

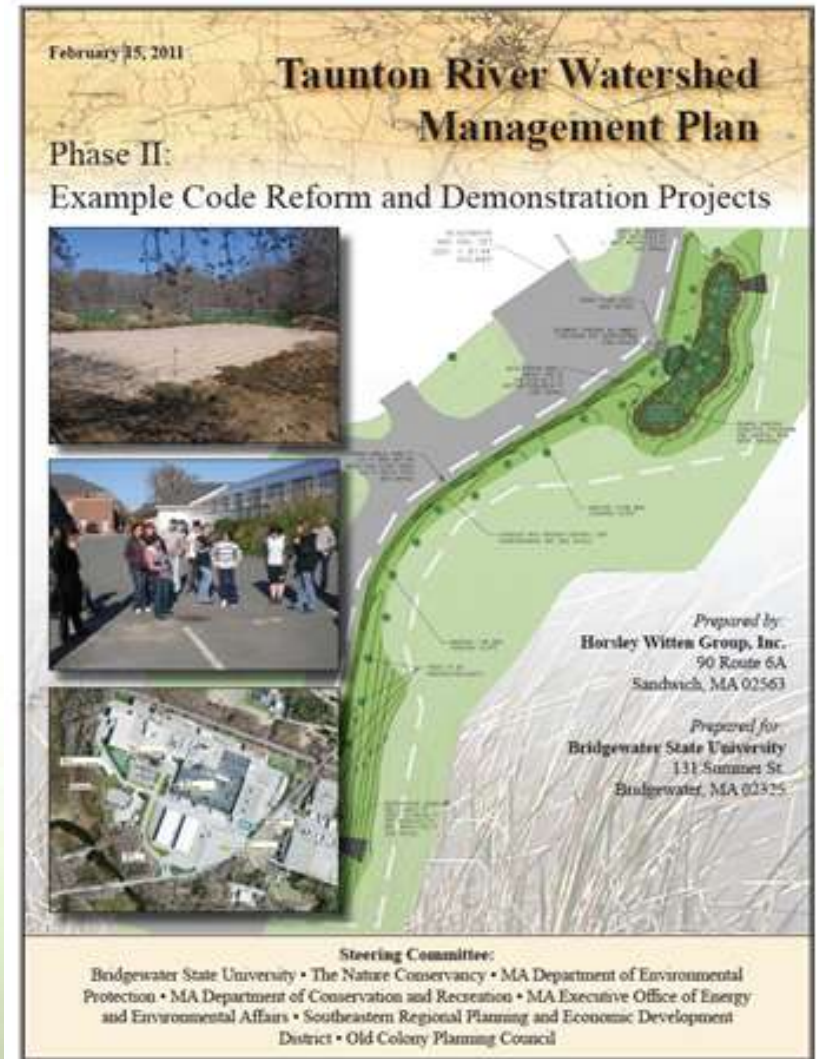
Low Impact Development Demonstration Projects

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Taunton River Watershed Management Plan

- Management Plan
 - ✓ Phase 1: collected data about watershed
 - ✓ Phase 2: designed projects to address issues
- Pilot projects to promote Low Impact Development as a way to:
 - ✓ keep water local
 - ✓ restore natural water balance
 - ✓ improve habitat



Why do demonstration projects?

- See LID techniques and how they work
- Understand the required steps in planning, design, permitting, implementation, maintenance; funding options
- Real-life examples to jump start others

“Ultimately, improvement of the watershed will depend on both large scale thinking and small scale actions; many of these small-scale projects will need to be implemented throughout the watershed...”

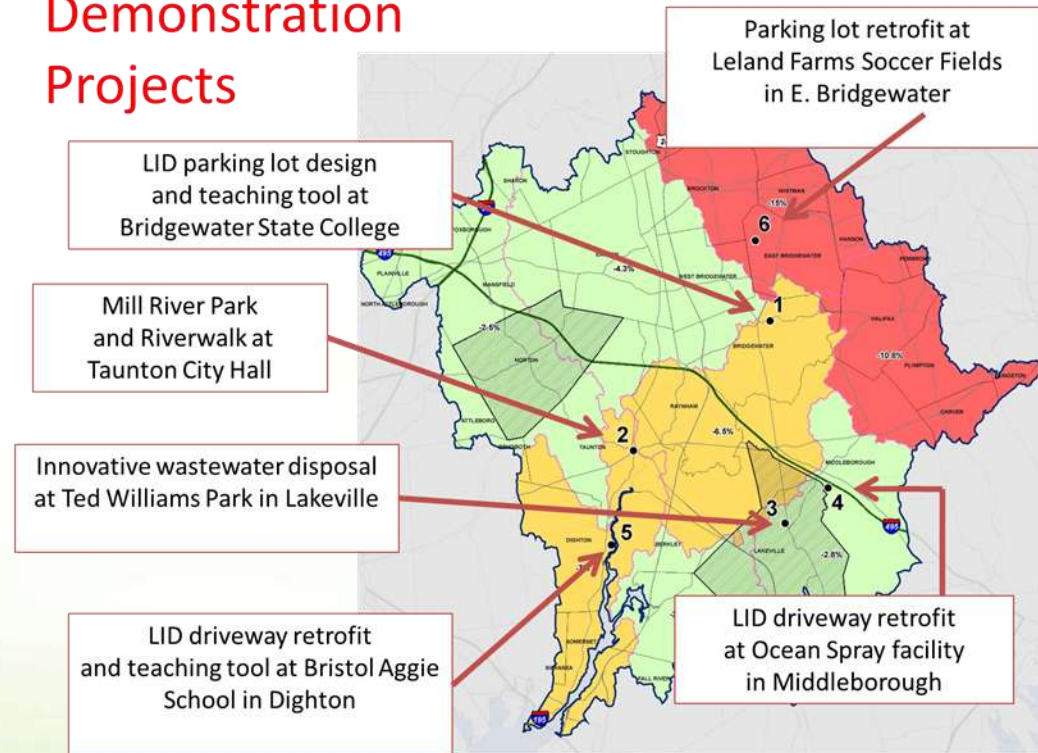
(Horsley Witten 2008)



How were projects selected?

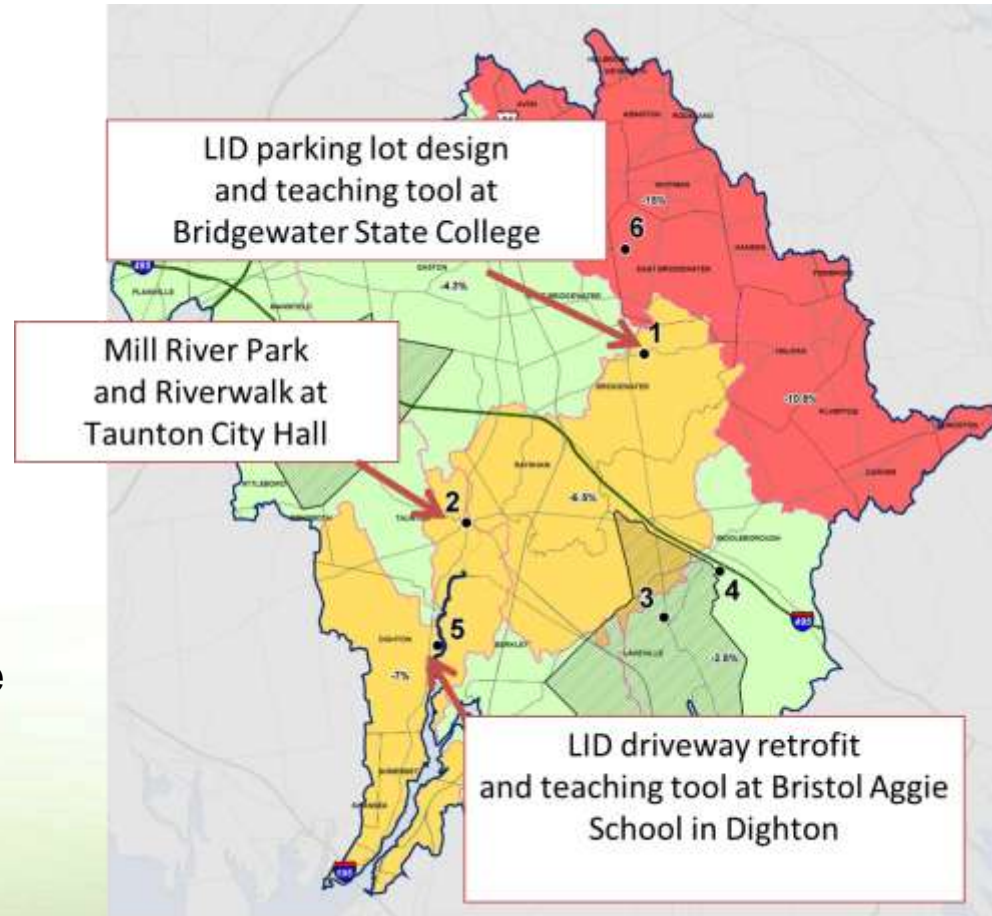
- Asked communities and organizations for potential projects
- Used selection criteria to narrow down the list
 - ✓ Address issues in watershed
 - ✓ Demonstrate different LID techniques
 - ✓ Partner participation
 - ✓ Likelihood of going to construction
 - ✓ Visibility/accessibility

Demonstration Projects



Which projects have been completed?

- Three have been constructed
 - ✓ Bridgewater State University parking lot bioretention system
 - ✓ Mill River Park/ Taunton City Hall parking lot rain gardens
 - ✓ Bristol County Agricultural High School rain gardens
- Setting, situation, solution, implementation, funding, maintenance



Mill River Park and River Walk at City Hall, Taunton

- Setting:
 - ✓ parking lot behind Taunton City Hall and Police Station
- Situation:
 - ✓ parking lot drained to Mill River
 - ✓ stormwater carried sediments and pollutants, caused erosion
 - ✓ degraded river buffer



Photo from Horsley Witten

Mill River Park and River Walk at City Hall, Taunton

- Solution:
 - ✓ cooperation from Taunton Conservation Commission; coordinated with park redevelopment
 - ✓ reduce asphalt on site
 - ✓ treat runoff through a system of swales, sediment forebay, and bioretention area (layers of stone and gravel covered with native plants)
 - ✓ restored river buffer



Graphic from Horsley Witten

Mill River Park and River Walk at City Hall, Taunton

- Results:
 - ✓ Park built in 2011
 - ✓ Provides public greenspace
- Maintenance:
 - ✓ maintained by City



Mill River Park and River Walk at City Hall, Taunton

- Funding for overall park project:
 - ✓ State Gateway City Parks Program (80%)
 - ✓ Federal Community Development Block Grant program, from Dept. of Housing and Urban Development (20%)



LID Driveway Retrofit at Bristol County Agricultural High School, Dighton

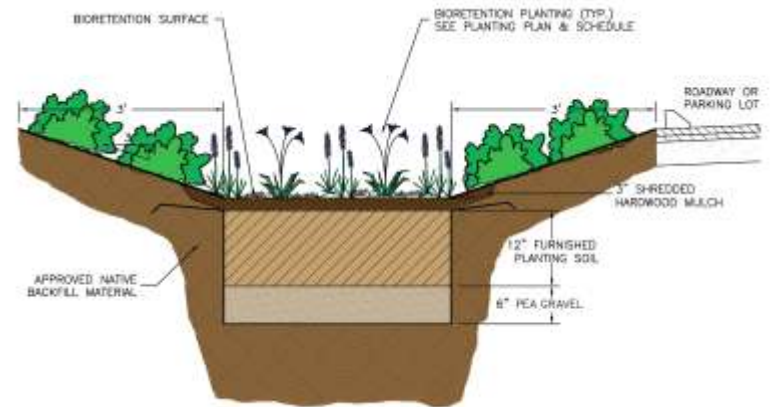
- Setting:
 - ✓ school near Taunton River mainstem
 - ✓ educational opportunity and visibility
- Situation:
 - ✓ parking lot runoff
 - ✓ lack of drainage infrastructure and failing catch basin system
 - ✓ erosion, sediment and other pollutants
 - ✓ school wanted centralized sewer; LID retrofits could help reduce wastewater load



Photo from Taunton River Watershed Management Plan, Horsley Witten

LID Driveway Retrofit at Bristol County Agricultural High School, Dighton

- Solution:
 - ✓ coordination with school staff and students
 - ✓ capture flow from lot in swales, lead to bioretention systems which treat and infiltrate runoff; reduce erosion
- Results:
 - ✓ built in Summer 2012
 - ✓ students planted in Fall 2012



Graphic from Horsley-Witten

LID Driveway Retrofit at Bristol County Agricultural High School, Dighton

- Maintenance:
 - ✓ students maintain vegetation, learn from site
- Funding:
 - ✓ State Revolving Funds paid for construction (part of sewer connection project)
 - ✓ TNC gave funds for plants
 - ✓ Students installed plants



To Learn More

Search on title:

Low Impact Development Keeping Water Local and Clean

-or-

<http://prezi.com/pgnfbarxnph/low-impact-development-lid-keeping-water-local-clean/>

