

People and the Environment 9-12th Grade

Themes: Environmental Justice, Sustainability, Equity

Location:

This lesson's activities can be done in the classroom with student computers. The self-guided walk can be done in a the students' neighborhoods. Remote learning modification: Lesson can be taught over Zoom or Google Classrooms.

Standards: NGSS

HS-ETS1-3

Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, aesthetics as well as possible social, cultural, and environmental impacts.

OSPI

Social Studies 3.9-12.4

Analyze the impact and the appropriate roles of personal interests and perspectives on the application of civic virtues, democratic principles, constitutional rights, and human rights.

Social Studies 3.9-12.6

Assess options for individual and collective action to address local, regional, or global problems by engaging in self-reflection, strategy identification, and complex causal reasoning.

ESE Standard 1

Students develop knowledge of the interconnections and interdependency of ecological, social, and economic systems. They demonstrate understanding of how the health of these systems determines the sustainability of natural and human communities at local, regional, national, tribal, and global levels.

Modifications, Adaptations:

For COVID-19 distance learning, or other remote learning modification, look for remote learning modifications throughout the lesson plan.

Materials:

Interactive ThingLink, Thinglink worksheet, Environmental Health Disparities Assignment, Washington Environmental Justice Taskforce Final Report, Self-Guided Walk Sheet

Objectives:

Students will...

- 1. Define what environmental justice is and explain why it is important for the health of communities.
- 2. Identify water impairments in their community.
- 3. Analyze environmental health disparities in Washington by looking at socioeconomic and environmental hazard data from the Department of Health.
- 4. Evaluate five recommendations of the Environmental Justice Task Force considering impacts of social, economic, and environmental health.
- 5. Explore their neighborhoods, create a journal that reflects their experiences, and identify ways they can help their community.

Vocabulary:

BIPOC: Black, Indigenous, and People of Color. Burden: The magnitude of poor health that exists within a community that is attributable to the risk factors that are

Disproportionate Impacts: When one group or population bears an environmental or health impact that is substantially higher than the average distribution. This impact is usually compounded by existing inequities due to historic discrimination against certain groups.

Environmental Effect: Adverse environmental quality generally, even when population contact with an environmental hazard is unknown or uncertain.

Environmental Equity: When no single group or community faces disadvantages in dealing with the effects of the climate crisis, pollution, environmental hazards, or environmental disasters.

Environmental Exposure: How a person comes into contact with an environmental hazard. Examples of exposure include breathing air, eating food, drinking water or living near to where environmental hazards are released or are concentrated.

Environmental Hazard: A specific source or concentration of pollution in the environment. Polluted air, water and soil are examples of environmental hazards.

Environmental Health Disparities: Inequities in illnesses that are mediated by disproportionate exposures associated with the physical, chemical, biological, social, natural and built environments.

Environmental Justice: The fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to development, implementation, and enforcement of environmental laws, regulations and policies. This includes using an intersectional lens to address disproportionate environmental and health impacts by prioritizing highly impacted populations, equitably distributing resources and benefits, and eliminating harm.

Equality: Treating everyone the same, regardless of their circumstances.



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Equity: The act of developing, strengthening, and supporting procedural and outcome fairness in systems, procedures, and resource distribution mechanisms to create equitable (not equal) opportunity for all people. Equity is distinct from equality which refers to everyone having the same treatment without accounting for differing needs or circumstances. Equity has a focus on eliminating barriers that have prevented the full participation of historically and currently oppressed groups.

Health Disparities: A higher burden of illness, injury, disability, or death experienced by one group or population relative to another.

Ocean Justice: The intersection of ocean conservation and social equity. It considers who is impacted the most by overfishing practices, more frequent and intense storms, sea-level rise, plastic pollution, and more.

Race: A social construct that divides people into smaller social groups based on characteristics most typically skin color. Racial categories were socially constructed, and artificially created whiteness as one of the elements of the dominant culture. Race was created to concentrate power and advantage people who are defined as white and justify dominance over non-white people. The idea of race has become embedded in our identities, institutions, and culture, and influences life opportunities, outcomes, and experiences. Racial categories change based on the political convenience of the dominant society at a given period of time.

Racism: A way of representing or describing race that creates or reproduces structures of domination based on racial categories. In other words, racism is racial prejudice plus power. In the United States, it is grounded in the creation of a white dominant culture that reinforces the use of power to create privilege for white people while marginalizing people of color, whether intentional or not. Vulnerability: A person's (or population's) non-biological situation that affects their ability to cope with risk factors. Examples of vulnerability include low income, language barriers or poor access to health care.

Definitions from Washington Environmental justice Task Force Final Report.

Procedure: Introduction

For homework, pass out the Self-Guided Walk Assignment. Have students answer as many of the questions on the prompts as they can. Their journal responses can be documented by writing, poetry, photographs, illustrations, etc.

The next class period ask students to share their experiences if they feel comfortable. After students are done sharing experiences, introduce the concept of environmental justice. You can do this by writing it physically or having students discuss it.

Ask students if they know what this concept is. Write ideas on the board or a virtual whiteboard like <u>Google Jamboard</u>. After discussing ideas, have students analyze their self-guided walk experience and consider if their community is experiencing any environmental injustices based on what they felt/saw/smelled/etc. As this could be a sensitive issue, we recommend not having students share this information with peers or as a class.

Next, ask students to write down questions they have about environmental justice and what they want to learn. Have students share their questions with a peer and then share with the class. In this lesson, students will be learning about concepts of environmental justice, and the relatively new concept of ocean justice.

Send students the link to the "Watersheds and Environmental Justice" ThingLink interactive exhibit and distribute the accompanying worksheet. Have students explore this exhibit as homework (should not take more than one hour). Discuss student answers as a class during your next class period. During this class period, show the 12-minute Career Connections video. This offers students a chance to learn more about ocean and environmental justice and learn about careers in the environmental field.

Environmental Health Disparities Map Assignment

Distribute the "Environmental Health Disparities Assignment" This assignment has students use the <u>Department of Health's Environmental Health Disparities Map</u> to find out demographics of overburdened communities. We recommend reading <u>pages 124-127</u> of the <u>Washington Environmental Justice Task Force's Final Report</u> to get a better idea of how the map works. This assignment is broken up into two parts.

The first part has students get familiar with the map and its different features. It asks students to analyze three separate areas (broken up into U.S. Census Bureau tracts) of Washington for environmental justice. Students collect data and then synthesize their information in a short report. We recommend giving this assignment as homework.

The second part of the assignment has students compare their synthesis with two other students (you can choose their partners, or they can choose themselves. You may let students choose their own groups, or assign them groups. After reviewing information about their different areas, students then write a brief summary of similarities and differences in their analyses. The assignment concludes with students analyzing recommendations from the Environmental Justice Task Force Final report in order to achieve environmental justice in Washington.

We recommend giving students some class time for this assignment. Remote learning modification: students can meet over breakout rooms to collaborate on part two of their assignment.

After students have finished their analyses and evaluations as a group, spend approximately 30 minutes of class time in discussion. Have students share what they learned, what surprised them, and how this assignment made them feel. Use student screenshots of data as examples to supplement discussion.

The second walk

For the final piece of this lesson, re-distribute the Self-Guided Walk Assignment. Students can walk the same route they took last time, or can go on a new route. This time, ask students to consider what they have learned about environmental justice. In their journal have them consider:

 How might you better get to know the members of your neighborhood or community?



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- Has your perspective on your neighborhood changed? Why or why not?
- Do you feel more connected to your neighborhood after walking in it a couple of times and getting to know it better? Explain why or why not.
- What things could you do to improve your community? Examples could include: volunteering, cleaning up trash, etc.
- How would these actions benefit the human community?
- How would these actions benefit the environment around



Idea: Show off your students' work! Share student projects from this lesson with WDFW.

Facebook:@WashingtonFishWildlife Instagram:@TheWDFW Twitter:@WDFW #WildWashington #WildWa

Did you teach this lesson? Give us your feedback.

Additional Resources:

We encourage you to use the following resources as either a supplement to this lesson, or to share the resources with students for their project.

Webpages:

- <u>Climate Change in the Latino Mind</u>- Yale Program on Climate Change Communication
- <u>Social and Environmental Justice in Seafood</u>- UW Sustainable Fisheries
- Environmental Justice Atlas
- Water Teachings

Articles:

- <u>Living Downstream</u>: The Birth of Environmental Justice-NPR California
- <u>Toxic Wastes and Race in the United States</u>- United Church of Christ (1987)
- What is Marine Justice (academic paper)

Videos:

- <u>BIMS dives into Ocean Justice</u> (one-hour video, highly recommended)- Black in Marine Science
- <u>Environmental Justice for Coastal Communities</u>-(video of subcommittee hearing)- House Natural Resource Committee
- Ocean Activist Wants to Change the Narrative on Environmentalists (video)