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### 4. Employing nature-based solutions.



With Permission: from *The Curious Garden*, by Peter Brown

#### **Nature-Based Solutions**

Projects that **protect**, **restore**, **and/or manage** an existing ecological system or mimic natural processes to **protect public health** and **clean water**, to **increase natural hazard resilience**, and to **sequester carbon**.



Conservation

Restoration and green stormwater management

### **NBS Anywhere - At Any Scale**

### Protect



Rural



Suburban Urban

### Restore Manage



5. Achieving **broad** and multiple community benefits

#### **Example Action Grant Projects**

Redesigns and Retrofits

#### **Boston**



Moakley Park - Resilience Preliminary Design, Technical Analysis, and **Pre-Permitting** 

FY19 Grant Award: \$1,500,000

Nature-based solutions

Community co-benefits



RESILIENT NEIGHBORHOOD ADAPTIVE + FLEXIBLE



DIVERSE PROGRAM BALANCE



Retrofitting a major

ACCESSIBLE FOR ALL LOCAL + LEGACY



7. Utilizing regional solutions toward **regional** benefit.

# Action Grant Example

# Boxford, Topsfield, & Ipswich regional resilience

12 re-designed culverts in the Howlett Brook Watershed

- Increased Flood Resilience
- Fish Passage,
   Aquatic Habitat

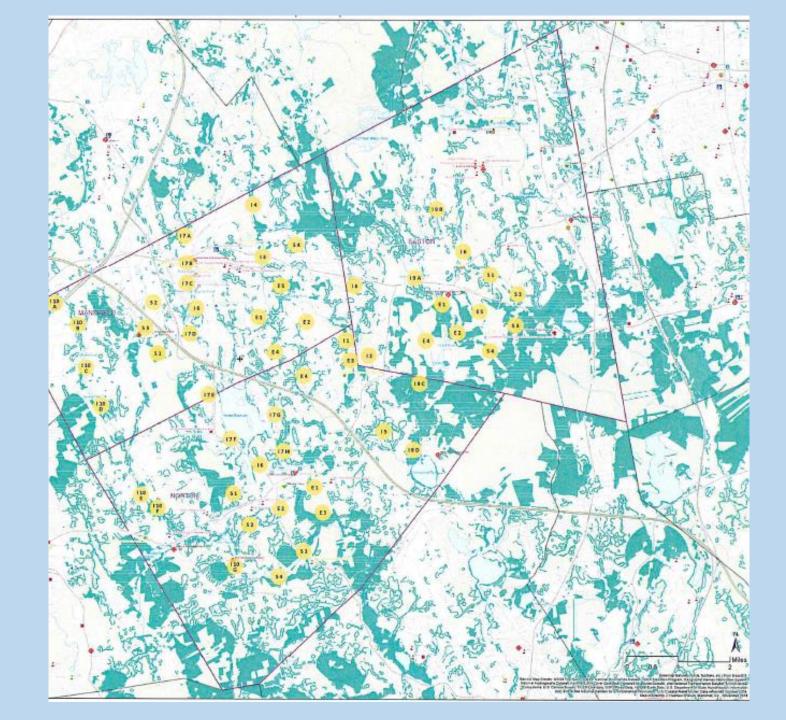


- 1. Furthering a community identified priority action to address climate change impacts.
- 2. Utilizing best available climate change data for a proactive solution. Data from local-level climate change vulnerability studies may also be used.

### Regional Priority Projects:

Mansfield - Norton - Easton MVP Plan June 2019

Work to retain/enhance the recharge capacity of the aquifer



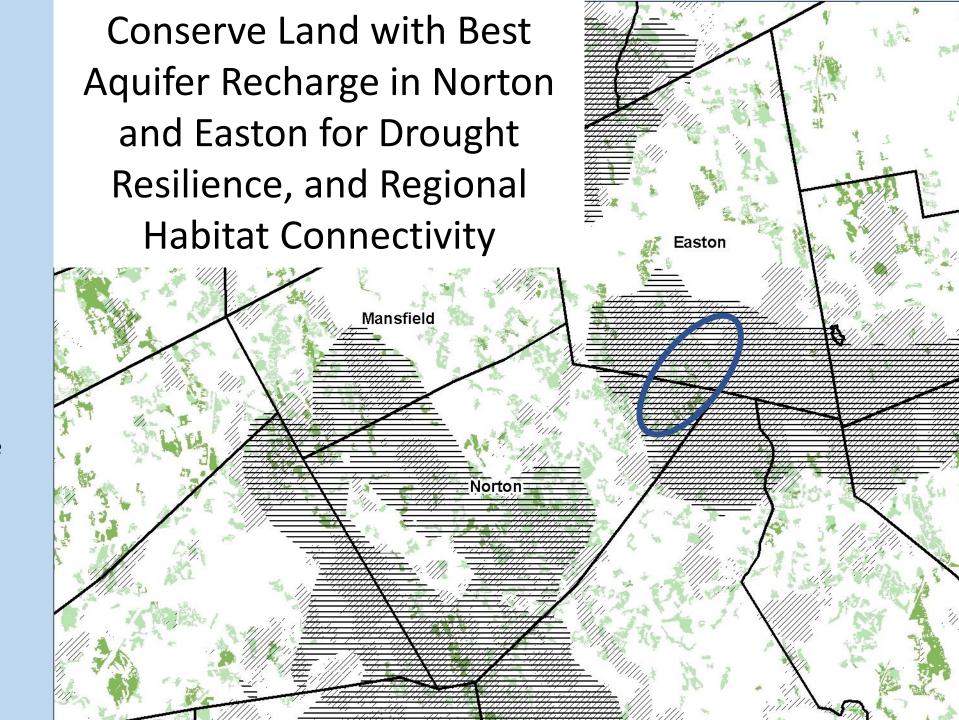
### Conserve-Drought resilience and habitat



Conserve for Regional
Habitat Connectivity

Good Aquifer Recharge Potential

Best Aquifer Recharge Potential



#### **Example Action Grant Projects**

Land Acquisition for Resilience

### Mattapoisett



Pine Island Pond Watershed Lands Project

FY19 Grant Award: \$960,000

Partnership between the Town, the Mattapoisett Land Trust and the Buzzards Bay Coalition to purchase 120 acres of pristine forest, streams, freshwater wetlands and coastal salt marsh in the Pine Island Pond area of Mattapoisett.



# Siting NBS Opportunities for Hazard Mitigation

Project Goals: Map sites that offer Best Bang for the Buck





