



# Appendices

A - Curriculum Organizers and Learning Outcomes

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D - Supplementary Resources, Workshops  
and Field Trips



# Appendix C: Video Script

## *Down the Drain and Back Again*

Opening Credits

VOICEOVER

Somewhere in Greater Victoria, a tap is dripping...

*Dylan, a small boy in pyjamas, is walking down the hallway, yawning. He's just awakened and is still very sleepy. In the bathroom, Sprinkle, a small, magical creature, is struggling with the shower tap, trying to turn it off and stop the drip.*

SPRINKLE

*(concerned)*

Oh no, someone left this tap dripping all night. Doesn't look like much but it sure adds up. Leaky taps waste water and energy too.

*Dylan enters the bathroom, still looking very sleepy. He doesn't notice Sprinkle, who quickly flies behind the shower rail. Sprinkle watches and gasps as Dylan walks over to the shower and turns on the water.*

DYLAN

*(feeling the water coming out of the shower tap)*

Brrr! Think I'll let it warm up a bit first.

*Dylan leaves the water in the shower running and walks over to the bathroom sink. Sprinkle watches as Dylan turns on the faucet, then puts toothpaste on a toothbrush and starts to brush his teeth with the tap still running. Sprinkle looks at the shower, which is still running, then back at Dylan, who's taking his time brushing his teeth. Just then Dana (Dylan's sister) enters the bathroom with a bandage on her finger.*

DANA

*(mumbling)*

'Morning, Dylan.

DYLAN

*(his mouth full of toothpaste)*

'Morning

*Dana walks over to the toilet, removes the bandage and places it into the toilet and flushes. Sprinkle watches from her perch on the shower rail with a horrified expression.*

DYLAN

*(turning around)*

Dana! Now the water will be too hot.

DANA

*(shrugs)*

Just wait a little longer. It'll cool down again.

*Dana walks over to the sink, picks up her own toothbrush, and begins brushing.*

*Sprinkle stares, mouth agape as he looks back and forth between the water pouring out of the showerhead, the toilet, and the sink, where the children are brushing their teeth while letting the tap run full blast. Clearly he is shocked by all the water that's going down the drain. Finally he can't take it anymore. He flies over to turn off the shower.*

DYLAN AND DANA

Huh?

*Sprinkle flies over to the bathroom sink and turns off that water as well, then faces Dylan and Dana.*

DYLAN

Hey! Who are you?

DANA

What are you?

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## Discussion Opportunity

- ▶ What do you think Sprinkle is going to say?
- ▶ How is Sprinkle feeling? Why?
- ▶ Dylan and Dana are wasting drinking water and energy. What could they do differently?

*Note: Wasting water wastes energy because it takes energy to heat water. And although our drinking water is distributed using gravity, in a few instances energy is used to pump it uphill.*

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SPRINKLE

The name's Sprinkle. It's my job to help humans conserve and protect our precious resource... water.

DYLAN

Protect water- from what?

SPRINKLE

From being wasted and polluted.

DANA

But we're not wasting water or polluting it, we're brushing our teeth.

SPRINKLE

But you're not using the water while you're brushing; it's just going straight down the drain!  
And the toilet should never be used as a garbage can.

DYLAN

It's only water.

SPRINKLE

*(surprised)*

Only water? Water is one of the most important things there is! All living things need water to survive! Without water to drink, you wouldn't be able to survive more than a few days.

DANA

But water is everywhere. This is Vancouver Island, we're surrounded by water.

SPRINKLE

Yes, but you can't drink ocean water, it's salty! Your tap water is fresh, clean and safe to drink... and there's a lot less fresh water than ocean water.

DANA

What do you mean? Look at it all coming out of the tap!

SPRINKLE

It may seem like there is no end to tap water, but have you ever asked yourselves where your tap water comes from?

DYLAN

Not really, I just turn on the tap and there it is- clean, fresh water.

SPRINKLE

You're lucky, not everyone in the world can do that. But tap water isn't endless. It's up to all of us to conserve it and make sure it stays clean so there is enough for all living things.

DANA

So, where does our drinking water come from?

DYLAN

And how do we keep water clean?

SPRINKLE

*(Aha moment)*

How would you like to go on an adventure to discover the answers?

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## Discussion Opportunity

- ▶ What adventure do you think Sprinkle has in store for Dylan and Dana?
  - ▶ Where do you think they will go?
  - ▶ What do you think they will learn?
- 

DYLAN

Yes!

DANA

Sure!

Sprinkle waves her hand and suddenly Dylan and Dana are turned into water drops hanging from the bathroom sink faucet.

DANA

Hey! What have you done to us?

SPRINKLE

I've turned you into water drops! You're going on a trip around the water cycle to find out why it's important to use your fresh tap water wisely.

DYLAN

*(as he and his sister are elongating, being pulled down by gravity)*

Here we go!

*Dylan and Dana drip from the tap and fall down the drain.*

## CHAPTER 2

*Dylan and Dana are sliding down through an intricate network of drainpipes. The drains are surrounded by earth and rock.*

DYLAN AND DANA

Aaagh!

*Dylan and Dana flow down the drain. They drop down into water flowing through a lateral pipe. Dylan narrowly misses another clearly defined water drop. Dylan and Dana are now in a much larger drain, with some air above them. Also in the water is garbage, including the bandage Dana flushed (e.g. dental floss, cigarette butts) and organic matter (e.g. vegetable peelings, coffee grinds, the remains of food that have not been scraped off plates). Floating on the surface of the water are dark, shiny oil slicks, gobs of fat, patches of greenish-brown scum, and clumpy piles of yellow-brownish foam.*

WATER DROP #1

*(as Dylan narrowly misses landing on him)*

Hey!

*Dylan and Dana look at the other drop, startled, as it drifts past. Then they almost bump into the bandage. Startled, they move away from it, then are swept by the current of the water toward a dark, shiny oil slick up ahead. Another drop of water floating alongside sees where they're heading and calls out a warning.*

DYLAN

Oh sorry... Where are we?

WATER DROP #1

We're underground, in the sanitary sewer.

DANA

What is all this stuff?

WATER DROP #1

Leftover food, tissues and other garbage humans flush down the drain. It's too bad, 'cause there are better places to put this stuff.

*Another drop of water floating alongside sees where they're heading and calls out a warning.*

WATER DROP #2

Hey, you two! Look out for that cooking oil slick! You don't want to be coated in that stuff or bring it where we're going.

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## Discussion Opportunity

- ▶ Where do you think they are going?
- ▶ Why do you think the water drop tells Dylan and Dana to stay away from the oil?
- ▶ Why do you think this could be a problem? (see Notes below)
- ▶ Why do you think people flush garbage down the drain?
- ▶ Where should the garbage have gone instead of down the drain? (see Notes below)
- ▶ Have you or anyone you know ever flushed anything other than human waste and toilet paper down the toilet?
  - What was it?
  - What could they have done with it instead?

### Notes:

- ▶ Anything that goes down an indoor drain can end up in our ocean (sanitary sewer) or our groundwater (septic system). Drains outdoors (storm drains) are connected to our streams, creeks and other waterways. Help protect the plants and animals in these sensitive ecosystems.
- ▶ Only human waste and toilet paper should be flushed down the toilet. Anything else could upset septic systems and wastewater works preventing them from working properly (e.g. block pipes, cause backups into our homes, streets and the environment) or could pass through them causing pollution (e.g. medication, oil and other chemicals)
- ▶ Leftover or expired medication and vitamins should be returned to pharmacies.  
**<http://www.crd.bc.ca/wastewater/sourcecontrol/residents/medications.htm>**
- ▶ Leftover food should be composted or placed in the garbage.  
**<http://compost.bc.ca/learn/howto.htm>; [www.myrecyclopedia.com](http://www.myrecyclopedia.com)**
- ▶ Toilet paper experiment. Stir a piece of toilet paper in a glass of water. What happens? It is better if the toilet paper stays somewhat intact, this will reduce clogging of septic systems.

### Extension:

Look for other ways to reduce, reuse and recycle an item you think might be wrongly flushed down the drain  
**[www.myrecyclopedia.com](http://www.myrecyclopedia.com)**

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DYLAN

(panicking)

Aagh! What's happening?

DANA

I don't know!

*Dylan and Dana see a metal screen up ahead. Water Drop #1 drifts past in to the long pipe on the other side of the screen. Bandage and other solid debris are caught on the screen. Some oil passes through and other dissolved material.*



WATER DROP #1

End of the line! We're out of here!

## CHAPTER 2

*Dylan, Dana and the other water drops shoot out underwater from a port in the deep sea pipe, swirling round with the force of the current. Looking back they see jets of water drops coming out of multiple ports in the pipe.*

## Background Information

### SANITARY SEWERS IN GREATER VICTORIA

This scene represents preliminary treatment- where wastewater is screened to separate out coarse solids (rocks, rags, plastics, etc.) and grit (sand and gravel) down to 6mm sized particles in effect at the CRD's Clover Point and Macaulay Point Facilities. The screened material is normally trucked to Hartland landfill. The screened wastewater called effluent, is pumped out through a deep-sea outfall (pipe) into the ocean. Secondary Treatment (Saanich Peninsula Facility) also removes dissolved organic substances.

- ▶ For information about Clover and Macaulay Point Facilities see:  
[www.crd.bc.ca/wastewater/marine/macaulay/index.htm](http://www.crd.bc.ca/wastewater/marine/macaulay/index.htm)
- ▶ For information about the Saanich Peninsula Facility see:  
[www.crd.bc.ca/wastewater/marine/saanich\\_peninsula/index.htm](http://www.crd.bc.ca/wastewater/marine/saanich_peninsula/index.htm)
- ▶ For information about changes to wastewater treatment in Greater Victoria see:  
[www.wastewatermadeclear.ca](http://www.wastewatermadeclear.ca)

### Key messages:

- ▶ Anything that goes down an indoor drain can end up in our ocean (via sanitary sewer) or our groundwater (via septic system).
- ▶ Do not use your drains for garbage disposal- instead recycle, compost, or place items in the garbage. To find out the best way to dispose of most items see [www.myrecyclopedia.ca](http://www.myrecyclopedia.ca)
- ▶ Collect cooled cooking fats, oils and grease in a sealable container and discard with household garbage or compost where facilities exist. [www.myrecyclopedia.ca](http://www.myrecyclopedia.ca)
- ▶ Return unused or expired medications to participating pharmacies. [www.crd.bc.ca/medications](http://www.crd.bc.ca/medications)

*Dylan and Dana gape as a school of salmon swims past them. Then they, the other water drops begin to turn the same bluish-green colour as the ocean around them. They are now salt water drops.*

DYLAN

Where are we? What's happening? Why do I feel so salty?

WATER DROP #2

You're in the ocean, of course.

WATER DROP #1

Yeah! Most of the Earth's surface is covered by ocean water.

DANA

I didn't realize that our homes were connected to the ocean.

WATER DROP #1

Do you mean humans' homes? Yes, the water cycle connects all homes of all living things on land and in the ocean.

DANA

I wonder how we will get back home.

WATER DROP #2

You're in the ocean. You are home, here with all the marine animals and plants.

DYLAN

No, you don't understand. We need to get back to land.

WATER DROP #2

Well, you're in luck. It looks like the current is taking us to the surface.

*The current carries them upward through the water. Orcas swim past.*

DANA

*(just as they're all getting sucked in)*

Oh no! The whale is going to drink us!

WATER DROP #1

Won't be the first time.

*They're sucked in, then the orca swims upward.*

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## Discussion Opportunity

- ▶ How do marine animals use water?
  - ▶ What other animals use water?
  - ▶ What else uses water?
  - ▶ What happens to the garbage that goes down the drain? Do you think it is good for the marine life- plants and animals?
  - ▶ Why was it not the first time the whale drank the water drop? Water cycle... goes around.
- 

*The orca surfaces and blows air out of its blowhole, sending Dylan, Dana and the other water drops up in a spray. Then the whale submerges and they fall back down on to the water's surface. In the background is the Victoria skyline.*

DYLAN

Look! It's Victoria.

WATER DROP #2

Yeah, that's where I just came from. Thousands of humans live there.

DANA

That's where we live! I wonder how we'll get back there.

WATER DROP #1

What's your hurry? We've only just returned to the salty sea. The ocean is where almost all of us water drops hang out.

DANA

Yeah, but we're not water drops. We're human children.

*The two other drops look at each other confused.*

DYLAN

Uhhh, anyways... so, how do water drops like us get back to land?

WATER DROP #2

Well, your best bet is to relax, hang out here on the surface and warm up a little. Ah...

*The two other drops stretch out, relax and enjoy the sunshine. Dylan and Dana watch them impatiently.*

DANA

Phew, it's getting hot... hey!

*Dana starts to get fuzzy around the edges, her greenish colour fades to dark blue and rises up above the surface of the water.*

DYLAN

*(as he gets fuzzy around the edges, his greenish colour fades to dark blue and begins to rise as well)*

What's happening to us?

WATER DROP #1

*(also getting fuzzy around the edges)*

You're evaporating. Don't worry, it's all part of the water cycle.

DANA

*(nervous as she continues to rise)*

I don't think I want to evaporate!

WATER DROP #2

*(as it and Water Drop #1 also rise)*

Relax. The sun's just turning you into water vapour, that's all.

DYLAN

Hey, I don't feel salty anymore!

WATER DROP #2

Yup, we're fresh water again. Woohoo! Not many of us water drops get to be fresh water at the same time.

*They float upward.*

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## Discussion Opportunity

- ▶ What do you think is going to happen next?

## Discovery Activity

Could pause the video here, and continue with lessons 5b-d

## Vocabulary

- ▶ Evaporation
  - ▶ Water vapour
-

*The drops of water vapour continue to rise. We can see the ocean, harbour and city beneath them. An air current comes and sweeps them even higher.*

DANA

*(shivering)*

It's cold up here. I'm freezing!

DYLAN

Me too!

WATER DROP #2

Not yet you're not, though you will be if we get high and cold enough.

WATER DROP #2

Hey, look! There's a small cloud. Hello! Can we join up with you?

WATER DROP #3

*(in vapour form, part of the cloud)*

Why not? The more the merrier.

*Dylan, Dana and the other two drops drift over to join the cloud, which floats toward land. The city of Victoria passes by underneath. There are many cars on the roads. They pass over a residential area.*

DANA

Look! There's our home!

DYLAN

I wonder when we'll get down there again!

WATER DROP #1

*(looking down)*

Can't get down there yet, we're not high enough!

WATER DROP #2

We have to get higher, so we can get colder. When that happens we'll condense into raindrops and fall to the ground.

WATER DROP #1

But I can't see why you're eager to get down there. Look at all the fresh water being wasted.

*Below him, Dylan and Dana see people outdoors in their yards, involved in different water wasting activities: one woman is watering a wide brilliant green lawn. There's a leak in her garden hose, out of which a fine stream of water is spraying and causing a puddle. A child is running through a sprinkler that's spraying as much water on the sidewalk and road as it is on the lawn itself. Down the street, a man is washing his truck while letting the garden hose run constantly. A stream of water runs down the gutter and into a stormdrain. Painted beside the drain is the silhouette of a fish (indicating that the drain empties into a stream used by salmon). Big garbage cans, no blue boxes or blue bags, no composter. Looking beyond the city, we see the network of local lakes and rivers that empty into the ocean. Looking closely, we can see that the water levels are low.*

DYLAN

But just look. There's lots of water everywhere... isn't there?

WATER DROP #1

Sure, there's lots of water but most of it is in the ocean and that's all salty! There's not nearly as much fresh water in the lakes and rivers.

*Looking back at the community, see golden lawns, a child playing in a shallow wading pool in the shade, a neighbour washing the car bucket and sponge on a gravel surface (no runoff), a garden of native plants and vegetables- carrots, kale, green onions, tomatoes, a P.U.R.E. sign in the garden, a composter, blue box and blue bag, a rainbarrel and a biker drinking from a reusable water bottle or water fountain.*

WATER DROP #1

Now that's a community I would want to rain on- look at all that fresh tap water being used wisely.

DYLAN

Aren't those lawns dead?

WATER DROP #2

No, they are dormant; resting like the trees and plants do in the winter. They will grow green again when more of us rain down during the fall.

DANA

How come nobody is watering those flowers?

WATER DROP #2

That's because they're native plants. They are used to the climate here, so they don't need extra tap water to survive, just us raindrops...whenever we fall.

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## Discussion Opportunity

- ▶ Describe a time you noticed someone using tap water wisely.
  - ▶ Does your family or someone you know use less tap water outside like the people in this community?
  - ▶ Can you think of one thing you could do at home to use less water outside your home.
- 

WATER DROP #2

It's nice to see humans using water more wisely. There's not much fresh water available in the world.

DANA

Yeah, because most of you, I mean us, are hanging out all salty in the ocean. Right?

WATER DROP #2

That's right. There are not many of us fresh water drops out here at once.

WATER DROP #1

When we are fresh water, most of us are far away from here in glaciers- frozen solid.

WATER DROP #2

Some of us flow as liquid in lakes and rivers, but many places we flow are not handy, deep underground or in faraway places.

WATER DROP #1

Leaving the rest of us as vapour, floating in the air waiting to condense into clouds and fall as rain, snow or hail...

*In the distance the air is thick with pollution . Heavy traffic fills the streets below. An industrial facility is spewing smoke into the air through its huge chimneys.*

DYLAN

Hey, what's that ahead?

WATER DROP #1

That's pollution. It's coming from the machines humans use that run on gas and oil.

*Transition the view to reflect changes. Less smog, buses replace cars and less smoke from the factory chimney.*

WATER DROP #2

Humans are trying to make less pollution and save energy. Even the factory has reduced its waste.

DANA

Look- It's working!

WATER DROP #1

It definitely helps. I know they'll keep finding ways to make a difference.

*Meanwhile, the cloud continues to rise. One by one the water vapour drops condense and become liquid water drops again.*



## Chapter 3

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### Discussion Opportunity

- ▶ What can you do to help save energy and make less pollution?  
*Use less energy, take shorter showers, turn the tap off while brushing your teeth, turn off lights, and drink tap water (in our region the emissions created for 1 bottle of water is approximately the same as 1,333 cups of tap water).*
- ▶ Have you, your family, your school, your community or someone you know already started to make changes? What were they?

### Background Information

#### WATER, ENERGY AND CLIMATE CHANGE

Climate Change- Since the industrial revolution, the increase of greenhouse gas emissions (GHG's) has changed the natural way the "greenhouse effect" controls temperatures on Earth, altering the atmosphere, water cycle and natural ecosystems. We create GHG's when we burn wood, coal, oil and natural gas (to generate electricity, to power vehicles, planes, boats and machines). Our actions are causing our climate to warm up.

- ▶ Regional Change in Climate- It is anticipated that our region will have:
  - long-term warming (all seasons will be warmer, river temperatures will increase)
  - extreme weather (flooding, droughts, storms and erosion)
  - changes to precipitation patterns (more rain and less snow in winter and drier summers)
  - rising sea levels which may erode land and intrude freshwater aquifers
  - Although our agricultural season may be longer, pests normally killed by cold winters may survive.  
**[www.nrcan.gc.ca/earth-sciences/climate-change/community-adaptation/assessments/84](http://www.nrcan.gc.ca/earth-sciences/climate-change/community-adaptation/assessments/84)**
- ▶ Can we help? Yes, efforts to reduce GHG emissions will help influence long-term climate change and its impacts. However, as a result of our historical emissions the Earth will continue to warm for decades to come.
- ▶ Our goal- to reduce community GHG emissions by 33% by 2020 (approx. 495,000 tonnes)
- ▶ World CO2 Levels **[www.crd.bc.ca/climatechange/index.htm](http://www.crd.bc.ca/climatechange/index.htm)**

#### BUSINESSES AND WATER POLLUTION

In the Capital Region, there are laws that limit what and how much can flow down the drain into the sanitary sewer (CRD Sewer Use Bylaw) or the stormdrain (Municipal Bylaws). CRD staff work with businesses to reduce their waste and change how they dispose of it. CRD staff also test wastewater quality, watch for any changes to aquatic and marine life and work to restore natural habitats.

DANA

*(turning into a water drop)*

Hey! I'm a water drop again.

WATER DROP #2

That's right! And soon we'll be raindrops. I wonder where we'll land.

*Below them are the Potholes of the Sooke River where people are swimming.*

DYLAN

*(looking down)*

Look! Those are the Sooke Potholes! We've been swimming there before.

DANA

*(wistfully)*

Oh, I wonder if we'll ever get home.

WATER DROP #2

Ooh, we're going to start raining any time now! I hope I fall in a forest. I just love helping plants and trees grow.

WATER DROP #1

Oh! Oh! Here I go! Goodbyeeeee! See you next time!

*She falls out of the cloud. Other drops fall. They're excited, eager to see where they'll end up. Finally it's Dylan and Dana's turn. Water Drop #2 falls with them. They drop through the air toward the forest and creek below.*

DYLAN AND DANA

*(falling)*

AAAGH!

WATER DROP #2

Why are you screaming? We're raining-now we can refill freshwater lakes, streams and rivers. Yahoooo!

*Dylan and Dana look down at the ground rushing up to meet them, then at each other.*

DYLAN AND DANA

AAAGH!

*Water Drop #2 lands on the outstretched frond of a fern growing on the bank of a creek just as Dylan and Dana land in the creek itself (Rithet Creek, which runs into the Sooke Lake Reservoir). Dylan and Dana begin to drift downstream.*

WATER DROP #2

Bye! I hope you find your way home!

*Dylan and Dana float quickly downstream. Most of the creek bed is exposed; the creek itself is a small channel of water threading its way through the centre of it. As they float they pass a bear.*

DYLAN

Gee, there sure isn't a lot of water in this creek.

DANA

Yeah, I know. I guess it hasn't been raining much lately.

DYLAN

And I always thought that all sunshine and no rain was a good thing.

*They see a small fish caught in a puddle that's cut off from the main creek channel.*

DANA

Not for everyone, I guess.

*The creek carries them into the Sooke Lake Reservoir, where they continue to float along the surface of the water.*

DANA

Where are we now? Is this a lake?

DYLAN

*(looking at the nearest shore)*

Look! There's a sign!

DANA

*(pronouncing it slowly)*

Sooke Lake Res-er-voir. I wonder what a reservoir is?

*WATER DROP #4 comes drifting up to them.*

WATER DROP #4

You must be newcomers. A reservoir is where humans store fresh water they will use as tap water.

DYLAN

Sure is quiet around here!

*View of the reservoir and surrounding area.*

WATER DROP #4

That's because the Sooke watershed is protected. All the land around here that drains water into the reservoir is closed to humans, well except for the watershed caretakers.

DYLAN

Why?

WATER DROP #4

It helps keep the water clean.

DANA

Is that why nobody is swimming, fishing or boating in the reservoir?

WATER DROP #4

That's right. Less chance of disturbing or polluting the fresh water. There are no houses or factories near the reservoir either.

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## Discussion Opportunity

- ▶ Did anything surprise you?
- ▶ Do you drink tap water at home?
- ▶ What is a watershed?  
*A watershed is an area of land that drains rainfall and melted snow (and anything the water picks up like sediment and dissolved materials) into a river, lake, reservoir or marine harbour.*
- ▶ Do you know which watershed you live in?  
*There are over 300 watersheds in the Capital Region.*

### For more information about:

- ▶ Our Drinking Water watershed protection  
<http://www.crd.bc.ca/water/watersupplyarea/index.htm>
- ▶ General Watershed information  
<http://www.crd.bc.ca/watersheds/protection/watershed-basics/index.htm>
- ▶ Watershed map (create kid friendly version)

## Extension

Have students draw a picture of a recreational lake and compare with a lake used as a reservoir. Locate your school's watershed. See lesson 6b

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DANA

Looks like there's a lot of fresh water stored here.

WATER DROP #4

The humans cleared some of the forest and raised the dam so the reservoir would hold more rainwater. That's how this reservoir gets filled: by rain. It flows into the reservoir in creeks and streams. Still, humans have to keep using tap water wisely.

DYLAN

But you said they have more room in the reservoir now.

WATER DROP #4

True, but it doesn't always rain enough to fill the reservoir. And with more humans moving to Greater Victoria using and drinking water from the reservoir, it's important they continue to use water wisely.

*The children look and see that the top of the shoreline looks new, and notice the water marks around the shore of the reservoir indicate that the water level is low (full is 186.75 meters). A lot of the surrounding shore is actually reservoir bed that, in wetter times, would be covered in water.*

DYLAN

*(concerned)*

Well, if all this reservoir water gets used up can't we, I mean, can't the humans, just find some more somewhere else?

WATER DROP #4

Well, they do have a back-up- a group of smaller reservoirs along Goldstream River.

DYLAN

*(relieved)*

Phew.

WATER DROP #4

It holds enough water for 30 – 90 days.

DYLAN

*(disappointed)*

Oh.

WATER DROP #4

Humans couldn't just keep using more and more fresh water. Eventually they would use it all up. And then what would happen to the animals, fish and plants?

DANA

*(pensive)*

Humans aren't the only ones that need fresh water to survive.

DYLAN

*(remembering what Sprinkle said)*

All living things need water to survive.

WATER DROP #4

*(pleasantly surprised by their understanding)*

That's right! As long as humans use tap water wisely, they are taking care of the environment- making sure there is enough fresh water in the reservoir for their neighbours, plants, fish and animals, especially during those hot summer months.

DANA

Why is the summer different than any other season?

WATERDROP #4

In the summer, we rain less often.

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## Discussion Opportunity

- ▶ Backup reservoirs hold enough water for 30- 90 days. In the summer, the backup system would not last as long as the winter. In the summer months, we receive less rain and we use twice as much water.
- ▶ What do you think we are doing in the summer that uses more water than in the winter? (watering plants) <http://www.crd.bc.ca/water/conservation/outdoorwateruse/index.htm>

## Extension

Measure how much it rains for one month in the fall, winter, spring and summer. Can you see a difference?

## Visuals

- ▶ Water Watch- weekly photos of the Sooke Lake Reservoir and water levels. <http://www.crd.bc.ca/water/watersupplyarea/summary.htm>
- ▶ Maps of the watershed (create child friendly versions) [crdatlas.ca/printable-maps/water-service-areas.aspx](http://crdatlas.ca/printable-maps/water-service-areas.aspx)  
[www.crd.bc.ca/watersheds/publications/listing.htm](http://www.crd.bc.ca/watersheds/publications/listing.htm)

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*Suddenly Dana realizes something.*

DANA

*(eyes widening with excitement)*

Hey! You said this water is used by humans. How does it get to humans?

DANA

*(hopefully)*

Maybe we can find a way to get home!

*View of the intake tower.*

WATER DROP #4

Well, if you want to go see the humans, your best bet is to go through the tower over there. That'll take you to the disinfection plant where the water gets cleaned so humans can drink it without getting sick.

Now if you want to go on an adventure through the forest, wait by the spillway for enough rain to push you over the edge- though that might take a couple of years. Or come with me over Deception Dam and down Sooke River. That fresh water is used for First Nations fisheries.

DANA

*(excitedly)*

Thanks, maybe next time!

DYLAN

Let's go!

## Discussion Opportunity

- ▶ Change the ending- write, draw or act a new ending to this story. What adventure would Dana and Dylan have if they went down the Sooke River and into the ocean?
- ▶ Read a related First Nation legend, such as
  - *"Salmon Boy, A Legend of the Sechelt People"* by Donna Joe
  - *"First Beaver"*, by Caroll Simpson

## Chapter 4

*Dana and Dylan hurry across the surface of the water toward the intake tower. They're sucked in, and then travel through pipes to the treatment plant where they proceed through the disinfection process. As they travel through the pipes, the water is first exposed to a UV light, then chlorine, then ammonia.*

*Finally Dylan and Dana are released along with a stream of water into another series of pipes. Finally, they're back in their own bathroom again, hanging from the faucet.*

DYLAN

Hey! We're back in our own bathroom again!

*Then he and Dana look down and see the dark drain hole beneath them.*

DYLAN

*(worried)*

Uh, oh! We're going to go down the drain again!

DANA

Turn off the tap! Hello! Somebody turn off the tap!

SPRINKLE

Don't worry, I have you. Welcome back.

*Dana and Dylan are magically transformed, back in their human form.*

DYLAN

What a trip!

DANA

What a drip, you mean! It's nice to be back in solid form again though.

SPRINKLE

Well, did you learn lots on your first tour of the water cycle?

DYLAN AND DANA

Yes!

DYLAN

I see now why it's important to protect our fresh drinking water.

SPRINKLE

And are you going to keep on using water like you were before?

DYLAN AND DANA

No way!

DANA

I'm going to use it wisely and keep it clean.

DYLAN

Because... all living things need water to survive.

SPRINKLE

Sending you on a trip through the water cycle was the best way to show you why we should conserve and protect fresh water and always use it wisely.



DANA

*(placing a piece of dental floss resting on the sink into the garbage beside the toilet and making sure the sink taps are also tightly turned off)*

Well, it worked for me.

DYLAN

*(looking at the shower tap, which is still dripping)*

Me too. Let's ask Dad to fix this leaky shower head.

*She walks over to the window and looks outside, then jumps in alarm. A sprinkler in the yard is holed and spraying water on the sidewalk.*

DANA

Oh no! Someone's left the sprinkler running in the hot sun!

DYLAN

Let's go turn it off and tell our neighbours what we've have learned about being waterwise!

*The two children look at each other in alarm and then run out of the bathroom. Dylan turns back and turns off the lights. Sprinkle watches them go with an amused expression.*

SPRINKLE

Looks like my job here is done.

*Sprinkle flies out of the bathroom window and disappears.*

End Credits

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## Discussion Opportunity

- ▶ What did Dana and Dylan learn?
  - ▶ What do you have in common with Dylan and/or Dana?
  - ▶ What will you remember about water?
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*Sing-along song, "Drip, Drip, Drop"*