Monitoring Community of Practice Workshop
Hilton Bayfront, St. Petersburg, FL
Monday June 11, 2018

WORKSHOP SUMMARY

WORKSHOP OBJECTIVES

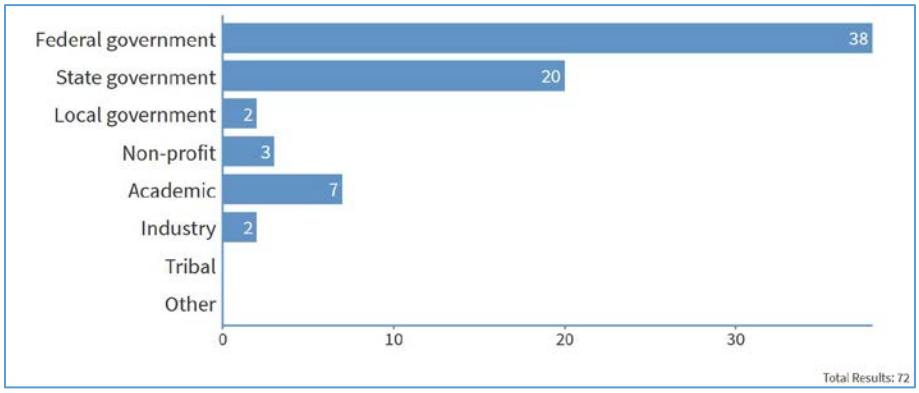
- Review Council Monitoring and Assessment Program (CMAP) Objectives/Tasks
- Discuss MCoP overall charge, established tasks, participant roles, and long-term vision
- Identify participant expectations for MCoP involvement
- Review CMAP task progress and get participant feedback

WELCOME AND INTRODUCTIONS

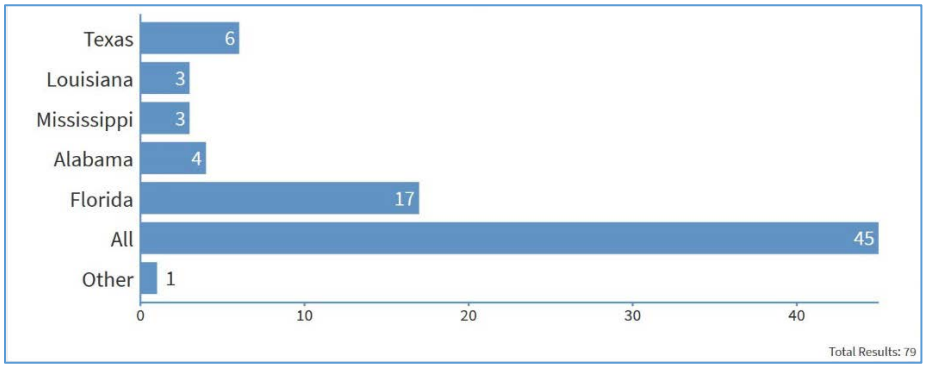
Participant Affiliation (see attachments for contact information)

One person form each category introduced themselves and briefly stated what they were hoping to gain from participation in MCOP. (responses available in meeting minutes)

1. Which category best describes your organization?



2. Which state do you or your organization primarily serve?



MCoP ACTIVITIES TO-DATE

INTRODUCTORY WEBINAR

Purpose: Introduce idea of MCoP, review CMAP objectives, discuss participant engagement, and notify of upcoming workshops.

- GOMA Priority Issue Team Coordinators and State Leads
- February 23rd, 2018
- 100+ invited; 70+ attended

WATER QUALITY AND HABITAT USER GROUP MEETINGS (additional information in presentation)

Purpose: Solicit information from the monitoring community, including data users, researchers and modelers. Build upon the existing work from Ocean Conservancy, Gulf of Mexico Coastal Ocean Observing System (GCOOS), Gulf of Mexico Alliance (GOMA), etc.

Water Quality User Group

March 6-7, 2018
NOAA National Water Center, Tuscaloosa, Alabama

- 38 participants
- 7 federal agencies
- 11 state agencies
- 1 non-governmental organization
- 1 academic institution

Habitat User Group

April 3-5, 2018
NOAA National Disaster Center, Mobile Alabama

- 54 participants
- 7 federal agencies
- 7 state agencies
- 6 academic institutions
- 4 non-governmental organizations
- 1 regional management agency

MCoP PURPOSE, ESTABLISHED TASKS, and VISIONING

Purpose: *The Gulf of Mexico Monitoring Community of Practice (MCoP) provides a forum for sharing and coordinating monitoring and mapping knowledge with the larger restoration community. The MCoP coordinates experts to support the RESTORE Council's Monitoring and Assessment Program (CMAP) and discuss regional information needs and gaps, monitoring parameter guidelines, data sharing and management, and outcomes of Gulf restoration to ensure the use of best available science for project planning and implementation.*

Established Tasks: The MCoP is beginning slightly different that a traditional CoP in that the initial effort is funded through the RESTORE Council's Monitoring and Assessment Program with tasks established through that project. The MCoP will develop additional objectives for focus during and beyond the initial three year CMAP-funded effort. The MCoP is also a focal area of the Data and Monitoring PIT in GOMA's Governor's Action Plan. The MCoP members, along with PIT members and CMAP, will work together to reach shared goals of both programs, as well as, address member organization priorities and needs.

Visioning Activity: The following breakout activity was conducted to address how member organizations and individuals want to engage with the MCoP and what participants envision as the highest priorities for the MCoP to address.

Activity:

1. Imagine the 2028 GOMA newsletter was just released and described an award (with funding) for the most effective GoM collaborative initiative of the past 10 years. Imagine you are submitting a nomination for the MCoP! Brainstorm with your table about what a successful regional MCoP looks like to you and your organization. Designate a note-taker to capture additional information as you work through the activity. This will feed into post-workshop MCoP logic model/MCoP planning.
2. For your group report-out, submit your table's **nomination** including one-two sentences of why you are nominating the MCoP and **list the MCoP's top three accomplishments** from the past 10 years.

Hint questions: (some groups answered these specifically)

- What are the greatest needs for GoM habitat and water quality monitoring and mapping?
- How are these diverse needs met?
- How are organizations and projects best coordinated/communicated/leveraged?
- What resource needs have been met or knowledge gaps filled?

Pooled Group Responses:

MCoP Nominations:

1. "The MCoP has developed a successful, transparent framework for sustainable monitoring of restoration of Gulf of Mexico ecosystems."
2. "The Monitoring Community of Practice is being recognized for developing a private/public partnership that produced a web-based community platform that 1) delivered relevant information to diverse end users including recreational users, resource managers, and scientists, 2) establishing venues for constant dialog between users, monitoring programs, and tool developers, and 3) achieving standard minimum units for parameters of interest that are being updated and used from the local to the regional scale."
3. "GOMA MCoP appropriated Congressional funding to effectively and cost-efficiently map benthic habitats of the GoM and established a standardized long-term water quality monitoring data plan."
4. "Successful cross-jurisdictional coordination of consistent methodologies with a core set of minimum parameters."
5. "Maximize the efficiency and effectiveness of data collection activities Gulf-wide, across ALL data collectors. Data are used for status, trends, and predictions for resources meeting the requirements for multiple programs."
6. "The MCoP provides user-defined tools for decision-making. The tools created by the MCoP are widely utilized by multiple user groups (researchers and managers from multiple disciplines) bringing in the needs of the communities (fisheries and geography)."

MCoP Accomplishments: (Could be interpreted as potential short/medium/long-term goals)

- Provides unprecedented leveraging of resources to support effort
- Provides a non-regulatory forum
- Provides a venue for constant dialog
- Provides comparability and consistency of data
- Provides internal and external communication and framework
- Provides tools and data to inform decision-making, breaking barriers
- Empowers the people
- Empowers communities to support decisions (among different habitats or resource types)
- Establishes coordination and collaboration with all regional stakeholders
- Establishes effective communication of relevant monitoring information
- Establishes (clearly defined) common goals and standards
- Establishes consistency in mapping and data monitoring protocols
- Establishes a "google-esque" data sharing platform
- Establishes minimum operating standards that have buy-in by participating agencies
- Includes sample collection, QA/QC, and reporting (including common level of info. in metadata)
- Develops an inventory and consolidates programs across the Gulf
    - Including common level of information in metadata
- Develops a decision tree or flow chart for what metrics should be considered for a project
- Develops a decision support system that is used by multiple agencies across the GoM
- Develops a coordinated monitoring tool (like SeaSketch)
- Develops a dash board or report card at multiple scales including data aggregation tool
    - Including status, trends, and predictions
- Exemplifies best practices at multiple scales
- Balances users and researchers - Inclusive of a variety of end users
- Achieved standard minimum unit for parameters of interest that are being updated and is being used from the local to the regional scale

What are the greatest needs for water quality and habitat monitoring and mapping?

- Scalability of data
- Accessibility of data
- Comparability of data – assess feasibility of comparable data
- Availability of quality metadata
- Identification of gaps
- Identification of emerging risks
- Standardization
- Core parameters
- Coordination and distribution of effort
- Scale and spatial and temporal resolution of observations
- Sustainable resources and the ability to continue without current resources
- Connecting environmental and socioeconomic components and needs
- Connecting grassroots monitoring initiatives that are being effective at the watershed scale
- Establishing a mechanism for feedback between users and developers to ensure contact is relevant
- Seamless delivery of information to variety of end-users
- Common reporting standards
- Metrics or dashboards that accompany monitoring information

How were diverse needs met and how were organizations and projects coordinated, communicated, and leveraged?

- Reliable funding
- Mechanism for constant feedback from users
- Maintain relevant content
- Cross-program coordination and retention of knowledge
- Workshops and reports
- Smaller task driven meetings (with specialized themes)
- Persistent web-based resource repository and communication tool
- Best practices for scientific management
- Use system that already exists to create larger network (watersheds for organizing)
- User driven needs - what do you care about and how do you need that information delivered
- Ability to reach daily users of the resources

SHORT/MEDIUM/LONG-TERM GOALS OFFERED THROUGHOUT DAY:

Short

- Inform project/program funding
- Inform project/program coordination
- Input to CMAP and RESTORE Council
- Identify specific outcomes to show what we have contributed over the Phase 1 CMAP Phase – 3 year effort

Medium

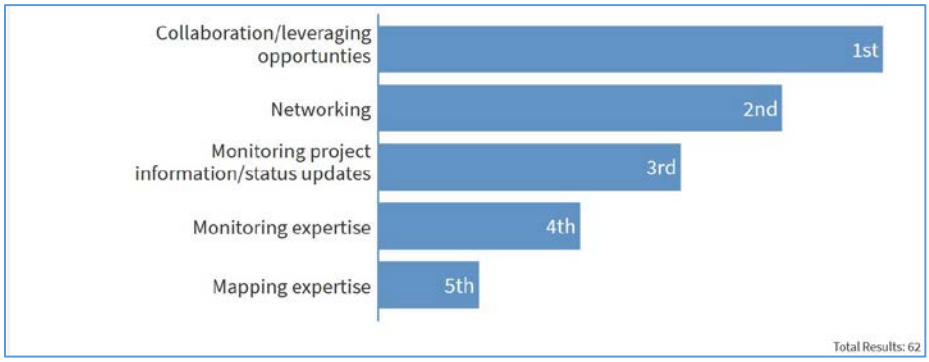
- Identify actual minimum data standards
- Knowledge of combined state activities

Long

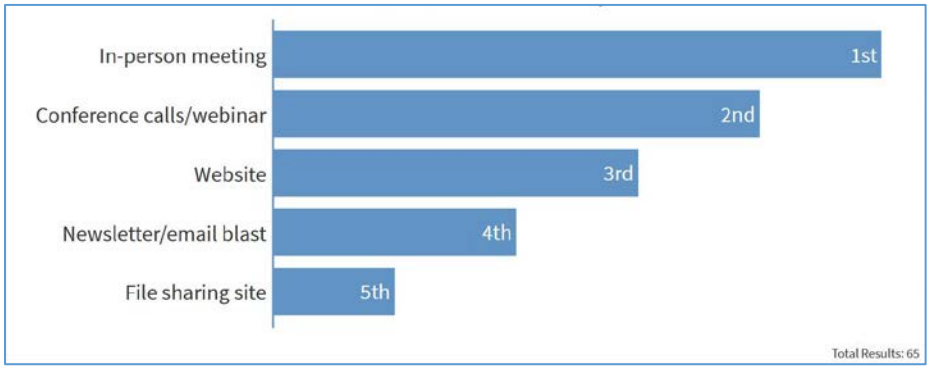
- (MCoP) used by managers to help make decisions
- Establish effective communication/ engagement program in GoM
- Transparency leading to future opportunities
- Full representation of the community and its objectives
- Input to the system (meetings, conversations, development of tools) should meet output from the system (informed management, multiple data sources)

MCoP PARTICIPANT ENGAGEMENT POLL

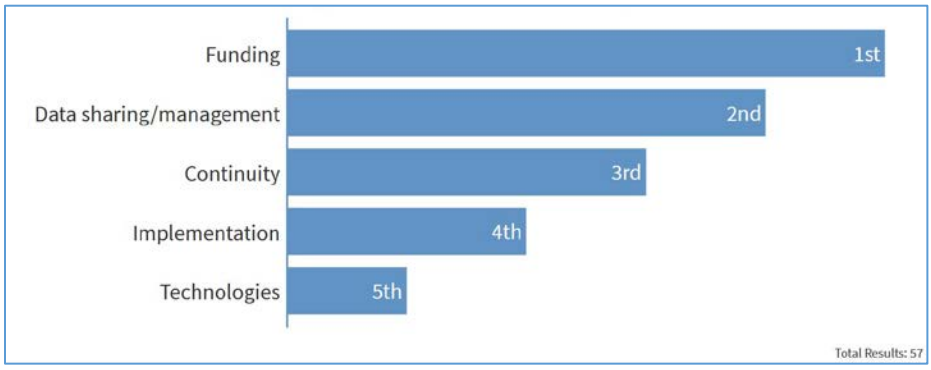
1. Please rank (greatest to least) what you are hoping to gain and/or provide through your participation in the MCoP.



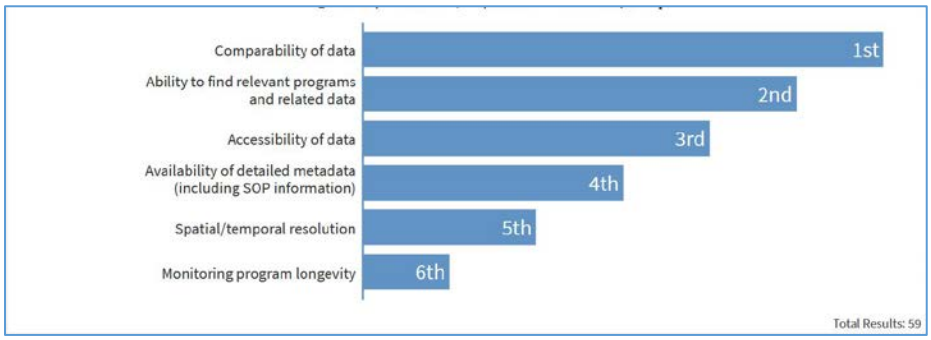
2. Please rank (most to least favorable) the following methods of communication/collaboration for the MCoP.



3. Please rank the following challenges (most to least) that you may encounter when planning, establishing, modifying, or maintaining a monitoring program.



4. Please rank the following challenges (most to least) that you may encounter when you are trying to discover, access, analyze, compare, or otherwise use data from existing monitoring programs.



5. Please rank the following cross-program (RESTORE Council, Trustee Council, State, etc.) information (most to lease important) to be communicated to the MCoP.

INVENTORY AND BASELINE ASSESSMENT MAPPING BREAKOUT SESSION:

- Great input from organizations and individuals to fill in "missing programs" from the Inventory and to begin a first population of Baseline Assessments conducted in each state.
- This information is currently being compiled and added to the database. A summary of information collected during this session will be circulated when available.

TASK 8 DISCUSSION

What do you want to see in an interface?

- Simple "google" search
- Polygon search – draw bounding box
- Hierarchical structure – i.e., nutrients and chlorophyll a
- Dependent on who the target audience is (i.e. ESRI-based practitioner is different from a high school user)
- Broad immediate categories with tabs to immediately narrow down (i.e. west Florida – physical, flora, etc.)
- Function to track queries, i.e. be able to report out to "crumb trail, "bucket," or "shopping cart"
- Viewing – see footprint of project rather than Hydrologic Unit Code (HUC), etc.
- HUC aggregated with subcategories along the side, watersheds but at local scale, maybe a revamp of EPA "How's my waterway."

- Will project tracker with monitoring data be included?
    - Looked at Project Tracker for initial development and used for planning monitoring and restoration
- GEMS – Harte Institute and The Nature Conservancy (TNC)
    - Use logic models to evaluate socioeconomic impacts to restoration projects – provide input for RESTORE and State members then roll-up to regional model (NSA-funded).

MONITORING PARAMETER GUIDELINES - PANEL DISCUSSION

- The Task is NOT to mandate collecting the same parameters in the same way.
- The Task IS to find the core level of parameters needed to provide consistency and comparability to be able to "scale-up" data and evaluate funded projects. Intended to provide bounds and flexibility to capture what is already done.
- First phase of CMAP is highlighting water quality and habitat. However, living marine systems, community resilience, and improved economy are additional core Council topics to consider in the future.
- Council looking to MCoP to develop recommendations for CMAWG
- Project is building a series of tools from planning to evaluation of outcomes.

CMAP can:

- Identify gaps
- Prioritize gaps to address
- Put dent in "white space" on maps, especially if we get program networking
- Show value, utility, and community and ecosystem benefits of what we are collecting at multiple levels (i.e., decision-making level, public level)

Questions:

1. If a group is not complying with the "definitions" then what?
   Answer: CMAP's responsibility is to provide recommendations on how to fill data gaps. Before investing, the Council wants to know where the program and project gaps exist.

2. Are programs and data sufficient to fit into analysis?
   Answer: It's not an issue of program quality for not including. Maybe the program isn't included initially, but it is recorded for possible future use.

3. **Comment:** "If Council is funding, it should be within reason to require certain standards, rather than issue just guidelines."

4. Since this program grew from DWH, are we building sampling guidelines for oil spills vs. water quality sampling? Is RESTORE looking for industry buy-in?
   Answer: It has always been a goal of the program to put us in a better place for analysis (compared to baseline) than before DWH. Maybe the MCoP, as a group, could decide this is the baseline need. RESTORE is less tied to nexus of oil spill than other restoration efforts.

5. How much will RESTORE pull from NRDA "MAMual?"
   Answer: Some is to be expected, since there is about a 75% overlap of membership between CMAWG and NRDA Cross-TIG.

6. What is RESTORE's game plan to get buy-in?
   Answer: Best method for buy-in is through networking and leveraging. Demonstration projects for collaboration and network-building with results used to leverage future buy-in. Encouraged by MCoP participant cross-state collaboration.

7. What is CMAP's realistic expectation for monitoring in the GoM?
   Answer: Three years to build the necessary framework (i.e. base minimum with sufficient guidance and comfort of using). Hopefully, "champions" will emerge. Primary need is shared vision and we have that. Now we have the support to move forward. "Sub-networks of expertise" will be needed to facilitate faster track to outcomes.

8. What about legacy data sets?
   Answer: There are ways to convert or translate legacy data or shift methodologies. This will be a very important discussion to have.

MCoP "ROADMAP" DISCUSSION

- Anticipate 4 more workshops Now – 2020. Hopefully, one offered in each state, either stand-alone or in coordination with a larger meeting.
- Will use DRAFT website as landing page for information. Additional information suggested by participants to include on webpage:
    - Slides from the GOMA MCoP meeting presentations
    - Internal process agenda to help standardize future and local MCoP meetings
    - Contact information, agencies, and expertise of MCoP meeting participants
- Missing or underrepresented groups to reach out to.
    - Industry (to increase technical knowledge)
        - environmental firms
        - monitoring firms and laboratories
        - technology companies
    - Local government
        - County
        - Water management agencies and districts
    - Federal government
        - USACE
        - US Air Force Bases
        - Pensacola Naval Air Station
        - US Navy
    - NGOs
        - Waterkeeper Alliance
        - Citizen scientists
        - Recreational fishery non-profits (to build conservation trust)
            - Trout and Bonefish Foundation
            - Coastal Conservation Association
    - Native Americans
    - Academia

Additional Flipchart Content:

1. What is the minimum amount of information to link to from Main Site?
2. How does information from subcommittees (of MCoP) feed up through the PAT and advisory boards?
   Answer: Gather recommendations from subcommittees, get recommendations to PAT, which will then feed back to the MCoP.
3. What is the minimum information needed (ex. For developing report cards for habitats)?
5. What is the connection between the MCoP and CMAWG?
6. Water Quality user groups – are you taking extra steps to develop metrics for parameters?
7. How, where, and within what structure do we discuss "return on investment? Do we cover this now with this effort?
   Answer: States and organizations think, "What does 15 years of effort look like?" Need to develop indicators of programs and of success.