

WANGRY: ARE WE ANGRY FOR WATER

UofT SCS Data Analytics

Project 1 – Group 2

2018 November 22



PROJECT PROPOSAL

WANGRY Team Members

Swati Madan
Naim Panjwani
Mariaveronica Sayewich
Jose Tomines

Project Scope

Our group will be exploring how climate change impacts the global freshwater supply, and if low freshwater areas experience more conflict. We will then assess the United States water access status and see if there are any trends.

Research Question to Answer

How does water access correlate with conflict?

Breakdown of Questions

1. How does climate change impact freshwater access?
2. Do areas with low freshwater access have higher instances of conflict?
3. What areas in the United States have less access to water?
4. Do these areas with low water access have higher instances of conflict?

Potential Data Sets to be Used

[World Bank Climate Change API](#)

[USGS Water Services API](#)

[FBI API](#)

[United Nations Data](#)

[Renewable Freshwater Resources](#) – Can download in Excel

[Net Freshwater Supplied by Water Industry](#) – Can download in Excel

[Water Quality Data](#) – Can download in Excel, and it works with the USGS

[Armed Conflict Locations and Events Data](#) – Can download in Excel

[Global Health Organization Data Repositories](#) – Can download in JSON

Breakdown of Tasks

Each WANGRY team member has been assigned an individual breakdown question. The breakdown questions are separated to the global and US situations. Team members must work closely with their partner to ensure that input to downstream activity will be met. The full team will also work together in the Team Checkpoint, Code and Presentation assembly.

The tasks have been summarized below:

1. Data analysis plan specific to breakdown questions (individual work)
 - Naim Panjwani
 - Will extract water levels and quality data based on major instances of climate change to isolate low freshwater locations
 - Jose Tomines
 - Will extract conflict data from the Armed Conflict and United Nations datasets based on low freshwater locations
 - Swati Madan
 - Will extract US locations with low water access from the USGS API
 - Mariaveronica Sayewich
 - Will extract conflict data from the FBI APIs based on low water access locations
2. Data extraction coding (Team collaborates in pairs to code affiliated sequences)
 - Naim and Jose work on the global questions
 - Swati and Mariaveronica work on the US questions
3. Team Checkpoint to review overall work
 - Do our numbers align?
 - Do we have any coding questions?
 - Does anyone need help?
4. Plots and charts coding specific to breakdown questions (Individual work)
5. Final code assembly and execution (Team Work)
6. Presentation assembly (Team Work)

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Date