

# **SUSTAINABILITY & STEWARDSHIP**

***Students explore ecosystem sustainability and how human actions can affect it in negative and positive ways.***

**NGSS STANDARD**  
5-ESS2-1, 5-ESS3-1

**GRADES**  
5<sup>TH</sup>

**TIME**  
50 minutes

## **LEARNING OBJECTIVES**

- Understand what factors contribute to sustainability in a healthy ecosystem.
- Understand how human actions can degrade an ecosystem and how responsible stewardship can improve it.
- Gain experience in asking critical questions.

## **PREPARATION**

1. Preview the two videos.
2. Cue the first video on your overhead projector's computer and have the address for the second close at hand.

## **WHAT TO DO**

1. Show the video [Salmon Story \(6.49 mins.\) at www.youtube.com/watch?v=x-6CuvZdy14](http://www.youtube.com/watch?v=x-6CuvZdy14), then engage students in discussing what they heard and saw about salmon sustainability. Possible questions to pose:
  2. What does "sustainability" mean?
    - What did you see in the video or what did you already know that can affect sustainability?
    - In the video, how do you see sustainability issues applying to how many salmon we have now versus years ago?
    - One of the narrators lists things he's never known, such as huge runs of salmon or the sky filled with birds. Can you add to his list - things that used to be common in the environment but no longer are?
    - What factors other than human action might affect sustainability?
    - What human actions can degrade an ecosystem and reduce the sustainability of species?
2. Show the video [Lost and \(Puget\) Sound \(27.37 mins.\) at https://vimeo.com/23283018](https://vimeo.com/23283018), then engage with students in discussing what they heard and saw about stormwater pollution and water-quality stewardship. Possible questions to pose:
  - What is a watershed?
  - What watershed are we in?
  - What larger watershed are we in?
  - What does "water quality" mean?
  - What does "impervious" mean?
  - What impervious surfaces can you name?
  - What three ways does the video emphasize that people pollute Puget Sound?
  - What additional ways can you name?
3. Engage students in defining "stewardship" and what actions they and their families might take to improve water quality in Puget Sound.

## **NOTE**

Consider presenting this lesson shortly before your salmon need to sustain themselves in the wild.