To promote education, research and public awareness of Pleasant Bay as an Area of Critical Environmental Concern, to preserve open space and retain the visual quality of the area, to preserve the environmental integrity of the bay’s shoreline, to ensure habitat protection and retention of the rich biological diversity and productivity of the bay, to retain and enhance public access to the shoreline, to preserve natural and historic sites and to promote public awareness of historic Indian culture.
A Letter From Our President

Dear Members,

As I write to you in mid-March, Pleasant Bay is ice-free but still rimmed in white, as the weather shows signs of releasing its wintry grip. In the lee, the sun feels warm on the face, and the reflection off the water’s surface sparkles and dances. Renewal is in the air.

We have much to report in this spring’s newsletter. First up is exciting news on the acquisition of Sipson Island: from dream toward reality! A benefactor has stepped forward, a P&S agreement is signed, and an effort to raise public funds in Orleans is well under way. Much work seeking private matching dollars awaits, but we are well on the way.

The solar floating classroom, which wintered ashore at Arey’s Pond Boatyard, was relaunched in early April. The challenges we face in getting her permitted by the Coast Guard for paying passengers are significant and ongoing. As only the second solar powered passenger vessel seeking certification in the United States, she is breaking new ground.

Water quality is an ongoing issue in Pleasant Bay. The Friends Board continues to monitor studies and has formed a science committee to help members understand the current water quality status and approaches to remediation. To bring water quality to the personal level, our education committee offers practical tips for better living on the Bay.

Our historical piece in this edition traces the hallowed local history of the Baybird, a classic gaff-rigged sloop about to celebrate her 100th birthday as a Bay resident. She taught me how to sail and has a warm spot in many of our hearts.

Every winter the river of sand that is our outer beach continues to flow south and west, rearranging our channels and complicating the fishing fleet’s access to the ocean. Dredging is ongoing, and we report latest developments.

One way to stay in touch with the Friends and have access to various Bay-related resources is through our website, at fopb.org. Alice Ronty has been doing a great job of updating it and posting useful materials. Our member survey will be posted there for your convenience, and a hard copy is included here, if you prefer that format. Please take the short time needed to let us know more about you.

By the time these words reach your mailbox, crocuses will have come and gone and daffodils will be nodding in the southwest breeze. We look forward to seeing you around the Bay, and hope you will attend our annual meeting at the Wequassett on July 15th.

Mon Cochran, President
Sipson’s Island is Within Reach!

In our Fall 2018 newsletter, we wondered aloud “… what if Sipson Island could be conserved for all time, with carefully managed public access?” Six months later, we can report that a plan is in place that could make that dream a reality. Much hard work lies ahead, but the route to success has been mapped out clearly.

A private buyer has stepped forward, willing to purchase the Island and then sell most of it back to us, parcel by parcel. He has negotiated a reasonable price with the seller, made a $1 million contribution to the purchase, and agreed to place the entire island in a conservation restriction. He will retain one parcel, two of the island’s 24 acres, for his limited private use, and has agreed to grant the town of Orleans a right of first refusal for any resale of this property at its acquisition costs. The Friends Board, working with the Compact of Cape Cod Conservation Trusts, has voted to make every effort to raise $3 million toward this purchase, and Orleans voters are being asked to approve Community Preservation funding for $1.5 million at the Town Meeting on May 13th.

A new non-profit entity, the Sipson Island Trust, is being created to hold

Continued on page 4
Sipsons Island...
Continued from page 3

and manage eight of the nine island parcels. The trust’s board members will include representatives from the Friends board, the four land trusts around the Bay, Pleasant Bay Community Boating, island neighbors, local marine scientists, and several major donors, along with the buyer. This group will develop a management plan for the island, including trail development and maintenance, the public access plan, and the future uses of or removal of existing structures on the island.

One idea would be to use the main house on the island for a sustainability education center, designed to demonstrate clean energy strategies focused on the building itself, the island as a whole, and the Pleasant Bay estuary. The Sipson Island Trust will consider this and other proposals as it examines future options.

The map shows how ownership of the nine parcels on the island will be distributed and where there are existing structures. Some structures are likely to be removed eventually, due to their maintenance needs and upkeep costs. The island is surrounded by beaches, with the safest waters on the east side, away from the Narrows currents. A publicly accessible upland trail will run the length of the island. More than fifteen public access points around Pleasant Bay are available as launch points for residents of the four towns and visitors wishing to travel by boat to the island.

The Friends of Pleasant Bay Board has until the purchase closing, scheduled in January, 2020, to raise the $3 million needed to secure the island’s conservation. We will be working hard between now and then to accomplish what is the greatest fund-raising effort undertaken by the Friends in its 33 year history. If you would like to participate in this effort, please be in touch with President Mon Cochran at mmc6@cornell.edu or Vice President Kris Ramsay at kramsey6@gmail.com.

Special Update on Orleans Sipson Island Vote

On May 13 Orleans voters considered purchase of a conservation restriction on Sipson Island. Sixty-two percent of the Town Meeting voters supported the idea, but we were unable to achieve the 2/3rds necessary for funding approval. Our efforts to raise private funds for the island’s purchase continue with renewed energy. Conservation and stewardship will always be the way forward for the Friends.
To be owned by Sipson Island Trust with Conservation Restriction held by Town of Orleans (and perhaps the Compact)

proposed Sustainability Center (existing dwelling); to be owned by Sipson Island Trust with Conservation Restriction held by The Compact

Retained private home with Conservation Restriction held by The Compact — no public access; one house, no added development, ownership of existing private dock

To be owned by Sipson Island Trust with Conservation Restriction held by Town of Orleans (and perhaps the Compact)

public access allowed, trail, boat house, research/education)
Dredging is becoming an inevitable part of maintaining our coastal system, as we struggle to keep bays and estuaries open to our activities. On February 7th, the Orleans Citizen’s Forum hosted a presentation on the proposed Nauset Estuary dredging project in waters shared by Orleans and Eastham that addressed the complexities and timelines involved in such an undertaking. The presentation contained information that may shed a realistic light on the proposed dredging in Pleasant Bay, as well. A primary point in the presentation was that the dredging process itself is complex, involving a lot more than moving sand, since it must take into account the ecology, fragility and many resources of our bays. In the Nauset Estuary there are 300 recreational moorings, two marinas and a yacht club. The estuary supports all the activities related to the moorings, yacht club and marinas, activities that represent a big draw to the two towns, not to mention their associated revenues.

As explained by Leslie Fields, a coastal geologist with the Woods Hole Group who has studied and evaluated the Nauset Estuary for the past two years, the in-coming tide is bringing in more sand, while the out-going tide has slowed down, resulting in sand deposits filling in the inlet and the navigable channels. Limited by the reduced depth and breadth of the inlet channels, the Nauset commercial fishing fleet has grown smaller. This is a situation the Pleasant Bay commercial fleet knows only too well.
The Woods Hole Group is advising Orleans and will submit a proposal offering four possible dredging scenarios, representing a variety of dredging goals and budgets. The Center for Coastal Studies is advising Eastham. When the towns agree on a joint proposal, its citizens will have the opportunity to approve it. That decision is not an easy one, since the choices will be complex, and Eastham and Orleans will have to agree on how to share the cost of this project, estimated at $2 million.

Once the dredging decision has been made, the permitting process begins. That alone is estimated to take another two years, as the permits are required from federal, state, regional and town agencies. And before permits are approved, required studies to analyze possible dredging impacts are necessary — shellfish and fish habitats, red tide blooms and sediment sampling among them.

Pleasant Bay presents a scenario more complicated than that of the Nauset Estuary. Its commercial fishing fleet faces a more difficult route out to sea; there are more commercial businesses that depend on the Bay, including marinas, resorts, boat transport services, sailing and yacht clubs; moorings are controlled by three of the four towns abutting the Bay; and there are scores of recreational boaters. Let’s watch the Nauset Estuary dredging project to see what we can learn.
Education Committee:  
Tips for Better Living on the Bay

As our anticipation for spending our summer months on Pleasant Bay grows, let’s take a minute to think about how we use the Bay. Whether we sail, fish, kayak, swim, enjoy the beach or take photos, each of us cares about Pleasant Bay, and there are issues related to the Bay we may overlook. So, as we begin to prepare for our first Bay-bound journey of the season, let’s review a few tips for more sustainable living on the Bay.

Observe wildlife with respect.

We all want to get as close as we can to nature, especially marine mammals. However, we need to remember to respect them. NOAA Fisheries recommends staying at least 50 yards from marine mammals and reminds us that to feed or harass these wild marine mammals is illegal. Learn more about these recommendations at: [https://www.fisheries.noaa.gov/insight/frequent-questions-feeding-or-harassing-marine-mammals-wild/](https://www.fisheries.noaa.gov/insight/frequent-questions-feeding-or-harassing-marine-mammals-wild/).

Review navigation rules.

USCG Navigation Rules can be tricky, especially if you don’t use them all the time. A review before you put your boat in the water will keep yourself and other mariners safe. Spend the next rainy afternoon reading through the rules, found at [https://www.navcen.uscg.gov/pdf/navRules/navrules.pdf](https://www.navcen.uscg.gov/pdf/navRules/navrules.pdf).

Use environmentally friendly cleaning products on your boat.

Cleaning is an essential and often unwanted step boating. Think about what kind of cleaning products you use and their impact on the water and/or the animals living there. Here are a few environmentally friendly products: Thetford Marine Boat Wash, Concrobium XT Eco-Wash, Shurhold’s Yacht Brite Wash. If you cannot get your hands on these, make sure your cleaning products are toxic-free. One way is to make your own! Below are some suggestions that may well be less costly, as well.

<table>
<thead>
<tr>
<th>Traditional Product</th>
<th>Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleach</td>
<td>Borax or hydrogen peroxide</td>
</tr>
<tr>
<td>Scouring Powders</td>
<td>Baking soda</td>
</tr>
<tr>
<td>Floor Cleaner</td>
<td>1 cup white vinegar in 2 gallons of water</td>
</tr>
<tr>
<td>Window Cleaner</td>
<td>1 capful of white vinegar in 1 quart warm water</td>
</tr>
<tr>
<td>General Cleaner</td>
<td>Bicarbonate of soda and vinegar, lemon juice with borax paste</td>
</tr>
<tr>
<td>Head Cleaner</td>
<td>Baking soda with a brush</td>
</tr>
<tr>
<td>Shower Cleaner</td>
<td>Baking soda with a scouring sloth</td>
</tr>
<tr>
<td>Chrome Cleaner/Polish</td>
<td>Cider vinegar to clean and baby oil to polish</td>
</tr>
<tr>
<td>Aluminum Cleaner</td>
<td>Two tablespoons cream of tartar to one quart hot water</td>
</tr>
<tr>
<td>Brass Cleaner</td>
<td>Worcestershire sauce with equal parts salt, vinegar and water</td>
</tr>
<tr>
<td>Copper Cleaner</td>
<td>Lemon juice and salt</td>
</tr>
<tr>
<td>Fiberglass Cleaner</td>
<td>Baking soda paste</td>
</tr>
<tr>
<td>Drain Opener</td>
<td>Disassemble; use plumber's snake; flush with boiling water</td>
</tr>
<tr>
<td>Mildew Remover</td>
<td>Make a paste of equal parts lemon juice and salt or vinegar and salt</td>
</tr>
<tr>
<td>Interior Wood Polish</td>
<td>High quality almond or olive oil</td>
</tr>
</tbody>
</table>
**Do maintenance the right way.**

As responsible boaters, our job is to ensure that we do our best to leave no impact on the Bay. When it’s time to bottom paint or replace batteries, anchors or engines, research the best alternatives. Sailors for the Sea, a nonprofit, has a Green Boating Guide: (http://www.sailorsforthesea.org/programs/green-boatingguide). Be a Green Fisherman.

Fishing is a great way to spend time on the Bay, but think about potential impacts on the environment before leaving the dock. Make sure that you have the correct licenses from your town, your tackle is suited for the fish you are trying to catch, and you are recycling monofilament. Any fishing gear that you lose overboard risks injuring or killing marine species through ingestion or entanglement.

**What happened to that winter cover?**

When we put our boats away for the winter, they are often times covered with shrink-wrap (Low-Density Polyethylene or LDPE), a polymer plastic. Taken off the boat, the shrink-wrap often is discarded. Think about investing in a reusable cover or researching ways to get multiple seasons out of your shrink-wrap, so that you can reduce your carbon footprint one cover at a time and insure that the plastic does not end up in Pleasant Bay.

**Swim with Care.**

As we have all learned, using sunscreen when we are outside is crucial, even more so during the summer months when we are near the water. Unfortunately, many of the products we use to protect ourselves are detrimental to the ocean. Try to avoid sunscreens with oxybenzone when going for a swim. Check out this link for a short list of eco-friendly sunscreens: (https://www.travandleisure.com/style/beauty/reef-safe-sunscrenn).

**Know where you are anchoring/ mooring.**

In an effort to protect the diversity of species that rely on eelgrass beds throughout Pleasant Bay, try to avoid anchoring/mooring in these areas. The anchor digs into species’ habitat, and the chain drags across the seafloor, disturbing an even larger area. To learn more about the diversity on the Bay, check out the Center for Coastal Studies Summary Report 2014-2017: Below the Surface of the Bay. The report can be found on the Friends of Pleasant Bay website (FOPB.org).

**Skip single-use plastics**

Spend this summer picnicking in style! Purchase your own reusable cutlery, plates, and water bottles to keep on your vessel or in your beach bag. If dining near the water, encourage others to skip single use plastics, including straws, all of which can make their ways into the marine world.
Pleasant Bay Baybirds

This summer marks the ninety-eighth season that the Baybird class sailboats will sail the Bay. The eighteen-foot gaff-rigged knockabout was originally built in 1916 for the Duxbury Yacht Club by Marblehead boat builder William H. Chamberlain. Baybird fleets were also sailed in Marblehead and Wollaston before they were chosen by the newly formed Chatham Country Club.

In 1921, nineteen boats were towed down to Pleasant Bay for club racing that first summer. Over time, the Chatham fleet grew to more than forty boats. The list of owners from that initial season included such familiar names as Nickerson, McClennan, Manson and Dickson. The class continued to race at what became Chatham Yacht Club well into the 1940s. Quanset Camp bought their first Baybird, known as the Big Q, in 1922. Their fleet eventually grew to nine boats, and Pleasant Bay Camp followed with four Baybirds. Because of their roominess and responsiveness, they were a perfect fit for teaching young men and women how to sail and race. By the 1950s, though, the wooden boats were showing their age, so the camps began to build fiberglass versions. When Quanset and Pleasant Bay Camps closed in the late 1970s, their fleets of fiberglass boats were acquired by Camps Namequoit, Viking and Avalon.

The Baybirds have endured both on the bay and in the cherished memories of countless campers. About a dozen of the original camp boats have survived and have been augmented by newer boats built by Compass Classic Yachts and its successor, Pleasant Bay Boat and Spar Company.

There is an effort now being made to gather a large fleet of Baybirds to celebrate the 100th Anniversary of the Baybird on Pleasant Bay, in 2021. To find out more, contact Bruce Hammatt, at rbhammatt@gmail.com.

We thank Bruce Hammatt for contributing this piece on Baybirds to the FOPB Newsletter.
Ways You Can Give

Gifts of cash are among the most valuable forms of support for the Friends because they provide immediately available funds that are often unrestricted and give us the flexibility to meet our projects’ most pressing needs. However, in addition to cash gifts, there are many ways you can make a gift to the Friends. If you are considering a tax-deductible charitable gift, perhaps you’d consider one of these options:

**Gifts from Your Will or Trust:**
You may want to consider a gift through your will or trust, because the assets remain in your control during your lifetime, and you can modify your gift if circumstances change. Under current tax law, there is no upper limit on the estate tax deduction. If you need sample language, please contact us.

**Gifts from Your Retirement Plan:**
If you name the Friends as a beneficiary of your IRA or other qualified retirement plan such as a 401(k), 403(b), IRA or Keogh, you will realize significant tax savings. (Under current law, the IRS considers any balance in a retirement plan to be untaxed income!) So if you had planned to leave the balance of your IRA to heirs other than your spouse, that gift will be subject to both income and estate tax. The result of such taxation could consume as much as 60 percent of the value of your account. Instead, consider making the Friends the beneficiary and leave other non-taxable assets to your heirs.

**Gifts of Stock and Appreciated Assets:**
Stocks can be an excellent vehicle for your charitable gifts, as long as you have owned the stock for at least one year. You receive an immediate income tax deduction for the fair market value of the securities on the date of transfer, no matter what you originally paid for them. And, you pay no capital gains when the stocks are sold. Bonds and mutual fund shares also qualify.

**Gifts of Life Insurance:**
If you hold more paid-up life insurance than your family obligations require, you possess a wonderful potential gift asset. By naming the Friends the sole beneficiary, you can take a charitable deduction today in the amount of the policy’s cash surrender value or basis, whichever is less.

**Gifts of Real Estate:**
If you own highly appreciated real estate and wish to sell it, you will be subject to a capital gains tax for any appreciation on the property since the time of purchase. (A personal residence enjoys a capital gains tax exclusion of $250,000 for singles, or $500,000 for couples filing jointly.) Why not consider a gift to the Friends? You will receive a tax deduction based on the fair market value of the property, regardless of what you paid for it. Even better, we have licensed MA Brokers on the Board who can assist with the gift or sale.

Need Advice? We are here to help you make the gift that benefits you the most. Contact us at info@friendsofpleasantbay.org.
Water Quality in Pleasant Bay: Important Findings and Open Questions

Water quality is an issue we all care about, and for nearly two decades a dedicated group of volunteers has been collecting water samples to monitor if the water quality in the Bay is changing. Based on the most recent analyses of 15 years of these samples, there are mixed signs and important open questions. Some measures of the health of the Bay’s ecosystem are improving, however other indicators are trending in the wrong direction. And despite some positive trends, the water quality is still not what it should be.

People have been altering Pleasant Bay for years, sometimes quite obviously, as with the dike and its narrow culverts built across Muddy Creek around 1899. Less obvious changes are associated with increased nutrient levels in the Bay that have led to reduced water quality. Hypotheses surrounding the source of these changing nutrient levels have evolved since we first became aware of them. Early on, bacteria were thought to be the cause, and then road runoff. Now we know human waste to be a major source of these unwelcome changes. Nitrogen, a nutrient contained in human waste, leeches out of residential septic systems, passes through groundwater, and eventually makes its way to Pleasant Bay.

The travel of these nutrients through groundwater is a slow process, which means the negative effects of our actions on water quality take time to manifest, as do the positive results of any mitigation measures. A collaborative commitment to the regular and sustained collection of water quality data over time is important. These data are collected at the town level, in many cases by volunteers in programs designed and funded by Pleasant Bay Alliance.

The Alliance, formed shortly after the Friends organized to achieve the Area of Critical Environmental Concern (ACEC) designation from the Commonwealth, undertakes technical analyses and develops policy recommendations related to the Bay’s health. The towns that form the Alliance, Brewster, Chatham, Harwich and Orleans, have just received the Commonwealth’s first watershed permit, which allows them to directly manage the process of nitrogen reduction in the ACEC.

While we look forward to reporting on the Commonwealth’s first watershed permit program in the future, the focus of this article is on the most recent report, Pleasant Bay Alliance Water Quality Monitoring Program: Statistical Analysis of 2000-2014 Water Quality Monitoring Data (pleasantbay.org, under programs tab).

Scientists use particular aspects of water quality to tell us more about some of the biological processes occurring in a system. These parameters, or indicators, are used to gauge eutrophication (from the Greek for well fed), a process fueled by excessive nutrients, rapid growth in and decay of algae, and subsequent ox-
ygen depletion, which often results in inhospitable conditions for animal life.

The authors report on the trends seen in four indicators of nitrogen and phosphate enrichment (dissolved inorganic nitrogen, total nitrogen, bioactive nitrogen, phosphate) in the Bay and two indicators of the ecosystem’s response to nutrient levels (dissolved oxygen and phytopigments).

To identify the current trends, the authors of the report needed to consider the possible influence of a large break in the outer beach (Nauset Beach) created by a storm in 2007. They report that the 2007 break increased the volume of tidal water exchanged between the Atlantic Ocean and the Bay in a manner likely to be consequential. In order to account for the 2007 break, the authors report separately on the trends seen “pre-break” and “post-break.”

The report includes a table in its Executive Summary (Table ES-2) that is reproduced below. We focused on the post-break picture (right column) because it reflects trends seen under the current configuration of Pleasant Bay. You can see from the post-break column that unfortunately two of the four measures of nutrients (Dissolved Inorganic Nitrogen and Bioactive Nitrogen) trended in the wrong direction between 2007 and 2014. No significant trends were observed for the other two markers of nutrients (Total Nitrogen and Phosphate). Fortunately, the trends for the two markers of the Bay’s biological responsiveness showed positive changes, even in the face of increased nutrients. (Total Phytopigments – an indicator of algae – decreased, while availability of Dissolved Oxygen --needed by other species--increased.)

Not shown in the table is the fact that 80% of the water samples taken in 2014 did not meet desired levels of dissolved oxygen, even with the trend in the right direction. Conditions across the Bay are inconsistent, with some locations showing more or less improvement than others. The data presented suggest that, in some locations, conditions are worsening across the board. To better understand the present state of the Bay, you will want to consult the station-by-station analyses found in Table ES-1.

Table ES-2. Results of bay-wide trend analysis. The direction of statistically significant trends is indicated by the arrow direction (▲, ▼, ▼ = increase; ▼, ▼, ▼ = decrease). Arrow colors are used to convey whether the trend is associated with improved or worsened conditions (green = improved; red = worsened). Station-parameter pairs with no significant trend are symbolized with a black square (●). The salinity trend was characterized as a step-change type trend, with a statistically significant increase in salinity concentrations after the 2007 break, and is not associated with improved or worsened conditions because it is not directly related to eutrophication.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pre-Break Trend</th>
<th>Post-Break Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissolved Inorganic Nitrogen</td>
<td>▲</td>
<td>▲</td>
</tr>
<tr>
<td>Bioactive Nitrogen</td>
<td>▼</td>
<td>▲</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>▼</td>
<td>▼</td>
</tr>
<tr>
<td>Phosphate</td>
<td>▼</td>
<td>▼</td>
</tr>
<tr>
<td>Total Phytopigments</td>
<td>▼</td>
<td>▼</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>▼</td>
<td>▼</td>
</tr>
<tr>
<td>Salinity</td>
<td>▼</td>
<td>▼</td>
</tr>
</tbody>
</table>

Continued on page 15
The Friends Survey

We want to know a bit more about what is important to our members so that we can better serve your needs and interests. Our short survey is online at www.fopb.org or here in the newsletter, along with an envelope. We hope you’ll participate.

1. Where do you live in the winter?
   - West Coast, USA
   - Southwest, USA
   - Midwest, USA
   - Northeast, USA
   - Southeast, USA
   - Other

2. Where do you reside on Cape Cod?
   - Brewster
   - Chatham
   - Harwich
   - Orleans
   - Other

3. Where do you vote?
   - Brewster
   - Chatham
   - Harwich
   - Orleans
   - Other

4. How much time do you spend on the Cape?
   - Full time
   - Summers only
   - Part time all year (weekends)
   - Other

5. How do you prefer to receive information?
   - Prefer to receive publications USPS
   - Prefer to receive publications online
   - No preference

6. Have you visited the Friends of Pleasant Bay website in the past year?
   - Yes
   - No
   - N/A

7. If you have visited the website, have you used any of the links for tide tables, news articles, newsletters, etc.?
   - Yes
   - No
   - N/A

8. Do you use Face book, Instagram, Twitter?
   - Often
   - Occasionally
   - Never
   - Other

9. What do you do on Pleasant Bay?
   - Sail
   - Power boat
   - Kayak
   - Paddle board
   - Swim
   - Fish
   - Shellfish
   - Other

10. How often do you swim in Big Pleasant Bay, Little Pleasant Bay, Nauset Beach, Skaket Beach?
    - Often
    - Occasionally
    - Never
11. Where do you swim?  
Maximum selections: 4  
O Big Pleasant Bay  
O Little Pleasant Bay  
O Nauset Beach  
O Skaket Beach  
O N/A  
O Other

12. Where do you prefer to fish, hike, bird watch, admire the sunrise?  
O Atlantic Ocean  
O Pleasant Bay and Inlets  
O Cape Cod Bay  
O Other

13. What is your age range?  
O 18-40 years old  
O 41-60 years old  
O 61-80 years old  
O 80+ years old

14. Are there topics of interest that you would like to read in the FOPB newsletter, on the FOPB website, or presented at the Annual Meeting?  
O Yes. Please write your response below.  
O No, not at this time.

Water Quality...
Continued from page 13

Managing the Bay requires understanding what is driving its health. The current analysis leaves us with important questions. Why is it that some nutrients continue to trend in the wrong direction despite efforts to curtail them? What more should we do? Why are the indicators of the Bay’s health somewhat improved, even though the levels are not what they need to be? To understand this, does future monitoring need to add other parameters known to influence water quality; such as pH, light, water clarity and tidal flushing? What will it take to produce enough change for the Bay to reach desired nutrient levels? How are these changes affecting the diversity of animal life in the bay?

FOPB members are currently reviewing additional reports that examine other aspects of the Bay’s health. It may be useful to integrate these analyses of water quality with assessments of other Pleasant Bay ecosystems, including marine and mammalian populations. Such an integration might make it possible to establish a more complete understanding of the parameters of “Bay health” and how interested parties can best use this information going forward. The Friends of Pleasant Bay remain dedicated to working with the Pleasant Bay Alliance and others to pursue these important questions. And we commend the 2015 report to interested readers as an important step forward.