
The Role of Water in the Early Development of Nevada

Westward Expansion

During the 1840's the Humboldt River played an important role as westward travelers made their way along the river on their way to California. It provided the pioneers with fresh water for themselves and their livestock. If they came by way of southern Nevada, on The Old Spanish Trail, they came through "the meadows," where spring water created a stopping place for the weary travelers.

As the amount of people traveling through Nevada on their way to California increased, small towns established themselves along these water trails. Mormon Station, what is known as Genoa, was founded in 1850 as a trading station along the Carson River, also part of the Emigrant Trail. The first mention of irrigation in Nevada was here, at Mormon Station. Settlers around the area irrigated their crops that were raised to support themselves, as well as, the gold seekers, passing through on their way to California. Around this time, an outpost in Southern Nevada, Las Vegas, was a way station for travelers heading to Southern California. In 1855 an irrigation diversion in Las Vegas Creek, built by the Mormon settlers, was the beginning of organized irrigation in Nevada. The Mormons diverted water from the creek to their fields, so the crops would get water.

Lake Tahoe

In 1865 Colonel Alexis Waldemar Von Schmidt and five other investors established the Lake Tahoe and San Francisco Water Works Company and wanted to export water from Lake Tahoe to the Bay Area (San Francisco). This would be a distance of 163 miles and be accomplished through a series of tunnels, pipes, ditches, aqueducts, and reservoirs. They petitioned the U.S. Congress for a right-of-way package.

Nevada Attorney General, George A. Nourse, challenged Von Schmidt to prove his legal entitlement to Tahoe water. He claimed that Nevada's agriculture and mining industries were completely dependent on the Truckee River and they held preeminent water rights through established usage. Von Schmidt claimed that the six-foot dam he planned to put in at the Lake Tahoe outlet would store enough water for both states, and Lake Tahoe was two-thirds in California so California had superior claim. State and federal legislators killed the legislation.

Comstock Lode

The demand of food for both people and livestock increased as more stations along the emigrant trails sprang up and gold and silver were discovered in Nevada. Water was needed for the mining camps, the milling operations, and other mining activities. Water development projects were increasing around the state as the demand for this precious resource grew. One well known example of a water diversion system was the pipeline constructed to meet the growing needs of Virginia City during the Comstock Lode. Between the Sierra Mountain and Virginia Mountain Ranges lay Washoe Valley. Hermann Schussler, a Swiss engineer, was brought to the Comstock

to design the new system to get the water from the Sierras across Washoe Valley and up to Gold Hill. With much fanfare the first flow of water reached Gold Hill and Virginia City on August 1, 1873. This accomplishment was the greatest pressurized water system in operation in the world. Marlette Lake, Hobart Reservoir, and Spooner Lake were built with the flumes and pipelines to funnel water to Virginia City (known as the Virginia City & Gold Hill Water Company).

Water was a key element in the settlement of the West; however, most of the arid West was too dry to grow traditional agriculture crops. Cattle and sheep were the primary source of protein for the settlers. The federal government realized that they had to issue water and grazing rights for federal lands. This would be instrumental in insuring farmers and ranchers with the ability to produce a stable food supply.

Reclamation Act & Newlands Project

Without irrigation, the land was limited in the number of settlers it could support. U.S. Representative Francis Newlands from Nevada pushed for federal help with irrigation and reclamation projects. Newland had a supporter in President Theodore Roosevelt who was an avid supporter of conservation and a lover of the outdoors. The President pushed for Congress to act on this and passed the 1902 Reclamation Act (also known as the Newlands Reclamation Act). This act used proceeds from the sale of federal land to build reservoirs that helped control flooding and allow for irrigation.

In 1903, the first big project under the Reclamation Act, known as the Newlands Project, broke ground in western Nevada to divert water in the Truckee and Carson Rivers. The goal of the project was to transform the Lahontan Valley desert near Fallon into farmland. The engineers miscalculated and overestimated the reliability of the Truckee River water supply. Upset farmers who had been lured into the project rebelled over water shortages.

Tahoe Basin Snowpack

Dr. James Church, a University of Nevada, Reno professor, developed a snow survey system which measured water content in the Tahoe Basin snowpack. These snow surveys enabled Tahoe dam operators to better regulate releases to prevent both flooding and wastewater. Adequately controlling the lake's elevation is an on-going challenge. When the lake's water level falls to 6,223 feet mean sea level, it stops feeding the Truckee River. Federal law prohibits storage of water in Lake Tahoe above 6,229.1 feet.

During severe drought in the 1920's and 1930's, Lake Tahoe fell below its rim (6,223') eight years in a row and the Truckee River dried up. Large pumps were installed near the Tahoe Dam. Newspapers reported that Tahoe residents were intent on sabotaging the pumps. There were armed confrontations that were barely averted between Tahoe residents and Fallon farmers who needed water released to the Truckee River to irrigate their crops.

Colorado River

For parts of the west, like northern Nevada, tapping the groundwater and aquifers allowed for access to water to meet the needs of citizens. In Southern Nevada the key water source is the Colorado River. The Colorado River Compact of 1922 was a deal between seven Western States and Congress. This deal divided the Colorado River into upper and lower river basins. Each of the basins split 7.5 million-acre feet of water per year. Then in 1928 the Boulder Canyon Act officially divided up the amount of water that each basin state would receive. Nevada was allocated 300,000-acre feet per year which at that time was plenty of water to serve the needs of the population. Today, with the population much higher, Las Vegas is searching for additional sources of water. This has led to a very controversial pipeline project that has put urban Southern Nevada against a largely rural Northern Nevada.

Pyramid Lake Paiute Tribe and Pyramid Lake

The Pyramid Lake Paiute Tribe which is located below the Derby Dam on the Truckee River in Western Nevada, was promised through a treaty with the U.S. government that they would have enough water to maintain their historic fishery at the mouth of the river. The Derby Dam cut water flow into Pyramid Lake, a terminal lake, and by 1967 had dropped 87 feet which prevented the endangered cui-ui fish and threatened Lahontan cutthroat trout from migrating upstream to spawn.

Truckee River Compact

The Water Master's duty is to administer the most recent federal court decrees regarding the Truckee River and the Carson River. The original purpose of the Tahoe dam and the management of Lake Tahoe was to store water for the agricultural industry in Fallon, not to protect fish, wildlife, property, or the environment.

Under the current Truckee River Compact, Lake Tahoe's goal is to provide as much water to the downstream users without causing shoreline damage to Lake Tahoe. The Water Master is required to release as much water as possible when the lake nears the 6,229.1-maximum elevation mark.

Now the Truckee River Operating Agreement helps enhance conditions for the threatened Lahontan cutthroat trout and endangered cui-ui, increase drought protection for the Truckee Meadows, improve Truckee River water quality, and enhance stream flows and recreational opportunities in the Truckee River Basin.