

# Wearing Away Walk

Location: RiverWalk Learning Station 6

Program Levels: Senior, Ambassador

**Objective:** Girls will use observations about erosion to plan a project to combat erosion in their community.



## Materials Provided

- Dry Erase boards
- Dry Erase markers

## Activity Steps

1. Begin by using the pre-discussion questions to facilitate a talk about the causes and effects of erosion, particularly the human factor.
2. Once everyone is comfortable with the subject matter, encourage the girls to examine the banks of the Peace Creek for signs of erosion, as well as measures that have been taken to help reduce the impact of humans on the creek banks. Does it seem that these measures are helping?
3. Have the girls split up into groups of four to five and pass out a dry erase board and markers to each group. Ask them to brainstorm a location where they have noticed that erosion is an ongoing problem. These might be favorite hiking trails, school sports fields, even their backyards or the edge of their driveways.
4. Have each group choose one problem area and plan a project that would combat the erosion. Encourage them to use the dry erase boards to sketch the area and show what measures could be put in place to address the problem.
5. Encourage each group to present their chosen problem and plan of action for reducing the erosion. Use the post-discussion questions to facilitate evaluation and constructive criticism of each proposal.

## Pre-discussion Questions

- **Define the word “erosion.”** The gradual wearing away of land surface materials, especially rocks, sediments, and soils. Usually erosion also involves the transport of eroded material from one place to another.
- **What are some natural causes of erosion?** Rain, streams, glaciers, wind.
- **How do humans cause erosion (or make it worse)?** Removing plants whose roots hold soil in place, walking along steep banks where soil is shifted from the pressure, changing the natural flow of water in streams and rivers.
- **Erosion is a natural process – how is it harmful?** Eroded soil can clog waterways, and wash nutrient rich topsoil away, harming plant life. Flooding can occur in areas where soil has been washed away and rock is left visible.

## Post-discussion Questions

- What are the proposed actions to halt or slow erosion? Are there any additional actions that could slow the erosion even more? For example: if you are planting trees, can you also cover the topsoil with mulch to help hold it in place while the trees take root?
- How feasible is your project? Is it simple enough to be completed by a few people, or will it require funding and assistance from people outside your troop?
- If it is larger scale, how could you motivate your others to be of assistance?
- Is it sustainable? Covering bare soil with mulch can be effective, but if you have to replace the mulch each spring after it snows, the problem may come back quickly.

### Extensions

#### On the Trail

Look for places on the trail where erosion is taking place and brainstorm how to slow or stop it. Pass on your ideas to the GSCNC camping department!

#### Beyond the Trail

Complete one or more of the proposed projects! Did your work halt or slow the erosion? If it didn't completely halt it, what could you do to increase the effectiveness of your work?