Climate Change, Communities, and Public Planning

A Problem-Based Learning Activity

Team Name: Team Members:

**Introduction**

Case study analysis is an approach to problem-solving that focuses on a defined range of concerns affecting a localized subset of a larger system. Case studies usually begin with a story depicting a real-life scenario that presents two or more decision-making options. They often reveal particular nuances that we would not consider otherwise. Because they are presented from a decision-maker’s point-of-view, they also help us to “put a human face” on the problem. In other words, in addition to paring down a problem, case studies can help to make the problem less abstract.

**An Example Case Study**

In August 2011, the Associated Press circulated a news story entitled, “Thinning Ice has Big Impact on Life in Greenland.” The article explained the impact that GCC is having on the biodiversity that is the basis of the 5000-year-old Inuit way-of-life, the challenges this is presenting to Inuit communities, and the dilemmas they face over new opportunities for oil drilling in once-frozen seas. While the purpose of the article was not to enlist readers in solving the problem, it certainly does highlight real issues facing real people in ways that help many readers to understand the significance of the global climate change (GCC) debate.

**Case Study: Research**

As a team, you will design a case study that “puts a human face” on the effects of GCC on a particular community in the United States – see the list below for your assigned region. Use the internet to research answers to the questions below.

* Team 1 – Community along the Mississippi River
* Team 2 – Community along the Colorado River

*Tip: Google "Global Climate Change Impacts in the US” for an official comprehensive report.*

* Team 3 – Community in the northern Rocky Mountains
* Team 4 – Community in the southern Appalachian Mountains
* Team 5 – Great Lakes coastal community
* Team 6 – Great Plains community
* Team 7 – Atlantic or Gulf Coast community
* Team 8 – Community on Alaska’s North Slope

*Questions:*

1. Find a real community within your assigned region. Community name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Describe the cultural and economic life of this community.
3. How is the quality of life in this community currently connected to the health of natural systems?
4. List local challenges presented by GCC. Estimate the risk (likelihood and potential severity) of each challenge on a scale of 1 (lowest) to 5 (highest).
5. Identify some options for responding to the GCC challenges faced by this community. How will community leaders choose the most appropriate course of action? (What information will they need? How should they prioritize options? Etc.)

**Case Study: Sharing Your Findings**

Put together a PowerPoint presentation, describing the community, and its GCC challenges and response options from the perspective of local community members.

**Reflection:**

*Answer the following questions after you have heard the case study presentations of all teams.*

1. Do the GCC risks tend to be similar or quite different from place to place? Explain.
2. What trends, if any, do you see in the response options available to communities?
3. Consider your own community (either the community in which your campus is located or your hometown). What GCC challenges does your community face? What recommendations can you offer for mitigating the effects of GCC in your community?
4. Based on the information presented from the perspective of various communities, what advice would you give the U.S. government about making GCC-related decisions (decisions concerning either actions that impact GCC or responses to GCC)?