The Sacramento

A Transcendent River

Bob Madgic



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Storm clouds. Bob Madgic.
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Bob Madgic

and Walt Simmons

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The Sacramento River in the Bend area exemplifies the natural river. Bob Madgic.

Chapter One

A Natural River

"Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven."

—Genesis 1:20

A T ONE TIME, THE SACRAMENTO VALLEY represented nature at her grandest. Behind its lush creation and sustenance was a river.

The river had many origins. Mt. Shasta's vast snowpack fed a massive underground reservoir of aquifers and springs. Water bubbled out of rock crevices and inaugurated tiny rivulets that made meadows bloom and sing. In the nearby Mt. Eddy mountain range, newly formed streams gushed down slopes. All these waters gathered as a single powerful river, then roared through a narrow gorge.

As the river plummeted within a granite and forested ravine, other waterways joined, adding volume and force. Torrents fed by snow and rain eroded hillsides; dislodged stones and boulders formed rock gardens as the river rushed onward.

Emerging from the canyon, the river was shadowed by mountains on either side. They collected massive quantities of snow, its melt destined for the river. Farther down the valley, two large tributaries delivered yet more water, this time from the Sierra Nevada.

The river grew in size, and its gradient flattened, its current slowed. Its load was reduced to smaller and smaller gravel, until only fine sediment and decomposed plant matter remained. Wherever it settled, the sediment provided substance and nutrition to river life.

From its very beginnings, the river sought to bend and turn, the way of all waterways. Tiny streams that form from melting glaciers will meander even when there are no obstructions, as do ocean currents. The river that follows a straight course is rare, unless constricted by something like rock walls.

Now free to wander, the broadening river soon twisted like a large slithering serpent, creating a complex mosaic of wide looping bends, deep pools, shallow riffles, back eddies, and oxbows. Its ever-shifting currents sculpted sandbars and carved out banks. Land rises stood as high as ten to fifteen feet and several miles wide in places.

Profuse rain and snow caused water to accumulate and then rage. Torrential flows scoured the river's bed, flushed out debris, moved gravel and sediment. Surges of water overflowed the channel, flooding outlying lands. This flood plain spread over a million acres and regularly extended thirty miles beyond the channel.



One of three forks of the Sacramento River in the Mt. Eddy watershed, major providers of water for the river. Bob Madgic.

Composed mainly of silt and clay, the spongelike land stored huge quantities of water that slowly seeped into the ground or retreated back to the river. Pollutants were filtered out, the water cleansed. As the water receded, it left gravel and sand bars. Such ebbs and flows allowed some creatures to spawn and grow, and plants to regenerate.

The volume of water entering the valley filled every cavity, depression, lowland, and channel. The entire region was replete with wetlands. Integrated among them were millions of acres of bulrushes, or tules, and other aquatic plants.

Periodic mass flooding would create a gigantic inland sea that extended more than 100 miles from the foothills to the coastal ranges, forming one of America's largest freshwater wetlands. Rather than damaging and destroying life, such flooding created and sustained it.

Lush riparian habitat was everywhere: high canopies of cottonwood, sycamore, walnut, ash,

and oak trees; dense masses of willow shrubs, grapevines, and hanging lianas; thick carpets of fruit-laden bushes, grasses, and herbs. The copious transpiration, succulent leaves, and rapid generation of trees and shrubs created a shady,



Old growth riparian forests as seen here are rare along today's river. Bob Madgic.

1. A Natural River

cool and moist microclimate, a virtual greenhouse environment.

These riverside jungles kept floods in check. Roots secured the banks, preventing excessive silt from entering the river and smothering fish-spawning gravel. When extreme flooding caused banks to crumble and large quantities of clay to enter the waterway, the river cleansed itself merely by flowing. Meanwhile, new banks formed elsewhere to replace those lost, as the river always sought to achieve equilibrium.

Beyond the riparian forests—generally defined as those that regularly flooded—were millions of acres of woodlands and meadows. Dominating the landscape were gigantic and stately valley oaks, the largest of all oak tree species and unique to California.

The river and its multifaceted surroundings nurtured and sustained one of the most prolific arrays of mammals, birds, amphibians, and fishes in the world. Countless elk, black and grizzly bears, mule deer, and pronghorn ante-



Tule elk, an iconic California mammal, now live mainly in preserves. Bob Madgic.



Bobcats are vital for controlling rodent populations. Trish Carney.



The native western pond turtle. U.S. Fish and Wildlife Service.



Vernal pools form from winter rains, with perimeter wildflowers blooming as the water retreats. Bob Madgic.



Tundra swans were once numerous in the Sacramento Valley wetlands. Mike Peters.

lope roamed the valley, resembling scenes from the African Serengeti and Great American Prairie. More than five hundred thousand tule elk, another California original, grazed valley lands. As many as ten thousand grizzly bears occupied California—the most in any state and roughly twenty percent of the entire North American population.

A multitude of aquatic species, amphibians and reptiles—including the giant garter snake that reached five feet in length—lived in the swamps and marshes. Every spring, rainwater gathered in depressions across the varied terrains and formed countless vernal pools, giving life to a surprising diversity of organisms that emerged from dormancy to enjoy resurgent life, like the fairy shrimp and spadefoot toads.

Few river corridors attracted as many resi-

dent and migrating birds—more than 250 species. Millions of birds, some from as far away as the Arctic, descended to this valley, including the abundant honking Canada geese, exquisitely beautiful greater sandhill cranes and tundra swans, and striking snow geese, magnificent in their profuse whiteness.

The forests and woodlands—home to species like the yellow-billed magpie, tri-colored blackbird, Nuttall's woodpecker, and the least bell's vireo—also attracted resplendent neotropical migratory birds. Bank and cliff swallows darted and swirled, swooping over water and fields, catching insects on the wing. Numerous eagles, hawks, falcons, harriers, and other raptor species soared everywhere, feasting on waterfowl, rodents, small birds—and, in the case of osprey, fish.

The Founding of Redding

THE DISCOVERY of gold in Coloma by Sutter employee John Marshall prompted another of Sutter's employees, Major Pierson Reading, to order Indian workers on his ranch

along the Sacramento River in the northern valley to start panning for gold on nearby Clear Creek. Reading had previously ventured north at Sutter's behest in 1845 and established an outpost—Rancho Buena Ventura—on lands he acquired from the Mexican governor.

Reading proceeded to run steamboats up the river to a place called Latona, near the mouth of Clear Creek. There he planned to build a town that he intended to call Reading. This was the farthest reach of shipping on the river, but his attempt was short-lived as there were too many obstacles in the waterway above Red Bluff for large boats to navigate, despite Reading's numerous and expensive efforts to make the channel more hospitable.

The discovery of gold on Clear Creek and other nearby tributaries to the Sacramento River, as well as on the Trinity River, changed everything. Hundreds of would-be miners swarmed to the region, establishing settlements throughout the area. The largest was a town that surprisingly came to be called Redding.

Although it was Pierson Reading who triggered initial growth in the region and became known as the "Father of Shasta County," it was Benjamin B. Redding for whom the town was named. In 1872, Redding, a former California secretary of state, sent a survey crew to the region to lay out a town site north of Red Bluff for the California & Oregon Railroad. When the town was laid out, instead of being named Reading as intended, the foreman of the survey crew named it Redding after his boss.



Pierson B. Reading. Gold seeker and developer. Shasta Historical Society.



Benjamin B. Redding. Politician, railroad agent, and conservationist. Shasta Historical Society.

Major Reading's friends objected and in 1873 had the legislature restore the name to Reading. But in order to please the railroad, a petition came before the legislature to repeal the act of 1873 and change the name back to Redding, which was done.

Besides his work for the railroad, B.B. Redding was a staunch conservationist who initiated the State Board of Fish Commissioners, forerunner of the Fish and Game Commission. Thus, it is the town's rich fishery legacy, rather than its destructive gold-mining past, that is highlighted by its final namesake.