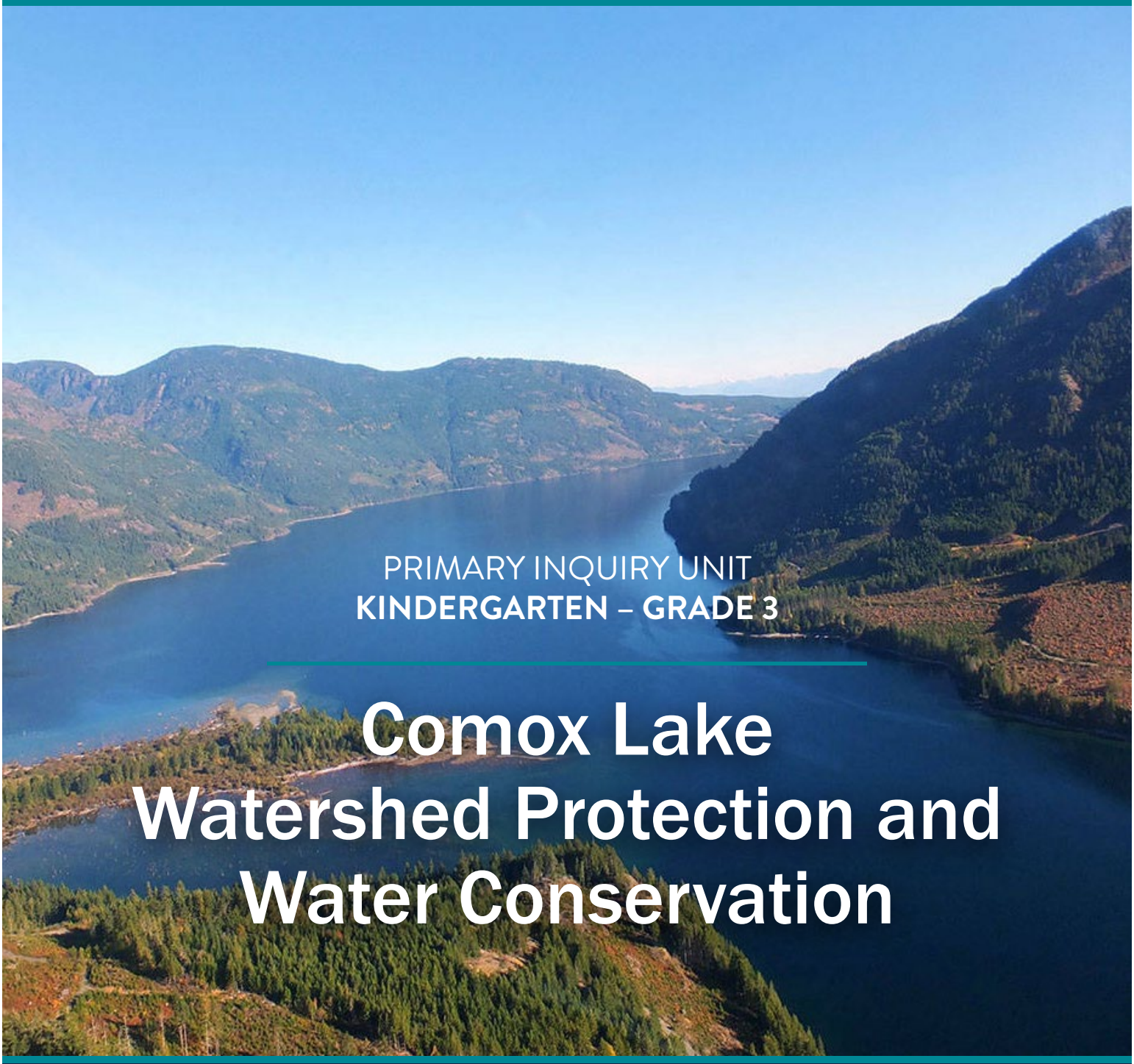
# Connected by Water

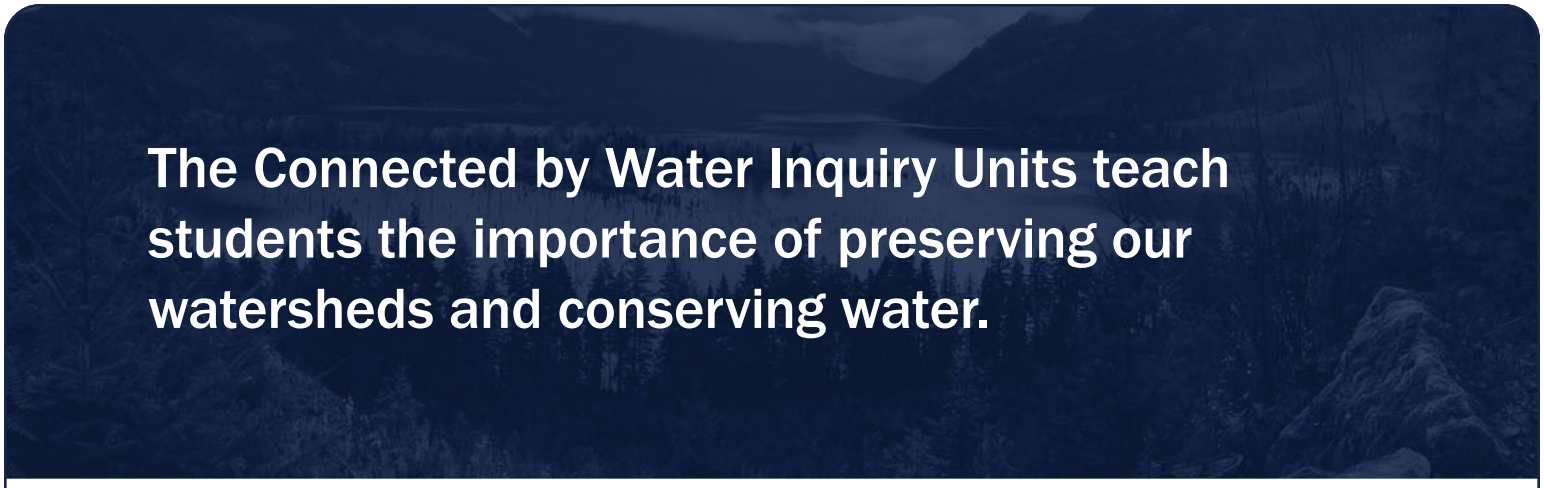


PRIMARY INQUIRY UNIT
**KINDERGARTEN – GRADE 3**

# Comox Lake Watershed Protection and Water Conservation

FOR MORE INFORMATION, VISIT:
**WWW.COMOXVALLEYRD.CA/WATERSHED**

Comox Valley
REGIONAL DISTRICT



# The Connected by Water Inquiry Units teach students the importance of preserving our watersheds and conserving water.

High quality drinking water is produced by a healthy, properly functioning ecosystem. To have healthy water you need healthy ecosystems. Protecting our drinking water requires two important things - conserving it and protecting the source. The Comox Valley Regional District (CVRD) has developed these materials to support students in learning about their connections to the Comox Lake watershed, learning what makes a watershed healthy, and learning how to conserve water by using it efficiently at home. Our watershed is the entire area of land in which our drinking water flows, including streams, rivers, lakes, groundwater and shorelines. See **www.comoxvalleyrd.ca/watershed** for a more detail about the Comox Lake watershed.

The following resources are informed by the Watershed Protection Plan, and the Connected by Water project vision, all within the framework of the British Columbia Ministry of Education Curriculum. They are designed to support answering the driving question: **What allows me to have safe water that I can drink?**

An additional Connected by Water inquiry unit is available for intermediate grades (Grades 4-7), High School, (Grades 8-9) as well as a Water Treatment Inquiry Unit (Grades 6-9).

More information is available at:
**https://www.comoxvalleyrd.ca/watershed/resources-educators**

Optional learning kits are available at the SD71 Learning Resources Centre.

The project team would like to thank School District #71's Learning Resource Centre, Indigenous Education Team, Director of Instructional Services Geoff Manning, as well as the long list of Local environmental educators listed in the Additional Resources appendix. These educators including SD#71 teachers provided feedback and tested the materials. The Comox Valley Regional District provided funding and project direction.

These materials were developed by Christina (Tina) Willard-Stepan and Angela Holmes, Curriculum Development and Delivery Team of Connected By Water.

Together we are creating a legacy of acting together to ensure the health and long-term viability of our communities through using our drinking water wisely and protecting the source of our drinking water.

We respectfully acknowledge that we live, work, learn and play on the unceded traditional territory of the K'omoks First Nation.

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# Introduction to Educators

## HOW TO USE THIS INQUIRY UNIT

Welcome to the Connected by Water Teacher Resource!

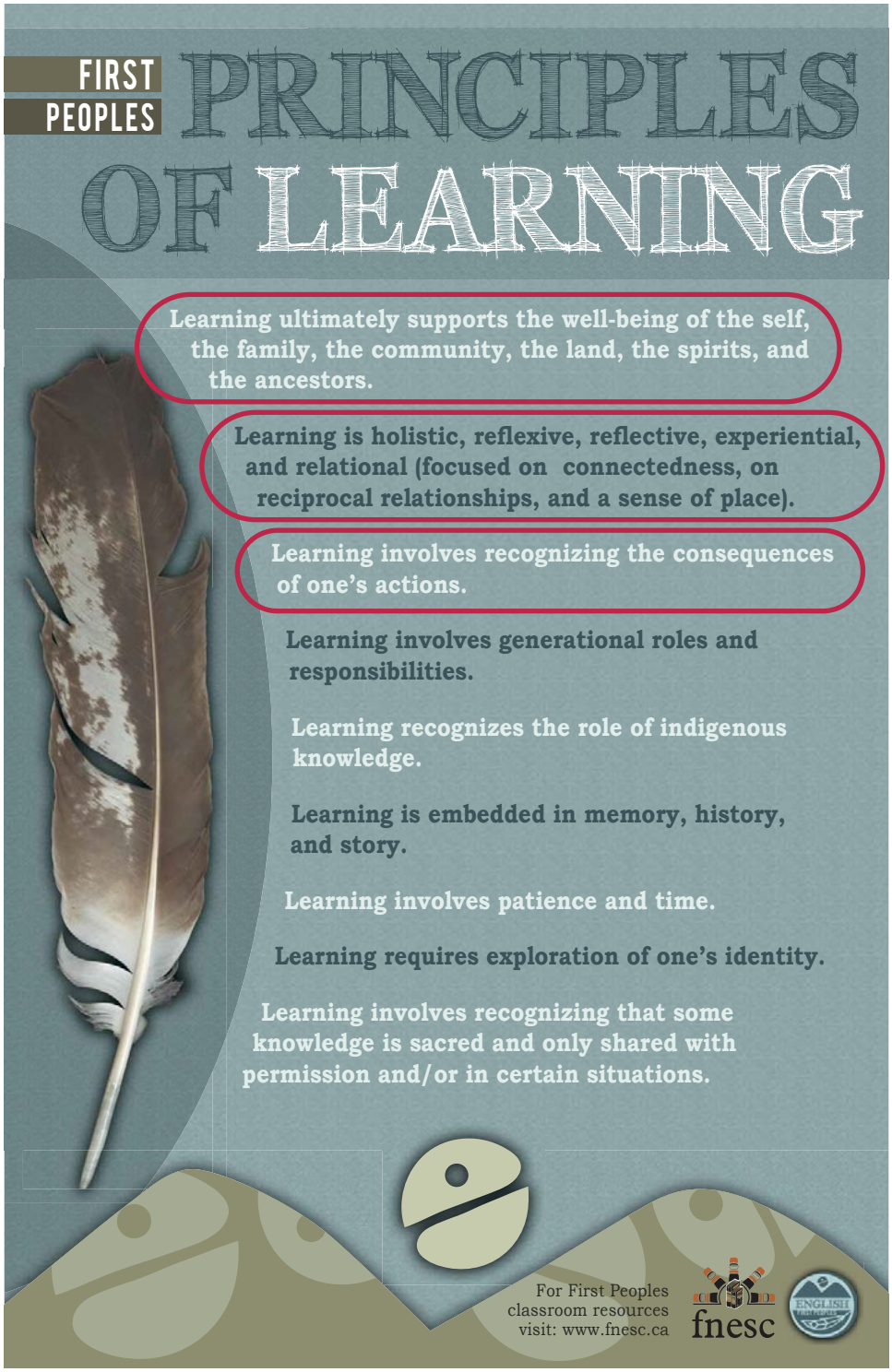
This Inquiry Unit can be used in its entirety, or each activity within the unit can stand alone. The end of this inquiry unit includes a very robust list of additional links and resources connecting you to many ideas and projects in the community, including options for field trips.

Consider integrating the unit while your school is working on social themes such as sustainability, Earth Day, or social responsibility.

These materials can be downloaded, and there are also physical inquiry kits available to book for School District #71 teachers at the Learning Resource Centre, which include copies of the books referred to within the lessons, as well as other supporting materials. There is a primary inquiry kit, intermediate inquiry kit, a High School inquiry kit, and a Water Treatment Inquiry for grades 8-9.

**www.comoxvalleyrd.ca/watershed/teacherresources**

The Connected by Water Inquiry Unit is most aligned with the three circled First Peoples Principles of Learning.



# This Inquiry Unit and British Columbia's Curriculum

## CORE COMPETENCIES

The BC Ministry of Education explains that Core Competencies, literacy and numeracy, and essential concepts and content are the foundations of the curriculum. Students will know, do and understand "Big Ideas" and what to do with this knowledge as they move from Kindergarten to Grade 12. Core competencies are sets of intellectual, personal, and social proficiencies that all students need to develop in order to engage in deep learning and lifelong learning.

**Watch this video for a refresher on the Core Competencies.**

An aim of the Connected by Water Inquiry Units is to teach students the importance of preserving our watersheds and conserving water. Tying the inquiry units to the core competencies allows students to gain an awareness and understanding of their watershed, take action to conserve and protect their watershed, and learn to use drinking water wisely. Listed below are some of the core competencies and curricular connections that are interwoven and interrelated in the Connected by Water Inquiry Units.

## This Inquiry Unit and British Columbia's Curriculum

### CORE COMPETENCIES


https://curriculum.gov.bc.ca/competencies

## This Inquiry Unit and British Columbia's Curriculum

### SCIENCE

| KINDERGARTEN | |
|---|---|
| **BIG IDEA** | Daily and seasonal changes affect all living things |
| **CURRICULAR COMPETENCIES** | **Questioning and Predicting:**<br>• Demonstrate curiosity and a sense of wonder about the world<br>• Observe objects and events in familiar contexts<br>• Ask simple questions about familiar objects and events<br>**Processing and Analyzing Data and Information**<br>• Experience and interpret the local environment<br>• Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge<br>• Discuss observations<br>• Represent observations and ideas by drawing charts and simple pictographs |

| GRADE 1 | |
|---|---|
| **BIG IDEA** | Observable patterns and cycles occur in the local sky and landscape |
| **CURRICULAR COMPETENCIES** | **Questioning and Predicting:**<br>• Demonstrate curiosity and a sense of wonder about the world<br>• Observe objects and events in familiar contexts<br>• Ask questions about familiar objects and events<br>• Make simple predictions about familiar objects and events<br>**Processing and Analyzing Data and Information**<br>• Experience and interpret the local environment<br>• Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge<br>**Evaluating**<br>• Consider some environmental consequences of their actions<br>**Communicating**<br>• Communicate observations and ideas using oral or written language, drawing, or role-play<br>• Express and reflect on personal experiences of place |

## SCIENCE CONTINUED

| GRADE 2 | |
|---|---|
| **BIG IDEA** | Water is essential to all living things, and it cycles through the environment |
| **CURRICULAR COMPETENCIES** | **Questioning and Predicting:**<br>• Demonstrate curiosity and a sense of wonder about the world<br>• Observe objects and events in familiar contexts<br>• Ask simple questions about familiar objects and events<br>**Processing and Analyzing Data and Information**<br>• Experience and interpret the local environment<br>• Recognize First Peoples stories (including oral and written narratives), songs, and art, as ways to share knowledge<br>**Evaluating**<br>• Compare observations with those of others<br>• Consider some environmental consequences of their actions<br>**Applying and Innovating**<br>• Take part in caring for self, family, classroom and school through personal approaches<br>• Transfer and apply learning to new situations<br>• Generate and introduce new or refined ideas when problem solving<br>**Communicating**<br>• Communicate observations and ideas using oral or written language, drawing, or role-play<br>• Express and reflect on personal experiences of place |
| **CONTENT** | • Water sources including local watersheds<br>• Water conservation<br>• The water cycle<br>• Local First People's knowledge of water:<br>• Water cycles<br>• Conservation<br>• Connection to other systems |

| GRADE 3 | |
|---|---|
| **BIG IDEA** | Wind, water, and ice change the shape of the land. |
| **CURRICULAR COMPETENCIES** | **Questioning and Predicting:**<br>• Demonstrate curiosity and a sense of wonder about the world<br>• Observe objects and events in familiar contexts<br>• Identify questions about familiar objects and events that can be investigated scientifically<br>• Make predictions based on prior knowledge<br>**Processing and Analyzing Data and Information**<br>• Experience and interpret the local environment<br>• Identify First Peoples perspectives and knowledge as sources of information<br>**Applying and Innovating**<br>• Contribute to care for self, others, school, and neighbourhood through personal or collaborative approaches<br>• Cooperatively design projects<br>• Transfer and apply learning to new situations<br>**Communicating**<br>• Represent and communicate ideas and findings in a variety of ways, such as diagrams and simple reports, using digital technologies as appropriate<br>• Express and reflect on personal or shared experiences of place |
| **CONTENT** | • Major local landforms<br>• Local First Peoples knowledge of local landforms<br>• Observable changes in the local environment caused by erosion and deposition by wind, water, and ice |

## This Inquiry Unit and British Columbia's Curriculum

### SOCIAL STUDIES

| KINDERGARTEN | |
|---|---|
| **BIG IDEA** | • Rights, roles, and responsibilities shape our identity and help us build healthy relationships with others. |

| GRADE 1 | |
|---|---|
| **BIG IDEA** | • We shape the local environment, and the local environment shapes who we are and how we live<br>• Our rights, roles, and responsibilities are important for building strong communities<br>• Healthy communities recognize and respect the diversity of individuals and care for the local environment. |

| GRADE 2 | |
|---|---|
| **BIG IDEA** | • Local actions have global consequences, and global actions have local consequences.<br>• Individuals have rights and responsibilities as global citizens |

### ARTS EDUCATION

| KINDERGARTEN | |
|---|---|
| **BIG IDEA** | • Engagement in the arts creates opportunities for inquiry through purposeful play. |

| GRADE 1 | |
|---|---|
| **BIG IDEA** | • Engagement in the arts creates opportunities for inquiry through purposeful play. |

| GRADE 2 | |
|---|---|
| **BIG IDEA** | • I nquiry through the arts creates opportunities for risk taking. |

| GRADE 3 | |
|---|---|
| **BIG IDEA** | • The arts connect our experiences to the experiences of others. |

### ENGLISH LANGUAGE ARTS

| KINDERGARTEN | |
|---|---|
| **BIG IDEA** | • Stories and other texts help us learn about ourselves and our families<br>• Stories and other texts can be shared through pictures and words<br>• Through listening and speaking, we connect with others and share our world<br>• Curiosity and wonder lead us to new discoveries about ourselves and the world around us |

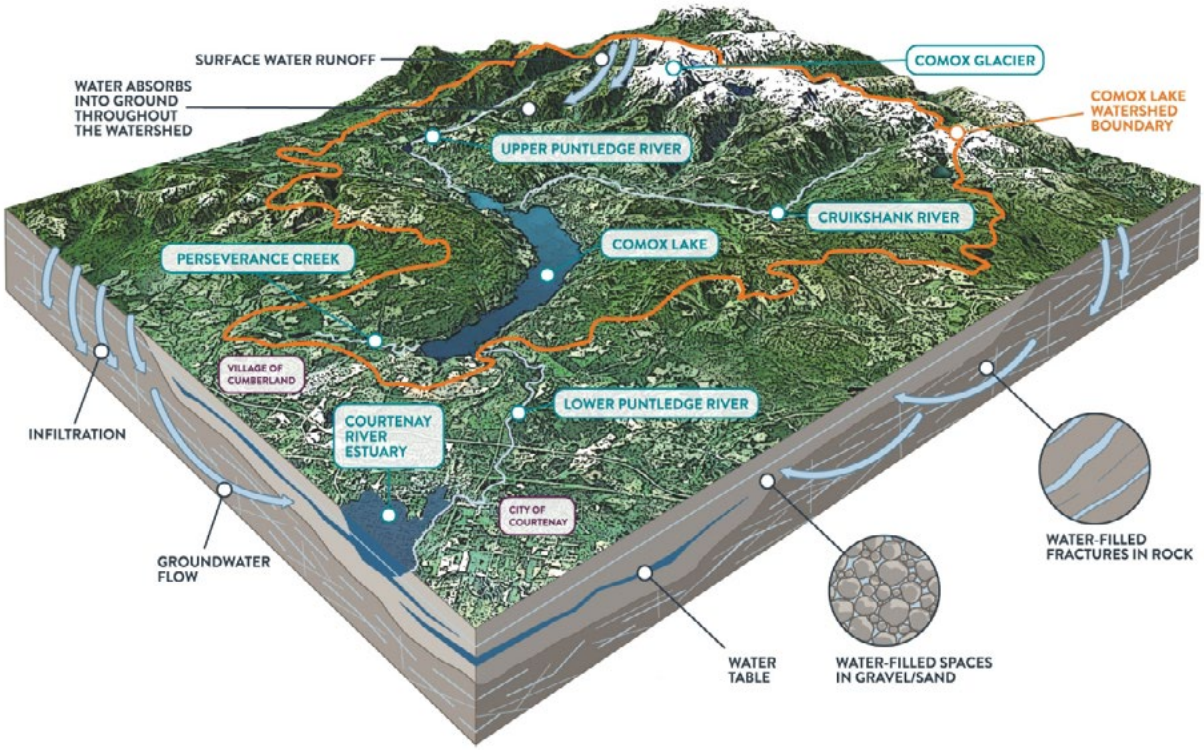
| GRADE 1 | |
|---|---|
| **BIG IDEA** | • Stories and other texts help us learn about ourselves and our families<br>• Stories and other texts can be shared through pictures and words<br>• Through listening and speaking, we connect with others and share our world<br>• Curiosity and wonder lead us to new discoveries about ourselves and the world around us |

| GRADE 2 | |
|---|---|
| **BIG IDEA** | • Stories and other texts connect us to ourselves, our families, and our communities<br>• Through listening and speaking, we connect with others and share our world<br>• Curiosity and wonder lead us to new discoveries about ourselves and the world around us |

| GRADE 3 | |
|---|---|
| **BIG IDEA** | • Stories and other texts help us learn about ourselves,our families, and our communities<br>• Curiosity and wonder lead us to new discoveries about ourselves and the world around us |

# The Comox Lake Watershed

The Comox Lake watershed is located in the traditional territory of the K'ómoks First Nation and provides drinking water for the Comox Valley water system. This watershed is an interconnected system of mountains, forests, rivers, creeks and streams and an ecological corridor that links Vancouver Island mountains with the Salish Sea.

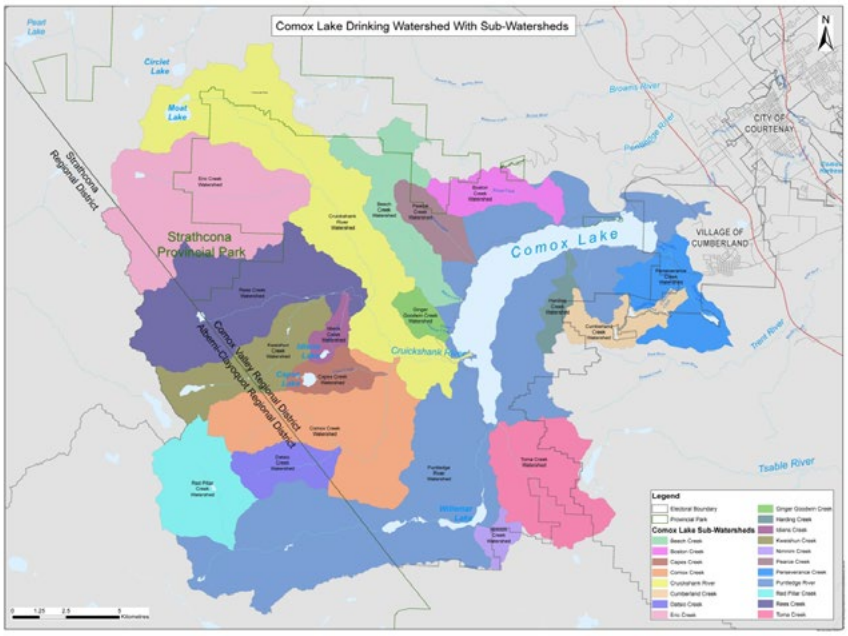



www.comoxvalleyrd.ca/watershed

The watershed is 461 square kilometres in size and reaches to the top of the Comox Glacier and the mountains surrounding Comox Lake. Within the Comox Lake watershed there are multiple sub-basins named for the creeks and rivers that flow through them. These include the Upper Puntledge, Cruikshank, Boston Creek and Perseverance Creek sub-basins. Much of the water that hits the ground as snow or rain anywhere in the Comox Lake watershed eventually flows into Comox Lake.

## The Comox Lake Watershed

The Comox Lake watershed has been managed for multiple values including mining, logging and recreation activities for over 140 years. While coal mining operations ended in the 1930's, a large portion of the watershed is still currently privately owned and managed for timber supply. Comox Lake itself is a reservoir controlled by BC Hydro for power generation. Swimming, boating and camping also takes place but public access is limited to specific sites at the east end of the lake.




www.comoxvalleyrd.ca/watershed

The watershed also provides important habitat for fish and wildlife including species at risk like the Roosevelt elk, little brown bat and northern red-legged frog. Comox Lake flows into the Puntledge River providing stream flows that support many species of salmon.

Other landowners within the watershed include the Village of Cumberland (Perseverance Creek sub-basin, Cumberland Lake Park), Comox Lake Land Corporation (cabin owners at east end of lake), the Comox Valley Regional District (Coal Beach), the Courtenay and District Fish and Game Society and BC Parks (Strathcona Park and Comox Lake Bluffs Ecological Reserve).

The Comox Lake watershed is the source of drinking water for over 49,000 residents of the Comox Valley through the Comox Valley Water System and the Cumberland Water System. Although the Comox Valley Regional District (CVRD) is constructing a new water treatment plant, the cost of treating our drinking water will be directly related to the quality of water that is drawn from Comox Lake.

View this short video **Watershed for Beginners: How to Care for Comox Lake**.

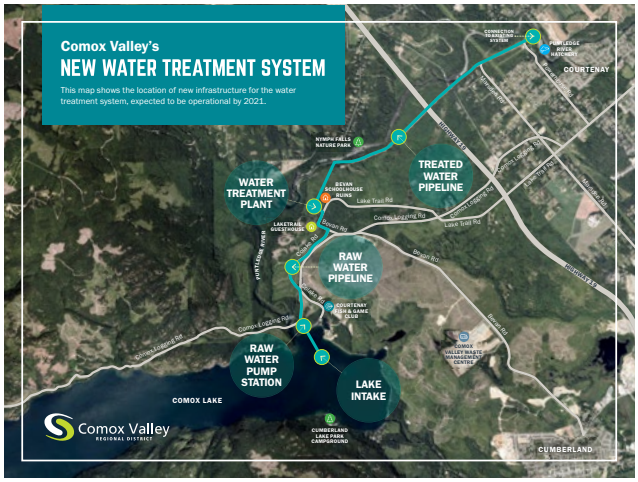
## The Comox Lake Watershed

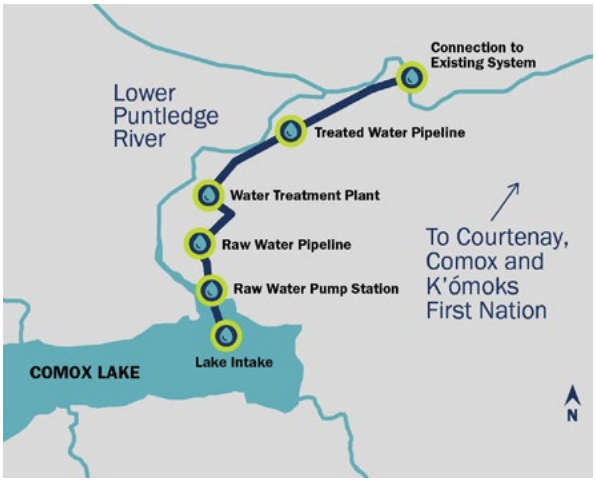
**The following image includes themes around what makes a healthy, climate resilient watershed: functioning creeks and streams, ecosystem health , fire protection, clean water, water conservation, and connection to place. The activities following will help you to generate meaningful conversations with your participants in keeping with these themes.**

## Water Treatment

### New Water Treatment Facility Complete, Providing High Quality Drinking Water to Comox Valley Residents.

Fresh, filtered and fully disinfected drinking water is now flowing to 50,000 residents in the Comox Valley – an achievement celebrated with an event on September 21, 2021 at the Comox Valley Regional District's new Water Treatment Facility on Lake Trail Road.




## ABOUT THE PROJECT

Construction of the Comox Valley Water Treatment Project is now complete. The new system, which began construction in fall 2019, now provides a safe, reliable source of drinking water that meets provincial surface water treatment objectives guidelines. The completion of this system means:

- Elimination the need for turbidity-related boil water notices.
- Removal the risk of viruses and bacteria in our drinking water
- A secure supply of reliable, high quality drinking water for decades to come

# Introduction to the Inquiry

An inquiry unit is often launched with an invitation or a provocation. Students' questions about the phenomenon they are experiencing through their senses are placed at the center of the learning.

In our rainy "wet coast" we seem to have lots of water. It is hard to imagine that the truth is we do not. If all the water on Earth is connected by the water cycle, we essentially have one big shared source of water. Every living organism on the planet needs water. That is a lot of life to support!

All water on Earth is connected - let's call it a global well. This global well includes oceans, icecaps and glaciers, groundwater, lakes, inland saltwater seas, moisture in the soil, water in the atmosphere and rivers. This global well feeds our local Comox Lake watershed, and all other watersheds/water sources that all people, plants and animals use for daily activity and their survival.

**Driving question: What allows me to have safe water that I can drink?**

# Launching The Inquiry

These First Nations stories takes a very broad perspective on the importance of water and how it connects us. The first is an origin story of how North America came to be, and the second focusses on a more local landmark – the Comox Glacier.

ACTIVITY:

## CREATION STORY - THE LEGEND OF TURTLE ISLAND

First Nation Creation stories often depict water, as does the story, "Turtle Island"). Many Nations

believe that they live on Turtle Island, which was formed on the back of a Turtle, and is what we call North America today.

View the following video telling of the **Turtle Island Legend** or read aloud the story (see Appendix 1)

Have your students view a world globe. On the globe, if you look carefully you can see the turtle's arms, legs and head forming the North American continent. Pass around the globe and talk about how this legend and story are amazing when you consider that First Peoples had no way of knowing that North America resembled a turtle when it is viewed from outer space.

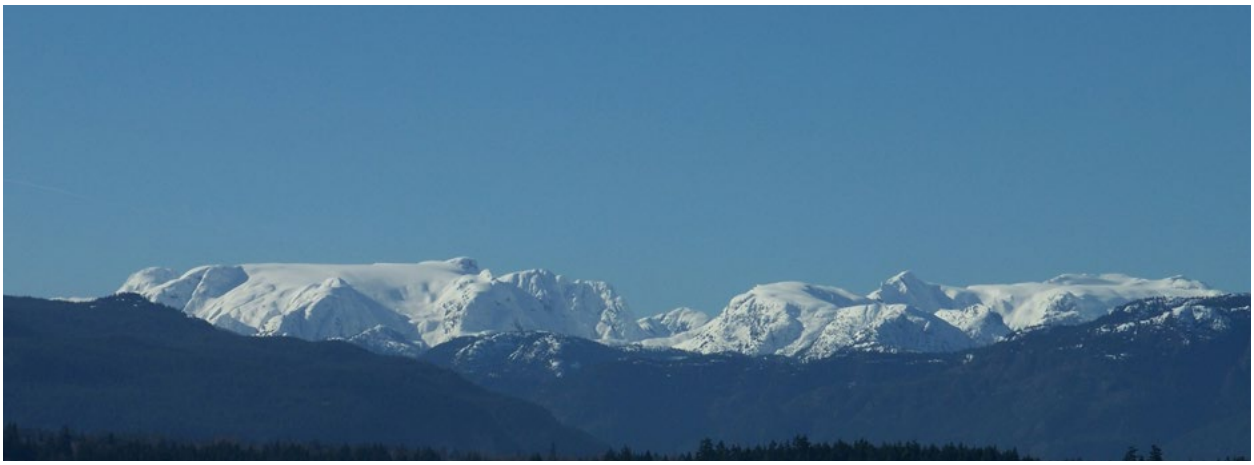
**Observing and Supporting Learning**

**Prompting Questions for Inquiry:**

- How does water play a role in the story?
- Is water important? To whom? Why?
- Is land important too?
- How does it all work together?

## Launching The Inquiry

ACTIVITY:
**THE LEGEND OF QUENEESH**



Read aloud the Local K'omoks Nation Legend of Queneesh with the class (see Appendix 2) or show the student-made video of the storytelling from this link:

### Legend of Queneesh

**Observing and Supporting Learning**

**Prompting Questions for Inquiry:**
- What do you know about the Comox Glacier?
- How is water important in the story?
- How do they use resources from the watershed to help them?

# What allows me to have safe water that I can drink?

ACTIVITY:
**DRIVING QUESTION**

Show this picture of water faucet.
Place a clear glass of water at the front of the class.

**Observing and Supporting Learning**

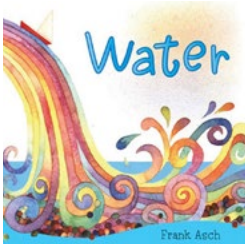
**Prompting Questions for Inquiry:**
What are you thinking? Noticing? Wondering?

# Connecting to Water and Understanding the Water Cycle

ACTIVITY:
**WATER - THE BIGGER PICTURE**

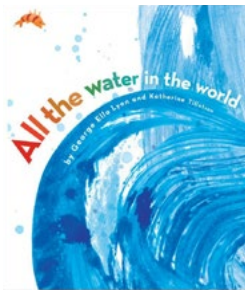
These first books introduce the water cycle - where water travels to, its different forms, and how we use it, and the following books generate more discussion and inquiry with regards to the watershed (the environment in which our water moves through) and water conservation.

**Water**, by Frank Asch, is a simple, beautiful book that introduces us to some of the different forms that water can take that are familiar to us in our own lives. Near the end of the book is a gorgeous image that gives many examples of water in use in everyday activities.




Read this to your students and ask them - how do you use water?

In **All The Water In The World**, George Ella Lyon and Katherine Tillotson share a basic graphic journey of water and its many forms. With Rhyme and form, they make a call to action to care for our water.




**Observing and Supporting Learning**

**Prompting Questions for Inquiry:**

- Where does water exist?
- What purposes does it serve?
- How many forms can it take?

Record their responses.

**Additional Inquiry Opportunities:**

Here is an Interactive water cycle diagram that can be introduced to students following the reading of the stories :

**Interactive Water Cycle Diagram**

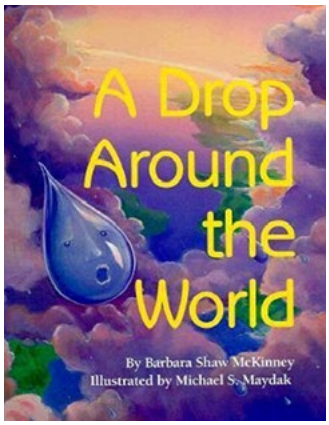

Here is a video about the water cycle:

**SciShow Where Does Water Come From?**


And here is a free water cycle craft from Teachers Pay Teachers:

**Water Cycle Craft Freebie**

# Watershed Protection




In **A Drop Around The World**, Barbara McKinney and Michael Maydak follow the life of 'Drop', a drop of water, through its many forms on a journey all around the world. Travelling with the drop, students see the world, inside and out, from solid, liquid and vapour views. 'Drop' inspires our respect for water and its role on Earth. There are prompts throughout the book to investigate scientific principles around the water cycle, as well as a glossary in the back. Using a globe or world map, pause and give them geographical context. 'Where do we live? Are there other places you have travelled?

Share this books with your students and ask:
Did you learn anything else about where water exists?
What things might influence water while it is on its journey?
What do we do to the water before we are able to drink it? Why?
It goes just about everywhere..what are some things that might make it dirty or unsafe to drink?
What are some ways that use you water in your life that don't have to do with drinking?

Record their answers.

ACTIVITY:
## TAKING IT OUTSIDE – PLACED-BASED CONNECTION TO WATER

Whether or not your school is near a creek or other body of water in the watershed, a walk outside will support students in connecting to elements of the water cycle that are in their surroundings all of the time.

**Materials:**
If you are lucky enough to be near access points to the watershed, or have access to field trip transportation, you can use the resource 'Walking the Watersheds of the Comox Valley'. This resource is included in the Learning Resource Centre kits and also available for purchase online here: **Trail Map Booklet**

- A writing journal for each student
- Pencils
- Permission slips for local walking field trip


**Instructions:**
This suggested activity is meant to encourage students' presence and awareness of how water is connected to everything.

Following discussion about elements of the water cycle, pair students up to walk together in the vicinity of your school. Have them bring a journal to record ideas. Students could also draw their findings. Invite them to simply walk and talk to their partner as they notice parts of the water cycle in action. This could be a cloud, a puddle, a sprinkler, a creek, or dew drops on leaves or moss. Encourage them to also identify anything that they see that is connected to water in some way. This could be anything – a dog walking that must drink water, a flower or grass that needs water to survive.

**Observing and Supporting Learning**

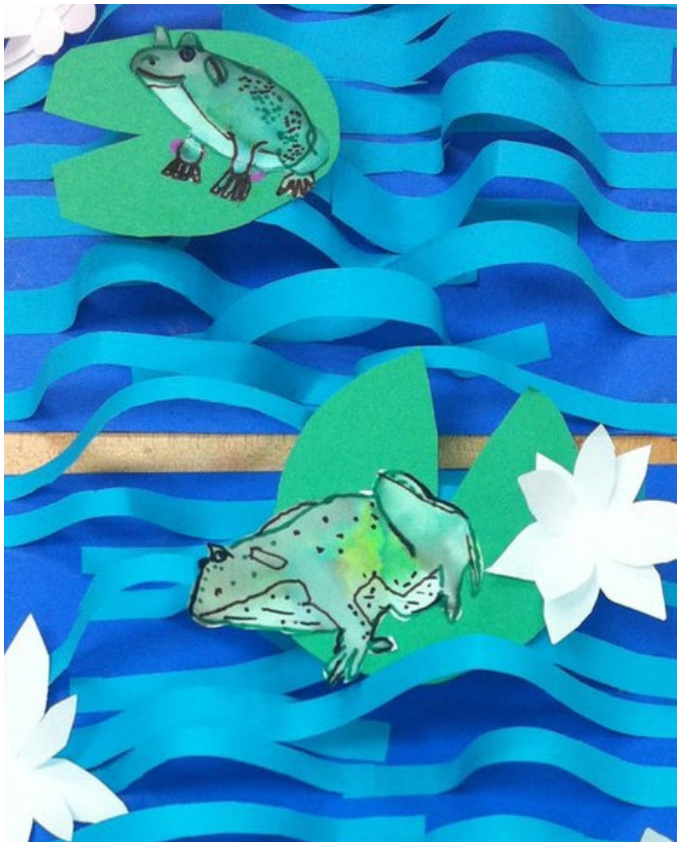
**Prompting Questions for Inquiry:**
Once back in the classroom, have pairs share what they noticed:

- What surrounds them that is connected to water and the water cycle?
- How are they connected to water and our local watersheds?

ACTIVITY:

## EXPRESSING OUR CONNECTION TO WATER

Invite students to create a piece of artwork that represents their relationship to water... how they feel about it, how they use it, or other thoughts that might have come up during inquiry. Have them draw the different forms that water takes. These photos are some ideas for class-wide water-related art projects, or invite students to create more of a free-form journal activity.



ACTIVITY:
## HOW AM I A PART OF THE WATERSHED?

This lesson is an introduction to the general concept of a watershed and how personal behaviours are connected to it and affect the whole picture, focussing on connectedness.


**Materials:**
Large laminated basic map of a generic watershed provided in the CVRD Connected By Water kit, or sketch your own onto large flipchart paper, something like this:

- Recipe card-sized paper for students to draw on, numbered 1-10
- Pencils and drawing materials
- Tape
- Dry Erase marker

**Instructions:**
Have students work in pairs or groups of three (you will need 10 groups).

Distribute numbered cards, one to each group

Invite the groups to discuss and then create and draw their 'dream home.' Prompt with questions like: How big is it? What do you have in it? What kind of vehicles do you have? What does your yard look like? Add as much detail as you can.

Hang Watershed Poster at the front.

Invite each group to present their 'dream home' and share all of the details with the class.

After each presentation, have them place their drawing by number onto the poster.

After the class has finished their presentations and populated the poster with their dream homes, finish the poster through a discussion of what lives in the watershed, and add with dry erase marker (i.e. fish, birds, crabs, etc.). Add rain, snow and other weather through discussion about all that happens in a watershed.

Have individual students write down what they can observe about the completed poster. Have them share back with their group what they see.

### Observing and Supporting Learning

**Prompting Questions for Inquiry:**

- How do these things and places influence each other? For instance if someone has a large car and driveway, where does the water run to?
- Does it affect people downstream if they wash the car? If the car leaks? What happens to the wildlife?
- If someone has a swimming pool or a large lawn to water - what if they use more than their share?
- Last discussion - what changes could they make to their dream home scenarios to make it so that they considered the connections?

ACTIVITY:
## THE CELERY EXPERIMENT

A great way to introduce basic science concepts are through fun and visual experiments such as this Celery Experiment. It requires just a few items and is a fun way to demonstrate to students that what is IN the water, gets absorbed by plants and animals who use the water, and therefore it is important to protect the watershed.

**Materials:**
- 2 clear glass jars
- Fresh celery stalks with leaves, preferably the lighter leafier stalks near the centre
- Water
- Blue food colouring

**Instructions:**
Separate and select stalks of celery with leaves. Cut about a quarter inch off the bottom. The lighter stalks near the center will show the most color.

Put about 8 ounces of water into each glass jar

Drop 3-4 drops of the blue food coloring into one jar

Place stalks into the water and using stalk stir very gently until food coloring is dispersed evenly.

Have students make predictions about what will happen. Write it in a simple sentence and "point and read" together.

Have students make 2-3 observations and write them down. Check at intervals depending on availability, results should be seen after 3 hours, significant results overnight and again at 48 hours.

Cut the bottom of the celery where the water was transported up into the celery stem to see full effect.

**Observing and Supporting Learning**

**Prompting Questions for Inquiry:**
How did the colour get up into the plant?

How could other things in the water affect the celery? How could things that go into our water source possibly affect plants and animals and us?

**Additional Inquiry Opportunities:**
Following these watershed conservation activities, create a chart in which you invite students to suggest ways to be respectful of the watershed (where our water comes from). As the chart is being created, nudge thinking forward with questions such as:
- Why should we be careful about what goes into the water?
- What are some things that we do in the water?
- Who might these things affect?

ACTIVITY:
## UNDERSTANDING WILDFIRE AS A THREAT TO THE COMOX LAKE WATERSHED

The Comox Lake Watershed provides essential resources, including clean drinking water for our community, freshwater recreation, and wildlife habitat. However, wildfires are a significant hazard in this area, affecting both its natural beauty and the community that relies on it. A *hazard* is a potential source of harm, while risk is the likelihood that a hazard will actually cause harm, along with the severity of that harm.

Wildfire is in fact considered the most significant risk to our drinking water supply in the Comox Valley. Why? Wildfires can lead to soil erosion, loss of vegetation, and the degradation of water quality as ash and debris enter the lake. When these fires occur, they can disrupt local wildlife, threaten homes, and increase air pollution, impacting the health of the entire watershed.

Increased temperature and dryer summers due to the climate changing are also increasing the frequency of wildfires. On Vancouver Island, the majority of wildfires are human caused, which means we can make a difference with our actions. It is important for all residents and visitors alike to understand how their own behavior might contribute to wildfire risk.

**Individual Activities That Can Cause Wildfires**
Several activities can inadvertently spark wildfires:

- **Campfires:** Unattended or improperly extinguished campfires can quickly spread.
- **Smoking:** if inappropriately handled, can ignite dry grass and leaves.
- **Equipment Use:** Sparks from lawnmowers and chainsaws can ignite dry vegetation.
- **Offroad Vehicles:** Offroad motorized vehicle sparks can ignite dry vegetation
- **Fireworks:** Fireworks create sparks that can land in flammable areas, especially during dry seasons.
- **Burning Debris:** Burning yard waste can easily escape control in windy conditions.

**Positive Actions to Consider**
To help protect the Comox Lake Watershed and your community from wildfires, here are some positive actions everyone can take:

- **Follow fire safety guidelines:** Always adhere to local fire regulations and use designated areas for campfires and never anywhere during a fire ban. Information on fire bans can be found here : **https://www.comoxvalleyrd.ca/fire**
- **Be mindful with any smoking:** If you or someone you know smokes, ensure it is completely extinguished and disposed of responsibly.
- **Check equipment:** Regularly maintain power tools to reduce the risk of sparks. Do not use these tools in dry areas.

## Watershed Protection

- **Avoid using offroad vehicles in dry areas:** off road / vehicles create sparks and can ignite a fire.
- **Celebrate safely:** Consider alternative ways to celebrate occasions, such as using glow sticks and solar power lights instead of candles or fireworks.
- **Community Clean-Up:** Participate in or organize community efforts to manage vegetation and reduce fuel for wildfires, such as clearing dry leaves and branches. You can also check out the **BC Firesmart Neighbourhood Recognition Program here** to find out about what can be done in your neighbourhood or close to your school to reduce vulnerabilities to wildfire.

By understanding the risks and taking proactive steps, we can all play a part in preserving the Comox Lake Watershed and ensuring it remains a safe and vibrant environment and source of safe, clean drinking water for generations to come.

HANDOUT:
**WHAT MAKES FIRE?**
(adapted from **learningintheleaves.co.uk** and **https://kids.kiddle.co/**)

**Understanding the Fire Triangle**
The fire triangle is an easy way to remember what fire needs. It helps firefighters understand how to put out different kinds of fires. And helps us know how we can be responsible citizens. By removing just one part of the triangle, the fire can't continue to burn.


The fire triangle is a simple way of understanding the elements of fire. The sides of the triangle represent the three ingredients needed for fire: heat, fuel and oxygen

**HEAT**
Fire needs enough heat to start. It also needs heat to keep burning. If a fire gets too cool, it will simply go out.

**How to Remove Heat**
One common way to remove heat is by using **water**. Water cools down the burning material. This works well for fires involving wood or paper. However, water can be dangerous on other types of fires, like electrical fires.


Another way to reduce heat is to separate burning materials. For example, in a **forest** fire, firefighters might create a firebreak. They remove trees and plants in the path of the fire. This stops the fire from spreading to new fuel. It also helps to cool down the existing fire.

**FUEL**
Fuel is what fire eats! It is anything that can burn. This could be wood, paper, cloth, gasoline, or even gases. Without fuel, a fire has nothing to consume.With the climate changing to include longer, dryer summers, we now have a lot of very dry fuel on the ground throughout our community.

**How to Remove Fuel**
Removing the fuel means taking away what the fire is burning. This can be tricky, especially with large fires.


One method is to let the fire burn out the available fuel. This is sometimes done in controlled burns. Another way is to physically remove the fuel. For instance, if a fire is burning in a field, you might clear a strip of grass. This creates a barrier without fuel.

**OXYGEN**
Fire needs oxygen to burn. Oxygen is a gas found in the air all around us. Without enough oxygen, a fire cannot start or continue.


**How to Remove Oxygen**
Removing oxygen from a fire is called "smothering" it. This means covering the fire so air can't reach it. Some special foams are used for this. They spread over the fire and block the oxygen.

ACTIVITY:
## GAME SHOW - SAFE/UNSAFE

Promote awareness about wildfire safety by categorizing activities as "Safe" or "Unsafe" for the Comox Lake Watershed.

**Materials:**
- 'What Makes a Fire?' Handout ( for gr 4-9 students only)
- Safe/Unsafe questions
- 'Safe' and 'Unsafe' cards for voting

**Instructions:**
Start with a discussion about wildfires. Ask students if they know what a wildfire is and why they are important to be aware of. Briefly explain the risk wildfires pose to our drinking water, humans, nature, homes, and animals. Review the handout about how fire works, and discuss the risky behaviors mentioned in the introduction.

Divide players into teams or play as individuals.

Read each statement below aloud.

Players must decide if the activity is "SAFE" or "UNSAFE."

Award points for correct answers.

Discuss each statement briefly to reinforce learning.

**Statements:**
- Using designated fire pits for campfires
  Answer: SAFE
  (Using fire pits helps contain fires and prevents wildfires. There is only ONE designated public place for fires in campfire rings in the Comox Lake Watershed, and that is Lake Park Campground).
- Leaving a campfire unattended
  Answer: UNSAFE
  (Unattended campfires can easily spread and become wildfires.)

- Smoking in areas without proper disposal bins
  Answer: UNSAFE
  (Discarding cigarette butts can ignite flammable materials.)
- Attending a professionally organized public fireworks show
  Answer: SAFE
  (Professional shows are organized to manage fire risks.)
- Lighting fireworks at a beach or campsite
  Answer: UNSAFE
  (Uncontrolled fireworks can cause wildfires, especially in dry areas.)
- Having a campfire next to the water when there is a fire ban in place
  Answer: UNSAFE
  (Fire bans means no fires permitted anywhere https://www.comoxvalleyrd.ca/fire.)
- Using a dirtbike or quad on dry ground
  Answer: UNSAFE
  (Sparks from equipment can ignite dry vegetation.)
- Clearing dry leaves and debris from the forest floor
  Answer: SAFE
  (This reduces fuel for potential wildfires.)
- Burning leaves and yard waste on windy days
  Answer: UNSAFE
  (Wind can cause burning debris to spread uncontrollably.)
- Putting out campfires completely before leaving
  Answer: SAFE
  (Fully extinguished campfires prevent them from reigniting.)
- Starting a fire with flammable materials in a dry area
  Answer: UNSAFE
  (Flammable materials can quickly cause wildfires.)
- Enjoying a nature hike on established trails
  Answer: SAFE
  (Sticking to trails minimizes the risk of accidentally igniting a fire.)
- Cooking food on a portable grill
  Answer: SAFE
  (Using grills responsibly and keeping flammable materials away reduces risks.)
- Parking your car on a gravel surface
  Answer: SAFE
  (Gravel reduces the risk of sparking from hot exhaust systems compared to dry grass.)

Cards to print for participants to hold up and vote with.

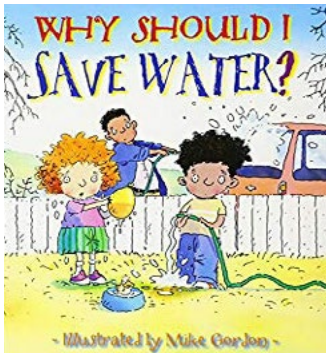
SAFE

UNSAFE

# Water Conservation

ACTIVITY:

## WHY SHOULD I SAVE WATER?




It is easy to take our water supply for granted because we seem to have so much water. Our forests are rainforests and Vancouver Island is thought to be the "wet" coast. In the summer months, consumption of water triples at the same time that water is least available. As the population in the Comox Valley increases so will the demand on our fresh water. High quality drinking water is produced by a healthy, properly functioning ecosystem. Protecting our drinking water requires two important things - conserving it and protecting the source.

In **Why Should I Save Water?**, by Mike Gordon, he shows the importance of saving water with amusing pictures and simple text.

**Instructions:**
After sharing this book with children, create a chart in which they suggest ways to save the water. See attached or visit the following link for a graphic about personal water conservation tips **Personal Water Conservation Tips** to provide you with prompts to get them started.

**Observing and Supporting Learning**

**Prompting Questions for Inquiry:**

- How can the community save water?
- Do they ever remember a time in our community where there were rules about saving water?
- Do you know where our water comes from?

These prompts get students thinking about how to make an impact, yet the ideas are theirs. Planting these seeds will launch this inquiry in child-friendly ways.

ACTIVITY:
**MAKE A RAINSTICK**

In many cultures, summoning rain often included the use of musical instruments. One well-known example is a rainstick, an instrument that mimics the sound of rain. They are traditionally made from dead cactus tubes with cactus spines hammered to the inside and filled with tiny pebbles.

**Science for Kids DIY Rain Stick Experiment**

ACTIVITY:
**MAKE YOUR OWN WATER WELL**


Here is a link to a video demonstrating how to make your own small well in the classroom. It has a great, simple description of how a well works, as well as a simple activity to demonstrate it live in the classroom.

**Make Your Own Well!**

ACTIVITY:
## BRINGING IT ALL TOGETHER - CULMINATING PROJECT

Revisiting our inquiry question - What allows me to have safe water that I can drink?

In groups, or on their own, invite students to create an answer to this question, emphasizing what has stood out to them and what they are interested in doing to protect this important resource - in a play, through art, through story, video or dance.

ACTIVITY:
## TAKING IT HOME

Support students in transferring their new knowledge into behaviors at home, this suggested activity.

**Materials:**
- Flip chart, whiteboard or chalkboard
- Ability to create chart (sample below) and photocopy for taking home

**Instructions:**
Create large chart together and populate it with these ideas that are co-created from your learning together. Create a mini version for them to take home as a challenge for the whole family. Revisit after a week with a discussion on how this went. What went well? What did not? Did they think of anything else they could do?

Here is an example:

| LOVING OUR WATER | MON | TUES | WED | THURS | FRI | SAT | SUN |
|---|---|---|---|---|---|---|---|
| Turn off tap while brushing teeth | | | | | | | |
| Have shorter showers | | | | | | | |
| Be careful about what we put down the drain | | | | | | | |
| Don't wear sunscreen or creams while swimming | | | | | | | |
| Don't litter | | | | | | | |

# Appendix 1: Legend of Turtle Island

Long ago, after the Great Spirit Kitchi-Manitou created human kind, the Anishinabe wandered away from their peaceful ways and began to fight amongst themselves. Brother fought against brother and sister fought against sister. Gone were the peoples' harmonious ways. Discord, jealousy and bitterness ruled the people. Seeing that the people had lost their peaceful ways and there was no longer respect for all living beings, Kitchi-Manitou decided to cleanse the Earth by bringing about a flood that drowned the Anishinabe people and most of the animals. This flood was known as mush-ko-be-wun.

The only person to survive the flood was Nanaboozhoo and a few animals that could swim or fly. Nanaboozhoo floated on a log and searched for land. No land could be found because the entire Earth had been flooded. As Nanaboozhoo was very kind, he allowed the remaining animals to take turns resting on the log.

Nanaboozhoo spoke and said, "I am going to dive to the bottom of the water and grab a handful of earth. With this earth, we could make a new land on which to live". Nanaboozhoo dived into the water and disappeared for a long time. The animals waited and waited. They thought that he had drowned. Finally, Nanaboozhoo surfaced, gasping for air , and muttered,"the water is too deep for me to reach the bottom".

Then "Mahng" the Loon spoke, "I can dive deep into the water, that is how I catch my food. I will try to make it to the bottom and return with some earth in my beak."

The Loon made a clean dive into the water. After a few long minutes, only small bubbles of air broke the surface of the water. Finally after what seemed like the longest time, the Loon returned to the surface weakened and out of breath. "I could not make it, there must be no bottom to the water." said the Loon

Next to try was Zhing-bi-biss, the helldiver. "Everyone knows that I can dive very well into deep water" and off went the helldiver head first into the water. After another long period of time, during which the animals scanned the surface of still water, the helldiver floated to the surface, unconscious. After he was revived, he too recounted how the water was too deep for him to reach the bottom.

After that, many more animals tried to reach the bottom to bring much needed earth to the surface. No one succeeded. Even Zhon-gwayzh, the mink and Mizhee-kay the turtle tried, but to no avail.

## Appendix 1: Legend of Turtle Island

Then after it seemed that no one would be able to reach the bottom and bring earth to the surface in order to create a new beginning for all the living things, a soft muffled voice was heard to say, "I can do it". To everyone's astonishment, they looked about trying to see who had just spoken. It was Wazhusk the muskrat who came forward. Again he repeated, "I'll try". Some of the other larger, more powerful animals mocked the little muskrat. Nanaboozhoo spoke, reminding everyone that only Kitchi-Manitou can place judgment on others. Like the others, Wazhusk the muskrat must be given the chance to contribute.

Off into the water went the muskrat. Soon the wave that formed after he dived into the water disappeared and the water was perfectly still. He stayed underwater for what was the longest time. However, underneath the water, the muskrat had indeed reached the bottom. Feeling exhausted and with his lungs screaming for air, he grabbed some earth in his paw and used all his remaining might and strength to return to the surface.

On the surface of the water, everyone waited and waited for what seemed an eternity. Finally, the muskrat's body floated to the surface. Nanaboozhoo pulled the motionless body on to the log. "Brothers and sisters", said Nanaboozhoo, "muskrat went too long without air and he is now dead". A song of mourning and praise was heard across the water as the muskrat's spirit passed on to the spirit world. Suddenly, Nanaboozhoo realized that the muskrat's paw was clenched tightly. He carefully opened the small paw and then realizing what the muskrat held so tightly exclaimed in amazement, "Look there is a small ball of earth in muskrat's paw!". All the other animals gathered around in awe and excitement. They all shouted with joyfulness, Muskrat sacrificed his life so that life on Earth could begin anew.

Nanaboozhoo took the ball of earth and held it in his hand. Just then, the turtle swam forward and said "Use my back to bear the weight of this piece of earth. With the help of Kitchi-Manitou, we can make a new Earth".

Nanaboozhoo put the small piece of earth on the turtle's back. Suddenly, the wind blew from the Four Directions.The tiny ball of earth started to grow. It grew and grew until it formed a mi-ni-si or island in the water. The island grew larger and larger, heavier and heavier, but still the turtle bore the weight of the earth on his back.Nanaboozhoo and all the animals danced in a widening circle and sang songs of praise on the growing island. After a while, the Four Winds ceased to blow and the water became still. A huge island sat in the middle of the water and that island today is known to us as North America.

Many First Nations Peoples, including the Ojibway hold special respect for the turtle who sacrificed his life so that the Earth's people could have a second chance. And not to be forgotten, the muskrat has been given a good life too. Though many marshes have been drained and the homes of many muskrat have been lost as mankind continues to spread his influence over the Earth, the muskrat continues to survive. The muskrats do their part too in remembering the great flood. They build their homes in the shape of the little ball of earth that Wazhusk had bravely grabbed from the bottom of the depths.

**This version of the legend was adopted from **chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://ltbbodawa-nsn.gov/wp-content/uploads/2020/12/The-Creation-Story-Turtle-Island.pdf.**

# Appendix 2: The Legend of Queneesh

Queneesh is the K'ómoks name for the gleaming white glacier which can be seen from all over the Comox Valley. The Legend of Queneesh tells us how a great white whale saved the K'ómoks people. It began long ago when the K'ómoks people still lived in big cedar plank houses along the shores of Puntledge River estuary.

One night an elder of the village, Quoi qwa lak, had a powerful dream. It warned him of a coming time when the rain would fall for many days and nights. In his dream he was told that this rain would cause a great flood and the K'ómoks people would be in danger.

In order for them to survive the flood, they would have to make canoes, cedar bark rope and clothing and preserve food for the coming disaster. Gye gya janook, Chief of the K'ómoks, directed all of the people of the village to work together so that they would be ready when the rain began to fall.

Quoi qwa lak himself supervised the making of a strong cedar bark rope that was many miles in length. The rope had to be long enough to reach from the village to the top of the glacier.

As foretold, the rains began to fall just as everything was ready. The river rose rapidly to flood stage. Young men carried the long cedar rope from the village to the mountains and attached it securely to the glacier. The people tied their loaded canoes to the rope so they wouldn't get swept away to sea by the flood waters.

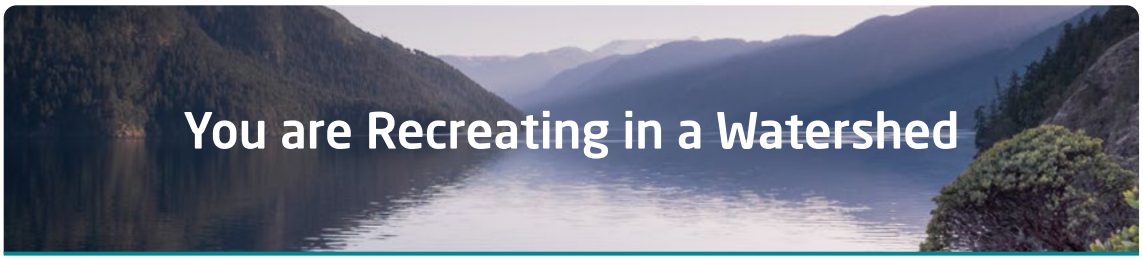
Soon the land was covered with water and still it continued to rain. The people were afraid as the water continued to rise up to the glacier where they had anchored their canoes. Suddenly the glacier began to float, breaking up through the rising waters like a giant grey whale breaching. The people were awestruck as they watched the glacier become a huge white whale.

"Queneesh, Queneesh!" they called. Queneesh almost floated free of the mountain, but the rain stopped and the flood waters began to recede. The K'ómoks people were saved. Some are still heard to whisper to him "Kwo la whee gai, Queneesh". "Thank you, thank you."

# Appendix 3:


*from the Cowichan Valley Regional Disrict Website. **Personal Use Water Conservation Tips**.

# Appendix 4: You Are Recreating in a Watershed




The Comox Lake watershed is a beautiful and complex system of mountains, lakes, rivers, and creeks. The water within this watershed - the snowmelt and rain - runs over land and into small streams and larger waterways such as the Upper Puntledge River, the Cruikshank River, and Perseverance Creek. Some of this water soaks into the ground but much of it flows into Comox Lake. In Comox Lake, the water is available for fish and wildlife habitat as well as being used for power generation and stored as drinking water for the Comox Valley.

The Comox Lake watershed supplies drinking water to over 45,000 people in Comox and Courtenay via the Comox Lake Drinking Water System and to 3700 people in Cumberland. Have you ever wondered "What allows me to have safe water I can drink?" By helping to protect the Comox Lake watershed you can help ensure that we have safe drinking water.

## How do we protect this shared resource?

### Stay on existing roads and trails

The land around waterways provides important ecological functions. Streamside vegetation and soils moderate stream flow, preventing erosion and flooding. They also reduce or remove suspended sediments, bacteria, viruses, parasites, and excess nutrients from the water before it reaches Comox Lake. It is important to leave these areas undisturbed to maintain high quality drinking water and to reduce the cost of water filtration and treatment.

### Do not build new trails without permission

Trails built within the watershed should follow a standard from the International Mountain Biking Association or the Whistler Trail Standards that consider the important ecological function of streamside areas. Trail building should only be done in consultation with landowners and trail stewardship groups.

### Keep poop and pee away from the water

Poop can carry bacteria, viruses, and parasites. Using the designated bathrooms and picking up dog poop at beaches and campgrounds reduces the risk of these pathogens entering our drinking water system. Empty the holding tanks of boats and recreation vehicles only at designated stations. If you are in the backcountry, pack out your poop and do not pee in waterways. Peeing on rocks, pine needles, and gravel in the backcountry is less likely to attract wildlife that can cause damage to sensitive and important ecosystems along waterways.

### Camp at designated campgrounds

Camping outside designated areas increases the risk of streams being contaminated by bacteria from human poop and increases the risk of damage to ecosystems from fires.

### Do not have a campfire outside of designated campgrounds

A small fire can quickly get out of control and destroy large tracts of forest within the watershed. Healthy forests are critical to moderate and remove suspended sediments, bacteria, viruses, parasites, and excess nutrients from the water as well as prevent flooding. A loss of healthy forests due to wildfire could significantly increase the cost of water treatment.

### Get informed

There is so much more you and others can do to protect the Comox Lake watershed. Learn more on the Comox Valley Regional District Website.

## We are all connected by water.

# Appendix 5: Additional Resources

## CULMINATING PROJECT OR DEEPER LEARNING OPPORTUNITIES

**Safe Drinking Water Foundation**
Take action on water issues and submit to the Canada wide Student Action competition.
**safewater.org**

**Connecting Students With Their Watershed Manual**
Connecting Students With Their Watersheds, a workbook for community leaders to inspire volunteers and develop local watershed stewardship project plans. Each module guides you through creating a personal project. The manual includes self-evaluation tools, checklists, examples, teaching tools, background information, and lots of great illustrations and ideas.
**https://www.hctfeducation.ca/resource/?resourcecode=RR000293**

## VIDEOS

**Connected by Water**
Local video filmed in the Comox Lake watershed.
**https://www.youtube.com/watch?v=pcmEhHGVYes**

**Love Your Raindrop**
Funny video describing how our fresh water gets to us through the story of a raindrop - snow to sea in the Comox Valley Regional District infrastructure.
**https://www.youtube.com/watch?v=8zg2cWtXb-4&feature=player_embedded**

**Fresh Water Scarcity: An Introduction**
A video about conservation and sharing the Earth's water source. Three minutes.
**https://www.youtube.com/watch?v=otrpxtAmDAk**

**Watershed for Beginners**
The Comox Lake watershed is an interconnected system of mountains, forests, rivers, creeks and wetlands that form an ecological corridor that links Vancouver Island mountains with the Salish Sea. In this video learn about what a watershed is, the history of the Comox Lake watershed, how it's managed today and what you can do to safeguard it.
**youtube.com/watch?v=W49hw96N2ro&feature=youtu.be**

## Appendix 5: Additional Resources

### FIELD TRIPS AND LOCAL COMOX VALLEY KNOWLEDGE

The Connected By Water Team would like to extend a special thank you to those who participated in Environmental Educators meeting in Aug 2018 and the online educators discussion that followed. Shared at that meeting were what role groups are currently playing in providing water-related education to children in the Comox Valley. Resources were shared and ideas exchanged about how to work together to sustain environmental education in the Comox Valley. Many of those resources are included below.

**Go Grants**
The Habitat Conservation Trust Foundation provides grants that can assist with covering costs like transportation for placed-based outdoor learning.
**https://www.hctfeducation.ca/go-grants/**

**Morrison Creek Streamkeepers**
Offer walking tours.
**http://morrisoncreek.org/**

**Tsolum River Restoration Society**
Excellent group of volunteers working to restore and build awareness about the Tsolum River. Offer education and outreach programs at your school's closest creek.
**https://www.tsolumriver.org/**

**Project Watershed**
Excellent resources for Grades K - 7 with links to lesson plans, field trip options, information sheets and colouring pages.
**https://projectwatershed.ca/glacier-to-estuary/#upper**

**Cumberland Community Forest Society**
Walking tours of the Cumberland Forest available.
**http://www.cumberlandforest.com/**

**Strathcona Wilderness Institute**
Guided walking tours.
**https://strathconapark.org/swi-events/**

**Wild Schools Program - Habitat Conservation Trust Foundation**
School programs available. Schools need to apply by March 31st.
**https://hctf.ca/education/**

**BC Hydro - Explore Conservation Resources**
Activities related to the hydrologic Cycle for grades k-12
**https://schools.bchydro.com/activities/conservation**

**MARS - Wildlife Rescue Center**
School tours and guest speakers available.
**https://marswildliferescue.com/visiting-mars-with-a-class-or-group/**

## Appendix 5: Additional Resources

**Comox Valley Nature Kids**
Kid friendly outdoor learning opportunities.
**https://naturekidsbc.ca/comox-valley-ync/**

**North Island Wildlife Recovery Centre**
School visits can be arranged.
**https://www.niwra.org/visit/**

**Lake Park Society**
School programs available.
**https://www.cumberlandlakepark.ca/programs**

**Climate Change and Blue Carbon in the Comox Valley**
Powerpoint presentation created by Project Watershed
**https://projectwatershed.ca/2018/03/08/climate-change-and-blue-carbon-in-the-comox-valley-lesson/**

### VIDEO

**How Water Makes Climate**
An original 12-minute animation that portrays the crucial connection between water cycles and the climate.
**https://vimeo.com/923077768**

### MAPS

**Local Watershed Maps**
Variety of maps of the local watershed from Project Watershed
**https://projectwatershed.ca/maps/watershed-maps-and-brochures/**

**Comox Lake Watershed Maps**
**https://www.comoxvalleyrd.ca/watershed**

**River Runner Global Map**
Interactive on-line map. Tap to drop a raindrop anywhere in the world and watch where it ends up.
**https://river-runner-global.samlearner.com/**

### WATERSHED PROTECTION

**Comox Lake Watershed Protection Plan**
**https://www.comoxvalleyrd.ca/watershed**

**Think Like a Watershed brochure**
**http://brooklyncreek.ca/wp-content/uploads/2018/09/Watershed-Brochure-Outside1sm.pdf**

## Appendix 5: Additional Resources

### WATER CONSERVATION

**Comox Valley Regional District**
**https://www.comoxvalleyrd.ca/conservation**

**City of Nanaimo - Team Watersmart**
**https://www.rdn.bc.ca/team-watersmart**

**Green Facts**
Provides scientific facts about water as a resource.
**https://www.greenfacts.org/en/water-resources/index.htm**

**Safe Drinking Water Foundation**
Fact sheets on a wide variety of topics related to drinking water
**https://www.safewater.org/fact-sheets**

### POLICY AND LOCAL GOVERNANCE DOCUMENTATION

**Comox Lake Watershed Protection Plan**
**https://www.comoxvalleyrd.ca/watershed/watershed-protection-plan**

**Water Sustainability Act 2016**
**https://engage.gov.bc.ca/watersustainabilityact/**

### WATER SAMPLING FOR SAFE DRINKING WATER

**Elementary Operation Water Drop Kit for Delivery**
Students in grades four to eight can use this kit to test their local water and control water samples for eight different components.
**https://www.safewater.org/school-programs-overview/**
Students will test for alkalinity, ammonia, colour, copper, pH, sulphate, total chlorine and total hardness.
**https://www.safewater.org/order-kits/**

### STORAGE AND CONSERVATION - GROUNDWATER

**It's Called Ground Water**
Groundwater is an important source of fresh water for industries, municipalities, farms, and rural homeowners in British Columbia.
**https://www.youtube.com/watch?v=VtIY4FYWJV8&feature=youtu.be**

### FIRE

**Learn about Fire with the Sierra Club of BC**
In this curriculum, you'll find four unique environmental lessons filled with activities, stories and teachings.
**link:https://sierraclub.bc.ca/fire-resource/**

# Appendix 6:

## Indigenous Education Resources Related to Watershed Protection/Water Conservation

Contributed to by: Gail Martindale, Lynn Swift, and Lelaina Jules of School District #71 Indigenous Education Department.

**Learn 71 - Teacher Resources Indigenous Education**
**https://www.comoxvalleyschools.ca/indigenous-education/**

**Legend of Queenesh**
**https://www.comoxvalleyschools.ca/indigenous-education/legend-of-queneesh/**

**Fish Traps**
SD71 The Fish Trap Experience
**https://www.comoxvalleyschools.ca/indigenous-education/fish-traps/**

**The Komoks Estuary Speaks**
**https://youtu.be/uD2hbAIBwKs**

**Komoks Estuary a Cultural and Archeological Treasure**
**https://youtu.be/csTJLpjCXDQ**

**Komoks First Nation Origin Stories**
**https://komoks.ca/cultures/#story**

**Water the Sacred Relationship - Video**
Full Video: **https://www.sacredrelationship.ca/documentary/**
Short Video: **https://www.youtube.com/watch?v=tyuVWksDJmA&feature=youtu.be**

**Honour Water**
A singing game for healing water available for ipads
**http://www.honourwater.com/#intro**

**Indigenous Ways of Knowing:** Components of an Indigenous Science Education Model Page 42
Suggestions for Teaching on pg. 49 and 50
**https://pressbooks.bccampus.ca/knowinghome/**