or otherwise suggest a scientific review? No, the water quality protocol has been recently revised into three separate protocols including marine.

8. Develop Summary of Decisions, Action Items and Timeline

Participants

David Raikow, Anne Farahi, Amanda McCutcheon

Meeting Notes

[Following the general order of the agenda, with emphasis on clearly documenting issues related to safety concerns, deviations from protocol, data quality concerns, and suggestions for improving the protocol documents.]

Summary of Decisions

[The following items are placeholders for organizing decision content; these can be modified to convey the actual discussions and decisions in a suitable manner.]

1. Protocol document updates, including a determination of whether the update is a clarification or a major/substantive change
2. Data follow-up: Follow-up on any data flagging or other special handling as a result of deviations from protocol, equipment changes, or quality concerns identified above
3. Database updates:

Plan for Follow-up Action Items

Category	Task	Who	When
Protocol			
Other docs	Upload permits to SharePoint	Raikow	March 2025
Data updates			
Database changes			