Green School Partnerships – A tool for education, outreach, and cost-effective stormwater management

Stormwater Finance Workshop

December 11, 2019

Chapel Hill, NC

UNC | SCHOOL OF GOVERNMENT
Environmental Finance Center

www.efc.sog.unc.edu

Why is Outreach/Education important?

- Perceived disconnect between stormwater services and fees/costs
- Necessary for driving policy change
  - Stormwater doesn't fit the mold that current governance/fee structures put it in
  - Lack of adequate funding sources for true needs
  - Quantity/quality challenges
- Neglected infrastructure can be costly
- Overlooked infrastructure can be a missed opportunity
  - Public support and involvement is an unbelievable resource

Why Schools?

- “School grounds present unique opportunities for onsite stormwater management. Public school systems or departments of education typically own or manage large amounts of public land in any given community. Impervious surfaces such as rooftops, basketball courts, bus loops, and parking areas often cover a large percentage of a school’s site.
- Additionally, school sites often have open or underutilized space. Land owned by the public school system, such as sports fields, may contribute pollutants, such as fertilizer, that discharge through stormwater runoff.”
- -US EPA

Why Schools?

- Big source of impervious surface
- Early education
- Built in workforce
- Public property
  - More cost-effective investment in stormwater infrastructure than on private property
- Often, very much in need of stormwater/flooding services due to old school designs
- Tangible benefits that go beyond stormwater related improvements

Philadelphia Green Schools Alliance

Philadelphia Green Schools Alliance

- Schools account for 1400 acres of Philadelphia's combined sewer area
- 67% of that acreage is impervious
- 2012 – City of Philadelphia entered into consent decree with EPA
- Green school partnership allows City to have access to 1400 acres of property on which to manage stormwater
- In return, the schools are eligible for up to 80% reduction in stormwater fee

Philadelphia Green Schools Alliance

ROSA PARKS ELEMENTARY SCHOOL, PHILADELPHIA

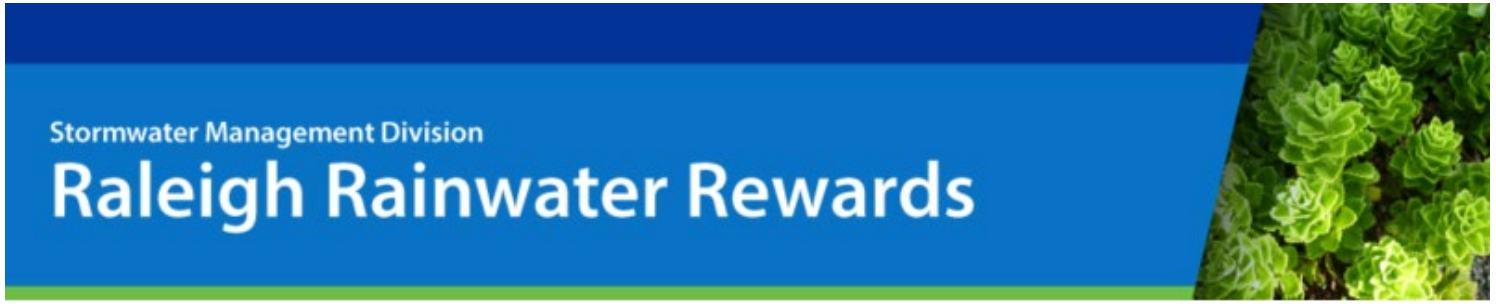
- Stormwater Management Incentives Program (SMIP) – grant program
- Applicant is either a community group/third party or the school district itself
- Always the school district signs 45-year O&M agreement
- Grants fund implementation but not ongoing maintenance which has created challenges…trying to work through that!

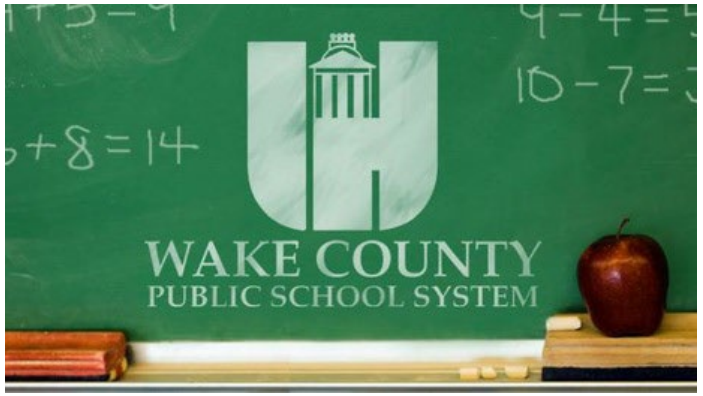

Boston Water and
Sewer Commission

Boston Water and Sewer Commission and Boston Public Schools

WASHINGTON IRVING MIDDLE SCHOOL, BOSTON

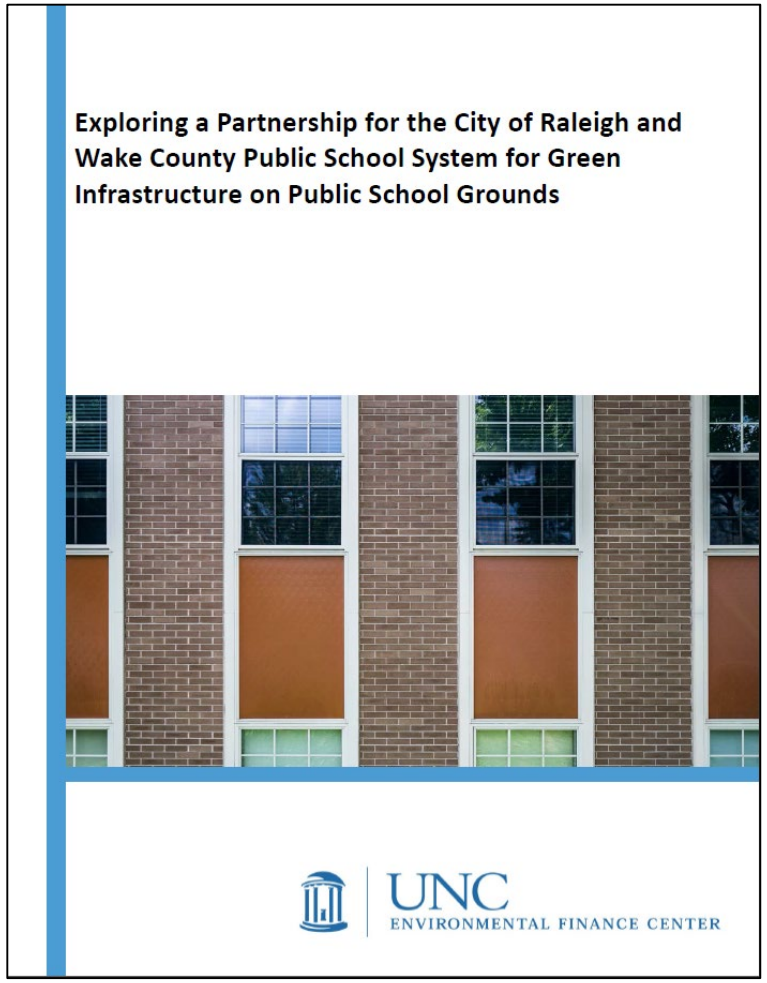
- Very unique regulatory framework because BWSC subject to consent decree but not City of Boston
- BWSC offered to fund in full installation of SCMs on school sites and to fund the first three years of maintenance
- Heavy investment at local level, meeting with school officials, developing curriculum, engaging with communities

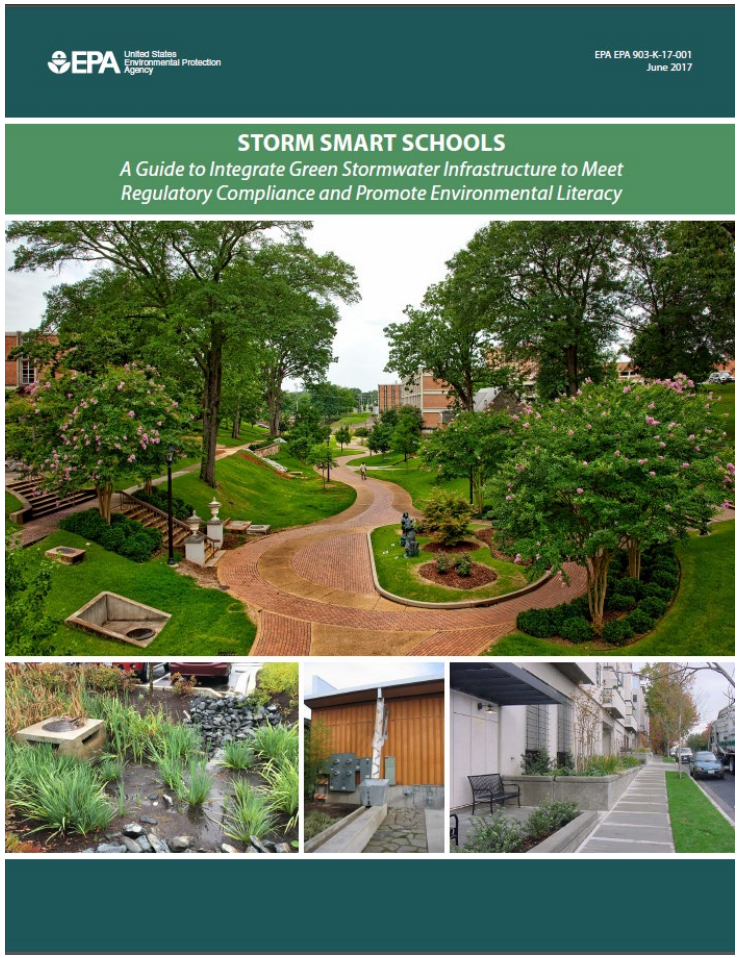




- In 2017, there were 64 active public school properties in Raleigh, which together covered 1445 acres (62,938,494 square feet) and which had a total of 461 acres (20,097,182 square feet) of impervious surface.
- NC Conservation Fund contracted with the EFC to research ways for the City of Raleigh to expand its program onto school sites
- Report of successful partnerships around the country
- Green School Symposium and continued exploration into a bigger Wake County wide green school partnership

Resources…


Exploring a Partnership for the City of Raleigh and Wake County Public School System for Green Infrastructure on Public School Grounds
UNC
ENVIRONMENTAL FINANCE CENTER


EPA United States Environmental Protection Agency
EPA EPA 903-K-17-001
June 2017
STORM SMART SCHOOLS
A Guide to Integrate Green Stormwater Infrastructure to Meet Regulatory Compliance and Promote Environmental Literacy

Questions???

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