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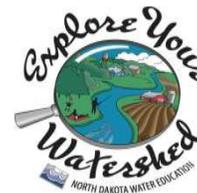


Coordinated by:

Connecting our community safely to the Red River through education, stewardship, and engagement for 35 years.



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Activities, Presentations

Thanks to the following organizations and activity leaders who are

Blue River

Simulate the movement of water through the Red River watershed.

Led by Annie Wodarek; David Marquardt, ND Project WET Facilitator; Travis Seaborn, NDSU.

Tributary – *a river flowing into a larger river*

Snowpack – *a mass of snow on the ground that is compressed and hardened by its weight*

Watershed – *the land surface that water flows across or under on its way to a stream, river or lake*

Streamflow – *volume of water that moves over a specific point over a fixed period of time*

H2O Olympics

Compete in games to investigate the physical properties of water.

Led by Mark Jensen, Anne Walker, Concordia College; David Marquardt, ND Project WET Facilitator.

Cohesion – *attraction of water molecules to themselves*

Adhesion – *attraction of water molecules to other materials*

Surface tension – *cohesion causes water surface to behave like a thin membrane/skin i.e. water strider insect*

Capillary action – *movement of water within the spaces of porous material due to the forces of adhesion, cohesion, and surface tension*

Activity Name _____

What did you do during this activity?

What new words did you learn?

List two new things that you learned:

What would you like to know more about?

ers and Vocabulary

teaching youth about the many aspects and importance of water.

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Incredible Journey

Role-play the effects of the water cycle on water quality.

Led by Alyssa Hauser-Johnson, International Water Institute; and Shannon Thornton.

Evaporation (and transpiration) – *When water changes from a liquid to a vapor*

Condensation – *The opposite of evaporation, a process where vapor becomes liquid*

Precipitation – *water falling, in liquid or solid state, from the atmosphere to the earth (rain, hail, snow)*

Invaders!

Participate in a game that simulates competition for habitat and resources while learning about aquatic invasive species.

Led by Matt Schlauderaff, Buffalo-Red River Watershed District; Clay County Soil & Water Conservation District; Mike Bush, Concordia College.

Invasive species – *not native to an area and whose introduction has a negative economic, human health or ecological impact*

Aquatic invasive species – *invasive species that lives in water; i.e. Zebra mussels, silver carp, rusty crayfish, Eurasian milfoil, curly leaf pondweed*

The Life Box

Discover four essential factors needed to sustain life.

Led by Graeme Wyllie, Concordia College and Jillian Patrie, Clay County | University of Minnesota Extension.

Organic matter – *matter from once living things, residue from dead plants and animals; i.e. compost*

Transpiration – *process where moisture is carried through plants from roots to small pores on underside of leaves where it changes to vapor and is released into the atmosphere; essentially evaporation of water from plant leaves*

Respiration – *process of inhaling and exhaling;*

Photosynthesis – *process that converts carbon dioxide and water into sugars using the energy from sunlight; releasing oxygen as a waste product*

Mallard Migration Game: Healthy Wetlands

Participate in a game that simulates ducks migrating utilizing wetlands as a safe haven that provide food, water, and nesting grounds.

Led by Kelly Tebben, Audubon Great Plains.

Migration *seasonal movement of animals from one region to another.*

Flyway - *the entire area of land and air covered by a migratory bird during migration*

Wetland - *an area where water covers the soil, or is present either at or near the surface of the soil - it can be all year or varying periods of time during the year*

Nursery habitat—*an area that provides important resources like shelter, food, and protection for young animals.*

Prairie Pothole Region - *a vast landscape formed by melting glaciers in the northern Great Plains and Canadian Prairies that has many shallow depression wetlands called potholes*

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River Crime Lab

Examining evidence and to develop theories; develop a sense of citizenship and community.

Led by Mara DeRung, Clay County; Christine Goldader and Peggy Amsbaugh, City of Fargo.

Nonpoint source pollution – *pollution discharged over large area, not a specific location; i.e. sediment from construction areas, excess fertilizer from farm fields, etc.*

Outfall – *a place where a sewer pipe empties into the sea, river or lake*

Storm drain – *drain system designed to carry away excess water from hard surfaces during rain events*

Investigate – *study or research a topic to find the facts*

River Meanders

Learn how sediment, plants, and flowing water interact to form stream/river channels and help form our topography.

Led by Amy Cole, Eric Dahl, Jeff Miller and Tony Peterson, Cass County Soil Conservation District.

Riparian – *the land on either side of river/stream including the river banks*

Meander – *a winding curve or bend in river*

Inside bend – *the inside bend of river where flow is slower and sediment accumulates*

Outside bend – *the outside bend of a river where flow is faster and sediment erodes*

Floodplain – *land adjacent to river or stream that is naturally subject to flooding*

Headwaters – *where a river/stream begins, typically high in the mountains or a body of water*

Erosion – *the process of wearing away by water, wind or other natural agents*

Mouth – *the end of a river/stream, typically opens into a body of water*

Stream Sense

Observe the river, learning there is more to flowing water

Led by Julie Goehring and Stacey Lundberg; Jess Wagner, KLJ; Nicole Lee, Red River Zoo; Cassie Setter and Julie Ly, Red River Basin Commission.

Senses – *using sight, smell, hearing, taste, and touch*

Observation – *the act of noticing something through careful and direct attention*

Sum of the Parts

Demonstrate how everyone contributes to the pollution of a river as it flows through a watershed and recognize that through individual group action, the amount of pollution can be reduced.

Led by Dianne Ornberg, ND Project WET facilitator.

Point source pollution – *water pollution coming from a single point; i.e. sewage outflow pipe*

Nonpoint source pollution – *pollution discharged over large area, not a specific location; i.e. sediment from construction areas, excess fertilizer from farm fields, etc.*

Steward – *a person who uses our natural resources through conservation and sustainable practices*

Trees...The Water Keepers

Learn how trees help the Red River and discover tree characteristics.

Led by Amanda Lewis, Clay Soil & Water Conservation District.

Riparian – *the land on either side of river/stream including the river banks*

Nonpoint source pollution – *pollution discharged from a wide land area, not from a specific location; i.e. excess fertilizer on farm fields, construction zones, etc.*

Tree ring – *each ring around the center of a tree represents one year of growth*

Water Treatment Officer

Simulate the treatment process water goes through before it flows from our tap.

Led by Moorhead Public Service; Richard Wienhold; City of Fargo.

Sedimentation - *Process in which solid particles settle out of water being treated, takes place in a large basin or clarifier.*

Softening - *Process by which hardness causing minerals (calcium and magnesium) are removed by precipitation, ion-exchange, or reverse osmosis.*

Filtration - *Removal of particles from the water utilizing physical and chemical processes such as sedimentation and straining.*

Disinfection - *Process designed to kill or inactivate most microorganisms in water, including essentially all pathogenic bacteria. Ozone and chlorine are commonly used disinfectants.*

Would you Drink This Water

Can senses determine water quality?

Led by Leslie Hagemeister, ND Project WET facilitators.

Nonrenewable - *a resource that is used faster than it is re-filled; i.e. coal, oil, etc.*

Senses – *touch, hear, sight, smell, taste*

Pollution – *harmful or toxic substance being introduced into an environment*

Precipitation - *water falling, in liquid or solid state, from the atmosphere to the earth (rain, hail, snow)*