

Wetlands Regional Monitoring Program

Steering Committee Meeting Notes

September 28, 2023, 10:00 AM - 12:00 PM

Meeting Attachments

- 6/22/23 Steering Committee Meeting Minutes
- WRMP Mission Statement
- WRMP Early Implementation Memo

Steering Committee Members and Alternates: Erika Castillo (Vice Chair; Alameda County Mosquito Abatement), Christina Toms (Water Board; WRMP TAC Chair), Brenda Goeden (BCDC), Ali Weber-Stover (NMFS), Dave Halsing (SBSRP), Dylan Chapple (DSC), Erin Chappell (CDFW), Evyan Sloane (SCC), Stacy Sherman (CDFW), Kelli McCune (SFBJV), Luisa Valiela (US EPA), Mike Chotkowski (USGS), Natalie Reeder (EBRPD), Ryan Olah (USFWS), Deja Gould (Sogorea Te Land Trust), Xavier Fernandez (Water Board), Renee Spent (Ducks Unlimited), Stuart Siegel (NERR)

WRMP Staff: Sasha Harris-Lovett, Alex Thomsen, Taylor Pantiga (SFEP); Donna Ball, Caitlin Crain, Cristina Grosso, April Robinson, Lydia Vaughn, Melissa Foley (SFEI)

Other Attendees: Erica Johnson (SCC, P&W Workgroup member)

Engagement Opportunities:

- Mission statement offline review: email Sasha Harris-Lovett
- Draft-in-progress Monitoring Plan review and feedback:
<https://docs.google.com/document/d/1yl2tymOHCmJPvvg7It8cc3LTDhJGdkqG/edit>
- People and Wetlands indicator development: email Alex Thomsen

Notes

Approval of 6/22/23 Steering Committee Meeting Minutes

- approved

WRMP Mission Statement

- Current WRMP documents all contain slightly different versions of the program mission
- Sasha and WRMP staff synthesized and revised the existing mission statements into a short and long version
- Regulatory integration is a core goal of the program, even though not explicitly stated in mission statement
 - Working on a regulatory strategic roadmap with consultant

Discussion:

- Stuart would like to discuss further the inclusion of regulatory integration in the mission statement
 - Emphasize reduction in costs and increases in meaningful science
- Brenda: this is a monitoring program vs delivering regional coordinated science
 - Language may be expanding the role of the program beyond the program's scope
- More support around Stuart's comments
- Dave: statement could specify who will be using the results of the program
- Evyan: interested in hearing why regulatory integration was removed from language
- Xavier: mission statement too broad, can be interpreted however someone wants
 - Good that we all have common understanding of what the mission statement should be, don't want to get caught up in process
 - General agreement from others about not getting caught up in process
- Renee: as a common project proponent, views WRMP as a regional approach
 - Is okay if regulatory integration isn't part of mission statement, as long as it is part of the program as a whole
- Luisa in chat: one concept that can be added that may address mtg "wetlands managers" needs (borrowed from RMP language) is something like this: The program is designed around management questions important to the XYZs for regulating wetlands in the estuary and delivering wetlands restoration projects..
 - Support in chat for this
- Mike C.: likes use of term science in mission statement, term monitoring can be misleading to more general audiences, happy with statement
- Stuart: who are the users of the products? Supporting decision making by permitting agencies, funding organizations, project proponents, and stakeholders w/ interests in outcomes of projects
 - "delivers" to whom?
 - Support for including audience in mission statement
- Stacy in chat: This may get re-worked with the shorter mission statement, but "comprehensive" is overstating in the more detailed version

- Sasha will incorporate feedback and send to Stuart, Brenda, Melissa Foley, and Dave for review
 - If interested in reviewing, let Sasha know
- Then Sasha will send out revised version to whole SC
- Renee in chat: I would support the addition of "monitoring to inform decision making"

WRMP Decision-Making Flowchart

- Program moving from development to implementation
- Staff has really been thinking about roles of SC and TAC in relation to decision-making process and product development
- We have learned some lessons about why the original model isn't working for the program now
- SOPs- SC will give workgroup some guidelines, workgroup will develop protocols and TAC will make sure the work is technically sound
- Monitoring plan: visionary plan
 - Will serve as a fundraising tool for now
 - TAC approves as technically as sound
- Priority monitoring:
 - TAC will recommend actions to SC
 - SC will make final decision on what monitoring activities will take place based on funding availability
- Brenda feels okay with TAC approving SOP, middle column (monitoring plan) less clear
 - Guiding and management questions so high level that it doesn't feel meaningful to approve those
 - I do like the notion that documents should come earlier for review so that we're not scrambling a final product
- Evyan also agrees with TAC approving SOPs
 - If SC job is to pare down to meet funding/regional needs, going to need to be very careful in how SOPs are developed and would want technical guidance on how to pare them down
- Stacy-land owners/property managers, where do they come in? And where does permitting come in?
 - Sasha: haven't discussed where landowners and permitting for monitoring comes in, would be between monitoring plan and work plan
- Stuart-agrees middle box (monitoring plan) needs to be looked at more
- Xavier-agrees with what's been said
 - SC can participate in any WG or TAC meetings that they would like, don't need to go to every meeting, but SC members can keep tabs on where TAC is in their process to choose when to engage
 - If you really want to make sure things match up, it's important to participate

- Matching up management questions with monitoring questions is important to make sure the data being collected can be used to impact management decisions
- Concern re having different members on TAC or more involvement on technical products: agency is beyond capacity with staffing for what it could cover on the WRMP
 - Concern echoed by another member
- Evyan in chat: For Monitoring Plan, I'm coming around to Brenda and Stuart's recommendation for SC approving.
- Luisa-have a lot of money coming from federal gov in next few years for SFB, program office already has a priority list
 - On thing on list is WRMP, they want to fund the program
 - Still a lot of technicalities to figure out
 - Can bog ourselves down in process because we feel like we don't have money, but we need to get through this because we will have money coming soon
 - If your organization needs funding, Luisa needs to know to see if they can give the money
- Sasha-once we have dependable funding, SC will be responsible for deciding how program money is spent
- Dave in chat: To Xavier's point: What if the SC was given the responsibility of reviewing and tentatively approving an early draft, thereby authorizing it for final development and verification. The TAC still has the final bit of technical work but the SC's input is thus demanded/expected at an earlier stage. Brainstorming...
- Donna: worried about program getting stalled if we take too long getting monitoring program approved (if we wait until the end to get feedback)
- Melissa in chat: keep in mind that the monitoring plan is a higher level document that will be used to develop the much more specific work plan that will need to connect finer-scale management questions to the work being planned.

Program updates

- Early Implementation Priorities
 - Funds from SFB Restoration Authority so we can start pilot monitoring
 - Criteria: low-cost high return, leverage historical/existing data, address large spatial scale, address funder/regulator interstes, address science priorities
 - Trying to distill broad guiding questions into questions to move the program forward
 - Where are our tidal wetlands?
 - How are they doing?
 - Are they keeping pace with sea level rise
 - Priorities
 - Analyze baylands change basemap
 - California Rapid Assessment Methods (CRAM) analysis
 - Generates score for wetland condition
 - Used across the state
 - CRAM already being conducted at some benchmark/restoration/project sites, looking to fill some gaps

- Regional network of sediment elevation table-marker horizons (SETs)
 - In partnership with USGS
 - Leveraging what the region's already done, and putting new SETs in areas the WRMP is interested in
 - Some sites line up with WRMP benchmark sites/project sites, some not in WRMP monitoring network, interested in putting more at benchmark sites
 - Facilitate data collection at the existing sites
 - Also mirrors EPA's level 1, 2, 3 monitoring
- Vegetation SOP
 - Approved by TAC, in final stages
 - Addressing management questions: MQ 1A, MQ 2A, MQ 3A
 - Workgroup proposed 4 monitoring components that can be done together or separately
 - Photo monitoring
 - Remote sensing of vegetation alliances
 - Field surveys of community composition
 - Special study: transition zones
- Hydrogeomorphic SOP
 - Organizing existing protocols and making recommendations specific to the WRMP
 - SOP will be going to TAC for approval in October
- SOPs are method documents, not saying what/where we will monitor, just how

Discussion

- Stuart has advocated strongly against the use of SETs in our region
 - They have great value, but are single point measurements, they are expensive, and require expertise
 - Stuart will be discussing other options with the hydrogeomorphic workgroup
 - Here's the brand new (2023) National Geodetic Survey "Accurate Elevations for Sea Level Change Sentinel Sites" document:
 - https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjW7Za29M2BAxWVIDQIHmQAzYQFnoECBIAQ&url=https%3A%2F%2Frepository.library.noaa.gov%2Fview%2Fnoaa%2F50570&usg=AOvVaw00uODPmlZXJmlO-v4LMf_h&opi=89978449
- Kelly: have SOPs been cross walked with the near-term criteria
 - Criteria is specific to selecting the near term monitoring priorities
 - SOPs are technical documents for how the work can be done, selection of what will be done will come later from monitoring plan
- Xavier re veg SOP: happy to see multiple levels of intensity for monitoring
- Evyan in chat: Just wanted to say I support the implementation memo for these high priority efforts. SCC requires CRAM and I would love to see a more consistent approach in the region. And for the SETs, I agree with Stuart, but still feel this is good low hanging fruit given that the SETs are already in place and Karen's group is highly trained.

- Caitlin in chat: Evyan makes a great point that the SETs are low-hanging fruit for looking at accretion rates as they are mainly already in the ground. In the HGM SOP alternative methods are proposed both to complement or replace SET monitoring.
- Funding updates
 - WRMP planning to put WPDG together when available
 - For development not implementation
 - Science Delivery Strategy
 - Develop long-range science plans for different funding scenarios
 - Let Sasha know if you have ideas/suggestions for the proposal
 - By summer, will present another funding proposal to Restoration Authority
 - Email Sasha/other staff if interested in providing input on funding opportunities

Monitoring Plan

- Want WRMP to get to point where they fund and implement ambient monitoring, special studies, and permit based monitoring
- Then project implementors don't have to worry so much about permit monitoring
- Need SOPs (how) and Monitoring Plan (implementation) to get to this point
- Program will grow overtime, but only if we can demonstrate that the program can collect data and answer questions of the users
- Monitoring plan focuses on our unfunded vision for the next 3-5 years
- Will be used to inform funding requests and the development of the workplan
- [Draft plan](#), request access if needed
 - In progress, as SOPs are wrapped up, the monitoring plan will be main focus for science team through the end of the year
- Possibly won't include dissolved oxygen/carbon sequestration, want SC feedback on this
 - Stuart in chat: DO fairly easy (but not especially cheap) to monitor, highly relevant to aquatic ecology esp. fish use, NERR does as does DWR. Carbon sequestration more complex.
 - Additional support in chat for including DO
- Bird monitoring?
 - Program will be focused on tidal marsh birds, working with Julian Wood
 - Want to establish a workgroup for birds first before including in the monitoring plan
 - Renee in chat: I would like to see bird monitoring included, and also think there are good potential synergies with the bird monitoring that SFBJV Science Committee is seeking alignment around (particularly for waterfowl, small, and medium shorebirds).
 - General comments in chat about broadening bird monitoring beyond just tidal marsh birds
 - In chat: I think that we need to look at pond birds because it is important to making management decisions.
 - Pond birds can exist at a site for a while before site is fully developed
 - This is why we need a bird workgroup, so we can figure out what should be included for monitoring

- Brenda in chat: think that the bird world is an excellent place to do a citizen science effort once the SOPs are done - there are so many amazing birders in this area - just a thought
- Donna: Thanks Brenda - SFBBO does some of this and used eBird for some of their data collection and might provide a good model.
- Dave: Lots of different bird species and guilds are at risk locally, so a regional understanding of those would inform ALL OF OUR decisions about whether or not pond restoration to tidal marshes can proceed without adding to that risk. Seems important to get to as part of 'enabling' (for lack of a better word) marsh restoration and management.
- aware of the importance of birds with regard to vegetated tidal wetlands and ponds and restoring marshes. look forward to seeing a bird workgroup tease this out - and especially finding the money to support it.
- Question in chat: restoration of bay oysters?
 - Program not focused in this habitat area, there are parallel efforts being implemented by other agencies focused on subtidal species like oysters
- Need SC input:
 - Align proposed activities with regulatory needs
 - Translating monitoring plan to implementation plan (work plan)
 - Identifying and supporting opportunities for funding
 - NOAA interested in providing some seed funding for fish and fish habitat monitoring
 - Communication and coordination with program partners and landowners
- For SC approval/review brainstorm
 - Maybe review of outline, then review on a representative section
 - That way SC can give approval before science team is too far into final product
 - Don't want folks to get caught up in details, but do want input on overall structure
 - Specifically request what level of review the SC should provide feedback on (thumbs up), but could be a lot for the team to have to continuously send product out for feedback and SC to continuously review items
 - SC members who are interested in providing feedback feel that 1 week is enough time for a quick review

Baylands Change Basemap

- Goal: detect change overtime and use the same methods overtime
- Using ecognition software for image analysis
- Geospatial workgroup has helped identify and compile data sources
- Developed and tested the rules at test sites
- ArcGIS online feedback tool to refine and improve the map
- Currently reviewing feedback and updating the toolset
- Then will develop final draft dataset for review
- Final dataset will be integrated into ecoatlas
- There will also be a standalone data set so additional analyses can be run
- RA interested in WRMP work and potential performance metrics

- Proposed metrics should:
 - Align with WRMP near-term priorities,
 - Be cost-effective
 - Show functional benefits
- BCB analyses
 - Total marsh extent
 - Patch size and configuration
 - WRMP can look at regional scale, RA at project scale
- Next step: presenting to Restoration Authority governing board next month
- Interested in any feedback from SC with how to move forward
- Brenda: WRMP prime candidate to cover the monitoring that the RA needs
 - Great to see this coordination is happening
 - Surprised to see marsh gain/loss wasn't selected as something we could do for the RA, why not add new projects approved by the RA immediately?
 - Evyan in chat: The project locations are being captured in Project Tracker which gets displayed on the SFBRA EcoAtlas Dashboard
 - Crisitina in chat: Thanks, Evyan. In addition, the dashboards are tracking funding by region as Brenda mentioned. Here is link to the SFBRA Dashboards: <https://ecoatlas.org/dashboard/sfbraDashboard.php>.
 - Brenda still interested in seeing this as a map
 - Christina: The SFBRA projects are mapped in EcoAtlas; I don't think they're in a separate layer but if you click on the Habitat Projects layer, they're in there
 - Christina: I think if you use the "Tool" on the right hand side of the map, you can select by only SFBRA projects
 - Evyan: Yes in Habitat Projects and have to select the "group" "SFBRA funded". Pretty sure.
 - Polygons are in layer that can be used to update the bar charts on a more regular basis
 - BCB will show what has been restored since 2009

People and Wetlands indicator development

- If you are interested in diving in further, feel free to review the slides after the meeting and email Alex
- Questions focus on distribution of benefits and how that relates to demographics
- Key benefits identified by workgroup, areas workgroup is exploring for indicators
 - Shoreline protection, specifically flood protection
 - Water quality
 - Inclusive access
 - Community involvement in stewardship and decision-making
 - Knowledge production and transmission
- Potential products/outputs-will be refined by workgroup and brought back to SC as a future proposal
 - Map of existing project data and overlay with community demographics

- Shoreline protection: Map flood protection metrics (wave attenuation, storm surge reduction) overlaid with EJ community data
- Inclusive access: maps of amenities, transit accessibility, etc.
 - Could calculate scores based on available amenities and accessibility and compare between adjacent vulnerable communities and other communities
- Stewardship and knowledge sharing (community science and education)
 - Look at summary stats of participants in events, compare regional scale and at project level, compare participants and nearby community
- Some of these products may be more useful for decision making and apply to all shoreline projects rather than just wetlands
 - For ex: amenities and accessibility at shoreline trails
 - Some products could be relevant to state of the estuary if include areas beyond wetlands
 - Brenda: two thoughts - wetlands often have limited access so the broader picture might be helpful. And Have you considered economic benefits of the areas to the local community?
 - Alex: From SC feedback on the last People & Wetlands survey, it seemed like people felt economic benefits were outside of the scope of the program so we haven't pursued anything on that
- Xavier: need to be careful about mapping access for whole shorelines when this is a wetland program, maybe there is another program where that could occur (like ABAG's Bay trail, Luisa agrees)
- SOE also tracks access through Bay Trail
- How to set up the protocol in a way that could simply be extended to the whole shoreline by another group, but for now focuses on benefits provided by wetlands
- Is program defining shoreline at edge of wetland or behind the wetland? Something to think about
- Evyan would like a copy of Alex's slides to provide comment

Announcements

- Can email Sasha if you have anything to share with the entire group