



AMERICAN WHITEWATER

Conservation • Access • Events • Adventure • Safety

BY BOATERS FOR BOATERS
Nov/Dec 2013

REMINISCING ABOUT THE EARLY YEARS OF AMERICAN WHITEWATER

EXPLORE A FREE FLOWING ELWHA

THEY'RE COMING:

NEW RIVER DRIES FLOW STUDIES





EXPERIENCING THE ELWHA

BY THOMAS O'KEEFE

Elwha Dam.
Photo by Thomas O'Keefe

FOR A CENTURY Washington's Elwha River was blocked by a set of dams that prevented salmon from accessing historic habitat and buried a river beneath a reservoir. With dam removal now well underway, a new landscape is emerging that is being explored by fish and paddlers for the first time in a century. The Elwha River is unique among the rivers of the Olympic Peninsula, with a watershed that represents approximately 20 percent of Olympic National Park and headwaters that reach to the very center of the Olympic Mountains. These mountains were formed by the domal uplift of marine sedimentary rock and basalt that the powerful Elwha River has carved its way through. The richly diverse geology there has been sculpted by the action of flowing water, the erosive power of sediment, and the persistent grinding action of the glaciers. The Elwha River of recent geologic history has all the attributes of a river that is well suited for the suite of species that include the Pacific salmon, while its deep canyons and diverse

geology create one of the region's classic backcountry whitewater destinations. Of course, the power and volume of a river descending from the mountains to the ocean over a distance of just 40 miles also made the river a prime candidate for early hydropower development.

History of Hydropower on the Elwha

In 1882 the world's first hydroelectric project began operation on the Fox River in Wisconsin and with it came ambitious plans to harness the power of rivers nationwide to generate electricity and fuel industrial development. Thomas Aldwell, one of the Olympic Peninsula's earliest civic promoters and developers, located a "homestead" on the Elwha and over the next 20 years, quietly began accumulating the land necessary for the development of a hydropower project. Where the Klallam people, native to the river valley, had found a fishery resource that sustained their community, Thomas Aldwell looked upon

the river and determined that it was "no longer a wild stream crashing down to the Strait; the Elwha was peace and power and civilization." As Aldwell worked to secure the financing, construction of the Elwha Dam commenced in 1910. The dam was not anchored to bedrock but instead set on glacial alluvium—"a dam on roller skates." Shortly after the dam was completed in October of 1912, it failed in spectacular fashion when the river blew out through the gravel below the dam. Repairs were cobbled together and by the end of 1913 the Elwha was no longer a free-flowing river and electricity flowed from the powerhouse to Port Angeles and beyond. At first the power was integral to the early development of the Olympic Peninsula, but as the decades passed and the regional grid was developed, the value of the project diminished. Over the same time period, a river that had once supported salmon runs of up to 400,000 fish dwindled to just 4,000. In 1927, a second dam was constructed at Glines Canyon, which was subsequently

STEWARDSHIP

included within the boundaries of Olympic National Park.

The Effort to Remove the Dams

Decommissioning the hydropower projects on the Elwha was an effort that took several decades. Although the 50-year FERC license for the Glines Canyon Dam had come up for renewal in the late 1970s, the FERC relicensing process continued to stall out into the mid-1980s. Around this time, local conservation advocate Rick Rutz made the observation that FERC did not have the jurisdictional authority to

OUTFITTER SPOTLIGHT

OLYMPIC RAFT & KAYAK

Olympic Raft and Kayak is an outfitter based on the banks of the Elwha River. While the dynamic nature of the river has made it difficult to run commercial trips there, that may change in the future. Owner Morgan Colonel and his staff do lead sea kayak trips at the mouth of the Elwha, where you can witness the newly forming estuary, and if you are passing through the area in search of recent beta or paddling partners, the folks at Olympic Raft and Kayak can always provide the most current information on river conditions and share aerial photos of the project that hang in their shop.

If you are planning a family trip to Olympic National Park, even if you do not have a kayak with you, you will find a trip to the Elwha fascinating. The old reservoir sediments are open for hiking and exploration, the newly-forming beach at the river mouth is a great spot to visit, and the overlook at the Elwha Dam site and the old access road to the powerhouse all provide opportunities to see what this project is all about.



The Elwha Dam comes down in 2012.
Photo by Thomas O'Keefe

license a hydropower dam in a National Park. It took several years, but local river advocates worked with the tribe and ultimately succeeded in convincing the mill that owned the dams that they were a poor investment. The dams produced a small amount of power relative to their size and the impact they had on the landscape. Ultimately, Congress stepped in and in 1992 the audacious idea to remove the dams inched closer to reality with the passage of the Elwha River Ecosystem and Fisheries Restoration Act. It was during this time that American Whitewater became formally engaged to support the effort with local paddler Gary Korb writing about the project for the *American Whitewater Journal*.

All that remained was the “small matter” of securing the funding for the project, a task that ultimately required two decades and a series of federal appropriations bills. With a final shot of economic stimulus funding from Congress, the project was finally underway in September 2011. As actor and river advocate Tom Skerritt looked out upon those assembled for the occasion and declared, “Elwha Be Free!” an excavator set to work and began to

break up the concrete and dismantle the dam that Thomas Aldwell had worked so hard to build. In the end most agreed that this dam’s time had passed, and the environmental costs associated with its continued operation greatly exceeded the small amount of power it produced. At the official ceremony to mark the occasion, Bureau of Reclamation Commissioner Mike Conner remarked, “Dam removal is not the best option everywhere, but it is the best option here...and it’s the best option in a lot of places because the process that we are going through these days is we are reassessing the costs and benefits of certain facilities that exist today... I think this is not only a historic moment here but it’s going to lead to historic moments elsewhere across the country.”

The River Today

While work to remove the upper Glines Canyon Dam is still underway, Elwha Dam is gone and a new landscape has emerged before our eyes. Where the stagnant waters of a reservoir once sat, a hungry river is eagerly devouring the mountains of sediment that were captured by the reservoirs for the past century. For anyone



The Elwha River flows freely through the former Elwha Dam site.
Photo by John Gussman

who enjoys rivers, the grand experiment that is unfolding is nothing short of fascinating, and in recent months paddlers have had the opportunity to explore the new landscape. Massive salmon have been finding their way upstream and the river offers ample opportunities for exploration where one can witness first-hand what it means to restore a river.

For paddlers, most of the new whitewater is Class II but the river is far from stable as entirely new river channels are formed

and wood hazards can appear at any time as buried logs emerge from the sediments or are redistributed within the dynamic landscape. Any blind corner could be totally clean one day and then choked with a massive log jam the next. Those who want to experience the river in person should come with solid Class IV skills, a recent scouting report, and exploratory boating experience. Higher flows are likely to be particularly hazardous as the river actively establishes its preferred channel. While the opportunity to experience this place

and witness the restoration first-hand is the defining feature of a journey down this section of river, the trip reaches a crescendo as you approach the site where the Elwha Dam once stood. As you enter the gates of Elwha Canyon, the bedrock walls that spoke to Thomas Aldwell as the natural place to put a dam, the river now explodes forth in the most challenging piece of whitewater on the run. A great technical Class IV+ rapid at lower flows and a big water monster at higher flows, this one gives everyone something to think about. Downstream of this point the river continues on its journey to the ocean, joining the Strait of Juan de Fuca at a new beach that has formed at the river's mouth.

Dams were once thought of as permanent features on the landscape, but the Elwha shows us that these projects do in fact have a finite lifetime. Many dams provide important benefits for our communities—electricity, flood control, water storage, and even scheduled releases for whitewater recreation—but sometimes those benefits do not outweigh the costs and in those cases removal of the project needs to be part of the discussion. In the case of the Elwha the discussion was a long one but the results are nothing short of amazing.



Larry Little charges into the rapids at the former Elwha Dam site.
Photo by John Gussman