Securing Resources for your Monitoring Program

Barbara Warren led the discussion on securing resources which focused on how to secure funding and equipment through various means. The conversation began with discussing the different opportunities and resources that participants knew about.

- Began with Therese Beaudoin, who went over DEP resources and provide 4 pages of information for participants.
- They covered external data submittals to DEP, volunteer resources, possible grant funding and supplemental environmental projects.
- Peter suggested that organizations have a list of potential projects and budget estimates to be ready if one becomes available in their watershed.
- Also, mentioned that DEP has a WQ summit in March each year.

Next participants were asked to speak about their programs and their needs.

- Sheri Caseau from the Martha's Vineyard Commission was interested in beginning a nutrient sampling program in the Great Ponds with volunteers but was nervous about starting it without sustained funding.
- Wanted to know about how to funnel people's energy and keep the program going with limited capacity.
- It was suggested she should contact all the groups working on the Vineyard to seek their help (EPA, shellfish warden, Woods Hole Sea Grant, etc.) and perhaps convening them.

- Katie Fiedman, CRWA water quality intern, discussed their desire to develop more biodiversity monitoring and increase cyanobacteria monitoring including airborne toxins.
- It was suggested that since it is a "crisis" concern for the public she ought to seek private donations.

- Susan Byrant, Cohasset Center for Coastal Studies, was interested in pulling all their data together for a State of the Harbor meeting and getting students to present to stakeholders.
- They have many monitoring student programs - eelgrass, tidal restrictions, mudflats, marsh and estuarine, water quality and microplastics.

- Josh Reistma, Cape Cod extension and Woods Hole Sea Grant, does not work with citizen monitoring and uses mainly YSI sondes but he does work with shellfish farmers with funding coming from NRCS under agriculture which led to a conversation about NRCS.

- Bryan Hogan works with EPA as a QAPP reviewer. He and Margherita Pryor discussed the hope that EPA would have funding again for equipment loans although it would have to be done through the state going forward.

The discussion also covered teaming up with universities and other non-profits, perhaps forming a consortium for a lending library or equipment loaning program.

- Since long term data is often the goal, it might be better to acquire the equipment.
- Barbara suggested looking into corporate giving programs because they seem to prefer providing funds for equipment rather than staff time.

MassBays Citizen Monitoring Coordinators' Summit: Breakout Notes

- The idea of using sidestarter (Katie - CRWA) developed from a NFS ciizen monitoring project.

Participants:

Therese Beaudoin	Bryan Hogan
Susan Bryant	Andy Hrycyna
Sheri Caseau	Peter Phippen
Dan Codiga	Margherita Pryor
Pam DiBona	Josh Reitsma
Katie Friedman	Barbara Warren

Partnering to Collect Data

Carole McCauley launched the discussion by having participants read statements underscoring the challenges of working with various sectors, and pointed out that collaboration among those representing nonprofits, government, academia, industry, and others requires an understanding of each other's challenges and motivations in taking part in a collaboration. One way to gain that understanding is through networking and discussions like this one.

Participants shared their motivations for collecting data, including to:

- Provide educational opportunities
- Promote stewardship
- Gather knowledge for subsequent advocacy/political pressure
- Improve environmental quality
- Prove/identify problems and adverse conditions
- Protect human health and the environment
- Enjoy being outside, in natural surroundings
- Answer compelling research questions
- Exploration
- Document ecosystem services/economics
- Inform policy/planning/management

Participants shared their motivations for collaborating with other sectors:

- Co-training for scientists and educators
- To support litigation:
    - Offers funding, regulator driver, a data-sharing team
    - Clearly identifies the problem
- Filling in gaps in capacity/staffing, interdisciplinary cross-training of young/early career folks
- Technological need, economic/workforce need
- Place-based as well as global appeal – technology (e.g., remote sensing) made widely available

MassBays Citizen Monitoring Coordinators' Summit: Breakout Notes

- Good PR/marketing
- Academics wanting to reach out to collaborate with real issues and organizations
- Education that is cross-discipline, preparing the next generation
- Win-win synergies

Finally, the group identified gaps and ways that MassBays can help:

- Standardization of procedures (e.g., QAPPs)
    - Training citizen scientists (e.g., certification)
    - Training citizen science facilitators
- Facilitate networks perpetually
- Carefully and regularly assess needs and interest
- Identify data gaps and advertise them
- Engage in processes to learn what is happening, what others are doing
- Advertise – people, projects, needs, tools
- Opportunities for face-to-face networking
- Listserv/communications among citizen scientists

Participants:

Kathryn Baltes	Kim Groff
Aimee Bonanno	Colleen Hitchcock
Elizabeth Cianciola	Rob Maxfield
Nora Conlon	Carole McCauley
Harlan Doliner	Jo Ann Muramoto
Bryan Dore	Adrienne Sharigian
Richard Friesner	

Sharing Data – Opportunities for Collaboration

Sara Grady began the conversation on sharing data and the opportunities for collaboration by teasing out who is looking at the data and what the message citizen monitoring groups are trying to convey with their data.

- Audience is members of nonprofits
- Data that can be understood by citizens
- Data for scientists
- How to present the data, social marketing – ask people what they want to know and what is important to them
    - Lawn watering – use less water
    - Scientific validity vs. what we want to see
    - Survey – who is coming to website, what are they looking for
    - Talk to your audience

MassBays Citizen Monitoring Coordinators' Summit: Breakout Notes

The group discussed ways that data can be presented in a useful and interesting way

- Bay Health Index - For many years, physical signs with up/down arrows
    - Usually qualitative
    - Most recent data looked like a "V"
    - Slope significant or insignificant
- Signs at all sampling sites with QR codes
- Real-time data is interesting to public

Participants felt that current practices could be more transparent about what happens to their data and who is looking at it.

- DMF does a poor job of sharing data except shellfish closures and quotas
- Make aquatic data in real time as ubiquitous as weather data
- Volunteers and YSI sondes in Buzzards Bay, DEP discounted all volunteer data
- Older data is of interest to schools/universities
- CUAHSI
    - citizen science group called ALLARM
    - create database
    - impact from natural resource extraction
- Data issues
    - Put out data with caveats on it
    - Buzzards Bay Coalition – in new database, data gets coded, flagged data doesn't get exported to avoid use
- Extra data that gets collected not really needed (i.e air temp with herring counts)
- Mapping
    - ArcGISOnline (free!)
    - GIS (static)
    - CUAHSI uses Google Maps - data.cuahsi.org
- Sharing with large data warehouses
    - Storet, MassDEP, NERACOOS
    - Issues with entry
    - Where does it go?
    - All sort of terrible

The group concluded by brainstorming ways that MassBays can help

- Putting data together going forward
- MassBays ID a single indicator, all collect that single thing?
- Develop BMPs for data collection and management

MassBays Citizen Monitoring Coordinators' Summit: Breakout Notes

Participants:

Brad Chase
Ryan O'Donnell
Sara Grady
Chris Hirsch
Rachel Jakuba
Cristina Kennedy

Bill Kiley
Jon Pollak
Meghan Rauber
John Rowse
Prassede Vella
Ben Wetherill