

PREPARING PLYMOUTH, NC for Future Flood Risks

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North Carolina Sea Grant

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Investments and Opportunities

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“We are in an ecosystem that has never been stable – ever. And it’s not stable now...”

Plymouth, NC resident

Photos: Brian Roth

Plymouth, NC Flooding Locations from Interviews Fall 2010

*“It runs off better now
than it did before
because of the town
trying to keep the
ditches and everything
cleaned out...”*

- Plymouth resident



(map: RENCI @ ECU 2011)

Potential Areas of Inundation

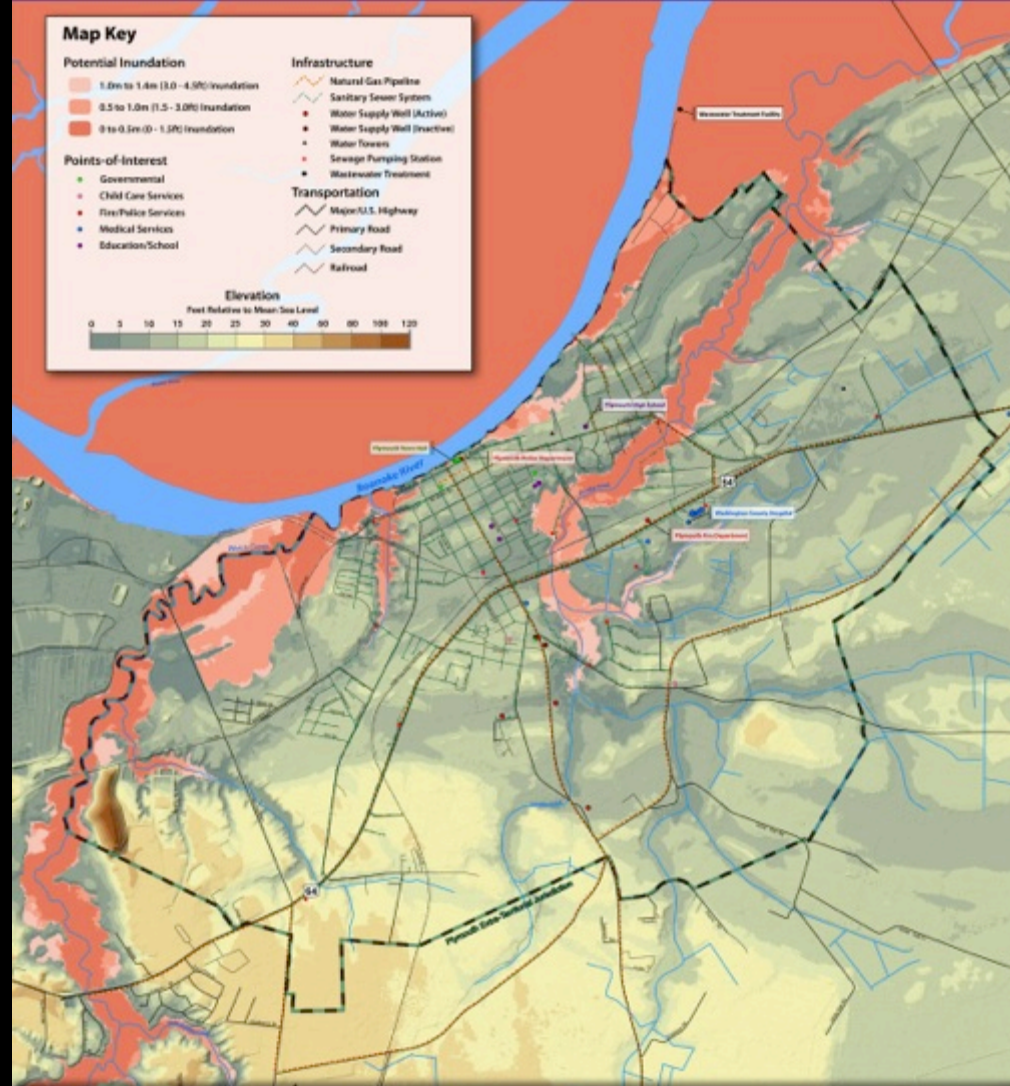
Town of Plymouth, North Carolina

Map Key

Potential Inundation	Infrastructure
1.0m to 1.4m (3.0 - 4.5ft) Inundation	Natural Gas Pipeline
0.5 to 1.0m (1.5 - 3.0ft) Inundation	Sanitary Sewer System
0 to 0.5m (0 - 1.5ft) Inundation	Water Supply Well (Active)
	Water Supply Well (Inactive)
Points-of-Interest	Water Towers
Governmental	Sewage Pumping Station
Child Care Services	Wastewater Treatment
Fire/Police Services	Transportation
Medical Services	Major/U.S. Highway
Education/School	Primary Road
	Secondary Road
	Railroad

Elevation
Feet Relative to Mean Sea Level

0 3 10 15 20 25 30 40 60 80 100 120



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Scale
0 0.25 Miles
0 0.5 Kilometers
0 500 Meters



Vulnerability, Consequences, and Adaptation Planning Scenarios

(VCAPS)

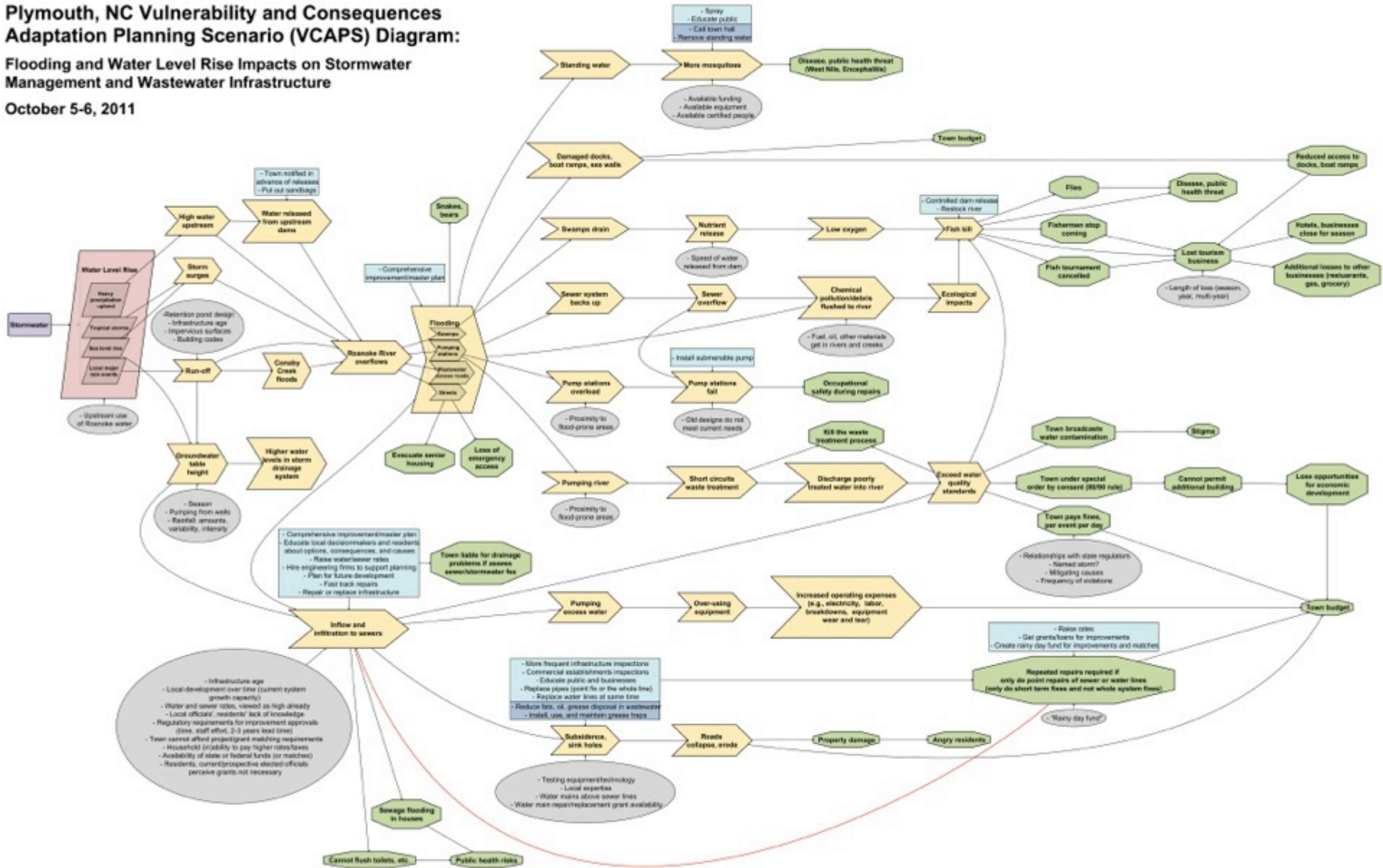
- Structure discussions using conceptual frameworks
 - Analytic-deliberative process
 - Causal structure of hazards
 - Vulnerability (sensitivity, adaptive capacity, resilience)
- Utilize visualization techniques
- Produce “usable” knowledge



Plymouth, NC Vulnerability and Consequences Adaptation Planning Scenario (VCAPS) Diagram:

Flooding and Water Level Rise Impacts on Stormwater Management and Wastewater Infrastructure

October 5-6, 2011



**Adaptation requires funding, but
funding for adaptation is limited.**

