**Foodprint**

**Understanding Connections Between Food Choices and Our Environment**

**Prof. Jennifer Jay**

**Session 4: Freshwater as a Resource**

**Class Plan**

**Introductions** **(10 min)**

Introduce yourself.

**Learning outcomes:**

By the end of this chapter, you will be able to:

* Discuss the importance of water as a resource
* Describe the hydrologic cycle
* Discuss whether water is a renewable resource
* Discuss water equity issues
* Understand the concept of hidden water
* Calculate the water footprint of a 2000 cal/day diet
* Estimate the energy use associated with bottle water use based on Gleick and Cooley’s paper assessing life cycle impacts of bottle use in Los Angeles

**Slides**

1. **Show Where is the Water? A short video by UNESCO and discuss (10 min):**
2. <https://www.youtube.com/watch?v=b1f-G6v3voA&t=348s>
3. **Go through slides (10-20 min, depending on if you show the video, b/c the video covers much of the same information). Foodprint Chapter has the information useful for discussing slides.**
4. **Active learning activities (20 min)**

* Calculate the water footprint of a 2000 cal/day diet
* Have students check the calculation about energy required for water bottles.
* The students can calculate the miles that can be driven if everyone in their largest class was given a water bottle for each lecture. Or, you may consider a large campus event where everyone is given water.

We did this calculation for a 200-person class meeting twice a week for the quarter. So, that would be 400 bottles per week, or 4,000 bottles for the quarter. Each bottle’s energy cost is equivalent 0.25 L, so the total energy would be 1,000 L of gas. We took an estimate of 4 L per gallon, so that got us to 250 gallons of gas. Assuming 40 MPG, a car could go 10,000 miles, or several times across the country. The students were very surprised to see this.