

## 4-5<sup>th</sup> Grade: Explore Your Watershed *Teacher Guide*

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| <p><b>Next Steps for Teachers</b></p>               | <ol style="list-style-type: none"> <li>1. <b>Print Journals:</b> Print out the <a href="#">Student Journal for students</a> (optional). The journal may also be used electronically.</li> <li>2. <b>Review Student Guides:</b> Review student guides (linked below) for each lesson.</li> <li>3. <b>Share Links with Students:</b> Share the Student Guide link with your students on the day(s) you'd like your students to do the lesson.</li> </ol>        |
| <p><b>NGSS Content Standards</b></p>                | <ul style="list-style-type: none"> <li>• ESS3.C Human Impacts on Earth Systems</li> <li>• K-ESS3-1 Earth and Human Activity</li> <li>• 2-ESS2-2 Earth's Systems</li> <li>• 2-ESS2-3 Earth's Systems</li> <li>• 2-LS4-1 Biological Evolution: Unity and Diversity</li> <li>• 3-LS4-3 Biological Evolution: Unity and Diversity</li> <li>• 4-ESS2-2 Earth's Systems</li> <li>• 5-ESS2-1 Earth's Systems</li> <li>• 5-ESS3-1 Earth and Human Activity</li> </ul> |
| <p><b>Themes Covered:</b></p>                       | <ul style="list-style-type: none"> <li>• What makes up a watershed?</li> <li>• Everyone, everywhere, lives in a watershed.</li> <li>• Water powers our world.</li> <li>• Watersheds can be big or small.</li> <li>• We all live downstream.</li> </ul>  |
| <p><b>Guiding Questions</b></p>                     | <ul style="list-style-type: none"> <li>• Where is water found? Name some examples of where you have seen water.</li> <li>• Is water salty or fresh? Where is it salty? Where is it fresh?</li> <li>• Where have you visited water in nature? What animals or plants did you see?</li> <li>• What is a habitat?</li> <li>• What animals live in the water?</li> <li>• What plants live in the water?</li> </ul>  |
| <p><b>Social and Emotional Learning support</b></p> | <p><a href="#">All the Water in the World video</a> has pause moments for students to repeat movements with their body.<br/>The <a href="#">Water Cycle Yoga video</a> reviews the water cycle and get students moving.</p>   |

**Lesson #1: Engage**

- Pose the guiding questions so students start thinking about water and watersheds.
- Students answer questions in their journal.
- [All the Water in the World Video](#) including the following pause points:
  - 0:47- Wobble like water
  - 0:54- Say cheers, and take a drink of water!
  - 1:39 - Pretend to make raindrops fall and go down the river and into the ocean
  - 2:00 - Swirl around
  - 3:53 - Pretend to be an animal that needs water to survive
- [Sort it out Activity](#) and question in their journal

**Lesson #2: Explore**

- [Water Cycle Yoga](#)
- [Crumpled Watershed Video](#) and Activity
- [Explore Your Watershed Video](#) including pause points.
- Student Guide Video Questions
- [Watershed Scavenger Hunt](#)

**Lesson #3: Explain**

- Revise and add to the answers the Guiding Questions
- [We all live downstream art activity](#)
- The ["River Song" Sing-along Video](#) and journal questions

**Lesson #4: Elaborate**

- Discover Your Watershed activity and journal questions
- Prevent pollution journal questions
- Chat with a Naturalist

**Chat with a Naturalist**

This is an option if students have more questions or are interested in continuing to engage and ask further questions of an East Bay Regional Parks Naturalist. Educators should reach out to their preferred interpretive center and can schedule a 30 minute zoom session with a Naturalist or Interpretive Staff. Questions should be provided to the Naturalist or Interpretive Staff prior to the date of the check in so they have ample time to prepare and address students' questions thoroughly and thoughtfully.

# Explore Your Watershed

## Student Journal



Name: \_\_\_\_\_

Date: \_\_\_\_\_

**1** Answer the following Guiding Questions. It is OK if you do not know the answers to all of them.

Where is water found? Name some examples of where you have seen water.

Add to your answer after learning about watersheds

Where have you visited water in nature? What did it look like?

Add to your answer after learning about watersheds

What animals live in the water?

Add to your answer after learning about watersheds






What plants live in the water?

Add to your answer after learning about watersheds

# Explore Your Watershed

## Student Journal

2 Complete the Sort It Out Activity and answer the following questions.

| Name the following water source.  | Have you seen this source of water before? Where? |
|---|---|
|    |   |
|    |   |
|    |   |
|  |   |
|  |   |

|  |  |
|--|--|
| <p>List how you sorted the pictures during round 1.</p>                    | <p>List how you sorted the pictures during round 2.</p>      |
| <p>How many different phases of water do you see? (solid, liquid gas?)</p> | <p>What patterns do you see with the different pictures?</p> |

# Explore Your Watershed

## Student Journal

### 3 Crumpled Watershed Activity

Click here to watch the [Crumpled Watershed Activity Video](#)

Complete the following statements

|  |                       |
|--|-----------------------|
| What you noticed                           | I notice...           |
| Write what questions you have              | I wonder...           |
| Write down what this paper reminds you of. | This reminds me of... |

### Check off the different sources of pollution



- Pollution
- Not pollution



- Pollution
- Not pollution



- Pollution
- Not pollution



- Pollution
- Not pollution

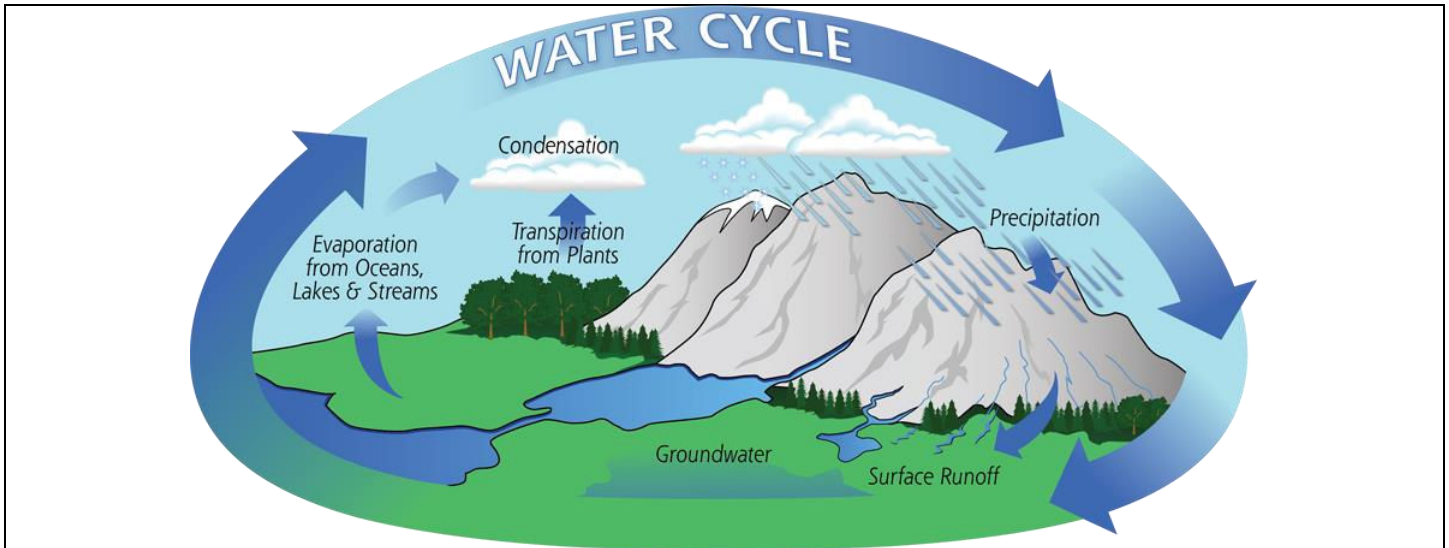
# Explore Your Watershed

## Student Journal

4

### Explore Your Watershed

Watch the [Explore Your Watershed Video](#) and answer the following questions.



Look at the water cycle picture above.  
List different sources of water.

What is the definition of a watershed?

Water...

Shed...

# Explore Your Watershed

## *Student Journal*



### 5 River Song

Click here to watch the [River Song Sing-along Video](#)

Draw a picture of what you think the song was describing.

A large, empty rectangular box with a blue border, intended for a student to draw a picture of what they think the song was describing.

# Explore Your Watershed

## Student Journal



### 6 What is Your Watershed

Answer the following questions.

The name of my watershed is...

My watershed drains into the...

The top of my watershed is at...

### 7 Pollution Prevention

List three ways you can prevent pollution from entering your watershed

1.

2.

3.

## Explore Your Watershed

### Lesson #1 Engage

|  |  |
|--|--|
| <p><b>Step 1:</b></p> <p><b>Guided Questions</b></p>     | <p>If you did not receive a printed copy of the <a href="#">Journal</a>, download the journal and save to your computer. From time to time, you will be asked to open up your Journal to do an activity.</p> <p>Go to #1 in your student journal to answer some of the Guiding Question.</p> |
| <p><b>Step 2:</b></p> <p><b>Watch Video</b></p>          | <p>Click here to watch the <a href="#">“All the Water in the World” Storytime</a>. Make sure to engage in the suggested movements and the various pause points.</p>  |
| <p><b>Step 3:</b></p> <p><b>Sort it Out Activity</b></p> | <p>Cut out each square from the <a href="#">Sort it Out Worksheet</a> and sort the squares in multiple ways. Repeat this activity numerous times and try sorting in different ways each time.</p> <p>Go to #2 in your student journal to answer the Sort it Out Worksheet questions.</p>     |

## Explore Your Watershed

### Lesson #2 Explore

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|---|--|
| <p><b>Step 1:</b></p> <p><b>Mindfulness</b></p>                 | <p>Click here to watch Claudia doing a 2.30 minute video on <a href="#">Water Cycle Yoga</a>.</p>  |
| <p><b>Step 2:</b></p> <p><b>Crumpled Watershed Activity</b></p> | <ul style="list-style-type: none"><li>• Click here to watch the <a href="#">Crumpled Watershed Video</a></li><li>• If possible, collect markers, paper and a spray bottle to follow along with the activity at home.</li></ul> <p><b>Go to #3 in your Journal: Crumpled Watershed</b><br/>Fill out the chart in your journal to share what you noticed happening to the water when you made it rain on your paper watershed.</p> |
| <p><b>Step 3:</b></p> <p><b>Watch Video</b></p>                 | <p>Click here to watch the <a href="#">“Explore Your Watershed ” Video</a>.</p> <p><b>Go to #4 in your Journal: Explore Your Watershed</b><br/>Write down answers to the questions.</p>  |
| <p><b>Step 4:</b></p> <p><b>Watershed Scavenger Hunt</b></p>    | <p>Using the <a href="#">Watershed Scavenger Hunt Worksheet</a>, walk around your neighborhood, with a trusted adult or family member. As you walk, search for examples of the six different pictures on your worksheet.</p>   |

## Explore Your Watershed

### Lesson #3 Explain

|  |   |
|--|---|
| <p><b>Step 1:</b></p> <p><b>Guiding Questions</b></p>      | <p><b>Go back to #1 in your journal: Guiding Questions.</b><br/>Add to your answers after learning more about water and watersheds.</p>   |
| <p><b>Step 2:</b></p> <p><b>We All Live Downstream</b></p> | <p>Complete the <a href="#">We All Live Downstream Art Activity</a></p>   |
| <p><b>Step 3:</b></p> <p><b>Watch Video</b></p>            | <p>Watch the <a href="#">“River Song” Sing-along Video</a></p> <p><b>Go to #5 in your journal: River Song</b><br/>Draw a picture of what you think the song was describing.</p> |

## Explore Your Watershed

### Lesson #4 Elaborate

|   |   |
|---|---|
| <p><b>Step 1:</b></p> <p><b>Discover Your Watershed</b></p> | <p>Using the resources listed below - locate where your school/home is, and what watershed it is in.</p> <p><b>Go to #6 in your journal: What is Your Watershed</b><br/>Answer the questions about your watershed.</p> <p><b>Watershed map related links:</b><br/><a href="http://explore.museumca.org/creeks/wb-A1-RescEast.html">http://explore.museumca.org/creeks/wb-A1-RescEast.html</a><br/><a href="http://explore.museumca.org/creeks/MapOak.html">http://explore.museumca.org/creeks/MapOak.html</a><br/><a href="https://www.fivecreeks.org/maps/">https://www.fivecreeks.org/maps/</a><br/><a href="https://www.cccleanwater.org/watersheds/watersheds-in-contra-costa-county">https://www.cccleanwater.org/watersheds/watersheds-in-contra-costa-county</a><br/><a href="https://www.epa.gov/sfbay-delta/about-watershed">https://www.epa.gov/sfbay-delta/about-watershed</a></p> |
| <p><b>Step 2:</b></p> <p><b>Prevent Pollution</b></p>       | <p><b>Go to #7 in your journal: Prevent Pollution</b><br/>Write down three ways you can prevent pollution from getting into your watershed.</p>   |
| <p><b>Step 3:</b></p> <p><b>Chat with a Naturalist</b></p>  | <p>To learn more, think of three questions you would ask a naturalist about water and watersheds near where you live.</p> <p>Your teacher will arrange a time for your class to chat with a naturalist from the East Bay Regional Park District.</p>  |