

Watershed walk overview: For teachers and chaperones

There are 5 kits, each with water testing materials, scavenger hunt materials, a site map, and discussion questions to be facilitated by teachers and chaperones.

Students will work in small groups of 5-7 students depending on class size (5 kits).

There are 3 activities on this walk - a scavenger hunt, water testing, and a wetlands activity.

Students and chaperones need to be evenly divided so that there are no more than 5 groups (per kit supply) and that each group has at least one chaperone lead.

SAFETY: STAY TOGETHER. Trails are mixed use, keep groups to one side. When entering the treatment plant use the side walk and watch for industrial traffic. Cross the crosswalk intersection at Oakesdale as one large group.

- 1) Give students the scavenger hunt photo guide and 2 of the native/invasive plant cards. Set them up to work in pairs or 3 as appropriate. The plant cards are their own personal scavenger hunt: goal: learn as much about their plant as they can, how many can they find on the whole trail?
- 2) Make sure each kit has a water testing kit container, a map, a water test descriptions, discussion question guide, worksheets as desired.
- 3) At several points during the walk encourage 2-3 minutes of silent walking and/or observation – at the end of those 3 minutes check in for what sounds they heard, what they saw, smelled, etc.

Scavenger Hunt Stop #1

When you leave the treatment facility, the first scavenger hunt stop will be at the river/overpass – this is where the scavenger hunt begins. Half of the items on the picture guide are around this area, the other half are later on in the walk. Students will use the picture guide to find as many items in that vicinity as possible. Students will then come to the adults - Adults will look at their discussion question guide and ask students the questions related to that found item. **This is where the learning happens.**

Walk approx. 10 minutes (veer to the right off the paved trail onto a dirt trail after a few minutes)

Water testing – find an easy access point to get to the river – there are several places

Plan to stay in this area for 20-30 minutes to run tests, read descriptions and discuss.

There are 4 tests that students will run. Instructions are in the kits.

- 1) Have students open the kit and locate
 - a. Empty container, with the circle disc and temp line inside
 - b. 2 large tubes, 1 small tube
 - c. 3 different chemical tabs: pH, Dissolved Oxygen (DO), phosphate
- 2) Give each student a responsibility
 - a. 3 students each will get the appropriate tube and test chemical per instruction
 - b. One student will fill the container
 - c. If there are more students, they can help each other, write results, read instructions, or read test descriptions later

- 3) Adult or student reads instruction one at a time – read the instructions and have the students start the tests in this order:
 - a. Dissolved Oxygen (DO)
 - b. Phosphate
 - c. pH
 - d. temperature
 - e. turbidity
- 4) While waiting for the tests to respond, have students take turns reading the descriptions of each test – after reading, have them then use their own words to talk about what the descriptions mean
- 5) Have students use the guide card to read their results, have them record results on the Optional water quality and wetland focused worksheet: Teachers can choose to use or not use this worksheet.

Leave your water testing area- walk approx. 5-7 minutes – you will see a larger trail leading up the hill to the left – indicated by a large tree directly in the middle of the main trail you are walking on (you will pass 2 small trails first) Take this trail.

The trail will take you through grassland to an intersection – carefully cross in one group – this takes you to the entrance of waterworks garden, turn left. You will be in the grotto area. From the water testing area to here takes about 10-15 minutes

Scavenger Hunt Stop #2 and Wetlands

Students will use picture guide to find as many items in that vicinity as possible. Adults will lead the discussion questions to make the connections between those items found and clean water and healthy ecosystems.

Optional water quality and wetland focused worksheet: Teachers can choose to use or not use.

Continue on this trail (flat, through the Grotto, not uphill) and this will take you back to Springbrook Creek Trail (paved) (approx. 10 minutes) – you have just made a loop. Continue to the right. Walk approx. 3-5 minutes and you will see the uphill, right trail that takes you back to the treatment plant gate.