

Adaptation in Portsmouth, Rhode Island



2012
(Thurston Gray)



2018
(Michael Asciola)



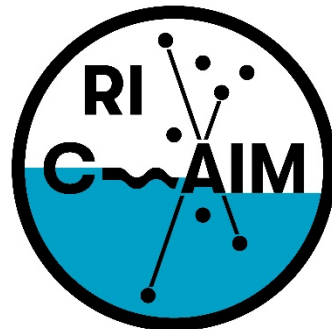
1954
(John T Pierce Collection, PPL)



1938
(WPA)

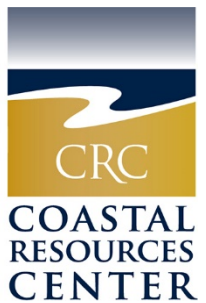


Peter Stempel, PhD Architect
Provost's Fellow
Rhode Island School of Design



RHODE ISLAND CONSORTIUM FOR
Coastal Ecology
Assessment
Innovation &
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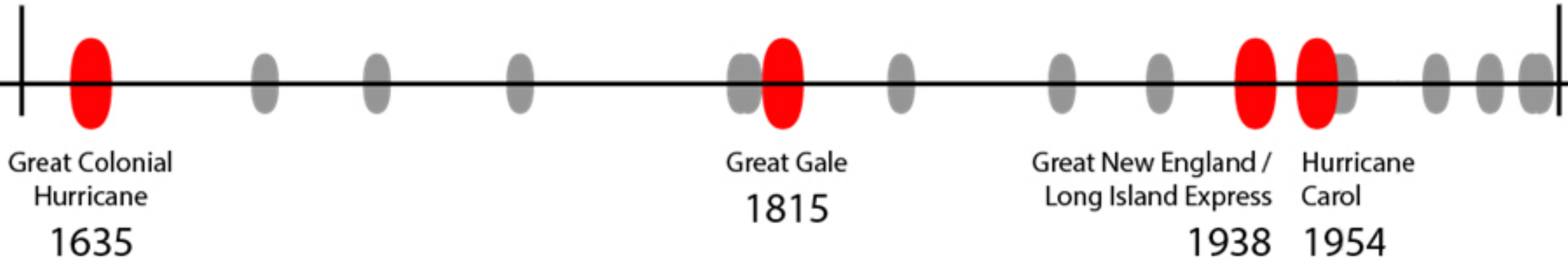
1939

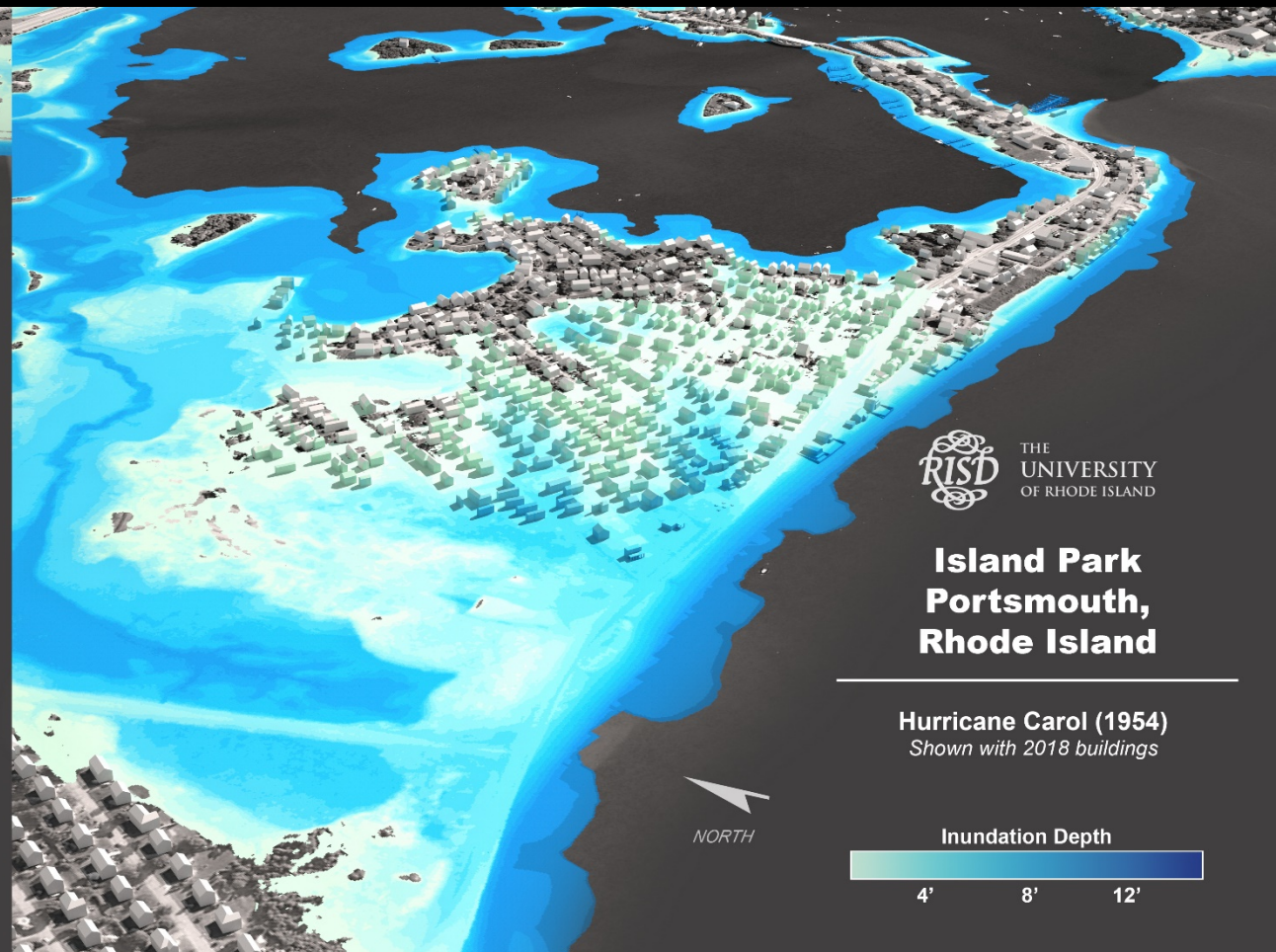
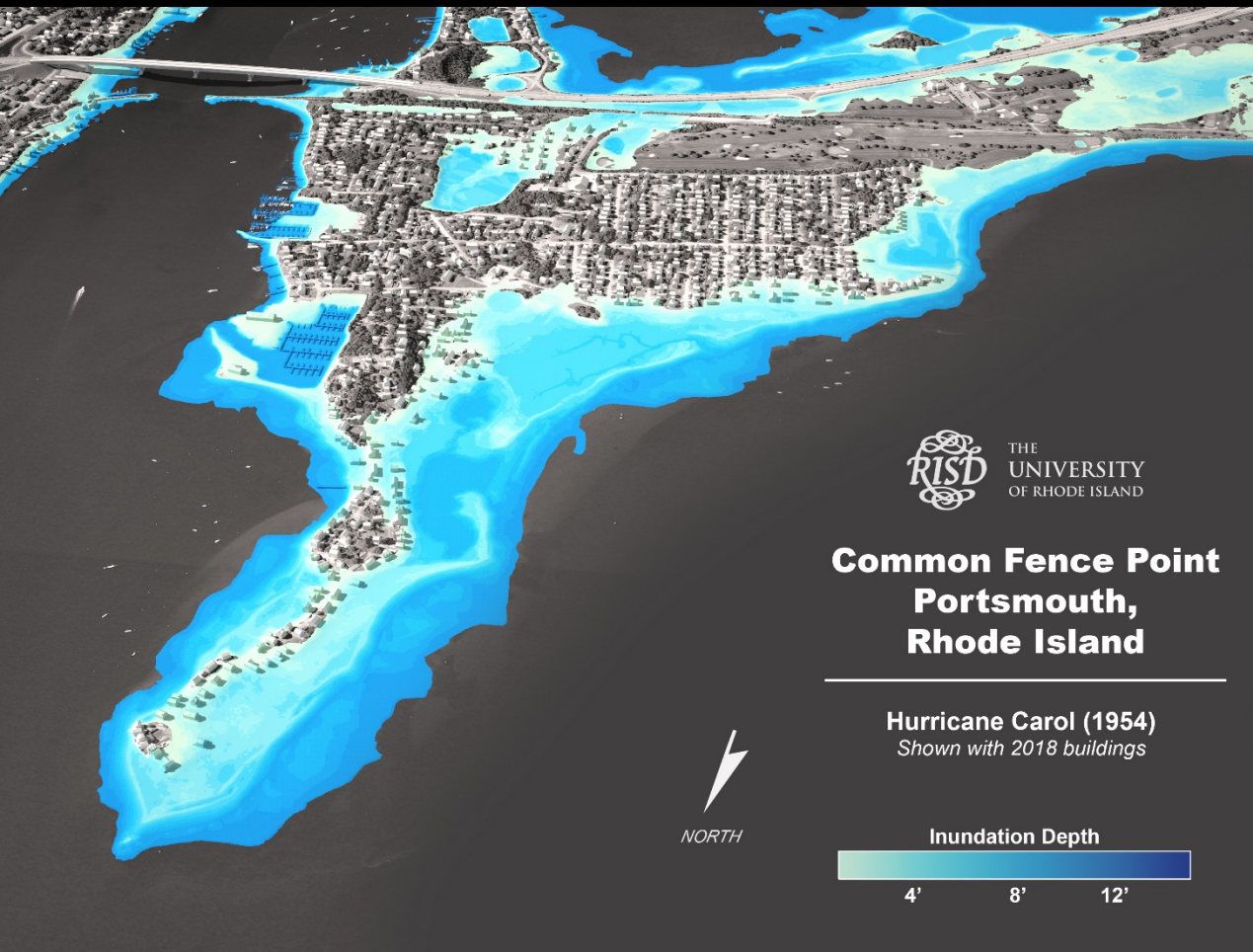


1951



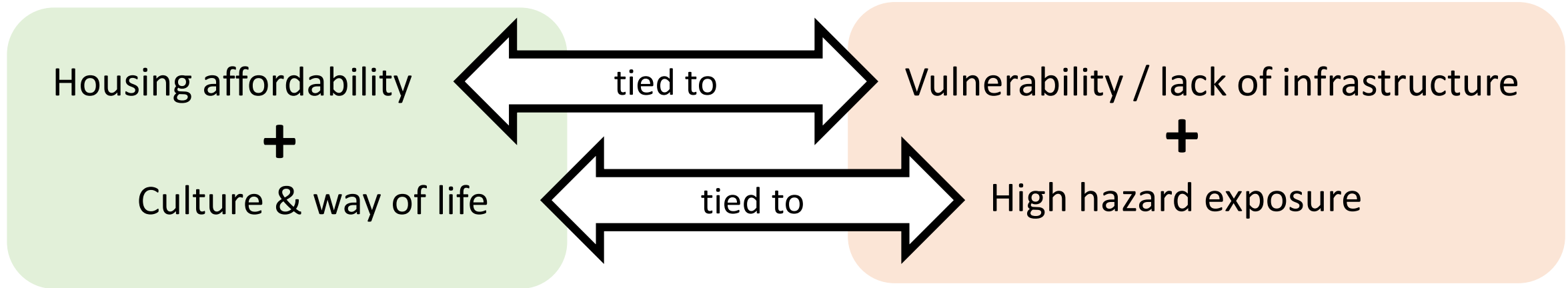
2020

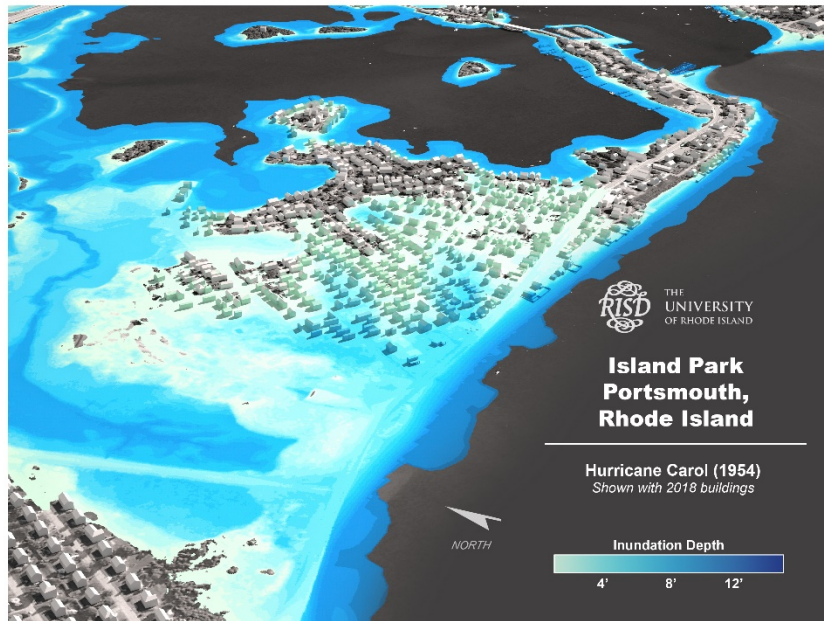
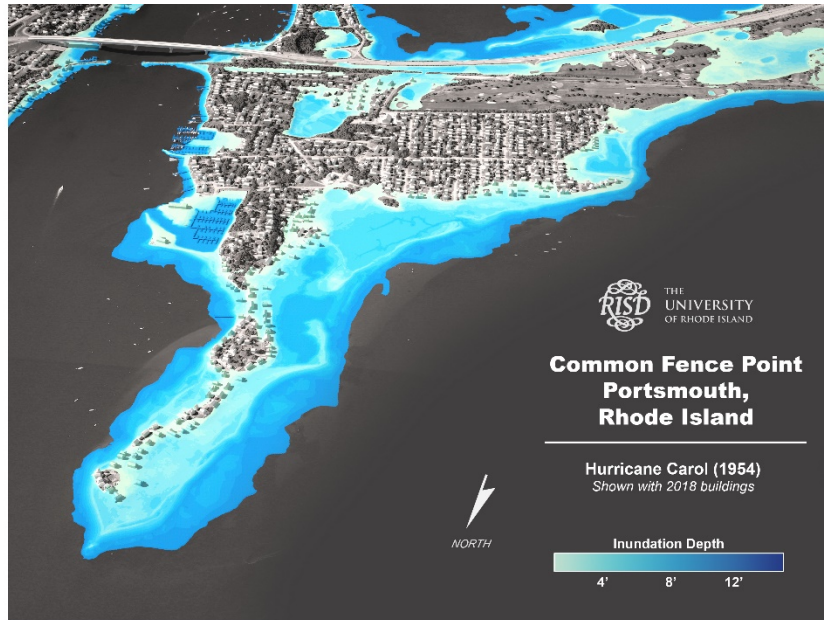
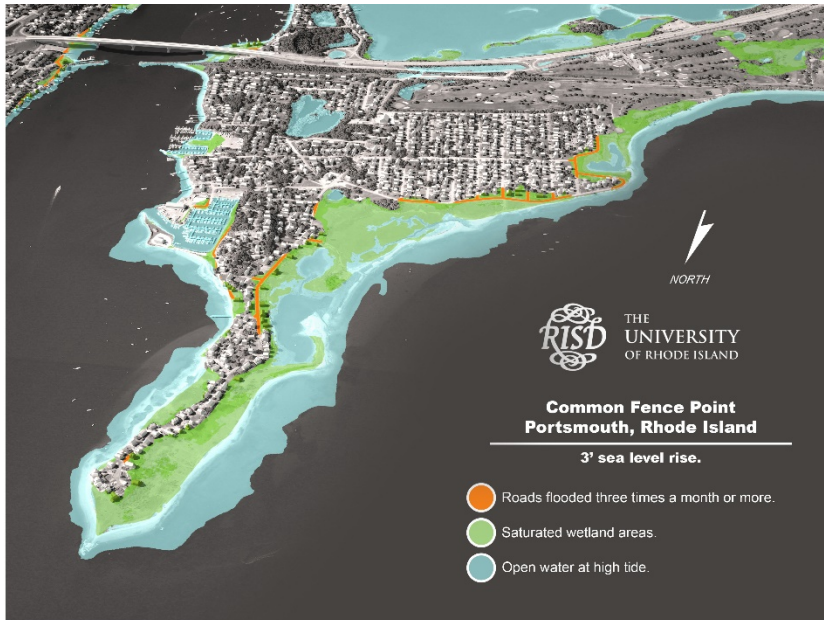
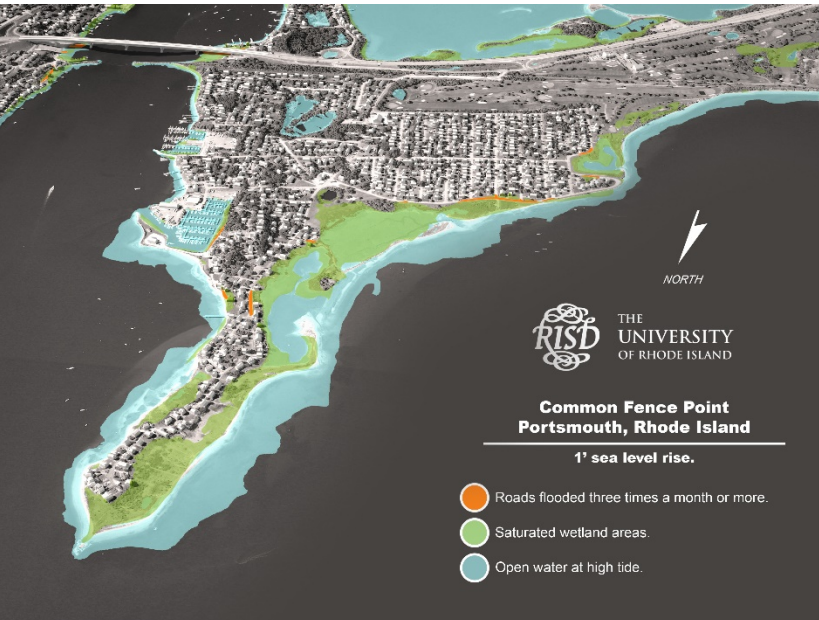






- Consensus and enthusiasm for improving disaster preparedness and response.
- Existential issues facing low lying areas disrupt a cherished way of life.





Survey Visualizations (.33 meter SLR left, .9 meter SLR middle, Hurricane Carol, right)

Visualizations: Peter Stempel

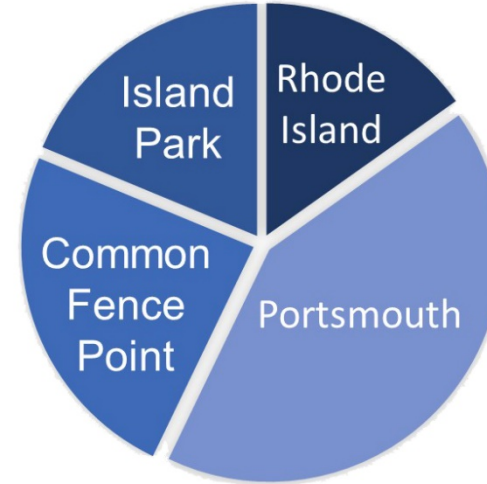
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Adaptation in Portsmouth, RI USA

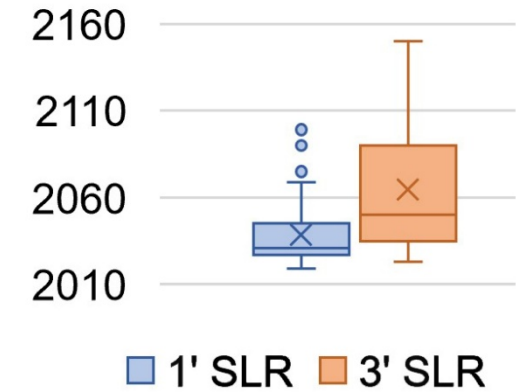
Visualization Survey

- 115 Respondents, distributed between neighborhoods. and town at large.
- Matches town demography with the exception of age.
- Respondent expectations for SLR align with projections.
- Used to identify priorities and criteria for evaluation.

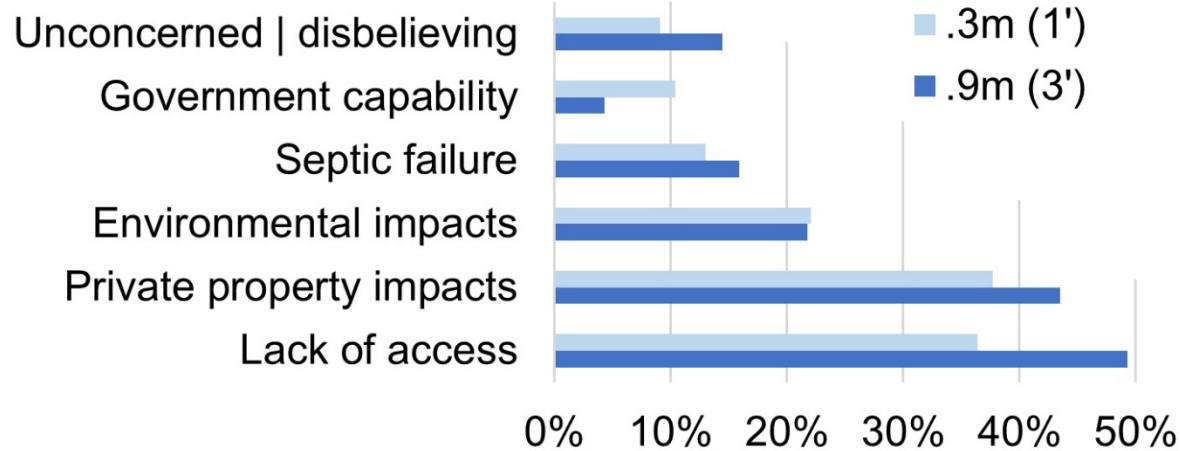
Resp. Residency



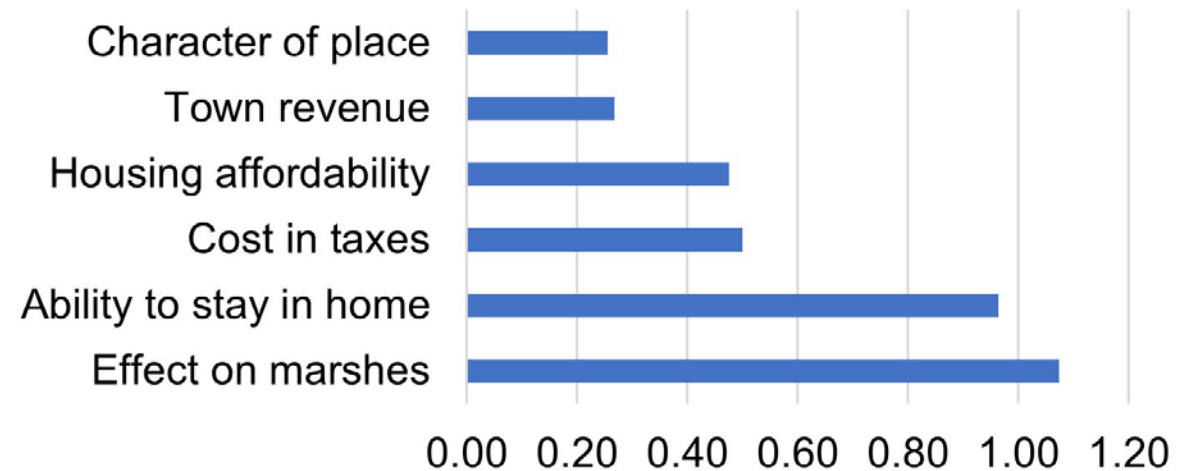
SLR Expectation



Community Concerns



Evaluation Criteria








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**Common Fence Point
Portsmouth, Rhode Island**

1' sea level rise.




-  Roads flooded three times a month or more.
-  Saturated wetland areas.
-  Open water at high tide.



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**Common Fence Point
Portsmouth, Rhode Island**

3' sea level rise.

-  Roads flooded three times a month or more.
-  Saturated wetland areas.
-  Open water at high tide.






NORTH



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**Island Park
Portsmouth, Rhode Island**

1' sea level rise.

-  Roads flooded three times a month or more.
-  Saturated wetland areas.
-  Open water at high tide.






NORTH



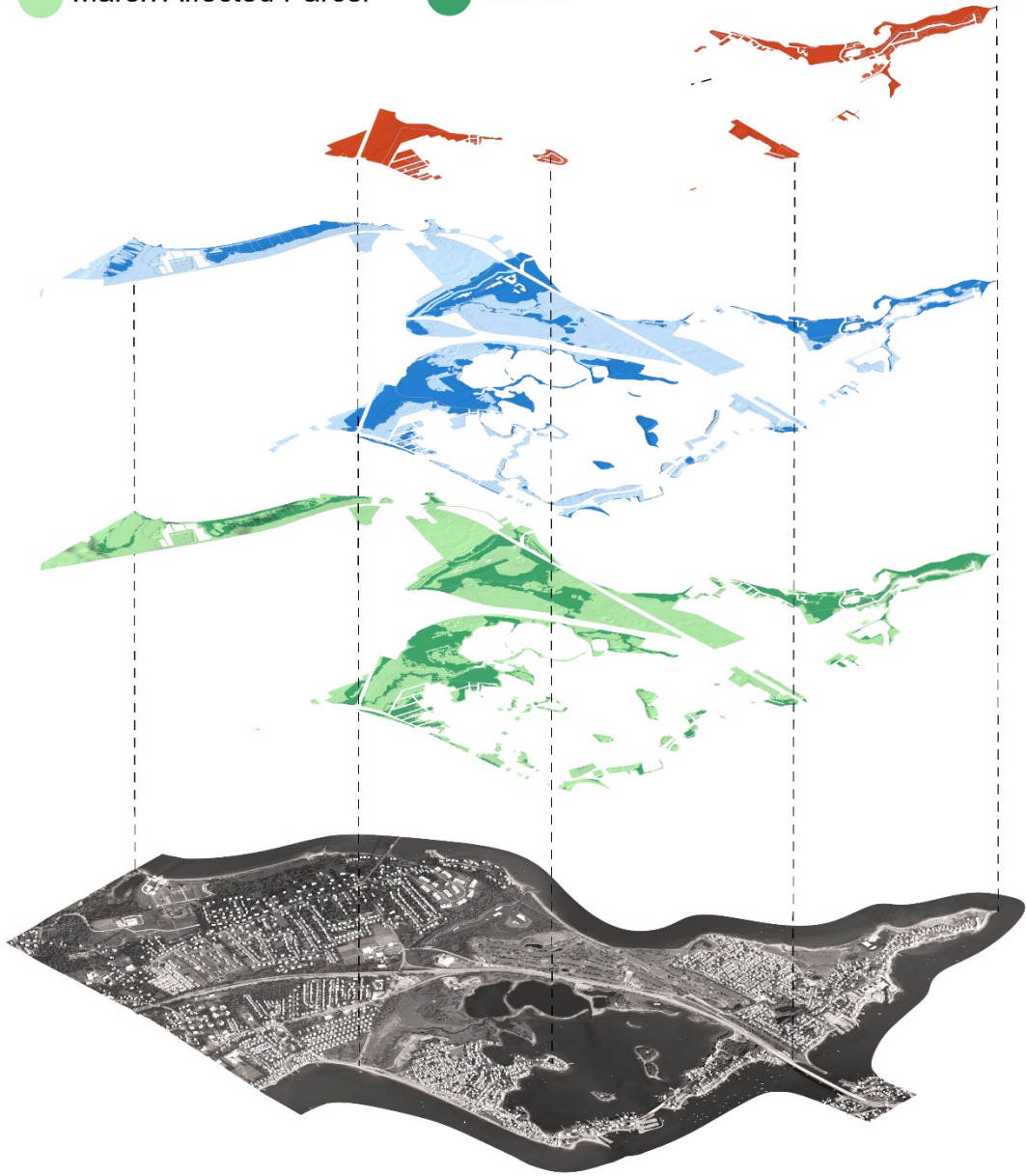
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**Island Park
Portsmouth, Rhode Island**

3' sea level rise.

-  Roads flooded three times a month or more.
-  Saturated wetland areas.
-  Open water at high tide.

- Access Affected Parcel
- MHHW Affected Parcel
- Marsh Affected Parcel
- MHHW
- Marsh



2035: Taking steps to enable as many people as possible to remain in their homes as long as possible.





THANK YOU PORTSMOUTH! SURVEY IS NOW CLOSED.

Peter Stempel, PhD, Architect, Provost's Fellow, Rhode Island School of Design; Anya Drozd, Research Assistant. Student Team: Oliver Chene, Wen-Yu Du, Andy Hojoa, Michele Katora, Stefan Korfmacher, Serafima Kovalevskaya, Lina Lopez, David Lu, Malery Nguyen, Rashmi Ravishankar, Isabel Scanlon, Peter Shanahan, Alexa Thorne, Aadit Todi. Special Thanks: Pam Rubinoff, CRC, Isaac Ginis, URI GSO, David Ulman, URI GSO, Town of Portsmouth: Gary Crosby, Planner, Michael Asciola, Planner, Raymond Perry, Emergency Manager, Residents of Portsmouth