



Driving Question: How can we, as citizens of our local community, identify and develop a solution for a human-caused problem in our local beach ecosystem?

Content: The children will utilize their knowledge of Earth's systems and human impact to take action and make a difference in our local community. Students will identify a current issue impacting our beach and work to brainstorm possible solutions and collaborate to design a project that will help to reduce this issue in their local community. The students will analyze, evaluate and fix problems they encounter and present their project to an audience. Finally, students will use critical thinking skills to reflect on the project, what went well, what they have learned and what they would do differently next time.

Standards:

3-5-ETS2-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. 5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Major Products/Making it Public:

1. After our science unit on Earth's Systems and a presentation from the Surfrider Foundation, student groups will identify a problem that they would like to address that impacts our local beaches.
2. Student groups will choose how they would like to address the problem, perhaps with an engineering solution, a community service project or a community education campaign.
3. Students will present their solutions to our school community and to the Surfrider Foundation representative and perhaps participate in a Surfrider event to broaden their impact.