







## Introduction

Mel Coté, Chief, Surface Water Branch, EPA Region 1

# Today's Agenda



09:30	Introduction/	/Roll Call/	Agenda
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09:45 SNEP Five-Year Strategic Plan

10:05 Pilot Watersheds Initiative

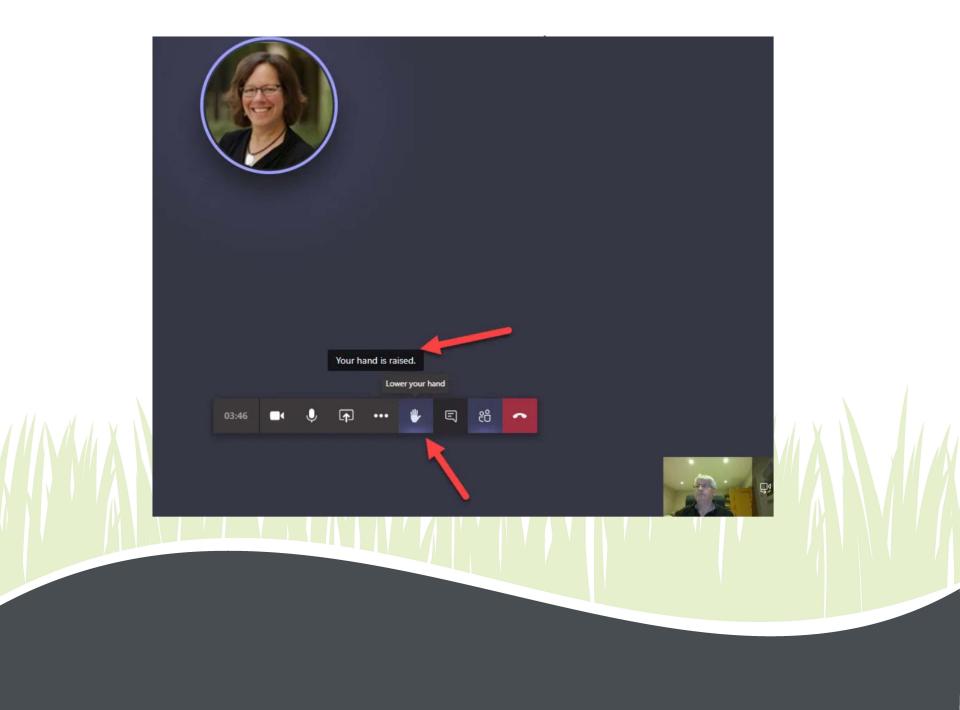
10:30 SNEP Technical Assistance Network Report Out

11:00 Watershed Grants Program Report Out

11:20 Budget Review FY20-21

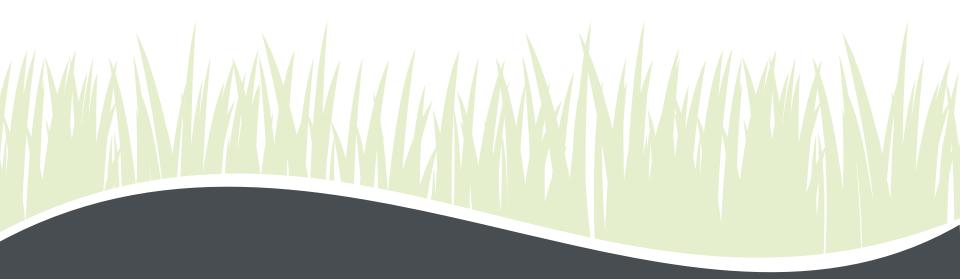
12:00 Upcoming Passthrough RFA (Watershed Grants)

12:30 Adjourn





# Five-Year Strategic Plan (Draft) Presentation and Discussion









# Plan Overview

- For Public Consumption
  - Recently Opened Public Comment Period
- Builds on Existing Regional Efforts
- Committee Input on the Product
- Guides the Program and Partners
- Steers Resources, Funds, & Priorities
- 5-Year Steps Towards 2050 Vision
- Iterative/Adaptive



# **Program Vision 2050**

A resilient ecosystem of safe and healthy waters, thriving watersheds and natural lands, and sustainable communities in the Southeast New England Program coastal watershed region.



Climate Change	including changes to the intensity of storms, the rate of sea level rise and rising ground water tables, the frequency of flooding, air and ocean temperatures; change in and/or loss of habitats; shifts in commercially and ecologically critical terrestrial and aquatic species composition and numbers; and increased vulnerability of natural ecosystems and human infrastructure				
Nutrients and Pathogens	excessive levels caused by inadequate treatment of septic systems, stormwater, fertilizer and manure from agricultural, commercial and homeowner uses; all of which can cause harmful algal blooms, unsafe swimming, fishing, or shellfishing conditions, and water quality and habitat degredation				
Land Development	loss of natural lands and habitat; hydrologic modification; increased impervious cover, pollution and reduced forest cover; impacting human safety and infrastructure				
Economic Impacts	lost ecosystem services, lost economic benefits from tourism, recreation opportunities, property values, and habitat-based food and fisheries				
Casial Instin					
Social Justice	greater susceptibility to health and environmental stressors in underserved, poor, and minority communities; disproportionate negative effects on sustainability, environmental/cultural opportunities, and health and economic outcomes				



#### SNEP Goal: Resilient Ecosystem of Safe and Healthy Waters

• Waters support native seagrasses and aquatic life, plentiful native fish and shellfish, and a variety of water-based recreation opportunities

#### SNEP Goal: Thriving Watersheds and Natural Lands

 Watersheds provide essential ecological functions, species diversity, and protection from both human-based and naturally occurring environmental stressors, and healthy, connected natural lands support a variety and range of native plant and wildlife communities.

#### **SNEP Goal: Sustainable Communities**

 Communities share robust water-based economies, protect and provide access to natural lands, open spaces and parks, encourage local foods sources, and are adapting for resilience to expected impacts of climate change.



# Action: Increase Local Capacity to Complete Projects and Adopt New Policies

Approach: Increase local capacity by providing financial and technical assistance to communities for the application of environmentally sustainable solutions towards the restoration of water quality and the stewardship of natural habitats



### Action: Increase Available Solutions

Approach: Increase available solutions to address stressors/issues by spurring the development, evaluation, and dissemination of innovative technologies, financing approaches, and policy development.



# Action: Ensure Diverse Representation in Program Decision-making

Desired Outcome: Ensure diverse representation of community needs, science, and management solutions in SNEP committees to include a wide range of perspectives and input in program decision-making by building relationships with Environmental Justice (EJ) communities, municipal/state/federal governments, tribes, non-profit organizations, businesses, and academia.



# Action: Demonstrate Ways to Address Common Challenges

Approach: Demonstrate ways to address common challenges by selecting pilot watersheds to support a holistic and targeted watershed management approach that is tailored to the differing characteristics in the region, with a focus on innovative, systemic solutions to environmental stressors that can be transferred to other areas in the SNEP region and beyond.



# Action: Increase Community Leaders' Understanding of the Benefits of Restoration Projects

Desired Outcomes: Increase community leaders' understanding of benefits achieved by supporting clean water, healthy natural lands, and sustainable practices by quantifying multiple benefits of ecosystem/habitat restoration projects.



# **Research Priorities**

- Innovative Technologies and Approaches
- Evaluation of Ecosystem Service Benefits
- Monitoring
- Tracking Program Effectiveness
- Harmful Algal Blooms
- Effective Communication



# Response to Comments on Previous Draft (Policy Committee and ORD)

- SNEP Regional Map
- Stressors
- Adaptive Management Approach
- Metrics/Indicators Chart
- Monitoring/Reporting Requirements



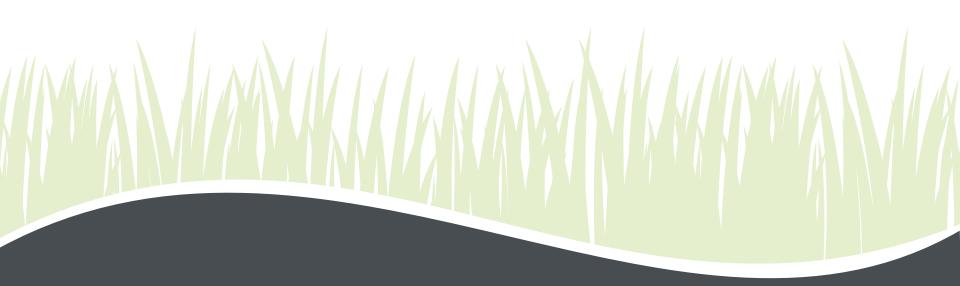
# Discussion

- General Input on the Plan
- Actions and Themes
- Research Priority Areas

Please Send Written Comments by Dec. 21 to SECoastalNE@epa.gov



# Pilot Watersheds Initiative Discussion



# Pilot Watersheds



# Starting the Pilot Watersheds Process

- Four Watersheds (HUC-14)
  - Cape, Islands, Narragansett Bay, Buzzards Bay
- Address Specific Challenge
- Collaboration, Leverage Funding, Leverage
   Expertise
- Five Years of Funding (Anticipated)
- Quantitative Assessment Through Monitoring

# Pilot Watersheds



# Focused Environmental Challenges

- Nutrient Pollution in Surface and Ground Water
- •Harmful Algal Blooms, Including Both Excessive Nuisance Algae and Toxin Producing Blooms
- •Restoration of Impaired Urban Watershed Using Techniques that Protect and Improve Water Quality, Habitat, and Social Well-Being
- •Impacts on **Natural System Function** Including Impacts to Habitat Connectivity, Habitat Loss, Invasive Species, or Potential Loss of Saltmarsh from Climate Change



# Pilot Watersheds

# Discussion

- •General Thoughts on the Concept?
- •Thoughts on Environmental Challenges?
- Collaborative Entities to Engage?



# **Technical Assistance Network Report Out**

Martha Sheils, Director, New England Environmental Finance Center

#### **SNEP Network**



# SNEP Steering Committee Meeting December 9, 2020

Worceste

# Partnering to Build Local Capacity and Achieve Environmental Outcomes

SNEP Network Reflections and Goals





Martha.sheils@maine.edu

sri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



#### Year 1: Network formation and cohesion

Network Framework Name, mission statement, tenets of engagement, website, contact lists, and more SNEP

#### Partnership

University of Southern Maine administers 14 sub-awards across the SNEP Region

Consultant Pool Published RFQ, established pre-

approved pool of 17 consultants

Call for Participants

After targeted outreach campaign across the SNEP region; Network awarded assistance to 12 communities

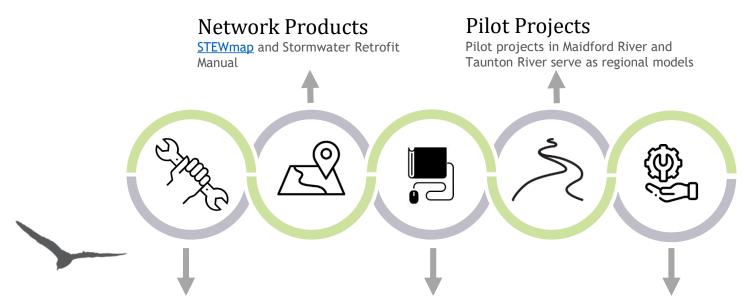
On-Call Technical Assistance

Online portal is up and running; first request received April 14th (Nantucket, MA).





## Year 1: Implementation



# Implementing Community Assistance

Working with 12 selected communities from the Call for Participants to improve stormwater and watershed management, resulting in 8 contracts and \$347,677 dollars encumbered from consultant pool

# Training and Leadership Development

Ongoing virtual trainings and webinars increase capacity and serve the diverse training needs in the time of COVID-19

# On-Call Technical Assistance

Offered via online portal, dayto-day access to two Network Liaisons



#### **Network Products**



#### **Stormwater Retrofit Manual**

- Formed the Stormwater Retrofit Manual Advisory Committee, vetted the short-listed consultants from provider pool, and signed contract with selected consultant to begin work to develop the manual
- Provided over 220 hours of additional technical assistance to federal, state, and local regulatory officials and stormwater professionals
- Working in 4 communities to advance innovative small scale stormwater controls for watershed restoration







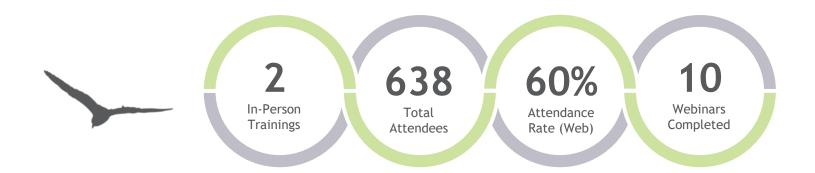
#### **Stewardship Mapping Project**

- The Stewardship Mapping and Assessment Project (STEW-MAP) of Southern New England is an interactive mapping tool that shows how stewardship organizations are connected to each other.
- Developed database of stewardship organizations for SNEP Region (over 500 tribes, organizations and environmental groups, and city/state/federal/municipal agencies)
- Hosted virtual survey launch on September 16th, 2020
- Created a core team of 19 individuals representing 'grass tops' and tribes in the region, to iterate and provide feedback in the development of a Southeastern New England-specific StewMAP tool





## **SNEP Network Training Delivered Year 1**

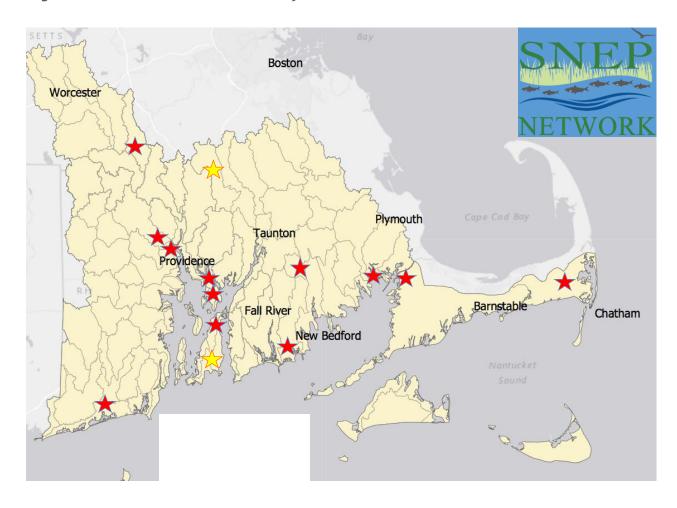


#### **Includes:**

- In-Person events include: A "Preparing for Success-Funding Climate Resilience Initiatives" workshop on February 20, 2020, and "Chesapeake and Narragansett Bay Environmental Leadership Exchange", September 25<sup>th</sup>, 2019.
- 2 Green Stormwater Infrastructure webinars through the Providence Stormwater Innovation Center
- 4 Additional webinars from University of Rhode Island, Mass Audubon, and The Nature Conservancy
- A **4-part webinar series** "Covid-19 Preparedness and Recovery: An Opportunity for a Stronger and Resilient New England" on April 10, April 17, April 24, and May 1, 2020 from Throwe Environmental



# **Community Assistance Projects**





## Two examples of Community Assistance

#### Warren

- Facilitated planning to evaluate green infrastructure and nature-based solutions to mitigate flooding including:
  - Disconnecting impervious surfaces
  - Creating additional storage in areas immediately upstream and downstream
  - Increasing the capacity of existing conveyance structures
  - SWMM Modeling to determine flood mitigation benefits
  - Report documenting existing conditions, alternatives evaluated, results of analyses, and next steps

Partners: UNH SC, STB, Elizabeth Scott

#### Pleasant Bay Alliance

- Facilitated planning among four municipalities (Brewster, Chatham, Harwich and Orleans) to create consistent approaches to managing stormwater and developing financing options:
  - Consistent regulations and by-laws related to stormwater management
  - Sustainable and scalable financing options for stormwater management
  - Training on use of stormwater (pollutant reduction) accounting and tracking tool

**Partners:** TNC, Throwe Environmental, Kim Groff, UNH SC, Cape Cod Commission, MA Audubon



## SNEP Network Pilot Projects

#### Maidford River

#### Year 1 Achievements:

- Property owner approval to undertake site assessments to evaluate floodplain restoration alternatives. Field assessments completed and evaluation of alternatives underway; and
- Riparian Buffer Restoration Initiative Launched including preparation of outreach and guidance materials; and site visits to 3 properties.

#### YR 2 Goals:

- Authorization from property owners (and town leaders) to proceed with final design & engineering, and ultimately preparation of required permit applications for selected floodplain restoration alternative; and
- Continued outreach and assistance to riparian property owners leading to restored riparian buffers.

**Partners:** Save the Bay, Elizabeth Scott Consulting, and Throwe Environmental, Eastern RI Conservation District with consultant services by Fuss & O'Neill

#### Taunton River/Canoe River Aquifer

#### Year 1 Achievements:

- Engaged with Resilient Taunton Watershed Network to select Canoe River Aquifer Resilience project from list of 25 candidate projects to advance nature-based solutions;
- Convened Steering Committee composed of stakeholders from Easton, Norton, and Mansfield to develop scope of work to address regional threats to water quality/aquifer recharge.

#### Year 2 Goals:

- Engage community to foster regional collaboration & identify 10 nature-based solutions priority projects;
- ID barriers to implementation and how to address each;
- Host 2 workshops to address local capacity building needs

**Partners:** Kim Groff, The Nature Conservancy, Throwe Environmental, UNH Stormwater Center, Cape Cod Commission, MA Audubon



# Looking Ahead: Year 2





## What's Next: Leadership Exchange

- 4 Sessions to help guide Wareham's redevelopment plans and explore sustainable finance opportunities
  - Green Infrastructure
  - Climate and Economic Resilience
  - Comprehensive Redevelopment
  - Smart Growth and Strategic Zoning
  - Each Session has:
    - Closed Meeting
    - Webinar (open to the public)
    - An accompanying podcast
    - Participating Communities include:

       Lancaster City, PA Provincetown, MA Annapolis,
       MD Hoboken, NJ New Bedford, MA Rowes Wharf Boston, MA Chattanooga, TN Burlington, VT Ranson, WV Portland, ME







## What's Next: Training

- Coordinated a Climate Leadership Training for Elected and Appointed Officials series in collaboration with the Association of Climate Officers (ACCO) on October 21, October 28, and December 2
- Upcoming webinar December 16
- Providence Stormwater Innovation Center Training: Green Construction Oversight - on Friday 10/23, and three more coming in Spring!
- Additional topics include low impact development, case studies from the Maidford River, and more!









- Responsive to Community and Participant Needs
- Elevating SNEP Partners and Successes
- Consistent and Reliable Virtual Program Delivery

# Cross Walk: SNEP Network Services with SNEP 5 year Strategic Plan

	SNEP 5-Year Priority Area						
SNEP Network Services	Increase Local Capacity/ Adopt New Policies	Increase Available Solutions	Ensure Diverse Representation in Decision-making	Demonstrate Ways to Address Common Challenges	Increase Community Leaders' Understanding of the Benefits of Restoration		
Community Assistance + Pilot Pr	ojects						
Stormwater Retrofit	✓	✓		✓			
Stew-Map	✓	✓					
BMP Tracking and Accounting	✓	✓		✓	✓		
Pollutant Load Mapping	✓	✓		✓			
Projects							
Call for Participants	✓	✓		✓			
Maidford Pilot		✓		✓			
Canoe River Pilot		✓		✓			
Pilot Baseline Measures				✓			
Training							
Leadership Exchange				✓	✓		
Tehnical webinars				✓			
Funding and Financing Train	✓	✓		✓	✓		
Climate Training Municipal Officials				✓	1		
Providence Stormwater Innovation Center		✓		1			
Build Network EJ Capacity			✓				



#### For More Information

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Visit our website: www.snepnetwork.org



THANK YOU!



#### Watershed Grants Program Report Out

Tom Ardito, Program Director, SNEP Watershed Grants Program



#### Background: 2018 - 2020

- RAE/EPA Cooperative Agreement since 2017
- Awards 2018, 2019, 2020
  - 38 Grants
  - 100+ Grantees
  - \$ 8.6M awards
  - \$ 3.9M match
  - \$ 12.5M total
  - Grants \$10k \$500k, most in the \$100k -\$400k range





#### **Purpose & Goals of Grants**

- Restore Ecosystems, Improve Communities
- Restore Clean Water Manage Nutrients
- Restore Ecosystem Functions & Values
- Build Capacity Technical, Institutional & Programmatic
- Foster & Support Partnerships
- Support Innovative Technologies
- Foster Regional Learning
- Develop Synergies with SNEP Network
- Support Diverse Communities, Organizations & Projects
- Holistic Approaches Water Quality, Habitat & Community



## **Examples of Projects Funded**

- Watershed-scale Estuarine Restoration
- Green Streets & Neighborhoods Urban Restoration & Community Engagement
- Stormwater Demonstration & Training
- Innovative Wetland & River Restoration
- Pilot Projects: PRBs, bioreactors, innovative septic
- Applied Ecosystem Research, Monitoring & Data Management
- Conferences & Tech Transfer (smaller \$\$\$)



## **Types of Organizations Funded**

- Municipalities
- State Agencies
- Tribes
- Non-Profit Organizations
- Regional Planning Organizations
- Universities & Other Academic Institutions
- Partnerships: Multicommunity, regional & public/private



#### Grantees include:

- Town of Bristol, RI
- RI Dept. of Environmental Management
- CT Dept. of Energy & Environmental Protection
- City of Pawtucket, RI
- Save The Bay, RI
- University of Rhode Island
- Assn. to Preserve Cape Cod
- Buzzards Bay Coalition
- Cape Cod Commission
- Falmouth Rod & Gun Club
- Martha's Vineyard Comm.
- Pleasant Bay Alliance
- New Eng. Interstate Water Poll. Control Comm.
- Southeast Regional Planning & Econ. Dev. Dist.
- Audubon Society of RI
- · City of Cranston, RI
- Groundwork RI
- City of Newport, RI
- Northern RI Conservation Dist.
- Town of Warren, RI
- Woonasquatucket River Watershed Assn.
- Mass. Maritime Academy
- Woods Hole Oceanographic Institution
- · City of Providence, RI
- RI Div. of Marine Fisheries
- Town of South Kingstown, RI
- · Friends of Bass River
- Mt. Holyoke College
- Center for Coastal Studies
- Mass. Audubon Soc.

#### Focus for 2021

- Expect to award \$1.79M region-wide
- RFP out in February; awards in summer 2021
- Incorporate lessons & feedback 2018-20
- Ensure diversity of awards (geographic, institutional & project type)
- Broaden outreach, expand communications
  - RFP Outreach
  - Website, social
  - SNEP Network collaboration
- Increase accessibility & streamline application process
  - Letter of Intent
  - Online Grants Management System
  - Review criteria



## **Looking Ahead**

- More support & collaboration with SNEP Network
- Expanding opportunities for grantee interactions & learning: topical workshops, webinars, etc.
- Continue to raise stakeholder & public profile
- Continuous improvement, streamlining & acceleration of application, award and administration processes through technology and stakeholder feedback

Continue to create a grant program that is accessible, effective and impactful for grantees & stakeholders!



## Questions?





## Budget Review FY20-21 and Discussion



#### SNEP Use of FY20 Funds



#### Total: \$5,400,000

Interagency Agreements \$410,000

**Contracts \$667,379** 

Grants \$4,304,489

Service Fees \$18,119

ORISE (DOE)

SNEP Technical Assistance

RAE SNEP Watershed Grant

**ORISE Fees** 

USGS Nitrogen Loading to Cape Monitoring Strategy

NEP Buzzards Bay

EPA HQ Fees

USGS Maravista Monitoring Flow Duration
Curve

NEP Narragansett Bay

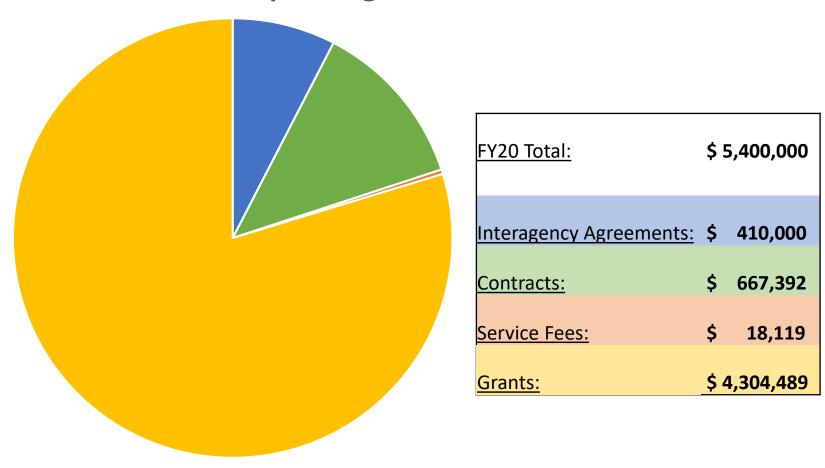
\* Note: \$15 remain and will be used for FY21-22

USGS Wickford Sewering NE-EFC SNEP Network



#### SNEP Use of FY20 Funds

#### **FY20 Spending Breakdown**





#### SNEP Use of FY20 Funds

#### Total FY20: \$5,400,000

Grants FY20 \$4,304,489

RAE SNEP Watershed Grant

NEP Buzzards Bay

NEP Narragansett Bay

> NE-EFC SNEP Network



## Proposed Continued Projects for FY21

#### Total: \$5,400,000-\$6,000,000

**Interagency Agreements** 

**Contracts** 

Grants

**Service Fees** 

ORISE (DOE)

Cape Stormwater BMP Monitoring

SNEP Watershed mplementation Grant

**ORISE Fees** 

USGS Nitrogen Loading to Cape Flow Duration Curve

NEP Buzzards Bay

EPA HQ Fees

USGS Wickford Sewering Webinar & Workshop Assistance NEP Narragansett Bay

> NE-EFC SNEP Network



## Potential New Projects for FY21

## Potential New Projects for FY21

- Pilot Watersheds Initiative
- Pilot Watersheds Pre & Post Implementation Monitoring
- PhyloChip Additional Data Analysis
- IESF Implementation/ Continuation
- Other Applied Research



## Comparison FY20 to FY21

## Total: \$5,400,000-\$6,000,000

	Interagency Agreements	Contracts	Grants
FY20	\$410,000	\$667,377	\$4,304,489
FY21 @ \$5.4	\$420,000	\$749,797	\$4,216,007
FY21 @ \$6M	\$430,000	\$775,000	\$4,780,804





## Comparison FY20 to FY21

## Total: \$5,400,000-\$6,000,000

Increase due Interagency **Contracts** Grants to monitoring Agreements for Pilot Watersheds **FY20** \$410,000 \$4,304,489 \$667,377 FY21 @ \$5.4 \$420,000 \$749,797 \$4,216,007 FY21 @ \$6M \$430,000 \$775,000 \$4,780,804



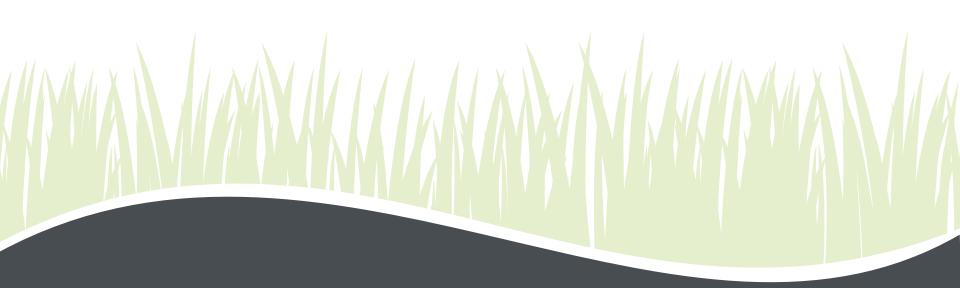
## SNEP FY21 Funding Discussion

#### **Discussion Topic Ideas**

- Question on FY20 Funding?
- Comments/Suggestions for FY21 Funding?
- •Input on Proposed New Projects?
- General Input and Ideas on Funding Distribution or New Projects?



# SNEP Watershed Implementation Grants RFP Discussion



#### Watershed Implementation Grant RFP



#### **RFP Details**

- Seeking Organization to Administer SNEP Watershed Implementation Grants
- Administer Sub-Awards in SNEP Region
- Potential Areas of Emphasis



#### **SNEP 2022 Watershed Grant RFP**

#### **Discussion Topic Ideas**

- Priority Project Types?
- What's Missing from Projects Funded Thus Far?
- Initial Proposals? Or Just Full Proposals?
- Known Needs in the Coming Years?
- Rotating Yearly Priority? Broad vs. Specific
- Innovative Projects/Ideas to Emphasize or Look Out For?



#### Adjourn

#### Thank You All for Your Time and Attention!

