



Figure 1 Oregon coast during king tide

Climate Change – Tools for Planning and Policy: Discussion Activity

Learning Objectives

- Assess the quality, accuracy, and limitations of climate data and analyze the implications of model uncertainty on risk analysis.
- Develop effective online communication skills to convey climate-related information to diverse stakeholders in your community. Explore ways to receive information and concerns from the public about climate impacts and risk through citizen science and public participation in policy development, with an emphasis on reaching diverse populations who may be disproportionately vulnerable to certain climate impacts.

Overview:

This week we will continue our discussion of adaptation policy with a focus on the potential impacts of climate change on coastal communities. As sea levels rise coastal communities are vulnerable to flooding, particularly during high tides or storms; saltwater intrusion; and erosion. Other climate impacts like increased ocean temperatures and ocean acidification are affecting coastal economies by damaging the ecosystems that support fishing or tourism. The objective this week is to examine model projections for coastal flooding, discuss uncertainties and their impact on evaluations of risk and vulnerability, and discuss the preferred policy options for addressing coastal flooding.

Instructions:

For your discussion we will use Kialo to host an online debate about whether relocation of coastal communities should be preferred over reinforcement. The discussion is available at: <https://www.kialo-edu.com/p/13bf72ea-0302-4527-92b3-ccda98790c4c/120860> (no account is

required, only a username, which should be the first letter of your first name followed by your last name, e.g. CFryefield, so I know whose comments are whose).

CFryefield

What is the best way to address coastal climate impacts like flooding and erosion?

2 Theses

CFryefield

We should reinforce coastal areas vulnerable to flooding.

CFryefield

We should relocate people away from coastal areas vulnerable to flooding.

Over the course of week 4 you will be required to post two claims with source links to supporting documentation or evidence, then add an additional claim below another student's claim to reinforce their argument. Claims can be either positive (supporting the use of this policy) or negative (disagreeing with the use of this policy). You should also vote for at least two claims by rating their persuasiveness and impact (the small red and green bars above the claim). You can see your task-list for this assignment on the left side of your Kialo screen. You are not assigned to any particular argument and can advocate for either policy.

We should relocate people away from coastal areas vulnerable to flooding.

Indigenous populations are at risk of forced relocation away from traditional lands - [Maldonado et al 2013](#)

Pros

Cons

Think carefully about the pros and cons of both policy options. Where could these two policies be effectively used? What are the downsides? How would the implementation of either policy affect the environment and society? Incorporate what you learn from this week's readings and video lectures on sea level rise projections and coastal vulnerability. Consider the high and low sea level rise projections and how uncertainty can affect policymaking.

Assignment tasks, due dates, and grading:

Stage	Tasks	Due	Points
Initial posts	• Sign into debate on Kialo and create username • Post first claim with link to source/evidence	Wednesday of Week 4	10
Expand debate	• Post second claim with link to source/evidence	Friday of Week 4	10
Advocate for policy	• Write a claim that supports another student's claim • Vote for at least 2 claims you find persuasive	Sunday of Week 4	10

Full points will be awarded for a thoughtful post making a unique argument by the due date. To encourage you to return to the debate several times over the course of the week one point will be deducted for each day that a task is late.

Where to go for help with the discussion:

- This guide for students on using Kialo: <https://support.kialo-edu.com/en/hc/tips-for-students/>
- Post to our class QandA board on Canvas
- Email your instructor

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