

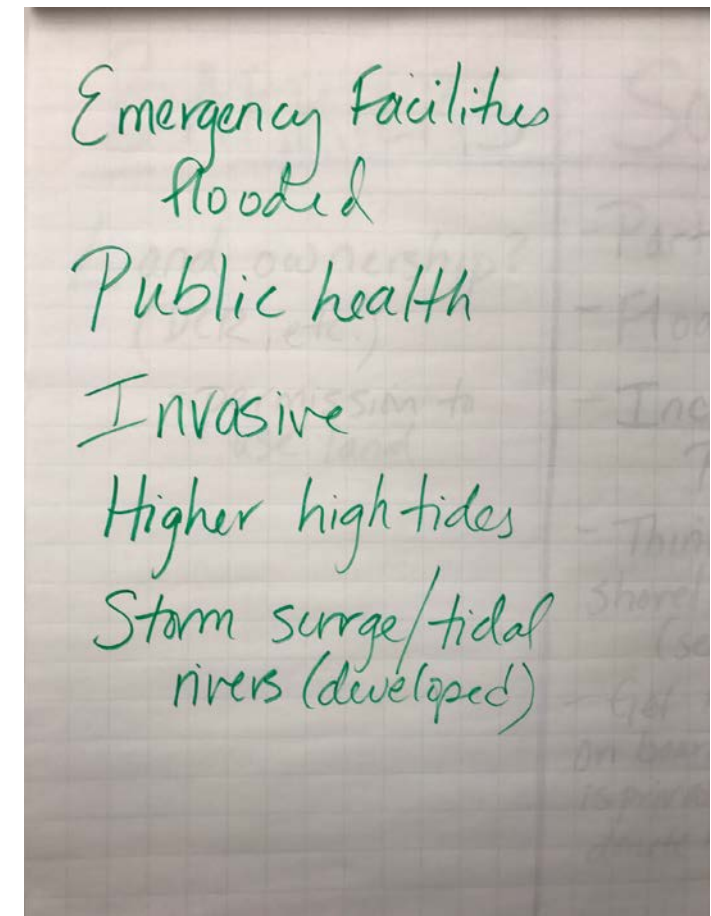
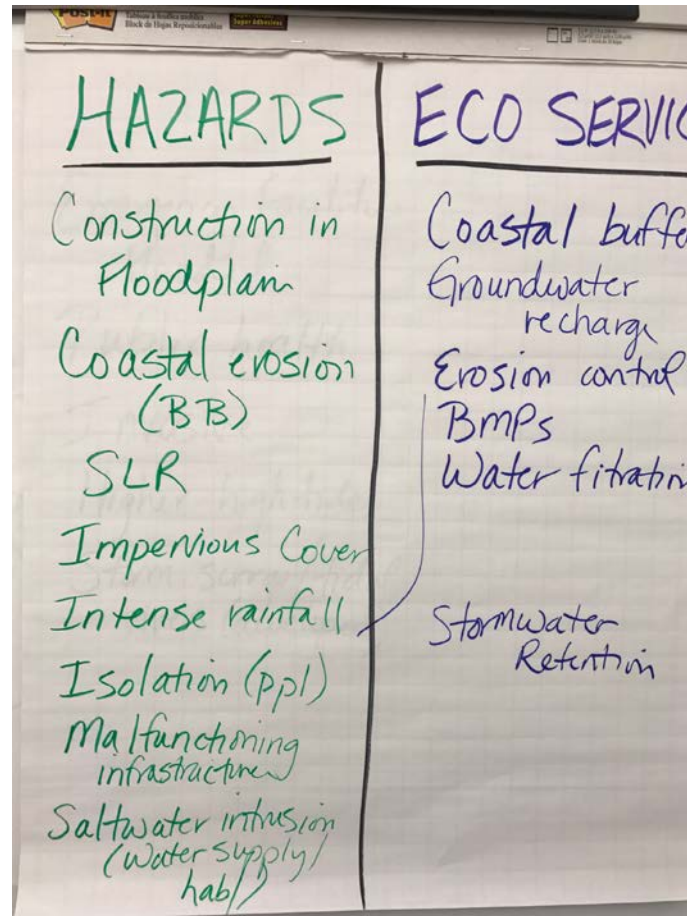
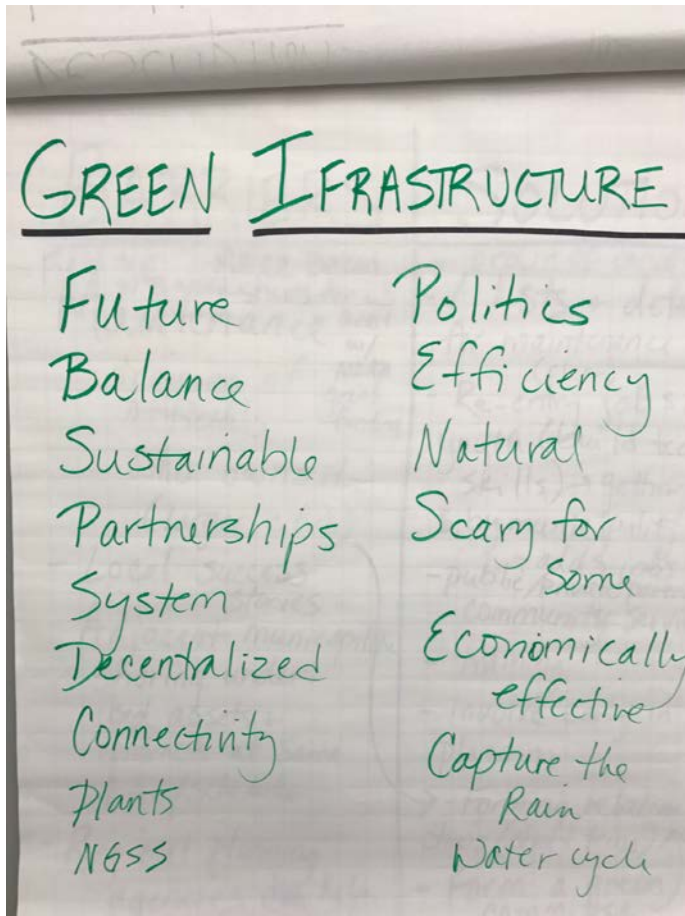
Green Infrastructure for Coastal Resilience

Nahant, MA

March 30, 2017

Training Notes

Green Infrastructure Terms and Hazards and Ecosystem Services



Green Infrastructure Implementation Barriers and Solutions

BARRIERS	SOLUTIONS
<p>Field trip MA C2 Design w/ B. NEER sheets for LS avail. w/ NOAA grant funding</p> <p>Maintenance</p> <ul style="list-style-type: none"> - training of officials - who owns it? (larger cities) - Local success stories - Adjacent municipalities sharing under-used assets + contracts at same time/schedule - Regional planning agencies can help. 	<ul style="list-style-type: none"> - order of conditions! - ✓ lists + details for maintenance (clear) - Re-entry jobs + youth (build tech skills) → getting by municipality - public/private partnership - community service - training - involve early in planning - Forming relationships (short term) - Form a green committee

<p>Regulations (old)</p> <p>ex. afraid oysters will be consumed</p> <p>- hard to use rock in LS</p> <p>- update ordinances</p>	<ul style="list-style-type: none"> - Transfer oysters before they are at edible size. - Re-address regulation - Get discussion going! - MA C2 → method for growing ribbed mussels (no one wants to eat); working on aquaculture. - Know more about what MD has done + made it work. - more examples needed to raise awareness.
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BARRIERS	SOLUTIONS
<p>Land ownership? (DCR, etc.)</p> <ul style="list-style-type: none"> - permission to use land 	<ul style="list-style-type: none"> - Partnerships - Floating solutions - Incremental projects - Think about new shoreline w/ SLR (seaward) - Get homeowners on board where land is private → incentives, donate materials, etc.

Green Infrastructure Implementation Barriers and Solutions

Funding → Natural Resource damage assess.

- Mitigation due to environmental crime
 - Post-storm rebuilding
 - have projects ready!
 - will occur + ppl will spend \$
- Opportunistic
 - Road work happening already
- Bring up hazards/issues seen thru out community to selectman.

Partnerships (Nahant)
- letters/donations
- buy land + restore

- Land trust
- Citizens
- Mass Audubon
- People who care
- Swim
- mailings

- extra filling fees? use \$ for projects.

think climate ~~don't do a study, use \$ to~~ when doing study work. → if not needed.

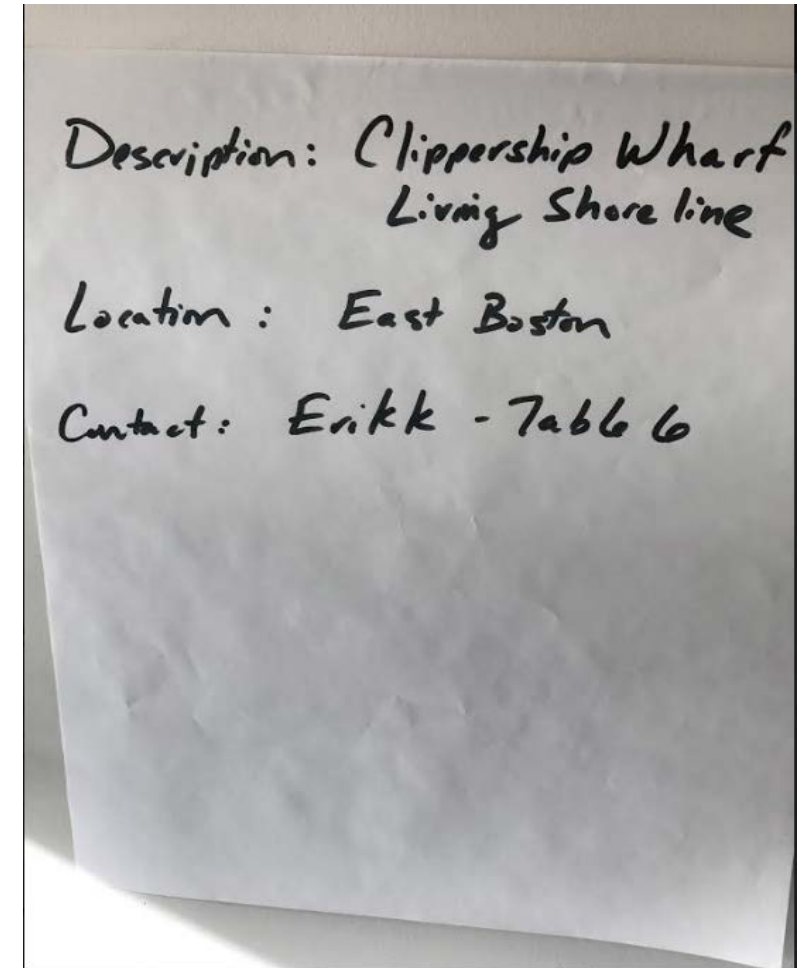
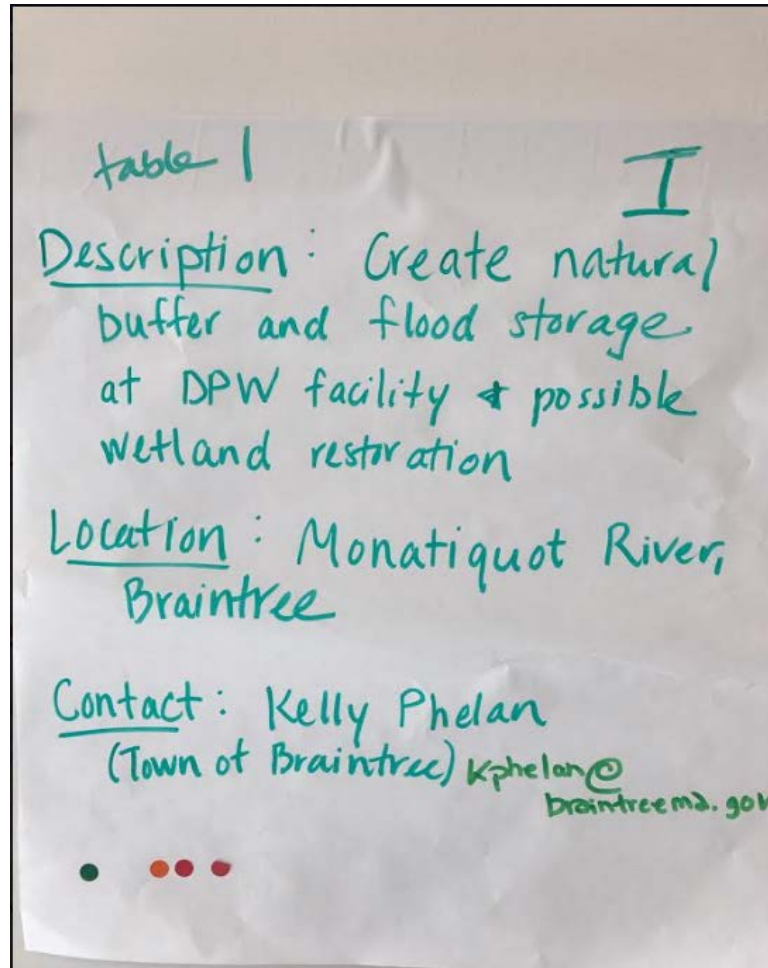
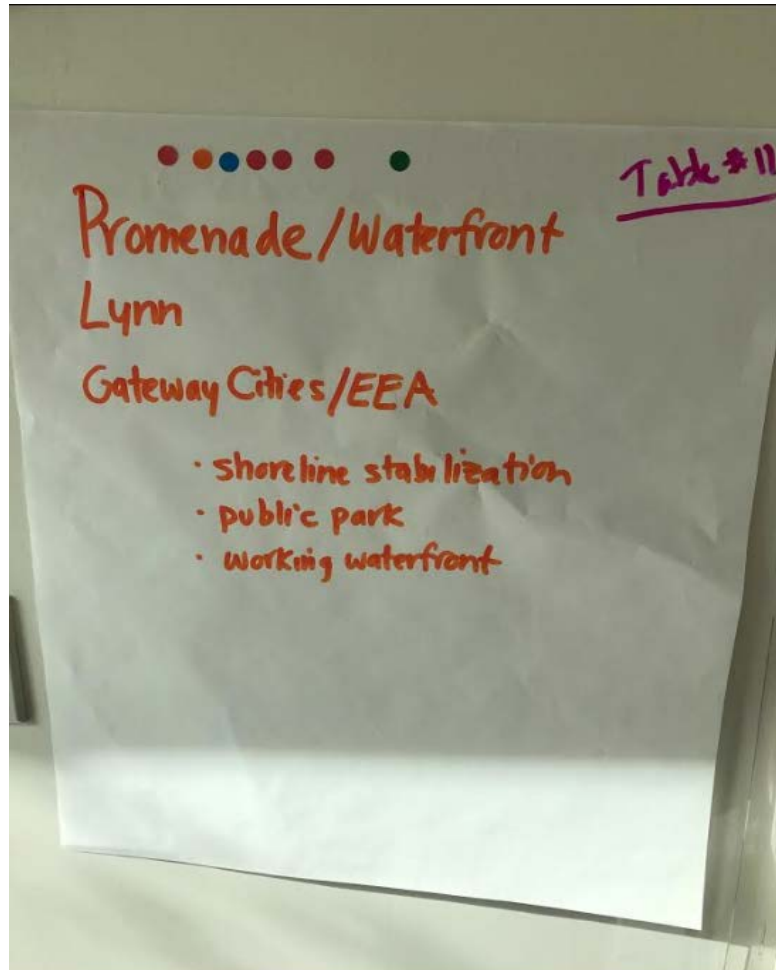
Political / Personal Resistance
↓
Something new (what does it mean to me)

- education
- getting to constituency
 - w/ elected officials
- knocking on doors
- mailings (personal)
- own background
- Working across municipalities → more \$ for
- peer-pressure back.

Budgets →

- sometimes the first to get cut.
- Return on investments (cost effective)

Green Infrastructure Projects – Completed, Underway, Planned, or Ideas



Green Infrastructure Projects – Completed, Underway, Planned, or Ideas

Description: Chelsea Creek
Salt Marsh Restoration

Location: Chelsea Creek - East Boston

Contact: Chris Busch - Table 6

Description: Zielski Field Project
Open Space Flood Control

Location: Lynnfield St., Peabody

Contact: Lucia - Table 6

- NOAA -
SAWHILL BROOK - MANCHESTER Table #13

Tide gate removal and upstream restoration for flood control, coastal buffering, tidal wetlands protection, wildlife habitat, climate adaptation, education, hybrid practices

Contact: Mary Reilly
reillym@manchester.ma.us

TABLE # 4

① URBAN HEAT ISLAND MITIGATION STUDY
P S. MEDFORD LID OPPORTUNITIES for GI on private sites
CONTACT: GENEVA FOSTER

② EELGRASS RESTORATION •
P BOSTON LOGAN AIRPORT •
CONTACT: Amelia Coteau
→ Habitat restoration and shoreline/coastal stabilization

Green Infrastructure Projects – Completed, Underway, Planned, or Ideas

Winter Island Salem Table 12

Parking lot runoff treatment

Contact: Rebecca Dupont Carter

Regulating

- Stormwater Retention
- Biofiltration
- Erosion Control

Cultural

- Educational Opportunities
- Sense of Place
- Cultural Heritage

Green Infrastructure Practices

- Bio retention
- Permeable Pavement

Table # 11

Town Brook Dam Removal.

Plymouth

David Gould

- Dam removal + bridge replacement
- coastal resiliency
- anadromous fish passage

Forty Steps Beach

Nahant

Jeff Chelgren

- slope stabilization
- critical infrastructure protection

Table 4

③ **GREAT MARSH MANAGEMENT**

Plants

- a) Invasive Species Mgmt.
- b) Community Resilience Planning
- c) Stormwater mgmt

Contact: JOE COSGRAVE/Peter Phippen

• **TROUT BROOK, S. PORTLAND**

④ **RAIN GARDENS, TREE BOXES**

INFILTRATION STEPS, ISIA - 1

RETENTION BASINS/WATERSHED PROJECT

CONTACT: Sandra Fanciullo EPA
617 918-1566

or Wendy Gailand, ME DEP
YOUNG GREENS JR

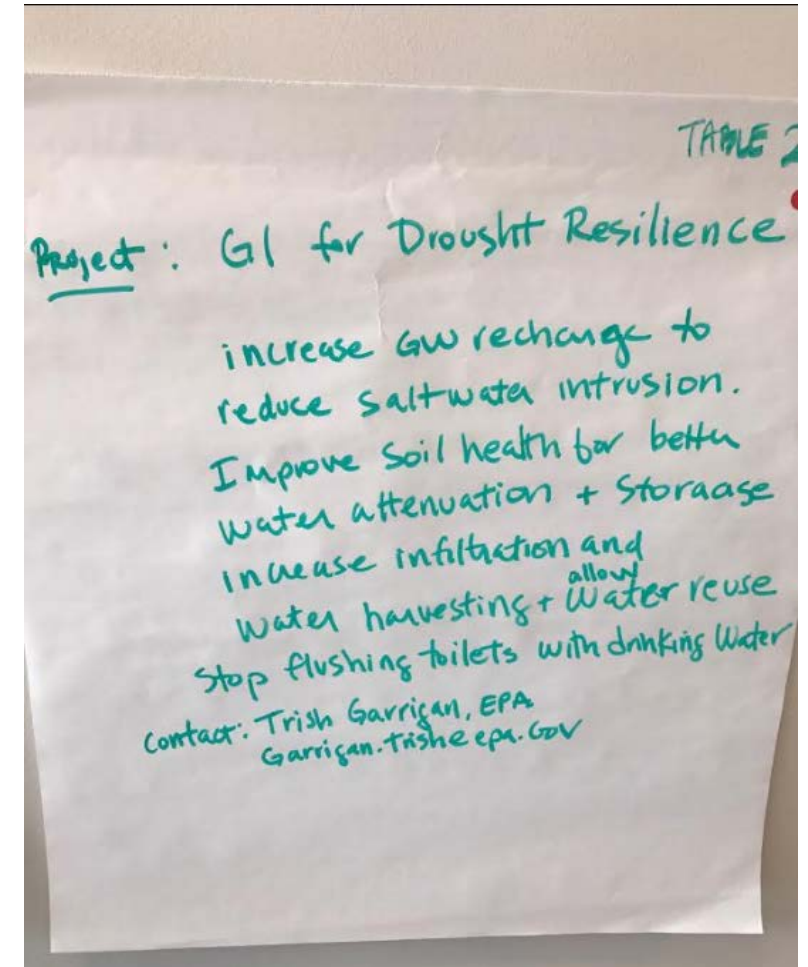
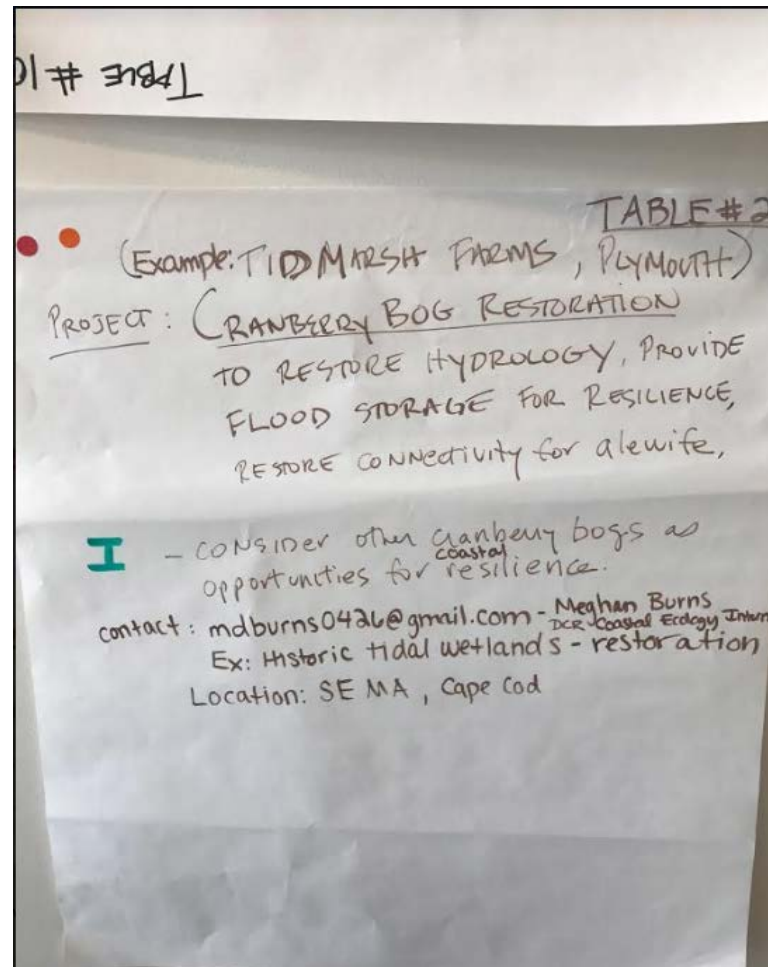
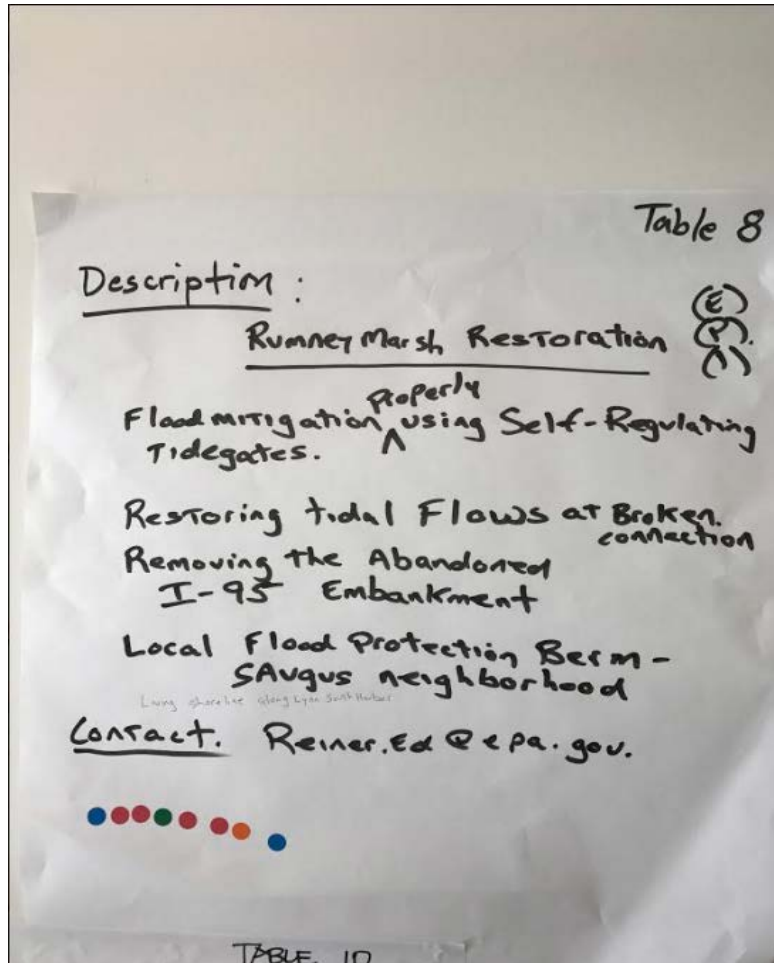
Green Infrastructure Projects – Completed, Underway, Planned, or Ideas

<p><u>DESCRIPTION</u>: LIVING SHORELINE CREATION</p> <ul style="list-style-type: none"> • TO REDUCE IMPACTS OF STORM SURGE • REDUCE FLOODING • HABITAT CREATION <p><u>LOCATION</u>: WINTHROP SHORE DRIVE, WINTHROP</p> <p><u>CONTACT</u>: KARA CAMPBELL kcampbell@town.winthrop.ma.us</p>	TABLE 10
<p><u>DESCRIPTION</u>: GI @ 5 BOSTON PUBLIC SCHOOLS</p> <ul style="list-style-type: none"> • INSTALLING GI FEATURES IN PARKING LOTS + SCHOOL YARDS • STORM WATER INFILTRATION + TREATMENT • EDUCATION / GI CURRICULUM <p><u>LOCATION</u>: ROBINSON, ROXBURY, MISSION HILL, AUSTON</p> <p><u>CONTACT</u>: KATE ENGLAND england.k@BWSO.org</p>	

<p><u>DESCRIPTION</u>: MOAKLEY PARK MASTER PLAN 100 ACRES</p> <ul style="list-style-type: none"> • BALANCE RECREATION AND STORMWATER / FLOODWATER MANAGEMENT • PARTNER WITH MULTIPLE CITY DEPARTMENTS, ORGANIZATIONS • INCREASE USER DIVERSITY + CREATION OF MULTI-USE SPACES <p><u>LOCATION</u>: SOUTH BOSTON</p> <p><u>CONTACT</u>: ALLISON PERMAN allison.perman@boston.gov</p>	TABLE 10
TABLE #10	

<p><u>Description</u>: P</p> <p>Green Streets - urban</p> <ul style="list-style-type: none"> - street trees - bioswales - underground stormwater storage - raingardens <p><u>Locations</u>: Cambridge Boston Watertown</p> <p><u>Contact</u>: Elisabeth Cianciola ecianciola@crwa.org</p>	Table

Green Infrastructure Projects – Completed, Underway, Planned, or Ideas



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