

Grade Level: 10th

Subject Area(s): Interdependent Relationships in Ecosystems

Goal(s): Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and ecosystem.

Objective(s): Choose an anthropogenic disturbance in the local environment. Research the causes and effects. Then design a solution for reducing the negative impacts for the environment and biodiversity.

Background Knowledge:

Local invasive species
Local water quality
Local air quality
Environmental toxins
Climate shift
Mono-agriculture
Primary and Secondary sources

Vocabulary:

Interdependence – ntk^wels
Biodiversity
Invasive species
Climate change
Anthropogenic
Habitat
Overexploitation
Herbicides
Pesticides
Toxins

Spokane Tribal Values/Tribal**Connection:**

Land and environment
Respect
Relationships
Home
Community
Honor

Lesson Teaching Plan:**The teacher will:**

Brainstorm with students some anthropogenic disturbances in the local area. After brainstorming, students choose an event to focus their research on. They take that topic out of class and discuss the anthropogenic effects the community experienced (first or second hand accounts). - This is part of the Research

Teacher involves DNR - Elders to come to class and discuss previous disturbances and solutions the Spokane Tribe used. This will build background knowledge and give the students a model for their upcoming work around their own topic.

Teacher will provide a format and/or template for researching and Planning the solutions for their disturbance. (in template: add Environmental and cultural impacts)

Groups and/or individuals will meet with teacher to present research Of the problem and ideas around solutions. Teacher will pay close Attention to citations from text proving their research accurate.

Groups and/or individuals will work on solutions and presentation

Materials Needed:

List of anthropogenic disturbances for reference. (Midnite Mine, Sherwood Mine, Dams, Invasive Species, Fires, Canadian (Teck Cominco) water pollution, Spokane waste water

pictures

(Polo and Jennifer working on coordinating students with a trip to
Their anthropogenic disturbance)

Presentation:

Peer input: Groups/individuals present their disturbance, their research and findings, as well as their solution.

Activity:

Brainstorm

Research

Project

Presentation

Community Guest Presenter (specialist)

Assessment: *Pre-Test/Post-Test Instrument*

Presentation

Peer input

Enrichment:
Present @ Community fair

LESSON ALIGNED TO:

NGSS

LS2.C

ESS3.C

ETS1.B

COMMON CORE STANDARDS:

[CCSS.ELA-LITERACY.SL.7.1.B](#)

[CCSS.ELA-LITERACY.SL.7.1.D](#)

[CCSS.ELA-LITERACY.RST.9-10.1](#)

[CCSS.ELA-LITERACY.RST.9-10.8](#)

[CCSS.ELA-LITERACY.SL.7.1](#)

[CCSS.ELA-LITERACY.SL.7.5](#)

[CCSS.ELA-LITERACY.RST.9-10.4](#)

[CCSS.ELA-LITERACY.RST.9-10.7](#)

[CCSS.ELA-LITERACY.SL.7.1.C](#)

[CCSS.ELA-LITERACY.SL.7.4](#)

[CCSS.ELA-LITERACY.RST.9-10.7](#)

Community Resources

Prior to this lesson - invite Lucas Bair to discuss air quality with class.

Prior to this lesson - invite Warren Seyler to discuss the effects of Dams and the current status of dam impacts.

Timelines, pictures, documents, - Warren, DNR, Preservation, Forestry, Spokane Public Library,