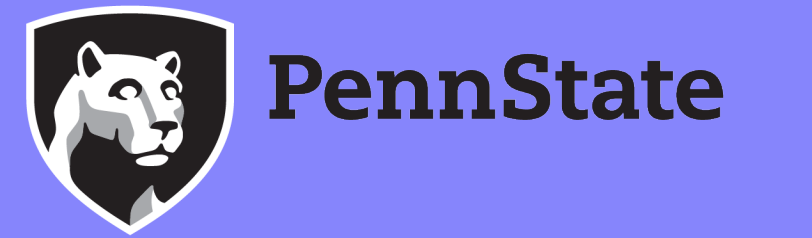


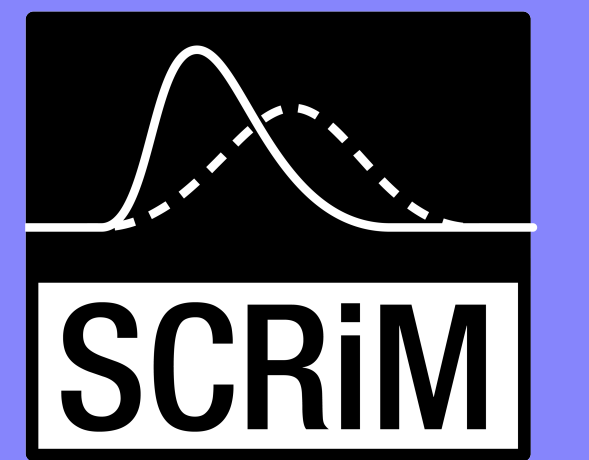


The Frontier of Fairness in Climate Change: Newtok, Alaska



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Introduction

The people of Newtok, Alaska have been exposed to disproportionate risks due to climate change. Hermansson and Hansson (2007) provide a framework for analyzing issues of fair risk distribution. They apply seven key questions that address the relationships among those exposed to risk, the decision-makers, and the beneficiaries. Applying this framework to the case study of Newtok helps to identify key issues regarding the fair distribution of risk that could help inform more just public policy.

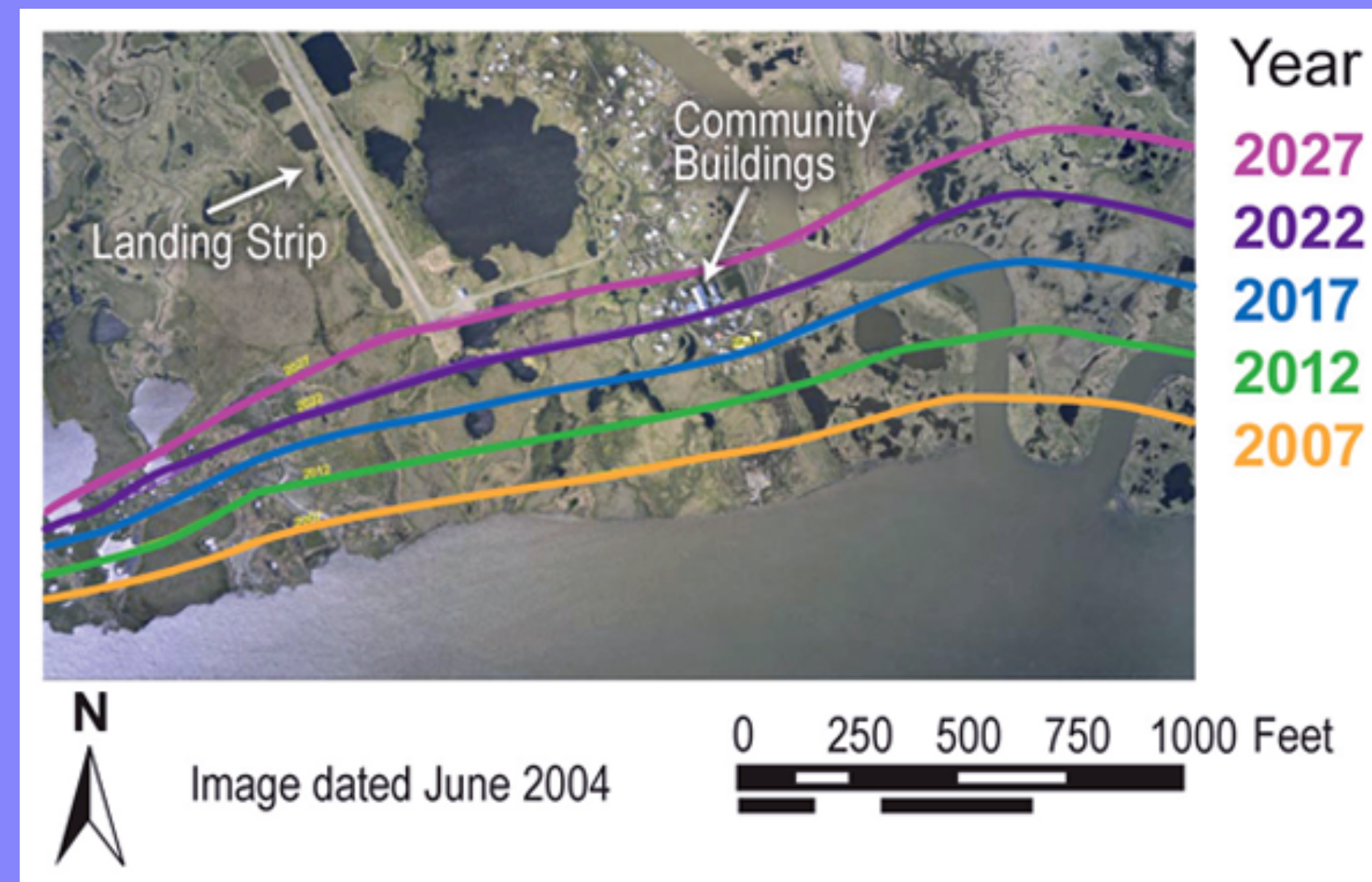


Figure 1: U.S Global Change Research Program

Case Study: Newtok, Alaska

Demographics:

- Historically nomadic people forced by the gov't to settle
- Coastal Indigenous village of around 323

Environmental Considerations:

- The Arctic is affected more rapidly by climate change than the rest of the world
- Melting sea ice has allowed for rapid erosion of the coast
- Warming also melts permafrost that infrastructure is built on
- Community faces risk of flooding and land loss

Decision-Making Process:

- Village has voted to completely relocate 9 miles inland, but have not moved due to government restrictions and lack of funds

Ethical Question:

- How should degrees of responsibility be assigned among those involved to promote justice in this situation?

Results

- An unfair burden of risk has been placed on the people of Newtok as a result of a colonial history and the effects of climate change
- Responsibility for climate change is complicated but nonetheless some degree of responsibility must be assigned to different parties who contributed
- Historical context/parameters of risk situation extremely important for evaluation
- Higher priority should be given to non-market values such as culture that cannot be compensated when destroyed
- Importance of autonomy of risk-exposed in deciding their future



Figure 6: Bingo Night in Newtok, The Guardian

Key Questions

Newtok

1) To what extent do the risk-exposed benefit from risk exposure?	Very little, the benefits (snowmobiles, etc.) are disproportionate to the risk exposure?
2) Is the distribution of risks and benefits fair?	The benefits are smaller or the same for risk-exposed compared with others, but the risk is significantly higher
3) Can this distribution be made more fair by redistribution or compensation?	The nature of climate change does not allow for redistribution, and there are issues with compensating for non-market values
4) To what extent is the risk exposure decided by those who run the risk?	The risk-exposed were not in control of the global phenomenon of climate change, and did not decide the placement of their village
5) Do the risk-exposed have access to all relevant information about the risk?	In the past they did not, now after they have been exposed they have the information
6) Are there risk-exposed persons who cannot be included or informed in the decision process?	There are people who have been excluded and continue to struggle to be included
7) Does the decision-maker benefit from other people's risk exposure?	Although there wasn't just one or a few decision-makers, those that choose to burn fossil fuels did benefit from the choice

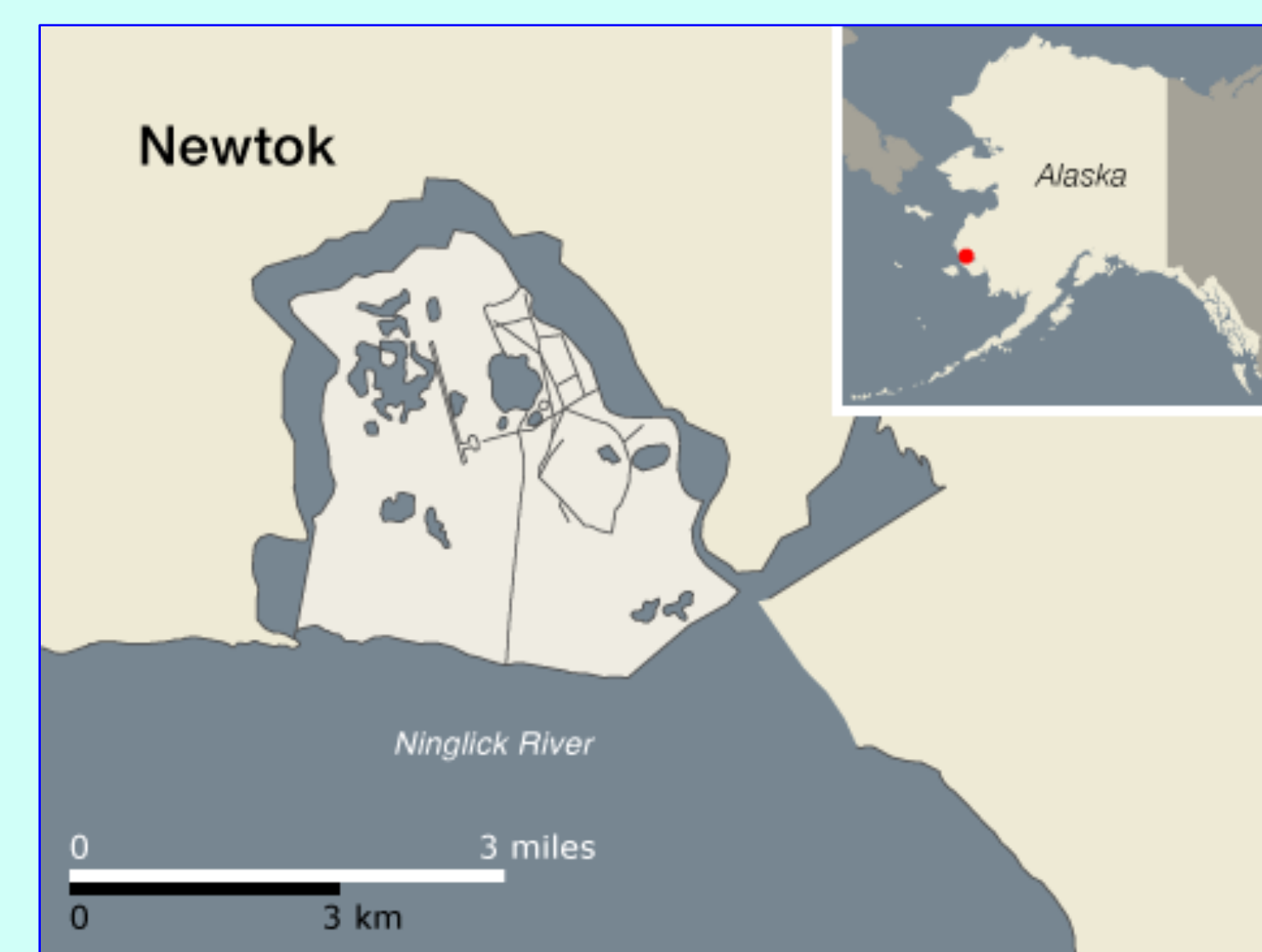


Figure 2: Map of Newtok, The Guardian



Figure 3: Aerial View of Newtok, The Guardian

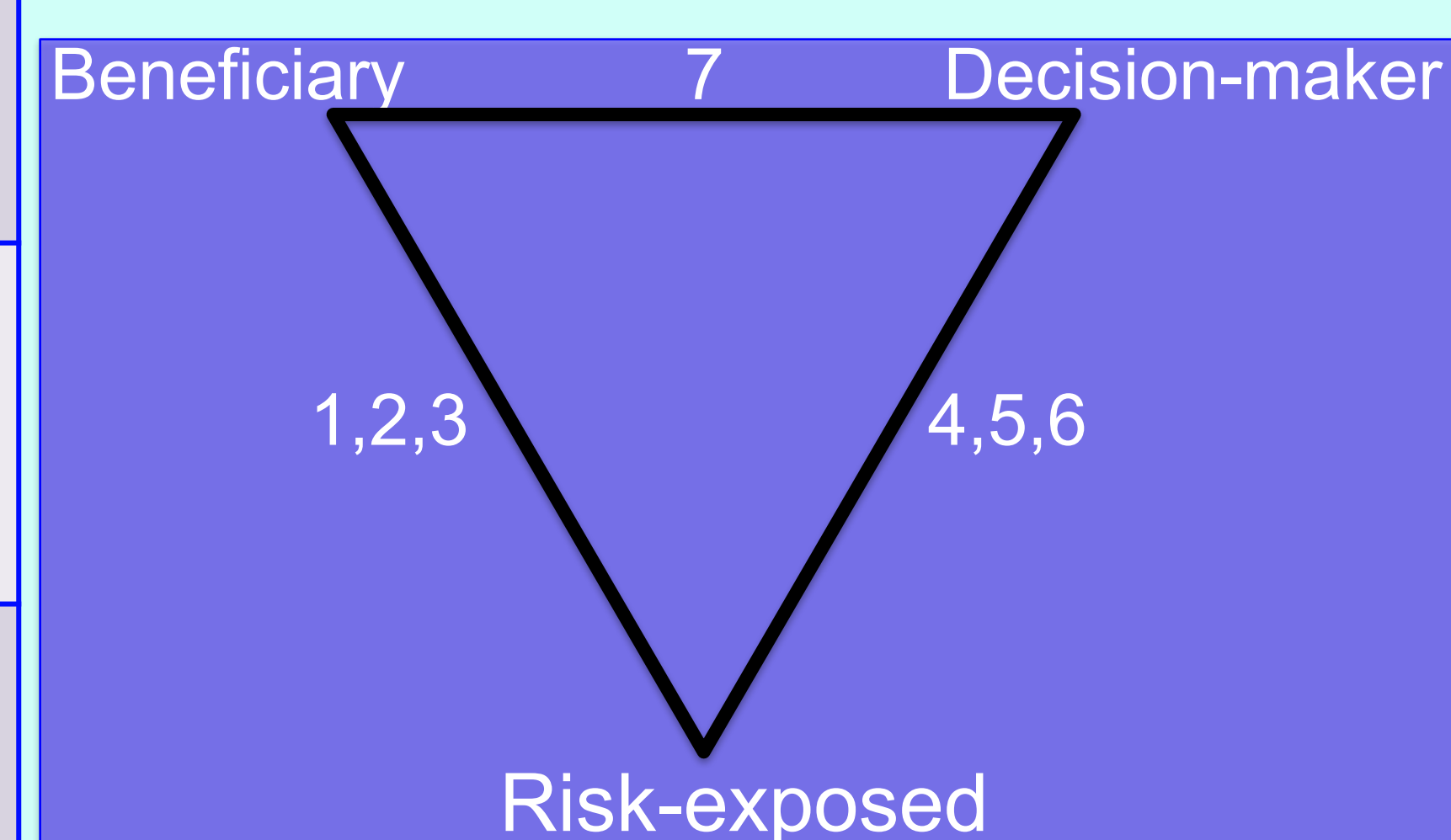


Figure 4: Recreated from Hermansson and Hansson 2007



Figure 5: Children in a classroom in Newtok, The Guardian

Further Research

Interesting points to follow might include:

- The unique role of colonialism in the current situation of climate change and how to decolonize climate change adaptation
- Policy implications of who is responsible to victims of climate change
- Further refinement for incorporating history into risk assessments

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