



"Read *Planet Ocean* with your children and grandchildren to begin the discussion of what humans can do to save our oceans from pollution and acidification. Books like this one help lead the way to a better climate future for all inhabitants of mother earth."

— **Jeff Bridges, Academy Award winner and environmentalist**



**An Interview with Patricia Newman, author of
A River's Gifts: The Mighty Elwha River Reborn (Millbrook Press/Lerner, September)**

Q. How did the Lower Elwha Klallam Tribe and local people use its bounty to live?

A. Salmon are probably the area's #1 resource. Their eggs hatch in the river. The young fish grow and then swim to the ocean where they become adults. When they return to the river to spawn, they bring nutrients from the sea. These marine nutrients feed the ecosystem – cedars, firs, alders, and berries, which feed the birds and the elk. The Klallams (also known as The Strong People) fished for salmon, but so did the bears, river otters, and eagles. As I say in *A River's Gifts*, "For thousands of years, river, forest, salmon, and Strong People nourished each other."

Q. Why was the Elwha Dam built without Indian input and knowledge?

A. At that time the LEK Tribe did not have a voice in the new settlement of Port Angeles. In the 1800s, settlers passed laws that said the Klallam were not allowed to fish or own land. So, who was going to ask their input on dams?

Q. Were the dams' benefits worthwhile?

A. Sure—for a time. Life was hard on the American frontier; there were no grocery stores, no Amazon.com. If you didn't know how to do something, you taught yourself. The dams provided electricity using the power of the river—a huge improvement that made life easier. But the Elwha Dam, and later the Glines Canyon Dam, came with cultural, and spiritual costs for the Klallams, and environmental costs for everyone.

Q. When and how did the townspeople and Indians unite to restore the river?

A. In 1986, the LEK Tribe began its petition to remove the dams. Prior to that, two important things happened. The boundary of the Olympic National Park expanded to include the Glines Canyon Dam, upriver from the Elwha Dam. Then the Glines Canyon Dam's license needed to be renewed by the Federal Energy Regulatory Commission (FERC). But the Glines Canyon Dam was now within Park boundaries. Could the license even be renewed? And by this point, the dams only provided a small amount of the town's electricity. Could the dams be removed?

Q. How long did the restoration process take?

A. The official Elwha River Restoration Act was signed by President George H. W. Bush in 1992. Then some people had second thoughts. 'If we take the dams down, what do we do for drinking water?' 'Our lakes will disappear.' 'Where can we fish? Who will supply electricity for the sawmill?' Opposition lasted for nearly 19 years before the two sides reached an

agreement. Finally on June 1, 2011, the Elwha and Glines Canyon Dams officially powered down and demolition began.

Q. Did restoration benefit people? What about the salmon?

A. Three days after the dams were removed one lone Chinook salmon swam past the former damsites. More fish return every year. The river is recovering. It flows free and wild and is almost exclusively protected by the park. If we step out of the way, nature will do what it's always done. Once again river, forest, salmon, and the people nourish each other.

Q. Are there roles for young people and schools in the process of restoring natural places, like a whole river ecosystem?

A. The first step is education. Everyone lives in a river basin. Young people can investigate, learn its name, the plants and animals in the habitat, and how humans affect the river. Talk to scientists who study the river. Are there citizen science projects to get involved in? Can you make a difference for one animal or fish that uses the river? Establish a Green Team or a Blue Crew dedicated to saving our planet one local project at a time.

Q. Can restoration of ecosystems affect climate change?

A. Yes. If we restore ecosystems, they begin to function as designed. They sequester carbon from the environment. They sustain the plants and animals within it. But that doesn't mean we're off the hook. We need to reduce the amount of fossil fuels we burn.

Q. How does this book relate to STEM studies in school?

A. The Elwha Dam was an engineering marvel in 1910. How was a wild river harnessed to produce electricity? And how did the workers build it? Before the dams were removed, scientists studied the river's flow, how fast sediment traveled, and how different animals used the habitat. Any one of those topics could inspire a STEM investigation. Kids can also make a stream table with some aluminum pans, sand, and a bottle of water. As the water flows down the stream table, kids will see how geography determines the river's path.

Q. Is this book different from many "picture books" for the range of 8 to 12?

A. Today's nonfiction for children is amazing in its depth, breadth, and variety of formats. Most of us don't know that nearly 2,000 US dams have been removed to restore free-flowing rivers. *A River's Gifts* tells one of these relatively unknown stories of hope and cooperation. Natasha Donovan's illustrations are rich in color and movement. Natasha is Métis and lives in northern Washington. Like the Klallam Tribe, the area is in her blood. Her illustrations feel like home.

*Q. What kind of knowledge do you hope kids will gain from **A River's Gifts** and your other books?*

A. Connection. Most of us don't live as close to nature as the Lower Elwha Klallam Tribe and as a result forget its benefits. But they exist whether we see them or not. In *A River's Gifts* I want to inspire readers to see and understand how nature impacts their lives.

Q. Are you a climate activist? How is education pivotal in that mission?

A. Yes. Climate change is not up for debate. It's here, and manifests itself in warming ocean and air temperatures, raging wildfires, catastrophic rains, rising seas, and melting sea ice. We must understand that our actions have consequences and to repair the damage we've done we must understand our relationship to nature. Which is why I write the books I do.

Q. With so much of our national resources going to Mars exploration, do you feel there is a commitment to save the Earth's climate?

A. Not yet. Politics stands in the way of progress in the US. Instead of waiting for our leaders to actually lead, people around the country and the world are creating their own pockets of commitment, which gives me hope.

*Q. The story of **The River's Gifts**--the cycle of nourishing the river, forest, salmon, and The Strong People, what happened when the current changed with the dam, then the restoration movement--is inspiring. Is change like this happening in other places?*

A. Again, pockets of change. There's Greta Thunberg's movement. People around the world conduct regular beach cleanups. Boyan Slat, a Dutch teenager, invented the Ocean Cleanup Device currently gathering plastic debris in the North Pacific. In *Planet Ocean*, Indigenous filmmaker Eben Hopson shows how the melting ice affects his Iñupiat people. Photographer James Balog's Extreme Ice Survey documents how glaciers around the world have receded. Baltimore's Mr. Trash Wheel keeps the harbor clean. Electric and fuel cell-powered vehicles are on the rise. But for every success there's a step backward too, like the US Postal Service's harebrained idea to buy a gasoline-powered fleet of trucks. I'd like to see a time where our environmental decisions continue to move us forward.

Q. I liked the persistence of the activists in this book, waiting 16 years to be able to change the dam, then 12 more for restoration. What lesson does this teach young people who might give up if they don't see results right away?

A. I once heard Michelle Obama say that activism is the work you do for the next generation—it's the rent we pay for living. I like to think of my books as a contribution towards that rent. Long term commitment to an ideal takes grit, a quality necessary for success in any aspect of life whether you're a child or an adult.

*Q. Do you consider **A River's Gifts** a unique book? What do you hope will be the legacy of this book?*

A. Absolutely! The story of the Elwha River Restoration has never been told as a children's book before. And the illustrations live and breathe the ecosystem. I hope readers will search for other ways we are connected to nature. I want their curiosity to continue blossoming so we will develop the next generation of leaders who think it is important to save our world.

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