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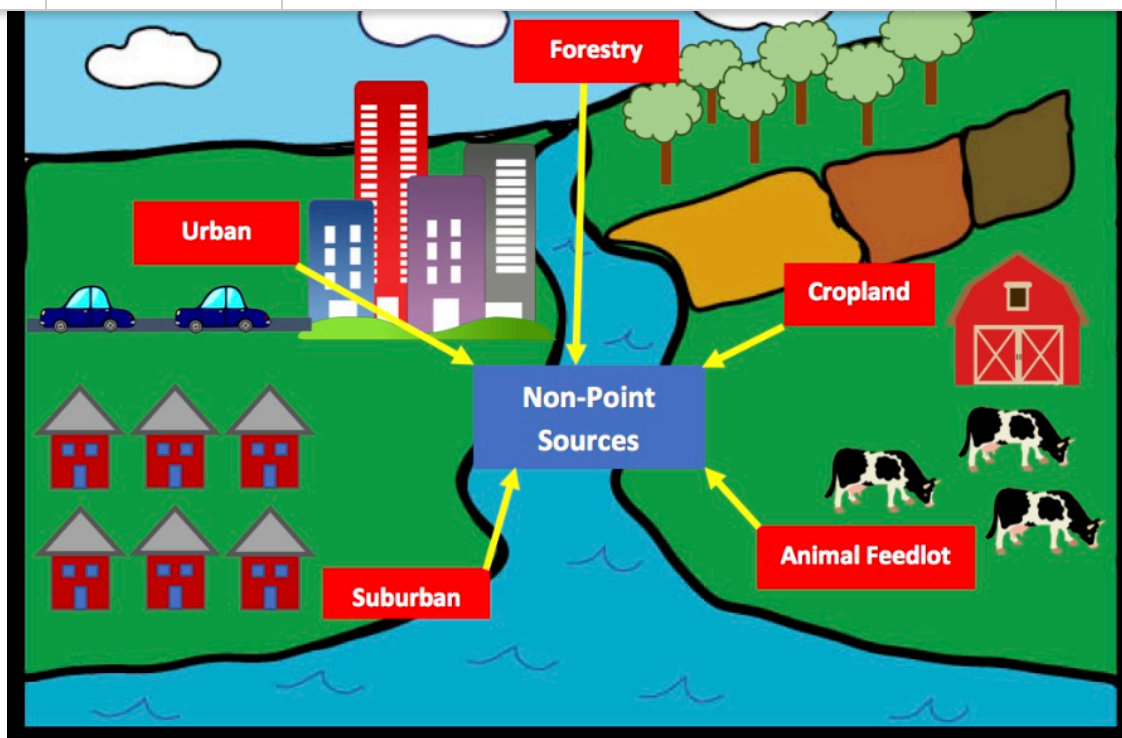
GET INVOLVED!

- Sign up for newsletter.
- Attend one of the scheduled pop-up events (check upcoming events).
- Go to the [Engage R1](#) webpage to see project updates and provide feedback.
- Volunteer to participate in planting days here [VOLUNTEER SIGN UP FORM](#)

IMPROVING WATER QUALITY IN THE REGION

What are Non Point Sources (NPS) Of Pollution?

Nonpoint source (NPS) pollution is the United States' main contributor to water quality concerns. The Illinois EPA identifies NPS pollution as the "primary factor limiting waters in Illinois from attaining their designated uses." ***NPS pollution is caused by water flowing over or through the ground, picking up pollutants, and depositing the pollutants into nearby waterways and groundwater.*** Common sources of NPS pollution include urban and construction site runoff, agricultural runoff, and resource extraction.



Nonpoint source pollution is difficult to control because it comes from many different sources and locations.

Surface runoff from precipitation or snowmelt moves across the land picking up and depositing pollutants to our streams, rivers, lakes, and oceans.

Image Source: Fox Demo Farms.

UPCOMING EVENTS



Saturday June 1 - Wednesday June 5, 2024

Ken Rock Planting Installation

Planting native vegetation at Ken Rock project site.

The rain date is Thursday June 6, 2024. Sign up to volunteer for this planting event using the volunteer sign up link above!



Saturday August 24 - Tuesday August 27, 2024

Park-Er-Woods Planting Installation

Planting native vegetation at Park-Er-Woods project site. The rain date is Wednesday August 28, 2024. Sign up to volunteer for this planting event using the volunteer sign up link above!

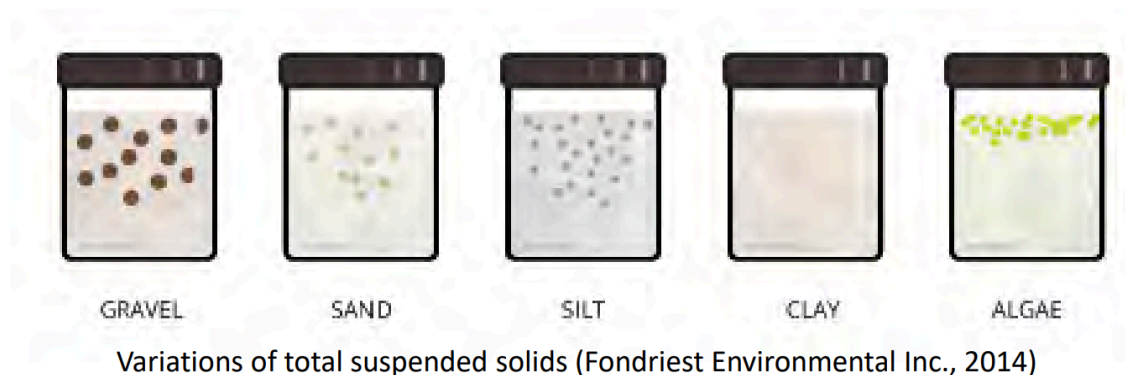
QUESTIONS? CONTACT

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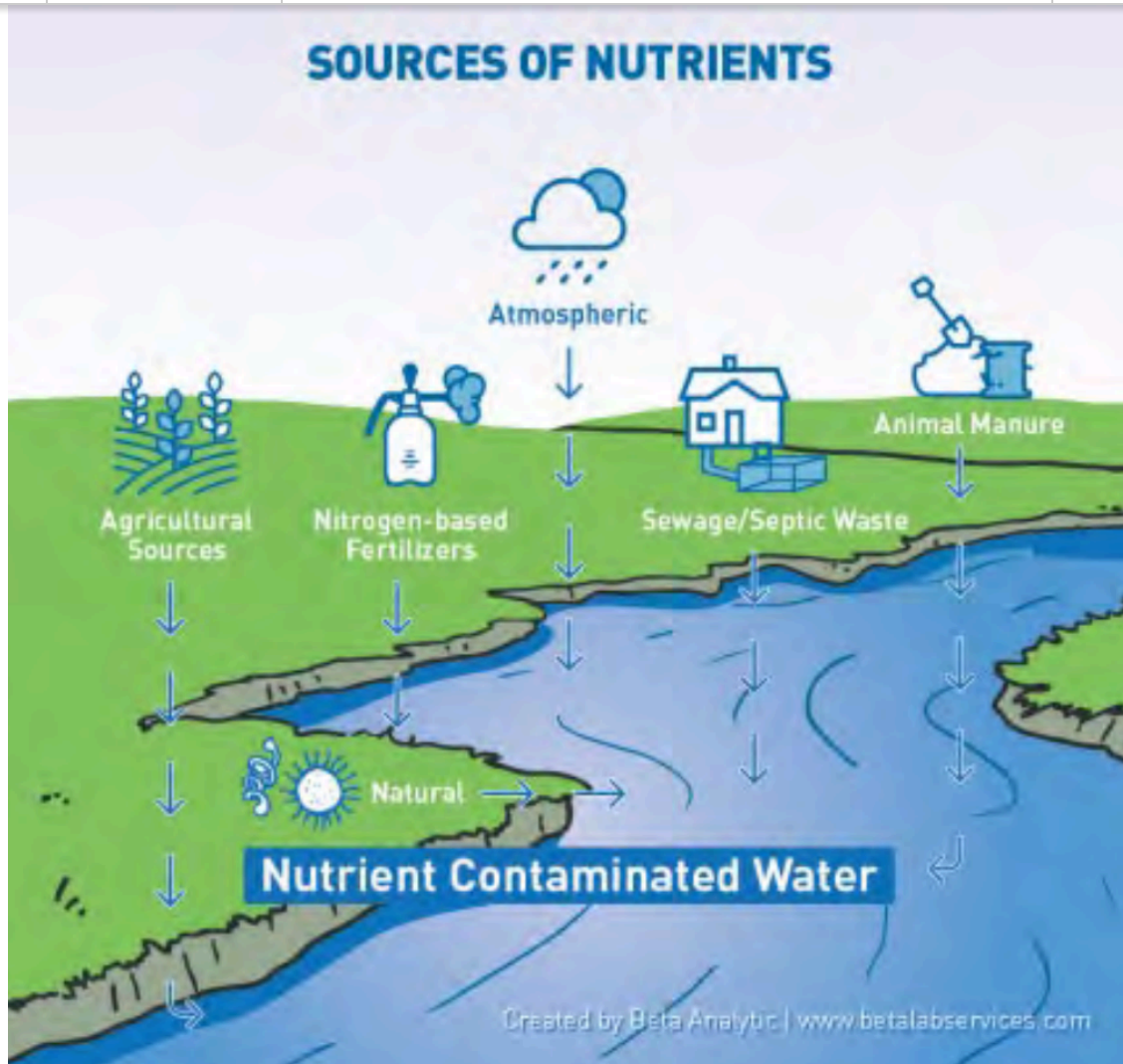
1 TOTAL SUSPENDED SOLIDS (TSS)



Total Suspended Solids (TSS) refer to the sediments in water that could be caught in a filter. Silt, soil erosion, decaying organic material, sewage, as well as agricultural, urban, and industrial wastes all contribute to TSS levels in water. Total suspended solids in water are often associated with excessive amounts of nutrients and harmful bacteria that can attach themselves to sediment.

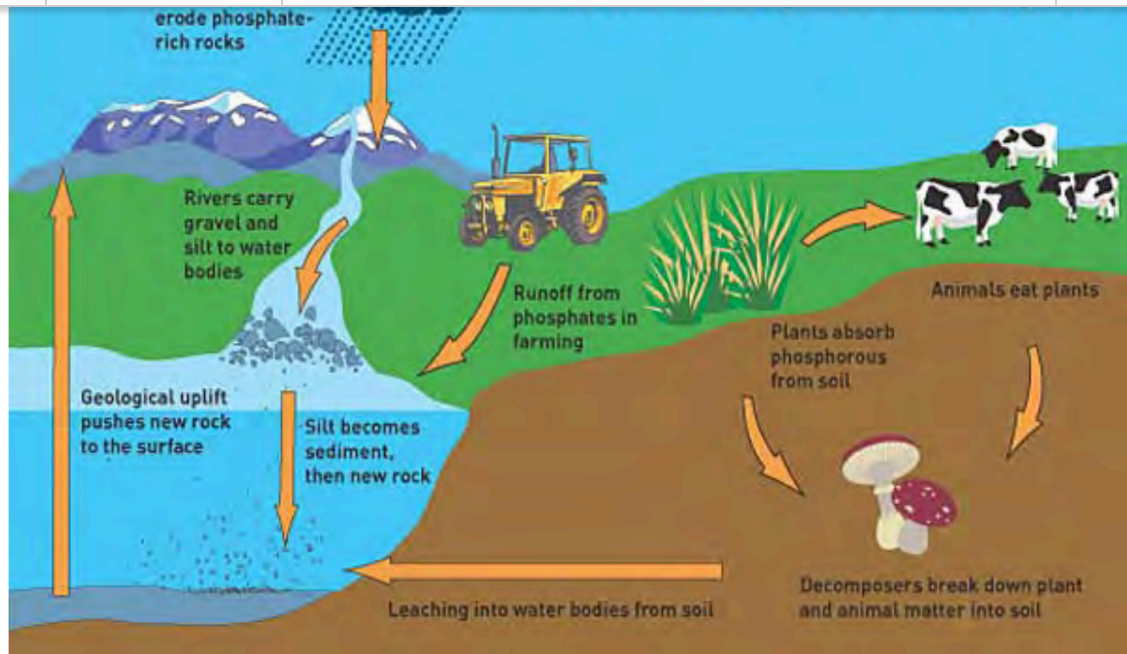
TSS affects aquatic plants by blocking light needed for photosynthesis, thereby reducing plant oxygen production. Decreased levels of oxygen kills both aquatic plants and fish. In addition, suspended sediments can clog fish gills, make them more prone to disease, and prevent egg development. TSS accumulation in surface water also reduces the amount of storage capacity for these streams and water bodies to capture and store runoff, resulting in to flooding.

2 TOTAL NITROGEN (TN)



Nitrogen is an essential nutrient for plant and animal growth. In excess, nitrogen negatively affects the health of aquatic systems. Extreme concentrations of nitrogen can lead to hypoxic conditions in which no oxygen is left in the water for plants and wildlife. Surpluses of nitrogen come from agricultural outputs (fertilizer, animal waste) and urban outputs (sewage, water treatment plants); these trickle into a watershed with the downstream movement of runoff over nutrient dense surfaces. Excess nitrogen overstimulates the growth of aquatic plants and algae. Algae uses up all the oxygen in water and then decomposes, leaving fish without air or food. What is left is a water body or stream that can no longer sustain life. Nitrates in our drinking water are unhealthy for human consumption and can restrict oxygen from entering the bloodstream. Most of the drinking water in the United States comes from subsurface water which are at risk due to nitrogen inputs, well draining soil, and a high ratio of cropland to woodland. With human and environmental health at risk, it is essential to have a better understanding of our local watershed

3 TOTAL PHOSPHORUS (TP)



Interference in the phosphorous cycle (Socratic, 2016)

Phosphorous typically attaches to soil particles and migrates with runoff into surface water. US Geologic Survey has found that phosphorous is also able to migrate via sediment in groundwater (Morganwalp, 2019). Phosphorous that enters water bodies reduces levels of available oxygen for aquatic life and causes algal blooms. The influx of nutrients comes from wastewater treatment facilities, lawn and agricultural fertilizers, domestic and farm animal waste, and even detergents that drain into sewage systems.

VOLUNTEERS NEEDED!

Help Save the Watershed!

HELP R1 PLANT NATIVE
VEGETATION PLUGS!



What is the 319 Watershed Education Grant?

Region 1 Planning Council (R1) has received Section 319 Grant funding from the Illinois Environmental Protection Agency (IEPA) to conduct research and activities to educate and encourage local watershed stakeholders to adopt non-point source (NPS) pollution control best management practices (BMPs). The grant includes the construction of two demonstration BMP projects; a bioretention basin in the Buckbee Creek watershed, and a bioswale in the South Fork Kent Creek watershed.

Project Site Location Information

Park-er-Woods Park address is 6700 Claremont Street, Rockford IL (61102). The improvement site is at the northwest corner of Parker Woods Drive and Lakewood Drive.

Ken Rock Park address is 2930 Bildahl Street, Rockford IL (61109).

Planting Days

Ken Rock Park -
Saturday, June 1 | Tuesday, June 4 | Wednesday, June 5

Park-er-Woods -
Saturday, August 24 | Tuesday, August 27

Rain Day -
Ken Rock Park, Thursday June 6
Park-er-Woods, Wednesday August 28

All planting days are 8:00 am to 5:30 pm.

Volunteers should be available for at least 1 two-hour block between 8:00 am to 5:30 pm.

Volunteers are encouraged to bring soil knives or hand trowels, a pair of gloves, and comfortable working shoes that you don't mind getting dirty.

Free volunteer t-shirt available on the day(s) of the event while supplies last.



To sign up scan the QR code
or bit.ly/Volunteer4Planting

Project Partners



This flyer was prepared using United States Environmental Protection Agency funds under Section 319 of the Clean Water Act distributed through the Illinois Environmental Protection Agency. The findings and recommendations contained herein are not necessarily those of the funding agencies.

SCAN THE QR CODE TO VOLUNTEER

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