

2. Baykeeping: Advocacy for Clean Water and Climate Resiliency

a. Introduction to Baykeeping

Waterkeepers speak for our waters. Our Casco Baykeeper advocates for Casco Bay. She uses our data (and the data of outside colleagues) to address problems that plague the health of Casco Bay. This necessitates working at a local, state, and federal level for incremental, positive change. For example, permits issued under the Clean Water Act (CWA) must be renewed every 5 years. The CWA contemplates that permit terms evolve to address new and changing water quality conditions. Therefore, every five years, our Casco Baykeeper can advocate for more stringent terms and the use of newer technologies to reduce pollution.

In FY23, we augmented advocacy by hiring our first Science and Advocacy Associate (Associate). The Associate literally helps translate the science into action. Under the guidance of our Staff Scientist, she collects data, ensures quality analysis, and translates data into graphs and other optics that can be analyzed to support advocacy. She also uses her legal background and the advice and direction of the Casco Baykeeper to research and draft comments and other documents and has begun testifying on behalf of Friends of Casco Bay. We will continue to augment Baykeeping by periodically selecting Maine School of Law “externs” skilled enough to assist in our efforts. We will set forth a training calendar for our Associate that includes targeted science and legal education and in house training to continue to advance her skill. Our Staff Scientist, Associate, new Community Organizer and Volunteer Coordinator, and Casco Baykeeper function together as our Programs Team, and meet and think that way. We look forward to incorporating our Sara Freshley, who was hired as our Community Organizer and Volunteer Coordinator, into this team.

We strengthen Baykeeping by engaging community members in caring for the Bay, telling Baykeeping stories through communications, and programming such as field trips and webinars. Our Water Reporter Program advances and deepens our ability to track changes and identify problems. More and more our emails and programs engage our members in new and creative ways. We continue to evolve our understanding of and act to ensure Environmental Justice, Diversity, Equity, and Inclusion (EJDEI) commensurate with our mission.

Our top issues of concern remain the causes and consequences of climate change, unsustainable land-use practices which alter hydrology and increase stormwater pollution, and adequate regulation of point source discharges through Clean Water Act (CWA) permits.

The below work plan summarizes the major accomplishments of FY23, identifies major Baykeeping goals for FY24, and other issues of concern. A typical Baykeeping week is always atypical as we pivot to respond to public concerns or emerging issues to the extent possible while fulfilling the goals set forth in our work plan.

b. Highlights from last year

In order to understand where we are going, it benefits to know where we are coming from. Last year witnessed pivotal evolutions in Baykeeping as we broadened our reach into the watershed and expanded the communities and people with whom we work. Here is an overview of advocacy accomplishments this past year:

Climate Change work last year: Climate change continued to be our major focus. Our advocacy has been weighted to addressing the consequences of climate change, and supporting actions to reduce the causes of climate change. With the prospect of offshore wind development

in the Gulf of Maine, we are spending more time on supporting responsible development of clean energy. This means we are more directly acting to reduce the causes of climate change.

We met all goals identified in last year's plan except participating in stakeholder processes to revise Maine's Chapter 500 stormwater rules. We did not participate in that effort because it did not occur. Instead we regularly communicated with DEP (Department of Environmental Protection) to encourage them to begin the process and began gathering resources and trying to identify technical assistance to help us during the process. We have been told the revisions will start in April 2023, but have been waiting for a start date since September 2022. FY23 Highlights include:

- Maine Ocean Climate Collaborative (MOCC): We started MOCC to continue the work we spear-headed through the Maine Ocean and Coastal Acidification (MOCA) partnership, a wholly voluntary network of scientists and policy-makers working together to advance our understanding of ocean acidification and act to address it. That partnership sunset with the advent of the Maine Climate Council. We served on the Coastal and Marine Working Group (CMWG) of the Council. That group recommended that a coast-wide network of public and private scientists continue to collaborate to build upon the MOCA foundation. Our Staff Scientist and Baykeeper started the MOCC for this purpose, and because we were engaged in a series of separate conversations about OA research and policy that would benefit from a more unified forum. MOCC identified supply chain and equipment challenges (including discontinued sensors) as a significant barrier to high quality monitoring. Friends of Casco Bay, in collaboration with two other organizations in MOCC, received a significant 2-year grant to test new equipment and ascertain if we can adopt coast-wide uniform methodology and protocols to monitor ocean acidification. Through facilitating this network, Friends of Casco Bay remains a state leader in addressing ocean acidification.
- Offshore Wind (OSW): We advanced our knowledge and advocacy in lockstep with many of our state and regional partners. We served on the Environment and Wildlife Working Group of the Offshore Wind Road Map and wrote a series of comments designed to prioritize environmentally-considerate siting of OSW farms to avoid harm to habitat and species. We also joined a network of other nonprofits to help shape state legislation that sets goals for the State to acquire energy from OSW. This work will continue in FY24.
- Regional Resilience Planning: The Greater Portland Council of Governments (GPCOG) received a grant to help coastal Casco Bay communities be resilient to some impacts of climate change through regional plans that identify and prioritize actions that can be taken to address coastal flooding and sea level rise. We supported the grant proposal and now sit on the steering committee overseeing the project. We are providing technical support and data and will continue to do so in FY24.
- Coastal and Marine Working Group: We continue to serve on this working group of the Maine Climate Council, although our tenure is coming to an end and we are awaiting news of whether we will be reappointed. This work may continue in FY24, depending on state priorities for reappointments to this group.
- Other: We provided some short-term assistance to municipalities grappling with climate change. We responded to complaints of algal blooms and clam die offs in Maquoit Bay secondary to high near shore temperatures. We received notable media coverage related to this issue.

Reducing pollution through the Clean Water Act and state laws and regulations last year:

This work continued to be the bread and butter of Baykeeping as we were often the only

advocates working on these issues. Last year, we celebrated the 50th Anniversary of the Clean Water Act (CWA). Prior to the CWA, the lower Presumpscot was known as the dirtiest little river segment, industries dumped toxins directly into Portland Harbor, and coastal Casco Bay was clogged with sewage. The CWA established a permit program that basically forbid point source (piped) discharges of pollutants to federal waters unless a person/business first obtained a permit that set limits on the amount of pollution that could be discharged and dictated how the effluent must be treated before discharge. These permits, known in Maine as MEPDES permits, renew every 5 years. That means, every 5 years, we can comment on draft renewal permits to address new pollutants or lingering problems. We track all permits up for renewal, review drafts and compare them to our data, and comment on those permits that must be strengthened.

The CWA also requires states to set a water quality classification system that describes the conditions that must be met for each class of water and that assigns water segments to a class. For example, the stem of the Presumpscot River from downtown Westbrook to head of tide is a Class C water. Class B waters must be of such quality that they are suitable for the designated uses of drinking water supply; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited. The habitat must be characterized as unimpaired. We compare waters to their classifications and advocate to upgrade waters to the next highest class when possible and to ensure that waters within each class are not degraded.

In addition, the State of Maine has passed laws to regulate stormwater and control other sources of water pollution. These laws are implemented through rules developed by Maine's Department of Environment Protection (DEP). We advocate for stronger rules and for rules that consider the impacts of climate change.

With that backdrop, in FY23 we celebrated the 50th Anniversary of the CWA through a series of events. We won our first appeal of the Municipal Separate Storm Sewer System (MS4) permit and filed a second appeal. We requested but did not push for updating the Maine Construction General Permit (MCGP). Other actions must occur first.

Here are highlights from our work to reduce pollution last year:

- MEPDES permits: We commented on the Great Diamond Overboard Discharge and Freeport Wastewater Facility discharge permits. In both instances, we questioned DEP's analysis of nitrogen data and its failure to set nitrogen testing or limits. EPA now also has questioned DEP's analysis and has asked DEP for justification to support its methodology. We will continue to track this issue and press for analysis that considers near field impacts and actual data. Both permits are pending.
- Nitrogen Criteria: We continued to participate in a stakeholder process to develop numeric nitrogen criteria. We took DEP on a boat trip to discuss the proposed criteria which we believe are not protective enough. The process has been stayed, and we understand that EPA also has questioned DEP's proposed criteria.
- DEP is long overdue in issuing CWA permit renewals. We held meetings about the Long Creek General Permit and other overdue permits, but no drafts have been issued for public comment. There are two potential issues: (1) DEP is understaffed in its permitting division; and, (2) by not issuing permits DEP does not need to impose more stringent permit conditions. We will evaluate how to handle this moving forward.
- We filed our second appeal of the MS4 permit, when the State approved weak and incomplete model LID ordinances submitted by MS4 communities to comply with the modified permit.

- We advocated for an upgrade of the lower stem of the Presumpscot. When it became clear that the effort would fail, we pressed for and secured an agreement to collaboratively monitor the Class C lower stem of the Presumpscot, from Saccarrapa Falls in downtown Westbrook to head of tide. We facilitated an *ad hoc* coalition to evaluate the data against Class B water quality criteria and to determine if the segment could be upgraded. We incorporated community into this project through a field trip with our colleagues, Friends of the Presumpscot River. DEP will monitor the river again in 2023. Their focus will be on determining the ability of the river to provide habitat as defined in Maine's water quality standards. Through this process, it has become clear that DEP now has identified other issues that would preclude an upgrade. The Presumpscot monitoring project revealed a pressing issue: How should continuous monitoring data be interpreted and applied for purposes of determining whether water bodies meet water quality classifications? We set a series of meetings with key stakeholders, DEP and the EPA to explore and address this question. The resolution of this issue will impact all tributaries in our watershed, wherever continuous monitoring is conducted. We will continue this work in FY24.
- Rivers Group: We worked with the Casco Bay Estuary Partnership to convene a select group of people/organizations working to improve and protect the health of our watershed. The goal of this nascent group is to identify issues we could collaboratively work on to better protect water quality. We have identified a co-leadership structure between CBEP and us to facilitate this effort and will evolve this group in FY24.

Nonpoint Source (NPS) Priorities: Stormwater that flows through pipes, such as MS4 systems, is point source pollution and can be regulated under the CWA. That is why advancing the MS4 permit is so important. All stormwater that sheets off our landscapes directly into waterways is known as nonpoint source or NPS pollution. NPS pollution is not regulated by the CWA. Instead the CWA provides grants to study the sources and create management plans to reduce NPS pollution. Waterbodies listed on the NPS Priority List are given priority for such funding.

We met our FY23 NPS goals. In addition, we supported the fertilizer ordinance adopted by Portland and spoke in favor of Brunswick adopting a fertilizer ordinance. We provided some technical assistance to the committee working on this.

Legislative Agenda: We must have sound laws to improve and protect our waters. The most efficient and best way to accomplish this is to ensure we enact sound laws and defeat laws that do not protect our watershed. Last year, we continued to track federal legislation through several sources that compile relevant bills and regulatory actions into newsletters. We also occasionally review a database that the WKA created regarding federal actions. Based on these sources, we take periodic, judicious actions to either file short comments on behalf of Casco Bay or to sign on to letters. At a State level, we continued to participate in the Environmental Priorities Coalition (EPC) organized by Maine Conservation Voters. The EPC provides tremendous benefits to our regional organization. We receive once a week briefings that consolidate information regarding bills of interest to Casco Bay. We support a priority agenda that we select with other members. We attend trainings and briefings for EPC members. Finally, we use the connections made through the EPC to collaboratively advance our mission. In addition, we review the list of bills submitted each legislative session and create a spreadsheet of bills related to our mission that we track and sometimes act on.

In FY23, we supported a legislative agenda to address climate change, improve and protect water quality (especially of the Presumpscot River), and ensure environmental justice.

c. FY24: Baykeeping Goals for This Year

The Program Team: Our Baykeeper, Staff Scientist, Science and Policy Associate, and new Community Organizer and Volunteer Coordinator will work as the program team. We will continue to develop and set training goals for the Associate and look forward to working with our new Community Organizer. As with our science program, in FY24, Baykeeping will focus on high quality work within our current areas of concern. We will continue to be responsive to public concerns. We will assist the public as we can and assess whether new issues brought to our attention need our focus relative to our mission. As we have capacity, we will work to address emerging issues that “come over the transom.”

Major Advocacy Issues in FY24:

The major issues we are working on this year include **climate change, reducing pollution through existing permits and regulations, and reducing nonpoint source pollution**. We will assess legislative bills as well as emerging issues.

Climate Change: Climate change will remain our major focus. Top climate change priorities for this year will include:

- Coordinating the MOCC network as it implements a pilot project (which we received a significant grant for) to test new OA monitoring equipment and plan public programming to report the results.
- On the mitigation front, we support responsible development of offshore wind as a green power source. We are doing this at the federal level (commenting on federal permits, research array), state level (implementation of the Offshore Roadmap and legislation on energy procurement), and at the local level (working with Yarmouth citizens on transitioning Wyman Station)
- Also on the mitigation front, we are working through the Environmental Priorities Coalition to improve our transportation infrastructure at the state and regional level. In Maine, transportation is the number one source of carbon dioxide.
- Continue serving on CBEP management and executive committees to effectively work with CBEP, as it convenes and funds collaborative work to reduce the consequences of climate change throughout our watershed.
- Continue to serve on the Coastal and Marine working group (CMWG) of the Maine Climate Council. (We still have a seat on the CMWG and are waiting to learn if we will be reappointed) to implement Maine’s Climate Action Plan.
- Serving on the Advisory Council of the GPCOG-led community resilience planning process to help coastal Casco Bay communities plan and act to address climate change.
- Selectively working at a municipal level to provide technical support for work that helps improve and protect water quality in the lower watershed. Right now, this work includes working with the Town of Brunswick.
- Continue facilitating and evolving the Rivers group: this is a nascent effort. Our goals of organizing the Rivers group are to better coordinate the shared missions of reducing pollution in our watershed and to expand our partnerships for clean water. We hope to have this group prioritize and coordinate shared work, grow the group, have it “name” itself, and have its self-identify as members.
- Participating in various other local collaborative efforts to reduce and address the consequences of climate change.

- Supporting legislation that improves water quality, land use regulations, and planning of our coastal and marine resources (we are assessing bills right now).
- Continue work on how to interpret continuous monitoring data as DEP updates its Standard Operating Procedures and we and they increasingly rely upon continuous monitoring.

Reducing Pollution and Protecting Water Quality: MEPDES permits, triennial reviews, nitrogen criteria: This continues to be our forte and one of the best means by which we improve and protect water quality. We continue to focus our comments on nitrogen removal, biological oxygen demand, and other pollutants of concern.

Top priorities for this year include:

- 2nd MS4 Appeal: We have appealed DEP's approval of the draft LID ordinances submitted by municipalities under the Permit Modification.
- Participating in stakeholder processes to revise Chapter 500 stormwater rules and other coastal land use regulations. DEP has not started this yet, but indicates it will this year.
- DEP is behind in issuing permit renewals. We will continue to comment when opportunities arise and at some point, will consider what we might do about the backlog of permits which includes: the East End wastewater treatment plant permit, the South Portland permit, the Freeport permit, the Great Diamond OBD permit, the Long Creek Permit, and the Maine Construction general permit. We expect two major permits on the Presumpscot to be renewed this year too: the Westbrook Waste Water Treatment Facility and the Sappi/SD Warren permit.
- Continuing to comment on and participate in stakeholder processes to adopt Nitrogen criteria.

Nonpoint Source (NPS) Pollution: This continues to be a difficult issue to address due to the lack of regulatory hooks. Revision of Chapter 500 stormwater rules and development of stringent municipal LID ordinances are two of the best ways we can address NPS. In addition, we will:

- Continue to encourage and assist municipal adoption of fertilizer ordinances.
- Continue to work with Water Reporters to track seasonal nuisance algal blooms and use the observational data to support our advocacy.
- Explore developing public education about issues such as the over-application of road salts which runoff into our tributaries and make them too salty to support freshwater life.
- We will continue to track and comment on the NPS priority list.

Legislative Agenda: Our focus will be on legislation to responsibly develop OSW, require consideration of climate change in land use management and regulation, and environmental justice. Legislatively, we continue to work mostly at a state level, with occasional support for federal legislation or budgets that improve and protect our watershed, and some assistance at a municipal level, as our limited capacity permits. We will continue to employ the methodologies identified in the FY23 section on Legislative Agenda.

Emerging Issues and Other Issues of Concern: Below are issues we works on as time permits. In addition, most weeks our program staff also responds to numerous requests and pollution complaints from the public. We also present and represent our organization in many public forums.

- PFAS: We working on an internal memorandum that summarizes the science and policy in effect to date in our watershed and will assess what work lies ahead on this issue (see Science above).
- Cruise Ships: We have an extern preparing an overarching memo on cruise ships that visit Portland Harbor that will provide an overview of regulations and known pollution control measures.
- Oil Spill Preparedness: Our Baykeeper and Associate will continue to participate in the ME/NH Area Committee and our Staff Writer will be prepared to fly our drone in the event of a spill.
- Aquaculture Siting: This issue continues to be contentious, with more long term, large lease applications in Casco Bay. Several areas of Casco Bay are becoming noticeably congested with lease sites. We engage in conversations about this topic at a municipal and state level, but do not lead advocacy in this area.
- Marine Debris and Microplastics: This is an area that we should prioritize more but we need to develop policy and program hooks. We continue to address this issue through beach cleanups and storm drain stenciling. We also support legislation to reduce single use and other plastics.
- Portland Harbor Dredge: The Portland Harbor Commission has not received federal grant funding for the dredge, despite three attempts. We wrote letters of support each time, and helped create a video to support the 4th attempt. The 4th attempt is pending.

d. Mobile Pumpout Service

Our Mobile Pumpout Service plays multiple and essential roles – the direct reduction of sewage discharges into the Bay, a gateway program to introducing our work to people who use the Bay, the education of boaters through the program’s ambassadorial function, and liaison between DEP and those marinas whose pumpout facilities are in out-of-service mode.

Our goal is work with boaters to reduce the negative impact boating can have on the health of the Bay. Last year, we kept more than 11,000 gallons out of the Bay and engaged more than 150 boaters. The effectiveness of this program hinges in large part on the boating and mechanical skills, as well as the character of the person who fills the Pumpout Coordinator position. We are excited that Pumpout Coordinator Chris Gilday will be coming back for his second season on our team. We will build off of our Healthy Habits messaging, began in FY22, to recruit more boaters to use our service and to join us as members, volunteers, and event attendees.

Thanks to our work with the state’s Pumpout Program, Casco Bay was awarded the first No Discharge Area status in Maine in 2006. Since then, many other regions along the coast of Maine have attained No Discharge Area status. In order to attain this, regions have to have a requisite number of pumpout stations, and, in order to meet the spirit of the law, as well as the letter, these stations need to be operational and accessible at all tides. We will continue to notify DEP when stations are nonoperational.

The Pumpout Program is 90% funded by a DEP administered federal grant program. When grant support from Portland Water District, the City of South Portland, and pumpout fees are accounted for, the program more than pays for itself.

3. Community Engagement