3rd Annual LISS Sustainable and Resilient Communities Workshop







Session #2: Resilience Tools

Tuesday, December 10, 2024 — 1:30-3:30 PM

This session featured presentations about new Resilience Tools being developed and used throughout coastal Long Island Sound!

View the recording here:

https://www.youtube.com/watch?v=NJYWVhmshsU

Resources:

Learn more about Long Island Sound Study https://longislandsoundstudy.net

Check out the LIS Resilience Resource Hub https://www.lisresilience.org/

Contact Information for Speakers:

Robin Glas, Hydrologist, U.S. Geological Survey - New York Water Science Center, rglas@usgs.gov

Enrico Nardone, Executive Director, Seatuck Environmental Association, egnardone@seatuck.org

Kaitlin Mattei, Conservation Project Manager, Seatuck Environmental Association, kmattei@seatuck.org

Mike Jastremski, Watershed Conservation Director, Housatonic Valley Association, <u>mjastremski@hvatoday.org</u> **Kathleen Knight**, Long Island Sound Project Coordinator, Connecticut Department of Energy & Environmental Protection, Kathleen.Knight@ct.gov

Contact Information for SRC Team:

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Resilience Tools Session: Poll Results

13

65

26



Activities

Participants

Average responses

Average engagement

Please indicate the sector that best represents you:

Federal or state Indigenous Natio Local Government	13% 0%	Response options	Count	Percentage	6004
Nonprofit/NGO 27% Watershed 4% Community Group 4% Consultant 4% Academia 9% Interested 7%	4%	Federal or state government	6	13%	69%
	9%	9% Indigenous Nation or	0	0%	Engagement
		Local Government	14	31%	45
		Nonprofit/NGO	12	27%	Responses
		Watershed Organization	2	4%	
		Community Group	2	4%	
		Consultant	2	4%	
		Academia	4	9%	
		Interested Individual	3	7%	

Have you attended other SRC workshops or trainings?

Yes	80%	Response options	Count Percentage		6
		Yes	32	80%	0
No, this is my first time!	20%	No, this is my first time!	8	20%	Enga



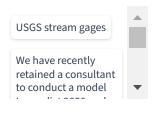
What is your familiarity with federal, state, and local resilience tools?

I frequently use various resilience tools to assess climate impacts a Toccasionally use resilience tools I rarely use resilience tools I have not used any resilience tools	8% 47% 14% 31%	Response options I frequently use various resilience tools to assess climate impacts and help with	Count 3	Percentage 8%	55% Engagement
		planning I occasionally use resilience tools	17	47%	36
		I rarely use resilience tools	5	14%	Responses
		I have not used any resilience tools	11	31%	

What is your familiarity with the Long Island Sound Resilience Resource Hub?

•		,			
The Resource Hub is fantastic and I use it frequently! I occasionally use the Resource Hub I am I amiliar with the Resource Hub but have not used it I had not Messelt about the Resource Hub	2%	Response options	Count	Percentage	620/
	10% 54% 34%	The Resource Hub is fantastic and I use it frequently!	1	2%	63% Engagement
		I occasionally use the Resource Hub	4	10%	
		I am familiar with the Resource Hub but have not used it much	22	54%	41 Responses
		I had not heard about the Resource Hub	14	34%	

What tools (if any) do you currently use to evaluate flooding impacts in your community?



Responses

USGS stream gages



We have recently retained a consultant to conduct a model to predict 2050 and 2070 Sea Level Rise impacts.

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Responses

First Street FEMA maps

professional assessment

County and State agencies mappers

floodnet nyc

None, although I'm aware of UCONN's modeling and CIRCA.

CIRCA mapping/FEMA Maps/SLAMM

FEMA

 FEMA

FEMA, CIRCA CCVI, CIRCA SLR Viewer, NOAA viewers, all of them

UCONN CLEAR mapping tools

not using any

CIRCA map

FEMA's Map Service Center to make FIRMETTES

CTECO

N/A to me

SLAMM

none

stories

CIRCA map

FEMA flood mapping

None!

Is your community interested in learning more about the compound flood mapping tool and receiving in-depth training?

Yes	87%	Response options	Count	Percentage	46%
Maybe	13%	Yes	26	87%	
No	0%	Maybe	4	13%	Engagement
		No	0	0%	

30 Responses

What additional information would be helpful for understanding flooding risks in your community?

stream crossings, dams, tide gates) that might amplify or otherwise alter flood risks. Also, identification of locations of infrastructure (green stormwater

Responses

It seems the entire coastline is awash in red. Is the problem tractable?



per decade inundation mapping

Darien is on the coastline, but I have never seen any solid data on flooding potential along Weed Beach. The Town has done some research on Pear Tree Point Beach, but has not invested money to make that part of the coastline more resilient. Where do we start so we can present facts rather than photographs?

9 Responses

Overlay or identification within this tool of infrastructure (road-stream crossings, dams, tide gates) that might amplify or otherwise alter flood risks. Also, identification of locations of infrastructure (green stormwater infrastructure, flood storage infrastructure) that can help mitigate localized flooding.

Include links to solution alternative by location

Relationship to watershed condition throughout the LIS watershed.

risks to infrastructure, depth analysis for homeowner visualization of the hazards

Be able to type in zip code

Smaller grid size.

Have you worked on culvert restoration projects?

		I have never worked on a culvert restoration project	23	70%	33 Responses
		I have worked on a few culvert restoration projects	9	27%	
I have never worked on a culvert restoration project	70%	restoration projects			Engagement
I have worked on a few culvert restoration projects	27%	I have worked on many culvert	1	3%	3170
I have worked on many culvert restoration projects	3%	Response options	Count	Percentage	51%

For those that have worked on culvert restoration projects, have any of these projects involved efforts for aquatic connectivity (i.e fish passage?)

Yes	64%	Response options	Count	Percentage	220/
ics	0470	Yes	9	64%	22%
No	36%	No	5	36%	Engagement

14

Responses

Would you use this toolkit (or for those outside NY, a toolkit like this one) to help locate priority sites for culvert restoration work?

Definitely!	55%	Response options	Count	Percentage	
Maybe, but I need more information	27%	Definitely!	18	55%	51%
Unlikely	0%	•			Engagement
This tool is not applicable to my work	18%	Maybe, but I need more information	9	27%	Engagement
		Unlikely	0	0%	33
		This tool is not applicable to my work	6	18%	Responses

What additional information do you think would be helpful for this toolkit?



Responses

There are no culverts in my area

8% Engagement

The number or nature of downstream culverts or obstructions

Understanding of contributing watershed condition, and mitigation options to reduce stream flow and flooding. And hydrologic factors, e.g., stream capacity to accommodate flow.

5 Responses

Threatened and endangered species in the area of the culvert

Ownership/stakeholder information

To what extent did this session provide you with new knowledge that will help with community resilience planning?

with Commi	illity les	sitience planning:			
I tound this session very informative and will be using I found this session I found this session.	72%	Response options	Count	Percentage	
	16% 12% 0%	I found this session very informative and will be using one or more of these tools in my work!	18	72%	Engagement
		I found this session informative but I still need more information to understand how I can use these tools.	4	16%	25 Responses
		I found this session informative but I am not sure if I will use these tools.	3	12%	
		I did not learn new or useful information from this session.	0	0%	

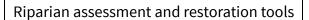
Are there other resilience tools that you would like to learn more about?

Are there resilience tools focusing on increasing heat and high winds along with the water-based tools?

Responses

stormwater/green infrastructure

As we move towards more powerful natural recovery and nature-based solutions, which provide self-sustaining resilience to our aquatic ecosystems, we should get away from site specific "treatment" fixes, which don't have much "reach" for ecosystem health. Time to move on from nutrients only.



Are there resilience tools focusing on increasing heat and high winds along with the water-based tools?



4 Responses