Exploring the Great Unknown
The 150th Anniversary of John Wesley Powell’s Colorado River Expedition
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The year 1869 marked a watershed in the settlement of the Intermountain West. The completion of the Union Pacific and Central Pacific Railroads in May of 1869 opened large areas of the West which had seen little settlement up to that point. The fur trappers of the 1820s and 1830s amassed a large and informal body of knowledge of the landscape of the West, but little of this information was passed on to the general public. The earliest explorers including Lewis and Clark, Stephen Long, Zebulon Pike, and John C. Fremont opened portions of the West but explored relatively narrow areas. Although some scientific and topographical data was generated, these expeditions did not include large parties of scientists or map makers. In these pre-Civil War expeditions, the scientific work was primarily conducted by the expedition’s principals, with the majority of the crew members being teamsters, hunters, or other support staff.

Things changed after the end of the Civil War. The late 1860s and 1870s saw the first large-scale multidisciplinary scientific explorations of the Intermountain West, an area which was rapidly becoming the last unexplored portion of the country. One of the most significant people associated with these first scientific expeditions was John Wesley Powell. In 1869, Powell led an expedition which traveled by boat down the Green and Colorado Rivers and through the Grand Canyon. While this is the most well-known expedition of the late nineteenth century, it was not the only scientific survey being performed at the time. While Powell was surveying the Colorado River Basin, Ferdinand Hayden was exploring central Colorado and the Yellowstone area; Clarence King was exploring a 100 mile wide corridor along the 40th Parallel; and George Wheeler was exploring Utah, Nevada, and Arizona for the U.S. Army.

Powell’s expedition down the Green and Colorado Rivers began at Green River City, Wyoming on May 24, 1869. When Powell arrived in Green River City, the town was in turmoil. The city had been founded a year before by entrepreneurs who realized that the place where the Union Pacific Railroad crossed the Green River would be of strategic value to the railroad. The town boomed during the summer of 1868, months before the railroad tracks reached the river. While the Union Pacific originally planned to build a switching station including a railroad yard and roundhouse at the town site, it chose instead to establish the switching point 13 miles west in Bryan, Wyoming as the railroad did not wish to build facilities on land it did not own. With no railroad shops, Green River City town lots became worthless and most of the residents moved away leaving the town largely deserted. By the spring of 1869, Powell’s expedition set up camp in abandoned houses along the east bank of the river opposite a low island in mid-stream now known as Expedition Island. Samuel Field’s store remained open and Powell bought the expedition’s supplies there. Unknown to Powell, the crew smuggled a small keg of liquor onto one of the boats at Green River City. It was not discovered by Powell until the boat was wrecked in Lodore Canyon.

Powell’s expedition team consisted of Powell and nine other men, none of whom were scientists, and four custom-built wooden boats. The expedition traveled down the Green River passing through Flaming Gorge and Red Canyon (both named by Powell), before arriving in Browns Park which was renamed by Powell from the original Browns Hole. The Canyon of Lodore (also named by Powell) was their first major challenge. One of the four boats was wrecked in the canyon’s rapids and much needed supplies were lost. Hunger, and even starvation, was a constant threat to the expedition from then on. As the expedition lengthened and the supplies dwindled, morale among the crew fell. The crew blamed Powell for delaying the progress of the expedition to gather scientific data. Eventually three members of the crew left the expedition while in the Grand Canyon. They attempted to walk out but were never seen again and were presumed to have been killed by Indians.

Two days later Powell’s expedition reached the south end of the Grand Canyon and completed its travels. Powell’s exploration of the Colorado River drainage system in 1869 and his second trip in 1871 was an epic adventure, but it also led to a greater understanding of the geology of the Colorado River drainage system. It had been hoped that
The Colorado River would be a route for riverboats into the Intermountain West in the same way that the Mississippi and Missouri Rivers were to the Midwest and Great Plains. Powell proved that this was wrong. The geological information gathered by Powell led to the establishment of the Grand Canyon and the Canyons of Lodore. The 1869 expedition set the stage for his further contributions to geology and ethnology which developed over the 1870s. It also made him the most famous American explorer of the post-Civil War period.

In many ways Powell's 1869 Colorado River survey was a throwback to the pre-Civil War expeditions where the expedition leader collected all of the scientific data and the remaining members rowed the boats. This differed from the Hayden, King, and Wheeler surveys which included geologists, map makers, paleontologists, biologists, botanists, zoologists, photographers, artists, and journalists. However, all these expeditions not only produced a broad body of scientific data, but also used it to promote the public interest. Hayden was an inveterate promotor of all things economic in Colorado, and King's expose' of the Great Diamond Hoax, which saved investors hundreds of thousands of dollars in fraudulent investments, was seen as a great public service.

Wheeler's mapping of the Intermountain West was originally intended to facilitate the movement of soldiers through the region. Powell's contributions to science were primarily in geology, his earliest interest, and in ethnology which became his later passion. His interest, and sympathy for, Native Americans led to the creation of the Bureau of American Ethnology of which he remained director until his death. Powell also advocated a more realistic pattern of land use in the arid West. He saw that eastern or Midwestern agricultural practices were ill-suited to this region and recommended classifying lands in a manner which was most suitable for its use. This thinking put Powell well ahead of his time, but did not make him popular among land speculators and developers.

Throughout the post-Civil War period, John Wesley Powell was a prime mover in the development of the scientific exploration of the West. The monographs produced by Powell, Hayden, King, Wheeler, and their associates; the photographs taken by William Henry Jackson and Timothy O'Sullivan; and the paintings of Thomas Moran brought the West to the attention of the nation in a way it had not been before. Tremendous amounts of information had been gathered, but by 1874 it was apparent that the surveys were overlapping each other leading to duplicated results. The ever conscientious Powell worked behind the scenes to bring the matter to the attention of Congress. By 1879, the funding of multiple surveys was deemed wasteful and the Powell, Hayden, and Wheeler surveys were discontinued.

Further scientific exploration of the West was administered under a new federal agency, the United States Geological Survey (USGS). The first director of the USGS, Clarence King, resigned after one year and was replaced by John Wesley Powell who served as director of the agency until 1894. Powell died in 1902. Powell's expedition experience beginning with his 1869 Colorado River survey, as well as his political and bureaucratic acumen helped build the USGS into the agency it is today.