Hydrology Before Human Settlement

Hydrology is the movement, distribution, and quality of water. This map shows the natural hydrology in California that existed for millions of years, even before humans arrived in the area.

Spring rains and melting snow once flooded the Central Valley in the spring and into the summer. The meandering Sacramento and San Joaquin Rivers would overflow to form an enormous seasonal **swamp**, four million acres in size. In this wilderness of tall grass and **riparian** (streamside) forest roamed grizzly bears, elk, beaver, turtles, resident and **migratory** birds, and billions of insects! **Rivers** flowing into the southern San Joaquin Valley filled three lakes. Of these Tulare Lake was the largest **freshwater** body west of the Mississippi River. It covered over 500 square miles. Over 200,000 acres of **marshes** once surrounded San Francisco Bay. The **delta marshlands** connected the **bay** with flooding rivers in the Central Valley. This giant **wetland** area supported enormous **populations** of salmon, smelt, steelhead, lamprey, and other fish. East of the Sierra Nevada, a large river drained into Owens Lake. Rivers flowing out of the Southern California mountains once flooded the coastal **plain**. There were many coastal marshes between Morro Bay and San Diego.

This amount of water running freely to the Pacific Ocean or to interior saline lakes is difficult to imagine today. Because of human settlement and water diversions to fields and cities, less than 10% of the original **wetlands** and lakes shown on this map exist today.