



An Overview of Score Four: Students, Schools, Streams, and The Bay

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What is the Score Four Program?

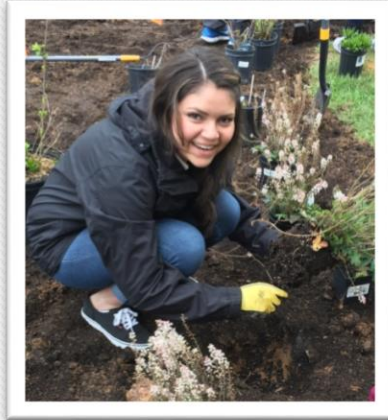
- A series of lessons, labs, and outdoor inquiries in which students use the scientific method and multidisciplinary tools to:
 - Assess the school watershed and their campus in relation to water pollution inputs.
 - Gather data needed to develop a Student Stormwater Action Project (SSAP).
- A series of planning activities in which students:
 - Set goals for their project.
 - Use their data to plan their project.
 - Prepare maintenance plans for their project.
 - Design elements of their project.



The Reasons Behind Score Four



Practical Skills



Improved Learning

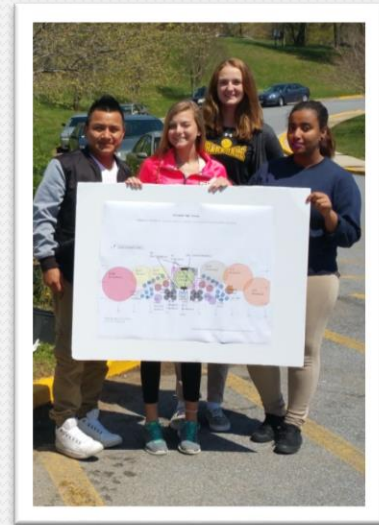
Stewardship



Outdoor Activity



Ownership



IMPROVED WATER QUALITY



Score Four's Overarching Focus...

Stormwater Runoff



Stormwater runoff is rain or melted snow that runs off impermeable surfaces, such as roofs and pavement, and picks up contaminants as it flows downslope into waterways.

Stormwater runoff is the only growing source of water pollution in the Chesapeake Bay.

Stormwater Runoff



By reducing stormwater runoff in local watersheds, we improve water quality and protect our local streams.

The End Goals: Student Stormwater Action Projects (SSAP)



These options provide opportunities for student leadership and stewardship.



How the Score Four Program Helps Your Students and School – and Our Waters

1. It provides Meaningful Watershed Experiences at your school.
2. It engages students in real-world investigations, math, outdoor exercise, and project planning.
3. It meets multiple Environmental Literacy, Core Curriculum, and MAEOE Green School requirements.
4. It helps preserve local waters by fostering informed stewards and the creation of sustainable stormwater solutions.



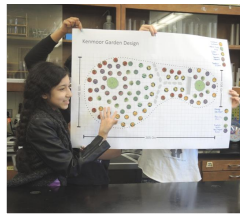
The Steps



A. Exploring Your Watershed



B. Assessing Your Campus



C. Planning Your Project



D. Maintaining Your Project

A. Exploring Your Watershed



Students learn about their local waters, pollution sources, and possible solutions for stormwater pollution.

- Determine your school's connections to local waterways.

- Find your watershed.
- Research land use.
- Find your local stream's source and outlet.
- Make class hypothesis on stream condition.
- Research local stream condition.
- Visit stream, if possible.

- Lessons:

- Score Four Watershed Connections PowerPoint presentation
- FieldScope Map Inquiry
- Topography, Land Use, and Stormwater Chemistry



Skills & Lessons

Computer
research

Geography
and maps

Modeling

Analysis

Scientific Method



B. Assessing Your Campus



Students discover how their school campus contributes to stormwater pollution.

- Discover how your school contributes to stormwater pollution.
- Learn and investigate permeability.

Lessons:

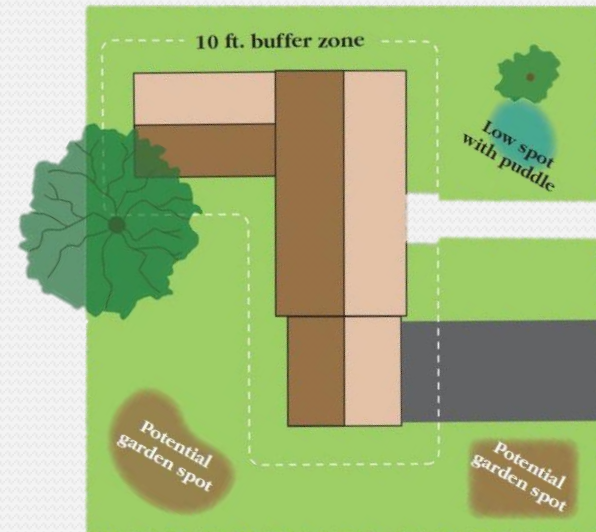
- Permeability Prediction
- Permeability Field Investigation



- Perform the Campus Stormwater Assessment.

- Tour your school grounds —best when it is raining!
- Use maps, sketches, & notes to record:

- Stormwater runoff
- Erosion
- Storm drains & gutters
- Slopes
- Walking paths
- Wet areas or other problems
- Spots for stormwater solutions
- Student outdoor gathering spots



- Analyze soil, infiltration, and permeability.
- Lessons:
 - Soil Basics PowerPoint
 - Soil Components – Identification and Texture Lab
 - Soil Percolation Investigation
- Other activities:
 - Soil tests for nutrients, pH, etc
 - Percolation test for rain gardens



Skills & Lessons	
Soil science	Field Methods
Biology	Analysis
Chemistry	Communication

Determine The Best Solution

- What stormwater solution will works best?
 - What are your goals?
 - Are there cost restraints?
 - How much time is available?
 - Is there a club or parent group that can help with maintenance?
 - What solution meets your project's overall goals and resources?
- Which solution fits your collected data?
- Can the project be long-term?

Skills & Lessons

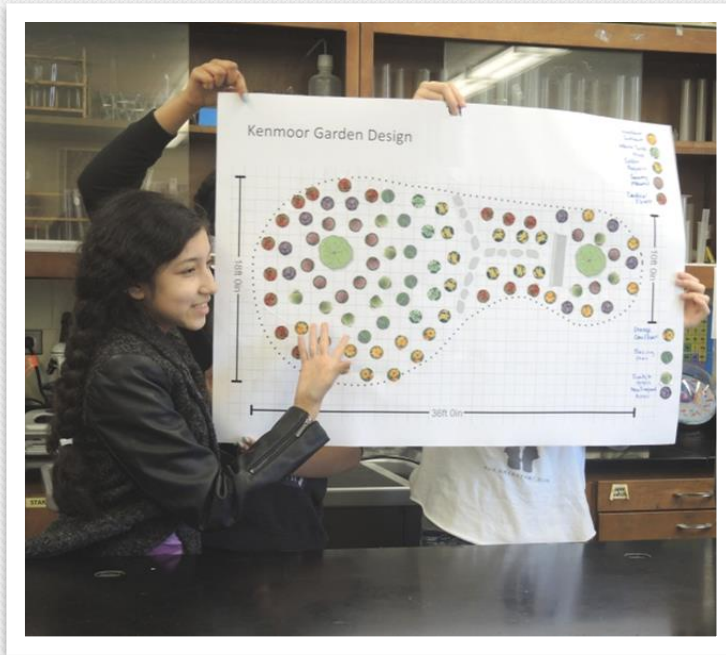
Synthesizing findings

Project Planning

Communication



C. Planning Your Project



Students investigate physical factors that affect the growth of plants and trees. They set goals for their Student Stormwater Action Project, pick the site and native plants, and design their project.

For a conservation landscape or garden planting:

- Set your Project Goals.
- Select the site.
- Pick native plants using the collected soils and lighting data.
- Size the project -- depending on type of project & resources.



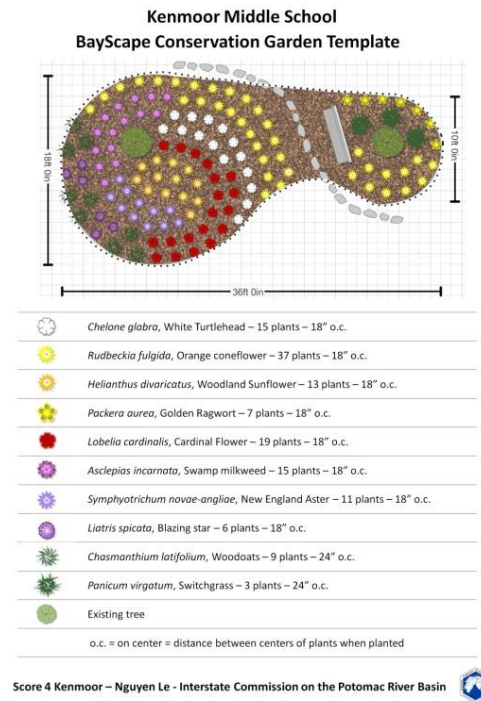
Skills & Lessons

Math and Spreadsheets

Project Planning

Communications

- Design the project.
- Plan purchases of plants, mulch, and soil amendments.
- Prepare grants and permits, if applicable.
- Create schedule for the design, site preparation, and planting days.



Installing Your Conservation Landscape

- Prepare the site and plant.
- Instruct the students on how to:
 - Layout and prepare the site.
 - Use the tools.
 - Correctly water the plants.
 - Correctly plant the plants.
 - Correctly mulch the garden.

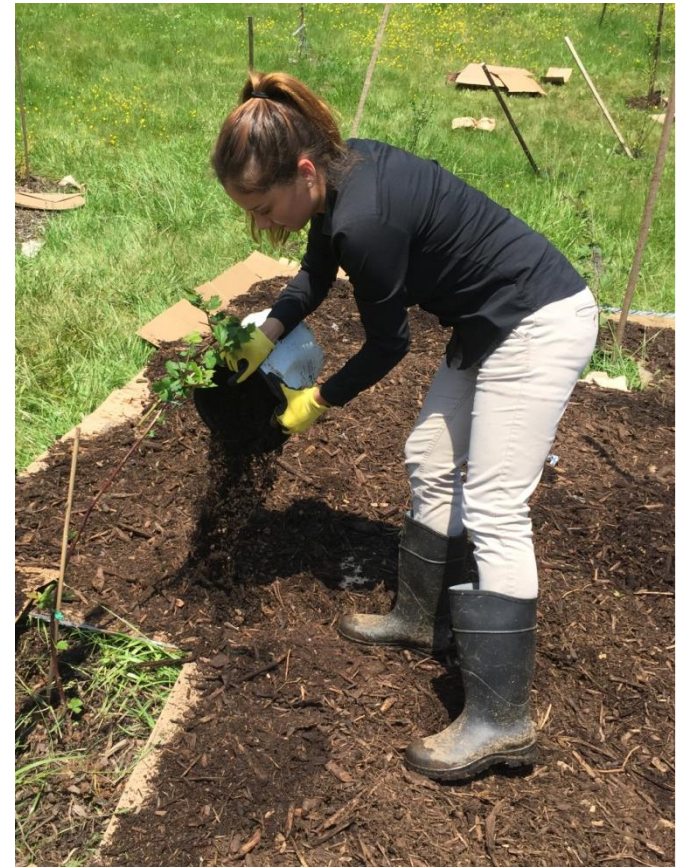


D. Maintaining Your Project



Students plan and create a maintenance schedule to ensure the project's success.

- Create a maintenance schedule to ensure the success of your project.
- Maintenance of gardens includes but is not limited to:
 - Watering
 - Weeding
 - Mulching
 - Monitoring



Celebrate!

- Students share project with school and community.
- Students thank partners.
- Have a picnic by the garden!



Tips For Success

1. *Before you start*, enlist your principal's and maintenance staff's support.
2. Only take on what you can maintain!
3. Plan for regular and long-term maintenance.
4. Involve other classes and clubs.
5. Involve community volunteers & experts.
6. Keep others informed of your progress.
7. Ask other schools about their "lessons learned."



ICPRB Website

Find all the Score Four PowerPoints and Lessons on our website at www.potomacriver.org/scorefour

From our home page: www.potomacriver.org

