



# Colorado Science and Engineering Fair

## 2025 Team Project Abstract Form

**Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.**

Title of Project: Oceanic Waste Removal

Team Leader's Name: Aidan Tipton

Team Member 1: Silas Morrison

Team Member 2:

School and City: Bayfield Middle School, Bayfield

Sponsor's Name: Kris Mcsweeney

Category: Energy

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

Our project is centered around creating an efficient way to remove and reuse plastic waste that makes its way into the ocean from landfills and littering. This plastic waste can be, and is extremely harmful to the marine environment and ecosystems. If humans find an extremely efficient way to get rid of this trash, it will immensely help the world's organisms, including people. When we did our research, we found a version of one of these robots. It was called the FRED robot. After doing some more research on the topic, we decided that it was time to start making ideas and building the project. We then gathered some materials, and began building the project. First, we built a barge, and then attached the conveyor belt to the barge. Subsequently, we tested the barge to make sure that it had the ability to float. Once we saw that it was floating, we went back to work and put the scoop onto the front of the barge in a good place and secured it so that it was stable. We then tested it again to make sure that it still floated. After we saw that it was able to float, we sealed the barge completely so that we would have no long term problems with the water inside of the barge. After all testing and proofing, we believed that our project was ready. We made a semi-autonomous barge that has the ability to remove and store plastic waste from the ocean.

*We hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. We also attest that the above properly reflects our own work.*

Team Leader's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Team Member 1's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Team Member 2's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with your Finalist Verification/Permission Form. **A signed copy of this form must be included in your notebook.**