

Program Report

March 10, 2020



I. HIGHLIGHTS

1. New SC members status [Update]
2. Commercial fisherman outreach [Update]
3. New NBEP Backgrounder/Case Statement [Update]
4. New Vision 2032 Road Map [Update]
5. Science Advisory Committee meeting [Update]
6. Blackstone Needs Assessment Project [Update]
7. NBEP Datahub Launch [Update]
8. Hundred Acre Cove Project [Update]
9. NBEP outreach [Update]



II. MANAGING THE PROGRAM

1. Financials

- NBEP's funding status as of December 31, 2019 from NEIWPPCC is provided in the tables on the next page.

2. People

- *New Steering Committee Members.* Four of the people we invited to join the Steering Committee (SC) have formally accepted. New members include Caitlin Chaffee, CRMC; Kate Michaud, Town of Warren; Rachel Calabro, RIDOH; and Nate Vinhateiro, Coastal Institute. Catalina Martinez with NOAA and Stefanie Covino with City of Worcester area awaiting approval from their management. We have not heard back from MassDOT.
- *NBEP Internship Program.* NBEP always has more than enough work for interns but doesn't always have budget to cover them. While paid interns will still be pursued as possible, we have launched a more formalized and specialized program to (1) attract a steadier flow of quality candidates, (2) build long-term relationships with diverse educational institutions, and (3) enable award of school credit as compensation. We have spoken to a range of institutions (from URI MESM to Bristol Community College) and they are excited about the program. We plan to bring on at least one student this year, with plans for expansion as staff capacity to manage interns allows.

Estimated NBEP Funds Budgeted, Remaining, and Projections (As of 12.31.2019)

Expense Category	Active Job Cost Codes										Budgeted Funds Remaining	Projection FY20 Spending (Q2-4)	Notes	
	FY15 (0318)		FY17 (0332)		FY18 (0338)		STB (0100-324)		FY19 (0349)					
	Budget	Balance	Budget	Balance	Budget	Balance	Budget	Balance	Budget	Balance				
Personnel and Fringe	\$ 390,260	\$ (1,181)	\$ 404,419	\$ 26,412	\$ 584,480	\$ 379,698	\$ 16,290	\$ 14,759	\$ 439,824	\$ 439,824	\$ 859,512	\$ 240,000	~23 months of salary/fringe remaining	
Travel	9,650	(1,273)	7,300	(3,570)	13,250	(636)	446	440	10,800	10,800	5,761	10,000	Adequate FY travel funds	
Supplies	6,057	4,245	4,592	(6,136)	7,089	5,862			500	500	4,471	4,000	Adequate FY supply funds	
Contracts	130,841	96,716	47,000	47,000	5,000	5,000					148,716	106,500		
Other (breakout below)	-	-	-	-	-	-	-	-	-	-	-	-	-	All obligations covered
Subawards	815,192	86,163		(26,159)	316,500	316,500			35,000	35,000	411,504	394,995		
Other Administrative*	47,700	(18,883)	38,781	(4,036)	21,749	12,105			22,351	22,351	11,537	18,000	Adequate FY funds	
Total Direct	1,399,700	165,787	502,092	33,511	948,068	718,529	16,736	15,199	508,475	508,475	1,441,501	773,495		
Total Indirect	200,300	18,603	97,908	14,869	151,932	112,173	3,264	3,007	91,525	91,525	240,177	120,149		
Total	1,600,000	184,390	600,000	48,380	1,100,000	830,702	20,000	18,206	600,000	600,000	1,681,679	893,644		

*Includes Rental Space, Equipment Rental, Printing, Website Services, Conferences and Meetings, Conferences and Meeting Registration, Telephone, Advertising, and Computer Support from our EPA approved budget. Note that Subwards are pulled out from the Other category.

Contracts and Subawards Detail (As of 12.31.2019)

JCC	Project Code	Expense Category	Active Job Cost Codes								Total Balances
			FY15 (0318)		FY17 (0332)		FY18 (0338)		FY19 (0349)		
			Budget	Balance	Budget	Balance	Budget	Balance	Budget	Balance	
0318-002	S-2018-006	D. Codiga	\$ 31,000	\$ 21,840			\$ -	\$ -	\$ -	\$ -	\$ 21,840
0318-002	S-2016-010	City of East Providence	100,000	5,071							5,071
0318-002	S-2019-013	Mass Audubon	28,760	28,760							28,760
0318-002	S-2019-028	Save the Bay	25,000	25,000							25,000
0318-002	S-2019-027	Land Conservancy of N. Kingstown	5,000	5,000							5,000
0318-002	S-2019-029	Town of Millbury	75,000	75,000							75,000
0332-001	S-2019-019	URI Stormtools			26,964	26,964					26,964
0332-001	TBD	CCMP Support			6,500	6,500					6,500
0338-001	TBD	Synthesis Manuscript					5,000	5,000			5,000
0338-002	S-2019-024	Pawtuxet River Authority					22,500	22,500			22,500
0338-002	S-2019-018	Town of Bristol, RI					25,000	25,000			25,000
0338-002	S-2019-017	Town of Richmond, RI					30,000	30,000			30,000
0338-002	S-2019-030	Aquidnick Island Planning Comm					100,000	100,000			100,000
0338-002	TBD	Blackstone Capcity Grants					25,000	25,000			25,000
0338-002	TBD	Blackstone Project Support					70,000	70,000			70,000
0338-002	S-2019-016	MA DER					30,000	24,860			24,860
0349-001	TBD	Research Grants							35,000	35,000	35,000
		Total	264,760	160,671	33,464	33,464	307,500	302,360	35,000	35,000	531,495

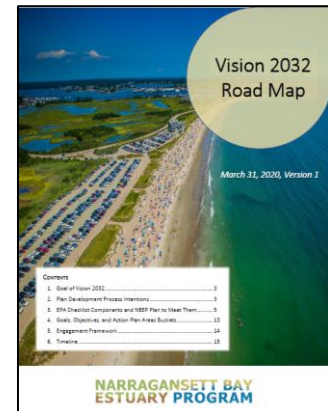
- *Commercial Fishing Meeting.* Mike has continued to engage with stakeholders across the study area at a rate of about three per week. One was of particular note. He had a lengthy and productive meeting with five commercial fishermen (lobster and finfish) in Newport. It appears that concerns about NBEP and the roll out of the *State of the Watershed* report are now behind us and we expect further engagement with them down the road including collaborations around estuary changes, citizen science, development of our new CCMP, and in time, a seat for the right person on the SC. A meeting with Bay shellfisherman is planned for this Spring.

3. Organizational Governance and Planning

- *Guiding Principles Update.* Further discussion on the set of updated NBEP *Guiding Principles* presented to the EC at their last meeting in January are on hold indefinitely pending resolution of divergent opinions among EC participants about whether to pursue a modest principles update (as proposed in January) or a full revision. NBEP staff will await specific direction from the committee on how to proceed.
- *Science Advisory Committee.* On February 19th, the SAC met to discuss science updates, and highlight some topics to cover in 2020 including a nomination process for new SAC members and having the SAC's input to the Vision 2032 process. The SAC heard from staff on land use, social science, and water clarity science updates while Emily Shumchenia presented new data on the status and trend of the benthic habitat. Additionally, staff and the SAC co-chairs will develop a short nomination process for the next meeting. The SAC will also have opportunities to contribute to Vision 2032 through the upcoming meetings, and at an upcoming SAC meeting.
- *NBEP Backgrounder/Case Statement.* Developed a new draft 4-pp fold-out fact sheet that provides a concise description of the background, importance, and accomplishments of the program. The draft version is being finalized internally and then will be made available for use. Page 2 serves as a simple fact sheet, while Page 3 will constitute the "case statement," a document with facts and figures that EPA has asked NEP's to produce to markets the value of the program. A more stylized version will be created when we bring on a graphic designer to assist with *Vision 2032*.
- *FY20 Work Plan.* Based on timing, the SC will need to approve NBEP's next work plan and budget at their next meeting on May 12th, so the SC can review and approve at their June 24, 2020 (our deadline for submittal is July 1st). NBEP has created a 1-page table that includes tasks in past plans that will carry forward, a list of four potential new tasks, and space for members to add their own ideas. The EC will walk through the table at today's meeting, with plans to provide the group a draft Work Plan and Budget well before the May meeting.
- *RISD Proposal.* Provided a Letter of Consistency for an exciting proposal, titled *Turning to the Rivers*, that RISD is submitting to the National Endowment for the Arts. This is an exciting and pioneering effort that will look to connect art, design, and place around the waterways of the Narragansett Bay Watershed. This project, if funded, will assist Vision 2032 by providing the perspectives of members of the interested public that may not come to typical outreach events.

- o *Vision 2032 Road Map*. Consistent with expert guidance we have received to date, NBEP staff have developed a 15-pp *Vision 2032 Road Map*. Note that we are referring to our next CCMP Revision as *Vision 2032*. The road map describes the perspectives and decisions shared to date at *Vision 2032* Subcommittee meetings. It includes the following information:

- Goal of *Vision 2032*.
- Intentions for plan development
- Tasks NBEP will undertake to ensure adherence to EPA CCMP Revision guidelines
- Matrix of preliminary new goals, objective and action plan areas
- Engagement framework to inform future outreach
- Plan development timeline.



4. Funding Diversification

- *Revenue Options*. Further discussion by this committee or pursuit of new sources is on hold pending release of a promised memo that describes the outcomes of the December 18th meeting between EPA and NEIWPC and new EPA NEP Funding Guidance later this year that will define permissible use of NEP funds for external funds proposal writing by NBEP and management by NEIWPC.



III. BRINGING PEOPLE TOGETHER

- *Blackstone Needs Assessment*. The second meeting for the Blackstone Needs Assessment project is March 11th. An invite went out to a long list of local interests, and 30 people are expected to attend. The agenda includes the solicitation process for capacity support grants, a review of the last watershed plan created for the basin in 2004, and a group process to build on ideas in the 2004 plan and captured at our first Blackstone meeting last November. In line with our SNEP award, at least four more meetings are expected to create a final needs assessment and decide on two field projects to support.
- *2020 Land & Water Summit*. On March 7th, NBEP will host a panel titled “New Tools and Opportunities for Volunteer Science in the Narragansett Bay Watershed.” Panelists will describe two new surveys using imagery to examine the recovery of bay bottom ecosystems from nutrient pollution and map the status of salt marshes facing rising seas. Finally, the panel will discuss a new method to assess potential sources of contamination to beaches that drive beach closures. The panelists will describe how these new tools create a better understanding of Bay conditions and new opportunities for people to participate in actions that advance the health of waterways in Rhode Island.
- *Indicator-specific Conversations*. Over the last 6 months staff have met with partners with specialized expertise and interest in certain watershed conditions, all of which are indicators in our Technical Report. Some have interest in forming ongoing working groups to enable better

coordination and knowledge-building to inform research and management decisions. Subject areas have included water clarity, salt marsh, submerged aquatic vegetation, HABs, social science, modeling, and changes in the estuary. Staff plan to continue these meetings in the context of science/indicator updates and potentially as a precursor for leading formalized working groups later this year.

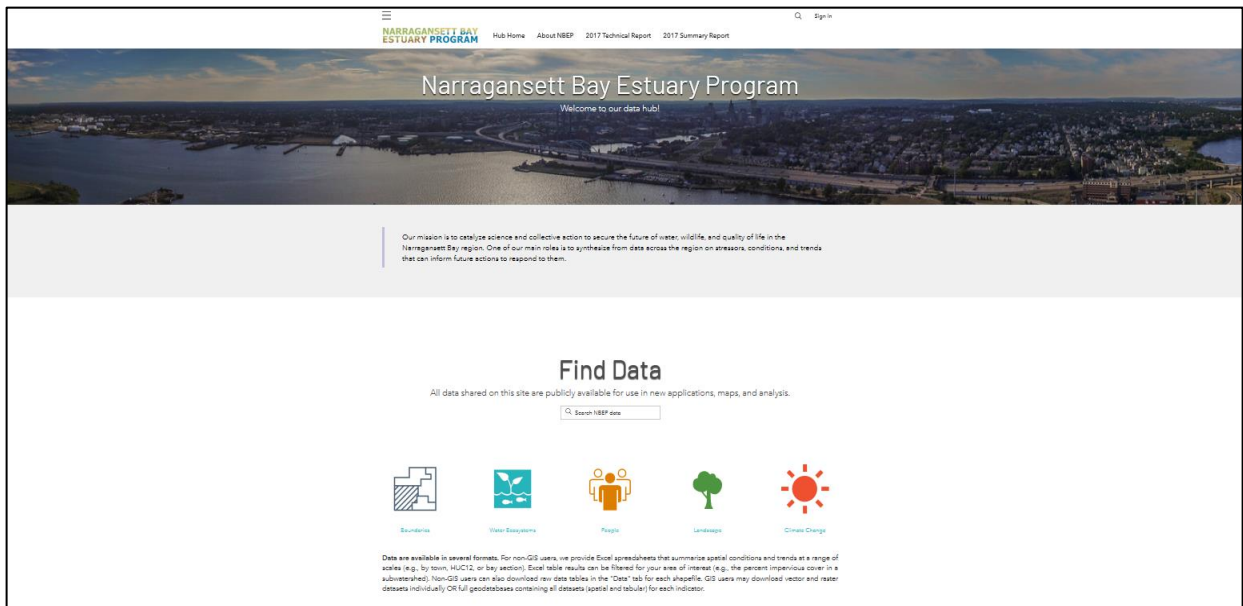
- *RAE Narragansett Bay Region Science Panel.* NBEP is plans to offer presentations and host a panel at the 2020 Restore America’s Estuaries Summit in October 2020. Topics include Vision 2032, HABs, and social science (coastal beach assessment).



IV. SYNTHESIZING, ANALYZING, & SHARING DATA

- *Synthesis Manuscript.* Submitted our Technical Report synthesis manuscript titled, *A synthesis of adaptive management case studies from Narragansett Bay emphasizing implementation of the U.S. Clean Water Act*, to the journal *Regional Studies in Marine Science* on February 27th. We are very hopeful that it will be accepted for publication by this journal; if not, we will publish it as a white paper via our website in the Spring.
- *NBEP Data Hub.* Launched a new NBEP Data Hub where data from our Technical Report, and ultimately other data sets, are available to the public. GIS data, excel spreadsheets, figures, maps, and online products are available, and GIS skills and software are not required. Our “Phase 1” data sets from the report are now available on the hub. These include boundaries, open space, impervious surfaces, land use, population, shellfishing areas, and water quality for aquatic life and recreation. A screenshot of the is hub below and a link here: <https://narragansett-bay-estuary-program-nbep.hub.arcgis.com/>.

1 A synthesis of case studies from Narragansett Bay (RI/MA, USA) emphasizing
 2 implementation of the US Clean Water Act using adaptive management
 3
 4 Authors: Courtney E. Schmidt^a, Eivy Monroy^{a,b}, Mark Cantwell^c, John King^d, Charles Roman^e
 5
 6 Author Affiliations
 7 ^aNarragansett Bay Estuary Program, Providence, RI
 8 ^bMassachusetts Division of Ecological Restoration, Boston, MA
 9 ^cUSEPA-ORD, Narragansett, RI
 10 ^dUniversity of Rhode Island Graduate School of Oceanography, Narragansett, RI
 11 ^eUniversity of Rhode Island Department of Natural Resource Sciences, Kingston, RI
 12
 13 Corresponding Author:
 14 Courtney Schmidt, Ph.D.
 15 Narragansett Bay Estuary Program
 16 235 Promenade St., Suite 393
 17 Providence, RI 02908;
 18 401-633-0553;
 19 Courtney.Schmidt@nbep.org
 20
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 26
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 28 The authors declare that they have no conflict of interest.
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- *NBEP GIS Infrastructure Upgrade.* Continue to organize and finish processing the data that underlies the Technical Report. All metadata is complete for the Phase 1 data sets posted on the Data Hub. Phase 2 is underway, starting with wastewater treatment plants, legacy contaminants, benthic habitat, and salt marsh habitat. Further, raw data for key figures in the report, including temperature, precipitation, population (historical), land use (historical), wastewater infrastructure, nutrient loading, seagrass, estuarine fish communities, and dissolved oxygen are complete, with water clarity, chlorophyll, and shellfish left to complete. These data will be uploaded to the Data Hub shortly. All work should be complete by Fall 2020, which will be a significant and important accomplishment in the history of the program.
- *Woonasquatucket Watershed River Council Story Map Project.* Visited two classrooms to offer in-kind technical assistance to students participating in WWRC's Story Map project, where students create stories about environmental issues impacting Olneyville for sharing with their family. We expect to partner further with WRWC around water, environmental justice, and youth in the future.
- *Solar Development as Land Cover Change.* After discussions with the *Rhode Island Climate Adaption/Resilience Info Sharing* meeting in January, and subsequently in the context of Mass Audubon's new report, *Losing Ground—Nature's Value in a Changing Climate*, NBEP spent some time investigating GIS data for ground-mounted solar development. Rhode Island has now implemented a process to track built and permitted solar projects and is re-digitizing solar projects based on NBEP recommendations. Staff also corresponded with various organizations in MA to discuss gaps we can fill for the MA portion of the watershed. This information is useful for NBEP in the context of tracking change in land cover.
- *Website Tweaks.* We continue to refine the website, including reorganizing the opening page, simplifying and better organizing the tabs along the top of the page, and adding links to our new data hub. A more extensive revision is planned in concert with the development/release of *Vision 2032*.



V. SUPPORTING EXTERNAL PROJECTS

- *Direct Via Technical Assistance*
 - *Hundred Acre Cove.* NBEP developed an interactive online map of stormwater infrastructure in the Hundred Acre Cove watershed. The map integrates town and state stormwater infrastructure data and supports viewing in concert with OpenStreetMap and satellite imagery. NBEP also conducted a full spatial analysis of onsite wastewater treatment systems using data obtained from the Town of Seekonk, Massachusetts. NBEP delivered a set of visualizations and a prioritization system using analysis of attributes collected by the towns and geoenrichment (e.g., how far something is from a stream). We will continue to work with Save the Bay to apply this prioritization system towards developing an implementation program and to refine Tier 2 maps.
 - *Narragansett Bay Watershed Map.* NBEP developed a customized map of Narragansett Bay Watershed for use in Save The Bay's 50th Anniversary coffee table book.
- *Indirect Via Funding*
 - *SNEP Funded Projects.* Scopes of work and contracts with NEIWPC are now in place for all but one of 11 projects awarded in 2019. We are still awaiting paperwork for the Aquidneck Island Planning Commission wetlands project and will need to reallocate these funds if we do not finalize their contract soon.
 - *FY17 Research Projects.* Projects from East Providence (Sabin Point Park Stormwater Improvement Project) and Dan Codiga (*Analysis and Synthesis of Bay Oxygen, Chlorophyll and Temperature Data*) are on target for completion by June 30, 2020.



VI. OUTREACH

- Below is a list of NBEP staff in-person outreach efforts since the December 4th EC meeting (a list was not provided for the January 14th meeting).

When	Person or Meeting	NBEP Staff	Why or Subject
Dec 6 th	Joanne Throwe, SNEP Clean Water Network	Gerel	SNEP support
Dec 9 th	Molly Henry, American Forests	Bancroft, Schmidt, Twichell	Partner-building/EJ
Dec 11 th	<i>RI Rivers Council</i>	Twichell	NBEP update
Dec 12 th	Liz Scott, SNEP Clean Water Network	Gerel	SNEP officer
Dec 13 th	Bill Napolitano, SRPEDD	Gerel	SC discussion
Dec 13 th	<i>Resilient Taunton Watershed Network</i>	Gerel	NBEP update
Dec 13 th	Sarah Schumann, commercial fishing	Gerel	Partner-building/fishing

When	Person or Meeting	NBEP Staff	Why or Subject
Dec 13 th	Curt Spaulding, Brown University	Gerel	Partner-building/funding
Dec 13 th	<i>RI Climate Adaption/Resilience Info Sharing</i>	Twichell	NBEP update
Dec 13 th	Walt Galloway, RI Rivers Council	Bancroft, Twichell	Mapping update
Dec 17 th	Millbrook Bog Restoration Project call	Schmidt	Project update
Dec 17 th	Kara Runsten, MA Municipal Vulnerability Preparedness (MVP) program	Gerel	Partner-building/municipal
Dec 17 th	Carolyn Mecklenburg, MVP program	Gerel	Partner-building/municipal
Dec 17 th	SNEP/NEP funding call	Gerel	SNEP support
Dec 19 th	West End Neighborhood Association	Gerel	Partner-building/EJ
Dec 19 th	<i>RI Woodland Partnership</i>	Schmidt	NBEP update
Dec 19 th	Emily Vogler, RISD	Gerel, Twichell	Partner-building/art
Dec 20 th	SNEP Policy Committee	Gerel	SNEP support
Dec 20 th	Hillary King, MVP program	Gerel	Partner-building/municipal
Jan 3 rd	Regina Lyons, EPA; Tim Dexter, MassDOT	Gerel	SC new members
Jan 7 th	RIDOH, RIDEM, and NBC	Schmidt	2019 bacteria data; science update
Jan 10 th	Shaun O'Rourke, RI Infrastructure Bank	Gerel	Partner-building/municipal
Jan 10 th	Kimberlee Glinka, SNEP Clean Water Network	Gerel	SNEP support
Jan 14 th	ANEP Board Conference call	Gerel	NEP support
Jan 14 th	Emily Shumchenia, E&C Enviroscope	Schmidt	Benthic habitat science update
Jan 15 th	Kate Mulvaney, EPA AED-Narragansett	Twichell	Social science update
Jan 17 th	Nate Merrill, EPA	Schmidt	Water clarity science update
Jan 21 st	Caitlin Chafee, CRMC; Tom Kutcher, RINH	Gerel, Schmidt, Twichell	Salt marsh working group discussion
Jan 22 nd	Kate McPherson, Save The Bay (STB)	Bancroft, Twichell	Hundred Acre Cove
Jan 23 rd	Wendy Nilsson, Brian Byrnes, PVD Parks	Gerel	Partner-building/parks
Jan 23 rd	Emily Vogler, RISD	Gerel, Twichell	NEA proposal
Jan 24 th	Priscilla De La Cruz, Green Energy Alliance	Gerel	Partner-building/advocacy
Jan 27 th	<i>SNEP Clean Water Network Advisory Committee</i>	Gerel	SNEP support
Jan 29 th	Wally Fulweiler, Boston University	Gerel, Schmidt	Bay change, SAC
Jan 30 th	Kate McPherson, Wenley Ferguson, STB	Bancroft Twichell	Hundred Acre Cove
Jan 30 th	<i>RI Environmental Monitoring Committee</i>	Gerel	NBEP update/RIEMC role
Feb 4 th	Tim Stagnitta, RI DEM	Twichell	Solar/land use change
Feb 5 th	JP Walsh and Jen McCann, RI Coastal Resource Center	Gerel	Partner-building/people
Feb 5 th	Sarah Schumann, Al Eagles, Lanny Dellinger, Tommy Doyle, Bobby	Gerel	Partner-building/fishing
Feb 5 th	Rob Johnston, Clark University	Schmidt, Twichell	Social science workshop
Feb 6 th	Paul Jordan, RIDEM	Twichell	GIS general, solar
Feb 10 th	NEP Nutrient meeting	Schmidt	NEP support
Feb 11 th	CRMC Habitat Trust Fund meeting	Gerel	Review proposals
Feb 12 th	Amelia Rose & Kufa Castro, Groundworks RI	Gerel, Twichell	Partner-building/EJ
Feb 13 th	Peter Zaykoski, NEIWPPCC	Schmidt	QAPPs
Feb 13 th	Emily Vogler, RISD	Gerel, Twichell	NEA proposal
Feb 13 th	Emily Johnson and Brian Hall, Harvard Forest	Twichell	Partner-building
Feb 14 th	NEERs Conference call	Schmidt	Treasurer role

When	Person or Meeting	NBEP Staff	Why or Subject
Feb 14 th	Warren Prell, David Murray, Baylor Fox-Kemper, Meredith Hastings, Tim Herbert, Brown University	Gerel	Partner-building/academic
Feb 14 th	Yelena Ogneva-Himmelberger, Clark Univ	Twichell	Social science
Feb 18 th	Heidi Ricci, Mass Audubon	Gerel	EC meeting planning
Feb 18 th	Sue Kiernan, RIDEM	Gerel	EC meeting
Feb 20 th	Kate McPherson, Mike Jarbeau, STB	Bancroft, Gerel, Twichell	Hundred Acre Cove
Feb 21 st	<i>Resilient Taunton Watershed Network</i>	Bancroft	NBEP update
Feb 21 st	Katy Dorchies, STB	Twichell	50 th anniversary map
Feb 24 th	<i>Project Zap the Blackstone 50th Anniversary Meet</i>	Bancroft	Blackstone needs assessment
Feb 24 th	RI Chapter National Organization for Women panel	Schmidt	Partner-building/EJ
Feb 25 th	Mike Bradley, URI; Kenny Raposa, NBNERR; Caitlin Chafee, CRMC; Jim Latimer; EPA; Stephen Granger, URI; and Wenley Ferguson, STB	Gerel, Schmidt	SAV working group discussion
Feb 25 th	Kate Michaud, Town of Warren	Gerel	New SC orientation
Feb 26 th	Emily Shumchenia, E&C Enviroscope; Dave McLaughlin, Clean Ocean Access; Mike Bradley, URI; and Kattie DeGoosh, RIDEM/NEIWPPC (Schmidt)	Schmidt	Land and Water Summit planning
Feb 27 th	Brett Stills, Art Gold, students, URI MESM	Schmidt, Twichell	Internship program
Mar 4 th	David Bidwell, Tracy Dalton, students, URI MA	Schmidt, Twichell	Internship program
Mar 4 th	SNEP Steering Committee	Gerel	SNEP support



VII. UPCOMING ACTIVITIES

- Priority staff activities for the next two months:

Gerel	Schmidt	Bancroft	Twichell
Vision 2032 and Steering Committee Meetings	Science Updates	Blackstone Needs Assessment	Data portal development
Blackstone Needs Assessment	NBEP Internship Program Launch	Hundred Acre Cove Project	GIS database organization and metadata
FY20 Work Plan & Budget	Metadata for Technical Report Figures	Data organization support and metadata	Hundred Acre Cove Project
NBEP Fact Sheet	Social Indicator Gathering	Website updates	Science Updates

- Upcoming NBEP meetings:
 - Blackstone Needs Assessment: March 11th, 9am-12pm, Blackstone Heritage Corridor Visitors Center, Worcester, MA
 - Vision 2032 Subcommittee: March 31st, 10am-4pm, RIDEM, Room 300, Providence, RI
 - Steering Committee: April 15th, 10am-2pm, RI Foundation, Providence, RI