Management Committee Meeting Notes
Thursday, January 21, 2021
Meeting conducted remotely due to COVID-19

Attendees:

Mark Tedesco, EPA LISO
Nikki Tachiki, EPA LISO
Cayla Sullivan, EPA LISO
Mel Coté, EPA R1
Leah O'Neill, EPA R1
Richard Balla, EPA R2
Darcy Lonsdale, STAC/NY
Nancy Seligson, CAC/NY
Holly Drinkuth, CAC/CT
Denise Savageau, CAC/*CT Association of Conservation Districts*
Olivia Del Vecchio, CAC
Harry Yamalis, CTDEEP
Erik Bedan, CTDEEP
Brian Thompson, CTDEEP
Kelly Streich, CTDEEP
Jennifer Perry, CTDEEP
Katie O'Brien-Clayton, CTDEEP
Kathleen Knight, CTDEEP
Evelyn Powers, IEC
Casey Personius, NYSDEC
Sue Van Patten, NYSDEC
Dawn McReynolds, NYSDEC
Koon Tang, NYSDEC
Victoria O'Neill, NYSDEC/NEIWPCC
Kristin Kraseski, NYSDEC/NEIWPCC
Matthew Maraglio, NYSDOS
Richard Friesner, NEIWPCC
Audra Martin, NEIWPCC
Jim Ammerman, LISS/NEIWPCC
Robert Burg, NEWIPCC
David Lipsky, NYCDEP
Rebecca Shuford, NYSG
Jimena Perez-Viscasillas, NYSG
Sylvain De Guise, CTSG
Judy Preston, LISS/CTSG
Tracy Brown, Save the Sound
James O'Donnell, UConn
Todd Randall, USACE
Suzanne Paton, USFWS
Nancy Ferlow, USDA-NRCS
Thomas Morgart, NRCS
Jonathan Morrison, USGS

Introduction:
Mark Tedesco called the meeting to order at approximately 9:00am in the Microsoft Teams Meeting. He outlined the meeting agenda to discuss the upcoming FY2021 budget overview (process and match requirements) and the FY2021 work plan development, including reviewal considerations/process of the base budget requests and initial enhancement proposals, and address any gaps. The October 15, 2020 meeting notes were approved and there were no changes to the proposed agenda. He announced the LISS 2020-2024 CCMP Action Plan was approved by EPA Office of Water on January 20, 2021 and will be posted to the website soon. He acknowledged changes to the Management Committee: Suzanne Paton will step in for USFWS as Tom Chapman retired, Jennifer Perry will step in for CTDEEP as Phil Trowbridge has accepted another position in New Hampshire, and Dawn McReynolds has rejoined to represent NYSDEC.

Citizens Advisory Committee (CAC) Update provided by Nancy Seligson and Holly Drinkuth:

- Nancy Seligson: CAC met online on December 10, 2020 to follow up on Environmental Justice (EJ) considerations that were discussed with STAC, and discuss ways for CAC to move forward with EJ implementation actions. NY-NJ Harbor Estuary Program presented to share experiences, progress, and process. CAC members were surveyed to determine connections with EJ organizations, and concluded that there are not many connections. Therefore, moving forward CAC will prioritize making connections and involving diverse groups. Other presentations included updates on Save the Sound Report Card, Sustainable and Resilient Communities Work Group progress, and the policy sub-committee discussed how to move forward and prioritize with increase in funding.
- Holly Drinkuth**:** Added that CAC members also discussed the removal of Plum Island from required sale list. Mentioned that Congresswoman Rosa DeLauro is now on the Appropriations Committee and Holly Drinkuth has been re-elected as Connecticut Co-Chair of CAC.

Science and Technical Advisory Committee (STAC) Update provided by Jim Ammerman:

- Jim Ammerman: STAC met online on December 4, 2020 that was focused on shellfish, eelgrass, macroalgae, and other restoration efforts. The presentations included restoration efforts conducted in Shinnecock Bay, best practices for eelgrass and shellfish restoration, and growing macroalgae for

bioextraction. Presentations were followed by breakout groups discussions, which will be included in the upcoming meeting notes. The next STAC meeting will be February 19 to focus on modeling efforts within the Long Island Sound, and presentations will include overviews from different organizations.

- Koon Tang: Mentioned that NYSDEC is modeling hydrodynamic modification to understand effects on habitat in embayment complexes and emphasized how the restoration work could complement this modeling effort.

FY 2021 Budget Overview – Leah O'Neill

- Leah O'Neill: Presented on the budget overview: LISS FY21 funding allocation is $31.1 million (CWA §320 - $700,00 and CWA §119 – $30.4 million), which is a $9.5 million increase from FY20. All awards are subject to aggregate statutory match requirements, but ultimately will depend on the final funding recommendation (please refer to match memo sent December 16). FY21 began with $39.8 million in unliquidated obligations (ULO) remaining from $59.4 million in existing cumulative obligations. With this large increase in funding and current awards open, the Management Committee needs to thoughtfully consider improvements to the budget process. To better evaluate the package, EPA plans to convene an ad-hoc work group to discuss budget process, gaps, priorities, and potential funding options (increase funding to LISFF or LISS Research Program). Please see attached for detailed notes and FY21 budget schedule, including a 2-day Implementation Team meeting to evaluate enhancement package proposals.
- Mark Tedesco: Highlighted that the funding level is growing, and need to evaluate the organization of the budget process in order to use and manage funds effectively.
    - Jim O'Donnell: Asked if the budget request currently includes funds to expand EPA staff to manage grants.
        - Mark Tedesco: Responded that EPA positions are set at a national level and distributed through an allocation process. Since there are staffing limitations, there is a need to evaluate how to meet management conference and EPA fiduciary and program oversight needs through process or other means.
    - Mel Coté: Asked if there is any way to evaluate the quality of proposals as our funding level is high enough to fund almost all projects.
        - Mark Tedesco: Responded that there are other options regarding funding as the allocations for the LISFF and LISS Research Program can be increased. However, need to be mindful of the administrative capacity of these organizations who run the programs.
        - Holly Drinkuth: Suggested to evaluate multi-year projects with requests over $1 million to another standard.
    - Richard Friesner: Suggested to consider additional projects or expand already funded projects to fulfill gaps.
    - Sylvain DeGuise: Emphasized that there are a number of enhancement projects that would not provide significant outcome if only one year was funded, therefore need to take that into consideration and understand that a significant commitment is sometimes required to make a difference. Suggested to consider funding multi-year commitments than lower priority projects.
    - Rick Balla: Emphasized the continuing and emerging issues of climate change and EJ that are priorities for the incoming administration, and how the topics should be incorporated into the upcoming tasks and projects included in the work plan.
    - Jim O'Donnell: Suggested utilizing the Governor's Council on Climate Change Report when funding organizations to tackle climate change and EJ. For example, the report recommends that 40 percent of resiliency funding be directed to EJ communities.

FY 2021 Work Plan Development – Mark Tedesco

- Mark Tedesco: Summarized the December Implementation Team Meeting: Discussed a number of options/considerations to review proposals. As a result, EPA developed and distributed directions to review enhancement package, which includes considerations that have been constant over the years (address CCMP outcomes, objectives, and actions; continue to fund already initiated projects; address sound-wide issues; conduct demonstration projects, and meet match requirements). Additionally, EPA developed a spreadsheet to pose a series of questions to provide an opportunity for input on the enhancement proposals. No one should feel the need to review all proposals. Work groups and advisory committees are also encouraged to provide input. The spreadsheet should be submitted to Cayla Sullivan by March 1. EPA will summarize input provided, and use the 2-day Implementation Team meetings (March 18 and 19) to discuss in detail and develop recommendations for the April 15 Management Committee meeting. Also encouraged identification of gaps in the package to better highlight areas in future funding vehicles (LISFF and LISS Research Program).
    - Sylvain DeGuise: Suggested to review package highlighting enthusiasm of projects.
    - Dawn McReynolds: Emphasized that work groups should focus on their specific theme as they have the expertise needed to evaluate.
- Mark Tedesco: EPA will review the FY21 Base Budget Requests and work directly with recipients on the work plans and budgets.
- Vicky O'Neill/Harry Yamalis: Presented on the initial Habitat Restoration and Stewardship Work Group review of Thriving Habitat and Abundant Wildlife theme projects. Co-chairs administered a survey to collect reviews and feedback. In total there were 10 responses that identified 5 priority projects, and reviews included helpful questions, comments, and concerns. Suggested that in order to recommend proposals for LISFF, need to know the FY21 RFP guidance. Please see the attached presentation for detailed feedback of each proposal.
    - Mark Tedesco: Encouraged work group chairs and members to actively engage with applicants to answer those questions, comments, or concerns.
- Becky Shuford/Sylvain DeGuise: Presented on the Sustainable and Resilient Communities Work Group Implementation discussing the development of the 5-year work plan. Please see attached presentation for detail.
    - Mel Coté: Shared a similar effort conducted by the Southeast New England Program (SNEP), a geographic program covering the coastal watersheds from the RI-CT border to Chatham, MA on Cape Cod and encompassing the Buzzards Bay and Narraganset Bay NEP management areas. SNEP funds a subgrants program similar to the LISFF that was receiving many low-quality proposals, so in 2019 they established the SNEP Network to provide technical assistance to local communities, tribes, and nonprofit organizations to finance, plan, design, and complete local implementation activities. The Network is comprised of fourteen organizations that together leverage existing programs and provide mentoring and expertise to local partner organizations. Their efforts empower and make it easier for communities and stakeholders to undertake effective projects to engage in restoration and protection efforts over the long term. However, the LISS has a much larger geographic scope requiring bistate coordination, and emphasized that this needs to be a long-term commitment.
    - Jim O'Donnell: Supported the idea to provide technical experts to help municipalities as there is a need to implement projects to combat climate change implications (prevent flooding, reduce damage to infrastructure, and restore marshes). However, suggested to take into consideration to current expertise available, and ensure there is no overlap in background. Additionally, suggested to consider that NY and CT are at different starting points in terms of planning and implementation.

- Becky Shuford: Suggested for Management Committee to think about ways to use the increase in funding to support breaking down barriers and working with municipalities, with an emphasized focus on underserved communities.
- Holly Drinkuth: Suggested a need for coordination between LISS partners, specifically focusing on communication and outreach efforts. For example, new outreach positions would need to coordinate activities with SRC circuit rider positions.
- Mel Coté: Suggested that circuit riders should have a diverse range of expertise to support municipalities, and coordination between NY and CT. They will also need to tap into existing expertise (e.g. NEMO/CLEAR).

- Mark Tedesco: Opened up floor for discussion on overall enhancement package – specifically perspectives or gaps.
  - Jim O'Donnell: Identified stream flow gauges as a gap to address climate change.
    - Jonathan Morrison: Since enhancement grants are short-term, USGS has initiated projects to develop coastal gauges requiring community based support and long-term commitment (i.e., Lower Housatonic). Additionally, submitted a framework document ranking the proposal including identified LISS gaps addressed and relevancy (see attached).
  - Sylvain DeGuise: Emphasized the need to clearly articulate and communicate what the increase in funding will be used for and what we accomplish with it.
  - Suzanne Paton: Asked for guidance on prioritization on proposals that pertain to different topics. Suggested better collaboration and coordination between partners as there is overlap in proposals.
    - Mark Tedesco: Suggested to prioritize based on the Ecosystem Targets addressed.
  - Brian Thompson: Emphasized that there is a need to determine how to prioritize multi-year projects, and asked is there specific criteria to rank proposals that are multi-year.
    - Mark Tedesco: Agreed there is a need to identify multi-year proposals that require long-term commitments. Another option is to fund only in the first year to provide flexibility.
  - Richard Friesner: Shared that the Nitrogen Coordination Work Group discussed that USGS should submit another proposal to fulfill the gap of connecting various data collecting and modeling efforts.
    - Mark Tedesco: Noted that EPA established a multi-year interagency agreement with USGS in 2020 to support USGS involvement in the systemwide modeling effort and to coordinate various USGS monitoring and modeling efforts.
  - Mark Tedesco: Shared that there is a national Open Science Work Group that is related to the national water quality portal. This is the direction everyone is exploring to improve interaction with the data platforms (i.e., LIQWIDS).
- Mark Tedesco: Requested pre-approval to fund the enhancement proposal for the EPA National Coastal Condition Assessment as EPA Office of Water has expanded the contract for embayment sampling in summer 2021. Additionally, base program will provide funding for an ORISE fellowship to work on many projects underway. The two projects would total at $600,000 of $31.1 million.
- Mark Tedesco: Identified that next steps for the FY21 Work Plan development are to fill out the spreadsheet, and send EPA any other thoughts that go beyond the don't fit into the spreadsheet.

Stretch Break at 11:30am

Area versus Volume of Hypoxia CTDEEP/UConn Project – James O'Donnell

- Jim O'Donnell: Presented on Area vs. Volume of Hypoxia project: 1) Built online database with discovery and accessibility, 2) Online mapping tool for area and volume that accesses the database (using and tested WQX), 3) Completed an analysis of uncertainty in area and significance of trends in Area and Volume that integrates all ship (DEEP and IEC) survey and LISICOS buoy data, and 4) are and volume areas significantly lower than 2000. Please see attached presentation for details and results.

Updates

- Cayla Sullivan: Presented on the LISS Tracking and Reporting Progress. Please see attached presentation for details.
- Robert Burg: Provided an update on the LISS Strategic 5-yr Communications Plan, in which there will be a request for contract within the next couple of months. If interested in participation, please contact him.
- Nicole Tachiki: The 2015-2019 CCMP Report to Congress was approved by Region 1 and 2, and has been transmitted to EPA HQ for approval. Once approved, the Report to Congress will be transmitted to Congress and published on the website. Additionally, the LISS CCMP 2020-2024 Action Plan was approved by HQ on January 20, 2021, and will be published on the website.
- Mark Tedesco: The LISFF RFP will be released in late winter/early spring, so suggested to start thinking if LISFF funding and/or project cap should be increased. Additionally, NFWF released 15 Years LISFF Report highlighting their accomplishments.
    - Jim O'Donnell: Suggested that NFWF should use results from previous projects to determine priority and needs of the RFP.
    - Suzanne Paton: Mentioned that some projects funded through LISFF do conduct the post-monitoring. However, applicants are not required to report on it. Suggested to track the results of these restoration projects to better evaluate effectiveness.
    - Jim Ammerman: Suggested to utilize STAC notes to highlight eelgrass and shellfish priorities and gaps in RFP.
    - Koon Tang: Suggested RFP should highlight community sustainability and resiliency planning.

Next Meeting & Adjournment – Mark Tedesco

- Meeting was adjourned at 12:30pm.
- Next meeting: April 15, 2021

Photo: Friends of the Bay

LISS Habitat Restoration & Stewardship Work Group

Summary of Work Group Feedback (To Date) of the Habitat and Wildlife Themed 2021 LISS Enhancement Proposals

Victoria O'Neill

LISS Habitat Restoration & Stewardship Coordinator

Co-Chair, LISS HRSWG

Priorities

#	Project Title	Lead	HRSWG Priority Projects
25	Implementing Ecological Restoration and Resiliency at Connecticut's Largest Remaining Unditched Marsh	Audubon	1.14
26	Acoustic telemetry array for monitoring tagged, migratory fish in Long Island Sound, including Atlantic sturgeon	CTDEEP	2
27	Enhancement of Tidal Flow Restoration at the Barn Island Wildlife Management Area, Stonington, CT	CTDEEP	1.5
28	Installation of Self Regulating Tide Gates at Hammock River, Clinton, CT	CTDEEP	1.5
29	Support for Stewardship Land Acquisition by the New York State Department of Environmental Conservation	NYSDEC	1.63
30	Coastal Ecologist and Community Outreach Liaison Position(s)(1 position: $466,406, 2 positions: $858,008)	USFWS	1.75
31	Monitoring Tidal Wetland Elevation and Water Quality to Assess Tidal Wetland Loss in Flax Pond and Three Other Embayments of Long Island Sound, New York	USGS	2.13
32	Bioextraction in action: Rehabilitating Long Island Sound natural oysterbeds for ecosystem services in partnership with shellfish farmers in need of COVID-19 relief	CTSG	1.25
33	Assessment of Existing Habitat Connectivity Data and Models	NEIWPCC	1.75
34	Developing Conservation Plans for New York's Long Island Sound Marsh Complexes-Phase 2	NEIWPCC	1.38
35	Design for a Living Shoreline Resiliency Project at Chittenden Park, in Guildford CT	Save the Sound	1.63

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Comments

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Implementing Ecological Restoration and Resiliency at Connecticut's Largest Remaining Unditched Marsh	Audubon	•Meets HW-1, 2, 3, 17; targets resiliency to climate change, and ecosystem targets – directly: coastal habitat extent, tidal wetlands restored, habitat connectivity, public access, and indirectly: nitrogen loading and water clarity •good opportunity to share lessons learned with various restoration practices; •This project is shovel ready, 39 acres of TW •strong team behind the project •will test out whether creating micro topography is a viable option for enhancing saltmarsh sparrow habitat; •Wheeler Wildlife Management Area in nearby Milford is the largest unditched marsh in CT	• Can the proposed elements proceed independently of each other? • Has a construction contingency costs included in total project cost? • Timeline of deliverables (lots proposed over short period of time)? • match provided concerning(fed: 62% and match: 38%),
Acoustic telemetry array for monitoring tagged, migratory fish in LongIsland Sound, including Atlantic sturgeon	CTDEEP	•Meets HW-16,17,19 •LIS supports many fish species of conservation concern, including several species included as Near Threatened or above on IUCN Red List •Support long-term monitoring. •Project will cover majority of LIS (eastern portion). •This data would be useful for NYSDEC and other NY entities. •The more we know about fish distribution and habitat use in LIS the more effective we can be in conserving the most important habitats.	•This project is better suited for funding through LISS research grant program and needs a multi-year commitment of funding to produce results for effective monitoring/management •The Enhancement Grant program is not designed for such long term/on-going projects. •Need a plan/map of where they will deploy new equipment •Does not address any principles or ecosystem targets.
Enhancement of Tidal Flow Restoration at the Barn Island WildlifeManagement Area, Stonington, CT	CTDEEP	• Good work plan, identifies the need • This project would likely increase resilience and adaptability in this important tidal marsh if not funded/constructed could significantly hamper/delay past restoration efforts. • If/when culvert completely collapse significant decline in marsh health could occur and public use/enjoyment of the WMA could result.; • A globally significant Important Bird Area for Saltmarsh Sparrows. • Meets HW-1, 3, 16, 17, 22, 29 • Addresses resiliency to climate change and long-term sustainability • Addresses ecosystem targets – directly: coastal habitat extent, tidal wetlands restored, habitat connectivity.	• Need clarity on requested amount – is the $1.2 million a total cost or the requested amount. • Need to expand on timeline and expected deliverable dates • Is it possible to remove the sections of berm completely and reduce costs associated with installing new culverts?; • It is unclear if the resulting habitat will be low or high marsh • Installing culverts (versus tide gates) does not offer any protection to birds that are nesting in those areas landward of the dike, from flooding events associated with spring high tides or storm events.;

Comments

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Installation of Self Regulating Tide Gates at Hammock River, Clinton, CT	CTDEEP	•Good work plan with deliverables and a timeline with expected outputs and outcomes; •Part of a globally significant focal area for Saltmarsh Sparrows, offers much opportunity to expand nesting habitat; 170 acres of TW, not expensive •The habitat landward of the tide gates is not currently good nesting habitat for saltmarsh sparrow. However, the project should improve the habitat. •Project could help determine if installation of self regulating tide gates are an appropriate technique for managing other LIS marshes facing similar habitat quality decline •Meets HW-1, 3, 6, 16, 17, 19, 21, 22, SM-1, 29 (cross-theme relevancy); •Addresses resiliency to climate change and long-term sustainability •Addresses ecosystem targets – directly: coastal habitat extent, tidal wetlands restored, habitat connectivity and indirectly: nitrogen loading and water clarity.	• Need clarification on timeline; • Unclear whether the funds that is being requesting is just for design and engineering or whether it includes construction.
Support for Stewardship Land Acquisition by the New York StateDepartment of Environmental Conservation	NYSDEC	• Site has extremely high conservation value. • Protection of any undeveloped coastal lands is a high priority. Area appears to have significant nesting habitat for Saltmarsh Sparrows and represents a large block of relatively undeveloped habitat for the north shore of Long Island. • An unusual/extraordinary opportunity to acquire 800 acres of coastal marsh/forest • Significant support from other NY State open space funding sources. • Property can be purchased in installments and doesn't require purchasing all 800 acres • Meets CCMP – HW-3, 10; Addresses ecosystem targets –directly: Coastal Habitat Extent, Habitat Connectivity, Protected Open Space, Indirectly: Nitrogen Loading, Water Clarity, Impervious Cover.	• Confusion over total cost. Total acquisition cost is $35 million, this is only $2 million. Where is the other 31.5M coming from? • Does this land face development pressure if not acquired? • How would these funds actually support acquisition of the property if the process has already begun?;
Coastal Ecologist and Community Outreach Liaison Position(s)(1 position: $466,406, 2 positions: $858,008)	USFWS	• Conservation staff across the board are overstretched. In order to achieve LISS CCMP goals this is necessary • Meets HW-1, 2, 5, 10, 16, 17, 25, 27, SC-3, 5, 19, 23 and potentially HW-9, 20, 22 (if second position funded); • Addresses environmental justice; • Addresses ecosystem targets –Tidal Marsh Restored, Eelgrass Extent, Approved Shellfish Areas.	• Sounds like a variety of work items for the term employees to accomplish. Need specific goals and deliverables for each position.; • Not clear exactly what benefits/projects requested staff would deliver. Are there particular high priority projects that USFWS is proposing for which they need these positions? • Supporting multi-year staffing requests using enhancement grant funding is not appropriate/sustainable staff funding source. If priority for USFWS then why wouldn't they fund it? USFWS should provide part of required match. • This would require future base budget funding (4-year agreement). Interagency agreement so not match.

Comments

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Monitoring Tidal Wetland Elevation and Water Quality to Assess Tidal Wetland Loss in Flax Pond and Three Other Embayments of Long Island Sound, New York	USGS	• Important to collect and will improve our management/restoration capabilities at other marshes • Meets HW-5, 16, 18, 19, 27 and other themes (SC and WW); • Addresses ecosystem targets –directly: Approved Shellfish Areas, Eelgrass Extent, Coastal Habitat Extent. • If this project is funded, it would be extremely useful to fund both monitoring and analysis as the analysis could help address management questions regarding understanding tidal wetland loss, sea level rise, coastal ocean acidification, shellfish productivity, and eutrophication.	• Why was data collection at Flax Pond discontinued in 2018? How would this project expand upon what is already being done at the other sites?; • Enhancement grant program is not reliable long term monitoring funding source.; • Interagency agreement – no match. • Project will require future base program funding if agree to fund 3 FY. • Why not produce a summary report that analyzes all the data collected at the sites in order to determine tidal wetland loss (SETs (NYSDEC), pore water sampling (SUNY SB) and water quality)? That was the original goal of these projects • May be important to plan for ways to disseminate findings so that practitioners and managers can apply to implementation projects for greater success.; • There already is pre-management baseline data for Flax Pond (2008-2018).;
Bioextraction in action: Rehabilitating Long Island Sound natural oysterbeds for ecosystem services in partnership with shellfish farmers in need of COVID-19 relief	CTSG	• Very timely COVID19 response; • Oysters are critical to the health of LIS and to the coastal economies of both NY and CT.; • One time funding to continue longer term effort of sustaining shellfish operations is appropriate during COVID on assumption that shellfish industry could be substantially damaged if there are no resources to maintain existing shellfish beds over next ~ 1year.; • Meets HW-1, 18, 22 and other themes (SM and WW); • Addresses ecosystem targets –directly: Approved Shellfish Areas, Extent of Hypoxia, Nitrogen Loading, Water Clarity, Shellfish Harvested. • Would be an awesome project to report on to Congress as it shows LISS is directly working with the fishermen who rely on the Sound.;	• Need more information on the timeline – will all 5 phases be completed in one FY? • Why do natural shellfish beds require maintenance? Does this project create or enhance naturally occurring populations that don't?; • What about the CARES Act Marine Fisheries aid? How does this relate to that?
Assessment of Existing Habitat Connectivity Data and Models	NEIWPCC	• Meets HW-4 (which is given high priority since it is a priority action to be completed by 2024). and ecosystem targets –directly: Habitat Connectivity. • Will identify areas that need to be protected or restored to improve connectivity.;	• Need more information on the project relevance and need.; • Habitat connectivity within the Long Island Sound Watershed is of critical importance to the health of the estuary, the better we understand the key factors related to the health of the watershed regarding aquatic and habitat connectivity. • A little unclear if this is just aquatic habitat connectivity (i.e. fish passage) or includes connectivity issues for other aquatic and terrestrial habitats including migration corridors.; • Not clear how proposed study would benefit/improve habitat management; • Will study consider existing models being used in the region for tracking/prioritizing LISS efforts? • Need more clarification on timeline – will this require future base budget funding?

Comments

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Developing Conservation Plans for New York's Long Island Sound Marsh Complexes-Phase 2	NEIWPCC	• Seems like a useful exercise on important habitats.; • Meets HW-1, 3, 5, 9, 22, 29; • Addresses resiliency to climate change and long-term sustainability; • Addresses ecosystem targets –Protected Open Space, Coastal Habitat Extent, Tidal Wetland Restored. • Public access to all SLAMM data, not just largest and highest priority marshes, is important for planning projects at a range of scales.;	• Would like to see more information on how they will conduct community workshops.; • Would be helpful to better understand community response to Phase 1 project outreach to understand need/benefits of expanding # of marshes served through the marsh migration viewer. What are communities planning to do with info. provided by Phase 1? Does it make more sense to request funding to continue working with communities who responded to Phase 1 outreach rather than continue/expand/deliver marsh migration viewer? • If the Phase 1 response has been overwhelmingly positive, indicating that many more communities would benefit if 'their marshes' were reported through the viewer, then it would make sense to expand the marsh viewer to provide mash modeling results for other marshes.;
Design for a Living Shoreline Resiliency Project at Chittenden Park, in Guildford CT	Save the Sound	• Extraordinarily well-researched proposal that builds on past efforts and could serve as a model for effective marsh restoration/living shoreline practices in other part of the Sound.; • Meets HW-1, 3, 11, 16, 17, 22, SM-29, 34; • Addresses resiliency to climate change and long-term sustainability; Addresses ecosystem targets –Coastal Habitat Extent, Tidal Wetland Restored.	• Needs more information on the project relevance and need.; • Is the amount listed the total cost or the requested cost? Need more clarification on the timeline for this project • Is it one year or will it be included in future base program funding?; • Why can’t this be a LIS Futures Fund project? In the highest impact category? • Is this a design only proposal? If so, why so expensive? Need detailed budget. Can the Town contribute some funds to reduce the cost?

LONG ISLAND SOUND STUDY

A PARTNERSHIP TO RESTORE AND PROTECT THE SOUND

Long Island Sound Study Sustainable and Resilient Communities Working Group

Introduction

January 21, 2021

Sylvain De Guise and Becky Shuford

Origin of the Working Group

- Discussion at October 2019 Management Committee meeting
  - Little progress on resilience related objectives and implementation actions
  - Suggestion to establish a working group on Sustainable and Resilient communities
    - Becky and Sylvain asked to co-chair

Working Group membership

Mark Tedesco, EPA-LISS	Nancy Balcom, CT Sea Grant
Cayla Sullivan, EPA-LISS	Jessica LeClair, Sustainable CT
David Ganim, Nassau County	Corey Humphrey, Suffolk County
Nicole Tachiki, EPA-LISS	Chris Schubert, USGS
Alexa Fournier, NY DEC	Kathy Bunting-Howarth, NY Sea Grant
James O'Donnell, CIRCA	Kathleen Fallon, NY Sea Grant
Koon Tang, NY DEC	Jimena Perez-Viscasillas, NY Sea Grant
Larry Swanson, Stony Brook U.	David Kozak, CT DEEP
Brian Thompson,CT DEEP	Harry Yamalis, CT DEEP
Rebecca Shuford, NY Sea Grrant	Cindy Corsair, US FWS
Sylvain De Guise, CT Sea Grant	Holly Drinkuth, LISS CAC co-chair
Susan Van Patten, NY DEC	Nancy Seligson, LISS CAC co-chair
Casey Personius, NY DEC	Marty Garrell, LISS CAC
Diane Ifkovic, CT DEEP	William (Bill) Cavers, LISS CAC
Juliana Barrett, CT Sea Grant	Tracy Brown, Save the Sound
Paul Stacey, Footprints In The Water	

First Working Group call

- Broad diversity of thoughts and opinions about what the Working Group should do (more than could be managed in a call)
  - Need process…

Overall Goal

- Develop a ***5-year work plan*** to advance the Resilient Communities themes of the CCMP
  - Strategic
  - Focused
  - Aligned with CCMP
  - Identifiable to LISS
  - Complementary (but not duplicative) of existing efforts
  - Transparent and inclusive process

3-3 OUTCOME: POLICY MAKERS, RESOURCE MANAGERS, AND OTHER STAKEHOLDERS HAVE THE INFORMATIONAL RESOURCES TO UNDERTAKE COLLABORATIVE EFFORTS TO RESTORE AND PROTECT THE SOUND.

Objective 3-3a: To ensure that policy makers, environmental professionals, health professionals, and other stakeholders have the best available **information** in order to make decisions that will improve the management of Long Island Sound

3-4 OUTCOME: NEW AND EXISTING DEVELOPMENT IS SUSTAINABLE AND RESILIENT.

Objective 3-4a: To **encourage and facilitate the development** of regional, state, and local sustainability, mitigation, and resiliency plans and integrate them into community comprehensive **plans**

Objective 3-4b: To develop and **implement** sustainability and resiliency plans for new and existing development, housing, transportation, emissions control, energy efficiency, and job creation programs for all municipalities

4-3 OUTCOME: IMPLEMENTATION IS ADAPTED AND IMPROVED THROUGH THE APPLICATION OF NEW INFORMATION AND KNOWLEDGE.

Objective 4-3a: To frame sustainability, adaptation, and resilience in relation to the drivers of ecosystem change

Overall process

- Step 1; Inventory LIS-relevant resilience initiatives to understand the landscape
- Step 2: Identify gaps and opportunities and select work plan priorities
- Step 3: Socialize work plan with partners, get feedback and refine

Mark Amaral

Emily Tucker

Timeline

- Step 1: Inventory ongoing and planned Long Island Sound-related sustainability and resilience efforts.
  - Session 1.1: Introduction (**September 18, 10:00-12:00**)
  - Sessions 1.2: Surveying the landscape (**September 23, 9:00-12:00**)
  - Sessions 1.3: Surveying the landscape (**September 24, 9:00-12:00**)
  - Sessions 1.4: Work plan design (**October 13, 9:00-12:00**)

  Step 2: A decision making process for the working group to select work plan priorities
  - Session 2.1: Defining selection criteria (**October 29, 9:00-12:00**)
  - Session 2.2: Draft options for the work plan (**October 29, 9:00-12:00**)
  - Session 2.3: Decision making (**October 29, 9:00-12:00**)

  Step 3: Socialize draft work plan, receive feedback and refine
  - Two sessions will be planned in **January/February**

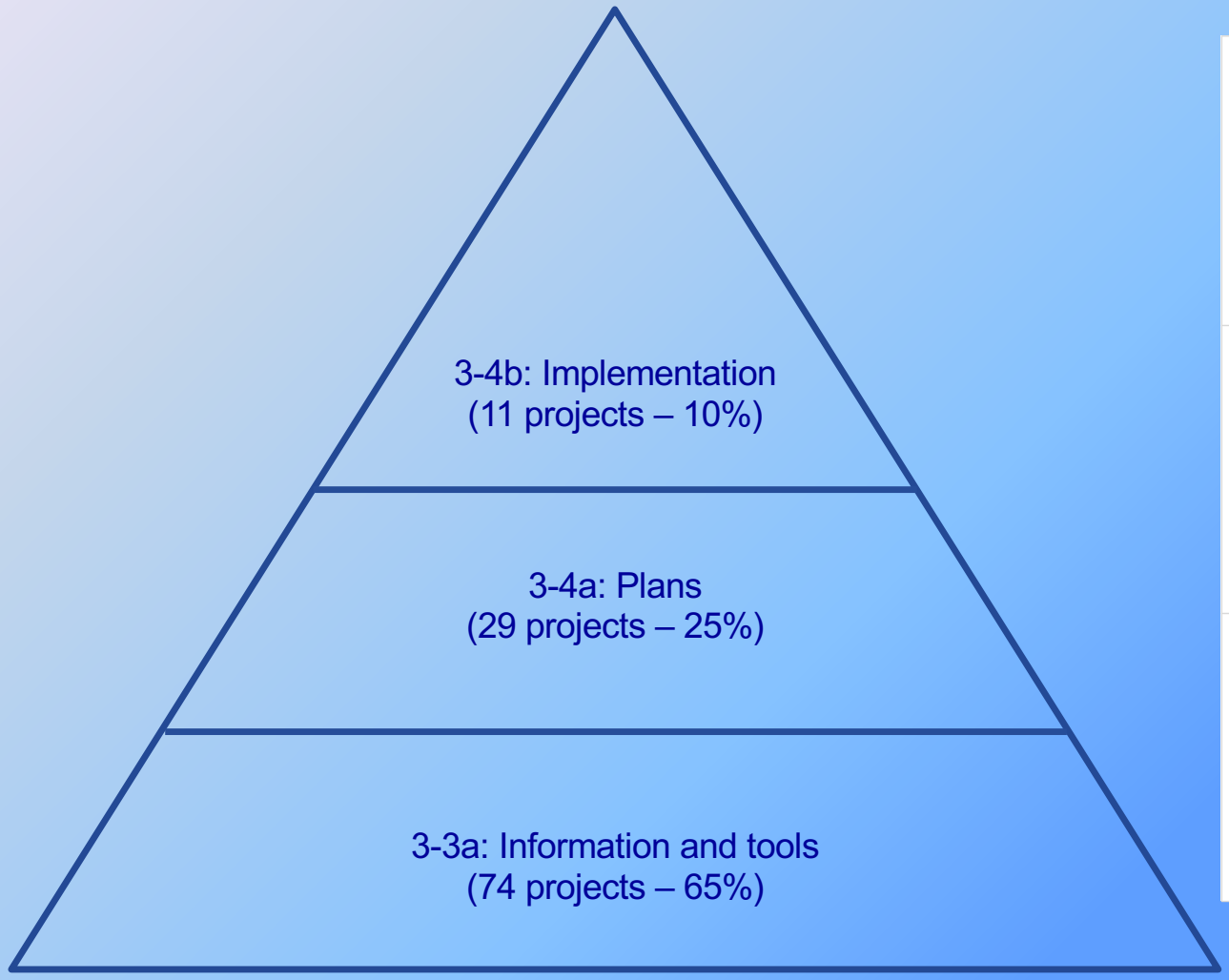
Working Group operational principles

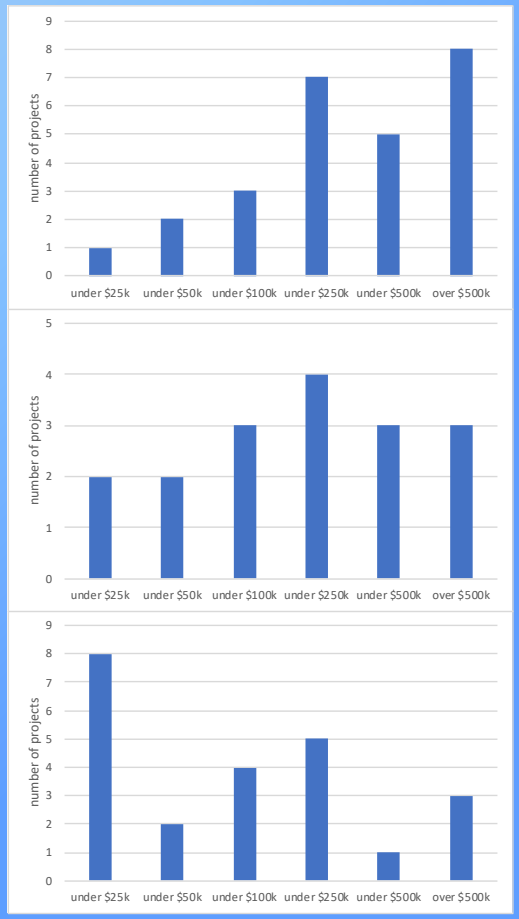
- Inclusive
- Transparent
- Respectful
- Objective

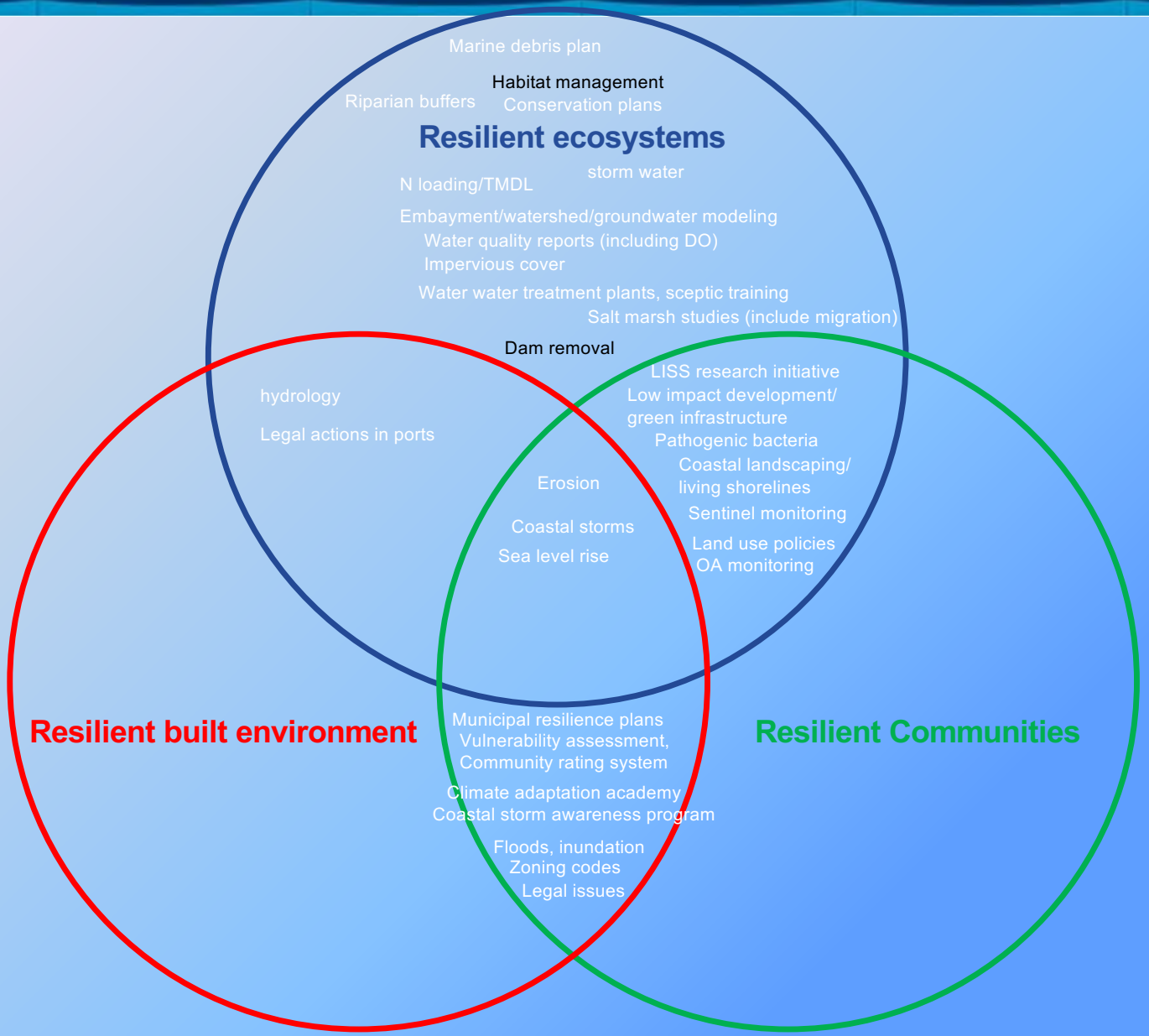
Year 1 Deliverables

- A LISS Sustainable and Resilient Communities Working Group **5-year work plan** and implementation strategy
- An **engaged** Sustainable and Resilient Communities **Working Group** ready to implement the work plan
- We anticipate developing a **budget request** for FY21 funding (ready in January!)

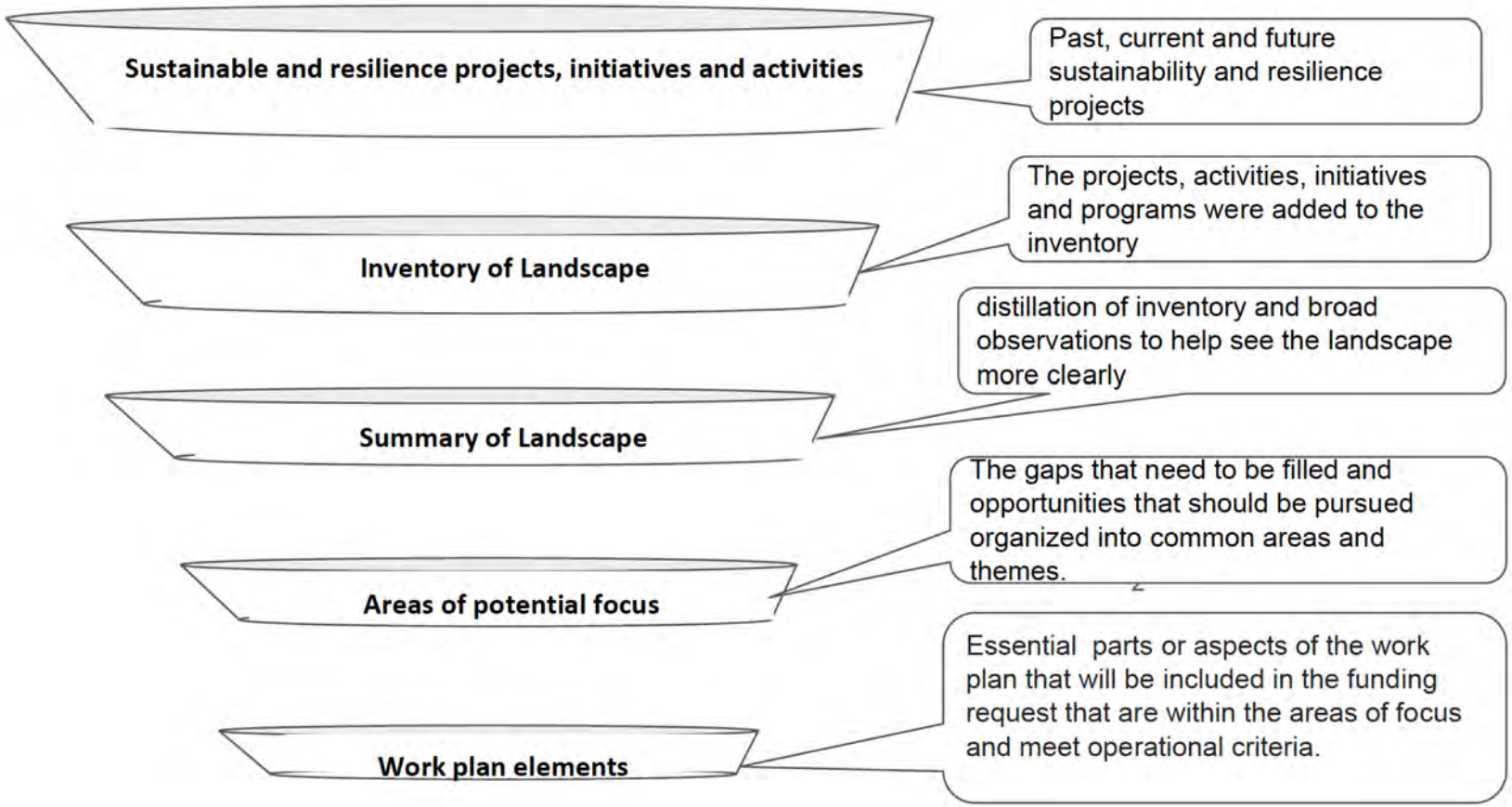
Resilience


3-4b: Implementation
(11 projects – 10%)
3-4a: Plans
(29 projects – 25%)
3-3a: Information and tools
(74 projects – 65%)


number of projects
under $25k
under $50k
under $100k
under $250k
under $500k
over $500k


Marine debris plan
Habitat management
Riparian buffers
Conservation plans
Resilient ecosystems
storm water
N loading/TMDL
Embayment/watershed/groundwater modeling
Water quality reports (including DO)
Impervious cover
Water water treatment plants, sceptic training
Salt marsh studies (include migration)
Dam removal
hydrology
Legal actions in ports
LISS research initiative
Low impact development/
green infrastructure
Pathogenic bacteria
Coastal landscaping/
living shorelines
Erosion
Sentinel monitoring
Coastal storms
Land use policies
Sea level rise
OA monitoring
Resilient built environment
Municipal resilience plans
Vulnerability assessment,
Community rating system
Resilient Communities
Climate adaptation academy
Coastal storm awareness program
Floods, inundation
Zoning codes
Legal issues

Stages of work planning



Overarching

Social-ecological model of resilience and sustainability

Environmental justice

Themes

Needs Assessment

Support municipalities

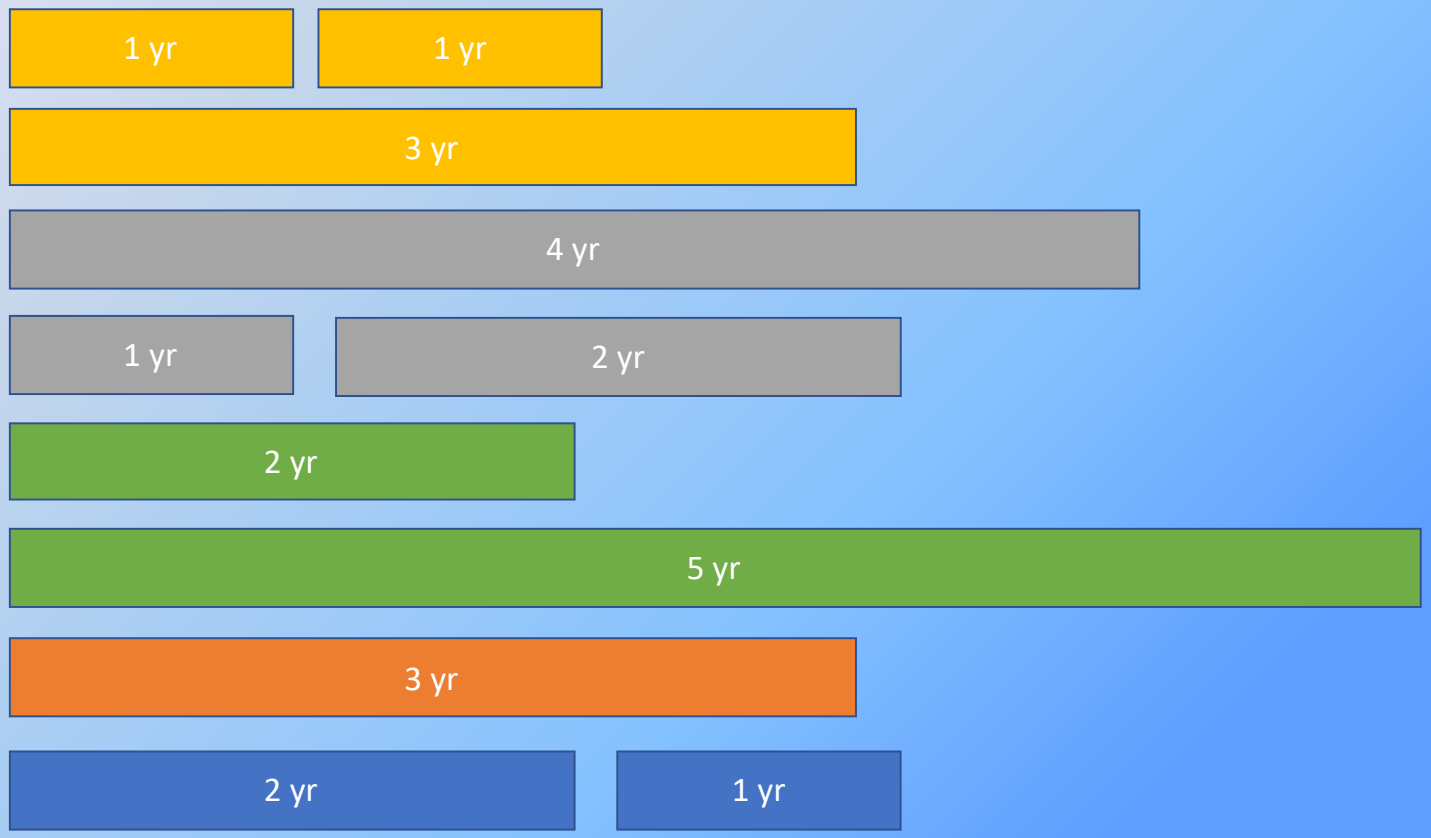
Rethink coastal development

Flip the pyramid

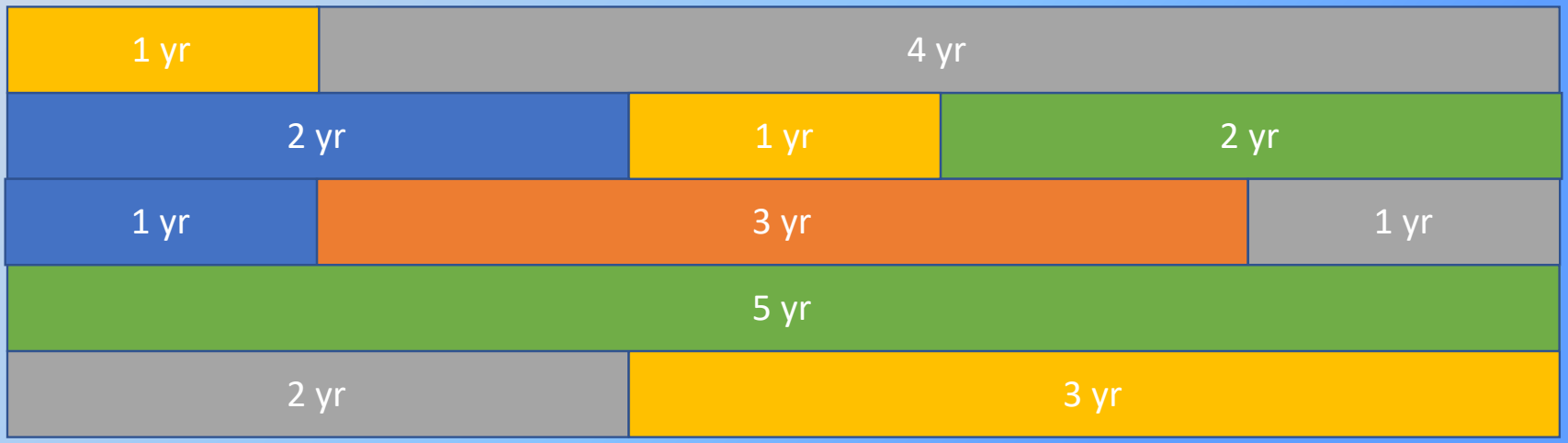
How

Build Strategic Capacity

Work plan elements (by focus groups)

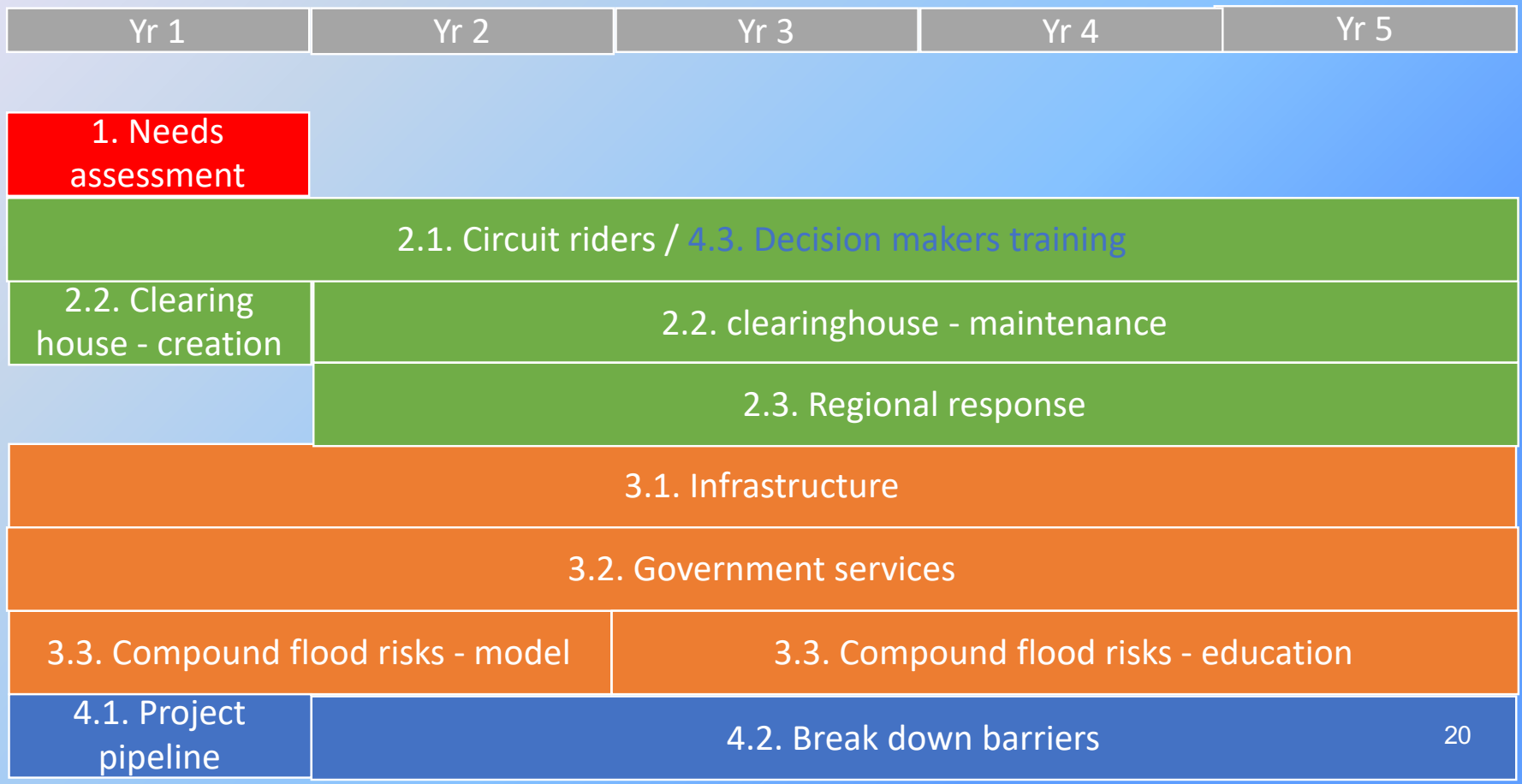


Work plan (over 5 years)

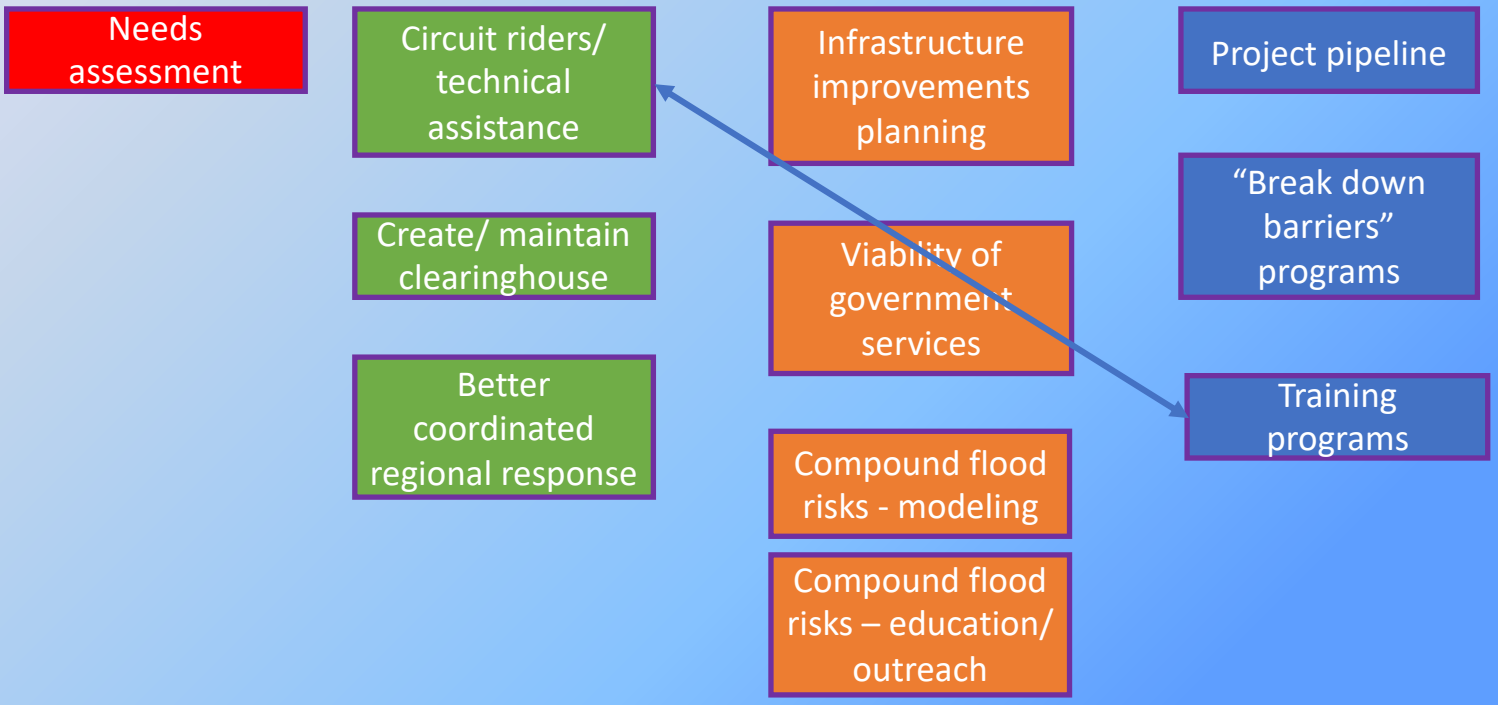


Work plan budget requests

Work plan (over 5 years)



Work plan elements (by focus groups)



Inputs	Tasks	Outputs	Outcomes
Staff Coordination efforts	Create/ maintain clearinghouse		Better coordinated regional response
Needs assessment			
Circuit riders	Compound flood risks - modeling	Compound flood risks – education/ outreach	Infrastructure improvements planning
	Project pipeline		Viability of government services
		"Break down barriers" programs	

Inputs

Staff Coordination efforts

Needs assessment

Circuit riders

Tasks

Workshops

Create/ maintain clearinghouse

Create training tools programs

Coordination among levels of government

Compound flood risks - modeling

Project pipeline

Understand barriers to implementation

Outputs

Shared lessons learned

Shared approaches/ services

Deliver training programs/ technical support

Compound flood risks – education/ outreach

"Break down barriers" programs

Outcomes

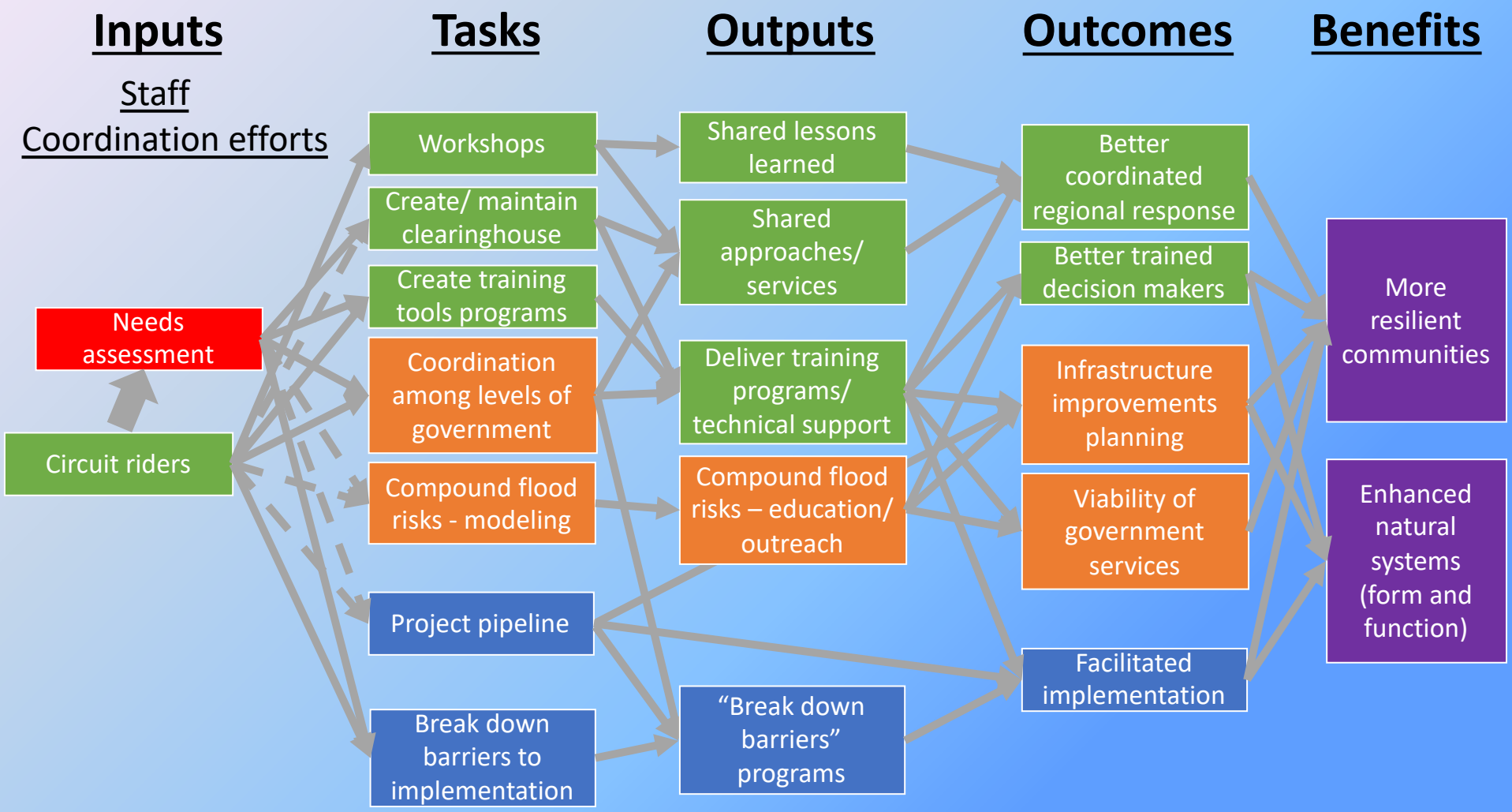
Better coordinated regional response

Better trained decision makers

Infrastructure improvements planning

Viability of government services

Facilitated implementation


Inputs
Staff
Coordination efforts
Needs assessment
Circuit riders
Tasks
Workshops
Create/ maintain clearinghouse
Create training tools programs
Coordination among levels of government
Compound flood risks - modeling
Project pipeline
Break down barriers to implementation
Outputs
Shared lessons learned
Shared approaches/ services
Deliver training programs/ technical support
Compound flood risks – education/ outreach
"Break down barriers" programs
Outcomes
Better coordinated regional response
Better trained decision makers
Infrastructure improvements planning
Viability of government services
Facilitated implementation
Benefits
More resilient communities
Enhanced natural systems (form and function)

Tasks	year 1	year 2	year 3	year 4	year 5
Needs assessment					
Hold annual workshops					
Develop and maintain clearinghouse					
Develop training programs to improve use of tools					
Improve the coordination among levels of government					
Support a compound flood risk modeling initiative					
Create a project pipeline					
Understand and break down barriers to implementation					

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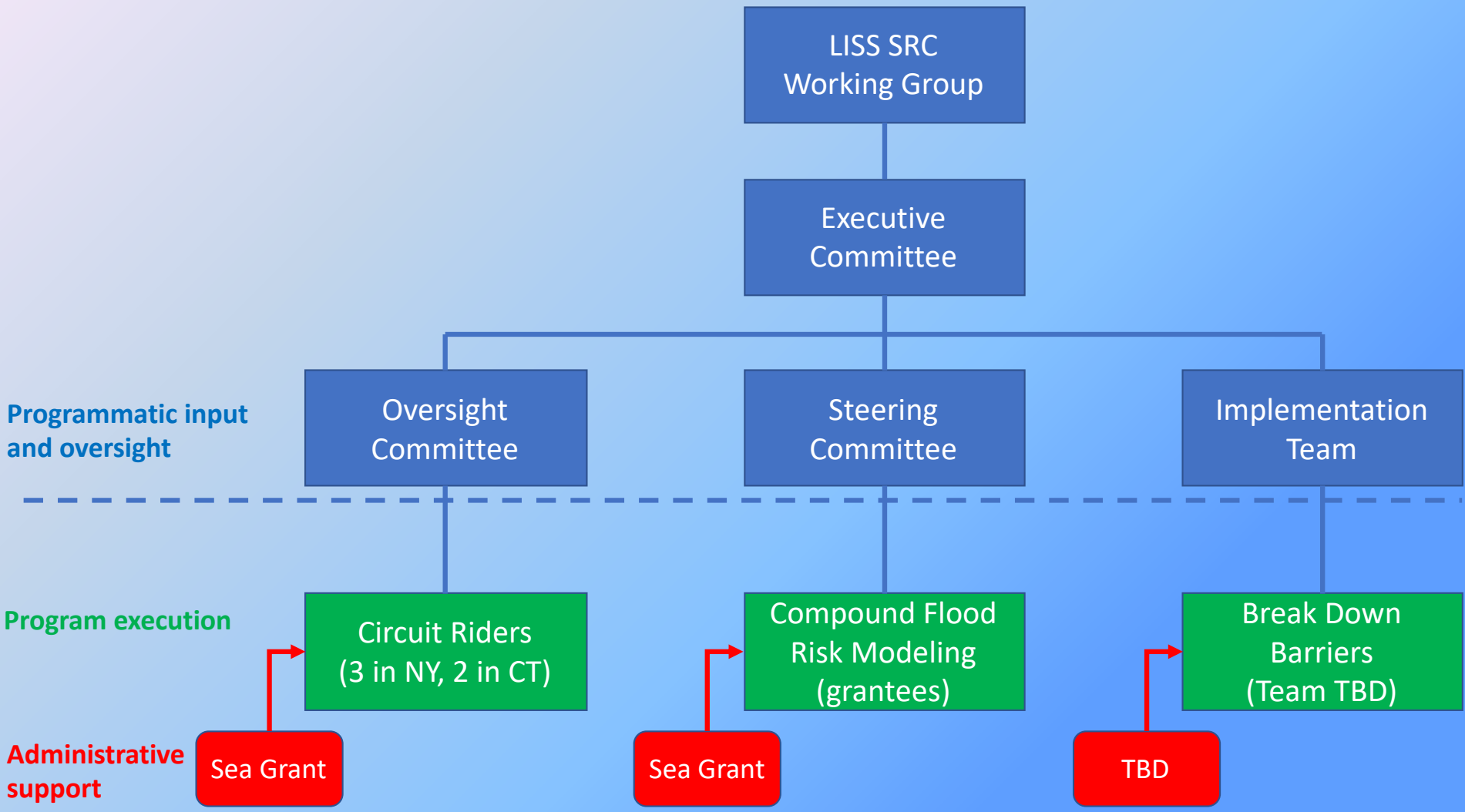

LISS SRC Working Group
Executive Committee
Programmatic input and oversight
Oversight Committee
Steering Committee
Implementation Team
Program execution
Circuit Riders (3 in NY, 2 in CT)
Compound Flood Risk Modeling (grantees)
Break Down Barriers (Team TBD)
Administrative support
Sea Grant
Sea Grant
TBD

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Circuit riders	$550k - 5 CR w FB	$575k - 5 CR w FB	$610k - 5 CR w FB	$650k - 5 CR w FB	$675k - 5 CR w FB
Hold workshops	$30k	$30k	$30k	$30k	$30k
Clearing house - creation / Clearinghouse - maintenance	$50k	$10k	$10k	$10k	$10k
Create training programs					
Coordination among government levels	$20k + $3k	$20k + $3k	$20k + $3k	$20k + $3k	$20k + $3k
Compound flood risks - model	$500k	$500k	$500k		
Compound flood risks – education/outreach				$50k	$50k
Create project pipeline					
Understand and break down implementation barriers					
Break down barriers			$250k	$250k	$250k
Total (direct costs)	$1,153k	$1,138k	$1,423k	$1,013k	$1,038k

~$5.75M

Questions?

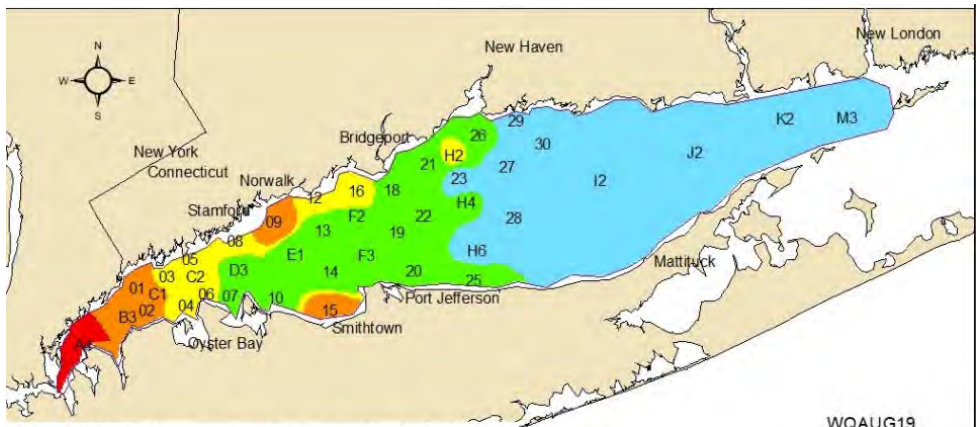
SUMMARY

1. Built on-line database with discovery and both P&C and M-M access (ERDDAP)

2. On-line mapping tool for area and volume that accesses the database (using and tested WQX)

3. Did an analysis of uncertainty in area and significance of trends in Area and Volume that integrates ALL ship (DEEP and IEC) survey and LISICOS buoy data.

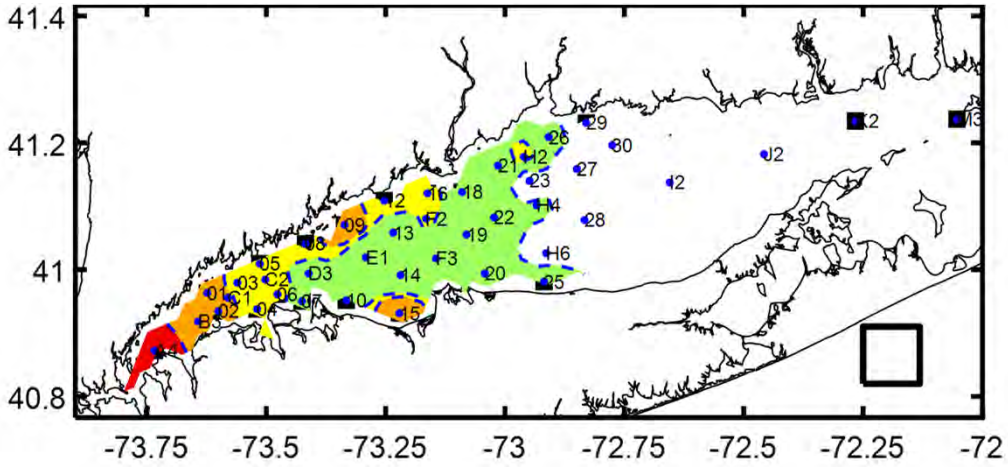
4. Area and Volume areas significantly Lower than 2000



The WQAUG19 survey was conducted July 29 -August 1st , 2019 aboard the R/V John Dempsey. 42 stations were sampled. The lowest dissolved oxygen recorded during this survey was at Station A4 with a concentration of 1.29 mg/ L. Six additional stations were below 3.0 mg/L and a total of 32 stations were below 4.8 mg/L.

There were 231.6 km2 of bottom water that had DO concentrations less than 3.0 mg/L during the WQAUG19 survey. An additional 987.2 km2 of bottom water had concentrations less than 4.8 mg/L.

Dissolved Oxygen	Severity of impact
0.0 - 0.99	Severe
1.0 - 1.99	Moderately severe
2.0 - 2.99	Moderate
3.0 - 3.49	Marginal
3.5 - 4.79	Interim management goal
4.8+	Excellent - Supportive of marine life



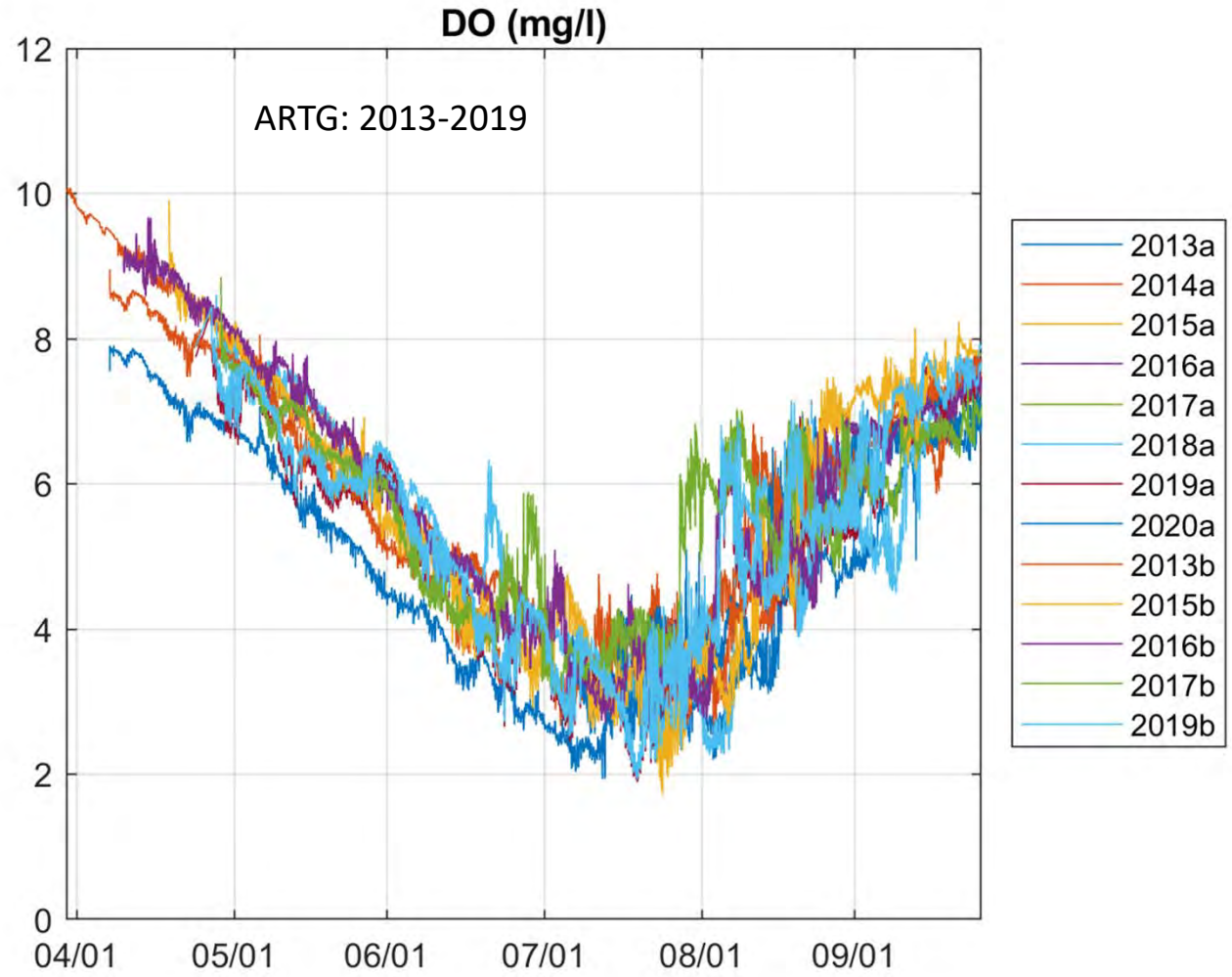
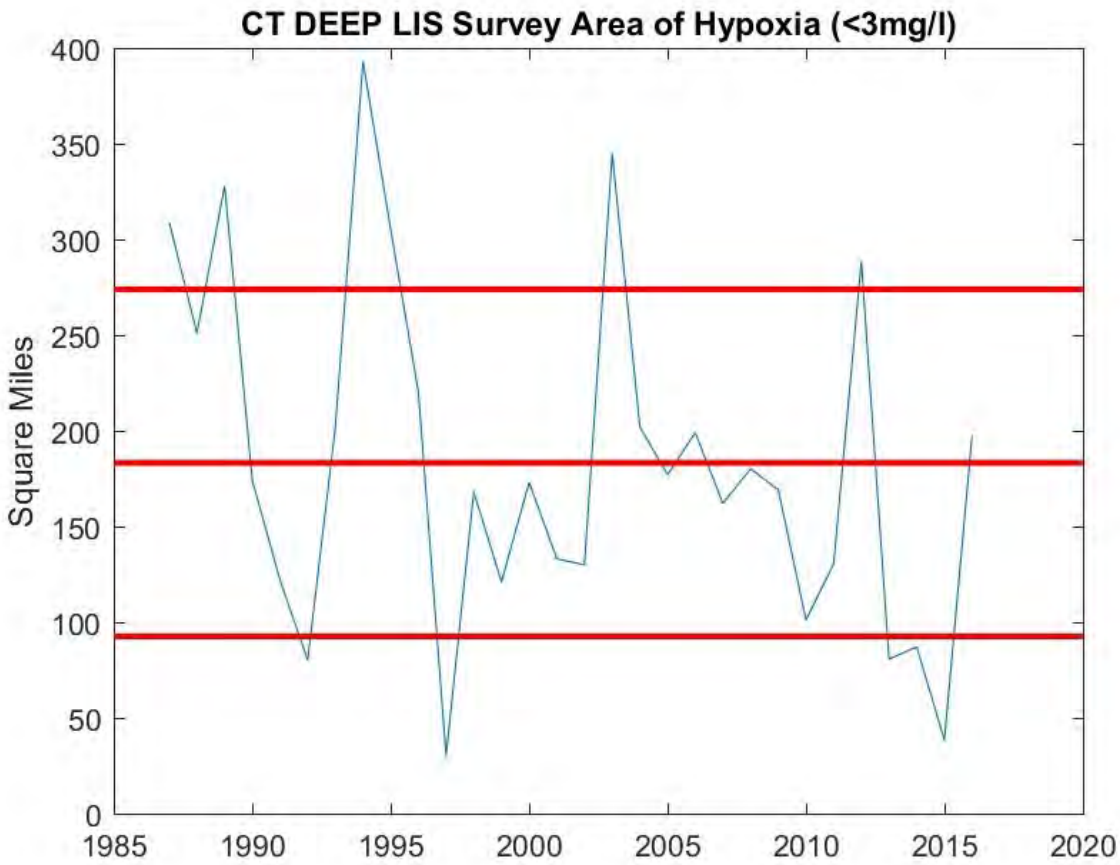
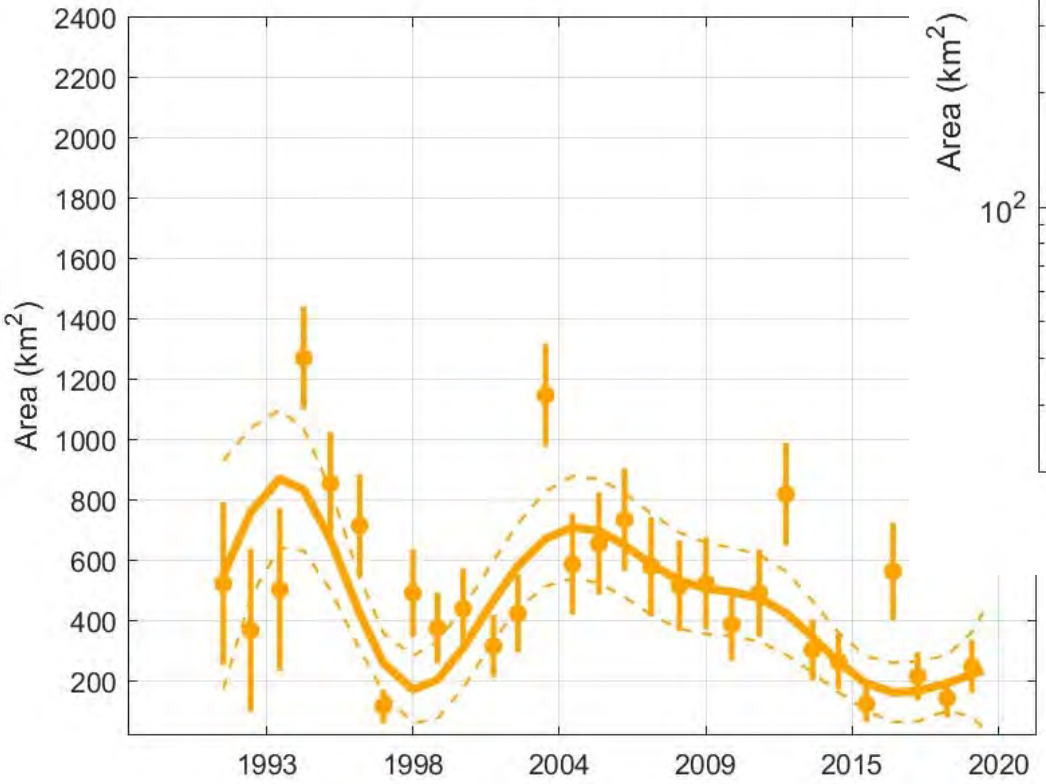
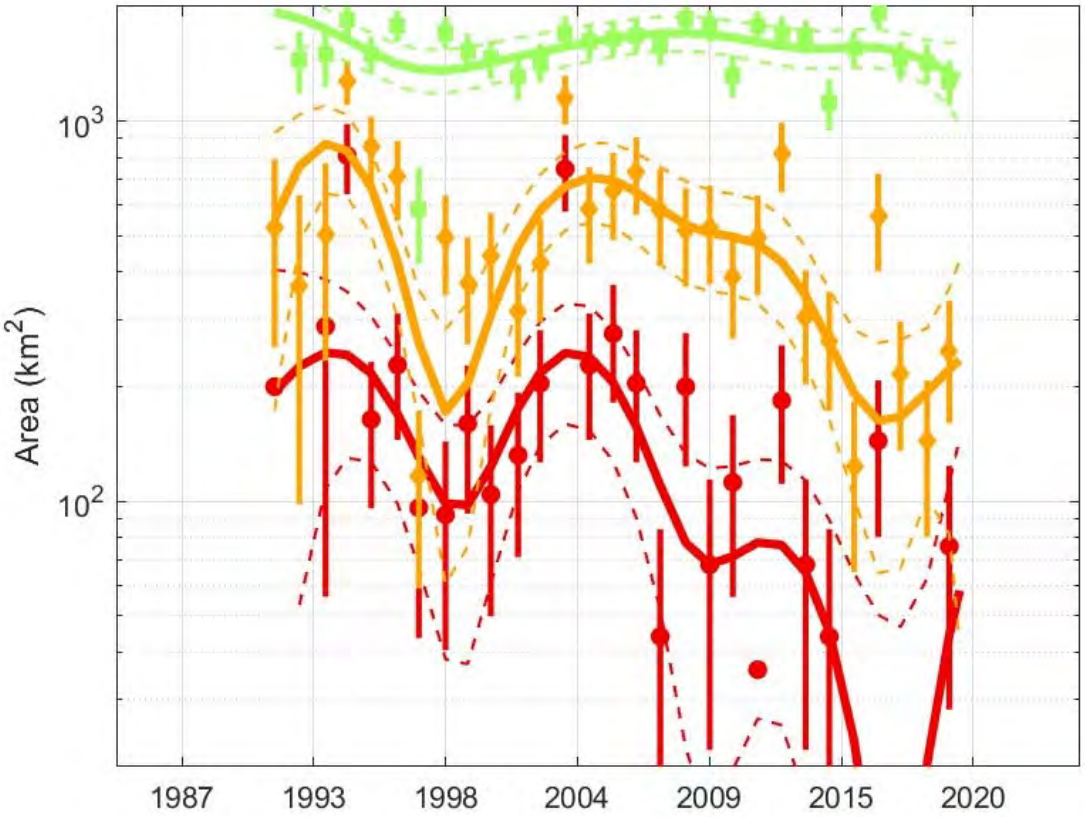
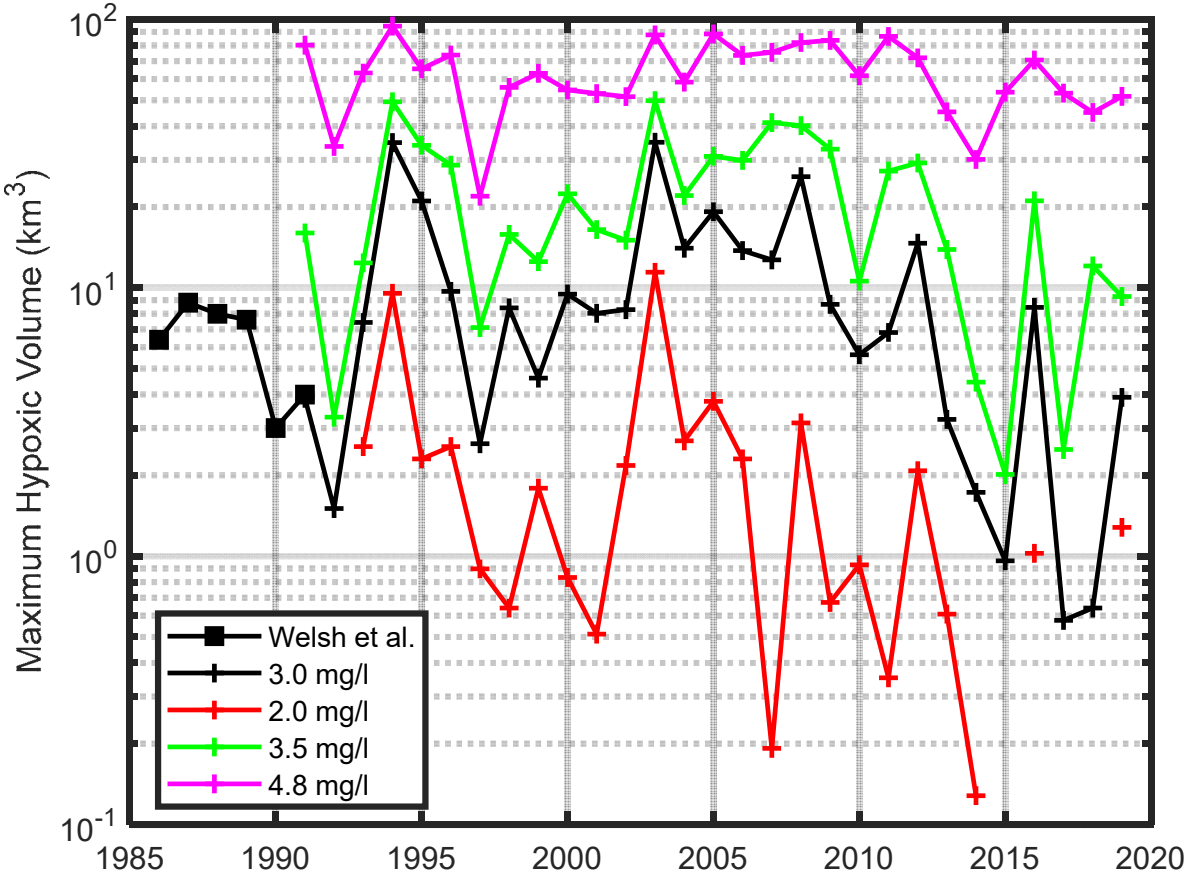


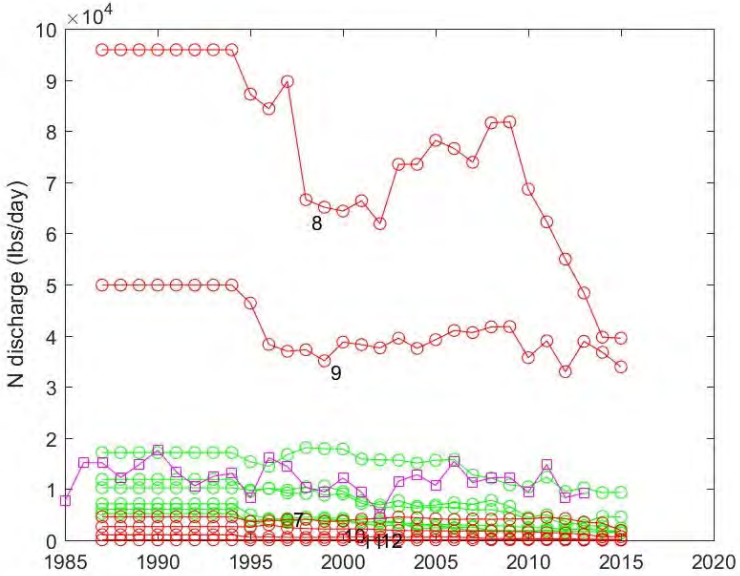
Figure16. Observations of the near-bottom (24 m) DO at the ARTG buoy (see Figure 15a) from pairs of sensors deployed in 2013-19.


CT DEEP LIS Survey Area of Hypoxia (<3mg/l)
Square Miles
400
350
300
250
200
150
100
50
0
1985
1990
1995
2000
2005
2010
2015
2020


2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
Area (km^2)
1993
1998
2004
2009
2015
2020


10^3
10^2
Area (km^2)
1987
1993
1998
2004
2009
2015
2020


Maximum Hypoxic Volume (km3)
10^2
10^1
10^0
10^-1
1985
1990
1995
2000
2005
2010
2015
2020
Welsh et al.
3.0 mg/l
2.0 mg/l
3.5 mg/l
4.8 mg/l


×10^4
N discharge (lbs/day)
10
9
8
7
6
5
4
3
2
1
0
1985
1990
1995
2000
2005
2010
2015
2020
8
9
7
10
11
12

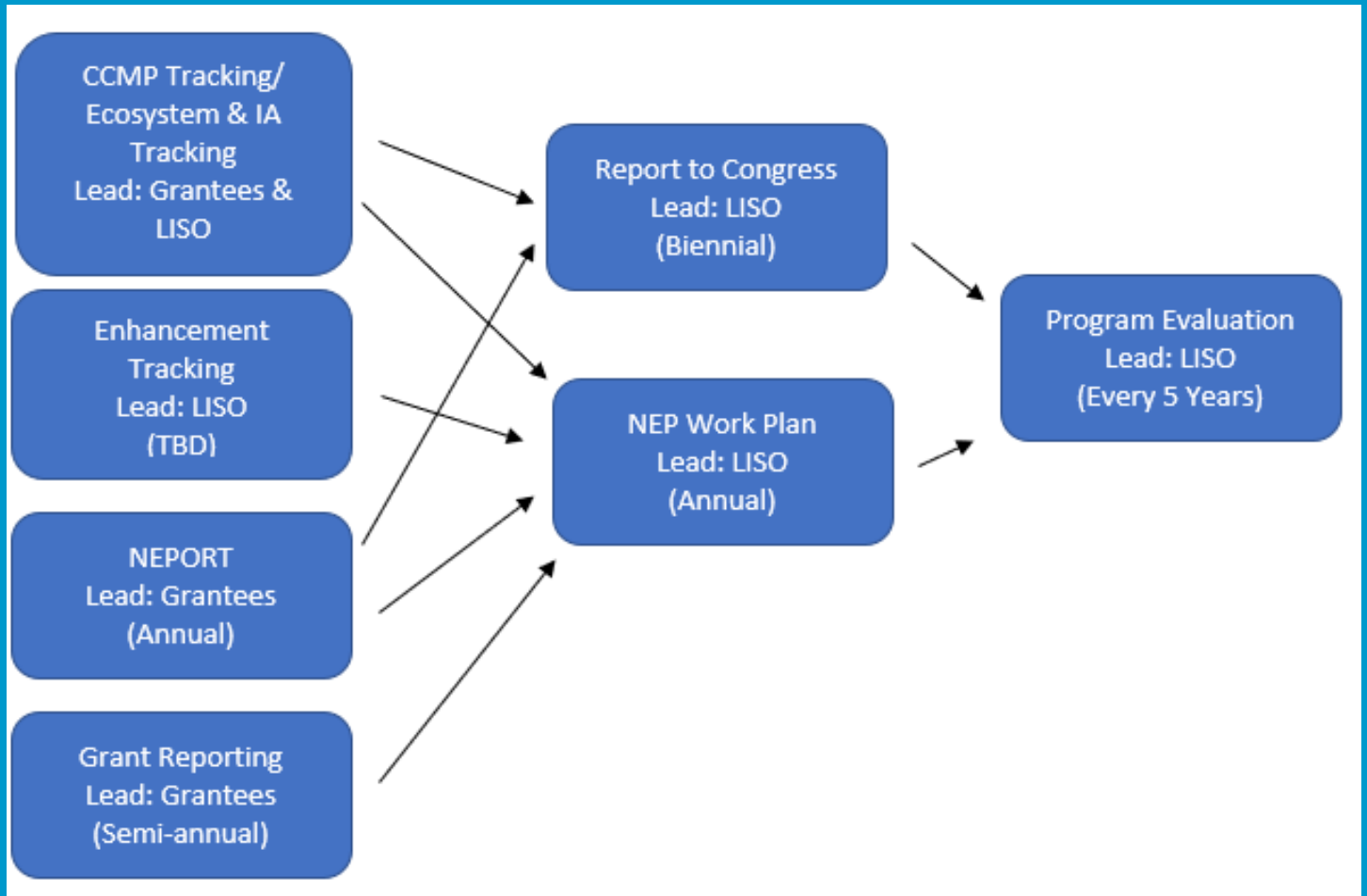
LONG ISLAND SOUND STUDY

A PARTNERSHIP TO RESTORE AND PROTECT THE SOUND

LISS Tracking and Reporting

Contacts: Cayla Sullivan and Nikki Tachiki

Switch from Implementation Action to Overall Tracking and Reporting



Tracking in SharePoint

Three tables:

- NEP Annual Work Plan - LISO
- Implementation Actions - LISO
- Grant Reporting - Grantees

Original List of Fields for Tracking

- CCMP Theme
- IA Number
- Implementation Action
- Type of IA: Ongoing vs. Discrete
- Status
- Description of Progress Made
- Date of Last Update
- Owner (Agency lead on implementation)
- Total Estimated Cost
- Expected Timeframe
- Output/Metric
- Ecosystem Target
- CCMP Outcome
- CCMP Objective
- CCMP Strategy
- Dollars Spent
- Funding Source
- Partners
- Output/Metric
- Date of last update

LONG ISLAND SOUND STUDY

A PARTNERSHIP TO RESTORE AND PROTECT THE SOUND

NEP Annual Work Plan

- Work Plan Element
- Activity Type
- IA Number
- Project or Task Title
- Project Objectives
- Project Description
- Project Implementing Agency
- Project Responsible Partners
- Funding Type
- Project Estimated Budget
- Federal Amount
- Match Amount
- Project Anticipated Outputs or Products
- Project Estimated Milestones
- Project Anticipated Long-term Outcomes
- CWA Core Program Elements
- EPA Grant Number
- Funding Opportunity
- Project Officer
- Region
- Other Information

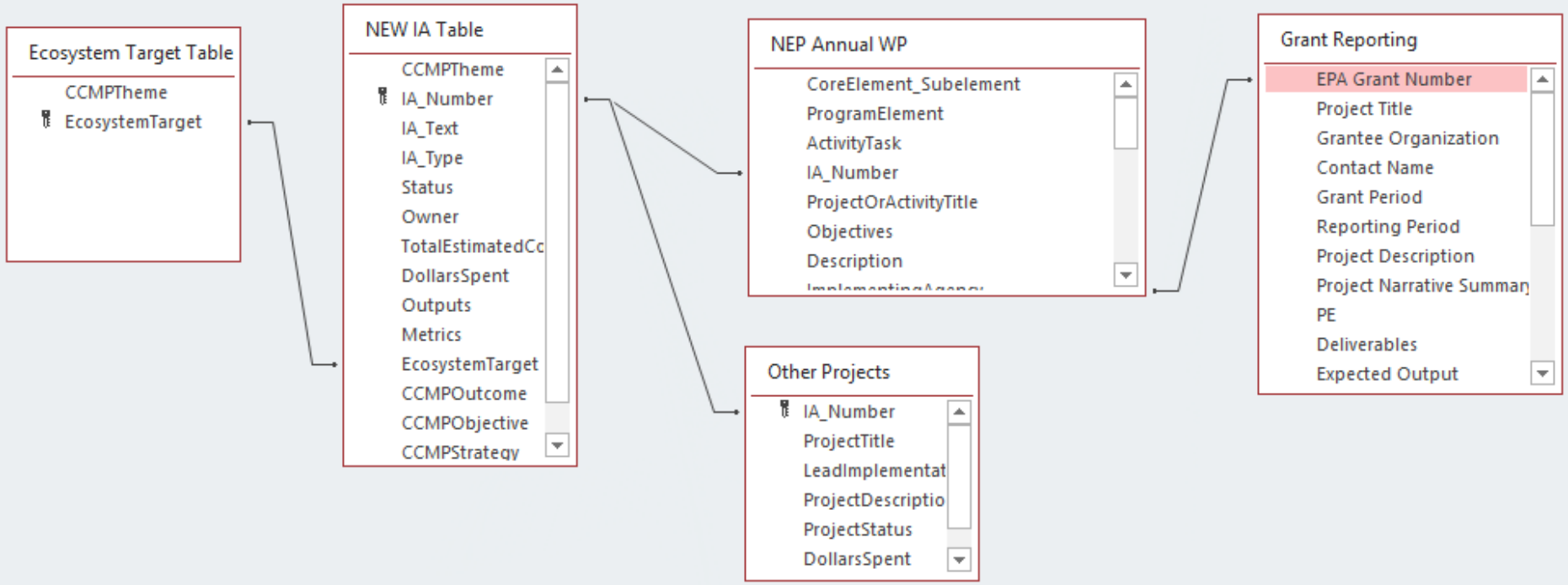
Implementation Actions

- CCMP Theme
- IA Number
- IA Text
- IA Type
- IA Status
- IA Lead
- Total Estimated Costs
- Total Dollars Spent
- IA Outputs
- IA Metrics
- Ecosystem Targets
- CCMP Outcome
- CCMP Objective
- CCMP Strategy
- Update Date

Grant Reporting

- EPA Grant Number
- Grant Title
- Grantee Organization
- Contact Name
- Grant Period
- Reporting Period
- Grant Description
- Grant Narrative Summary or Accomplishments
- Activity
- Deliverables
- Timeline
- Expected Output
- Actual Output
- Expected Outcome
- Actual Outcome
- Project Status
- Challenges or Changes
- Participants
- Quality Assurance
- Funding Status
- Future Activities or Events
- Presentations/Publications/Outreach
- Other Information

Relationships and Lists



Moving Forward: SharePoint Tracking Tool

- To be completed by end of February 2021
- Distributed for LISS use by March/April 2021 to have populated by June 2021