# The Water Footprint of Food Teaching Demo

**Kai Olson-Sawyer**
Sr. Research & Policy Analyst
GRACE Communications Foundation
kai@gracelinks.org

**watercalculator.org**
**calculadoradeagua.org**

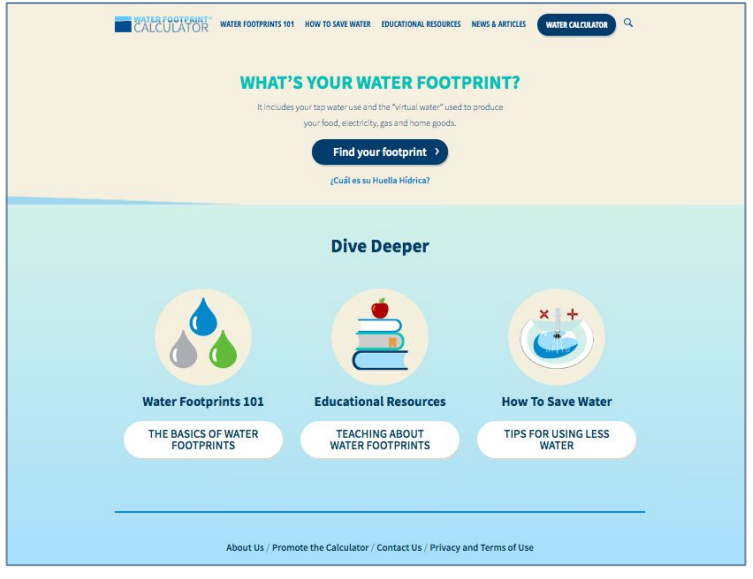
## GRACE Communications Foundation

A non-profit dedicated to creating a more sustainable food system.

GRACE wanted to raise awareness about how people in the United States use water throughout their day, so we developed the tools and information on the Water Footprint Calculator site.

## Water Footprint Resources for Educators

- **Tools:**
  - **The Water Footprint Calculator**
  - **The Water Footprint of Food Guide**
  - **The Water Footprint of Food Quiz**
- **Lesson Plans:** standards-aligned lessons for middle- and high-school.
- **Educator Resources:** materials that help educators teach students about water use and how to save water.
- **Student info:** information on careers in water protection, as well as research and reports.

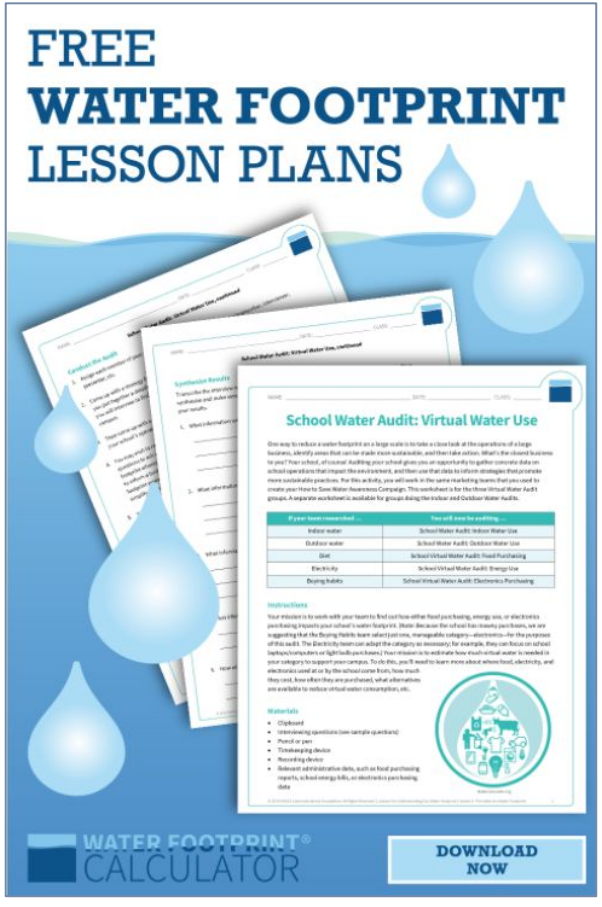


## Water Footprint Lesson Plans

Three middle- and three high-school science lessons that can be adapted up to the undergraduate level or down to elementary-school level (grades 6 to 16).

Standards alignments:

- Texas Essential Knowledge and Skills (TEKS);
- Common Core State Standards (CCSS) for ELA/Literacy and Mathematics;
- Next Generation Science Standards (NGSS); and
- Cloud Education for Sustainability (EFS) Standards & Performance Indicators.



## Pop Quiz

What's the average daily water footprint for an American (in the US), for all uses?

a) 100 gallons per day
b) 650 gallons per day
c) 1,800 gallons per day
d) 4,100 gallons per day

## Water Footprint Calculator

**GO TO:**

**watercalculator.org**

**or**

**calculadoradeagua.org**

## What is a Water Footprint?

- A method to account for and analyze the ways humans use, overuse and generally depend on water.
- Determined by the volume of water consumed, evaporated and polluted to make a product or conduct a service.

## What is a Water Footprint?

Your personal water footprint includes:

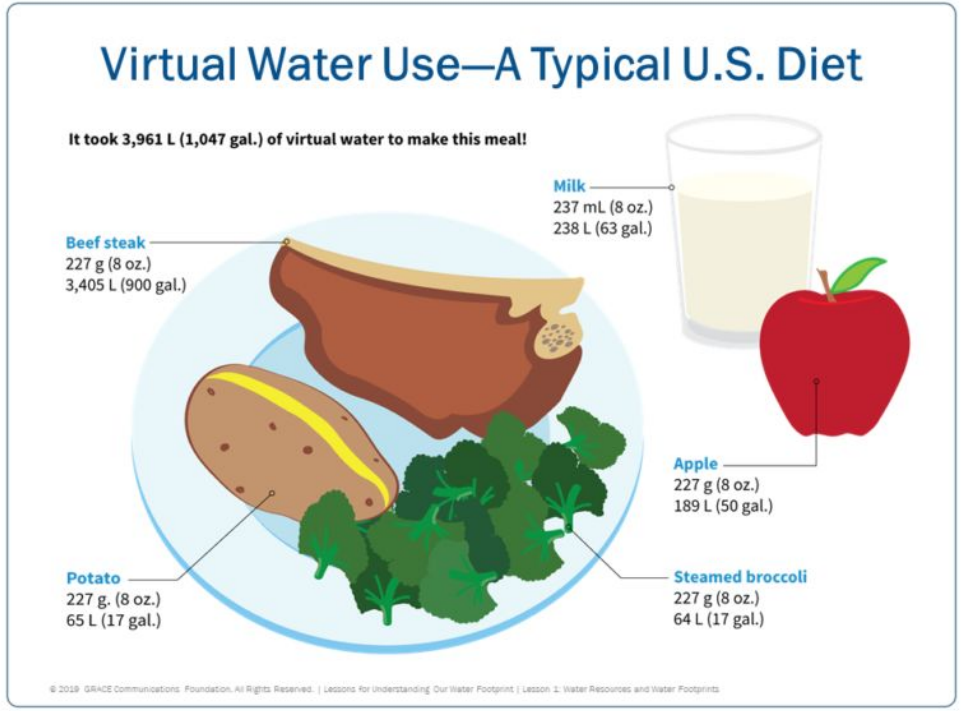
- **Direct water use:** The water you use from a tap.
- **“Virtual” water use:** Water used to produce the food you eat, the products you buy and the energy you use - this makes up most of your water footprint.

# What is “Virtual” Water Use?

**Indirect** or **virtual water** is the water “hidden” in the products, services and processes you buy and use every day for crop irrigation, power production and consumer goods manufacturing.

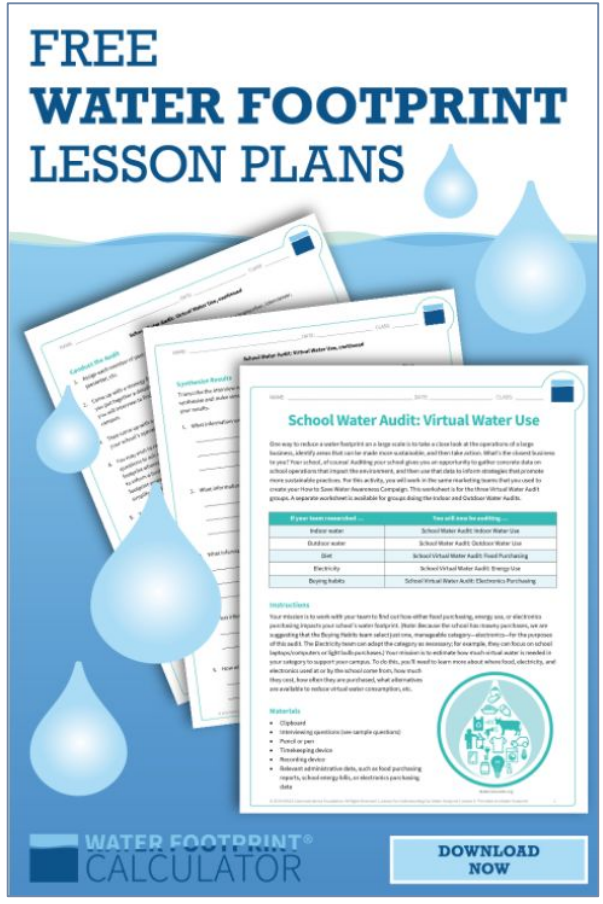
US-agricultural water use is one of the biggest, because most animals are fed grain and other feed types from irrigated crops.

Your diet is the biggest indicator of what your personal water footprint will be, especially if you eat animal products.



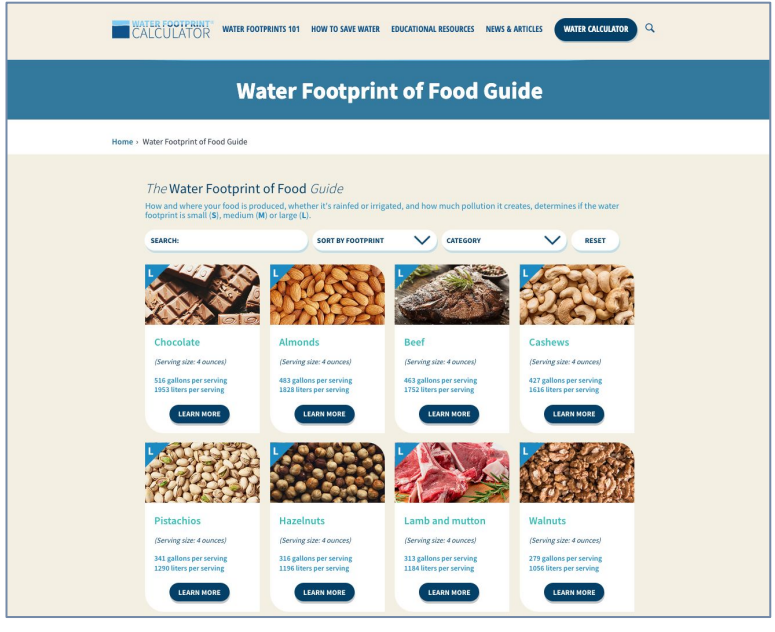
## How Are Water and Food Connected?

**Activity:** Three Foods (Lesson Plan 2, Page 5)

# How are Water And Food Connected?

## The Water Footprint of Food Guide



## Wrap Up/Q&A/Survey

- How will you incorporate these ideas into your instructions?
- What additional information do you need to help your students better understand their own water use and food choices and how it contributes to societal water use?
- Survey

# Thank you!

**Kai Olson-Sawyer**
Sr. Research & Policy Analysts
GRACE Communications Foundation
kai@gracelinks.org

**watercalculator.org**
**calculadoradeagua.org**

WATER FOOTPRINT® CALCULATOR