

# K-12 Youth Education Information & Programming from North St. Louis SWCD





# SOIL & WATER CONSERVATION

Greetings Educators,

Are you looking for a way to bring soil, water, and natural resource topics to life in your classroom or with a youth group?

The North St. Louis Soil & Water Conservation District has a variety of conservation education resources available for a variety of grades. We can visit your school or group to present on many topics. Please take a look at some of the offerings highlighted in this catalog. We are able to present either in person or by virtual means.

We also have materials available for classroom use including specimens, teacher guides and lesson plans, activity books, pamphlets and posters, and demonstration materials.

We look forward to engaging students in natural resources sciences!

#### What is the North St. Louis SWCD?



The North St. Louis Soil & Water Conservation District (SWCD) is a local government agency providing conservation and resource management services. In cooperation with federal, state, county and local agencies, the District provides technical assistance, cost-sharing, information and education about natural resources management.

The mission of the North Saint Louis Soil and Water Conservation District is to encourage sustainable use of our natural resources by engaging people in soil and water conservation in northern Saint Louis County.

# **PROGRAM LESSONS**

Indoor and outdoor lessons we can conduct with your students



## WOULD YOU DRINK THIS WATER?

Grade levels: Any Topics: Pollution, drinking water

Students will investigate water quality using their senses of sight, smell, and taste to determine if water is safe to drink.

#### THE INCREDIBLE JOURNEY

Grade Levels: K-6 Topics: Water cycle



Students will "become a water molecule" and take a journey through the water cycle. Best done outdoors or in a large room.



#### MACROINVERTIBRATE MAYHEM

Grades: Any Topics: Habitat, Water Chemistry

Who doesn't love playing with bugs?! Students will learn about aquatic insects and what they can tell us about the water quality of local lakes and streams. Can be done in a classroom or paired with an outdoor investigation.

#### WONDERFUL WETLANDS

Grades: Any Topics: Habitat, wetlands



**GYOTAKU** (FISH

**PRINTING**)

How wet does wet land need to be to be a wetland? Students will learn about wetlands and all the benefits they provide. May investigate a local wetland if available.



Grade Levels: Any Topics: Art, senses

Investigate the senses fish use for survival through the Japanese art form of gyotaku or fish printing.



## PLAN A FISHING TRIP

Grades: Any Topics: Habitat, fishing, safety

We have fishing equipment available for youth use. Plan a fishing trip with our SWCD and meet at a local lake!

## STREAM OR POND STUDY



Grades: Any Topics: Habitat, water quality, water chemistry

Get the kids outside to investigate the water quality, habitat, and characteristics of a local stream or pond nearby! They will use scientific equipment as they do so.



#### ENVIROSCAPE®

Grade level: Any & adults Topics: Watersheds, pollution

The Enviroscape® is a portable, interactive model of a watershed used to demonstrate water pollution and human interactions with the environment.

## CULVERT CONUNDRUM



Grade level: 5-12 Topics: Watersheds, impervious surfaces, culverts, engineering

Students will investigate a human and natural processinteraction challenge. They will then design a culvert to solve a problem.

Grade level: 3-6 Topics: Soil



Students will investigate the different types and properties of soil. A color component can even include painting with soil!



#### INVASIVE SPECIES MUSICAL CHAIRS

Grade level: K-6 Topics: Habitat, invasive species

Students play musical chairs to learn about native and invasive species and the impacts of invasive species on native species.

## AN IMPERVIOUS SITUATION



Grade level: 5-9 Topics: Watershed, stormwater, impervious surfaces, stormwater pollution

Students will investigate watersheds, impervious surfaces, and stormwater systems by investigating how much water collects from their school during a 1-inch rainstorm.



## TREE-MENDOUS TREES

Grade level: All Topics: Trees, wood products

Students will learn the many benefits that trees provide especially in our local area.

# TREE ID

Grade level: 3-12



BURSTING

BUDS

Topics: Trees Students will learn how to identify different trees based on leaves, shape, and other characteristics. Students will get to know some of the most common trees in our area.

Grade level: K-5 Topics: Trees, life cycles, seasons

#### Students investigate where deciduous leaves come from and how the seasons influence tree buds.



#### POWERFUL POLLINATORS

Grade level: All Topics: Habitat, pollinators

Students will learn about the diversity of pollinators, the services they provide, and the perils they face.

#### EDIBLE SOIL PROFILE

Grade level: K-6 Topics: Soil, weathering



Learn the importance of soil, soil layers, and how soil forms all while creating a delicious snack!



#### WHAT ELSE?

Grade level: All Topics: Many

Are you and your students interested in another natural resource topic you don't see listed? Let us know and we can work with you!

# **ENVIROTHON©**





Envirothon© is a national environmental education program for high school students in grades 9-12. It combines classroom learning with outdoor activities. Through Envirothon, students learn about natural resources based on the annual theme and develop an understanding of competitive teamwork. They will also gain valuable exposure to a range of disciplines while exploring possible career paths.

Teams of students compete by visiting 5 learning stations and taking a 20point exam on an environmental topic. The topics are: Aquatics, Forestry. Soils. Wildlife. Current Events.

Regional competitions are hosted and managed by local Soil & Water Conservation District staff. Student teams from area counties compete at the SWCD Area 3 Envirothon in early May annually at the Cloquet Forestry Center. Winners advance to statewide and possibly national competitions.

For more information, contact our Community Conservationist, Becca Reiss at becca@nslswcd.org or 218-288-6143. More information on state Envirothon can be found at: https://www.maswcd.org/envirothon.htm.

The 2023 Area 3 in-person competition is on **Monday**, **May 1** at the Cloquet Forestry Center. This year's theme is "Adapting to Climate Change in Minnesota." The State Envirothon will be in Fergus Falls on Monday, May 15.



North St. Louis SWCD annually sponsors a conservation-themed poster contest for students in grades K-6.

The local poster contest focuses on soil, water, or natural resources based on the National Association of Conservation Districts national theme. 2023's theme in:

#### "One Water"

Poster finalists will be selected by the North St. Louis SWCD board and staff. They will be voted on at the Iron Range Earth Fest in April to determine the top three winners in Grades K-1, 2-3, and 4-6. Deadline to submit is Friday, April 7, 2023. For rules, prizes, and details of the poster contest visit: www.nslswcd.org/education.







Do your students want to make a difference? Plan a shoreline clean, educate others in their community about stormwater, or plant a pollinator garden? We can help!

We can provide guidance, resources, and materials for youth to make a difference in their community. We have materials to paint storm drains, pick up litter, and plant. Reach out to our Community Conservationist if interested.









We table at local education and outreach events such as the north St. Louis County Fair, Iron Range STEAM, and Iron Range Earth Festival as well as other local outreach events. Let us know if you are interested in us having a table at your event.





## REQUEST A RESOURCE

Want to borrow equipment, specimen examples, or identification guides to investigate natural resources with your students? Reach out and we we can lend out available resources for a couple weeks at a time.







# CAREER EXPLORATION

Do you have a career class or career exploration program for your students? We are happy to table at events, present, and arrange job shadowing.

#### FOR MORE INFORMATION CONTACT OUR COMMUNITY CONSERVATIONIST: BECCA REISS



www.nslswcd.org/education





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