**Activity: Climate Trends in the Greater Yellowstone Ecosystem (GYE) and Global Trends**

Obtain a laptop from your teacher and circle your assigned graph. Find the other two students assigned your graph, and study the graph to determine the meaning. Fill out the table below for your graph. Then, get into your mixed group (graphs 1-9) and share your information. **Be sure to fill out the entire table by the end of the period!**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Evidence** | **What do you observe?** | **Time span of data collection?** | **Describe the trend you observe.** |
| 1. **Mean Annual Temperature and Precipitation** |  |  |  |
| 1. **Stream flow** |  |  |  |
| 1. **Snow level on Snake River** |  |  |  |
| 1. **Tree rings** |  |  |  |
| 1. **Snow melt** |  |  |  |
| 1. **Whitebark Pine bioclimate projections** |  |  |  |
| 1. **Frost Free Days** |  |  |  |
| 1. **CO2 and Global Temperature** |  |  |  |
| 1. **Natural and Human factors** |  |  |  |

Answer the following analysis questions on the next page of your journal:

1. What graph were you assigned? State the name, and describe it.
2. Based on **your graph**, what conclusion can you draw about the Global Climate Trends?
3. Based on **all the graphs**, what conclusion can you draw about the Global Climate Trends? Is that different then number 2?
4. What factor(s) do you and your group think could be the most responsible for these trends?
5. What trends do you and your group see happening in the Greater Yellowstone Ecosystem?
6. What are the connections between the different pieces evidence (different graphs)?
7. Based on what we learn about these trends and the conclusions we draw at this time, what kind of predictions can we make about the future?
8. Are there primary causes that can be addressed to manage or even reverse these trends?
9. What else do you wish you knew about this evidence?

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