ENVIRONMENTAL SYSTEMS AND SOCIETIES

WATER CASE STUDIES SUMMATIVE ASSESSMENT

For this assignment you will be describing and evaluating the sustainability of a freshwater resource usage through a case study. With your case study you will identify whether or not the case study represents sustainable or unsustainable water usage. You will then detail out the evidence that you found that told you whether it was sustainable or unsustainable.

You will select one of the Case Studies from the list below. You may not choose the same case as another student. Read through your case study before you begin:

* Colorado River
* Dead Sea
* Jordan River
* The Aral Sea
* Tigris and Euphrates River
* Yangtze River/China’s Three Gorges Dam
* Ganges River
* Zambezi River
* Amazon River
* River Congo
* Murray-Darling Basin
* Ogallala Aquifer
* Great Lakes
* Kai Usher
* Cochabamba
* Or another source that has been approved by the teacher

| **Name of Water Source:**  **Location:**  **Scale:** (local/global) |  |
| --- | --- |
| **Maps of location** | * Create a map showing the location(s) of your water source * Show graphics showing issues sources * Climatograph of region and identify the biome |
| **What?**  **How?** | **Facts & Figures**   * Develop a written description of the river, include the states or countries the water source flows through * Typical biotic species found in the location * Identify the most important facts surrounding the water source * Identify the associated inputs, outputs and storages surrounding your water source |
| What are the causes?  What are the processes involved? | * Identify the specific threats surrounding the water source * Explain effects on the ecosystem and local communities * State how these threats have changed over time * Identify the human contributions to the problem? * Identify any conflicts between countries? |
| What are the responses?  How is it being managed?  Could altering human activities reduce or solve the problem? How? | * List strategies the government has implemented to protect the water source. Evaluate the effectiveness of the laws or policies * Evaluate the government water strategies. Identify the strengths and limitations of the strategy. Is it sustainable or unsustainable? What evidence did you find to determine if it was sustainable or unsustainable? * Specify alternative courses of action. Evaluate each course of action. |
| Link to EVS | Links to ToK |
| Keywords: | |

| **Include the following images:** |
| --- |
| **Systems Diagram** |
| **Sketches or images of the impacts** |
| **Exam Questions:**  **Create 2 IB Style Exam Questions linked to your case study, using the command term listed below. Include the syllabus number that links to the question and point value that is fitting of the command term and expected answer. *Example: “Define Speciation (topic 3.2). [1 mark]”***   * **A 'describe' question** * **An ‘outline’ OR 'identify' question** * **A 'calculate' question** * **An ‘evaluate’ question** * **An 'explain' questions** |

Your oral presentation will be 5-10 minutes. Your written report will be the Case Study document excluding the bibliography.

| Criteria | 7 | 6 - 5 | 4 - 3 | 2 - 1 |
| --- | --- | --- | --- | --- |
| Identification of Main Issue/Problem | Identifies and demonstrates a sophisticated understanding of the main issues/problems in the case study | Identifies and demonstrates an accomplished understanding of most of the issues/problems | Identifies and demonstrates acceptable understanding of some of the issues/problems in the case study | Identifies and demonstrates a week understanding of some of the issues/problems in the case study |
| Analysis and Evaluation of Issues/problems | Presents an insightful and thorough analysis and assess the implications and limitations of all identified issues/problems | Presents a thorough analysis of most of the issues identified and assess some of the implications and limitations | Presents a superficial analysis of some of the identified issues | Presents an incomplete analysis of some of the identified issues |
| Recommendations on Effective Solutions/Strategies | Supports diagnosis and opinions with strong arguments and well documented evidence | Supports diagnosis and opinions with limited reasoning and evidence; presents a somewhat one-sided argument; demonstrates little engagement with ideas presented | Little action suggested and/or inappropriate solutions proposed to the issues in the case study | No action suggested and inappropriate solutions proposed to the issues in the case study. |
| Links to Course Reading and Additional Research | Excellent research into the issues with clearly documented links to class (and/or outside) reading | Good research and documented links to the material read | Limited research and documented links to any reading | Incomplete research and links to any reading. |
| Writing Mechanics | Uses proper grammar, punctuation, and spelling and writes effective sentences that make logical sense. Has a proper academic style that is void of clichés and informal colloquial phrases and language. Writing is well organized and logically coherent | Moderate uses proper grammar, punctuation, and spelling and writes reasonably effective sentences that generally make logical sense. Has a proper academic style that generally avoids clichés and informal, colloquial phrases and language. Writing is well organized and generally logically consistent. | Inconsistent us of grammar, punctuation, or spelling throughout the paper. Some of the sentences are ineffective and do not make logical sense. Does not have a proper academic style and often uses clichés or overly informal or colloquial language. Writing is not well organized and not logically consistent. | Does not use proper grammar, punctuation, or spelling throughout the paper. Many of the sentences are ineffective and do not make logical sense. Does not have a proper academic style and often uses clichés or overly informal or colloquial language. Writing is not well organized and not logically consistent. Writing is rambling and often does not make sense. |
| Case Study Requirements | All paper requirements are correctly met | Missing 1-2 paper requirements | Missing 3-4 paper requirements | Missing 5+ paper requirements |
| Delivery and enthusiasm | Very clear and concise flow of ideas  Demonstrates passionate interest in the topic and engagement with class | Clear flow of ideas  Demonstrates interest in topic and engagement with the class | Most ideas flow but focus is lost at times  Limited evidence of interest in and engagement with the topic | Hard to follow the flow of the ideas  Lack of enthusiasm and interest. |
| Visuals | Visuals augmented and extend comprehension of the issues in unique ways | Use of visuals related to the material | Limited use of visuals loosely related to the material | No use of visuals |