

Fall 2024 SNEP Steering Committee In-Person Meeting Summary

Location: Cape Cod Commission, Barnstable, MA

The Southeast New England Program (SNEP) held an in-person meeting of the Steering Committee on October 21, 2024, from 10am – 3:00pm. The meeting is summarized below.

Meeting Date: October 21, 2024, from 10am – 3:00pm.

Agenda

- Meet and Mingle
- Introductions and Partner Updates
- Discussion: FY25 Budget Priorities and Workplan Overview
 - Review of FY25 Draft Workplan
 - Identification of new project priorities for BIL and Base funding
- (Lunch Break)
- Report Out: Monitoring Subcommittee Activities
- Report Out: Ecosystem Services Subcommittee Activities
- Discussion: Building Resilience to Climate Impacts in the Region
- Next Steps
 - Priority topics for next meeting
 - State of the Region Report Update
- Closing Remarks

Attendees

- Environmental Protection Agency, Southeast New England Program (EPA SNEP)
- Environmental Protection Agency, Office of Research and Development (EPA ORD)
- United States Geological Survey (USGS)
Cape Cod Commission (CCC)
- Martha's Vineyard Commission (MVC)
- Rhode Island Department of Environmental Management (RIDEM)
- Massachusetts Department of Environmental Protection (Mass DEP)
- The Nature Conservancy (TNC)
- New England Interstate Water Pollution Control Commission (NEIWPCC)
- Restore America's Estuaries (RAE)
- Save the Bay
- New England Environmental Finance Center (NEEFC)
- United States Army Corps of Engineers (USACE)
- Buzzards Bay National Estuary Program (BBNEP)
- Narragansett Bay Estuary Program (NBEP)
- United States Department of Agriculture, Natural Resources Conservation Service (NRCS)

MaryJo Feuerbach	EPA SNEP	Maggie Leary	Mass DEP
Margherita Pryor	EPA SNEP	John O'Brien	RI TNC
Haley Miller	EPA SNEP	Richard Friesner	NEIWPCC
Natalie Schafer	EPA SNEP	Tom Ardito	RAE
Christina Madonia	EPA SNEP	Padmini Das	Mass DEP
Alana Spaetzel	USGS	Courtney Schmitt	NBEP
Laura Erban	EPA ORD	Jed Thorp	Save the Bay
Erin Perry	CCC	Martha Sheils	SNEP Network (NEEFC)
Kristy Senatori	CCC	Larry Oliver	USACE
Sue Kiernan	RIDEM	Joe Costa	BBNEP
Adam Turner	MVC	Eric Boettger	NRCS RI

Introductions and Partner Updates

- CCC Updates
 - CCC Freshwater Initiative
 - Through SNEP working on an applied research grant to further work using remote sensing
 - Regional Water Quality Monitoring Program (partnering with the Association to Preserve Cape Cod)
 - Local pond monitoring
 - WQ Data portal for freshwater ponds and developing freshwater pond buffer guidelines specifically for Cape Cod.
 - Researching wastewater needs
 - 208 water quality management program
 - All 15 towns are partaking
 - Fund established in 2018
 - \$200M in funds to Cape Cod communities and fund monitoring efforts (long term – 2+years)
 - Held OneCape Summit, September 2024
- NBEP Updates
 - Going through comments on their CCMP and a draft will be released for public comment in mid-November
 - RFP – aquatic habitat conductivity (BIL funds to continue site specific planning activities) \$75k-150k/award
 - 41N Magazine Water Ways Issue (<https://41nmagazine.org/>)
- NRCS Updates
 - Program template work
 - Equip Program
 - NWQI (National Water Quality Initiative) – complete watershed plans
 - 2 watershed plans have been approved, now working on 3 HUC 12 plans, (Scituate)
- TNC RI Chapter Updates
 - New to the SNEP Steering Committee, updates to come.
- SNEP Network/ NEEFC Updates
 - Awarded for next 5 years
 - Most subawards are in process

- Additional templates in progress
- Assessing needs of the communities to start
 - Call for needs in stormwater series
 - Est. early Nov, then start series in Dec
 - Community assistance projects
- New partners in Network
 - URI (septic management)
 - Groundwork RI
 - Int. Resources RI
- LID/ ordinance review trainings
- Continue regional tools development
 - Nature-based solutions
 - Stormwater retrofit manual, developing companion manual for inspection and maintenance
- Next Gen Holistic watershed management tool
 - CCC (partner)
- Capitol viewing tool – HRU mapping for hot spots (and cold spots)
- Pre-vetted consultant pool
 - Pay consultants for work that cannot be done in house
 - Continuing this program and increasing funds to help moving projects forward (a lot of interest, especially from SWIG projects)
- Officially a TCTAC program partner!
- Mass DEP
 - Currently procuring grants for BIL and Base for 604b and 319 awards in the works
 - Multi-year funding opportunities
 - Received 30 proposals (asking a total of 8.3M)
 - Were able to waive the 40% match!!!
 - NEW: Environmental Justice (EJ) Nonpoint Source (NPS) Coordinators Program
 - Nitrogen sensitive areas incorporated into the NPS grants (planning and implementation grants)
 - Reviewing a ton of watershed-based plans!
 - Launched INSPIRE
 - Ideas for NPS projects
 - Working on climate and equity assessment projects for 604b (and also for 319)
 - Under review
- EPA SNEP SOAR Grant Updates/Overview
 - SNEP Opportunity to Advance Resilience (SOAR)
 - Goal to commit in total \$5 M to DACs
 - Event on Friday (Oct 25) in Providence
 - In total to date, have committed \$2.8 million
 - Focus – capacity building, planning, implementation, outreach, capacity
 - Max award is \$300K
- RAE Updates
 - SNEP Watershed Implementation Grants (SWIG)
 - Completed 2024 grant round
 - Awarded 2.8 M to 12 projects (split between RI and MA, with 1 interstate project)
 - Quality Assurance Project Plan (QAPP) support with VHB for SWIG grantees

- RAE National Restoration Conference in Washington DC
 - SNEP Panel
- Ramping up for 2025 grant round
 - RFP expected mid February 2025
 - Roughly \$2.8M funding level
 - Always trying to improve the application process
- Coordinates with SNEP Network and recommends utilizing the SNEP Network consultant pool
- NEIWPPC Updates
 - Certification and training for Title 5 wastewater operators
 - 1836 inspectors mostly in MA completed in September
 - Grant through RAE (SWIG)
 - Eradication of water chestnuts
- EPA ORD, Narragansett, RI Updates
 - Wetland restoration (cranberry bogs)
 - Works closely with USGS
 - Enhanced Septic Systems Paper
 - Wastewater training program at URI
 - Outreach/talks focusing on needs for better wastewater treatment systems
 - Hoping to address needs from stakeholders
- RIDEM Updates
 - Updated impaired waters list
 - Completed NPS management plan
 - Focus on 5 major concerns
 - New: microplastics focus
 - Worst year on record for Cyanobacteria blooms
 - Higher level of public engagement complaining and concerns
 - Hydrilla – discovered in RI for the first time in 2023 (big issue)
 - Was able to get a survey of Worden’s Pond, turns out to it has a HUGE infestation (150 acres out of the 1000-acre pond)
 - A ton near the public boat ramp
 - Working with USGS in assessing nitrogen concentrations
- USGS Updates
 - New representative to the SNEP Steering Committee, replacing retired staff
 - Several ongoing studies
 - SNEP symposium Overview Poster
 - Septic system densities
 - GIS datasets
 - Relationships between these densities and water quality
 - Salt ponds in RI – updates to groundwater models, nitrogen loading rates, flow paths, travel times, looking at management scenarios and incorporating sea level rise (SLR) and climate resiliency concerns in the RI region
- Save the Bay Updates
 - Projects on culvert assessment and aquatic habitat
 - Pawtuxet River
 - Also concerned about plastics
 - Statewide green bond (trying to secure via ballot on Nov 5th)

- Stay tuned!
- BBNEP Updates
 - Municipal grant programs, 170K in grants to support management plan and municipal activities (SNEP funds)
 - Infrastructure funding through EPA, running 4th round this spring
 - Technical assistance projects
 - Stormwater program/ collaborative to map and monitor discharges while working with 8 municipalities, especially concerning compliance with MS4 permits
 - Collaboration with Mass Maritime Academy
 - Students working towards environmental degree, work with Town to collect samples, smoke testing and going around systematically to all discharge locations
 - Working with partners and towns
 - Bourne – 604b, develop Total Maximum Daily Load (TMDL)
 - Dartmouth – similar TMDL
 - GIS nitrogen loading work in the watershed
 - BBC collaboration to evaluate runnels and short-term losses in salt marshes due to sea-level rise
 - Drone and remote sensing piece to saltmarsh restoration project
 - Working on prioritization of lands
 - Can view mapper tool on website
- USACE Updates
 - Re-sanding project, town beach in Sandwich
 - Hydrilla
 - Different species in RI than in CT river
 - Workshop with MA next week to explain approach in CT river
 - Highlight: beneficial dredge material database
 - BANOS search – beneficial use links
 - Put together database of which projects will need and are projected to have added sediment to sites
- MVC Updates
 - Drainage program with UNH
 - Workshop with Department of Transportation (DOT), UNH, and the town; also working with USACE
 - Looking at carrying capacity
 - Finishing up 208 Comprehensive Wastewater Management Plan (CWMP) with all the towns
 - Investigating joining the Water protection fund
 - Also working on a permeable reactive barrier (PRB)
 - Deeper dive looking into Biochar, and per-/polyfluoroalkyl substances (PFAS)

Discussion: FY25 Budget Priorities and Workplan Overview

Review of FY25 Draft Workplan

Identification of New Project Priorities for BIL and Base Funding

- Keeping in mind that all grants need to be competed and contracts need to be specifically for EPA direct benefit, SNEP is estimating approximately \$400K in base funds, and \$1.1M in FY25 BIL funds from FY25 that will be available for awards or contracts. SNEP also had a small amount of BIL

funds leftover from FY24 that will be rolled over into the FY25 funds and has another \$1.1M in BIL funds for FY26, therefore totaling an estimated \$2.2M in BIL funds needing to be allocated.

- Following is a list of potential funding priorities identified at our last Steering Committee (SC) meetings
 - Stormwater and nature-based infrastructure grants (SNIG)
 - Innovation grants (technologies and techniques)
 - New pilot watershed grant focused on green infrastructure
 - Direct awards to existing pilot watersheds
 - Existing Pilot Watersheds are:
 - UNH Stormwater Center and Marthas Vineyard
 - Buzzards Bay Coalition
 - Barnstable Clean Water Coalition
 - Woonasquatucket River Watershed Coalition, Providence
 - Charlestown, RI
 - NOTE: would need to be competed in those watersheds and not solely directed to those who already have awards through the pilot watershed initiative
 - Fund Cape and Islands subregional planning organizations (similar to BBNEP and NBEP support) (Base)
 - \$250K to NEPs every year
 - Proposing similar funding method for Cape and Islands
 - Incremental award (potentially)
 - 1 organization to serve the Cape and Islands
 - Monitor representative waterbodies in the SNEP region (Base)
 - Found that the monitoring in our region is highly variable in parameters and frequency monitored between subregions, not enough comparable monitoring to say something about the region as a whole
 - Instead – identify representative waterbodies
 - Boost monitoring in those areas to show change overtime
 - Congress wants to see results!
 - Plan to include these waterbodies in upcoming SNEP State of the Region Report (to be discussed further in next Steering Committee Meeting)
 - Permeable reactive barrier effectiveness research
- Other suggestions made during the meeting included emerging contaminants, however anything SNEP funds needs to align with its strategic plan, and since emerging contaminants are currently not a focus of the plan... including PFAS
- Important to note that our Strategic Plan will be due for an update next year, may be something to discuss when updating the plan to expand to contaminants, microplastics, etc.

Funding Priorities Discussion and Outcomes:

- Base Funds:
 - Recommended funding go to 1 organization to serve the Cape and Islands
 - Would need to compete but start small
 - Steering Committee thinking about subregions, NBEP and BBNEP gets this funding, should also consider giving to SNEP's other subregion
- Monitoring assistance?

- Concern regarding current monitoring since there are rising threats to sustaining the ongoing monitoring efforts. Something to keep in mind since future support of current monitoring may be needed to maintain data for the selected representative waterbodies.
 - Since there could be disruptions in monitoring, support could allow for an easier transition to shifts on monitoring efforts
- If we compete monitoring funding – may prove to be difficult to continue monitoring for the same group, the same way... cannot guarantee consistency unless it is a contract (contracts are for direct EPA benefit, while grants/ cooperative agreements are not)
- BIL:
 - Stormwater and Nature-based Infrastructure Grants? Similar to SWIG but not → in 2024 there were \$10M in requests for SWIG and was only able to fund \$3M
 - Would love to see more innovation grant opportunities, especially since SNEP is charged with supporting innovative approaches and strategies within its region.
- Base/BIL Voting Results:
 - Stormwater and Nature-based Infrastructure Grants – 14
 - Cape and Islands Subregional support – 11
 - Monitoring - 10
 - Innovation grants – 9
 - Awards to existing Pilot watersheds – 5
- Outcome/ Takeaways
 - Base = Cape and Islands Support
 - Monitoring support if funding is available
 - Note: we should consider how to keep support in existing pilot watersheds
 - BIL:
 - Stormwater and Nature-based Infrastructure Grants
 - Innovation Grants
 - Keep RFP as open as possible
 - Could do ½ and ½?
 - Breakdown would depend on funding and applications
 - Note: Discussed it may be good to expand the SWIG RFP to focus more specifically on nature-based solutions
- EPA will consider this member input as it prioritizes its funding allocation, and it is important to note that final FY25 program funding amounts will influence the priorities selected for FY25 allocation

Lunch Break

Monitoring Subcommittee Updates

- Update on SNEP EcoHealth Tracking Tool
 - Contract ended 9/30/2024, we are working to do a small close-out contract to make tool 508 compliant and make it available via SNEP/EPA website
 - Once on the website, use/test for a year then revise for second version
 - What is included in the tool:
 - Habitats: Eelgrass, Salt Marsh, Tidal Flats within SNEP Region
 - Most recent mapping vs. previous mapping

- Water Quality filters
 - Currently only using data in WQX; not doing lakes just coastal/near shore waters
 - Data sources listed and described in “Data Sources” tab
 - Also has a note next to the WQ parameter box referring to WQX data source.
 - Tool does not have live updates yet
 - Update on increasing regional data availability
 - CEI WQX contract, purpose was making it easier to get data into our database
 - Data is then shared with the public via the SNEP EcoHealth Tracking Tool
 - Developed a saved import configuration tool for partner organizations for future use and education on collection
 - QAPP assistance tool
 - Goal: develop a searchable QAPP data base (soliciting contract 1/2025)
 - Access QAPPs as needed through database:
 - Search by keyword
 - Download documents of interest
 - Has QAPP been amended
 - Maintainable by SNEP staff
 - Bid will be going out for a second time in January 2025
 - Discussed need for QAPPs to be relevant giving changing requirements

Ecosystem Services Subcommittee Updates

- Valuation of salt marshes in the region
 - Contract building on integrated ecosystem services framework in previous years; basic methodologies and value monetary and non-monetary benefits within SNEP region
 - 3 areas: Waquoit Bay, MA; Northern Buzzards Bay, MA; Hundred Acre Cove, RI
 - Modeling future flooding impacts in relation to global sea level rise scenarios – IPCC climate projections – under 2 scenarios:
 - With constant current salt marsh habitat extent
 - Without salt marsh habitat
 - Initial results in northern Buzzards Bay and Narragansett Bay
 - Contractor is now taking this framework and putting on ground.
 - Final deliverables include discussion of cultural benefits, model outputs and we should expect to see a report by end of 2024 calendar year (will share out)
 - Final graphics and figures are being developed to better present the individual impacts
- Valuation of urban parks and green spaces in disadvantaged/underserved Communities
 - Contract to look at urban parks and green spaces in a similar way as we did on the salt marsh
 - Compare metrics within our identified EJ communities
 - Distance to closest parks
 - Tree shading within the park vs the rest of the SNEP region
 - Starting with the desktop special analyses, but for next steps, would be good to do on the ground outreach

- Think about filtering through and thinking about the specific uses of the greenspace (recreational and for communal purpose)
 - Spaces for public use vs private golf courses.
 - Feedback – instead of focusing on the entire SNEP region, why not focus on a smaller area as a pilot study
- SNEP Cranberry Bog Restoration Workshop
 - Deliverables available on SNEP site (<https://www.epa.gov/snep/cranberry-bog-restoration-workshop-case-studies-and-opportunities-maximize-ecological-benefits>)

Discussion: Building Resilience to Climate Impacts in the Region

Cape Cod Commission Highlight

- Host organization (CCC) climate resilience activities
 - Developed model bylaws for communities subject to flooding
 - Originally developed by MassDOT
 - Model used for flooding and SLR estimates for different time scenarios and future flood vulnerabilities
 - What do we need to be planning for? Roads, structures, stormwater, septic, etc.
- 1st PROJECT HIGHLIGHT: How important are these roadways to these communities
 - Highly critical roads with high usage
 - 15 towns identified 2-3 vulnerable roads and for these roads CCC and towns worked with consultant to develop solutions (hybrid and nature-based solutions)
 - 34 road solutions across the Cape
 - Q & A:
 - Road and nature-based approaches/ solutions - how does that work?
 - With each of the concepts, relative costs, efficiency, and depends on the towns' priorities and the roads identified
 - Some roads couldn't have a full nature-based, some had to be hybrid solutions
 - How do you consider the driveways and other components?
 - Working with stakeholders and there is a next step for working with communities to move forward into the next phase of the project
 - What about long-term benefits and avoidable costs?
 - Did not necessarily include avoidable costs but gave stakeholders a timeline, the different design solutions and their benefits
 - Were the Tribes involved?
 - Worked closely with towns, and Mashpee is very communicative with the Mashpee Wampanoag Tribe
- 2nd PROJECT HIGHLIGHT:
 - Manage development in the floodplains
 - Cape specific work is consistent with MA DEP work, relies on MCFRF model.
 - Started this project a couple years ago, critical need to manage growth development
 - Guidelines and models are available and are deigned to expand past the FEMA floodplain.
 - Developed implementation tools to aid in the implementation of these models and make adoption of these bylaws easier

- Real community interest (especially in the lower Cape)
- Q & A:
 - How receptive are the towns to the updated/ change in bylaws?
 - Lots of town staff that are receptive, but really depends on the town...
 - Going to be a big lift in education and outreach

Steering Committee Discussion

- What do partners see as major needs?
 - Downtown flooding problems – need soft and hard solutions
 - RI has storm tools that are supposed to look at coastal and inland/riverine flooding
 - Mostly coastal, looking into adding riverine data with storm surge data/parameters
 - Having a tool like this would be helpful for the region
 - More detailed flood predictions and updates
 - Needs someone to gather this data
 - What are the demographics of people affected by flooding?
 - And what solutions were chosen from these results (hurricane Sandy)
 - Looking at management of marshes to manage SLR
 - Is there a mechanism to increase the public green/urban spaces and greenway but also incorporate climate resilience.
 - Also take on rural areas as well.
 - What direction do we go? (Increase? Protect?)
 - Would need to look at both.

- What are partners doing to address needs?
 - NRCS: National watershed and flood protection program expanded with BIL
 - RI Infrastructure Bank
 - “Designing for resilience” (reached out with RFP)
 - Tell us what your problems are,
 - 4-5 projects funded
 - Initial design
 - A ton of demand, would be great to have more like this
 - USFWS: Spent through TNC ~\$5M on thin layer placement, and a lot of it didn’t work... how was it done, what happened?
 - Something further to investigate...
 - USACE: Study in western CT, as well as expanding to south coast RI, Narragansett Bay, and looking into Boston...
 - There are small projects of protecting the shorelines, but to protect against large flood events, need LARGE projects (there are none regionally)
 - Upgrading culverts – nature-based (whole thing needs to be done)
 - “Oyster castles” being used in Nantucket to combine culvert work with improved habitat and water quality
 - EPA: resource document on the role of dam removals in combatting NPS as well as supporting restoration.
 - <https://www.epa.gov/nps/nonpoint-source-hydromodification-and-habitat-alteration>
 - Feedback. SNEP focuses on environmental improvement, not straight flooding. Other agencies are tasked with that. SNEP should continue to seek projects that lead to

environmental improvement (water quality, habitat), and also support flood reduction as part of that.

- Project Boundary (clean water eligible project with resiliency aspects, vs. getting water off the streets... many projects are not eligible because the environmental hook is missing... SNEP should be funding the projects with the environmental hook, projects without it can use other resources).
- Opportunities for collaboration among partners?
 - Designing for resilience
 - Not so much looking at habitat but more at the flooding locations and flooding issues
 - Region wide efforts to look at stormwater and nature-based infrastructure
 - Flood risk reduction solutions
 - Next strategic plan should be looking into the science
 - There are many interesting questions that will need attention, but answering certain questions about flooding, future water quality and the climate change impacts it a regional need
 - In terms of nature-based solutions (UNH stormwater), need to think about combining needs, ex. PRB for both nutrients and other pollutants in stormwater – combine both approaches (more monitoring?)
 - Need assessments of the nature-based solutions...
 - Do they actually work?
 - Ex. thin layer placement is not enough to address damage from major events like hurricane Sandy.
 - SNEP should look at what was learned by work after Sandy, wrap up what we can or have learned after hurricane Sandy
 - Region collaboration opportunity?
 - Workshop opportunity??
 - Helping partners with bylaws and municipalities
 - Top-down vs bottom-up approach
 - Capacity is done through doing projects
 - Examples of workforce development include:
 - URI Septic workforce development
 - Groundworks, RI Infrastructure workforce development
 - Stormwater innovation center
 - If the projects that go in are done by the people maintaining them – more care in the projects to carry on vs being forced/ told to do the projects

Next Steps

- State of the Region Report
 - Timing and next steps
 - Selection of Representative Waterbodies
 - Interested in being a part of the conversation? Email: schafer.natalie@epa.gov
- Priority topics for next meeting
 - State of the Region Report
 - Develop program targets in the future, EPA expects to be asked to do this in the future
 - Next meeting will be virtual (shorter version)

- Identifying dates - what is the best way? Should we continue using doodle poll or should we set up a standing meeting invitation?
 - Consensus: Doodle Poll (year). First try it over a 6-month period to identify major conflicts, then pick a date and go with it.
- Interested in being a part of the Monitoring Subcommittee and/or the Ecosystem Services Subcommittee?
 - Monitoring Subcommittee: schafer.natalie@epa.gov
 - Ecosystem Services Subcommittee: miller.haley@epa.gov