**Earth 111 Capstone Project**

**Objectives and Overview**

For your capstone project for Earth 111 you will be independently investigating and assessing water issues facing a city of your choice that is experiencing water shortages/drought, water availability concerns, or dealing with water quality issues such as increased salinity or high levels of chemicals. Your assignment is to create a water plan that will best address the water problem(s) facing your selected city. The water plan should be based on, 1) your own research and assessment of the data you collect; 2) consideration for realistic and timely change *(i.e., simply suggesting that millions of people should be relocated in the next 2 years to alleviate water scarcity is not ‘realistic’)*; and 3) the needs of the city that will best address their specific water problems.

**You have already selected a city from the list below (or contacted us to 'ok' a city not on the list)*.***

* Cairo, Egypt

**Instructions:**

Part 1: Written Water Plan for you City

Develop a water plan for the future (say, next 20 years or so) that you think will solve the problem of water scarcity or water quality issues facing your city. Please use this [**water plan template**](https://psu.instructure.com/courses/2014407/files/101765962/download?wrap=1) to develop and explain your plan. In your plan, you will address the following:

* Overview of problem or issue: including relevant historical context, background info, and importance, and a summary of your proposed plan.
* Study Location: details of the geography, hydrology, and explanation of current water plan/actions the city is implementing.
* Independent Analysis and Discussion – this will vary depending on project, but must be your own contribution and analysis of the issue.
* Recommendation or position/closing argument. Again, this will vary depending on individual project or topic, but should include one of the following, recommendation(s), a position for/against existing plans/solutions, future impacts or problems.
* List of References (minimum of 6)

Part 2: Presentation -give a presentation outlining your water proposal. Here are the guidelines:

Content:

* Goal & Audience: The goal of this presentation is to explain your water plan via a narrated presentation. Make a PowerPoint presentation
* Focus the presentation on explaining your water plan, as if you are giving the presentation to the city council of your selected city..
* Convince your audience (myself and the city council of your selected city) that your plan is the BEST by providing the rational and details to support it.

Format Notes:

* Include no more than 8-10 slides in your Powerpoint. Your last slide needs to be a Reference Slide. All data/information/figures should be properly formatted.
* Include at least 2 figures in your presentation sourced from the references from your written presentation. Make sure to properly reference them.

Narration: *narrate your presentation*

* + 1. **Narrate the slides. Type up an explanation of each slide. Remember this is a presentation to convince your audience that your idea is best**