M. Kelsey Lane

Course: Climate Change and Social Action
Climate Resilience Plan, Week 9

"After successful completion of this course, you will be able to..."

- Students will be able to formulate climate adaptation and mitigation strategies for a region of their choice.

Assignment: Create a climate resilience plan for a city of your choice.

1. **Choose your city.** Brainstorm what makes this city special or unique, its' environmental setting, and how vulnerable it is to climate change and extreme weather events.

2. **Write a climate resilience plan**. Base your write-up on the US Climate Toolkit steps to resilience framework (and see the Portland, OR case study we studied earlier in the class.) Your write-up will include 6 sections.

   a. **Background** - your city of choice

   Tell us a little bit about your city of choice – location, demographics, history, environmental setting and governance structure.

   This section should be 2-3 paragraphs. Please include at least one visual aid of your city to set the scene.

   b. **Understand exposure** – Identify five paired assets and hazards for your community.

   An exposed community asset is something your community thinks are important that are exposed to potential harm. Identify a paired environmental or climate hazard that could impact each asset. Describe the potential consequences with a description of what the impacts could be on the community.

   This section should be 5-7 paragraphs.

   c. **Assess vulnerability and risks** – Assess the vulnerability and risk of just *one* of your asset-hazard pairs.

   Not all assets are as vulnerable to harm as others. Choose one and try to predict how vulnerable it is using data available from a trustworthy source, like the FEMA National Risk Index, or from the suite of Climate Tools available through the Toolkit.

   Classify how vulnerable (high, medium, or low probability) your asset is, show with a figure or graph, and explain how you got your data.

   This section should be 2-3 paragraphs with one figure. Remember to include citations where relevant here. *Please reach out early if you're having issues finding data or figuring out how to present it, I'm here to help!*

d. **Investigate options** – Choose one of the hazard-asset pairs to focus on for this section! Offer 2-3 solutions for *just one of the* asset-hazard pairs you identified in the previous section.

Start with a big brainstorm, then narrow it down to the best solution for your city. Consider pros and cons of your solution – cost, economic and development impact, political feasibility, etc.

Write up a description of your solutions and practical considerations for enacting it in your city.

This section should be 2-3 paragraphs.

e. **Prioritize and plan** – Identify the first step your city can take from your solutions. Justify your choice considering the cost, the value to the city, and the benefit to the community. Evaluate the trade-offs of taking action or focusing on other hazards.

This section should be 2-3 paragraphs.

f. **Take action** – Make a plan to take action in your community of choice.

Who are the players in your city related to this solution? What is their role in the city or region and how would you contact them? Include at least 5 stakeholders or key agents.

This section should be 2-3 paragraphs.

<u>Assignment Logistics</u> – This assignment will be submitted on Canvas at the end of Week 9 and should be created in a word document or other word editor. Please use 1.5-spaced, 12-point font of your choice. Please use headers for each section. Include citations when referencing specific events, data, etc. Stick to a consistent citation style of your choice (here's a <u>resource</u> for APA, but you can use whatever you are comfortable with in your field.)

3. **Presentation** - Finally, put together a brief presentation (1-2 slides/section) and share on our class Canvas page on the discussion page for Week 9. Include a 5-7 minute video presenting the slides so your classmates can give feedback on your resilience plan (we'll do this in Week 10). Please include closed captioning to make your talk accessible to all students.

Rubric

Criteria	Ratings			Points
a. Background Students describe their city of choice – location, demographics, history, environmental setting, and governance structure – in 2-3 paragraphs.	8 pts - Meets Expectations Background is covered and meets all of the prompts, and is presented clearly.	6 pts - Nearing Expectations Most prompts are met, but not all or the presentation is not clear.	0 – No Evidence	8

b. <u>Understand exposure</u> Identifies 5 paired asset-hazard pairs and consequences of environmental impacts in 5-7 paragraphs.	10 pts - Meets Expectations Includes 5 asset-hazard pairs and consequences.	2-8 pts - Nearing Expectations Includes 2-4 asset-hazard pairs (2 pts per), but not all 5, or forgets to describe the consequences.	0 – No Evidence	10
c. <u>Assess vulnerability and risks</u> Predicts the vulnerability of one hazard-asset pair. Should include some data to predict probability of risk – high, medium or low – in 2-3 paragraphs with one figure.	8 pts - Meets Expectations Identifies the vulnerability and includes one figure predicting the probability of this hazard. Properly cites data source.	5 pts - Nearing Expectations Missing either the figure or the vulnerability write-up.	0 – No Evidence	8
d. <u>Investigate options</u> Describes 2-3 solutions and practical considerations of enacting in 2-3 paragraphs.	8 pts - Meets Expectations Describes 2-3 solutions and considers pros and cons of those solutions.	4-6 pts - Nearing Expectations Does not include at least 2 solutions (3 pts per) or the considerations of those solutions.	0 – No Evidence	8
e. <u>Prioritize and plan</u> Decide the action your city can take, and why you chose it, in 2-3 paragraphs.	8 pts - Meets Expectations Explains the action chose and justifies it with a clear analysis.	5 pts - Nearing Expectations Does not explain the action or justify it clearly.	0 – No Evidence	8
f. <u>Take action</u> List 5+ key players and/or stakeholders and how to contact them	8 pts - Meets Expectations List of 5+ players and their contact information.	2-6 pts - Nearing Expectations Lists less than 4 players (2 pts per) or forgets contact details.	0 – No Evidence	8
<u>Assignment logistics</u> Follow formatting requirements, maintain a consistent citation style and is written clearly.	5 pts - Meets Expectations Includes headers, 12-point font, maintains consistent formatting and citation style and is written with clarity.	3 pts – Nearing Expectations Formatting inconsistent or messy, many grammatical errors, or inconsistent citation style.	0 – No Evidence	5

Presentation	15 pts - Meets Expectations	10 points – Nearing Expectations	0 – No Evidence	15
Short presentation with 1-2 slide/section, recorded in a 5-7 minute video.	Presentation is clear and concise with minimal grammatical errors. Video is clear and easy to hear and close-captioned.	Video is too short, presentation is too short, or presentation is sloppy with lots of errors.		
			TOTAL	70