Lesson Title:

Meet your Watershed The Sa



Overview:

Grade Level: 6-9

Time Required: 45-80 minutes

NGSS Alingment:

MS-LS2-3, MS-LS2-4, MS-ESS2-4, MS-ESS3-3, MS-ESS3-4, HS-LS2-7, HS-ESS3-4, HS-ETS1-3

Learning Goals:

- Students will understand the concept of a watershed by playing the Watershed Heroes Action Game (WHAG)
- Students will be able to identify sources of contamination in a watershed
- Students will be able to describe actions that can be taken to remove pollution from a watershed

Materials:

- Equipment to show video:
 <u>Watershed Adventures with Echo</u>
 <u>the Orca</u>
- WHAG Class Kit Contents
- Video: How to Play WHAG
- Classroom set of <u>Meet Your</u> <u>Watershed</u> Handouts
- Writing implements
- Access to a sink for clean-up

Procedure:

- 1) Warm-up challenge (5-10 minutes)
- As students enter class, invite them to complete the "What do you already know?" column of their Meet Your Watershed handout.
- When students seem finished writing, invite them to share any information they have.
- 2) Meet Your Watershed Video (10-15 minutes)
- Show "Meet Your Watershed"
- invite students to add new information to their handout in the "New Information" column.
- 3) Show "How to Play The Watershed Heroes Action Game" Video (3-5 minutes)
- 4) Have students play The Watershed Heroes Action Game (15-20 minutes)
- 5) Game clean-up (5-10 minutes)
- · Have students clean-up and dry off the game
- 6) Reflection and closing class discussion (5-20 minutes)
- · Invite students to complete the "After the Game" section of the Meet Your Watershed handout
- Invite students to discuss:
 - · What new information they have learned
 - What new things they are curious about
 - o What actions they might want to take to help keep the watershed clean

Additional Resources:

- <u>The Nature of Teaching: Discovering the Watershed. Purdue University.</u>
- <u>Drain Rangers: Investigations Polluted Stormwater</u> <u>Runoff in Elementary Grades.</u>
- <u>Engineering Solutions: Investigating Polluted</u> <u>Stormwater Runoff in Secondary Grades</u>
- <u>Washington's Water Quality Management Plan to</u> <u>Control Nonpoint Sources of Pollution</u>
- <u>Center for Watershed Protection Trees and</u> <u>Stormwater Runoff</u>
- <u>Disentangling effects of forest harvest on long-term</u>
 <u>hydrologic and sediment dynamics, western</u>
 <u>Cascades, Oregon</u>