

Stormwater Runoff

A Regional Science Consortium
Education Initiative



Subject: Science

Grades: 3-12

Number of Participants:

Groups of 1-5

Regional Science Consortium

Stormwater Runoff

This lesson incorporates an informative PowerPoint lecture and hands-on activity to introduce students to the challenges posed in their local community and around the world by stormwater runoff.

Supply List

In this lesson:

- Digital copies of materials available at www.RegSciConsort.com
 - Stormwater Runoff lesson (ppt)
 - Stormwater Runoff lesson (mp4)
 - Educational video
 - Paperwork
 - Introduction (pdf)
 - Activity instructions (pdf)
 - Student worksheet (pdf)
 - Teacher guide (pdf)
 - Skype with a Scientist discussion points (pdf)
- Gloves
 - Five pairs per student

Component	Length
Lesson	24:04
Video	3:57
Activity	Four sessions of 10-20 min each
Worksheet	Four sessions of 5-10 min each
Skype with a Scientist session	15 min

Additional materials:

- Trash bag
- Pencil
- Clipboard (Recommended but not required)

Goal

After completing this lesson, students will have gained a detailed understanding of stormwater runoff pollution, pervious and impervious surfaces, and solutions to these problems. Students will participate in the solution by monitoring a local storm drain and implementing best management practices at their school.

Additional Resources

Related RSC Lessons

- Climate Change

- Erosion
- Lake Erie Buoys and Weather Stations
- Litter and Marine Debris
- Microplastics

Citizen Science Programs

- NOAA What’s your water level?
 - <http://noaa.maps.arcgis.com/apps/MapSeries/index.html?appid=8e4a278576964f47b4fc050e51f344ca>

Pennsylvania Academic Standards

Grade 4	Grade 7	Grade 10	Grade 12
3.2.4. C, D	3.2.7. C, D	3.2.10. C, D	3.2.12. C, D
4.1.4. B, E	4.1.7. A, B, E	4.1.10. B, C, E	4.1.12. C, E
4.2.4 A, B	4.2.7. B, D	4.3.10. A, B	4.2.12. A
4.3.4. A, B	4.3.7. A, B	4.6.10. C	4.3.12. A, C
4.6.4. B, C	4.6.7. B, C		4.6.12. A, C
4.8.4. C	4.8.7. B, C, D		4.8.12. C