Policy Brief

Surface Water Distribution in California

KEY FINDINGS

California's surface water resources are crucial for the environment, urban development, and agricultural food production.

Water use distribution in California is often misrepresented in the media, particularly for the agricultural sector.

Agricultural water use is less than what the media reports, emphasizing the need for more precise data to guide policy.

California leads the nation in agricultural production and is therefore critical to ensuring local, national, and global food security.

California agriculture uses only four times as much water as the urban sector, despite continuously growing, highlighting the water efficiency food crop production technologies made over time.

The majority of California's surface water is used to support the environment.

Environmental regulations, while important for protecting species and habitats, need to be balanced with agricultural and urban needs.

Improved water storage and conveyance systems are critical for managing variability in water availability across different seasons, and to stabilize and protect supplies in drought years.

California Farm Bureau

STUDY SHOWS AGRICULTURE IS NOT THE LARGEST USER OF WATER STATEWIDE

A 2023 scientific study by the **California Bountiful Foundation**, the 501(c)(3) of the **California Farm Bureau,** found the media incorrectly reported that agriculture in California uses 80% of the state's water resources. This statistic is misleading because it only accounts for surface water diverted, captured, or stored for human use and does not consider water that is not captured, stored, and allocated for the environment. In reality, the environment, not agriculture, uses 80% of the state's available surface water. California agriculture uses between 12-34% of California's surface water, depending on precipitation in a given year.

The results showed:

Total, Captured, and Uncaptured Water:

- California receives about 200 million acre-feet (MAF) of water annually on average, depending on annual precipitation levels.
- During a wet year, such as in 2006, 41% of the total water was captured and 59% of the total water was not captured.
- In a dry year, such as 2014, 60% of the total water was captured and 40% of the water was not captured.
- "Environmental Water" is defined as the water captured and allocated to comply with regulations for protecting endangered species. However, this does not include the larger volume of uncaptured water that flows to the ocean each year, even though it flows through and to the environment.

Agriculture sector:

- Agriculture in California is misrepresented in media as consuming 80% of California's surface water.
- The sector uses about 12% or less of the total water in wet years and up to 34% in dry years.
- Agriculture is allocated between 30-35 MAF regardless of a wet or dry year from a total of 200 MAF that arrives in the state as rain or snow.
- Agriculture's water use is only four times that of the urban sector.
- The agricultural sector has improved water use efficiency, with over 55% of irrigated land employing efficient methods like micro-sprinkler, drip, and subsurface irrigation technologies, in conjunction with on-farm recharge projects and other efforts to ensure surface supplies recharge the underlying aquifers.

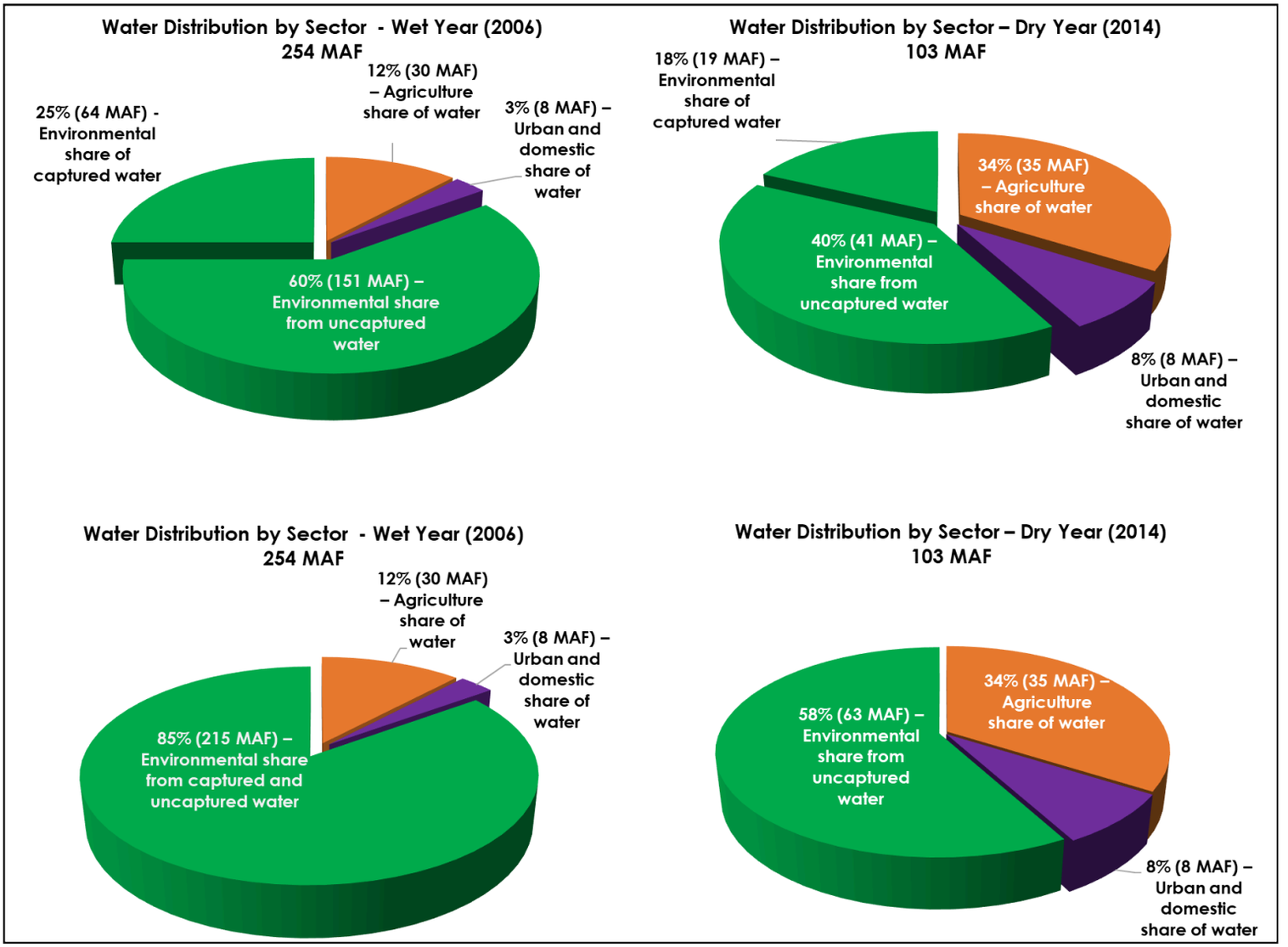
Environmental Sector:

- Receives the majority of California's surface water, about 80% or more in a wet year, through captured and uncaptured water that arrives as rain or snow.
- Uncaptured water flows through the streams and rivers to the ocean and should be categorized as "Environmental Water".
- In a very wet year, a significant amount of uncaptured water should be captured or used for beneficial uses such as groundwater recharge.

Urban sector:

- Urban sector water use is consistent at 8 MAF in both wet and dry years.

THE BIGGER PICTURE



California's approach to water management requires a balanced consideration of environmental, agricultural, and urban needs. By fostering innovations in water use efficiency, expanding infrastructure, and engaging the public with accurate information, California can sustainably manage its water resources to support all sectors.

To learn more, please visit or contact:

https://www.californiabountifulfoundation.com/research-studies

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