Water Storage and Transport

California has a water problem. Rain and snow arrive during the cool winter months, but 75 percent of this precipitation falls north of Sacramento (see page 19), while 75 percent of the population lives south of this city. In addition, most crops require irrigation during the warm and dry Mediterranean summer that lasts from May through September.

To solve this problem, dams and reservoirs trap and hold much of the fresh water flowing down mountain streams. The bumpy land surface of California forms 60 major watersheds. Of the 20,000 miles of streams and rivers that drain the state, only the Smith River in the northcoast remains free of dams. A large network of aqueducts and canals transport water over great distances to agricultural and urban areas. The federal and state governments control the two largest water projects, while local governments and business associations sponsor additional projects.

California rivers and streams flow into the Pacific Ocean, Colorado River, or salty inland lakes of the Great Basin and Mojave Desert. The rivers run low and quiet during fall and begin to rise as winter rain and snow builds up in the mountains. By early spring rivers reach maximum flow as the sun melts the winter snow. In early summer, the snowpack has disappeared and the streams become slow and quiet again. The same pattern occurs in the deserts of southeastern California. This area can also flood during summer rains that blow in from the Gulf of California and the Gulf of Mexico.