

Watershed Web of Life

AN INTERACTIVE GROUP ACTIVITY

“When we try to pick out anything by itself, we find it hitched to everything else in the Universe.”

—John Muir

Purpose:

Water defines us. It connects us with nature and with each other.

This activity is to encourage students to understand the connection between all things in the Comox Lake watershed. It demonstrates that small behavior changes can contribute to the wellness of our water source to ensure that we continue to have safe water to drink.

Materials:

- Eco-system card set, sorted into THREATS, SOLUTIONS and ECOSYSTEM piles
- Ball of yarn
- Blank home challenge handout
- Clear glass filled with water
- A large open area with enough room for your group to form a circle.

Optional: outdoor space. The activity can be done outside in a quiet location.

Best Practice:

Group size 15 - 30 students

Grade K - 7

Two facilitators to introduce threats and solutions



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ACTIVITY WEB OF LIFE

Introduction:

Launching the Inquiry

Take a sip from your clear glass of water. Relish this sip, the flavour, then marvel at how this water came to be in your glass. Ask the group, “What allows me to have this safe water I can drink?” “What do you use water for today?”

Create some fun with a few water jokes or riddles

Examples:

Where can you find an ocean with no water? What do mermaids sleep on?

– On a map!

– Water beds!

What runs, but never walks?

– Water

What kind of hair did the ocean have?

– Wavy!

What did the ocean say to the beach?

– Nothing, it just waved!

What happens if you throw a white hat into the Black Sea?

– It gets wet!

Introduce the Comox Lake Watershed

Perhaps your class is using the Connected by Water Inquiry Unit Kit found in SD71 Learning Resource Center, or you have this large slice map of the Comox Lake on display. This map can be found here: comoxvalleyrd.ca/watershed/teacherresources

Identify the Comox Lake

Identify the general area your group lives

Describe what is a watershed and how it works. Key points for your activity.

- Watersheds are areas of land where all water travels to the same place. For most of the Comox Valley’s drinking water, that destination is Comox Lake.
- A watershed is typically made up of an interconnected network of streams, wetlands, lakes and ponds. Streams near hills or mountains at the top of the watershed are called headwater streams.
- Since water can only flow downhill, the boundaries of a watershed are defined by topography, which is the shape of the land. The boundaries of watersheds are high points or ridges of land that water drains away from in different directions. Watersheds often cross ownership and jurisdictional boundaries, which presents both challenges and opportunities for management
- Our watershed is home to many species and habitat corridors that connect the Salish Sea to higher elevation areas. Healthy watershed ecosystems allow wildlife and species at risk to migrate and adapt to climate and landscape-scale changes.
- There is a Comox Lake Watershed Protection Plan (CVRD, 2016) that identifies 29 hazards that can put our drinking water at risk, some of which are used in the activity.
- The Comox Lake Watershed supplies drinking water to over 45,000 people living in the Comox Valley.

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Watershed Web of Life Game

Set-Up

1. Invite students to stand in a large circle
2. Hand out a variety of the ecosystem cards. Everyone in the group receives a card.
TIP: Make sure you have handed out the River, Ocean and Lake cards and they are placed across from each other in the group.
3. Have students say what card they hold so that others have an idea of what is in the circle. Ask students to hold the card so others can see it.
4. Hand the ball of yarn to the student who has the river card.
5. Demonstrate how to hold the yarn so that the yarn stays tight and the circle stays in place.

Making Connections

6. Have the river card holder start by holding the end of the yarn and rolling the ball along the floor to someone else in the circle whose card they feel are related to.
TIP: Remind each student to continue to hold onto their string and to keep a small amount of tension on it.
7. Ask how they are connected. Invite other ideas from the class to contribute.
8. Have that second person roll the ball along the floor to another classmate, repeating the discussion about connection and passing the ball until everyone is included and a web is formed.
TIP: Crowding may happen as connections are made. Ask students to take a step back to make room for their new connections. You may also have to take charge of moving the ball around as it gets more crowded - just have students direct where they want it to go to, and hand it to the next person. For younger students, you may want to take charge of moving the ball of yarn around entirely.
9. Have brief discussion marveling at the web and its connections.

Enter the Threats

10. Facilitator introduces a threat card next to an ecosystem card that could be impacted by the threat (i.e. oil leak card next to river card). Speak about why this would be a problem.
TIP: Facilitator can introduce up to three or four threats at once to collapse the entire web.
11. Have the student holding the river card sit down while still holding their yarn. 'dead'.
12. Next have everyone who's piece of string is connected to river sit down, and then everyone connected to this next group sit down and so forth until the web has collapsed.
13. Reflect on this impact.

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Enter the Solutions

14. Introduce a solution card next to a threat card. This will cancel the threat.
15. That part of the ecosystem can now stand up.
16. Parts connected to them can now stand up and so on.
17. Reflect on this impact.

Clean Up

18. Ask group to sit and lay the yarn web on the ground.
19. One person can roll up the yarn and another person can collect the cards
20. Re-sort cards into Ecosystem, Threat and Solution decks

Observing and Supporting Learning

This tangled ball of twine has formed a web, just like the complicated web of life in an ecosystem that deeply relies on a proper functioning watershed and enough water to go around. The web shows how closely organisms in an ecosystem interact with one another. Anything that happens to part of the web has an effect on the whole system.

Prompting Questions for Inquiry:

What did you notice?

How do you feel about this?

What allows me to have safe water I can drink?

Reflect on the quote: “When we try to pick out anything by itself, we find it hitched to everything else in the Universe.”

Additional Inquiry Opportunities

After discussion, ask the group what are some things that you can do differently to protect our water and the watershed? What can you do at home to protect and conserve watershed?

Using the worksheet attached - Home Challenge: How to be Water Wise! Write out a personal pledge to take action at home or school to commit to watershed protection and water conservation.

Watershed Web of Life

CONNECTED BY WATER WATERSHED WEB OF LIFE ACTIVITY CARDS

Please use these cards. Print-off and cut-up a set for your classroom. A coloured pictured version can be purchased and printed through the SD71 Print Shop at printshop@sd71.bc.ca or 250-338-7926 x 226

ECOSYSTEM cards

Lake	River	Stream
Ocean	Beach	Salmon
Worms	Birds	Snake
Frog	Bee	Grass
Mouse	Butterfly	Soil
Rain	Leaf (Dead)	Leaf (Living)
Deer	Sun	Ant
Flower	Bear	Bird
Tree	Duck	

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THREAT cards

Oil Leak	Camping	Off Road
Swimming	Sunscreen	Leave Sprinkler On
Watering Lawn	Littering	Wildfire
Drought	Glacial Retreat	

SOLUTION cards

Stay on Road or Trail	Wear a Hat	Camp in Designated Areas
Hand Water Garden	Don't Pee in the Water	Don't Poop in the Woods
Use Proper Fire Rings	Have a Brown Lawn	Don't Litter
Be Careful with Using Water	Use Cars Less	Fix Your Car