

# Photo Credits for Course on Understanding Climate Change Impacts on Water Resources

Photos and graphics used for this course were taken from a number of public domain galleries, reference documents, and U.S. EPA. The sources of the photos used in the course are listed below.

## **Climate Change 101**

Trinity Lake, California in February 2014 - U.S. Geological Survey,  
<http://ca.water.usgs.gov/data/drought/images/carousel/Trinity-Lake-drought-04Feb2014.jpg>

## **What is causing climate change?**

U.S. National Park Service, Golden Gate National Recreation Area – What is Climate Change?  
<https://www.nps.gov/goga/learn/nature/climate-change-causes.htm>

## **What is causing this rise in greenhouse gases?**

National Climate Assessment; Our Changing Climate -  
<http://nca2014.globalchange.gov/highlights/report-findings/our-changing-climate#tab2-images>

## **What are the indicators of climate change?**

*Ten Indicators of a Warming World* [Image]. National Oceanic and Atmospheric Administration, National Climatic Data Center. <https://nca2014.globalchange.gov/report/our-changing-climate/observed-change>

## **The Water Cycle**

Our Changing Planet: The Fiscal Year 2003 U.S. Global Change Research Program,  
<http://data.globalchange.gov/file/d7b7addb-6458-4587-87b4-d82661811e8b>

## **What are the observed and projected changes in the U.S.?**

<https://nca2023.globalchange.gov/downloads/>

## **Vulnerabilities of Water Resources to Climate Change**

Upper: McCall, K. [Flooded cropland in southwest Iowa]. Natural Resources Conservation Service, U.S. Department of Agriculture.

Lower: (2010). [View over Devil's Golf Course in Death Valley National Park, CA]. IStock Photo.  
<https://www.istockphoto.com/photo/devils-golf-course-in-death-valley-np-gm146961907-11945953?st=5f50600>

## **The EPA National Water Program**

The National Water Program 2012 Strategy - [https://www.epa.gov/sites/default/files/2015-03/documents/epa\\_2012\\_climate\\_water\\_strategy\\_full\\_report\\_final.pdf](https://www.epa.gov/sites/default/files/2015-03/documents/epa_2012_climate_water_strategy_full_report_final.pdf)

The 2021 EPA CAAP - <https://www.epa.gov/system/files/documents/2021-09/epa-climate-adaptation-plan-pdf-version.pdf>

The 2022 OW CAIP - [https://www.epa.gov/system/files/documents/2022-10/bh508-OW-12113\\_ClimateAdaptatImplementPlan\\_508final.pdf](https://www.epa.gov/system/files/documents/2022-10/bh508-OW-12113_ClimateAdaptatImplementPlan_508final.pdf)

## **Colorado Springs, CO Case Study**

Left: Juhan Sonin, [www.flickr.com](http://www.flickr.com), Creative Commons

Middle and Right: Mary, Monterey Bay Aquarium, [www.flickr.com](http://www.flickr.com), Creative Commons

## **Castine, ME Case Study**

Drought Response and Recovery; A Basic Guide for Water Utilities  
([https://www.epa.gov/sites/default/files/2017-10/documents/drought\\_guide\\_final\\_508compliant\\_october2017.pdf](https://www.epa.gov/sites/default/files/2017-10/documents/drought_guide_final_508compliant_october2017.pdf))

## **Kansas City, MO Case Study**

Kansas City Water Services; <https://www.kcwater.us/>

## **South Monmouth, NJ Case Study**

<http://www.smrta.org/>

Left: (2013). [An esthetically designed portable trailer houses an emergency generator, a successful mitigation project South Monmouth Regional Sewerage Authority (SMRSA) implemented in their Sea Girt pump station before Superstorm Sandy struck.]. Federal Emergency Management Agency.  
<https://femacontract.com/news/sewerage-authority-mitigation-plan-reduces-risk-of-environmental-disaster/>

Right: [South Monmouth Regional Sewerage Authority Executive Director Michael Ruppel, systems mechanic Steve Harsin, apprentice Barney Bigley and plant maintenance worker Thomas Valerio (from left) stand behind the portable pump station/trailer in Sea Girt, N.J.]. Municipal Sewer and Water Magazine.

## **Wailuku-Kahului, HI Case Study**

Kahului Wailuku Wastewater Treatment Plant, Juan Rivera, County of Maui, Wastewater Reclamation Division <http://mauinow.com/2012/09/20/shoreline-protection-proposed-at-kahului-wastewater-facility/>

## **EPA National Water Program Highlight: Healthy Watersheds Program**

Photo by Tetra Tech, Inc., Fairfax County, VA

### **Taunton River, MA Case Study**

Left: Taunton River Watershed, USGS,

[https://en.wikipedia.org/wiki/Taunton\\_River\\_Watershed#/media/File:Taunton\\_River\\_Watershed.gif](https://en.wikipedia.org/wiki/Taunton_River_Watershed#/media/File:Taunton_River_Watershed.gif)

Right: Railroad Bridge over Taunton River near Dean Street, Taunton, Massachusetts, by Marbela,

[https://en.wikipedia.org/wiki/List\\_of\\_crossings\\_of\\_the\\_Taunton\\_River#/media/File:Taunton\\_River\\_third\\_RR\\_bridge.JPG](https://en.wikipedia.org/wiki/List_of_crossings_of_the_Taunton_River#/media/File:Taunton_River_third_RR_bridge.JPG)

### **San Juan, PR Case Study**

[http://water.epa.gov/type/oceb/nep/programs\\_sjb.cfm](http://water.epa.gov/type/oceb/nep/programs_sjb.cfm)

<http://sanjuanbayestuary.blogspot.com/>

### **Casco Bay Estuary, ME Case Study**

Left: Sea Snail, Nina Bednarsek, National Oceanic and Atmospheric Administration Pacific Marine Environmental Laboratory, <http://nca2014.globalchange.gov/report/regions/oceans#tab2-images>

Middle and Bottom Right: Landscape photo/little boy photo, <http://www.cascobayestuary.org/about-us/>

Upper Right: People moving pH monitor, Brian Rappoli, USEPA

### **Explore Your Climate Region**

All graphics in the Explore Your Region slides are from the National Climate Assessment unless otherwise indicated: <https://nca2023.globalchange.gov/>

### **Impacts on Vulnerable Populations**

[www.iStock.com](http://www.iStock.com)

### **You Have Completed This Course!**

Streambank willow planting in the Johnson Creek Watershed in Portland, OR. Photo by Tetra Tech.