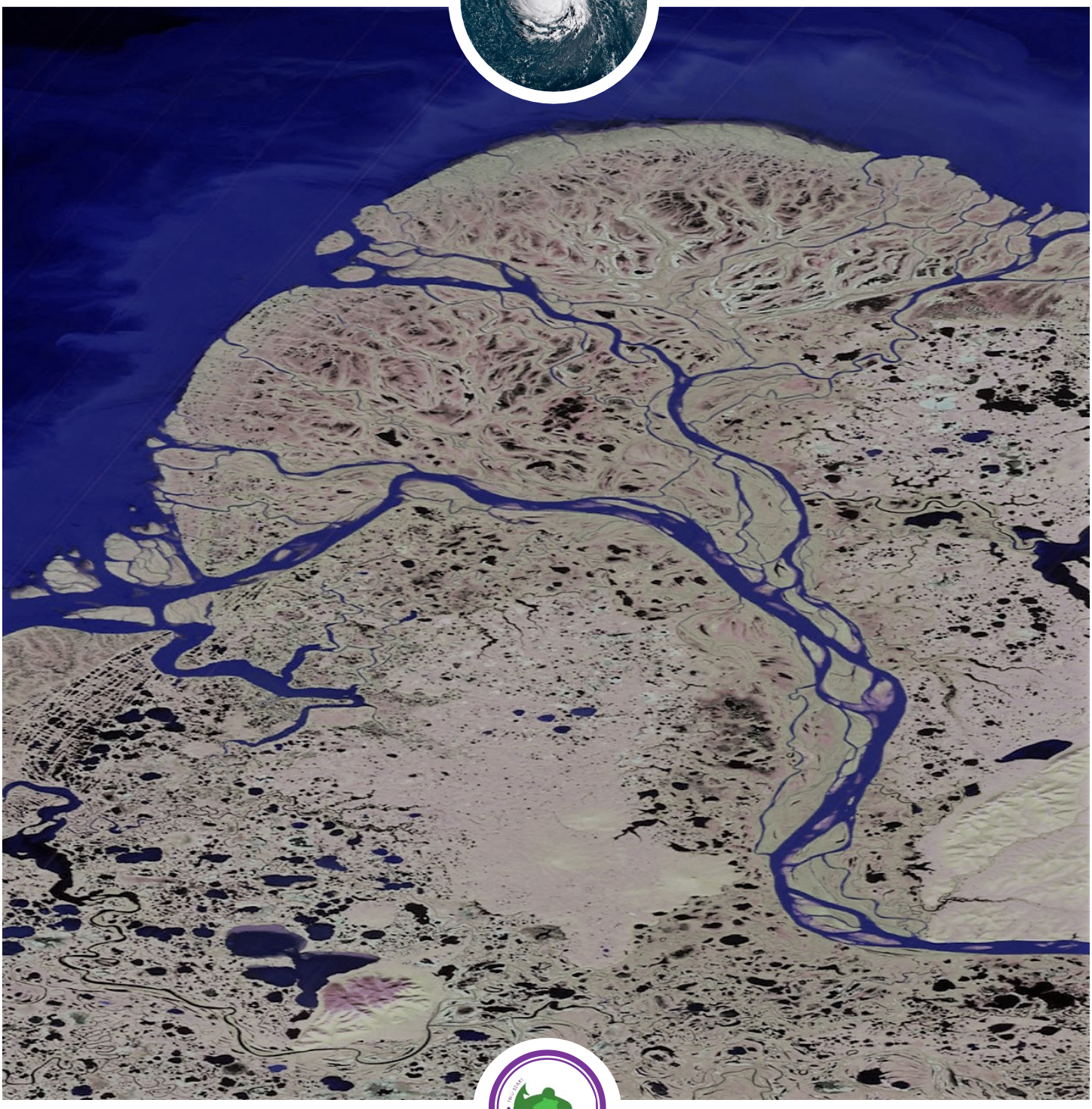
ADAPTATION FOR FUTURE RESILIENCE



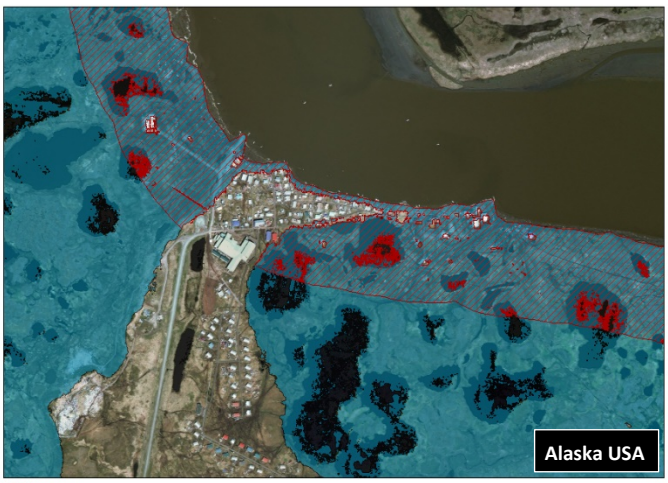
TWO BEARS ENVIRONMENTAL CONSULTING, LLC.

Your Partner in Environmental Risk Assessments and Adaptation Planning

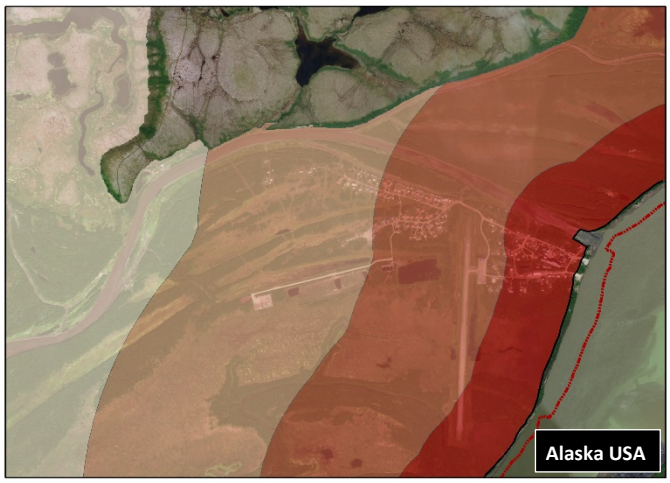
WHAT WILL THE FUTURE LOOK LIKE? WHAT ARE THE RISKS TO ME?

Applying the Latest General Circulation Model and Regional Climate Model Data for Risk Assessments and Planning

Chefornak Potential Erosion and Flooding 2100 ARI 100



Napakiak Potential Erosion 2030 - 2100



TBEC is strongly established in the risk and biophysical adaptation, with data and tools to support communities and businesses with their climate and development priorities including predicting, preparing for, and adapting to environmental change. The goal of our work is to reduce climate risks while increasing resilience. Future climate variables and sensitivities are predicted at an actionable scale using accepted forward-thinking climate practices. Our mission is to improve the understanding of the potential impacts of future climates and provide the information needed to effectively "climate-proof" homes, lifestyles, and businesses.

We provide the fit-for-purpose data and insight needed for informed decisions. Outputs are tailored to the needs of the end users, our clients.

Two Bears Environmental Consulting, LLC. (TBEC) applies the latest high-resolution, forward looking climate data to predict the risks and impacts of a changing climate, including timing, direction and magnitude. For example, risks due to storm surge, sea level rise, erosion, flooding, wildfire, drought, agriculture, forestry, disease vectors, fisheries, freshwater resources, fish, wildlife and marine mammal habitats, availability of subsistence foods, and other environmental hazards or changes to ecosystem services due to future climate. The timing and changes in sustainability of critical infrastructure (e.g. roads, airstrip, water, power, waste, fuel farms or other assets) are also determined to increase infrastructure resilience. Data is used to identify, develop and promote comprehensive and sustainable best management practices for informing climate risk management decisions and developing effective adaptation strategies. For instance, whether 'protect-in-place' is more cost effective than replacing existing infrastructure.

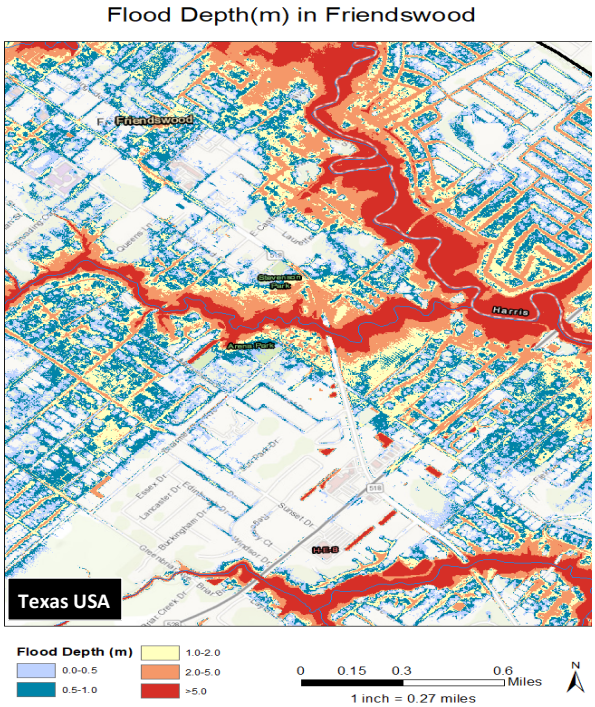
TBEC links science and social/business priorities in community-based adaptation planning to obtain powerful mapping and analytical tools for generating high quality actionable data and reports for our clients.

Our expertise provides a critical nexus between the environmental impacts resulting from climate change and how people and businesses are affected by, and respond to, these impacts and their associated risks.


ENVIRONMENTAL ATLAS

What will climate look like in 25, 50, or 100 years?

Environmental Atlases provide information on future climate and biophysical variables.



Environmental Atlases compare historical climate to predicted future conditions. We project over 25 slow onset climate variables, more than five extreme weather events, and biophysical maps and linked impacts such as storms at high tide or on dry soils. Additional information is collected at a local scale to inform the building criteria for resilient infrastructure for protecting prior to, or rebuilding after, a climate disaster.

We can develop robust, projected risks at a detailed actionable scale, providing instructive maps and guidance for climate risk management, emergency response, and for the protection, or recovery and rebuilding, of communities and businesses. The data is invaluable for building and maintaining resilient infrastructure, protecting lifestyles, livelihoods and businesses, and reducing the risks of future climates and the costs of project failure.



WE OFFER A RANGE OF SERVICES

Environmental Risk Assessments - Biophysical Adaptation & Resilience: Incorporating Ecological and Socioeconomic Challenges.

- Cost-Benefit Analysis
- Cost-Risk Modeling Analysis
- Hydrology and Erosion Modelling
- Evaluate the impacts of slow onset and extreme climate events on the built environment (e.g., infrastructure and impermeability)
- Develop guidelines for building resilient infrastructure
- Work directly with clients to provide fit-for-purpose results to inform decisions and develop policies
- Evaluate changes in Ecosystem Services, (e.g., food, clean water, health)
- Develop Resilient Sanitation