



**Operating Plan  
for  
Friends of Casco Bay**

**FY14**

April 1, 2013 – March 31, 2014

*for internal use only*

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## I. Introduction

This document contains Friends of Casco Bay's **Strategic Plan**, this year's **Operating Plan**, a summary of **FY14 budget highlights**, and a section about **metrics** that are being developed to measure our progress. The **Table of Contents** will help you navigate this document.

The **Strategic Plan 2013-2017** identifies 6 strategic goals, a vision for the future, 3 areas of our work seen as particularly strategic in advancing our mission for a healthier Bay, and a series of measurements that we can use or develop to help identify and monitor our progress. The Strategic Plan is included for informational purposes only.

The **Operating Plan** contains detailed narrative generated by staff teams, laying out specifically the activities we will engage in this year, April 1, 2013 to March 31, 2014, to make progress on the goals outlined in the Strategic Plan. The Operating Plan is in 4 sections: Program, Development, Technology and Capital Assets, and Administration. The contents of this plan are open for discussion.

The next section is a summary of the FY14 Budget highlights. **The FY14 Budget and a Supplemental Schedule to support it are separate documents and have been sent to you along with this plan.** The FY14 Budget is built to support this plan.

The last section of this document addresses some of the **metric measurements** we are using or will be developing and tracking. We will likely roll out the drafts of groups of measurements to present at committee and board meetings as appropriate throughout the year.

Our mission is to improve and protect the environmental health of the Bay and is supported by efforts in science, education, and advocacy – the three legs of the stool, so to speak. We are privileged to have, at our core and in our midst, one of the seven founding members of Waterkeeper Alliance, the Casco Baykeeper, and while he acts as the eyes, ears, and voice for our waterbody, Casco Bay, it takes a community to take care of a Bay, and an organization to lead that charge. It is a privilege to live in an area with such a relatively clean waterbody, and as the Baykeeper says, “With every privilege comes a responsibility.”

The value of what we offer to the community is in our continuing programmatic work, making that work and its implications understandable and relevant to people in our community and our state, empowering members of our community to engage in activities that have a positive impact on the health of the Bay, strengthening our working relationships around the Bay and across the state, encouraging policy changes that make a difference in the health of the Bay, and running our organization responsibly. We strive to be an organization that is both leading and learning.

In summary, in FY14, we will be tackling our goals in the following ways:

1. Advocating for standards and for behaviors that protect the health of the Bay, particularly in the areas of nitrogen pollution, coastal acidification, oil spill preparedness, and dredge disposal site selection.
2. Communicating science through credible data collection and accessible presentations to educate our community, using various forms of outreach: presentations, events, meetings, print, special reports, web postings, e blasts, television, radio, and press conferences.
3. Building and maintaining collaborations and partnerships that advance our mission – with the Board and volunteers, colleagues and scientists, interns, members and donors, policy makers, other water groups, Bay “users,” and other members of the public.
4. Building and maintaining our ability and operating capacity to realize our operating plan, while responding to issues, threats, requests, and opportunities, as they arise, effectively and timely.
5. Growing funding resources to better deliver our mission.

While the Strategic Plan is elegant in its brevity – 3 pages, the Operating Plan is just the opposite – 26 pages; the devil, as they say, is in the details. The beauty of this detail for us at the Staff and Board levels is that we can all see what we are intending to do, and we can all be on the same page in our messaging. This also helps coordinate our use of resources, and it makes the fundraising process markedly more straightforward.

Many thanks to the Staff for your contributions – and to all of you readers for your dedication to considering the contents of this plan and the budget that will follow.

Respectfully submitted,

Cathy L Ramsdell, CPA, CGMA  
Executive Director  
Friends of Casco Bay

## **II. Strategic Plan 2013-2017**

**[Presented here for informational purposes only]**

### **Mission:**

Improve and protect the environmental health of Casco Bay

### **Strategic Goals**

1. Advocate for standards and controls on nitrogen and acidification
2. Advance the visibility, branding, educational outreach, political involvement, and recognition of our mission
3. Apply technology and scientific methods; build credibility; communicate and educate
4. Pursue collaborations and partnerships that advance our mission
5. Build capacity in Baykeeping and maintain capacity in organization and infrastructure
6. Grow funding consistent with our resources

### **A Vision of Friends of Casco Bay in 2017**

The five-year Strategic Plan for Friends of Casco Bay directs us to monitor the environmental health of the Bay in a science-based, credible, convincing, and transparent manner. We engage our community to help us collect data, understand and communicate our findings, address pollution issues, ensure laws are enforced, and advocate for new protections the Bay needs.

In 2017, Friends of Casco Bay is widely recognized and respected for protecting the well-being of Casco Bay through our programs, environmental leadership, community presence, and sound scientific data. We are known as the “Go To” organization for the preservation and improvement of the Bay. We are collaborative in our stewardship and engage our members and our community with honesty, integrity, and concern for the welfare of the entire resource. We are known as a great place to work, to volunteer, and to donate.

In 2017, Casco Bay is cleaner, healthier and more productive, and is valued as the centerpiece of the region. Friends of Casco Bay has leveraged scientific evidence and effective communications to win new protections from nitrogen and acidification. Our science is respected for being grounded in sound principles, our interpretations and application of data are transparent and clearly articulated to the public. We evaluate and deploy data collection systems and techniques around the Bay. We are on the Bay and in the community a substantial portion of every week.

Communities and citizens who enjoy the Bay are aware of the importance of our coastal waters and are engaged in conservation and protection through Friends of Casco Bay. Our ambassador program augments observations of conditions in the Bay, data collection, and communication about what we each can do that will help protect the health of the Bay. Area schools use our Casco Bay Curriculum with its advanced learning opportunities, to educate the next generation of leaders and *friends* of the Bay. Our public speaking and educational programs create high public awareness of our work. We evaluate and deploy appropriate technological media to further engage and educate the public (social media, mobile applications, new developments). Our volunteers and members continue to grow in numbers.

Our organization has strong and stable leadership. The organization is led by the Executive Director, in close partnership with the Casco BAYKEEPER®. The Executive Director and the Board of Directors keep programs on point and on top of current and emerging issues, and conduct periodic review and evaluation of our advocacy focus, standards of scientific quality and integrity,

and collaborative relationships. We have a dynamic Casco Baykeeper who serves as lead scientist and as chief advocate and spokesperson for the Bay. Staff is active and engaged, respected, and competitively compensated. We have explored and achieved appropriate capacity in staff and budget to address legal capacity and promotion of our work. We have accomplished an appropriate increase in activity and presence in the eastern end of Casco Bay, and we have considered activities outside of the Bay. We maintain a commitment to developing and maintaining deep local knowledge and local connections.

Our organization is financially sound, appropriately housed, and technologically up-to-date. Our boat fleet is fully functional. Our data collection systems have kept pace with technological developments. Our database management systems are current with our needs and our mission. Our website is interactive with frequent postings of observations from our community.

### **Our Areas of Work from 2013 to 2017**

Our vision for the organization for the next five years is further refined by focus on three strategic areas of work: Baykeeping, Community, and the Organization. The agendas for these areas cross connect and intersect dynamically. The descriptions below focus on the developmental edge for Friends of Casco Bay. It is imperative that we balance staffing, budget, time, and energy, to maintain mission focus and avoid mission creep.

Our **Baykeeping** work will include special attention to the science of nitrogen pollution and coastal acidification and will advocate for better standards and protection from these threats, as well as other impacts driven by climate change and direct discharges. Baykeeping will harness emerging technologies to communicate, engage, and educate our community. We will show more presence on the water and on shore to advance our visibility. Some ideas we will explore include: discouraging the use of nitrogen fertilizers (outlawing ornamental use), making our volunteers more ambassadorial, developing mobile apps that feature Casco Bay's beauty and vulnerabilities, maintaining greater visibility on the water.

Our **Community** work will deliver the Baykeeper messages, seek broader visibility and recognition of our work, and increase the engagement of the public as members, board members, volunteers, friends, and advocates for the Bay. Our Community work will expand and build our communications base, our political outreach capability, our database, and our financial base. We will engage our membership, the public at large, the municipalities of the watershed, and the state and federal agencies, as appropriate, to make these connections. We will be alert to opportunities for collaborative work with these constituencies, as well as academic institutions, other nonprofits, and citizens. We will seek and consider partnering opportunities for efficient and effective use of resources. We will enthusiastically use technology to aid and enhance these efforts, explore messaging and signage that make Casco Bay a more visible and appreciated resource in the area, and explore expanding educational opportunities with area schools.

Our **Organization** will maintain adequate staff capacity, including succession readiness, to carry on our work with reasonable ability to weather short-term disruptions and changes. The Board of Directors will maintain a cross section of representation of the community in its membership, with the skill sets and insights needed to ground Friends of Casco Bay with the community. We will strive to build our political and communications capacity to achieve recognition of and respect for our concerns for the Bay, our visibility and brand as "Friends on the Watch" and as the "Go To" protector of the health of the Bay. We will maintain our infrastructure at pace with our needs. Projects we will advance include: a staffing analysis to determine how best to build capacity, explorations of how best to enact data processing and communications advancements, a study of the impact of economic changes we are likely to encounter, and a plan for addressing occupancy

issues. We will maintain significant competence in science, technological, social, and operational skill areas.

### **Measurements and baselines**

An essential aspect of any plan objective is that it be specific, measureable, achievable, relevant, and time bound. The following metrics have been identified to be developed and tracked to help monitor our strategic goals over the next 5 years. The staff will apply these to the annual operating plan, reporting baseline measurements and then progress.

Among the data that will be assessed or developed, and monitored and applied are:

- Baseline tracking for nitrogen and acidification
- Tracking application of recognized technologies and emerging technologies
- Baykeeping communications, engagements, programs, recognitions, and awards
- Days Baykeeping on water, days Baykeeping from shore
- Scientific data collection: data parameters collected (water quality data, soil, sediments, stormwater, etc.), number of water quality data points collected by staff and by volunteers, number of sites sampled, number of days of sampling on water and on shore.
- A compilation of data to reflect our efforts to achieve visibility
- Develop a means to inquire of the community about our visibility and impact
- Numerical data: about donors, volunteers, staff, board, grants, pump out, contacts, hits, events
- Baseline our financial base (revenues, expenses, contributions, grants, average contribution per gift, and other relevant ratios)
- Track communication effect by type and result
- Track our political action activity and effect
- Track current alliances, collaborations, and partnerships

Closing summation:

We plan to remain programmatically effective, financially strong, and growing in visibility and perceived value to the community by doing the following: Stick to our mission. Stay science-based in advocacy and policy. Build knowledge, build relationships, communicate our brand, educate, and maintain our credibility. Harness and apply technology. Use the “work-with” approach and develop alternative approaches when this is ineffective. Invest in the human capital of the organization and assure orderly succession. Build financial strength. Increase public awareness of impacts to the Bay and best practices to improve and protect the health of the Bay.

### III. FY14 Operating Plan

For the fiscal year April 1, 2013 to March 31, 2014

#### A. Programs

The employees of Friends of Casco Bay meet together regularly, throughout the year, to discuss our work, track progress, and assess potential opportunities. The sharing of expertise, experience, and inspiration are essential to setting direction together, whether staying the course in certain areas, shifting our focus, or deciding to launch new initiatives.

Themed meetings, sometimes involving collaborative partners from outside the organization, range from reviewing aspects of our water quality monitoring program and other scientific work, to content messaging, advocacy positioning, education and outreach efforts, event planning, scheduling publications, press releases, and web activity. The shared sense of rationale and understanding about why we are engaging in certain activities (and not others) is essential for outreach, for fundraising purposes, and for organizational harmony; we must continue to effectively and compellingly tell the story of what we are doing to improve and protect the Bay, the stories of why this work matters.

#### 1. Water Quality Monitoring

This will be the 22<sup>nd</sup> year of collecting data on the water quality of Casco Bay. We maintain and continue to add to one of the largest and most important long-term data sets on marine water quality in New England.

- a. Our volunteer citizen scientists are trained to collect data in surface water, whereas staff profiles, described below, focus on collecting data down through the water column. The **Citizen Stewards Monitoring Program** will continue, on 10 sampling Saturdays between April and October, with data collection twice each day, in the morning and afternoon (at 7 a.m. and 3 p.m.) on those sampling dates, resulting in 20 sampling events. During our fall water quality program review meetings in 2010 and again in the fall of 2012, staff considered having volunteers revert to sampling once per day, but analysis of the data collected in the morning and afternoon over 7 sampling seasons, has revealed significant diurnal variability in water quality; sampling twice per day will continue for the 2013 season (FY14). Staff agreed we will likely this sampling regime for the next five years, then review the data to again assess whether the program needs modification.
- b. This year we are continuing our **Citizen Stewards (Volunteer) Water Quality Monitoring Program**.
  - (1) **Data** to be collected: Volunteers will continue to measure water temperature, salinity, Secchi depth, dissolved oxygen (DO), and pH, as well as ancillary data on weather conditions, air temperature, and any unusual sightings.
  - (2) Measuring the acidity at **surface water sampling** sites by our volunteers has been part of our program from the beginning. In 2011, we equipped and trained our volunteers to use **digital pH meters** to measure acidity levels. Acidity levels in ocean water are changing as a result of the absorption of atmospheric carbon dioxide at the surface, an effect of greater carbon loading in the atmosphere (ocean acidification), and as a result of the decay of organic matter in productive, nearshore waters (coastal acidification). Most of the meters purchased in the spring of 2011 have electrodes that are due for replacement in



the spring 2013. We will **replace pH electrodes and batteries** in the volunteers' meters in order to ensure the highest levels of precision of these instruments as well as the accuracy of the data collected.

- (3) In 2012, our volunteers sampled surface water quality at 36 sites around the Bay. This year, we will try to **increase the number of volunteer sites to 40**. Our ability to do this depends in large part on the number of new and returning citizen scientists, as well as on their geographic locations. Recruitment efforts become more sophisticated each year, employing everything from word of mouth and local newspaper recruitment to internet links, our *Raisers Edge* integrated e mail marketing tool, Net Community (replacing Constant Contact emails), and Survey Monkey scheduling.

In 2012, 68 returning Citizen Steward Water Quality **Volunteers** were recertified to sample during the 2012 season. In addition, 12 new folks joined the ranks. After the end of the season, two individual, Erno Bonebakker and Walter (Doc) Phillips received recognition for 20 years of service, Roberta Brezinski received recognition for her 15 years of service, Richard (Dick) Stevens received recognition for his 10 years of service, and Lisa Willey, Ansel Critchfield, Sheila McDonald and Debora Price each received recognition for five years of service. In 2013, returning volunteers will brush up their skills during the annual Quality Assurance testing in March; new recruits will begin training in April.

- c. **Profile sampling down through the water column** at ten stations around the Bay will continue monthly throughout the year, led by staff using a data sonde aboard the Baykeeper boat. As often as possible, students, other scientists, and volunteers will accompany staff on these trips. If weather is an impediment, only three of the ten sites, sentinel sites, may be sampled (this is often true during the winter months, though we are informally noticing that wind and rough seas have become more of an inhibiting factor year round, not just in winter). Parameters measured in the profiles include temperature, salinity, Secchi depth, dissolved oxygen (DO), chlorophyll fluorescence, pH, DIN, and Total Nitrogen (TN). TN samples will be collected at the surface at all 10 profile sites only on a quarterly basis; the decision to switch to quarterly sampling from monthly sampling was made due to the very low annual variability exhibited in the analyses of profile TN data.
- d. Staff will continue to collect **Total Nitrogen (TN)** samples as part of a complete suite (TN, DIN, and chlorophyll *a* fluorescence) from nearshore surface sites around Casco Bay. Our data show higher nitrogen concentrations inshore than offshore, as well as closer to freshwater sources. This effort is entering its eighth year, and different sites will be sampled this year to better focus on nitrogen concentrations coming into the bay from streams and other freshwater sources. Other parameters to be measured, as usual, include: water temperature, salinity, Secchi depth, dissolved oxygen (DO), and pH.

Background: In 2007, after an external analysis of Friends of Casco Bay water quality data showed higher nitrogen values around Portland Harbor, the decision was made to measure TN, DIN and other standard oceanographic parameters on a weekly basis at four sites around the harbor. This annual monitoring project has evolved based on results from each preceding season. In 2008 and 2009, the program was expanded to include six sites; the very low variability found in the 2007 data indicated that sample collection could shift from weekly to biweekly. In 2010, after data analysis from previous seasons revealed a significant continuing trend of increasing nitrogen with proximity to land, the number of sites was increased from 6 to 13 and included other parts of Casco Bay away from Portland Harbor. In 2011, the effort was given the acronym **SWAN for "Surface Water Ambient Nitrogen."** This effort gives us a better look at nitrogen conditions around Casco Bay and provides

comparison among the various regions in the Bay and also with conditions found “off-shore” during our profile cruises. Data from these combined efforts present the largest and most complete nitrogen dataset in the state. This dataset is being used by the Maine Department of Environmental Protection in the ongoing effort to produce a nitrogen standard.

In 2013, SWAN sampling will be done just twice a year, at 8-10 sites, once in early summer and again in the fall. Some sites may need to be accessed using the pump-out boat rather than by car and foot. At least one site will be located near any freshwater outfalls that influence the clam flat pH monitoring site. Total Nitrogen analysis will be done by the Chesapeake Bay Analytical Laboratory in Maryland.

The table below summarizes the SWAN sampling effort to date:

Year	Number of Sites	Number of Sampling Dates	Sampling Frequency
2007	4	22	weekly
2008	4	24	weekly
2009	6	8	bi-weekly
2010	8	3	3x/year
2011	13	3	3x/year
2012	13	3	3x/year
2013	8-10	2	2x/year

- e. Our concerns about ocean acidification, inshore nitrogen pollution creating conditions for coastal acidification, and reports about “death by dissolution” of baby mollusks unable to survive in low pH conditions led us, in 2011, to begin looking closely at how to assess the **pH levels of sediments in clam flats in Casco Bay**.

During the summer of 2011, we investigated the feasibility of various methods for collecting data on the pH levels of sediments in clam flats. Low pH is one of many factors that can inhibit the ability of clam spat to grow and prosper. We collaborated with Dr. Mark Green at St. Joseph’s College and Dr. Joe Salisbury at the University of New Hampshire (UNH), experts on the effects of ocean acidification on calcifiers’ ability to develop, or not, in acidic conditions, to design a simple protocol for data collection. The development of this protocol turned out not to be simple, as it took most of the summer of 2011 for us to get the bugs out of the protocol before we could finally use it to collect data in a consistent manner from flat to flat.

In 2012, we improved the protocol by upgrading our pH electrode to an Accumet AP 115, which allowed us to take measurement directly on the mud surface. We identified 30 flats to be sampled and collected data on sediment pH, seawater pH, water temperature, and sediment oxidation reduction potential (ORP) ; we are saying that nitrogen pollution has a cascading

effect eventually resulting in lowering the pH of marine sediments, so measuring ORP provides some indication of the degree of eutrophication or organic enrichment in the area.

We also collected sediment samples to be analyzed for percent carbon, percent nitrogen, and surface area, to be analyzed by Dr. Larry Mayer of the University of Maine Darling Center. Oxidation reduction potential and percent carbon and percent nitrogen together can be used to determine the extent of organic enrichment of the sediment, which is important as we continue to investigate whether nutrient pollution is the cause of coastal acidification.

Data was grouped by productive clam flats (actively being clammed) and flats which are not or are no longer productive. The data showed that average pH was lower at the sites located on nonproductive flats, and the organic carbon and nitrogen concentrations were higher at the sites located on nonproductive flats. We view this as evidence of the effects of nitrogen pollution on the flats.

In 2013, we will address the critical question of whether or not pH is the best indicator of sediment acidity. A low carbonate saturation state is what actually drives the dissolution of calcifiers, and pH has been used as an affordable and relatively easy proxy for saturation state. To test the correlation between pH and carbonate saturation state, we will measure both parameters concomitantly during the 2013 field work. We will also improve our understanding of sediment pH temporal and spatial variability by focusing on just one clam flat ("site") but collecting much more data, visiting the flat nine times between April and October and sampling at a number of places throughout the intertidal zone. The site will be selected after the careful consideration of a number of criteria, including past sampling results, closure to clamming and other activities, and ease of access. We will measure water temperature and salinity at the site, then collect sediment data along two parallel transects running perpendicular to the waterline from the high intertidal to the low intertidal. These two transects will be 10 – 20 meters apart and will include at least 5 sampling points ("stations") each, with the samples and measurements being collected at the waterline following an outgoing tide. Each station will include 10 rounds of sediment measurements, including sediment pH, sediment temperature, and sediment oxidation reduction potential. Sediment samples will be collected at each site and will be delivered to Dr. Mark Green at St. Joseph's College in Standish to be analyzed for carbonate saturation state. Dr. Green and Dr. Joe Salisbury of the University of New Hampshire are collaborating with us on this component of the project, and the laboratory analysis will be done at no cost to Friends of Casco Bay. Sampling frequency will be once per month in April, July, August, September and October, and twice a month in May and June, during the period of greatest spat fall. The stations will be determined prior to the first monitoring event and identified by flag or other obvious marker.

In addition to the nine transect monitoring events, we will also conduct a random sampling event during a low tide, collecting many measurements regardless of both location on the flat and of sediment exposure to air (sampling will not be constrained to being close to the waterline).

Finally, we will attempt to develop and test a clam spat exposure bioassay, using hatchery-reared spat deployed in mesh-covered PVC tubes at different parts of the flat, left on site for varying lengths of time (1-5 days). The spat would be provided by Beal Shellfish Hatchery in Machias. After retrieval, the clam spat would be examined with the Bowdoin College Scanning Electron Microscope to determine the extent of dissolution. Dr. Michele LaVigne, a professor and ocean acidification researcher at Bowdoin will collaborate with us on the design and analysis of this bioassay.

During 2012, we had an exceptional summer intern from Bowdoin College, Jessie Turner, working on this project, funded through the Psi Upsilon Fellowship, as a major part of her 40-hour work week. We will again work with Bowdoin to provide another intern with a 2013 field experience working primarily on this project.

- f. The water quality of the **New Meadows region** of Casco Bay is severely degraded. Since 1999, Friends of Casco Bay has been involved in the New Meadows River Watershed Partnership, a coalition of citizens, nonprofit organizations, and municipal, state, and federal officials concerned with the health of the New Meadows River. From 2009 to 2011, Friends of Casco Bay participated in an effort to determine the feasibility of removing or modifying the causeway that impedes tidal flow between the New Meadows Lake and the upper New Meadows estuary, **one of the least healthy areas of Casco Bay**. Do to strong opposition from local quahog harvesters and abutting land owners for removing or modifying the causeway, the effort to restore tidal flow has been put on hold. In addition, significant changes in leadership in the coalition, and the lack of a clear direction have caused the coalition to cease meeting. In spite of these setbacks, Friends of Casco Bay has continued to monitor the health of this embayment each year through our volunteer program and occasional staff led projects. We have historically deployed an unattended sonde to collect data for a three-week period in July each year at the upper New Meadows, but after 13 years of collecting data we have decided to discontinue this component of the New Meadows work. In early 2013, key members of the New Meadows River Watershed coalition will discuss the future direction for this group. If efforts are made to revive the group, we will participate.
- g. In 2013, we will collaborate with the Maine Department of Environmental Protection (DEP) and the Casco Estuary Partnership (CBEP) to produce a new aerial survey of **eelgrass** in Casco Bay. Eelgrass beds are a vital aquatic habitat in Casco Bay and are home to many commercially important species of fish and invertebrates at some point in their lifecycle. Eelgrass beds help stabilize sediment and shorelines, filter nutrients, and are a critical indicator of water quality. Updating the eelgrass coverage maps for Casco Bay is an important component in understanding the health of the Bay. We participated in planning meetings, including the proposal review process to choose someone to fly the aerial survey and someone to analyze the data. DEP will conduct the field work component associated with this effort, and the final product will be a new GIS data layer to update previous efforts made in 1993 and 2001. The previous mapping was done by the Maine Department of Marine Resources, but DMR has discontinued this extremely valuable project.

h. **Data Management:**

**Murphy Water Quality Database:** The platform for our water quality database, known as Murphy, written in DOS in 1994, has needed upgrading for some time. During 2010 and 2011, the original software designer, Sarah Rose Werner, redesigned the database platform in the relational database program Access. During 2012, she and Peter Milholland continued to debug the new program and migrated much of the historical data into the new database. Our goal now is to complete the migration of all water quality data, including the TN and DIN data, into one dataset as soon as possible, thereby improving our ability to analyze the data in a more efficient and timely manner. This database should be user friendly by being windows-based. The migration to this new platform will enable us to have multiple users working on data at the same time, and will enable export to other users and data access portals such as the Data Exchange Network, thereby enhancing our collaborative efforts. We will continue to make our water quality data available to the DEP, CBEP, and a variety of agencies,

institutions, scientists, teachers, and citizens, and to provide program consultations to other groups.

**Mapping and statistics** (Geographic Information Systems (GIS) and JMP statistical analysis): Mike continues to expand and deepen our GIS and statistical capabilities. This is crucial for analyzing our data and for making our data more accessible, understandable, and meaningful. During 2013, Mike will continue to look at the datasets of the various water quality parameters we collect to **compare** changes over time and contrast geographical differences in water quality site-to-site and region to region in the Bay. Mike will also update the **Casco Bay Health Index**, as well as produce data analysis reports and briefings. In 2013, each Citizen Steward water quality volunteer will receive a short report with graphs of monthly and annual trends in the data they collect, compared to other sites in their region.

Maps, tables, graphs, and other visual depictions are fundamental to the effectiveness of our presentations, our web-based outreach and education, and our assessment of data for making decisions about the direction of our programs. We will identify the products that could most benefit from the abilities of a graphic designer (maps, charts, graphs, posters, Bay Papers) and contract for such assistance.

## 2. Baykeeping

### a. Oil spill preparedness:

Despite our earlier successful collaborations, described below, we are becoming increasingly concerned about a decrease in the preparedness of the Port of Portland to deal with an oil spill. Less oil is coming into the port, which results in less funding generated from each barrel of oil going into the Surface Fund for oil spill preparedness, training, equipment, and response. As oil terminals downsize their staff and people retire, there are fewer people left with institutional memory, experience, and long term training. Because of cost, all the terminals, except Portland Pipeline, have pulled out of membership with the Marine Spill Response Corporation, an Oil Spill Response Organization (OSRO). They have instead joined a less expensive OSRO, NRC, which has fewer resources at its disposal locally with which to tackle a spill. We worry that MSRC and their *Maine Responder* oil spill response vessel may be sent to a more active port.

In addition, the Maine Department of Environmental Protection (DEP) has lost three senior people in oil spill response. Two have not been replaced. The head of the division has been replaced with a good candidate, albeit far less experienced. Both the Maine Department of Marine Resources (DMR) and Department of Inland Fisheries & Wildlife (IF&W) have lost staffers who acted as liaisons and natural resource trustees in oil spills. We will monitor those agencies to see when/if the staffers are replaced.

The Coast Guard is working to accomplish their mission and is doing an average job given that so much of their mission now deals with Homeland Security.

In 2013, Casco Baykeeper Joe Payne will attempt to re-energize the Coast Guard and other key partners about local oil spill preparedness through our participation in the Coast Guard Area Committee, the Local Spill Management Team, and as a Governor's appointee to the Maine Oil Spill Advisory Committee. We will seek the help of an attorney to analyze the Oil Protection Act of 1990, and advise us on rules around the adequacy of OSRO's to help us better protect Casco Bay from oil spills.

The port of Portland has a strong history in oil spill preparedness and response, and it would be tragic to lose that capability. In the wake of the *Deep Water Horizon* crisis, the importance of preparing for a possible oil spill in Portland Harbor has never been clearer. In March

2010, we participated in the Coast Guard's simulated Spill of National Significance (SONS) exercise to determine our region's readiness for a major oil spill. Casco Baykeeper Joe Payne and Citizen Stewards Coordinator Peter Milholland worked in the Command Center throughout the exercise. Since then, we have been working with federal and state officials and local businesses to ensure that locally we are implementing the lessons learned in that exercise and from the spill in the Gulf of Mexico.

Joe and Peter continue to serve, at the request of the Coast Guard Captain of the Port, on the Maine/New Hampshire Area Committee on Oil Spill Preparedness. Joe continues to serve on the National Dispersal Study Committee, although that working group was inactive in 2012.

Joe continues to serve (by gubernatorial appointment) on Maine's Oil Spill Advisory Committee (MOSAC), an influential platform to affect policies and programs for oil spill preparedness. Joe convinced the state to review the Casco Bay maps of environmentally sensitive areas, used in oil spills, and participated in that effort in June 2011, along with state agency biologists. Through MOSAC, Joe and our colleague Wyman Briggs of the Coast Guard, instigated on-water testing of the pre-planned booming strategies for Casco Bay. This vital activity to protect sensitive habitats will continue in 2013. Joe will continue to observe and critique these deployments.

In 2012, Casco Baykeeper Joe Payne moderated the Oil Spill Seminar for the seventh time, an annual convening of oil spill response professionals and industry representatives to update their skills, learn about new techniques, and discuss response problems. Held in March in Portland, the focus was on a topic that Joe had recommended: sensitive habitats and environmental impacts and protections: "Why Do We Protect What We Protect?"

Because the Coast Guard has designated less funding for a regional oil spill seminar this year, the 2013 Oil Spill training will be held on one day, March 5<sup>th</sup>, at the New Hampshire Department of Environmental Services in Newington, NH. The topic is "Crisis Communications and PR." Coast Guard Communications staff and outside experts will train oil responders on how best to communicate information to the news media in the event of a spill. Joe will lead the seminar again.

Joe catalyzed discussion of a fine scale **circulation model** for Casco Bay and is on the Casco Bay Estuary Partnership (CBEP) committee that held a circulation model workshop. Experts from around the country attended the workshop in May 2012, to help answer questions and define the parameters of the work needed to achieve an excellent model for the Bay. This model will be useful in predicting oil spill trajectories as well as providing insight on pollution fates and larval transport. This is one of the most important data needs for our work. Before a circulation model can be done, a couple of initiatives need attention. One is to get fine scale wind models for the Bay, and the other is to get river flow data for some of the rivers flowing into the Bay. Joe had convinced MOSAC to fund at least part of the next phase of the project, filling data gaps, but unfortunately MOSAC has declining revenues. CBEP revenues are already committed. Another major setback to developing the model was that NOAA did not receive funding for a big effort involving up to 35 data-collecting buoys, some in Casco Bay. If we spot potential funding, we will remain opportunistic in trying to obtain it for studies supporting a Casco Bay circulation study.

**b. Dredging:**

During the winter and spring of 2012, the Maine Department of Transportation (DOT), the Army Corps of Engineers, and the City of Portland, with the cooperation of the DMR and the DEP, undertook a fast-tracked dredge project at Ocean Gateway to be completed before the

2012 cruise ship season. Joe vigorously opposed actions by the Corps and DOT to circumvent Clean Water Act provisions and the required sediment testing, particularly because prior sediment samples, from next to the area to be dredged, indicated that the sediments are contaminated. Also, sediments were erroneously characterized as “sand” which does not require testing. Joe was able to prove the sediments were not sand but instead contaminated silt. In the end, federal and state agencies involved did permit the project but with several safeguards that Joe requested, such as an “environmental bucket” and a silt screen to prevent contaminated material from dispersing over a wide area. He has met with dredge authorities and has received assurances this will not happen again. We are investigating the effectiveness of challenging sections of the Natural Resource Protection Act (NRPA) with the Board of Environmental Protection, as well as how to strengthen NRPA itself – both efforts are to prevent shoddy protection of the Bay as evidenced in the permitting of this project.

The federal channel in Portland Harbor is due be dredged again soon; initially, this was slated for 2012, but likely will occur in winter of 2013/2014. Joe serves on the Portland Harbor Dredge Committee of the Waterfront Alliance. Friends of Casco Bay has monitored the sediment sample analysis results to be assured that the dredged mud is suitable for disposal at sea. Lobster relocation is a condition of the dredge permit, and we are hopeful that federal funds will come to the port to cover the costs. Joe instigated an analysis of a Confined Aquatic Disposal (CAD) site in Portland Harbor for the contaminated sediments at the privately owned piers; a sub-bottom survey, in November 2008, confirmed suitable depth to bedrock to accommodate a deep hole in the harbor in which to isolate contaminated sediments. The projected cost of a CAD cell, \$8-10 million, has precluded progress. We will encourage our partners in the port to re-approach our Congressional delegation to once again explore bringing federal funds to the region for the CAD cell.

Of growing concern is a discussion to create a dredge disposal site within Casco Bay, an idea being pushed forward by some members of the Dredge Committee. This is called a 404 site for the section of the Clean Water Act that allows such sites. Some envision this as an inexpensive option for disposing of contaminated dredge materials from around the privately-owned piers. Maine has no specific requirements for locating a dredge disposal site, and federal law is more permissive inshore than it is offshore. Joe has been talking to several advisors in an attempt to find a non-conflicted environmental lawyer to help with this. No luck yet. Work on this issue will require constant vigilance and an attorney.

- c. **Nitrogen Standard:** A Legislative Resolve authored by Friends of Casco Bay and passed in 2007 by the Legislature called for the DEP to create a plan for establishing nitrogen criteria and limits in coastal waters. Mike Doan was asked by the DEP to advise the DEP’s consultants on methods of nitrogen sampling and analysis for other embayments down the coast of Maine. The consultants’ report was a disappointment, even to the DEP. The DEP’s report to the Legislature was postponed, and consequently, so was our opportunity to present our vehement opposition to parts of the report. Meanwhile, we continue to collect and analyze data, consult with experts from around New England, search for other sources of nitrogen data in Maine, and build our case using examples from the literature.

In 2008, the DEP effectively lost its only marine scientist. Due to a hiring freeze, the position was to remain vacant, jeopardizing all of our nitrogen regulation efforts to date; it would be impossible for the DEP to move forward on science-based nitrogen regulations without a staff person who understands the science. In 2009 in negotiations with state officials, Friends of Casco Bay put its reputation and its social capital on the line, offering to raise \$100,000 *for the State of Maine* in order to reinstate a marine scientist on to the DEP’s staff. The offer both shamed and inspired the Baldacci administration into releasing the Department from the

hiring freeze for this specific position, and in 2010, the DEP hired Angie Dubois Brewer for the position. Given that all unfilled positions were subsequently eliminated from the state budget, the reinstatement of this position was a timely and critical victory.

Working through the DEP's administrative processes, we need to convince DEP regulators to set the standard at a protective level, which to us means 0.38 – 0.40 milligrams of Total Nitrogen per liter of seawater. This limit is realistic and reasonable, and concentrations above this level begin to degrade critical habitat. In February 2012, the DEP disclosed to us that they plan to postpone submitting their recommendations for a standard until 2015. We vehemently oppose the delay and will continue to work to speed up this process. However, the atmosphere in Augusta under the current administration is making that difficult. We plan to meet with counsel and then meet with the Commissioner of the DEP to determine options for moving forward.

- d. **CSO's and the City of Portland:** Friends of Casco Bay helped influence the DEP and the City of Portland to get serious about eliminating combined sewer overflows (CSO's), and we helped get a \$61 million dollar bond commitment passed by the City Council to fund Tier II of the CSO Abatement Program. We encouraged the City to have stakeholder meetings on CSO's. During FY12, consultants to the City on the design of Tier III recommended a 30-year time horizon. Action by FOCB staff, members, and supporters convinced the City Council to vote instead for a 15-year timeframe.

We (Joe, Cathy, and sometimes Mary) continue to attend quarterly meetings on CSO's to monitor the City's progress on its CSO elimination plan. We will continue to make it clear to the City that not making deadlines will cause a reaction from us, up to and including legal action. We continue to pressure the city to determine definitively the source of hypodermic needles that end up in the intertidal zone and that seem to be coming through storm drains.

We will continue to cite the need to reduce the amount of stormwater runoff coming into the Bay by encouraging transitions to more porous surfaces and infiltration/percolation systems. We were recently told "off the record," that due to our efforts, every City of Portland project will now have a "green" element to reduce runoff. Joe and Cathy sit on a committee to plan a strategy for implementing an equitable stormwater utility fee that spreads the cost of improvements beyond water rate-payers to all stormwater system users. While the committee has two more important decisions to vote on, their recommendations so far have been sent to the City Council's Finance Committee. The City is also encouraging CBEP's stormwater committee to fund an education campaign around stormwater utilities; a consultant experienced in successful and failed attempts to initiate stormwater utilities has advised that education is the critical step.

We will continue to push the City to implement more low impact development (LID) practices throughout Portland. We will work directly with City officials, as well as independently, to conduct outreach efforts to encourage residents to reduce nitrogen pollution.

- e. **Diluted bitumen (tar sands oil) transport through the Port of Portland:**

We have met with representatives of Portland Pipe Line (PPL), and national and local representatives of Sierra Club, Natural Resources Council of Maine, National Resources Defense Council, and with local citizens about the possibility of one of PPL's pipe lines reversing to bring tar sands oil into Portland. We have stated that our three primary concerns are 1) the possible release of invasive species in ballast water discharges 2) the lack of equipment and know-how to clean up tar sands oil if it spills and 3) the continued no-leak



integrity of the pipeline itself. Tar sands oil is a heavy, potentially sinking oil, that has not been transported through our port before, and if spilled, poses a different set of environmental threats than lighter oil. We will continue working with the Coast Guard to ensure that the Oil Spill Contingency Plans address tar sands clean-up and that equipment is available in the port. We will continue to work with national and international experts to identify and recommend best management practices for pipelines transporting tar sands oil, and we will continue to monitor national and international law on ballast water. Additionally, we will continue to dialog with PPL on all of these issues expecting cooperation and good decisions.

We are preparing a Bay Paper describing our issues with tar sands oil.

- f. The shift in the political climate has been extreme and has required vigilant **monitoring of legislative initiatives**. Cathy and Mary will continue our involvement in the Environmental Priorities Coalition, monitor proposed bills and the Legislature's calendar, and inform the Board and Staff about relevant topics. Joe and Mary will provide written testimony when needed. Joe will, with research help from Mary, give testimony at appropriate legislative committee hearings. We will continue to encourage Board and Staff to establish and maintain relationships with regional Senators and Representatives, as well as key colleagues at the DEP and DMR.

We will continue to keep an eye and an ear on such activities as:

- a) Any coal tar remediation efforts in Portland Harbor especially with the proposed development of the West Commercial Street Property that is the source of the remaining coal tar.
  - b) Bills that are introduced in the Legislature that may have an impact on the health of Casco Bay, from snow dumping to overboard discharge elimination to combined sewer overflow abatement
  - c) Increases in the acres of closed clams flats in Casco Bay
  - d) Proposals for wind turbines in Casco Bay (Joe sits on a committee to look at the issues involved.)
  - e) Bans on synthetic pesticide use on public property, especially school and municipal playing fields
  - f) Proposals for recycling medical wastes, i.e. sharps
  - g) Possible of establishment of a dredge spoils disposal site within Casco Bay
- g. We have been building **capacity** in the Baykeeper Program by dedicating some of Mary's time to assist Joe with this program, by searching for legal counsel on issues for which Joe needs help, and by delegating to staff other than Joe whenever possible, such things as responses to public inquiries. When Joe is unavailable to attend certain meetings, Cathy and as appropriate other staff will attend instead. Mary continues to be instrumental and invaluable in helping with research, drafting position statements and elevator speeches (Bay Papers, described below), responding to inquiries, interacting with Waterkeeper Alliance on national issues and positions, continuing to oversee research on such topics as snow dumping and various proposed developments, and coordinating volunteer assistance with Baykeeper issues. Cathy and Mary also help culture constructive relationships with policy leaders.

We have begun to build **legal capacity** for access to legal counsel by having a dedicated fund for this purpose. In March 2011, the Board voted to designate \$6,000 from prior years' accumulated operating surpluses as a Legal Fund for Baykeeper support. This fund is to be used solely for legal work on programmatic Baykeeper-related topics and not for the purposes of other organizational issues. Joe and Cathy have and will continue to meet with Sean Mahoney of Conservation Law Foundation (CLF) on a frequent basis to discuss a variety of environmental issues, from the Ocean Gateway fast-tracked dredging project, to the DEP's delays in proposing a nitrogen standard for Maine's coastal waters. Sean has made it clear that CLF does not have the capacity nor the mission to work on these issues, and he has suggested contacting Steve Hinchman, a former CLF attorney, as a potential source of legal help. Joe has recently met with Bill Taylor at Pierce Atwood, and Bill is exploring options and ways he may be able to provide Joe with "generic" advice and research. The search for appropriately experienced and available legal help on various issues continues in earnest.

- h.** Attendance at **meetings and conferences** as diverse as the Waterfront Alliance (Portland) and the Waterkeeper Alliance (international) continue to be important to bringing our work to our peers and community while learning about what else is going on. All staff members attend meetings to increase our visibility, learn new things, make new partners, support current partners, collaborate on problem solving, and insinuate our agenda into other groups' activities.

An issue in the Baykeeper Program and for all senior staff is the number of requests by other organizations and citizens for advice, help, and mentoring. On any given day, Joe alone may receive several requests for assistance, and we seek every opportunity to delegate our response to come from someone other than Joe whenever possible.

- i.** We plan to extend our outreach by having Joe, Peter and Mike pilot the new Baykeeper boat to various parts of the Bay, to meet local supporters, learn about their issues, invite water quality monitors and other guests aboard, and increase the visibility of the Baykeeper Program, our new vessel, and the work of Friends of Casco Bay. Thanks to a new laptop and new technology that allows Joe to be connected to his work station in the office, he will be able to conduct Baykeeper business aboard the boat.
- j.** Another way we plan to extend our Baykeeper messaging is through a Twitter account for Casco Baykeeper. We will use this to post news alerts, useful information, and to announce where the Baykeeper boat will be.

### **3. BayScaping and Stormwater Sampling Program**

To ensure a solid scientific basis for our BayScaping Program, we sampled stormwater and sediments at tributaries to Casco Bay, testing for the presence of the most commonly-used pesticides and for nitrogen. Our collection methods were based on a quality assurance plan developed in conjunction with the Maine Board of Pesticides Control (MBPC).

#### **Stormwater and Sediment sampling**

Through our Stormwater Sampling Program, Mike collected stormwater from pipe outfalls, catch basins, and small streams, for analysis of various fertilizer and pesticide compounds. This data has been instrumental in effecting behavioral changes in residents of neighborhoods in which these compounds have been detected in the runoff.

We have eight years of stormwater sampling results from 22 sites all around Casco Bay. We detected the presence of specific pesticides, including fungicides and herbicides that have been linked to cancer, reproductive problems, and birth defects. Our sampling has also

revealed the presence of nitrogen and phosphorous, components of fertilizers, at all of the sampled sites; these nutrients can pollute drinking water wells and when washed downstream can cause algal blooms, degrade marine water quality, and create conditions that worsen coastal acidification. Once they reach the Bay, certain pesticides (pyrethroids) can settle out in the sediment and threaten the health of marine life. As Gary Fish, of the MBPC and recipient of a Friend of Casco Bay Award says, “A pesticide that will kill a bug can kill lobsters and crabs.”

We have collaborated with the MBPC and the University of Maine to do this work. In 2009, working with MBPC, samples were taken of both stormwater (at three locations) and sediments (at nine locations). In 2010, we sampled sediments at two sites for pyrethroids. In 2010, MBPC did sediment sampling. During 2013, we will add the results of the most recent MBPC sampling to our tables and maps of FOCB and MBPC data. The presentation of these data at BayScaping socials builds fast awareness among neighbors throughout our community and motivates resistance toward applying these compounds heedlessly.

### **BayScaping:**

With nitrogen and ocean acidification identified as critical threats to the health of Casco Bay, our BayScaping messaging is as important as ever.

### **What we’ve been doing:**

Since 2000, we have delivered more than 80 BayScaping “neighborhood socials” and other presentations for coastal and island community residents throughout Casco Bay and beyond. From 1999 to 2012, we have staffed booths at more than 33 community events and flower shows, including an extended display at the Patagonia Outlet in Freeport, we have offered 4 courses for Master Gardeners, and we targeted 400 landscapers at 3 *Go Green to Get Green!* workshops in conjunction with the Maine Board of Pesticides Control (MBPC). The BayScaping message also has been delivered in TV, newspaper, and radio interviews.

Interactive **neighborhood socials** are the core of our BayScaping program and at the core of our messaging. BayScaping presentations now incorporate the dynamic relationship between nitrogen pollution from fertilizer runoff and coastal acidification. At these socials, our staff and volunteers share our data with residents in our communities, explain the harmful effects of lawn care chemicals, describe the dynamics of nitrogen pollution, and suggest Bay-friendly alternatives. We have found that providing evidence of pesticide use in a particular neighborhood (the results of stormwater and sediment collection and analysis) is one of the most compelling ways to inspire behavioral change.

As we connect one-on-one with residents through these events, we continue to reach out into the broader community by issuing timely media releases, emails, social media releases, and newsletters.

In 2012, Mary delivered BayScaping presentations at the Harpswell Garden Club and Thornton Oaks Retirement Community, and hosted a booth at WillardFest in South Portland. Cathy spoke at the official opening of the YardScaping Demonstration Gardens in Back Cove in June.

In September 2012, Mary helped teach a 3-week course designed specifically to prepare York and Cumberland County **Master Gardeners** to deliver YardScaping/BayScaping programs to various audiences. The course was taught in conjunction with the County Master Gardener program and Maine Board of Pesticides Control (MBPC). Registrations for the course

quickly filled to capacity with 30 Master Gardeners with more on a waiting list. Mary posted a modified version of her PowerPoint to the YardScaping website.

Mary continues to share information with residents of communities who are working to enact **local ordinances to limit the use of lawn chemicals on public properties** (Scarborough, Portland, Cumberland, and others). Such an ordinance was passed recently in Scarborough, and proponents said their campaign had been inspired by data presented by Friends of Casco Bay.

Mary developed and/or presented keynote addresses for three *Go Green to Get Green* conferences, in 2009, 2010, and 2011, each of which attracted 100-175 landscapers and lawn care providers. That conference will not be held in 2013, nor will we assist the MBPC at the 2013 Portland Flower Show in March. This is the first time since 1999 that the MBPC is not hosting a YardScaping/BayScaping booth there.

**Over the coming year, we will:**

- Create BayScaping Fact Sheets (for downloading and as handouts) for 2 audiences. One set will be easy-to-follow, ecological lawn care guidelines for the do-it-yourself home gardener. The other will be lawn care dos and don'ts written for the homeowner who needs to direct their professional yard care provider in adopting ecological lawn care practices. We have received dedicated funding from the Maine Outdoor Heritage Fund to produce and disseminate these materials, and we will work closely with the MBPC, our state agency partner in this project, to ensure that these materials are accurate and effective.
- Map pesticide and fertilizer data for BayScaping presentations using GIS software and perhaps some graphic design assistance.
- Present at BayScaping socials and other presentations in communities around Casco Bay, using our mapped data, fact sheets, and Bay Papers.
- Further train Master Gardeners to help them understand how fertilizers and pesticides impact the marine environment. We will continue to work to more deeply integrate our nitrogen pollution and coastal acidification messages into our own BayScaping presentations and pass those on to the Master Gardeners in some way. Eventually, this will free up some of Mary's time (for more Baykeeper support), while building a larger cadre of ambassadors to carry the messages of BayScaping and Bay caring deeper into the community.
- We are actively seeking additional partners for expanding other BayScaping outreach efforts. We will continue to collaborate with MBPC, Portland Water District, grassroots (no pun intended) Citizens for Green communities (such as Scarborough and Yarmouth), and neighborhood associations to deepen the connections between lawn care practices and water quality in the Bay. As more churches become engaged in the conservation movement, this appears to be an excellent venue for BayScaping presentations. We plan to utilize our close working relationship with Cornerstones of Science, a decade-old initiative to bring science into communities through their local libraries. We will leverage our monitoring data to support efforts by anti-pesticide groups, such as Toxics Action Center and Beyond Pesticides, as they educate homeowners, landscapers, and municipal and state officials about the effects of pesticides.
- Continue to support communities interested in developing local ordinances that limit the use of lawn chemicals and fertilizers, and support a legislative initiative to restrict pesticide use on public property statewide.

- Continue to spread the BayScaping ethic through strategic media releases, social media, emails, newsletters, and television opportunities, if and when possible.
- Share BayScaping principles with educators through several curriculum activities designed around the Six Steps of BayScaping (see Curriculum section).
- Specific event commitments:
  - Friends of Casco Bay will host a booth at the Maine Garden Day on April 6, which attracts 350-400 participants, many of whom are Master Gardeners.
  - In honor of Earth Day, April 22, we have agreed to do two BayScaping-related events. We will staff a BayScaping booth at the 2013 Green Neighbor Family Fest on Saturday, April 20<sup>th</sup> at Deering High School. The festival follows the Urban Runoff 5K and is geared toward pre-K through 4<sup>th</sup> graders and their families. We will present an activity from our storm drain stenciling kit program. We will also present a BayScaping program at the request of the Justice and Outreach Committee of the Foreside Community Church, Falmouth, the next day, Sunday, April 21<sup>st</sup>.
  - In response to concerns about high nitrogen levels found in runoff on Peaks Island, Mary will present a BayScaping workshop on July 16<sup>th</sup> to the Trefethen-Evergreen Improvement Association.

#### 4. Casco Bay Curriculum

We continue to work with teachers and educational administrators to disseminate the **Casco Bay Curriculum** in the community and continue to refine and update the working modules. Since education and collaboration are ways we engage the community to help us improve and protect the health of the Bay, the Casco Bay Curriculum is THE way we are able to get data about the Bay directly into the hands of local teachers in a form that will engage the next generation of stewards.

Since 2010, Mary has conducted 3 Summer Institutes to help educators incorporate the *Casco Bay Curriculum* into their own curricula. The Summer Institutes highlight strategies for linking literacy and science education, an effective way to engage these teachers in strengthening their science curriculum. Incorporating literacy into the Summer Institute makes elementary school teachers more comfortable with the Casco Bay Curriculum as they tend to have a stronger background in teaching reading than in teaching science. We provided them with lessons and hands-on activities that incorporate real-world data about Casco Bay into their lesson plans and provided recertification credits through certificates of completion or the opportunity to purchase “official” CEU transcripts through the University of Southern Maine’s Professional Development Center. Altogether, these three-day intensive workshops have immersed 51 area educators in the Casco Bay Curriculum.

Just in this past year, Mary has presented elements of the course and curriculum to educators at conferences of the Maine Science Teachers Association, Cornerstones of Science, and the Gulf of Maine Marine Education Association, reaching another 85 educators and school librarians. She also participated in educational events with the Freeport High School Earth Club, Waynflete School’s State of the Oceans Event, and WillardFest.

We are now considering other options for delivering the curriculum to the education community. This stems in part from lower attendance at the June 2012 Summer Institute (16 vs. 21 teachers the year before). We are also sensing there may be funding fatigue in the foundation community,

and that many funders are reluctant to continue this on an on-going basis (instead preferring “the shiny new thing”). For nearly 3 months prior to the course, we expend considerable staff time preparing activities, arranging for guest speakers and field trips, purchasing and collating materials, and advertising and recruiting teachers for the Summer Institute. Although the course receives rave reviews from participants every year, we are finding it more difficult to fill the three-day workshop, perhaps because many teachers no longer seem to have the liberty to choose their own professional development courses.

For all these reasons, we plan to suspend the course for 2013, and instead, explore other ways to deliver the curriculum. We plan to:

- Review the curriculum to identify 3-4 of the most impactful activities to deliver to teachers through conferences and in-house workshops.
- Evaluate the 40 existing activities by collaborating with the Gulf of Maine Marine Education Association, to help us see if important issues are missing or if some activities are no longer relevant. For example, we already know we will create an activity on Ocean & Coastal Acidification using a hands-on activity in the classroom. Content will continue to be specific to Casco Bay, and the concepts will be broad enough to apply to the entire Gulf of Maine region.
- Combine elements of BayScaping and storm drain stenciling activities with other Casco Bay Curriculum activities to deliver a cross curricular program for Master Gardeners, informal educators, and classroom teachers.
- Select some of the most dynamic, hands-on activities from the curriculum to offer as part of our Friends of Casco Bay Speaker Series, to be presented at libraries or community events.
- Investigate the content and design of a poster focusing on dynamic concepts that influence the health of Casco Bay. We likely would gear this toward middle school students, and its conceptual appeal we hope would extend way beyond this group. The poster would be accompanied by a few curriculum activities that reinforce the subject of the poster. We would engage a graphic designer in this fiscal year or next, once we have conceptually identified the content.

## 5. Storm Drain Stenciling

Unfortunately, storm drains are a tempting place for residents to dump dangerous pollutants. Substances commonly thrown down our storm drains include used motor oil, antifreeze, hypodermic needles, cigarette butts, pet waste, and yard waste. We launched our **storm drain stenciling** as a creative, hands-on way to create greater awareness about the need to reduce pollution in our communities. The program inspires volunteers to “take to the streets” to paint “do not dump” messages next to storm drains in towns around the Bay. We provide stenciling kits and easy-to-use instructions to help neighborhood groups organize stenciling events to educate their communities about their connection to the Bay and help reduce the amount of pollution and waste dumped into storm drains.

During 2010, in order to meet the pent-up volunteer demand we were hearing, we assembled “stenciling kits” with all the supplies and information needed to conduct a stenciling activity – including paint, stencils, and how-to guides. During the Winter/Spring of 2010, we partnered with USM’s Media Studies Program to create a film about the do’s and don’ts of storm drain stenciling. We compiled a database of relevant ordinances and contact people in each town around the Bay to make it easier for folks to get permission to do stenciling, and we hosted

several stenciling projects ourselves, including through the Summer Institute. During 2011, we designed door hangers that inform neighbors about the stenciling activity nearby and the need to not dump things down the drain. We also developed a curriculum activity that allows students to design their own messages and graphics using a template drawn from our door hangers. This activity is one of several new curriculum activities that offer an in-school component to the outdoor activity. In 2012, there were stenciling events in Cumberland, South Freeport, and Peaks Island. Although there were more requests in 2012, the weather hampered many of the scheduled attempts.

During 2013, we will maintain the readiness of the stenciling kits, continue to explore ways to engage school groups and community members in adopting their neighborhood storm drains, and use these events as media attractors whenever possible. We plan to meet with our municipal partners in Portland and South Portland to encourage neighborhood groups and schools to undertake storm drain stenciling projects in their neighborhoods. This effort renews our collaboration with the Stormwater Coordinators of both cities, who often receive requests for community service projects. This spring we will lend our kits to the Island Institute's Island Fellow on Peaks Island, who is directing a team of teenagers to stencil storm drains there, a project they began last fall. She has also requested a BayScaping workshop for island residents, scheduled for July 16.

Our participation in the 2013 Green Neighbor Family Fest in April requires that we not only staff a booth but offer a family-friendly activity. We will provide templates for kids to create their own door hangers to alert neighbors about the importance of keeping household and yard pollutants from going down storm drains.

## **6. Pumpout Program**

Our **Pumpout Program** continues to play an essential role in the direct reduction of sewage discharges into the Bay, the education of boaters through the program's ambassadorial function, and as liaison between the DEP and those marinas whose pumpout facilities are in out-of-service mode. 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 this position. Our pumpout coordinator and captain, Jim Splude, an exceptional boat captain and ambassador on the Bay, will return in 2013, his fourth season with us.

- The Pumpout Program breaks even because of reimbursements and dedicated funding. The DEP reimburses us for 75% of the costs of running the program, fees for service contribute some support, and the City of South Portland Water Resources Division and the Portland Water District through CBEP make modest contributions to support the program. During 2008, the Board concluded that the program should continue on the condition that it is financially self-sustaining and can be adequately staffed.
- Thanks to our work in this program, Casco Bay was awarded the first No Discharge Area status in Maine in 2006. Since then, a number of other regions along the coast of Maine have attained No Discharge Area status. In order to attain this designation, regions have to have a requisite number of pumpout stations. In order to meet the spirit of the law, as well as the letter, these stations need to be accessible at all tides and operational. We will continue to notify the DEP when stations are nonoperational.

## **7. Volunteers**

We will continue to recruit volunteers for a wide variety of activities, most notably, the Citizen Stewards Water Quality Monitoring Program, as well as for other field work, beach clean ups,

office tasks, and events, using word-of-mouth, website, posters, and our *Raisers Edge* integrated e-mail marketing tool, Net Community.

**Volunteer Appreciation and Members Annual Meeting Event:** Each year we celebrate the work of all of our volunteers, including our Board and take care of the legal business of Annual Meeting as expeditiously as possible. See section below on Outreach and Events for a description.

**Summer Internships:** We are accepting applications from college and high school students for our limited summer internship positions. We typically invite two bright students to work with us during the summer in a non-paid summer internships. The positions vary between 20 and 40 hours per week for roughly 8-10 weeks, beginning in late May and ending mid-August. Our philosophy of summer internships is to engage these students in all aspects of our operations at Friends of Casco Bay. Our goal is for them to best understand how a small non-profit environmental organization works in the larger arena of environmental advocacy, hands-on science, and community engagement.

**Psi U Summer Internship:** The Community Matters in Maine Psi Upsilon and Logan Environmental Fellowship Program, through Bowdoin College, places students who have an interest in pursuing an environmental career through stipended summer internships with Maine non-profit organizations and governmental agencies. The Environmental Studies Program at Bowdoin College coordinates the 10-week internships. In 2012, through a very competitive process, Friends of Casco Bay was awarded the opportunity to host a student to work with us on our experimental clam flat pH sediment work. This student, Jessie Turner, was invaluable in the development of our project, and she conducted numerous hours collecting field data on flats at over 30 sites in Casco Bay. In 2013, we have again been awarded the opportunity to host a Psi U student who will build on the ground-breaking work from last summer and help develop this summer's acidification work, as described in section above on pH of sediments on clam flats in the Bay.

## **8. Outreach and Events – Community Engagement with Our Work**

**Special events:** As a community organization, people look to us to use the idea of protecting the Bay to bring people together. This gives us the opportunity to engage directly with people who care about the Bay and our work. Events that focus on specific groups have proven to be the most effective in delivering tailor-made messaging about our work and recruiting support as a result. The variety of events range from seminar-like presentations, neighborhood information and BayScaping socials, to scheduled events including six already scheduled for FY14:

- **Commissioning the new Baykeeper Boat,** the R/V Joseph E. Payne: We will host a re-christening and commissioning event at Yankee Marina on May 29 or 30, 2013. We will invite via formal invitations all of the donors to the Boats Fund, and via postcard, other contacts in our database, as well as key VIP's and the press. The event will be celebratory and will mark the end of our fundraising efforts for the campaign.
- **Two summer house parties:** These events are crucial for garnering new members and for helping us deepen relationships with donors. These also lead to many of our speaking engagements. We will host two events this summer, preferably in the middle and eastern regions of the Bay. We continually track possible venues for the future and evaluate all opportunities as they arise.
- **Sponsored events** provide a way to leverage board relationship with corporate and media sponsors that we otherwise could not access. They also provide visibility with the



general public while raising much-needed revenue and promoting core message and mission.

On Saturday, November 9, 2013, we plan to host, for the sixth time, the **Wild & Scenic Film Festival** at USM's Abromson Center. Staff will work with the Board to secure sponsorships, starting with media sponsors, and including in-kind sponsor, as well as items for the raffle.

- **The Major Donor Appreciation Event:** This December event at the Cumberland Club is for our elite donors; it has been such a successful and enjoyable event each of the past four years that we will repeat it on Thursday, December 5, 2013. This is one of our favorite events of the year.
- **The Volunteer Appreciation and Members Annual Meeting Event** provides the opportunity for us to thank those who roll up their sleeves and work the hardest for the Bay alongside us, including our Board, our water quality volunteers, other volunteers, and our community partners. In 2012 and 2013, we accepted the offer from our Board Vice President, Judy Woodbury, for us to use the public space at Pierce Atwood's location on Commercial Street. Both events were great successes, though we realized that had we promoted the January 2013 beyond simply sending out invitations, we would have run out of room. We will be investigating other venues for January 2014, in hopes of expanding attendance, thereby increasing the recognition of our volunteers, the cache of volunteering with Friends of Casco Bay, while we promote mission-related messages about what we are learning together about the health of the Bay.

Here are detailed descriptions of some of our planned **outreach events**:

- **Baykeeper Speakers Bureau:** One of Friends of Casco Bay's strengths is making scientific data understandable, and identifying what we in the community can do differently as a motivation for people to change their habits in ways that will have positive impacts on the health of the Bay. People want to do the right thing. Events give us the opportunity to bring our data and science into the community in a personal and easily understandable form. This builds knowledge about the issues, informs people about what they should and shouldn't do that can protect the health of the Bay, strengthens our relationship with attendees, promotes a sense of shared ownership of the Bay and its health, and increases the credibility, visibility, and relevance of the organization.

There is increasing demand for us to make presentations in the community, and we launched the Baykeeper Speakers Bureau as our official program for marketing our talks. We will continue to work to expand the schedule for our staff and affiliates to speak. Staff and Board continue to identify sectors, groups and venues, such as land trusts, yacht clubs, civic organizations, neighborhood groups, and other nonprofits. We will explore, with each opportunity, whether we will be reimbursed for travel, receive an honorarium, solicit for membership, and/or recruit volunteers, though these will by no means be "deal breakers" for engaging. We received a modest grant to underwrite the costs of our speaking engagements during FY13 and will seek another underwriter in FY14.

Topics for our speaking engagements include: nitrogen pollution, coastal and ocean acidification, water quality, stormwater, storm drain stenciling, Baykeeping, BayScaping, the Casco Bay curriculum, beach cleanups, boater education, ocean acidification, oil spill preparedness, and our organization.

We will also make presentations at our house parties and similar events. We will continue to keep a log of all presentations given, along with the number of attendees.

In 2012, Mike Doan and Joe Payne presented talks on coastal and ocean acidification to audiences at the Maine Fishermen's Forum, Yarmouth Lions Club, Harpswell Land Trust, Phippsburg Land Trust, KELT (Kennebec Estuary Land Trust), and Trefethen Evergreen Improvement Association on Peaks Island. In addition, Joe inspired and provided the background information for a WMTW-TV editorial on ocean acidification, and Joe discussed the issue as a guest on *Maine Calling*, *Maine Watch*, and *207*. Additional outreach efforts for the past year are described above in the BayScaping section.

- **Conferences:** Friends of Casco Bay will be involved in a number of conferences, in a variety of roles, including, at least, the annual Oil Spill Seminar in Portland, Waterkeeper Conference to be held in conjunction with River Rally in Portland, Oregon, in May 2012.

**Bay Papers:** We have developed a format for presenting key issues and topics we are working on, which we refer to as an elevator speech. Each begins with an engaging question, poses why the issue is a problem for the Bay, and suggests to the listener or reader what we can do about the problem. More detail follows. Four of these were complete during FY13: CSOs, Ocean and Coastal Acidification, nitrogen, and snow dumping. More are in the pipeline, so to speak, and include and are not limited to the following topics: diluted bitumen / tar sands oil, what Friends of Casco Bay does and how we accomplish our mission, "What is a Waterkeeper?", recreational boat discharges, fertilizers and pesticides, oil spill preparedness, and our water quality monitoring program.

The Bay Papers are a key tool for educating our community about the Bay and our work, for speaking with one voice about our issues, for promoting advocacy, and for creating more ambassadors around the Bay who understand what we as an organization and what WE as a community need to understand about our relationship to this special resource. As completed, each is posted to our website and is available at our events. We may utilize the skills of a graphic designer to help us create a professional and cohesive brand for this product.

We will also be exploring production of a couple of key visual products involving our water quality data (pH and Temperature, in particular), and a piece on conditions around the Bay, in addition to exploring the poster idea described above in the section on the Casco Bay Curriculum.

## 9. Media and Public Relations

We continue to build on the already excellent record we have with getting our message out to various media connections. We will continue to seek opportunities to run feature stories on our work, as well as on our staff, board, and volunteers. We will continue issuing press releases on anything newsworthy, from the appointment of new board and staff members, to program initiatives, funding successes, crucial partnerships, interesting or unusual collaborations, volunteer accomplishments, and hot issues.

**Email communications:** We will transition from using Constant Contact. We will use the mass email capabilities in Raiser's Edge (REi), our new development software/management system, to engage with our members and friends by reporting our successes, inspiring action when appropriate, and encouraging on-line giving. We will use emails even more strategically and regularly to report-out, perhaps in place of some traditional print pieces. Over the past few years, we have been able to save significant financial resources by using digital communications instead of print. Specific objectives this year:

- Seek opportunities to tailor emails for particular groups and purposes – especially our volunteers (help Peter use email as a recruitment and communication tool) to improve open rates
- Schedule email updates throughout the year (maintain flexibility to send alerts and news when they are timely)
- Use emails to promote our events, especially the Film Festival
- Improve the substance, visual appeal and interactiveness of our emails, providing lots of links to donate and to our website
- Keep an “idea file” built on emails from other nonprofits, Network for Good’s Hints and Tips emails, etc.
- Make a concerted effort to acquire email addresses (consider sign-up perks or special benefits such as a contest, provide opportunities to join all over our website and material, or an online petition)
- Add an email renewal ask. This will include a link so that recipients can donate via the website immediately. The email will be sent just after 2<sup>nd</sup> renewals.

**Facebook:** Our goal is to use Facebook as a tool for engaging our current and potential supporters, especially in the greater Portland area. Specific objectives this year:

- At least two posts a week
- Use Facebook to drive users to the website
- Continue to use Facebook as a method to get information out, recruit volunteers and promote events.
- Consider using Facebook ads for the Film Festival
- Examine ways to capture user’s contact information. Ex: Create a contest where users must give contact information to participate or an online petition

**Twitter and other Social Media content:** In FY14, Friends of Casco Bay will launch a Twitter feed. We will create a Social Media Guiding Document to focus our efforts and guide our tweets. While a Twitter account will allow us to connect with all of our constituents, we see this as an important tool for reaching the media. Reporters and bloggers monitor Twitter for story ideas, news, and sources. We will supplement our press releases with tweets to get our stories out to the media. We will explore using a social media management dashboard to dispense our social media content and to track our interactions. This year we will consider utilizing additional social media platforms such as Google+ and LinkedIn to reach our constituents.

**Website:** The goal of our website is to present information about our organization in a way that is substantive, visually appealing, and interactive, in order to engage the support of our current and potential *friends*. We will keep our website dynamic and refreshed with substantive and easily understandable information about our work and Casco Bay, maintaining consistency with our fundraising efforts (developing content and language that match/complement our proposals, for example). We will continue to track visitor statistics, make use of links that serve our issues, programs, initiatives, and events. Specific website objectives this year:

- Consider ways and create opportunities to use our website more effectively to “get our message out”
- Refresh the content of the website with new language where needed
- Add more video content to the site as we continue to find creative ways to tell our story
- Convert existing written content to post on our website (newsletters, foundation proposals and reports, etc).
- Make our data and maps available (working with Mike and Peter)

**Print media:** We will continue to generate two print newsletters, the Annual Report, the film festival program, and other program-related display materials. Whenever and wherever possible, we will continue to weigh the trade-offs between cost and such things as the durability and portability of mailed print media, versus the less expensive but more ethereal on-line media, which is cheaper, has the ability to go viral, and reaches a different audience.

We will develop a foldout, 4 page version of the 2013-2017 Strategic Plan, including photos.

We will work to incorporate the status reports to funders written by the Development Office into the theme of the next Annual Report. We will seek to create other outreach opportunities to describe our progress on many of the issues we are confronting through advocacy, research, and outreach.

We will endeavor to get a full featured article in one of the monthly glossy magazines (Maine Boats Homes & Harbors, Down East, Maine Magazine), and we will continue to strive to submit op-eds and letters to the editor to the local papers. We have had good success getting pro bono ads placed in such publications as Maine Today Media, *Ocean Navigator*, and the program for Greater Freeport Community Chorus Christmas Concerts.

As part of the public phase of the Boats Fund Campaign, we designed an ad campaign to invite the public to support the fund for their Bay and to invite the public to the June 5, 2012 event at DiMillo's. We designed a matrix of print media outlets and pieced together an appropriate mix, geographically and demographically, of paid and pro bono markets for the ads. As a result, we had 29 ads for the public launch of the Boats Fund Campaign.

**Media and the R/V Joseph E. Payne:** As we follow the progress of retrofitting our new vessel for its role as a research and patrol boat through its launch and beyond, we foresee many opportunities for using the vessel as a public relations tool. We will seek out boating magazines to follow the retrofit of our new boat and the christening and commissioning of the Joseph E. Payne in their publications. We envision a three-pronged approach:

**Vessel Retrofit** We will invite selected boating publications to follow the progress of retrofitting the boat for our needs. We will also document the process with photographs as the boat is outfitted at two yards.

**Christening/Commissioning** We will expend considerable effort throughout the spring of 2013 to bring the media to the official launch events for the boat, including making individual contacts with reporters, arranging interviews before and after the events, and creating media packets to give out at the ceremony and send to those who do not attend.

**“Grand Tour”** We will explore opportunities to showcase the new Baykeeper vessel throughout Casco Bay. We will arrange for the boat to be highly visible at events such as the lobster boat races in Portland and Harpswell, MS Regatta, and yacht club events. We will explore using Twitter, Facebook, and email to alert coastal residents—and the news media—that the boat is coming to their neighborhood. We will see if we can develop a GPS tracking system to alert people to follow the Baykeeper boat whenever it's out on the Bay.

**Media Cultivation:** In 2012, we had

- Overall, more than 896 media mentions, with many stories citing Joe Payne's Lifetime Achievement Awards from Bates College and EPA
- 29 paid ads for Boats Fund launch on June 5<sup>th</sup>

- 348+ media hits for the Film Festival (includes 290 on WCLZ radio alone)

In 2012, we continued our Film Festival promotion through WCLZ radio's \$20,000 promotion donation. Other media sponsors included ProSearch-paid PSAs on cable TV, Portland Daily Sun print ads, Portland Press Herald online promotions, and a paid sponsorship campaign with Maine Public Broadcasting radio.

The 2012 group of USM Media Studies students completed a film project on our Water Quality Monitoring program. We did not submit new proposals in time for the Spring 2013 selection process, but we would like to identify partners who could transfer our BayScaping PowerPoint presentation to film or create an online forum for our Casco Bay Curriculum. We may submit these ideas in early 2014 to USM Media Studies Coordinator Dennis Gilbert.

While we are well-known and respected for our "work-with" approach, there may well be times that we have exhausted our working behind the scenes efforts. In those instances, we will use other means of advocating for better protections for the environment, including working through the news media, by bringing our key messages to the community.

A key part of our outreach work is cultivating our media partners to help them understand and report on issues important to our mission. We provide background information on issues and keep them informed of our actions so that not only will they cover our activities and announcements, but when a crisis arises that impacts Casco Bay they will think to contact us.

Some of our cultivation efforts will be to:

- Work with WMTW to establish an outlet for our messages and an environmental brand for the station
- Place Joe and Cathy on television and radio programs such as *207, Maine Things Considered*, *Mainewatch*
- Identify opportunities to call a press conference on specific issues, such as the Port of Portland's reduction in oil spill preparedness, what our water quality data shows that reflects global trends (climate change), the effect of changing pH on clam flats, beach cleanups
- Submit op-eds that appeal to readers' emotions, such as Joe's impassioned essay "The Bay is brown, the Bay is hurt," taking advantage of events such as the effect of polluted runoff from heavy rains, to evoke a visceral connection to the Bay.
- Cultivate reporters at major publications for exclusive issue-oriented interviews
- Call a press conference to talk about what our data is telling us about the health of the Bay, after we have developed a couple of the key visual products described above, such as the Report on the Health of the Bay.

**Help leverage Water Quality, Baykeeping, and Communication Efforts:** Development and communications staff will work collaboratively with program staff to leverage community support for our efforts. This will include efforts such as: developing a "Health of the Bay" report (mentioned above), encouraging activism (e.g., signing a petition), recruiting ambassadors for the Bay, and developing and distributing Bay Papers.

## **B. Development**

The mission of the Development Office is to ensure Friends of Casco Bay's long-term success through developing and sustaining diverse funding sources. Key to this effort is the effectiveness with which we engage our community about issues impacting the Bay. Through cultivating our donors' appreciation and understanding of our work and increasing Friends of Casco Bay's name recognition in the community, our goal is to broaden the breadth and deepen the depth of our support. Relationship building is crucial to our work. We have identified two demographics: those who support our work and those who do not know that they will support our work.

We recognize that our organization continues to operate in a challenging economic environment. In this time of economic uncertainty, it is likely that government and corporate support will continue to decline. Yet, as the Baykeeper Boats Fund shows, there is perceived value in our work and capacity in the community to support it.

We will continue to seek input and focus by collaborating with program staff, engaging the Board's Development/PR Committee, and conducting regular internal development meetings. In order to meet our fundraising goals, we will implement the following plan.

During FY14, we will endeavor to broaden and deepen all sources of funding. Development efforts will include the following:

- All solicitations for membership renewals, annual fund appeals, and Boats Fund requests will continue to be sent with hand-written notes, as is our standard policy and practice.
- We will continue to work with the board on penning notes on all Annual Fund appeal letters.
- We will raise money both for operations and capital needs.
- We will work to harness the power of our new Raiser's Edge database. The database will continue to be mined for special solicitation opportunities. Special appeals will again be designed as part of the Annual Fund appeal, to tailor asks to interests.
- We will continue to develop our corporate solicitation plan, including improvements in working with the Board to solicit more sponsorships for events.
- We will continue our boat donation program with Maine Maritime Funding Alliance, a Maine-based nonprofit, established to handle boat donations for the benefit of marine-related nonprofits in Maine.
- We will continue to set up visits with major donors, as well as with corporate and foundation representatives. We will contact the Board, as visits are set up, to garner intelligence and to see if and when Board members can accompany us.
- We will design and host a variety of events (see section on events).
- Our Film Festival will continue to be one of our signature events. Much of the solicitation of sponsorships has shifted from being done by the Board to being done by staff. After the November 2013 event, our sixth, we will evaluate whether this strategy, and, indeed the festival itself, is working for us, organizationally.
- We will continue working with individual board members to find the best ways to leverage their social capital and engage them in friend and resource building with us. Our data show that sending personal solicitation letters, hosting house parties, and inviting

friends, colleagues, and family members to our events are excellent ways to garner new members and deepen relationships with existing donors.

- We will draft our gift acceptance policy.
- We will begin to lay the groundwork for a planned giving society.

### C. Technology and Capital Assets

During 2010, we launched the **Baykeeper Boats Fund Campaign**. The goal is to raise \$485,000 in cash, pledges, and in kind gifts in order to replace and upgrade the Baykeeper boat and to have a fund to support maintenance of the fleet (which consisted of the 26' Baykeeper boat, the 21' pumpout boat, a 13' whaler, two skiffs, and two inflatables). To date, we have raised 88% of the goal in cash and pledges. (The 80/20 rule seems to be in effect: it will take 20% of our effort to raise 80% of the funds, and 80% of our efforts to raise the last 20% - not unusual.) We will continue to work with board and staff on visits to major donors for in-person asks. We held the public event to launch the public phase of the fund-raising campaign in June 5, 2012, which involved procuring boat registrations lists and sending those folks a newsletter and an invitation before we asked them to contribute, an advertising campaign, a series of extensive mailings through the end of 2012, and a fun event in June.

Over the course of FY13, in addition to the extensive capital campaign efforts for the new boat, we engaged in an extraordinary number of additional capital projects, all successfully. These investments are positioning us well as we go into the next 5-year period of operations:

- We searched for and in September 2012, acquired a new (to us) **Baykeeper vessel**, an AJ28 built in Winter Harbor, Maine. Over the winter and spring of 2013, the vessel is being retrofitted at Yankee Marina and New England Fiberglass.
- As mentioned in the Media and Public Relations section above, we upgraded our **website** platform.
- We researched, chose, and transitioned to a new development management system (software and database), **The Raiser's Edge** by Blackbaud. Data is stored in the cloud at 3 secure locations and is accessible via staff computers and smart phones. The Development staff continues to do a fantastic job learning how to use the attributes of the system to our advantage.
- We raised the funds to complete a **technology challenge matching pledge**, which together paid for the Raiser's Edge acquisition.
- We replaced our **network server**, which required extensive research and investigations into technological options, cloud feasibility, and vendor selection.
- We reviewed our 403(b) **retirement plan service provider**, and we are now in the process of shifting from Lincoln to Principal.
- Board and staff, along with three key volunteer partners, constructed a new **Strategic Plan**.
- We developed an **emergency succession plan** and will revisit its components as part of the annual staff review process.

- We have begun the process of transition to an **upgraded accounting system** to go on the new server.
- We will realize some preservation of **working capital** in because we will we not use capital from Contingency Fund for operating purposes as was provided for in the budget as a hedge against the potential effects of the lingering recession, and, instead, we will have made additions to working capital at year end to the extent of depreciation (a noncash expense) plus a very small operating surplus.

During FY14, we will:

- Continue the process of setting up the new **accounting** system, now that the new network server is in place.
- Continue the process of getting the **water quality database** completely populated with data and usable.
- Continue upgrades in **computer workstations**.
- Replace and upgrade the **projector** we use for presentations.
- Acquire a second **vehicle**.
- Replace **pH sensors** and batteries in all of the volunteers' meters, as well as outfit the **equipment** needed for more mudflat pH field work.
- Order a new **canvas top** and commission a **survey** for the pumpout boat.

## D. Administration

### 1. Staff

Over the past ten years, Friends of Casco Bay has restructured its staff carefully, ultimately adding only half a position, by redefining job descriptions and hiring accordingly when there has been attrition or opportunity. The staff consists of eight full time professionals and a seasonal pumpout ambassador. The staff turnover rate continues to be relatively low. We have a number of unpaid interns in and out through the year and during the summer, every year, as well as other volunteers.

We have assembled and retained an excellent team by maintaining a good benefits package and by running a fair and flexible workplace. In return, we expect a high quality of engagement, appreciation of the big picture and attention to detail. We also provide professional development opportunities across the board, such as attending classes, workshops, seminars, and conferences.

Compensation was frozen in the FY09 / FY10 / FY11 budgets; when revenue goals were met, an accrued bonus that was included in the budget was released and in two cases supplemented with additional funds. Given the continued surplus and/or break even results, and the need to bump up the base, the FY12 budget contained a 3% increase in compensation integrated into the numbers, not accrued, and this was greatly appreciated by staff. The FY13 budget contained a 2% increase, in addition, a couple of modest adjustments were made during the year, for merit and for partial compensation in lieu of health insurance for those leaving the plan to join spousal coverage.

At the beginning of FY12, we made the transition to Health Savings Accounts, a plan with a lower premium rate and a high deductible with some cost offsetting for the staff by Friends of



Casco Bay for the initial transition year via front loading a modest amount into each H SA. Premium costs increased by over 21% for FY13; as a result, the cost sharing was adjusted so that Employees now pay 25% of the premium instead of 20%, for both health and dental insurance. The benefits package also includes life and disability insurance, and the retirement plan. These benefits are central to attracting and retaining our excellent staff, and we need to make every effort to maintain levels of compensation and benefits to sustain them. For FY14, a 2% increase in base pay is included in the proposed budget, along with maintenance of the benefits package.

## 2. Financial Stability

The economy, domestically and internationally, continues to be in a recession; this is “the new normal.”

Friends of Casco Bay underwent a change in fiscal year end after 2008, the year the recession hit. We had a short, 3-month year January 1 – March 31, 2009, and for each year ending March 31 since, in 2009, 2010, 2011, and 2012 we have ended each fiscal year with operations at break even or better. Each budget has contained a provision to utilize up to a certain amount of the Board Designated Contingency Fund (BDCF) (\$45,000 each of the last three years). Not only have we not used a dime of the BDCF, we have added cash to the coffers by breaking even or better, and to the extent that we have recorded depreciation, a noncash expense. As of the writing of this plan with a month to go, projections show that FY13 will be another break-even or better year.

The FY14 budget draws on many sources of revenue and does not contain a request to utilize some of the BDCF in order to balance the budget to support the FY14 operating plan. With skill, hard work, and luck, we hope we will, once again, find we can break even in operations; if we are unable to, the resulting operating deficit will be closed out to unrestricted net assets. The evidence of an operating deficit in our financial reports the following year would make fundraising that much more of a challenge. During the last quarter of the fiscal year (January – March 2014), should circumstances indicate the need, we will be prepared to engage the board fully in conversations about how best to get to breakeven. We have a variety of options, and together we will seek out every opportunity to be able to present solid financials going forward.

Monthly financial reports will continue to be prepared, and budget versus actual figures will be closely monitored with timing versus permanent differences addressed in the narrative.

## 3. Collaborations

All members of the staff are engaged throughout the community and much of the state in a variety of ways, attending a myriad of meetings and conferences with a wide diversity of partners. While this gives the organization a great deal of visibility, it also provides our staff the **opportunity** to hear about what is happening with other organizations and issues. We will continue to share data and resources where appropriate, and to seek opportunities to collaborate on projects and funding opportunities. We will be alert to the opportunity to pick up important pieces of work and, whenever possible, associated funding streams, that may be abandoned by other groups in these difficult times. We will explore with the Board any merger or merger-like opportunities that may arise.

We will track our current alliances, collaborations and partnerships as one of our Strategic Plan metrics.

We update our emergency succession plan, for use in the (we hope unlikely) event of an unplanned temporary absence of staff. We have a first rough draft, compiled last year, which will be updated this year during staff reviews. This plan identifies the key roles and responsibilities of

each staff person, the particular staff members who would fill in on certain responsibilities in their absence, and the activities so unique to that individual that in their temporary absence likely would just not be attended to. We will also continue conversations about nonemergency succession planning.

We will continue to engage **Board** members around policy issues, Bay Paper content, program efforts and accomplishments, board governance, events, and community connections to resources, financial and otherwise.

## IV. FY14 Budget Highlights

The Operating Plan for FY14 describes our plan for improving and protecting the Bay under this first year of our new Strategic Plan 2013-2017. The Operating Plan itself describes the work and the rationale for our efforts (or the discontinuation of efforts) in four sections: Programs, Development, Technology and Capital Assets, and Administration.

A budget is the identification of the resources it will take to accomplish our Operating Plan, and it is a best guess at a point in time based on reasonable assumptions. Reality will prove to be different. To meet the goals of our FY14 Operating Plan, expenses are budgeted at \$778,430, a 6% increase over the prior year. As usual, expenses include a \$12,000 contingency line item. If we do not have any significant, unexpected expenditures, this expense line will help “absorb” some of the depreciation expense. The Budget identifies \$752,883 in operating revenue from a robust variety of sources, a 2% increase over the prior year. To bridge the gap, the Budget once again contains a line item Budgeted Contingency Transfer to Operations Not to Exceed. This reflects the potential use of accumulated surpluses from prior years, located in the Net Asset section of the Balance Sheet in the Board Designated Contingency Fund, to absorb the FY14 operating deficit, should one occur. The good news is that over that past 4 years, this “gap filler” in the Budget has been \$45,000 each year (we have never had to utilize it), and the amount in this year’s budget is down \$26,000. It is our fervent hope that we will not run a deficit and that we will, instead, have added working capital to the coffers at year end once again.

The beauty of having a fiscal year that ends on March 31 is that we can experience the results of (calendar) year-end giving, assess where we are in relation to where we thought we would be (an ongoing process, actually), and then together explore options to best meet our goals of delivering on our plan while striving to do better than break even.

The Budget to support the FY14 Operating Plan will be fodder for discussion at our upcoming March 13<sup>th</sup> Budget Workshop. Significant elements affecting FY14 include, on the downside, the continuing recession and the unknowable effects of sequestration, and on the upside, development staff will be fully focused on the plan (with the transition to a new database management system behind them and the Boats Fund Campaign winding down).

The FY14 Budget highlights:

- Increases in rent, fuel costs, event costs, and monthly tech support costs for the network and for the development system
- Increase in base compensation and increases in health and dental insurance
- An allotment for graphic design work
- Two major capital acquisitions: continued improvements to the new Baykeeper vessel prior to launch, and a new vehicle. Annual depreciation expenses are projected to be about \$27,500, so the prospect of breaking even after depreciation is slim. Our goal is to at least break even in operations before depreciation (a noncash expense).
- A proposed 1% increase in the transfer from the Baykeeper Endowment at Maine Community Foundation. This can be revisited in January 2014, before we request the next transfer.
- Use of the Boats Fund to pay for the Commissioning Event and the incremental increase in the costs of maintaining the fleet
- A budgeted \$26,000 potential use of the Board Designated Contingency Fund to help absorb an operating deficit, should one occur, and to present a budget that identifies the sources of all resources to be used to meet operating expenses as indicated by the Operating Plan.

Once the new Baykeeper vessel is launched, we will discuss where to house the balance of the Baykeeper Boats Fund.

## V. Measurements and Baselines

**Metrics help us monitor progress** in key strategic areas, toward key strategic goals. We can also use them to:

- quantify how we are doing over time
- provide us with information from which we can see trends and make decisions
- build credibility
- increase awareness of our organization
- inspire ongoing interest in our organization
- create relationships with our community
- raise money from our community

Our financial reporting is one of the more consistent metrics we utilize to measure our progress and see “how we are doing,” but the financials fail to tell us many other things. The other metrics now in development will enrich everyone’s sense of many other dimensions of our work.

Metrics information is widely available, across the organization. Efforts are underway to gather comparative (year by year) information we already have to help identify additional metrics we might track. The information we have is appropriately “siloed” in each of our program areas. One of our challenges may be to re-sort the information gathered from across the organization, to effectively address the areas of measurement identified in the Strategic Plan.

What follows is a list of the some of the data staff are tracking or plan to track. These will be presented to the Board in the months ahead.

### **Water Quality Program:**

Data points collected in a given year of each parameter (e.g., temp, salinity, pH, etc) by both volunteers (surface) and by staff (profiles and other field work)  
Sites monitored in a given year  
# days on water, in field collecting data  
#’s of samples collected, such as TN and DIN  
# of requests for data

### **Baykeeping**

Requests for support (as, letters of support, sign-on to petitions and letters, participation in press conferences, hearings, etc.)  
Request to emcee events other than those of Friends of Casco Bay  
Interviews, press conferences  
Meetings attended by type/issue  
New legislation, BMPs, regulatory changes, as a result of our work  
Detrimental actions halted or changed due to our input  
Beneficial actions catalyzed by our influence  
# of postings to website re Bay issues  
Website hits on Bay Papers, other topics

**Boats**

- # days on water by purpose
- # events new Baykeeper boat attends, # of visitors

**BayScaping**

- Presentations / year, # attendees
- Requests for materials
- Participation in community events, Back Cove garden days, workshops, etc.
- # Master Gardeners trained in BayScaping
- New materials to distribute and post on line – track web hits
- Request for related info (e.g., names of ecological landscapers, how to get rid of grubs)
- New ordinances or laws or BMPs related to BayScaping principles, use of pesticide and fertilizer reductions, limitations, bans on public property

**Storm drain stenciling**

- # Storm drains stenciled, # participants, # of communities around the Bay
- # Requests for kits, as many do not follow through because of weather or timing
- Cooperation with cities of South Portland, Portland, Falmouth, Cumberland, etc.
- Collaboration with other nonprofits and community groups (see collaborations below)

**Curriculum**

- Requests from teachers for curriculum, school visits, or training
- Workshop participants for Summer Institute and number of students they serve annually
- Other workshop presentations and numbers of participants
- Request to use our data in the classroom

**Pumpout Boat**

- Gallons pumped out each year in 20 gallon increments
- # Returning customers, new customers, transients
- Marinas, moorings most frequented
- # Requests received by email versus text, web site, phone, pumpout cell, VHF radio

**Publicity**

- Media hits
  - # of reporters who contact us for background info
- Press releases, calendar listings sent
- Pro bono media assistance: ads, TV appearances, editorials, etc.
- Anecdotal: people who are not members who have heard of us

**Publications**

- # printed and distributed
- Feedback (anecdotal but appreciated)

**Collaborations and Strategic Alliances**

- We will develop a grid to illustrate current working collaborative relationships in science, policy, education, media, program areas, and governance.
- # of requests for data

- # of requests from other organizations seeking WQ program planning help, QAPP's, equipment help, other help
- # requests to investigate "something going on" on the Bay

**Volunteer activity:**

- # of applications
- Annual recruitment versus returning stats
- # of WQ volunteers who enter data on line versus submit by mail
- # of Water Quality volunteers, other volunteers for beach clean-ups, events, office assistance, presentations
- # of interns
- # SMCC students who volunteer
- # WQ volunteers in program in 5-year time spans
- # beach clean ups annually, #'s of volunteer participants, #'s of pounds of debris removed

**New Media/Social Media**

Website

- # People visiting website, peak dates
- Top 10 traffic referral sources

Email

- # Constituent email accounts, # Donors, # Lapsed Donors, # Non-Donors with email
- Email open rates: average, highest, lowest

Facebook – both "Friends of Casco Bay" page and "I Love Casco Bay" page

- # Facebook Friends, # Likes, # Shares and most Shared items

Twitter

- # Tweets, # re-tweeted Tweets by topic

**Development information:**

Giving constituency statistics for each category Individual, Foundation, Corporate:

- # donors: # renewed from previous year, # lapsed that returned, # new
- Overall renewal rate %, # new that returned from previous year, new member renewal rate

Total # Donations

Annual Fund performance

Pyramid of Donors – Individuals

Pyramid of Donors - Foundations