Colorado River

The Colorado River is being depleted through overallocation and over withdrawal from the water table as well sa a decrease in the Rocky Mountain snowpack due to global warming.

More water is exported from the Colorado River Basin than any other river basin in the United States

Seven states draw water from the Colorado River, Wyoming, Colorado, Utah, New Mexico, Nevada, Arizona, and California

90% of winter vegetables in the US are grown using water from the Colorado River



Colorado River Map



40 million people rely on the Colorado River and its tributaries for municipal water use and 5.5 millions acres of land rely on the water for irrigation.

The lower basin is experiencing an 11 year-long drought while the basin as a whole has been in a drought for two decades.



Economical

Supports \$1.4 trillion annually in economic activity and 16 million jobs

"If just 10% of the river's water were unavailable for people, we would see a loss of \$143 billion in economic activity and 1.6 million jobs in just one year"



Home to over 30 unique fish species, but about 50% are extinct or vulnerable

- could save up to 1 million acre-feet of water
- regulated irrigation, rotational fallowing, crop shifting, and water banking

Colorado River Drought Contingency Plan

Passed in 2019, it brought water cuts to the lower basin and new water management tools to the upper basin w/ 3 basic elements

a. Extended operations. Federal reservoirs upstream of Lake Powell – Flaming Gorge, Aspinall and Navajo Reservoirs – would release additional water for storage and use in Lake Powell.

b. System augmentation. Enhanced cloud seeding and accelerated removal of non-native vegetation such as tamarisk.
c. Demand management. Additional conservation by municipal and irrigation users and deficit irrigation or fallowing by agricultural users

Next Steps Visit watercalculator.org to calculate your own water footprint at home Visit the U.S. Geological Survey website to learn about the 3-year study that took place and the main components of the basins water budget, such as evapotranspiration losses, snowpack hydrodynamics, water use, and groundwater discharge to streams

Find an organization that is working to help your local water infrastructure (through friends, social media, or online research), and encourage others to join in

Sources

1) Economic Importance of the Colorado River. (n.d.). Retrieved December 04, 2020, from https://www.nature.org/en-us/about-us/where-we-work/priority-landscapes/colorado-river/economic-importance-of-the-colorado-river/

2) Loeffler, M John, and James L Wescoat. "Colorado River." Encyclopædia Britannica, Encyclopædia Britannica, Inc., www.britannica.com/place/Colorado-River-United-States-Mexico.

3) Brown, R. D., et al. "The Effects of Climate Change on the Hydrology and Water Resources of the Colorado River Basin." Climatic Change, Kluwer Academic Publishers, 1 Jan. 1970, link.springer.com/article/10.1023/B:CLIM.0000013684.13621.1f.

4) Larsen, Photograph by Erika. "Can the Colorado River Keep on Running?" National Geographic, 18 Aug. 2020, www.nationalgeographic.com/science/2020/03/partner-content-colorado-river-preserving-stressed-water-resources/.

"5) The Hardest Working River in the West: Common-Sense Solutions for a Reliable Water Future for the Colorado River Basin." American Rivers, 17 July 2014, www.americanrivers.org/conservation-resource/hardest-working-river-west/.

6) "Reclamation: Managing Water in the West." Bureau of Reclamation, Dec. 2012, www.usbr.gov/lc/region/programs/crbstudy/finalreport/index.html.

7) Colorado River Basin Focus Area Study, www.usgs.gov/mission-areas/water-resources/science/colorado-river-basin-focus-area-study?qt-science_center_objects=0.

8) Gassert, F., et al. "Colorado River Basin Study." World Resources Institute, 1 Aug. 2019, www.wri.org/resources/data-sets/colorado-river-basin-study.