CHARLES SCHMIDT

Mendocino Blowhole at Low Tide, 2013 Oil on Canvas. 30 x 44 in

Mexisto Carlo

COURTESY THE ARTIST

JERRY LAWRENCE

The Irony Of Hetch Hetchy

Origins of the National Debate on Preservation vs. Conservation

or preservationists the damming of Hetch Hetchy Valley in Yosemite National Park is a wound that has never healed. Ironically, however, the controversy surrounding this loss of a large part of a national park led directly to the founding of the National Park Service. Forty-four years after the establishment of Yellowstone, a separate agency was created that was devoted entirely to the protection, purpose, and appropriate administration of national parks.

The hundredth anniversary of the National Park Service occurs on August 25, 2016.

How this agency originated and the opposing roles John Muir and Chief Forester Gifford Pinchot played in its creation and the making of the Hetch Hetchy Dam are the topics of this article.

Background—Conservation and Forestry

The conservation movement in the United States developed out of the growing awareness that our forests were being depleted and that unless something was done, lumber and watershed would soon be in short supply. On the other hand, the heart of the preservation movement was the concern for wilderness—wilderness for its own sake and for its scenic, spiritual, and recreational values.

The practice of forestry, which is the management of forests to ensure a continuing supply of wood and other natural resources, was brought to the United States from Europe in the late 1800s. By that time, European forests had already been reduced to only remnants of what had once existed and American forests were headed the same way. In 1875, the U.S. Commissioner of Agriculture said in his report "Because of the rapid deforestation of large areas, forestry has excited much attention in the United States," and that he "feared a timber famine, unless appropriate actions are taken."

A report done by Commissioner Franklin Hough for Congress in 1876, titled Report on Forestry, described a prevalent "pioneer mentality" which was resulting in a shocking waste of forest resources.

Despite these warnings, it was not until the 1890s that effective federal measures to protect American forests were established. In 1801, Congress passed the Forest Reserve Act, which gave the president authorization to

create national forests. In 1897, the Pettigrew Amendment directed the Secretary of the Interior to make rules and regulations to protect these reserves and authorize the sale of timber. These forest reserves were not being *preserved*. They were being *conserved*, as stated in the Pettigrew Amendment, to "secure favorable conditions of water flow and to furnish a continuing supply of timber for the use of the citizens of the United States." In other words, trees in national forests were to be harvested just like any other crop. But now harvesting was to be done in such a way as to result in a sustained yield of lumber over time.

Gifford Pinchot

In 1898, Gifford Pinchot became chief of the Division of Forestry. He was to become one of the outstanding leaders in this country's conservation movement. His grandfather and father had made fortunes in timber production. In an era without regulation, they and their fellow lumber entrepreneurs had left behind massive areas of denuded hills, eroded terrain, and silted rivers. Eventually Gifford's family took a different view of forests. They had been greatly influenced by the book Man and Nature, written by George Marsh and published in 1864. Marsh was the first American to lay down in a book of general circulation the broad principles of conservation and to show how earlier civilizations had been ruined when they abused their natural resources. He pointed out that the United States would suffer the same fate if it continued to destroy its forests. In 1886, when Gifford was twenty years old, his father asked him if he would like to be a forester. No American up to that time had ever been a professional forester. As a matter of fact, in those days no American college even taught forestry. Later, Gifford said he had had no more conception of what it meant to be a forester than the man in the moon. He went to France in 1889 to get his training and became chief of the u.s. Forestry Division in 1898.

In 1905, during Teddy Roosevelt's administration, that division was reorganized and became the u.s. Forest Service. This action was to give Pinchot control over one hundred and fifty million acres of national forest land.

Pinchot and Theodore Roosevelt had a number of things in common including a great love of the outdoors. They were both appalled by the widespread waste and destruction so visible around them in the 1890s and early 1900s. Pinchot later wrote in his communications to the president: "When the Gay Nineties began the common word for our forest was 'inexhaustible.' To waste lumber was a virtue and not a crime. There would always be plenty of timber. ... The lumbermen ... regarded forest devastation as normal and second growth as a delusion of fools. ... And as for sustained yield, no such idea had entered their heads. The few friends the forests had were spoken of, when they were spoken of at all, as impractical theorists or fanatics, more or less touched in the head. What talk there was about forest protection was no more to the average American than the buzzing of a mosquito and about as irritating."

Pinchot came to the conclusion that all natural resources were to some degree related and had to be dealt with by a unified approach. His solution was federal regulation of public lands and scientific management of land resources. Roosevelt agreed and aggressively asserted his executive authority to implement Pinchot's proposals. During his administration, he tripled the size of the national forests. This addition of over one hundred million acres greatly reduced the amount of lumber, grazing, and mining abuse. That is not to say that lumbering, grazing, and mining were not allowed in national forests. These lands were being conserved for *use*, but regulated in such a way as to eliminate waste and to ensure that use did not exceed the carrying capacity of the land.

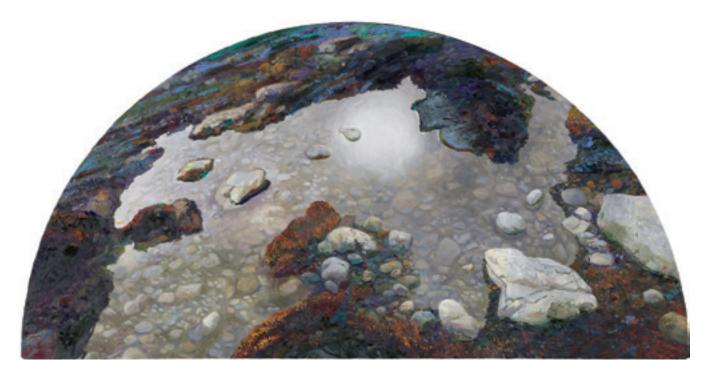
Yosemite—A New Concept—Preservation

"Government has a duty of preservation. ... The central purpose of the new preserve (The Yosemite Grant) is to prevent the otherwise insurmountable ... selfishness of individuals from destroying essential natural values." So said Frederick Law Olmsted upon appointment to the Yosemite commission, 1866. He is considered to be the father of American landscape architecture.

President Abraham Lincoln signed the bill setting aside Yosemite Valley and the nearby Mariposa Grove of Giant Sequoias in 1864. That this would happen in an era when the prevailing attitude toward wilderness was one of exploitation might seem surprising, but in fact, Yosemite Valley was first preserved for its unique scenic value rather than as wilderness.

CHARLES SCHMIDT

Tidepool Near Mendocino, 2013 Oil on Canvas, 18 x 36 in





COURTESY THE ARTIST

The first nonnative Americans to see the valley were probably members of the Joseph Walker Party, which was a group of fur trappers passing through the area in 1833. The first known entry into the valley by whites was on March 27, 1851, by members of the Mariposa Battalion as they pursued suspected Native American raiders.

In 1853, an event occurred fifty miles to the northwest, which was to have long-term implications for Yosemite. In that year, two "businessmen" stripped the bark from the bottom 116 feet of one of the largest of the huge sequoia redwood trees ("Mother of the Forest," 315 feet tall and 61 feet in circumference) in the recently discovered and unprotected Calaveras Grove, located in the mountains east of Stockton. The bark was exhibited at the London World's Fair of 1854. This incident became known as "The Tree Murder" and was seen as so outrageous at the time, it probably rivals the suggestion made in 2005 by a certain ex-California Central Valley congressman to sell some national parks. The 1853 event was seen as a graphic demonstration of what could happen to the sequoia groves located on the rim of Yosemite Valley if left to the mercies of the "entrepreneur spirit," and was one of the factors which led Congress to pass the legislation protecting the area in 1864.

Yosemite at first was not a national park. It was federal land granted to the State of California with the proviso that it be preserved. In effect, Yosemite was California's first state park. The first national park was Yellowstone, established in 1872. It was set aside to prevent private acquisition and exploitation of "geysers, hot springs, waterfalls and similar curiosities." Unlike national forests, which had been established for the extraction and consumption of natural resources, the purpose of national parks at that time was for the permanent protection of scenic land-scapes and natural conditions.

John Muir

John Muir was the most effective spokesman for this country's Preservation Movement. His family emigrated from Scotland to Wisconsin in 1849, when he was eleven years old. His sensitivity to and awareness of the natural world was extraordinary. That he was sensitive to anything at all is even more remarkable considering that he was raised by a father who, in the name of god, subjected his family

to ignorance, abuse, and needless denial. Later on in life, Muir would use the hard lessons of spartan living at home to survive and even flourish in extreme wilderness conditions. He also learned a certain missionary zeal and vocabulary from his father—characteristics he would later put to good use as the first American to deliver a populist message about the critical value of wilderness. It took Muir the first twenty-nine years of his life to find his calling. As a young man, he was a brilliant inventor and showed great promise as a businessman, but at heart was always more at home in the outdoors. At twenty-eight, he was temporarily blinded in a work accident. Thinking his condition permanent, he told friends, "The sunshine and the winds are working in all the gardens of god, but I ... I am lost." Recovering, he decided that he was going to be true to himself and never again live away from nature. Later he wrote, "God has to nearly kill us sometimes, to teach us lessons."

He began his new life in the fall of 1867 by walking a thousand miles from Wisconsin to Florida. In the spring of 1868 he sailed to San Francisco and walked across California's great Central Valley to Yosemite Valley. Muir described the Central Valley of the time as "one sheet of purple and gold sweeping from the coast range to the Sierra foothills" when recording a first view in his diary. He wrote it was a place of "bee pastures, where every footstep crushed a hundred flowers." When Muir reached Yosemite, he had an emotional response that bonded him to the area for the rest of his life. He lived and worked in the vicinity for five years and became recognized as a self-taught expert on Yosemite's terrain, geology, and natural history.

In 1873, Muir moved to the San Francisco Bay Area and began to write. Eventually he would become known worldwide for evangelizing the benefits of wilderness and nature. He wrote about preservation in at least three ways: the general benefit of wilderness for people, the right of nature to exist without human interference, and the need to save specified wildland areas.

Muir saw more than beauty when he observed nature. He combined intuition and reason to become an ecologist before there was a science of ecology. He understood that each part of the natural world played a role in the overall scheme of things or, as he said in his letters, "When we try to pick out anything by itself we find it hitched to everything else in the universe. No particle is

ever wasted or worn out but eternally flowing from use to use." "Lord Man," as Muir sometimes called the human race, "must be made conscious of his origins as a child of nature. If brought into the right relationship with wilderness, mankind would see that he was not a separate entity endowed with a divine right to subdue his fellow creatures and destroy the common heritage, but rather was an integral part of a harmonious whole...the universe would be incomplete without man," Muir said, "but it would also be incomplete without the smallest transmicroscopic creature that dwells beyond our conceptual eyes and knowledge."

Gifford Pinchot's brand of utilitarian conservation seemed to have a broader appeal. After all, wise use of natural resources was good common sense, and unlike Muir, Pinchot did not challenge the still dearly held arrogant notion that mankind is the center of the universe and master of the natural world (known as anthropocentrism).

However, when Muir wrote things like "thousands of nerve-shaken, over-civilized people are beginning to find out that going to the mountains is going home, that wilderness is a necessity and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life," he was catching the mood of a changing world, a world in which the industrial revolution, political unrest, and social change were causing millions of people to move from rural settings into the stress of city life. Muir felt the human need for nature was on a par with the need for food, water, and shelter. He often told the story about living in San Francisco and returning to his lodging from botany expeditions with his arms full of wildflowers. His route took him through a slum area where, when children playing on the street, "caught sight of my wild bouquet, [they] would run after me asking, 'Please, Mister, give me a flower—give me a flower, Mister,' begging in a humble tone, as if expecting to be refused. And when I stopped and distributed the treasures ... their dirty faces fairly glowed. ... No matter into what depths of degradation humanity may sink; I will never despair while the lowest love the pure and the beautiful and know it when they see it."

One of Muir's major accomplishments was the writing of two 1890 magazine articles, "Treasures of the Yosemite" and "Features of the Proposed Yosemite National Park."

Muir wrote these articles after camping in unprotected wilderness areas above Yosemite Valley and being shocked by recent damage done to forest, meadows, and stream banks by grazing sheep. In this writing, he advocated the creation of a national park, which would include large wilderness areas surrounding the existing Yosemite Valley grant. More significantly, Muir made the point that the worth of such wild places should be determined by their scenic beauty and wilderness value, not just profit potential.

This was a radical idea at the time, but Muir was able to gain widespread acceptance for it. His ability lay in his passion for wilderness generally and for his love of the Yosemite area in particular. His feelings enabled him to describe the beauty and natural worth of the area so vividly that the public was aroused and he gained the support of Interior Secretary John Noble and President William Harrison. Consequently, in 1890, Congress approved not one but three new California National Parks: Yosemite, Sequoia, and General Grant (later incorporated into Kings Canyon National Park). Some historians feel this was the first time that the u.s. Congress preserved land for its wilderness value. The new Yosemite National Park consisted of 1,500 square miles surrounding the existing 48-squaremile Yosemite grant. In 1906, the 1864 grant was dissolved and Yosemite Valley and the Mariposa Big Tree Grove were incorporated into the national park.

There were national parks before there was a National Park Service. That is, at first Congress created national parks piecemeal in response to individual groups of local wild lands enthusiasts but did not create an organization that could coordinate, manage, or protect them. Yosemite, Sequoia, and General Grant National Parks, like Yellowstone before them, were put under the protection of the army. If you visited Yosemite in the years 1891 through 1913, you would not have encountered National Park Rangers. They didn't exist yet. National parks in California at that time were patrolled by the U.S. Cavalry headquartered in the San Francisco Presidio. In the case of Yosemite, a fourteen-day horseback trip was made across the Central Valley each spring to provide law and order in the park until the arrival of winter.

The establishment of the Park Service came about after a long and bitter battle over the fate of Hetch Hetchy

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Valley in Yosemite National Park. Thanks primarily to Muir, that controversy brought the issue of wilderness preservation to the attention of the American public as it had never been done before.

Drowning Hetch Hetchy

In 1890 when Yosemite National Park was established, federal park lands were managed in a piecemeal fashion. Some were administered by the Department of the Interior, some by the War Department, and others by the Forest Service. No single agency provided unified management of these areas. Consequently consistent, system-wide national park policies concerning development, landscape management, forestry, sanitation, and construction did not exist. For years the critical matters of national park purpose, appropriate administration, and protection from exploitation were largely unaddressed. This neglect was to have a price.

The City of San Francisco needed water and wanted to dam Yosemite's Hetch Hetchy Valley to get it. The Hetch Hetchy Valley lies in the northwestern part of Yosemite National Park and is drained by the Tuolumne River. During the late nineteenth century, the valley was renowned for its natural beauty—often compared to Yosemite Valley itself. Since the 1880s, San Francisco had been looking to Hetch Hetchy as a fix for its outdated and unreliable water system. The city tried repeatedly to acquire water rights in Hetch Hetchy Valley but was continually turned down because the valley was part of a national park and because of conflicts with irrigation districts that had senior water rights on the Tuolumne River. In 1908 however, Secretary of the Interior James R. Garfield granted San Francisco the rights for development of the Tuolumne River.

Between 1908 and 1913 the Hetch Hetchy issue became the first national debate about environmental preservation. At the heart of the debate was the conflict between conservationists, like Gifford Pinchot, who held that the environment should be used in a conscientious manner to benefit society, and preservationists, led by John Muir, who believed that Hetch Hetchy should be protected and saved from human interference. Prior to this time there had been no clear-cut distinction between preservation and conservation. The Hetch Hetchy controversy exposed

and helped define the differences between these two critical environmental concepts.

Pinchot and Muir had once been good friends. Muir as a young man had also been influenced by George Marsh's book, Man and Nature. Both men were active in the movement to save American forests and had traveled together in 1896 as members of the National Forest Commission's tour of the western states. The reasons for the eventual deterioration of their friendship can be seen in their disagreement over recommendations in that commission's final report. Muir sided with the preservationists who felt that forest reserves should be closed to development and protected by the army. Pinchot, on the other hand, felt that forests should be used and not "locked up." Later, the battle for Hetch Hetchy Valley developed along similar use-versus-preservation lines. In 1908, Muir sent a message to the Governors' Conference on conservation, saying of San Francisco's efforts to dam the valley, "Nothing dollarable is safe, however guarded, thus the Yosemite Park, the beauty glory of California and the nation, nature's own mountain wonderland has been attacked by spoilers."

Since the Hetch Hetchy Valley was in a national park, an act of Congress was needed to authorize the dam project. Former Chief Forester Pinchot's testimony before the House Committee on public lands in the summer of 1913 was that "injury to Hetch Hetchy by substituting a lake for the present *swampy* shore of the valley is altogether *unimportant* when compared to the benefit to be derived from its use as a reservoir." Two of the more important factors responsible for San Francisco's eventual success in damming Hetch Hetchy were Pinchot's support and congressional sympathy after the city's horrific earthquake and fire experience of 1906. Pinchot at the time was recognized as one of the outstanding leaders in the conservation movement and his testimony carried great weight.

Near the close of the Senate debate on damming the valley, James A. Reed of Missouri expressed his amazement that "the senate goes into profound debate and the country is thrown into a condition of hysteria over a 'piece of wilderness." In fact Hetch Hetchy wasn't just any old "piece of wilderness." It was a significant part of a national park legally protected by Congress.

In the end, Congress passed legislation that enabled the creation of a dam in the Hetch Hetchy Valley. President Woodrow Wilson signed the bill into law on December 19, 1913.

Although preservationists lost the battle, the Hetch Hetchy controversy, for the first time, brought the issues of protecting nature and national parks to the attention of the American public.

Establishment of the National Park Service

The Hetch Hetchy debate highlighted the problems of the national parks. At that time the parks were administered in the Interior Department by a chief clerk who, because of other duties, had little time for their problems. At the 1912 National Parks Conference held (ironically) in Yosemite, Interior Department Secretary Walter Fisher acknowledged that his department had "no machinery whatever to deal with national parks" and that his office and that of the chief clerk had never really been equipped to handle matters such as park development, landscape management, forestry, sanitation, and construction.

In 1916, less than three years after the fate of Hetch Hetchy had been decided, men who had fought each other over that issue and consequently were well aware of the weaknesses of national parks joined together to create the National Park Service.

Two of these men were Northern California Congressmen John Raker and William Kent. Both had put perceived water and power needs ahead of preserving Hetch Hetchy but otherwise were supporters of national parks. Kent had previously donated the land for Muir Woods National Monument, located just north of San Francisco, and had insisted that it be named in John Muir's honor. In 1911 Raker had tried unsuccessfully to introduce legislation for the creation of Redwood National and State Parks.

These two congressmen joined forces with a long list of men including Secretary of the Interior Franklin Lane, Frederick Law Olmsted, and future National Parks Directors Stephen Mather and Horace Albright to craft the Organic Act, which was the founding legislation for the new agency. The act, signed into law by President Woodrow Wilson on August 25, 1916, stated the purpose of the new agency as:

... to promote and regulate the use of the ... national parks ... which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Gifford Pinchot did not believe a National Park Service was necessary at all. He thought there was little difference between national forests and national parks and that they both should be administered by the Forest Service. Influential park supporters saw things differently. In their opinion, parks were to be *preserved* and not *used* for grazing, mining, water storage, as a source of timber, etc. Pinchot's support for converting Hetch Hetchy Valley into a reservoir ended any possibility that he or the Forest Service would ever control national parks. Preservation, not multiple use, continued to be the imperative in national parks.

Jerry Lawrence has a B.S. Degree in Park Management and worked as a park ranger and naturalist. He retired from the City of Palo Alto as the Superintendent of Open Space and Science. In that capacity he was responsible for four thousand acres of open space including two thousand acres of salt marsh on the shores of San Francisco Bay and two thousand acres in the foothills of the Santa Cruz mountains. He retired early to write. Jerry Lawrence lives in Santa Cruz with his wife Barbara. They have two daughters.

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