

Latimer Point

2023 REPORT

Karolina Zimny and Summer Mitchell



Who We Are



Summer Mitchell
Environmental Science Major
2024



UConn



Karolina Zimny
Environmental Science Major
2023

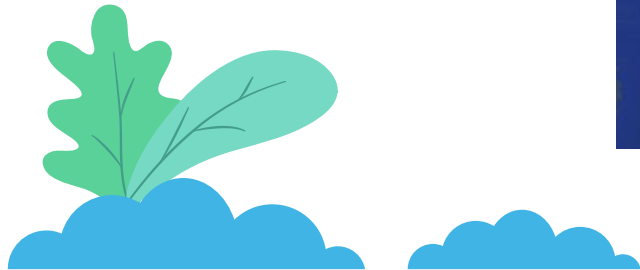
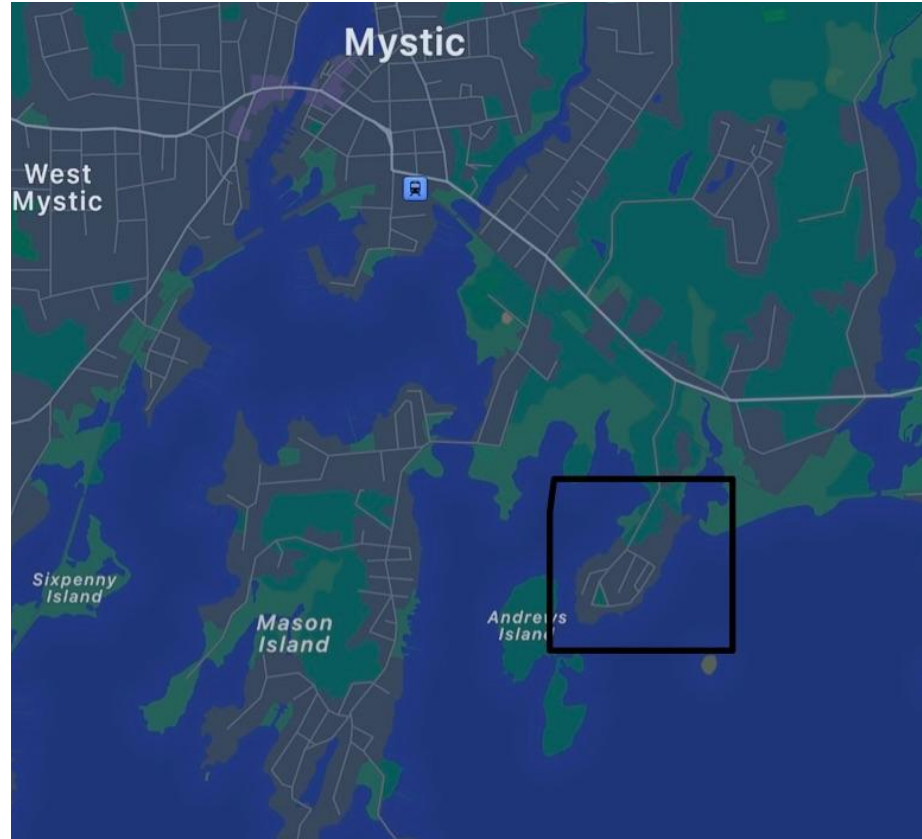
The purpose of this project is to ...

Assess the vulnerability of Latimer Point through a land use history assessment, climate vulnerability assessment, and outreach materials to further educate residents



IMAGE OF LATIMER POINT

Latimer Point is a peninsula located in Stonington, Connecticut



LAND USE ASSESSMENT

HISTORY:

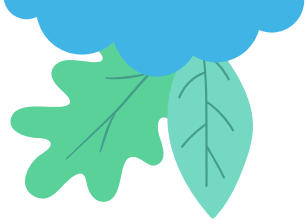
- The Southwestern tip of Latimer Point used to be home to a fish processing factory
 - Now home to a boat dock and grass area
- First cottage built in 1941
- All developments were finalized by the 1960s



LAND INFORMATION:

- The Point is split up into residential, public, and land conservation areas
- The areas protected by the Avalonia Land Conservancy are:
 - Oak forests
 - Tidal marshes and assorted tidal rocks
- The southern half of the Point is a residential area with:
 - Family cottages
 - Two private beaches
 - A recreational field
 - A boat dock
- The rest of the land is public land associated with the state of Connecticut
 - Amtrak railway

CLIMATE VULNERABILITY ASSESSMENT



Risks & Climate Vulnerabilities of Latimer Point:

- Susceptible to flooding
- Vulnerable to erosion
 - CT ECO shoreline change data shows that the western side of the peninsula has had a decreasing shoreline
- Higher precipitation levels and increased frequency of tropical storms
- Vulnerability to tropical storms:
 - Superstorm Sandy surges affected the entirety of the peninsula
- Heat waves and temperature increases:
 - Increases in water temperatures causes algae blooms

Adapting to vulnerabilities:

- Implement LID rain gardens
- Plant more native vegetation in areas where possible



AREAS OF VULNERABILITY

GRASS AREA NEAR BIG BEACH

- This area floods during major storms aligning with the tides
- The sea rises as far up as to the top of the sea wall at Big Beach
 - Rising tides bringing in sand and weeds from the ocean, impacting the vegetation
- Major concern as some waves flow onto the main road in this area

BACK OF MAIN GRASS AREA

- This areas pools with any rainstorm, and/or severe storm
- The elevation of this area slopes downward into the sea
- The lawn area lays flat with a slight tilt in elevation towards the center of the peninsula
- The lawn also has dips within its flat land, allowing for pooling to occur with almost every weather event



Areas proposed for LID rain gardens



ADAPTATION PLAN: LID RAIN GARDENS AND PLANTINGS

We propose the additions of LID rain gardens in areas 1 and 2 on the map above

BENEFITS

- Mitigates flooding
- Reduces stormwater runoff
- Prevents erosion
- Attracts biodiversity & wildlife to the area
- Help to get rid of geese

NATIVE PLANTS

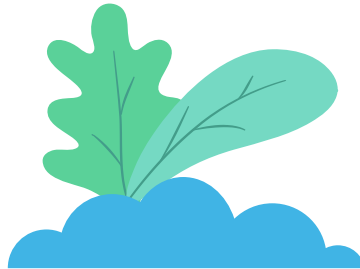
- Native
- Salt-tolerant
- Low maintenance

These rain gardens will help the area **environmentally** and add **natural beauty**.



We envision...

- Walking path in area 2 with a surrounding rain garden
- A bench or picnic table to provide a place for residents to leisure.



Recommended Plants

Seaside Goldenrod



https://cdn.shopify.com/s/files/1/0739/9053/products/Goldenrod-seaside_1024x1024.jpg?v=1478539158

Indiangrass



<https://open.lib.umn.edu/app/uploads/sites/269/2020/06/indiagrass.png>

Carolina Sea Lavender



<https://www.gardenia.net/storage/app/public/uploads/images/detail/e2TRNK95LC41qslCrB0Z1dHmDc6bJfasPiH6ha3m.webp>

<https://s3.amazonaws.com/eit-planttoolbox-prod/media/images/Rosa-carolina--Malcom-Maners--CC-BY.jpg>

Red Bearberry

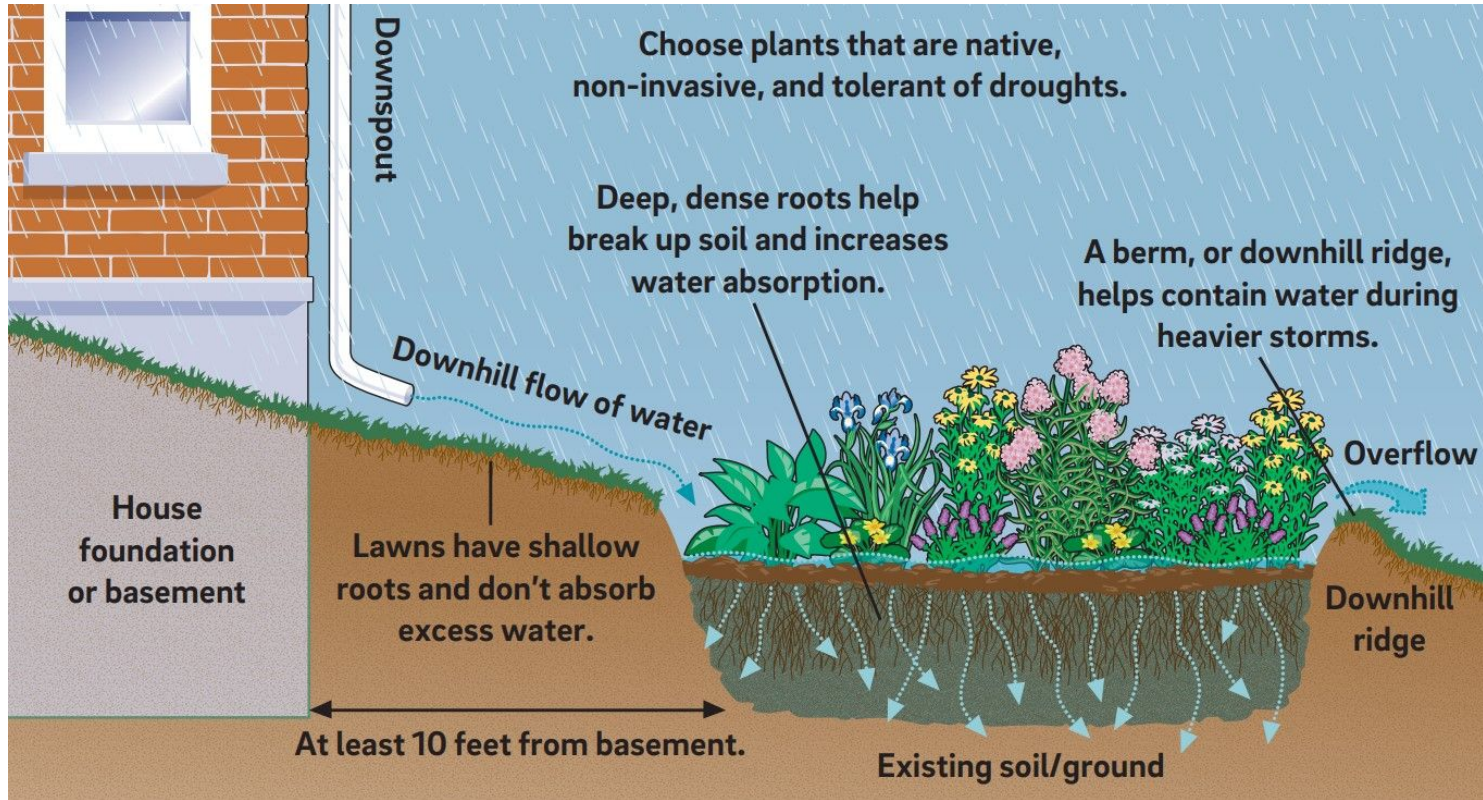


Carolina Rose

https://s3.amazonaws.com/eit-planttoolbox-prod/media/images/Arctostaphylos_uva-ursi-XdYGxflzicVI.jiff



How does a rain garden work



Latimer Point

2023



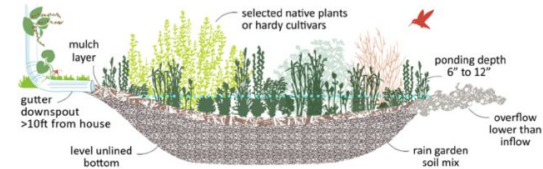
OUTREACH IMAGE

RAIN GARDEN APP LINK

Create personal residential rain gardens with these tips!

- Consider your external environment when selecting a project area
- Choose native plantings over invasive plants
- Keep in mind plant tolerance
- Refrain from excessive pesticide use
- Visit: <https://nemo.uconn.edu/raingardens/> to find out more information on how to create your own personal rain garden.

PLANTINGS



BENEFITS OF RAIN GARDENS

Rain gardens provide for erosion control, infiltration of stormwater runoff, habitat and food for animals, and aesthetic value.

The image above provides information on ingredients needed to create a functional home rain garden.



SELECTING NATIVES

Choose plants that are native, non-invasive, and tolerant of droughts. Solidago sempervirens, Rosa carolina, and Sorghastrum nutans are examples of natives that all grow to be under 4 feet, ensuring views of the Point are not obstructed. Native plantings provide for an increase of native biodiversity and wildlife such as birds and butterflies. *Find more information at GoBotanyCT.*



STAYING AWAY FROM INVASIVES

Plants such as Phragmites australis, Purple loosestrife, and Multiflora rose should not be selected in a garden as these are highly invasive species and can outcompete the natives.

REFERENCES

RAIN GARDEN IMAGE

[LINK](#)

OUTREACH INVASIVES

[LINK](#)