



# How Coastal Erosion Affects Life in Angoon, Alaska

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## INTRODUCTION

Some of Alaska's most eroded coastal villages are facing a new crisis. The currents in rivers, streams, and oceans, are carrying sediments from eroding shorelines and depositing them in harbors. Now barges can't make their deliveries of regular fuel to remote communities. Erosion and flooding affect 184 of Alaska's 213 native villages. Erosion problems are expected to worsen as the ocean warms and rises, shrinking buffers and the shorelines.

In Angoon on southwest Admiralty Island, along Chatham Strait, precipitation averages 220 inches per year. Precipitation is the major force in erosion in southeast Alaska. Our roads and our shoreline homes are in danger because of erosion.

## Methods

We collected waypoints from the GPS satellite constellation using Garmin etrex receivers .....around Angoon....for the purpose of.....

We focused on sites that were eroding?  
Explain why you collected the points you did and what you hoped to learn from them

To stop erosion we thought about making water resistant materials to help our roads, to plant some plants or trees to help our soil from eroding. Our Mentor Teacher Jim Parkin and Professor Cathy Connor at UAS helped us to export our waypoints into ArcGIS shape files and as .KML files for display in Google Earth.

## Results

The pictures linked by arrows to our waypoints show..... we can see that this area is both wet and steep making it a high risk for mud slides.

Data? Any info about locations of eroding areas relative to shoreline? Prevailing currents? Streams? Need some data to interpret map and photos below



Readd the arrows the way you want them

## Conclusions

If global warming were to happen because this area is steep and wet it would destroy homes and maybe even take lives. August 2006 workshop version... update for your project results..

Add map showing waypoints and label them...there weren't any labels  
On your GPS files.....????

## Acknowledgments

We would like to thank our teacher Mr. Parkin for nominating us for this class.

## For further information

Please contact [youremail@woohoo.com](mailto:youremail@woohoo.com). More information on this and related projects can be obtained at [www.swarthmore.com](http://www.swarthmore.com). (give the URL for general laboratory web site). A link to an online, PDF-version of the poster is nice, too.



