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“GOALS, ROLES, AND STORIES”: Vision 2032 Meeting

April 12, 2023

NARRAGANSETT BAY ESTUARY PROGRAM

Meeting Attendees

Catie Alves, Save the Bay
Rich Batiuk, Coastwise Partners
Veronica Berounsky, Rhode Island Rivers Council
Walter Berry, NBEP Steering Committee
Giancarlo Cicchetti, EPA
Peter Coffin, Blackstone River Coalition
Stefanie Covino, Blackstone Watershed Collaborative
Donna Desrosiers, Pokanoket Tribe
Roger Desrosiers, Pokanoket Tribe
Walt Galloway, NBEP Steering Committee
Mike Gerel, NBEP
Holly Greening, Coastwise Partners
Melissa Guillet, 15 Minute Field Trips
Topher Hamblett, Save the Bay
Allen Hance, Roger Williams University
Jim Latimer, EPA ORD
Regina Lyons, EPA Region 1
John Marsland, Blackstone River Watershed Council
Haley Miller, SNEP
Dave Monti, No Fluke Charters
John O'Brien, The Nature Conservancy in Rhode Island
Heather Parry, Blackstone River Coalition
Suzanne Paton, U.S. Fish and Wildlife Service
Sarah Paulson, The Nature Conservancy in Rhode Island
Caitlin Riddick, MassDEP
Scott Ruhren, Audubon Society of Rhode Island
Jane Sawyers, RI Dept of Environmental Management
Courtney Schmidt, NBEP
Elizabeth Scott, SNEP Network
Mariel Sorlien, NBEP
Dave Taylor, Roger Williams University
Liam Van Vleet, University of Rhode Island
Max Werner, Rhode Island School of Design
Darcy Young, NBEP

Meeting Agenda Summary

Welcome, Introductions, and Vision 2032 Refresher (15 minutes)

Review of Key findings from February conversations with NBEP Partners (30 minutes)

Activity #1: Which Vision 2032 objectives most need goals? (45 minutes)

Activity #2: How can we work together to create and adopt these goals? (45 minutes)

12:15 Lunch Break (30 minutes)

Activity #3: What are our region's most compelling environmental stories? (45 minutes)

Group Synthesis of Goals, Roles, and Stories (25 minutes)

Brief Preview of Next Steps for Vision 2032 (5 minutes)

2:00 PM Adjourn

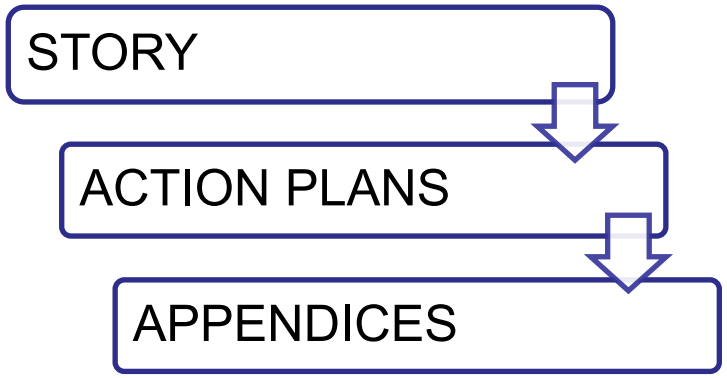
Why Vision 2032?

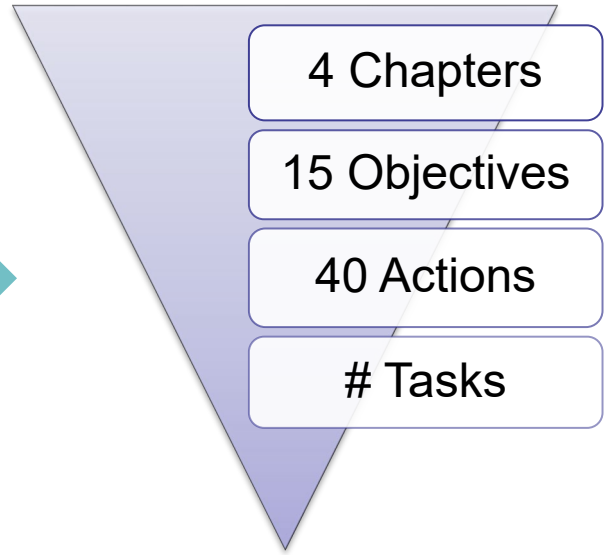
Provide a coordinated, holistic plan to inform delivery of the Narragansett Bay Estuary Program partnership's services and funding over the next 10 years.

Vision 2032 Plan Hierarchy

Comprehensive
Plain language
Narrative

Narrow
Technical
Required paperwork





Vision 2032 Development

Input & Screening
- Stakeholder meetings to identify priority issues
- Create list of possible Actions based on input
- Check Actions against screening criteria and lenses

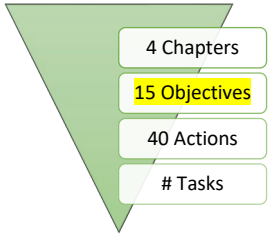
Draft Plan
- Draft Action Plans
- Define partnership roles
- Develop stories

Review Plan
- Action-specific outreach and peer review
- Final committee review
- Public comment

Finish Plan
- Steering Committee and EPA approvals
- Release plan in printed and online versions
- Get to work!

1. Action is not already complete.
2. Supports CWA/NBEP mission.
3. Addresses an NBEP indicator or Vision 2032 Goal.
4. Creates measurable results.
5. Achievable in 10 years.
6. Entity available to lead.

Vision 2032 Objectives



People

- **Engagement.** Increase meaningful engagement with and ownership by those most knowledgeable and/or impacted by environmental changes and proposed actions to address them.
- **Information and Storytelling.** Manage data and tell stories.
- **Governance.** Create the structures and processes that empower progress toward goals.
- **Funding.** Support those with the authority, expertise, and/or agency to act.

Water

- **Nonpoint source pollution.** Reduce pollution that runs off the land.
- **Point source pollution.** Reduce pollution from WWTPs, CSOs, stormwater systems, and septic systems.
- **Trash.** Pursue trash-free watersheds.
- **Flooding.** Respond proactively to sea level rise and flooding.
- **Water supply.** Provide water supply to meet beneficial uses.

Wildlife and Habitat

- **Land use.** Advance sustainable and equitable land use decisions.
- **Freshwater living resources.** Restore connectivity, function, and resilience of freshwater systems.
- **Estuary living resources.** Restore and preserve estuarine and coastal habitats.
- **Wildlife.** Protect and document biodiversity.

Public Spaces

- **Public access.** Increase access and enjoyment of the region's common natural resources.
- **Sustainable resource use.** Protect nature through responsible use of existing natural resources.

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"GOALS, ROLES, AND STORIES": Vision 2032 Meeting

Conversations with NBEP Partners: Summary of Findings

NARRAGANSETT BAY ESTUARY PROGRAM

Who we are

Holly Greening
Executive Director Tampa Bay Estuary Program. Facilitated Tampa Bay Estuary Program's successful nutrient management and seagrass recovery strategy.

Rich Batiuk
Chesapeake Bay Program, Associate Director for Science, Analysis and Implementation. Instrumental in designing Chesapeake Bay Program's extensive cooperative approach to meeting Bay targets.

Preparing for Today's Meeting:

CoastWise Partners conducted one-on-one in-person and virtual conversations with Steering Committee and Scientific Advisory Committee members

- Shared lessons learned with Steering Committee at December 15, 2022 meeting
- Held in-depth in-person discussions with NBEP staff in December 2022 and February 2023
- Held 16 conversations with Steering Committee and Scientific Advisory Committee members during February
  - All conversations were kept confidential
- CoastWise Partners identified 15 key findings
  - Extracted partners' perspectives backing up each finding
  - The Summary of Findings and compilation of individual responses without attribution were provided to NBEP partners in mid-March
- Worked with NBEP staff to structure today's meeting agenda and objectives

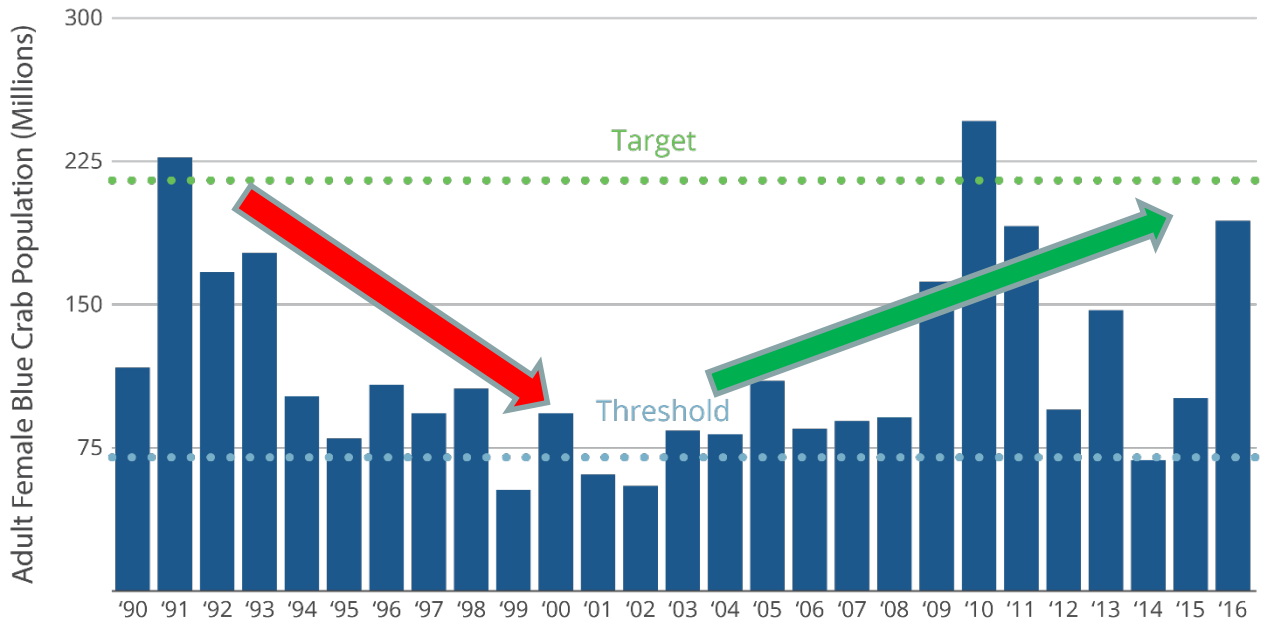
Findings Review

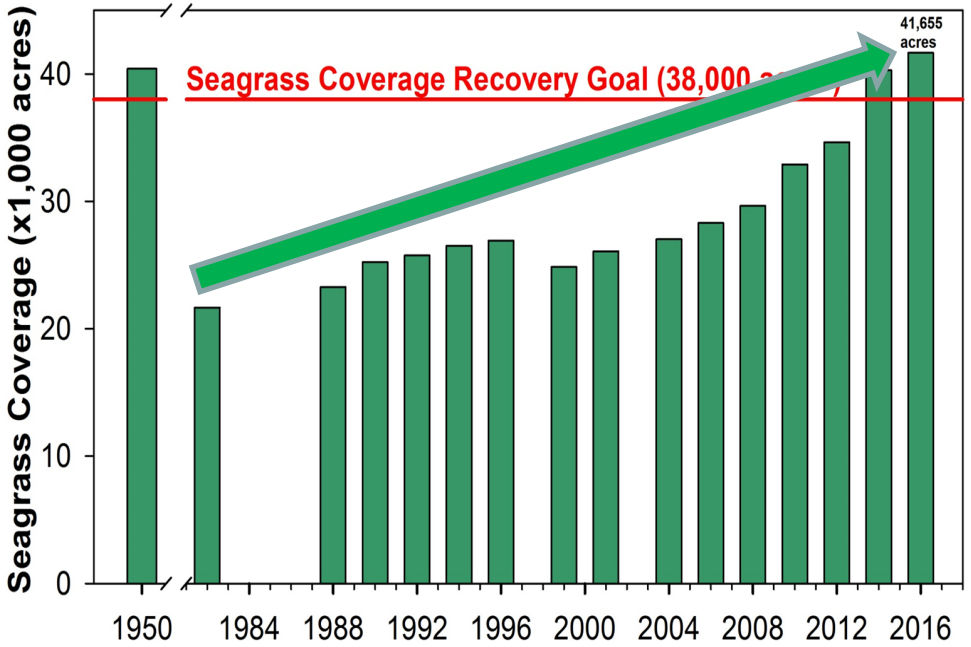
- The following Findings were collated by CoastWise Partners based on results of the conversations.

- Please identify any questions, comments or corrections you may have about each of these findings.

- You will be asked to identify specifics for three of these findings following the Findings Review.

Setting Numeric Restoration Goals and Measuring Progress Towards Achievement is Critical to Success!





Goals for Narragansett Bay and Watershed

Finding: Partners don't see any existing measurable environmental goals for Narragansett Bay and the surrounding watershed beyond those required through the Clean Water Act. However, Vision 2032 provides the opportunity for collectively developing quantitative restoration, protection and conservation goals which are measurable and achievable.

Finding: Partners want to see goals for working together more effectively.

Comments:

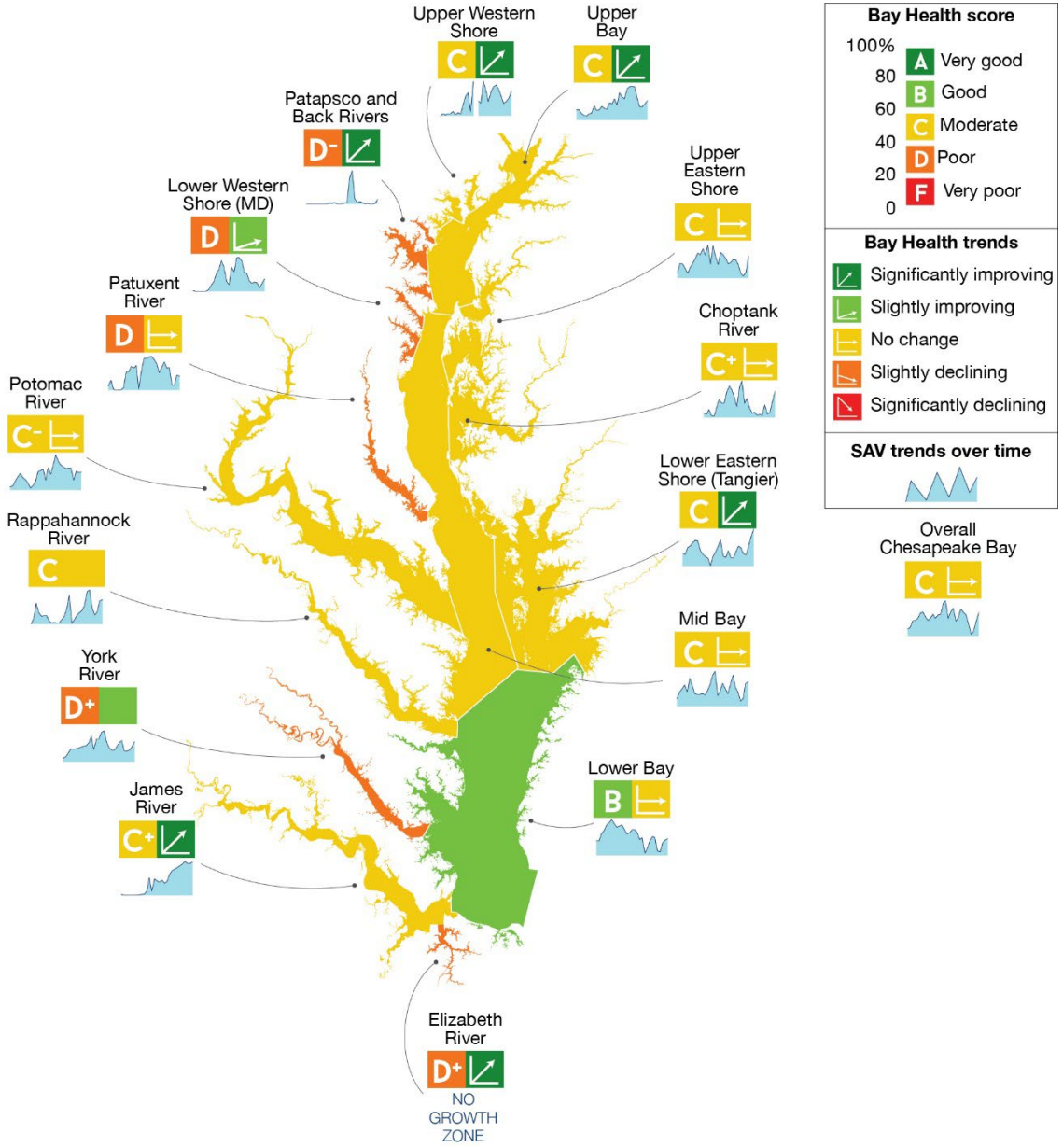
Responsibility for Creating Goals for Bay and Watershed Restoration

Finding: Partners are in agreement on the need for setting goals for Bay and watershed restoration, but there are different perspectives on which entities should be responsible for setting the goals.

Comments:

Telling the Public Your Bay and Watershed Story is Critical to Success!

Year	Old Tampa Bay	Hillsbor-ough Bay	Middle Tampa Bay	Lower Tampa Bay
1975	Red	Red	Red	Green
1976	Red	Red	Red	Yellow
1977	Red	Red	Red	Red
1978	Red	Red	Red	Yellow
1979	Red	Red	Red	Red
1980	Red	Red	Red	Red
1981	Red	Red	Red	Red
1982	Red	Red	Red	Red
1983	Red	Yellow	Red	Red
1984	Red	Green	Red	Yellow
1985	Red	Red	Red	Yellow
1986	Red	Yellow	Red	Green
1987	Red	Yellow	Red	Green
1988	Yellow	Green	Yellow	Green
1989	Red	Yellow	Red	Yellow
1990	Red	Green	Red	Yellow
1991	Green	Yellow	Yellow	Yellow
1992	Yellow	Green	Yellow	Yellow
1993	Yellow	Green	Yellow	Yellow
1994	Yellow	Yellow	Red	Red
1995	Red	Yellow	Red	Yellow
1996	Yellow	Green	Yellow	Green
1997	Yellow	Green	Red	Yellow
1998	Red	Red	Red	Red
1999	Yellow	Green	Yellow	Yellow
2000	Green	Green	Yellow	Yellow
2001	Yellow	Green	Yellow	Yellow
2002	Yellow	Green	Green	Green
2003	Red	Yellow	Green	Yellow
2004	Red	Green	Green	Yellow
2005	Green	Green	Yellow	Yellow
2006	Green	Green	Green	Green
2007	Green	Green	Green	Green
2008	Yellow	Green	Green	Yellow
2009	Yellow	Yellow	Green	Green
2010	Green	Green	Green	Green
2011	Red	Green	Yellow	Green
2012	Green	Green	Green	Green
2013	Green	Green	Green	Green
2014	Green	Green	Green	Green
2015	Yellow	Green	Yellow	Green
2016	Yellow	Green	Green	Green
2017	Yellow	Green	Green	Green



Telling the Bay and Watershed Story

Finding: Partners see the need to tell the story of how Narragansett Bay has been improving, what's happening up in the rivers, and where are the remaining challenges.

Comments:

- Also focus on trends, not just meeting the goals.
- Remember the audience when telling the story, e.g., EJ communities.
- Upper Bay improvements is one story we need to tell based on based on everything which have been accomplished in the past decades.
- Important to get the stories from people that live on and around the watershed.
- Lead with success stories-actions which have resulted in improvements.

Unique Roles and Responsibilities of NBEP

Finding: Partners view the NBEP as critically important conveners, providing a safe and neutral space for bringing together different perspectives. Partners find NBEP to be key to addressing the need for a bi-state approach; as a credible source science and technical information; and as being the honest broker letting us know when we are straying from our desired path forward.

Comments:

- Technical support and expertise.
- Bi-state focus is a success story in itself.
- Provide direct support to smaller actions and partners.

Unique Roles and Responsibilities of NBEP

Finding: Partners view NBEP's focus on local communities as mission critical.

Comments:

Need Groups of Partners Working Towards Common Goals

Finding: Partners want to form teams to help coordinate work towards specific goals.

Comments:

Scales at Which to Address Issues

Finding: Partners agree that, depending on the specific issue, the scale at which to work will vary from watershed and bay-wide down to very local.

Comments:

Developing Watershed and Estuarine Habitat Restoring Priorities

Finding: Partners see local partners' involvement as key to establishing watershed and estuarine habitat restoration priorities, with NBEP and entities with larger scale expertise providing support for development of restoration strategies.

Comments:

Tracking Effectiveness of Nonpoint Source Pollution Reduction Practices

Finding: Partners envision EPA and the state environmental agencies taking the lead on developing and implementing systems for tracking the effectiveness of nonpoint source pollution reduction practices.

Comments:

Creating and Applying Narragansett Bay and Watershed Models

Finding: Most partners believe developing and applying models is needed in support of enhanced decision making, but there are different perspectives on who should be responsible for model development.

Comments:

- Model needs to be clearly defined.

Protecting and Restoring Salt Marshes and Ponds

Finding: Partners want individuals and entities with the recognized expertise and representing local communities taking the lead for setting goals for and undertaking the actions necessary for protecting and restoring salt marshes and ponds with the NBEP playing a coordination but not an implementation role.

Comments:

- Staffing up is occurring at many levels and entities. NBEP can be a bridge and convener.
- Existing efforts to be more strategic- NOAA and FWS. NBEP can play a key role in this effort. Who is doing which portion- can help identify these.

Coordinated Monitoring of the Bay and Watershed

Finding: A number of partners made it clear that it is time for undertaking coordinated monitoring of Narragansett Bay and the watershed, bringing together the multitude of currently independent data collection efforts.

Comments:

Need to Get 'Shovel Ready' to Receive More Funding

Finding: Partners see the time is now to become much more effective and efficient in receiving and investing the greatly expanded level of federal funding now available in shared water quality and habitat restoration priorities.

Comments:

Vision 2032 Seen as an Opportunity

Finding: Partners see their collective work on Vision 2032 as an opportunity to be bold and address a number of recognized gaps and priorities.

Comments:

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Activities for Discussions and Decision Making

NARRAGANSETT BAY ESTUARY PROGRAM

Activity #1: Which Vision 2032 objectives most need measurable goals?

Activity: From the 15 objectives in the Vision 2032 Action List, identify the highest priority objectives to set measurable goals for that are most needed/feasible to set within next ten years (dot exercise).

Exercise: Each participant has five dots to place on priority objectives. Objectives are listed by Vision 2032 chapter.

Rules: 10 minutes to place dots. Each participant may place no more than 2 dots per objective. 30 minutes for group discussion.

Activity #1 Review: Which Vision 2033 Objectives most need goals?

Results of the prioritization exercise: the highest priority objectives most prime for goals were (in order of the number of votes received during the dot exercise):

1 – Objective 12: Estuary living resources (23 votes)

2 – Objective 5: Nonpoint source pollution (20 votes)

3 – Objective 14: Public access (16 votes)

4 – Objective 6: Point source pollution (12 votes)

5 – Objective 13: Wildlife (12 votes)

6 – Objective 3: Governance (11 votes)

7 – Objective 11: Freshwater living resources (11 votes)

8 – Objective 8: SLR & Flooding (9 votes)

9 – Objective 1: Engagement (7 votes)

10 – Objective 2: Information and storytelling (7 votes)

11 – Objective 15: Sustainable resource use (7 votes)

12 – Objective 4: Funding (6 votes)

13 – Objective 10: Land use (4 votes)

14 – Objective 7: Trash (3 votes)

15 – Objective 9: Water supply (1 vote)

Activity #1 Review: Which Vision 2033 Objectives most need goals?

Results of the prioritization exercise: the five highest priority objectives most prime for goals were:

1 – Estuary living resources (23 votes)

2 – Nonpoint source pollution (20 votes)

3 – Public access (16 votes)

4 – Point source pollution (12 votes)

5– Wildlife (12 votes)

Discussion:

- Interested to see public access scoring in the top 5
- Thought flooding would score high given the connection to climate change. However, all of these topics relate to climate impacts.

Activity #1 Review: Which Vision 2032 objectives most need goals?

Discussion (Con't):

- What was your rationale for putting your dots on the wildlife objective?
  - The public responds to local wildlife and their restoration, from butterflies to river herring, particularly in urban communities.
  - Focus on increasing biodiversity in the face of continued climate change.
- Need to establish baselines for our streams and rivers prior to undertaking major restoration projects so we can measure and report progress as a direct result of our restoration projects.
- Even in development of TMDLs, we can focus on habitats and habitat restoration which will benefit from the desired pollutant reductions.
- Recommend we go with a 20 year horizon to achieve numerical restoration goals to provide a level of comfort to those responsible for setting and achieving these goals (based on experiences with development of the Long Island Sound TMDL).

Activity #1 Review: Which Vision 2032 objectives most need goals?

Discussion (Con't):

- In Tampa Bay, the partners did not establish a specific timeline for goal achievement as they did not know when they would restore seagrass.
- With fish passage, it's critical to document the blockages themselves as well as the populations which now can reach the re-opened habitats.
- Don't forget about the importance of water supply in terms of quantity and quality and its influence on where and how much we can further develop the watershed.
- Beyond wildlife, we should consider our states' water quality standards and the built-in objective of achieving balanced aquatic life populations.
- Are we working to set these goals before we finish the Vision 2032 plan or include commitments to establish the goals in the plan itself?
  - Response: we are planning to include commitments to set these goals in the plan.

Activity #2: How can we work together to create and adopt these goals?

Activity: For the objectives we prioritized for goal-setting, who needs to be the lead – an existing entity (if so, who) or a new entity (if so, why)?

Exercise: Count off into five groups and rotate among flip charts. Write down potential leads for each prioritized Vision 2032 objective.

Rules: 5 minutes per chart, 20 minutes for discussion.

Activity #2: How can we work together to create and adopt these goals?

Activity: For highest priority goals, who needs to be the lead – an existing entity (if so, who) or a new entity (if so, why)?

Pre-Activity Discussion:

- Leads don't need to provide the staff support or carry out the convening, but they need to lead the work of the team they are responsible for.
- NBEP staff will provide the necessary staff support and work to convene the teams.

Activity #2: How can we work together to create and adopt these goals?

Public Access - Lead entity ideas (asterisks indicate additional votes):

RI DEM*, Save the Bay*, Washington Park Neighborhood Association in Providence, Johnson and Wales University, Woonasquatucket River Watershed Council and other designated watershed councils*, Rhode Island Rivers Council*, municipalities***, RI League of Cities and Towns, RIPTA and other local transit authorities, RI DOT, RI Coastal Resources Management Council***, Mass CZM, legislators **, indigenous communities, land trusts, local watershed groups, The Nature Conservancy, National Park Service-Blackstone, Wild and Scenic Councils for Wood-Pawatuck and Taunton, Sea Grant legal, Port of Providence, Blackstone Heritage Corridor, RI Upland Land Trust Council*, Blackstone Watershed Collaborative

Depends on the activity-paddle, swim, fish, hike, birdwatch, etc.-and locations-beach, harbor, forest, river, bikeways, greenways

Activity #2: How can we work together to create and adopt these goals?

Public Access - Leads/leaders:

- In RI, the CRMC has the lead for coastal public access and has already established goals for coastal public access.
- Consider the Blackstone Collaborative for the lead up in the watershed along with the Land Trust Council/Rhode Island Rivers Council (in Rhode Island).
- RI DEM open space program manager may also have a leadership role.
- Could be a role for a new entity to convene organizations with large land holdings.

Activity #2: How can we work together to create and adopt these goals?

Estuarine living resources- Lead entity ideas (asterisks indicate additional votes):

RI DEM**, MA DEP, MA Division of Marine Fisheries, MA Division of Fish and Game, MA DER (fish runs), MA town conservation agents, US Fish and Wildlife Service, NOAA, CRMC, NB NERR, CT NERR, EPA-ORD*, CT DEEP, MA Town Conservation Agents, Save the Bay*, TNC RI, URI Students and Faculty, Mass and RI Audubon, collaborative of federal/state/local (via setting TMDLs)*, RI DEM and NBNERR collaborate (Massachusetts lead needed) and bring in EPA ORD when available to support with data*

Activity #2: How can we work together to create and adopt these goals?

Estuarine living resources- Leaders/leads

- DEM, NBNERR, and MA DER broadly recognized as leads.
- Recognize we will often have separate RI, MA, and CT leads for each of these objectives and we will need to figure out how to bring all together to work together on common goals.
- Recognize the leads for the data processing/analysis will be different from the programmatic/policy leads, but we want to build off of a similar framework.

Activity #2: How can we work together to create and adopt these goals?

Nonpoint Source pollution- Lead entity ideas (asterisks indicate additional votes):

New entity* – those named below lack the capacity to tackle setting and adopting a goal. Perhaps a coordinated effort among the state entities to combine state plans.

Entities that should be at the table: RI DEM Office of Water Resources, MA DEP, CT DEEP, Universities, EPA Region 1 (especially for MA), Cities and Towns, Sea Grant – suggested as lead, Save the Bay, SNEP Network, USGS for stream gauges, Septic testing center on Cape Cod, TNC, Mass and RI Audubon, Consulting firms, Stormwater innovation center*, RI DOT, MA DOT, Blackstone Parks Conservancy, RI Energy (because digging causes issues), RI Coastal Resources Center, RI Green Infrastructure Coalition (includes Audubon, TNC, Conservation Districts)

Notes: Capacity is a big question. Hire private firms? Implement a TMDL? 604b for funding? Prioritize this discussion – lots of money is out there to implement.

Activity #2: How can we work together to create and adopt these goals?

Nonpoint Source pollution- Leaders/leads

- RI DEM, MA DEP, CT DEEP recognized as likely leads
- Consider convening the listed agencies and organizations to help define the lead/leaders
- Note that the listed actions under this objective are not actions that the state agencies carry out. Response: focus for this activity is who is going to set the goals beyond the CWA related goals, not who is going to carry out the implementation actions.
- Need to identify other goals for nonpoint sources beyond the Clean Water Act related goals—e.g., retention of water up in the watershed based on habitat restoration and protection

Activity #2: How can we work together to create and adopt these goals?

Point Sources - Lead entity ideas (asterisks indicate additional votes):

RI DEM, EPA Region 1, MA DEP, CT DEEP, NBC and other operators (need more ongoing education), Municipalities (permits, land use, upgrade funding, wastewater treatment and septic title V regulations, Woonsocket and Worcester need assistance) CRMC, Save the Bay

Notes: enforcement & accountability for this goal?; operators need ongoing education; municipalities (especially Woonsocket, Worcester) need assistance and/or enforcement actions; when thinking about water quality metrics, consider greater monitoring, clarity*, turbidity*; this goal may overlap with nonpoint source pollution goal – think in terms of regulated vs. non-regulated; tell the story about changes in water quality from point source upgrades – are we doing a good job? More areas are open for recreation; recognize that the goals developed may be very different from current state water quality standards, for example they may be ecological outcomes rather than loads or TN etc.

Activity #2: How can we work together to create and adopt these goals?

Wildlife - Lead entity ideas (asterisks indicate additional votes):

CT DEEP; MA DMF, Mass Wildlife, DEP; RI DEM-Marine Fisheries; RI Natural History Survey*; USFWS; watershed groups and land trusts; TNC*; Audubon (RI and MA)*; NBEP Science Advisory Committee; NOAA; Atlantic States Marine Fisheries Commission; Atlantic Coast Joint Venture; Ducks Unlimited; Fisheries community; indigenous communities*, EPA/ORD, University Research Community*, RI Saltwater Anglers Association, Roger Williams Park Zoo

Notes: need federal and state entities working together*; state wildlife plans have goals; dividing into managed vs. unmanaged may be a good start; Mass BioMap is a great tool*, TNC's regional resilient habitats map*

Activity #2: How can we work together to create and adopt these goals?

Wildlife – Leaders/leads:

- Need to consider different leads depending on the group of wildlife being considered-e.g., fisheries has existing structures for addressing goal setting.
- States and federal agencies have existing goals for listed species in their state wildlife plans and federal listed species, respectively.
- RI/MA Audubon have the stories about bird populations nailed down.
- MA BioMap is clearly a starting point for this work. Would like to see it expanded.
- Managed species are well documented and ‘taken care of’, perhaps we should focus on those species which are not currently ‘managed’.
- TNC resilient landscape tool is very useful for application at a landscape level.

Activity #3: What are our region's most compelling success stories and challenges?

Activity: List the Narragansett Bay Region's most compelling stories – success stories and challenges – for each Vision 2032 chapter.

Exercise: Count off into four new small groups and rotate among 4 flip charts (1 per Vision 2032 chapter).

Rules: 5 minutes per chart. Return to seats at 1:30 for discussion.

Public Spaces Stories

- Successes: lots of visitors; tons of volunteers; bikeways and greenways; Wild and Scenic Wood-Pawcatuck and Taunton Rivers; boat ramp improvements and restoration of fishing piers; protected land open to the public; acknowledgement of co-benefits of public access; green bond passage for open space; increasing public access and public rights to the shore; pocket parks; state beaches are popular and see fewer closures
- Challenges: lack of clear shoreline definition (MHW) in RI; complete the MA portion of the Blackstone bikeway; RI CRMC challenges; equitable access to nature – public transportation, parking ordinances that block access, signage, outreach so that people know about opportunities; maintenance; trash; access to sacred places for tribes; freshwater access, especially lacking in the Blackstone; increasing numbers of visitors, especially tourists, have negative impacts on quality of life for local residents
- Other stories: create more/new access points and places; need younger volunteers (liability barriers for some); permitting and regulations across jurisdictions; user conflicts

People Stories

- Successes: Community/citizen science (spadefoot toad) – longevity of observations and historical data (WPWA); environmental education programs; individual behavior changes e.g. rain gardens; community projects; Blackstone River revival is a story about people; remote work reducing traffic emissions, more time to spend in nature; recreation in upper Bay due to water quality improvements; Blackstone water quality data map & data sharing; Massachusetts CPA funds – people taxed themselves for conservation; identity of watershed vs. just the states (NBEP success); acknowledgment of and efforts to address disparities; NBEP funding for capacity/project development; new recreational access points bring in more people to care
- Challenges: individual and community behavior change e.g. landscaping; access for BIPOC communities to green spaces; inclusive and multilingual information; environmental injustice; funding; new climate change policies e.g. forests and solar; stormwater governance and resources at state and local levels – lack of enforcement; compiling monitoring data and research projects to tell comprehensive stories; los of long-term knowledge via staff retirements and loss of traditional ecological knowledge (these are particularly time-sensitive); how to get youth interested in nature when so much of their lives happen online
- Other stories: offshore wind development – fisheries; how to assess people's attitudes, motivations, and perceptions

Water Stories

- Successes: wastewater treatment facility upgrades; nitrogen and hypoxia upgrades; CSO improvements; quahogging in the upper Providence River; river improvements – WWTF, delisting for P in Pawtuxet, Blackstone, and Woonasquatucket; reduction in legacy pollutants (metals, PCBs, etc.) to the Bay; more collaborative data collection efforts across state lines; Blackstone water quality monitoring; aquaculture commercial success; outdoor recreation along urban rivers; Greenwich Cove delisted for rec? based on NPS/stormwater projects; Mount Hope Bay impairment for fish removed
- Challenges: development; tourism & water demands; invasive species – clams, water chestnut; emerging pollutants (PFAS, pharmaceuticals, plastics, etc.); managing stormwater for water quality and flooding – difficult because we don't work at the watershed level or the site level(?); climate change – when to move away from the water; warming water and species changes; aquaculture siting – best use of space?; capacity at all levels to run programs at RI DEM; dam removal – people like impoundments and sometimes legacy contaminants prevent removal
- Other: Providence daylighted urban rivers, which resulted in some good and some bad (mall); tribal keepers losing access to water
- Additions to Water Stories: Daylighting of streams and moving rivers; Changes are successes in some areas, challenges in others (dams); Stories are best told as people stories -when we tell stories, talk about effects on people.

Habitat and Wildlife Stories

- Successes: opening new shellfish areas; reducing nitrogen in the Providence River; increases in quality of benthic habitat; more oxygen and fewer fish kills in the bay; water quality in the Blackstone and other rivers; diamondback terrapins; osprey; bald eagles; dam removal and fish passage; protected habitats; saltmarsh restoration; RI started investing in habitat restoration; increased funding for MA DER; Narducci center – outdoor habitat classrooms for children
- Challenges: bringing herring back; habitat corridors/migration, including climate migration; need to improve green space in urban areas; bird biodiversity; restore floodplains; saltmarsh; eelgrass; sea level rise; hydropower alterations; development; saltmarsh sparrow (especially because it's an indicator species for saltmarsh-dependent species); warming water; invasive species; contaminated sediments; oxygen levels in the salt ponds; pollinator decline; coastal erosion; wind farms; protecting tribal rights to subsistence fishing; shellfish restoration; marine dissolved oxygen in Mass; illegal pet trade/poaching; horseshoe crabs; permitting for restoration
- Other: subsistence fishing; solar fields; wind farms; charismatic wildlife species

What's next for Vision 2032?

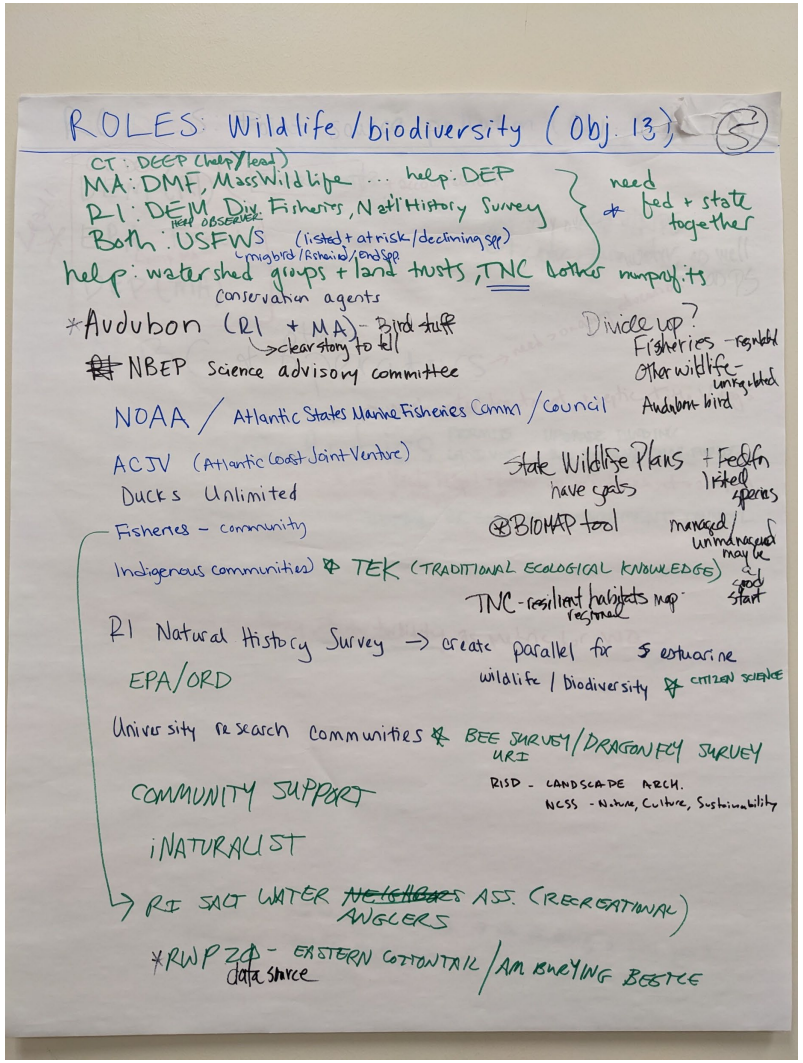
Thank you!

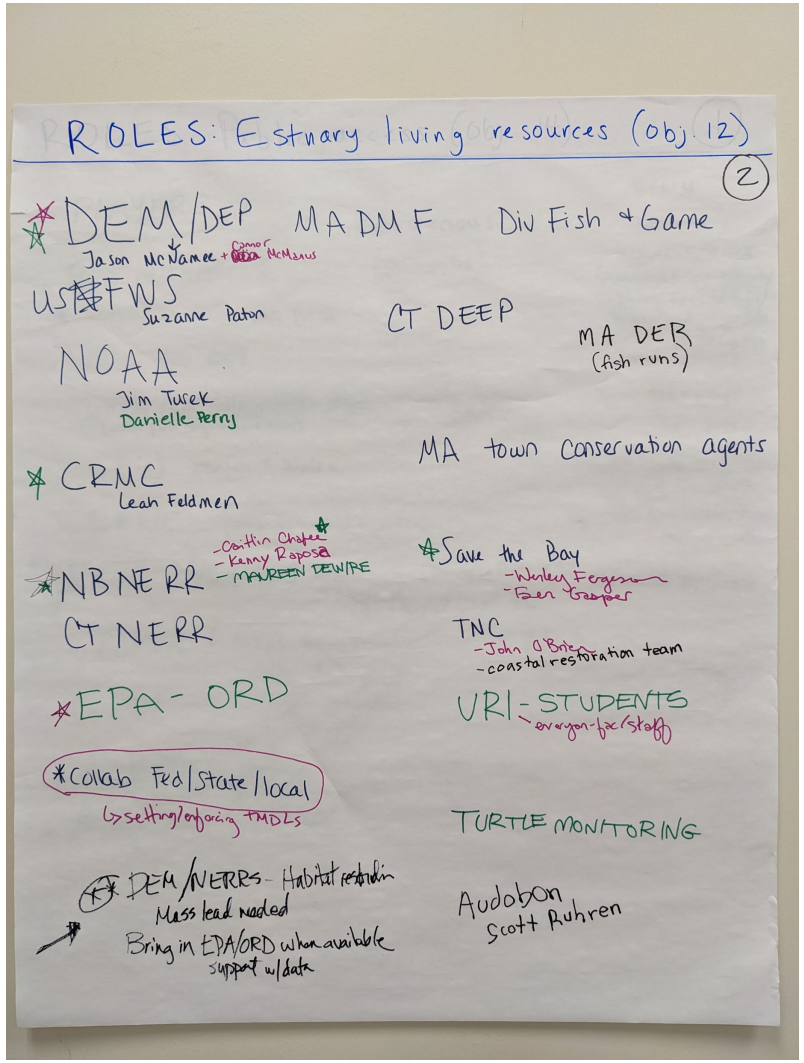
Rich (richbatiuk@gmail.com)
Holly (hgreening@coastwisepartners.org)

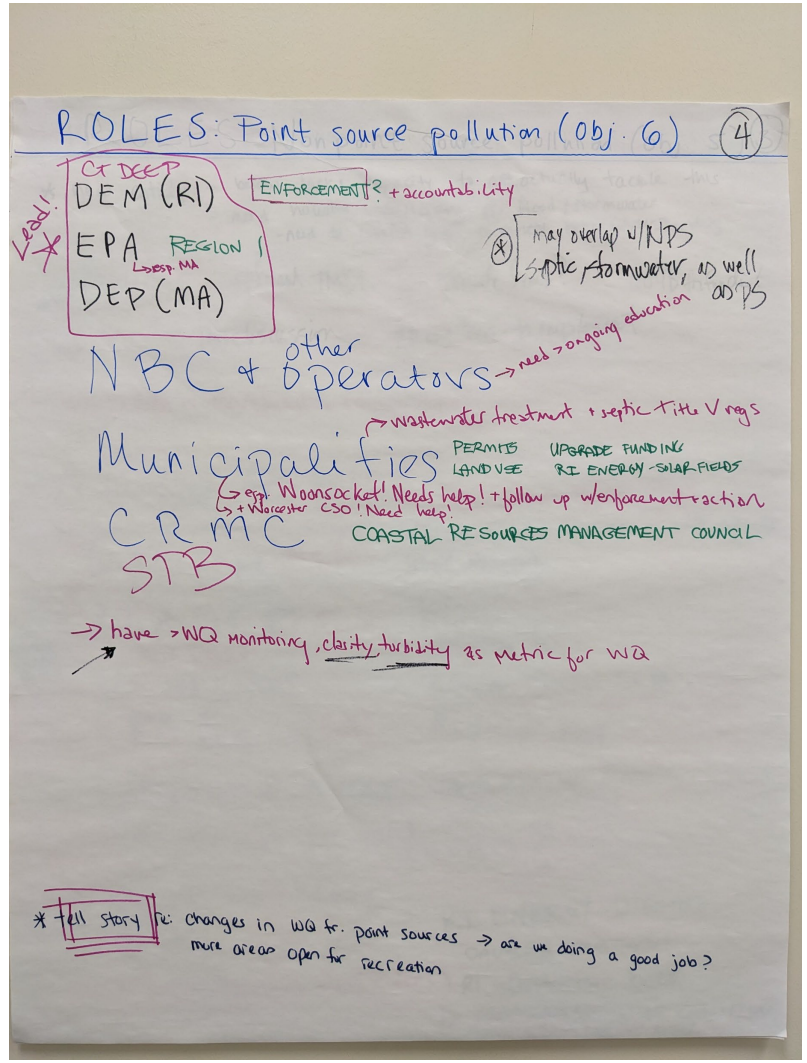
Darcy (dyoung@nbep.org)

NARRAGANSETT BAY ESTUARY PROGRAM

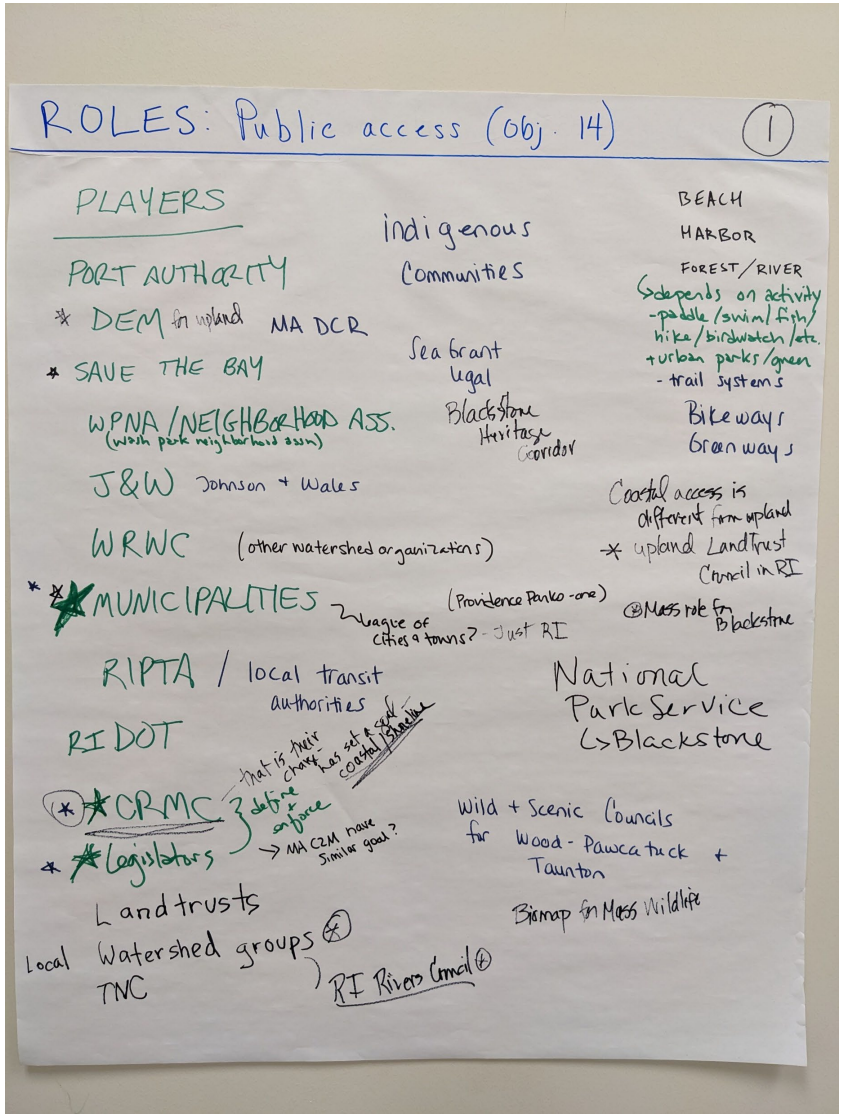
Activity 2: Wildlife, Estuary Living Resources, and Point Source Pollution Goal Leads

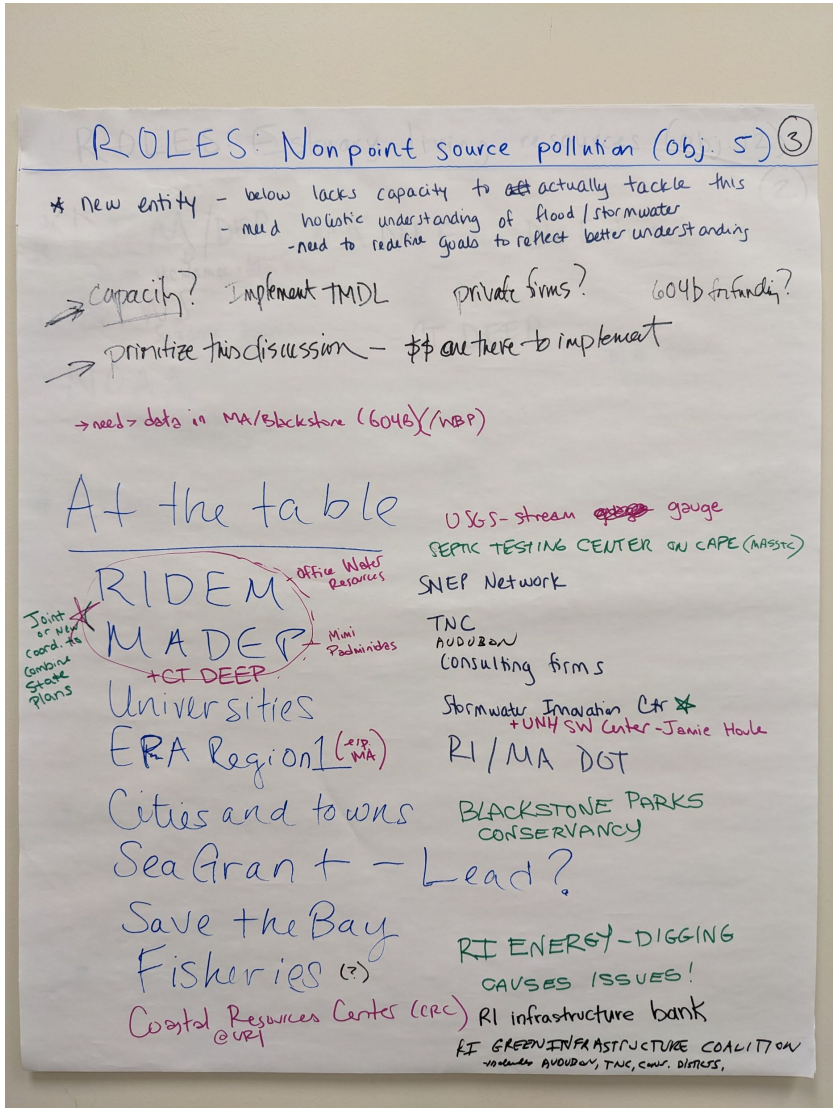




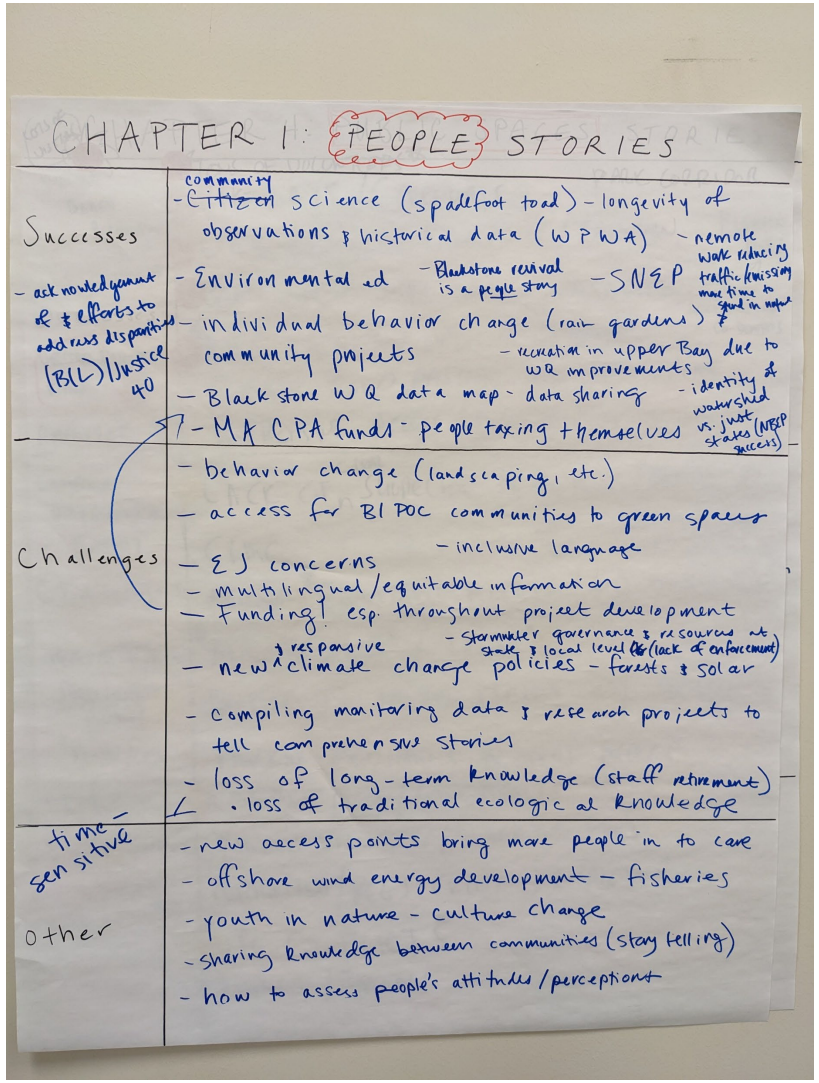


Activity 2: Public Access and Nonpoint Source Pollution Goal Leads





Activity 3: People and Habitat & Wildlife Stories



CHAPTER 1: PEOPLE STORIES

Successes

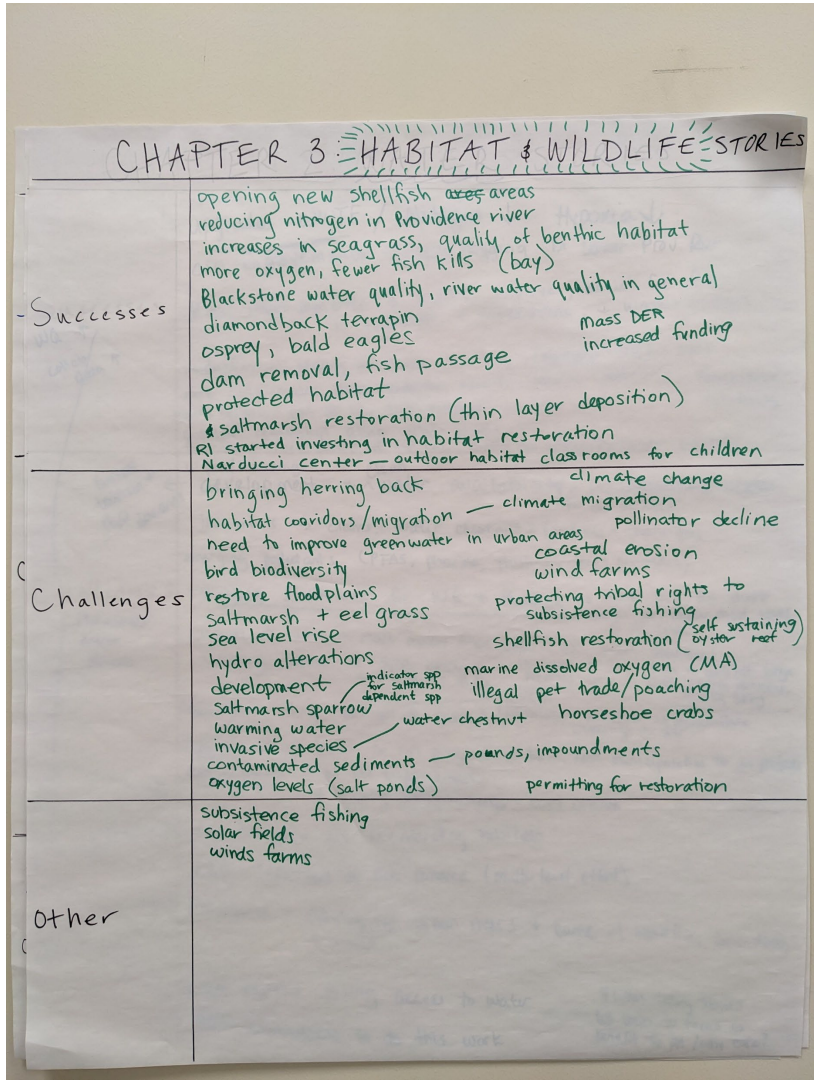
- ack nowledgment of & efforts to address disparities (BIL)/Justice 40
- community ~~Citizen~~ science (spadefoot toad) - longevity of observations & historical data (WPWA) - remote work reducing traffic/commuting time to spend in nature
- Environmental ed - Blackstone revival is a people story - SNEP
- individual behavior change (rain gardens) & community projects - recreation in upper Bay due to WQ improvements
- Blackstone WQ data map - data sharing - identity of watershed vs. just states (NBEP success)
- MA CPA funds - people taxing themselves

Challenges

- behavior change (landscaping, etc.)
- access for BIPOC communities to green spaces - inclusive language
- EJ concerns
- multilingual/equitable information
- Funding esp. throughout project development
- new & responsive climate change policies - stormwater governance & resources at state & local level & (lack of enforcement) - forests & solar
- compiling monitoring data & research projects to tell comprehensive stories
- loss of long-term knowledge (staff retirement)
  - loss of traditional ecological knowledge

Other (time-sensitive)

- new access points bring more people in to care
- offshore wind energy development - fisheries
- youth in nature - culture change
- sharing knowledge between communities (story telling)
- how to assess people's attitudes/perceptions



CHAPTER 3: HABITAT & WILDLIFE STORIES

Successes

- opening new shellfish ~~area~~ areas
- reducing nitrogen in Providence river
- increases in seagrass, quality of benthic habitat
- more oxygen, fewer fish kills (bay)
- Blackstone water quality, river water quality in general
- diamondback terrapin
- osprey, bald eagles
- dam removal, fish passage
- protected habitat
- & saltmarsh restoration (thin layer deposition)
- RI started investing in habitat restoration
- Narducci center — outdoor habitat classrooms for children

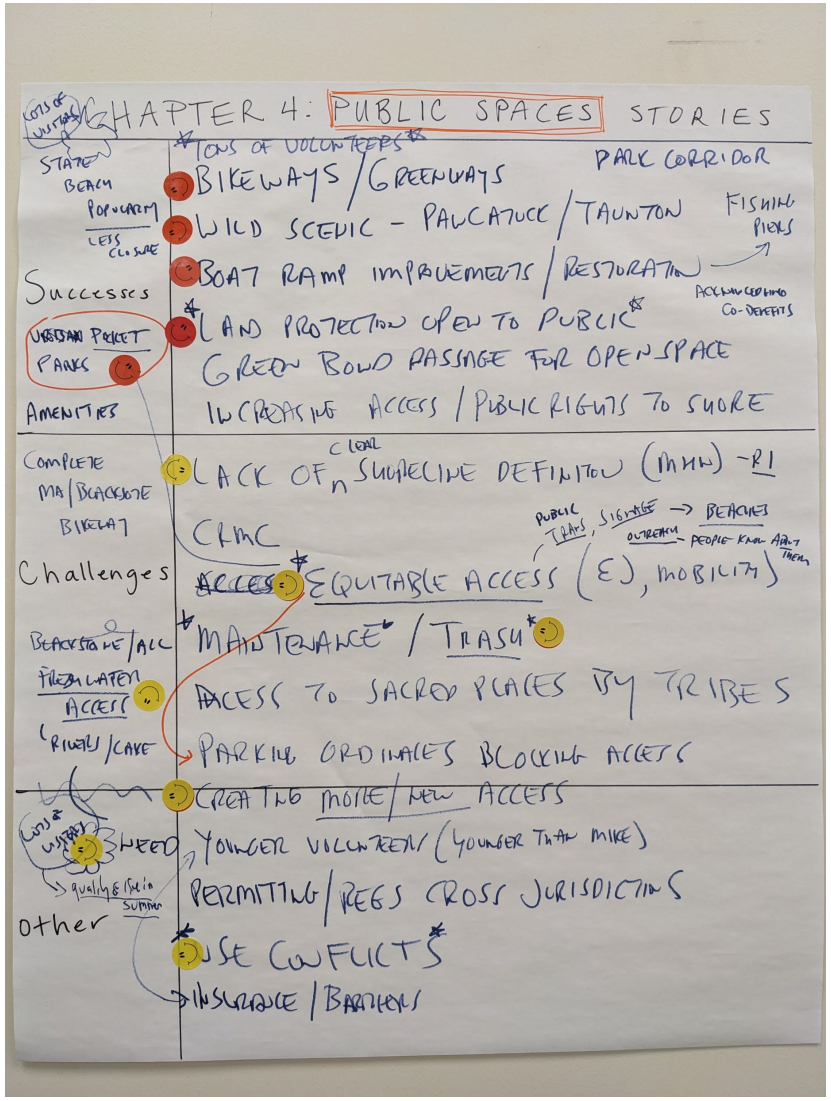
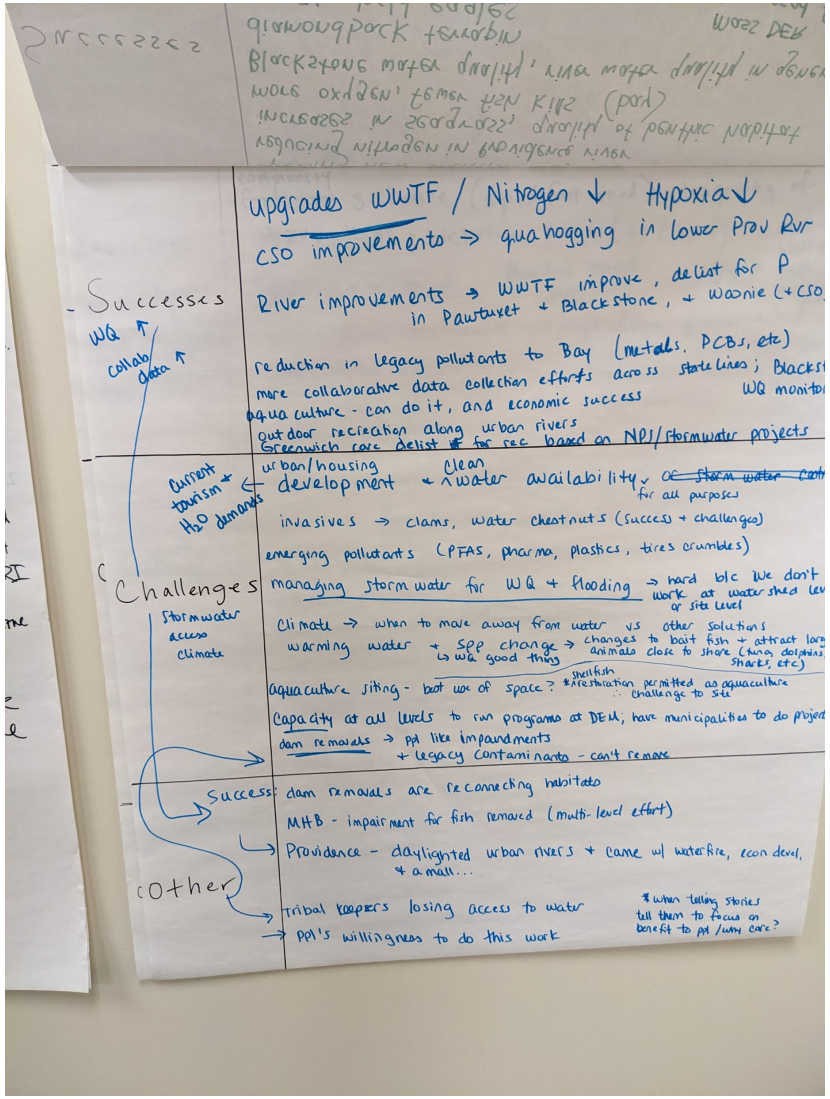
mass DER increased funding

Challenges

- bringing herring back
- habitat corridors/migration
- need to improve greenwater in urban areas
- bird biodiversity
- restore floodplains
- saltmarsh + eel grass
- sea level rise
- hydro alterations
- development
- saltmarsh sparrow (indicator spp for saltmarsh dependent spp)
- warming water
- invasive species — water chestnut
- contaminated sediments — ponds, impoundments
- oxygen levels (salt ponds)

climate change
climate migration
pollinator decline
coastal erosion
wind farms
protecting tribal rights to subsistence fishing
shellfish restoration (self sustaining oyster reef)
marine dissolved oxygen (MA)
illegal pet trade/poaching
horseshoe crabs
permitting for restoration

Other

- subsistence fishing
- solar fields
- winds farms

Activity 3: Public Spaces and Water Stories