



Wetlands Regional Monitoring Program

Steering Committee Meeting Notes

December 12, 2023, 1:00 pm – 3:00 pm

Meeting Attachments

- 9/28/23 Steering Committee Meeting Minutes
- Monitoring Plan
- People & Wetlands Indicators Proposal
- SOPs for monitoring vegetation, hydrogeomorphology, fish and fish habitat
- WRMP Regulatory Engagement Roadmap Draft
- TAC Meeting Notes (12/1 and Working Session on Monitoring Plan)

Steering Committee Members and Alternates: Erika Castillo (Vice Chair; Alameda County Mosquito Abatement), Christina Toms (Water Board; WRMP TAC Chair), Sarah Firestone (USACE), Luisa Valiela (US EPA), Dana Michels (US EPA), Evyan Sloane (SCC), Stacy Sherman (CDFW), Xavier Fernandez (Water Board), Jana Affonso (USFWS), Dylan Chapple (DSC), Brian Meux (NMFS), Brenda Goeden (BCDC), Jaime Lopez (BCDC), Matt Graul (EBRPD), Kelli McCune (SFBJV), Renee Spenst (DU), Matt Ferner (NERR)

WRMP Staff: Sasha Harris-Lovett, Alex Thomsen, Taylor Pantiga (SFEP); Caitlin Crain, Karen Verpeet, Jeremy Lowe (SFEI)

Other Attendees: Stacie Smith (CBI)

Notes

1) Approval of 9/28/23 Steering Committee Meeting Minutes

- Minutes approved

2) WRMP Regulatory Engagement Roadmap (Stacie Smith, Consensus Building Institute)

- Regulatory Needs Assessment found
 - Regulatory agencies were interested in WRMP improving data consistency, quality, and sharing of project-based monitoring data

Not easy swap out site-specific monitoring with regional monitoring, projects need to confirm they're not having negative impacts

- Purpose of permit-driven monitoring includes ensuring restoration projects achieve their goals, don't have negative impacts, and comply with relevant regulations
- WRMP staff are talking with agencies about what aspects of regional monitoring could meet their needs
- SOPs allow for better comparison between sites and learning opportunities due to standardized methods, but SOPs are not intended to be used as permit-driven monitoring requirements
- Current permit-driven monitoring doesn't necessarily serve needs of regional scientific understanding
- Strategic engagement roadmap recommendations:
 - Further build relationships between WRMP and regulatory agencies:
 - Improve opportunities (including addressing time & funding needs) for dialogue & feedback loops among WRMP staff, SC & TAC members, workgroup members, and regulatory agency leaders & line staff
 - Support BRRIT Policy & Management Committee (PMC) to implement their policy list priorities on regional monitoring. Consider an MOU with regulatory agencies
 - Communicate outcomes from regional WRMP monitoring to regulatory agencies
 - Build consensus on opportunities for WRMP to support efficient monitoring
 - Fund and implement a workshop or individual conversations focused on regulatory monitoring with WRMP staff, regulators, project implementers
 - (add from slides)
 - Prioritize regulatory agency monitoring needs
 - SOPs should identify lower cost, higher quality/value methods for achieving regulatory goals
 - (add from slides)
 - Monitor effectiveness of innovative/novel restoration approaches, including nature-based solutions for shoreline resilience
- SC comments
 - Brenda: How do we get SOPs into the hands of the project proponents, so they use them in their monitoring proposals to regulatory agencies? This will improve efficiency in developing monitoring plans since regulators have been involved in development of the WRMP SOPs. BCDC would like to be included in conversations about next steps
 - Evyan: How will WRMP support PMC policy improvement list? Many of them can't be addressed by monitoring
 - Sasha, Evyan, Brenda will connect offline before PMC meeting
 - Kelli: Will the early monitoring actions address regulatory needs?
 - Sasha: This will be part of future conversations
 - Christina: Analyses will begin to be completed in early 2024. Landmark baylands map will cover all restoration projects as of 2020, and will be relevant to regulatory interests. Analyses of habitat condition, elevation distribution,

- adjacency of vegetated marsh to appropriate high tide refugia and transition zones will also be relevant to project proponents
- Renee: Are we talking about making parts of SOPs part of permit-driven monitoring?
 - Stacie: This is part of building consensus within the WRMP and with regulatory agencies and project proponents. There is not current alignment on how SOPs are intended to be used in permit-driven monitoring.
 - Need to include project proponents in the regulatory alignment process.
 - Brenda: SOPs are intended to reflect the best practices for monitoring
 - Christina: All parts of SOPs will not be applicable at all sites
 - Stacie: From the report: "If regulatory agencies were to require all the monitoring procedures in the SOPs to be written into permits, it would increase rather than reduce the current permit-driven monitoring required of project implementers. Further discussion with regulatory agencies can clarify whether specific portions of the SOPs may be suitable for meeting permit-driven monitoring requirements while also providing relevant data for regional analysis."
 - Renee: There's a lot of nuance and room for misinterpretation that we should work to clarify
 - Luisa: Maybe we will just brand SOPs as a "buffet"
 - If other Steering Committee members have ideas, questions or suggestions about the WRMP's draft Regulatory Alignment Strategic Roadmap, please reach out to Sasha directly. It would be great to talk more and incorporate your feedback into the Roadmap.
 - Evyan: I think utilizing the SOPs to better align regulatory requirements as a subset or phasing is needed and good thing to do.... as long as we continue to maintain the common goal of reducing project specific monitoring. If your project site is lucky enough to be a WRMP project site, you don't have to do anything! if it isn't, hopefully there is something more simple like photo monitoring and CRAM.

3) Monitoring Plan and SOPs (Caitlin Crain (WRMP Lead Scientist; SFEI), Christina Toms (TAC Chair; Water Board))

- MP provides a framework for an integrated regional monitoring plan. Balances ambition with practicable limits (funding, capacity), builds off existing programs and projects, integrates regulatory needs, and can be modified over time
- MP describes "what" and "why"; SOPs describe "how," "where," and "when"
- WRMP Implementation Plan will be a subset of monitoring activities described in the MP. We will develop criteria to determine what will be incorporated into the Implementation plan
- Improvements based on SC & TAC input
 - Executive Summary
 - Focused on high-level content, with details in SOPs and appendices
 - Cost estimates in appendix
 - Tables synthesize recommendations
 - Clarified that the role of the MP is a framework and living document

- SFEI design team is formatting the document to make it more approachable & accessible
- Process
 - Requesting SC feedback and adoption of the MP as a framework to inform the Implementation Plan
- Monitoring Plan organized by regional monitoring, sub-regional monitoring, and site-specific monitoring
 - Subregional monitoring is meant to identify a central, representative location to monitor parameters for a priority Network (e.g. Wildcat Network example) and therefore could inform Benchmark/Reference/Project sites
- Integrating regulatory needs
 - Regional mapping products will include all project sites
 - Making photo-point data more usable
 - Improving spatial/temporal coverage of key physical drivers to inform future project design & adaptive management
- SC comments/questions
 - Luisa: Can you further explain the data loggers at "priority WRMP site network" - is that using new terms or supposed to reflect benchmark, or reference sites?
 - See the WRMP Priority Site Networks memo, approved by the SC last February - https://www.wrmp.org/wp-content/uploads/2023/04/Exec-Summary-and-Memo_WRMP-Priority-Monitoring-Site-Networks_20230419.pdf. If I recall correctly, they include reference sites and benchmarks.
 - Need to practice using WRMP terms consistently

4) Community-Based Environmental Monitoring Program Review (Taylor Pantiga (CA State Sea Grant Fellow, SFEP))

- Background
 - WRMP is exploring options for collecting rigorous, reliable data
 - This project investigates whether community-engaged monitoring is a feasible way to meet this goal
 - This type of monitoring can benefit communities and WRMP
 - Leading to scoping report
- Review of 10 volunteer monitoring programs: how have other orgs successfully run these programs?
 - Data were used by government agencies or academia
 - Collected data on environmental variables
 - Parameters: training, funding, program characteristics, participant info
- Key findings
 - QAPP needed for accurate data collection
 - Training considerations
 - Consistent funding

- Partnerships for analysis: e.g. participants collect samples, and partner with a lab for consistent analysis
- Data should be shared back to communities, with the info needed to understand results
- Participant coordinator
- Participant appreciation for retaining participants (compensation is best)
- Example: Missouri Stream Team
 - Run by MO Dept of Conservation in collaboration with MO Dept of Natural Resources, Conservation Federation of MO
 - 3 levels of training depending on what participants will be collecting data on
 - Conduct biological, physical, chemical assessments
 - Data used by DNR & MDC to establish baselines, screen & locate possible problems
- Possible monitoring ideas for WRMP
 - Lower resource: Photo monitoring, iNaturalist or eBird data, collect event-based data
 - Medium resource: Trash monitoring, mosquito monitoring
 - Higher resource: Water quality, vegetation monitoring, structured wildlife monitoring, CRAM, public access surveys
- Next steps: producing scoping report with detailed write-up of one monitoring option to lay out the considerations that would be needed to pursue that option. This will be presented back to the SC; a pilot program could be included in a future version of the WRMP Implementation Plan
- Stacy: Nice job Taylor! Specifically for water quality, this program is applicable to SFE: https://www.waterboards.ca.gov/water_issues/programs/swamp/clean_water_team/
- Kelli: Let's connect on ebird. The San Francisco Bay Joint Venture is working with the Joint Ventures across the Pacific Flyway to match their data to each of our geographic boundaries. This could be a resource to use as an example in the scoping plan or consider a pilot in terms of how to use this data in regional monitoring.

5) People and Wetlands Indicators Proposal (Alex Thomsen (Environmental Scientist, SFEP))

- Presenting proposal on behalf of People and Wetlands workgroup to incorporate new questions, indicators, and a special study into the WRMP science framework.
- Background
 - Funding from EPA Wetland Program Development Grant, Restoration Authority, and State Revolving Fund
 - Why monitor human dimensions and equity?
 - Bolster support and advocacy for future support and wetland restoration by measuring and communicating about the benefits of wetlands
 - Help projects /programs achieve goals for diverse participation
 - Better plan for new features and amenities for wetland users and to attract new users
 - Enable restoration community to improve equity
 - Working under Guiding Question 5

- Proposal: to add new monitoring questions and indicators to the Monitoring Matrix
 - Will enable WRMP staff to develop new products and indicators
 - Will use funding not applicable to bio-physical monitoring
 - Describes both equity indicators and human dimension indicators
 - Equity indicators – products and metrics that evaluate the distribution of environmental features or qualities through a social lens
 - Human dimensions indicators – Monitor social aspects of wetlands, like how people are interacting with wetland spaces
 - Includes a special study that the workgroup identified as high priority
 - Monitoring questions for:
 - Inclusive access
 - Flood protection
 - Engagement, learning and stewardship,
 - Water quality
 - Low hanging fruit indicators (analyze existing data in new ways, minimal data collection): wetland restoration projects and their stated benefits, public access amenities, wave attenuation, wetland decision-maker demographics,
 - Next steps include defining EJ communities, defining how to define proximity to EJ communities
 - Moderate indicators (would require new data collection): projects with paid community and Tribal members, visitation estimates,
 - Special study on sense of belonging to address: how safe and welcome do people in different demographic groups feel in different publicly-accessible wetland spaces?
 - Factors that positively or negatively influence their sense of belonging
 - Inform decision-makers about these factors so they can improve equitable access
 - Could pilot methods about collecting info about sense of belonging
 - Paired with tracking other indicators like visitor demographics, could see if changes in factors result in changes in visitation
 - Workgroup next step is developing monitoring protocols and standard
- Brenda: BCDC and Bay Trail have good mapping of where public access along the shore exists - easily overlaid with wetlands.
- Brenda: Concerned about “safe”. It’s subjective, and for wave heights, someone can drown in shallow water. When people have safety or feelings of fear, how do we capture that with regards to wetlands? Is there another term we could use? Challenged by how we monitor and respond to that.
 - Response: SFEI has modeled wave attenuation provided by wetlands, and maps of whether wetlands are wide enough to reduce a 100-yr wave event to 1 foot, which has to do with expected damage.
 - Response: In the next phase of the special study, can better define the questions posed to focus groups and interviewees, and think carefully about what we get to get the information we’re looking for. We can also look at how other monitoring programs and others who have done this have phrased their questions.
- Kelli: Is there a way to tie this regional monitoring in with an already existing Bay Area equity tracking, such as the Bay Area Equity Atlas? I am curious if our indicators could be linked/built into the 'Place' category. <https://bayareaequityatlas.org/indicators>

- Look at re-word example ‘C’ to find something else or a different description for the word “safe”.
- Renee: Curious about flood protection element – do we want anything to indicate what additive level of flood protection wetlands are providing to communities? A wetland by itself is probably not going to be enough protection for anybody. Can we add the word “additive” to flood protection? Want to recognize the role that wetlands play in flood protection, but they’re not an entire solution to flood protection. Having such a straight line of wetlands to flood protection feels a little bit oversold. Wetlands do not all by themselves provide flood protection.
- Xavier: There are temporal and spatial components to unpack when we talk about flood protection benefits.
- Replace wording of ‘flood protection’ with ‘wave attenuation’, ‘flood reduction’, or ‘level of flood risk reduction’
- Luisa: We don’t usually send people out to go measure a wetland and understand what that flood reduction benefit is. We may be setting ourselves up for a very hard communications problem. This one might need a re-work. We want to be able to communicate what the status is – it may mostly depend on how big the wetland is in front of the community.
 - Indicators A and C relate to flood protection. We could change the language to flood risk reduction, and is more specific.
 - In “Flood Protection” monitoring question, remove “level of”.
- “Flood protection” needs to go back to the workgroup – they want their voices to be heard, that would be a bad precedent. See if workgroup is comfortable with “flood risk reduction”
- Will hold indicators A and C to check in with the workgroup about “flood risk reduction”
- Would vote for conditional approval, make sure that A and C work with re-wording
- Not sure ‘C’ would be low-hanging fruit
- On ‘C’, remove “safe height” – safe for what?
- Jeremy and Alex and bring the monitoring question on flooding and product ‘C’ back to the workgroup.
- Xavier: I would leave it at modeled capacity to attenuate waves.
- Alex: This is how the monitoring questions and indicators are laid out in the spreadsheet that accompanies the proposal, and are what we’re proposing to be added to the monitoring matrix:

https://bayareametro.sharepoint.com/:x/s/wrmp/EblaFNfqcktNrOoe9C1xWF4BnEou_NxzER1S9tdLv8kgzw?e=PJY7ID
- Ran out of time before approval.

6) Subcommittee on Information Delivery (Sasha Harris-Lovett (Lead Environmental Scientist, SFEP))

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7) Proposed 2024 Meeting Schedule (Alex Thomsen, SFEP)

- **March 28, 2024 (alternatives: April 4 or other days 3/28 - 4/5)**
- **April 25, 2024 (alternatives: April 18, May 2, or other days 4/18-5/3) -- potential joint SC/TAC meeting**
- **June 27, 2024**

- **September 26, 2024**
- **December 12 or 17, 2024**

8) Announcements