

Notes-California's Water Resources

California has many resources, none more important than _____. The main sources of California's freshwater supply are _____, surface water or runoff, and groundwater. Most of the state's fresh water begins as snow in _____ and Central California mountains. More than ____% of all precipitation in the state is lost to _____ and _____. Only about ____% of the precipitation stays on the surface or seeps into the ground. This water helps meet the states needs. The average precipitation California receives is _____ cm.(24 in.), although the amounts are not evenly distributed. Northern California and the mountain regions receive the bulk of precipitation where the deserts and _____ California receive the least. Some of the precipitation flows back into rivers and lakes which is California's drainage basins or _____. Another source of surface water that originates out of the state forms the border between California and Arizona. The _____ starts in the Rocky Mountains and provides water for all of the southwestern states.

_____ is another important source of fresh water and comprises about ____% of water used in California. In times of drought groundwater levels can be depleted. Rocks and soils that contain groundwater are called _____. _____ is growing in importance when it comes to some coastal cities. Desalination is the removal of salt from ocean water to obtain _____ water.

California's Water Projects: Due to the unevenness California's population distribution, the fresh water needs of the state is distributed in an intricate network of water _____ and distribution systems, or water _____. These projects are operated by local, state, and _____ agencies. California's major water projects consist of long aqueducts that carry water from its sources to where it is needed. In Southern California local water projects include the Los Angeles and _____ River aqueducts. The L.A. aqueduct has been carrying water from the Owen's River in the Sierras to Los Angeles since 1913. Another local water project is the Colorado River Aqueduct which brings water in to supply water to the _____ Empire, San Diego and L.A. _____ Valley Lake holds much of the water before being sent of to Lakes Mathews and Skinner for treatment and distribution. The State Water Project (SWP) is one of the nation's _____

water distribution systems. It uses the water sources in the Central Valley and distributes it to the San Francisco Bay Area and Los Angeles. The SWP also operates ____ hydroelectric plants to generate _____. The federal government has also constructed major water projects in California. These projects include the All-American Canal, the _____ Canal, and the Central Valley Project. A lot of the water is used for irrigation of crops. Most of California's water supply is used to grow crops. The rest is used in homes, businesses, and industries, or has been set aside for _____ or _____ use. _____% of freshwater used in California each year goes to agriculture. Domestically we use about 90 gallons of water per day, by drinking, washing, _____, flushing, and cleaning. Industrially water is used primarily as a coolant for products or machinery. Recreationally some rivers and estuaries are set aside for activities like kayaking, rafting, and fishing as well as wetlands for animals.

Factors that affect our supply of water will be due to _____.

California sits in a unique location in the middle latitudes at a boundary where storms come in to the North and less in the South. California receives most of its annual precipitation in short bursts of storms in the winter and spring months. As temperatures climb that means less _____. Climate change also causes seasons to become more extreme. It is estimated that California will receive 10% less precipitation than historical averages. When does California get most of its precipitation? _____. When does California use most of its water? _____. Much of the precipitation that California receives comes during atmospheric _____ events

1. Not all storms are atmospheric _____ events
2. Moisture is common in the tropics but not the middle latitudes where California is and AR's can be as much as 50% of our entire precipitation amount.
3. Unique conditions set up a conveyor belt of air with excessive amounts of _____
4. Climate change will likely affect atmospheric rivers causing California to be _____ some years and _____ in others

What can we do to manage our water especially in times of drought?

- 1.
- 2.
- 3.
- 4.