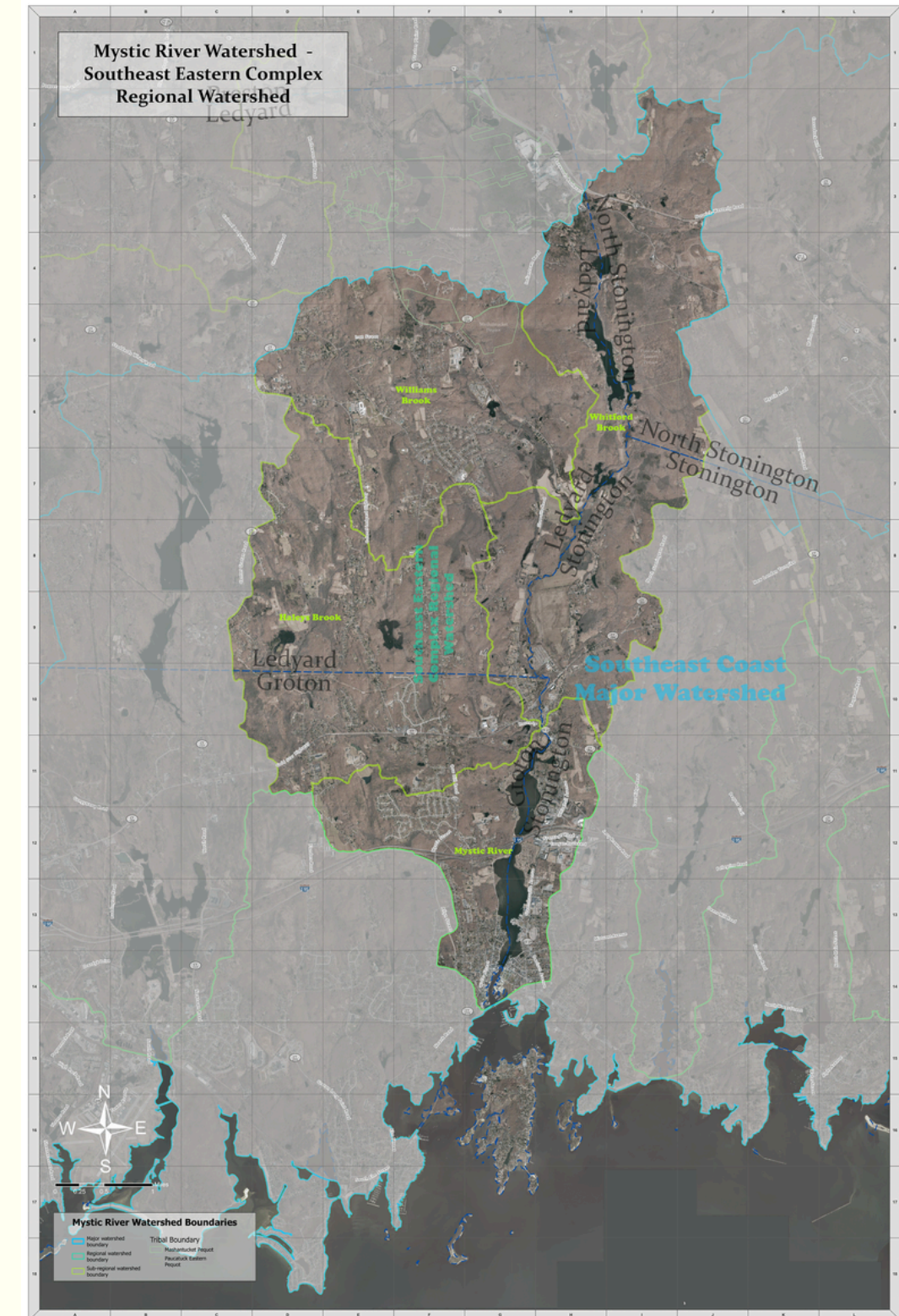


**CLIMATE VULNERABILITY
ASSESSMENT AND BUSINESS
RESILIENCE COUNCIL
PROPOSITIONS WITHIN THE
MYSTIC RIVER WATERSHED**

BY: PAIGE BOOTH

INTRODUCTION

For this project, I worked with the Alliance for the Mystic River Watershed. The overall goal of my project was to talk to communities, specifically people who work or own businesses in Groton and Stonington, and let them voice their concerns. The end goal of the project was to host a design clinic where the people I have met with can come together to discuss common issues and brainstorm solutions. Additionally, a goal is to get contact information from businesses to keep them in the Resilient Business Coalition!



BACKGROUND



Research and Planning



- CT has seen a 3.5°F increase in its average temperature.
- Sea levels are estimated to rise 1-4 feet by 2100.
- The Mystic River watershed is located in southeastern Connecticut. It includes portions of Stonington, Groton, Ledyard, and North Stonington, as well as the Eastern and Mashantucket Pequot Nations. This part of the state is a popular tourist destination, especially in the summer.
- Mystic is most vulnerable to flooding due to sea level rise, flooding due to increased rain events, and extreme heat.
- Mystic's estimated median household income in 2022 was \$125,000, (>\$35,000 higher than the CT average).
- There was a Climate Vulnerability Assessment done in Groton in 2023-2024 where I took a lot of inspiration from





INTERVIEWS

I reached out to over 20 businesses in the Mystic area.

- Mystic Art Center, Mystic Seaport, Red 36, Bravo Bravo, Sift Bake Shop, Young Buns, Mystic Sweet Shoppe, Kenzie's Fudge & Chocolate shop, Mystic Park Ice Cream, Army/Navy Store, Company of Craftsmen, Mystic Bookstore, Fatface, Blue Heaven Kayak Adventures, Lis Bakery, Richard Dixon law firm, Adventure Mystic, The Ditty Bag, Mystic YMCA, Mystic Mine, Jealous Monk, Rio Salado, Taqueria, Drawbridge Ice cream and Mystic Salad Co.
 - Richard Dixon's law firm did not believe they were the best fit for my project. A few other businesses never got back to me.
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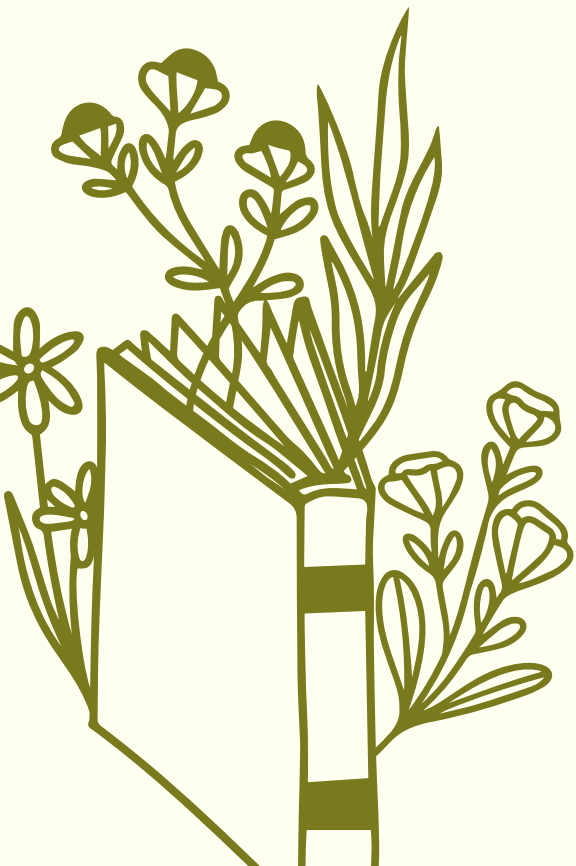

INTERVIEW QUESTIONS



- What is your name and what business do you work for?
- What is your position in the business?
- How long have you worked here?
- Where are you from? How long have you been in CT?
- Have you experienced any of the following within the last year: downpours, clogged drains, tidal flooding including high tides and king high tides, heavy precipitation, stormwater flooding, coastal storms, algal blooms, drought, or increased need to use air conditioners?
- If you have been in the business for multiple years, have you noticed an increase in these events? If so elaborate
- Have you noticed any of these events interfering with your business or services?
- Have you noticed a fluctuation in tourists due to any of these events?
- Has your business experienced any damage or required renovations because of climate-related events?
- Are you aware of the hazards and risks that may occur because of climate change in your area?
- Would you be interested in joining our Resilient Business Coalition and participating in a brainstorming and resilience session?

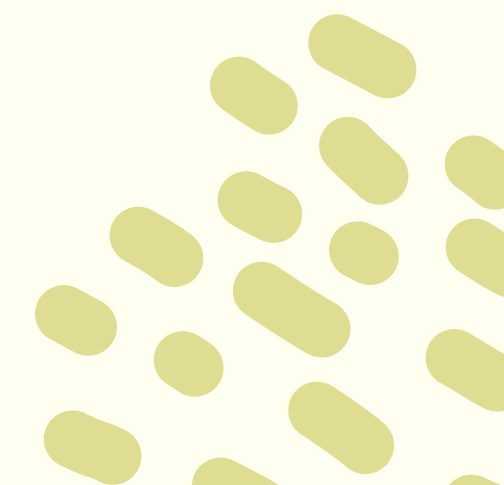
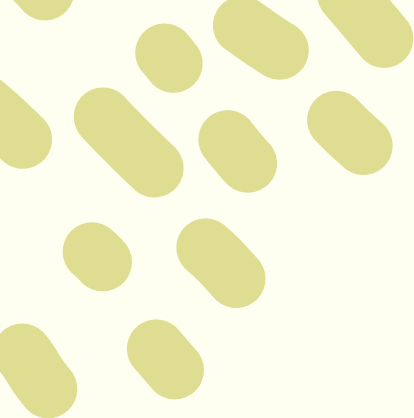


RESULTS

- The largest concern for Mystic businesses is flooding. Every business representative I talked to stated they had noticed flooding in the Downtown Mystic area.
 - Additionally, half of the business representatives stated that they have noticed increased flooding over the last year.
 - I had over 5 businesses talk about how the flooding has affected their business directly, and one business owner stated she could see the effects on her business's profits.
 - The owner of Kenzie's Fudge and Chocolate Store explained how the flooding was getting so bad that she is expecting to have to relocate her businesses eventually if the issue continues to get worse.
 - Another major issue: extreme heat.
 - One long-term employee of Fatface recalled a time when a patron entered their store on a hot summer day and was exhibiting signs of heat stress. The employee expects these events to increase as global warming continues
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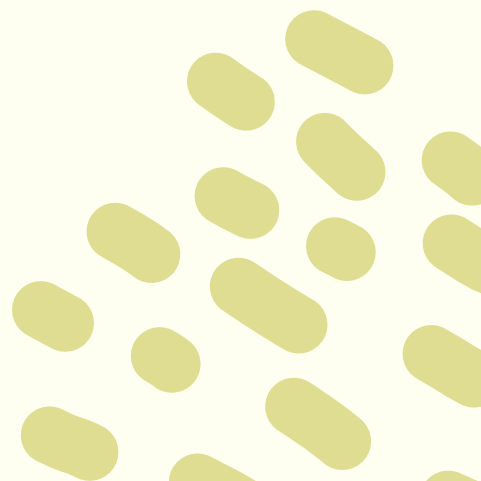
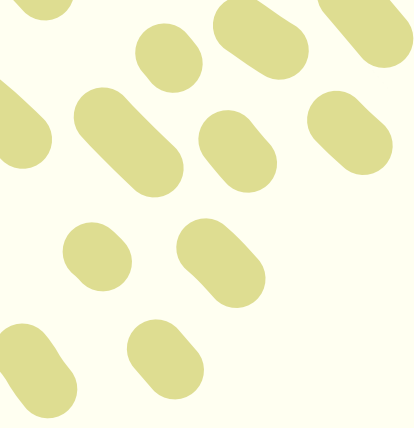
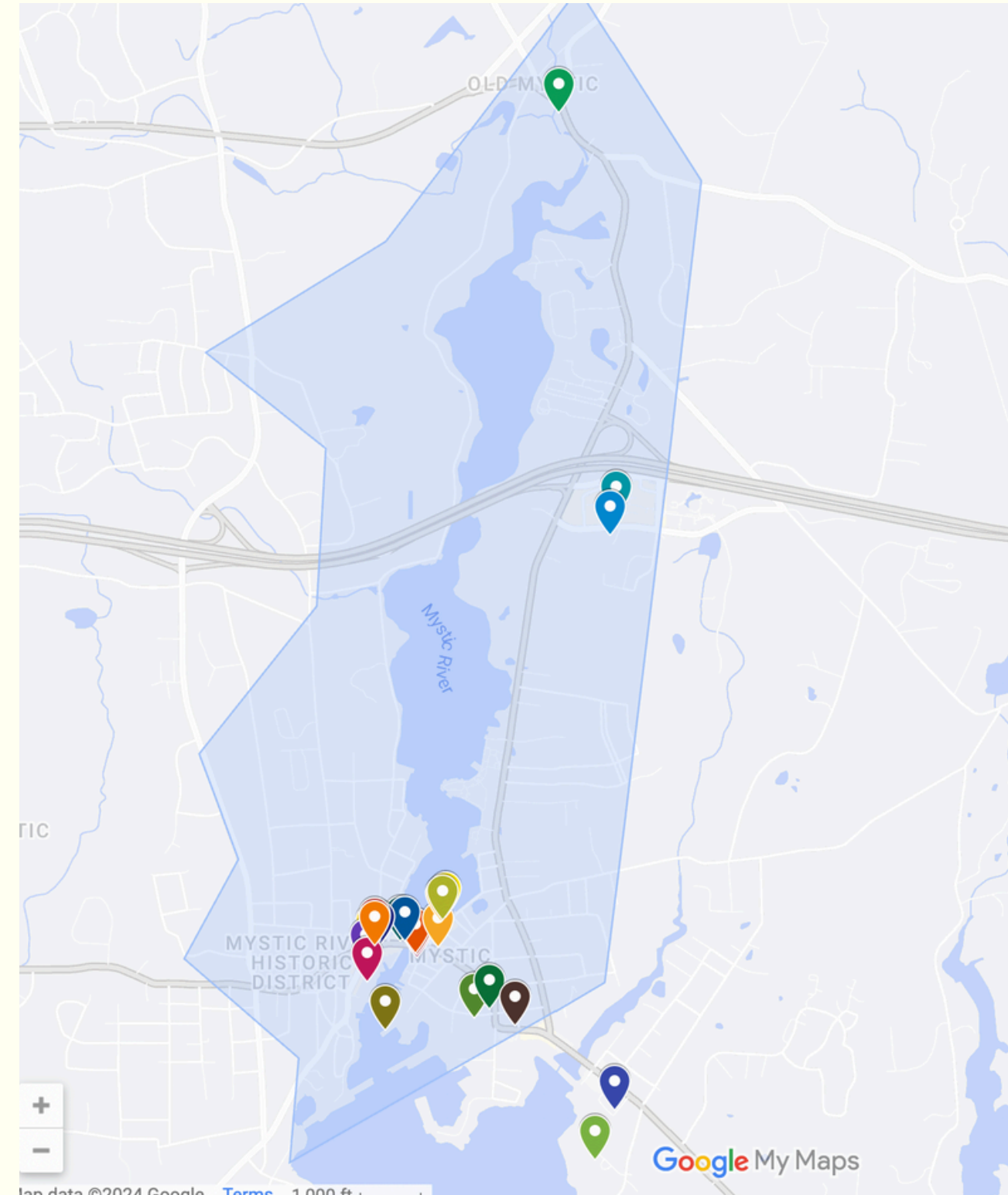


Left, Gravel Street normally. Right, Gravel Street flooded after heavy rain



INTERACTIVE MAP

- Mystic Salad Co.
- Mystic Park Ice Cream
- Mystic Sweet Shop
- Bravo Bravo
- Bank Square Books
- Red 36
- Mystic Mine
- Taquerio
- Fatface
- Mystic Drawbridge Ice Cream
- Mystic Army and Navy Store
- Sift Bakeshop
- The Ditty Bag
- Mystic Art Center
- Young Buns
- Company of Craftsmen
- Lis Bakery
- Richard Dixon law firm
- Adventure Mystic
- Mystic YMCA
- Old Mystic History Center
- Jealous Monk
- Rio Salado
- Avalonia Land Conservancy Inc



MEETING PLANNING

HOW TO STAY OPEN IN HIGH WATER: A Resilient Business Challenge

The Alliance for the Mystic River Watershed invites you to join us for an evening of brainstorming and problem-solving. Through statements from local business owners and employees, the issues that many Mystic businesses face have been revealed. The biggest one is flooding which affects access to local businesses. Come meet people who share your concerns and begin to come up with tangible solutions. Refreshments will be provided.

If you plan to come, we challenge you to bring with you a friend or colleague. Everyone brings their own unique experiences and ideas!

For more information, email paige.booth@uconn.edu.



↑ Scan to RSVP!! ↑

Wednesday, April 24th
7 pm
The Mystic Seaport Museum's
Masin Room

Greeting/ Purpose/ Outcomes (10 minutes)

- This will include introductions, a brief slideshow outlining the purpose of the meeting and the results from my research, and a brief explanation of what outcomes the meeting will ideally produce.

Part 1: Discussion groups (20 minutes)

- Split up into small groups. Each group will have a set of prompts to get people talking about their experiences regarding climate change and its effects.

Part 2: Brainstorming solutions (25 minutes)

- Each group will begin brainstorming solutions for the issues discovered in part 1. This will include idealization and realistic solutions.

Part 3: Find a consensus of ideas and separate them into different areas (25 minutes)

- Taking the solutions created in part 2, participants will merge into one group and analyze common ideas. Solutions can then be separated into different categories based on the feasibility, the purpose, the location, etc.

Part 4: reflection and priority ideas (10 minutes)

- This will consist of a reflection on the objectives of the meeting and a determination of priority solutions.



RECOMMENDATIONS

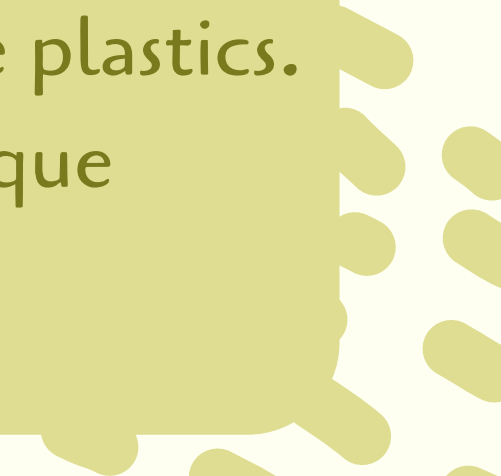
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Pervious Pavers On Gravel Street: Pervious pavers reduce runoff by allowing water infiltration in spaces between the pavers. This is a pricy option but could benefit multiple businesses.

Stormwater downspout disconnection and rain garden constructions: Disconnection downspouts on businesses will reduce the amount of water that makes its way to the *Mystic River*.




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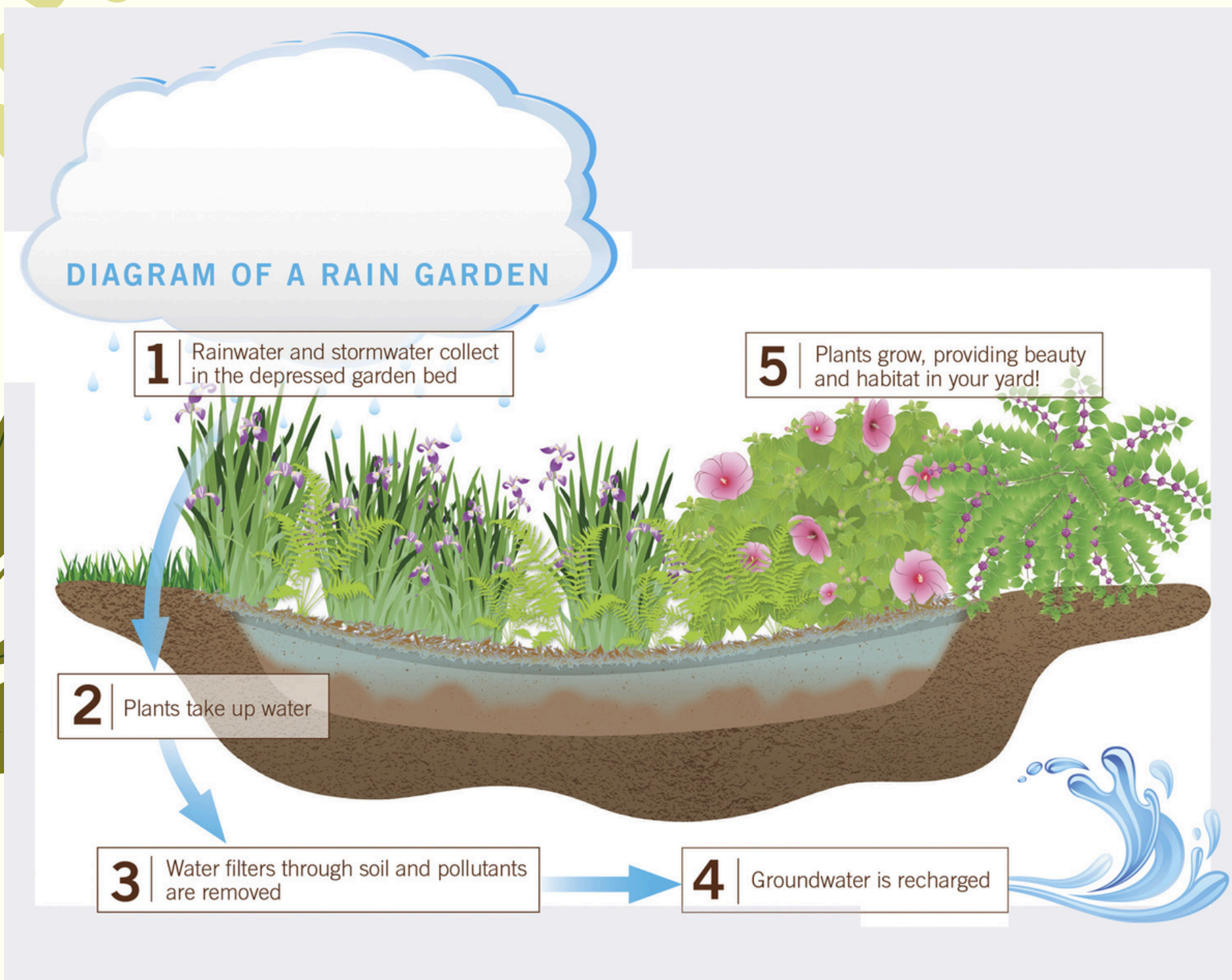
Bill Writing: A proposal could be written that allows businesses in *Mystic* to get compensated if they partake in sustainable practices, such as installing solar power or avoiding single-use plastics. This bill example is more of a mitigation strategy, but if more people with their own unique knowledge and expertise help then a bill related to adaptation may be created.





NEXT STEPS

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- Hold multiple Resilience business coalition meetings where each meeting more steps can be made to help businesses become more resilient.
 - Create some way for businesses apart of the coalition to show off what they're doing so more will be likely to join. Essentially, make it more official.
 - There is room for more collaboration, possibly with people higher up in the town or state governments.
 - Do this again with businesses in other parts of the watershed
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THANK
YOU

