JACKSON HOLE HISTORICAL SOCIETY & MUSEUM CHRONICLE VOLUME 42, ISSUE N° 1 | MARCH 2021



Jackson State Bank at the south side Broadway and Center Street circa 1925. Pictured (left to right): Jim Francis, Robert Miller, R.P. Stevens, and Charlie Fox. JHHSM Collection 1958.2227.001



WWW.JACKSONHOLEHISTORY.ORG

From the Director's Desk2Building Jackson Lake Dam5Meet Tom & Shelley Botts8Sagebrush to Silver Dollars9Home for History Update11

BUILDING JACKSON LAKE DAM

Jackson Lake, photo by Otto Roach. JHHSM Collection 1958.0368.001P.

BY ROB MURPHY

The natural world plays a significant role in Jackson Hole. The environment affects almost everything, from conservation to development to recreation. And in turn, humans have long sought to influence and control the Jackson Hole environment.

The Jackson Lake Dam is a prime example of the effort to influence the natural world. In Grand Teton National Park, vacationers float the Snake River, sail, waterski, and fish on Jackson Lake, and watch Grizzly 399 raise her cubs along their shores. These activities occur within view of, because of, and despite the Jackson Lake Dam.

The history of the dam began at the end of the nineteenth century. Following the adoption of the Homestead Act of 1862, thousands of families struck out for the west. Not for Jackson Hole, as this area was poor for farming, but to better farmland, including the rich sagebrush-covered land of central Idaho. An 1889-90 Geological Survey further confirmed the existence of rich farmland in Idaho. However, the pursuit of farming in this section of the arid Great Basin was fraught with difficulties. Water was scarce and deep canyons formed by ancient volcanic activity held the available water of the Snake River. In 1902, US Congress created the Bureau of Reclamation (USBR) and then the Minidoka Project to bring water to central Idaho and other arid lands in the country.

The Minidoka project still exists and consists of a series of dams, reservoirs, canals, and pumping stations along the Snake River in Idaho and Wyoming. The project's major dams are the Jackson Lake Dam, Minidoka Dam, American Falls Dam, Island Park Dam, and the Grassy Lake Dam. Hydroelectric power from the Minidoka powerplant and the Palisades Dam Powerplant (not part of the Minidoka project) powers pumping stations that direct Snake River water through canals to irrigate the farms of Idaho. How the water in Jackson Lake became the irrigation water for over a million acres of farmland is the story of the Jackson Lake Dam.

Jackson Lake is a natural lake created by glacial action during the Pinedale Glacier stage by the Jackson Lake Glacier.[1] It is filled by the Snake River from headwaters in Yellowstone National Park to the north and drained by the Snake River on the eastern side. The Snake flows from Jackson Lake, south through Jackson Hole, and into Idaho. Early twentieth-century geologists described the Dam's foundation as, "A rock ledge 30 feet thick underlain by a 10-foot layer of stiff blue clay overlying second rock formation; the embankment wings lie on alluvial clay, sand, and well graded gravel."[2] Or, in modern geological terminology, "Jackson Lake Dam is situated on porous volcanic rock and unconsolidated lacustrine, glacial and alluvial sediments."[3] Questions remain about the suitability of this substrate for a large dam. A study conducted in 2003 concluded that the substrate could liquify in a Magnitude 7 earthquake.[4]

After its formation in 1902, the USBR quickly began looking at water storage opportunities in the Jackson Hole area. [5] The first Jackson Lake Dam was authorized during the Theodore Roosevelt administration by the Secretary of the Interior, Ethan A. Hitchcock, on April 23, 1904. Though still completing surveys of the area, construction soon began on a temporary log and stone dam completed in 1907. The USBR hoped to provide some water for farmers, and the temporary dam raised the lake's height about 10 feet. The USBR planned to release the stored water in the fall for irrigation, but in 1910, the dam failed days before the scheduled release.

The Bureau of Reclamation then hired engineer Frank Crowe, and in 1911 construction began on a new concrete dam with earthen embankments. Supplies for the new dam were carried by rail to the end of the line in Ashton, Idaho, and then hauled to the dam site and the newly established town of Moran. After a few failed attempts to go over Teton Pass, freighters lugged equipment and supplies down the Ashton-Moran haul road. Locals referred to the road as the Reclamation Road, and the USBR later reengineered it as the Grassy Lake Road between Ashton and Flagg Ranch.

The Bureau of Reclamation created the Town of Moran to house workers brought in for dam construction. Officials named the town after Thomas Moran, a landscape artist with the 1870 Hayden Survey of the Yellowstone region. [6] The town's location, built on land owned by hunting lodge and ferry operator Ben Sheffield, is now a parking lot utilized for fishing access.[7] The approximately 400 workers who lived in Moran tripled Jackson Hole's population, which previously stood near 200, most of whom lived in the southern end of the Jackson Hole valley. Later, John D. Rockefeller Jr.'s Snake River Land Company purchased the Sheffield property for \$106,425. The price tag included 343 acres, Teton Lodge, and 107 buildings in Moran.[8] However, by the time of Grand Teton National Park's expansion in 1950, the Snake River Land Company had removed Moran's buildings. Though many were lost, some of these historic buildings are still in use at the dam and Moran.

Additional construction, completed in 1916, raised the height of the dam to 78 feet.[9] Then the National Park Service proposed building a road around the area flooded by creating the Jackson Lake Dam. The small community of Jackson Hole was skeptical. Some owners of local dude ranches argued that development would hurt their business.[10] Rancher Struthers Burt thought the new road might bring too much civilization. Teton County later sued the Federal Government over the taxation of the additional stored water in Jackson Lake. The county contended that because private interests had funded the 1916 height increase, the extra water was private property and thus taxable.[11] The county lost this argument, but it started a long history of dispute and compromise between local and federal efforts in the Tetons. In 1932 additional construction raised the left embankment three feet, completing the early building of the dam.

Why would officials choose Jackson Hole as a reservoir site? In the early twentieth century, the Tetons looked out over a valley where people struggled to scrape out a living. Long winters and a short growing season made Jackson Hole an economic gamble for settlers. USBR employee,



Early map Jackson Hole showing Jackson Lake before dam construction. JHHSM Collection 1958.1916.001.

John Markham when writing about the Jackson Lake Dam noted, "Times were so desperately hard in Jackson Hole during the years until 1930 that the residents hardly felt the effects of the depression."[12] Other locals recall that the Depression actually did make hard times even worse.[13] However, all agree that times were tough in early Jackson Hole. This reality is key to understanding Jackson Hole's history and the controversy surrounding Grand Teton National Park's creation. Jackson Hole has evolved significantly over the last century since the Dam was constructed. Different needs and interests dominated decision-making at the time the USBR established the Jackson Lake Dam. The creation of the Dam was only the beginning of the story, and its fascinating history continued when the area became part of Grand Teton National Park. [1] Fritiof M. Fryxell, "Glacial Geology of Jackson Hole" Augusta Library Publications, Vol XIII, Rock Island, Ill. Augustana College (1930): 225

[2] Bureau of Reclamation, Minidoka Project, Report (1958): 356.

[3] Marston, "Effects of Jackson Lake Dam on the Snake River and its floodplain, Grand Teton National Park, Wyoming, USA" 84.

[4] Associated Press, "Expert says quake may break Jackson Lake Dam," Billings Gazette, September 17, 2004

[5] Bureau of Reclamation, Minidoka Project, Report (1958): 353.

Jackson Hole Historical Society id. 2002.117.044

[6] Teton County Planning office, Town of Moran Document, (1991) Jackson Hole Historical Society Archive.

[7] Robert W. Righter, Crucible for Conservation: The Struggle for Grand Teton National Park. (University Press of Colorado, 1982): 56

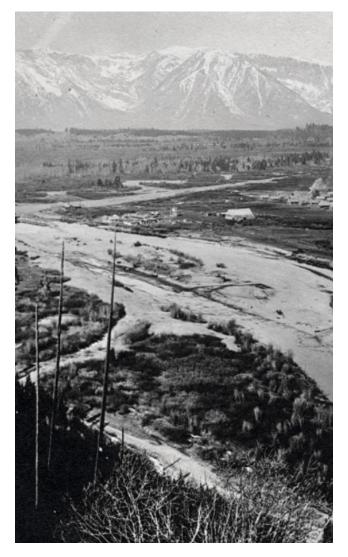
[8]Teton County Planning office, Town of Moran Document, (1991) Jackson Hole Historical Society Archive.

[9] Bureau of Reclamation, Minidoka Project, Report (1958): 351.

[10] Robert W. Righter, Crucible for Conservation: The Struggle for Grand Teton National Park. (University Press of Colorado, 1982): 31

[11] Ian Moody, Excerpt from "Some Recollections of the formation and early history of Teton County WY."(11/9/1968) Jackson Hole Historical Society Archive.

[12] Markham, "Recollections on Jackson Lake Dam," 2. [13] Markham, "Recollections on Jackson Lake Dam," 1-3.



Jackson Lake Dam, JHHSM Collection.

PEOPLE OF THE DAM



Frank T. Crowe –Remembered for his ability to lead, Frank (Hurry-Up) Crowe led the building of the Jackson Lake Dam. The workers on his many projects praised him for understanding their views and so worked hard for him. Born in 1882, the Jackson Lake Dam was his third big project, and he went on to build the Hoover Dam while revolutionizing the dam construction process. While working for the USBR and later as a private contractor, his greatest asset was a talent to bring different kinds of people into a building project and inspire them to work together.



Johanna Walden Markham- The first recorded registered nurse in Jackson Hole, the USBR hired Johanna Waldin in 1910. She worked as the nurse in Moran alongside the resident physician, Dr. Joseph Shaw. They treated everything from work-related injuries to bear bites suffered by early Yellowstone tourists. She also offered care to local families and delivered babies when necessary. Johanna married the dam's construction superintendent and time-keeper Joseph Markham the next year. Their son, John Markham (quoted above), went on to work for the USBR and wrote glowingly of the Bureau's work and the benefits of Jackson Lake Dam.[13]