2000

"Irrigated Eden:" Tales of the Many Snake Rivers

Dale Goble
University of Idaho, College of Law, gobled@uidaho.edu

IRRIGATED EDEN
TALES OF THE MANY SNAKE RIVERS

DALE D. GOBLE*

This is the story of a river. Actually, it is the story of the many rivers that share the banks and bed and are hidden beneath the apparent simplicity of a single name: Snake River. Mark Fiege goes the famous aphorism of Heraclitus – that one cannot step in the same river twice – at least one better: his thesis is that you can never step in the same river even once. To put your foot into the stream we call the Snake River is to put your foot into a collection of rivers and to feel the current of as many myths.[1]

In the beginning there was the natural Snake, spilling out of the Tetons in the floods of spring, its flow tapering off as summer wears it down to a remnant of its spring-self. This was the Snake that the early Euro-American settlers encountered. Along its upper reaches, they built simple diversion works and dug ditches to channel the water to their fields. The crops they grew had water needs that mirrored the River's rhythm: hay and grain require relatively little water, and then only in the spring and early summer when the winter snows swell the Snake and its tributaries. The manipulation of the River, however, had begun. The natural River was now only one of the Rivers; another flowed through the ditches into grain and grass and thence to the boomtowns in the mining districts that were the markets of the day.

The rock-and-brush dams, and the ditches they fed, were generally constructed by small groups of farmers organized as mutual or cooperative irrigation companies The waterworks they constructed were more the product of muscle than money – a physical manifestation of the kin and community relationships that dominated the first stage of turning the Snake into a working river.[2] The creation of other Rivers accelerated with the arrival of the national market in the form of the railroad. The prospect of profits led irrigators to plant different crops: hay and grain were supplemented or supplanted by sugar beets and potatoes.[3] Beets and potatoes, however, had water requirements that did not match the natural River's flows: they need water far longer into the summer, into the period when the natural River begins to fall. New crops and the desire to bring additional lands into cultivation – the need for more water than the natural River could provide – spurred a trend to larger hydrological projects. Larger projects in turn required different organizational models and substantial

* Professor of Law, University of Idaho College of Law.

1. *See* MARK FIEGE, IRRIGATED EDEN: THE MAKING OF AN AGRICULTURAL LANDSCAPE IN THE AMERICAN WEST (1999).

2. *See id.* at 119-23.

3. *See id.* at 53-54, 135-40, 146, 155-70.

capital; cooperatives gave way to corporations and government. Federal dams and Carey Act projects dictated the organization of labor and capital on an industrial basis: engineers, surveyors, draftsmen, hand drillers, muckers, skinners, steam shovel operators, pile drivers, concrete mixers, carpenters, cooks, nurses, doctors, clerks, timekeepers, and accountants all had to be mobilized and organized.[4] Under the Reclamation Act of 1902, the Bureau of Reclamation built Arrowrock Dam on the Boise River. At 349 feet it was the tallest dam in the world when completed in 1916. The Minidoka Dam provided water to more than 130,000 acres along both sides of the mid-Snake and near the headwaters in Wyoming, the Bureau turned Jackson Lake into a reservoir by damming its outlet. The Carey Act also produced mammoth projects: two Pennsylvania steel magnates created the Twin Falls Land and Water Company that built Milner Dam and a massive network of canals to irrigate some 200,000 acres.[5] The new scale further submerged the natural River: the early appropriators along the upper Snake saw a River full of (storage) water even as their headgates were being closed because, they were told, the natural River was falling.

But withering fields beside a full River was not the only discontinuity. The irrigators and the engineers set out to tame the Snake River, to turn it into a pipeline that delivered water when, where, and as needed. But the River was not a pipeline; the water that flowed in it was an imprecise and shifting mix of nature and engineering. Dams are not impervious containers; they leak water into the ground and into the air in amounts that vary with unpredictable, external factors such as the chaotic mix of sun and clouds. Water flowing down the River is an even more complex amalgam of natural flow, storage water, return flow, and the seepage into and out of the groundwater.[6] The mechanistic view of the River as pipeline thus bore only a tangential relationship to the River that actually flowed – or failed to flow – across southern Idaho.

Engineering was only one tool for reducing uncertainty and regularizing the River's flow. The irrigators sought not only physical control over their environment but also legal control. As they struggled to bring water to the fields they were clearing, they began the creation of another river: the legal River. This River was a reflection of the doctrine of prior appropriation. In theory, it was an orderly and systematic River, arranged with chronological and quantitative specificity: a date and a quantity attached to each irrigator. The earlier the

4. *See id.* at 125.
5. *See id.* at 124-25.
6. *See id.* at 97-116.

date, the more secure the right. The law thus was an attempt to assert control over nature, to parcel it out into private property – but like the pipeline River, the legal River only gave an appearance of control. It still remained for a watermaster to reconcile the idealized with the erratic, the legal with the flowing Rivers. Even when the engineered River could – in theory – be parcelled out among appropriators, the irrigators soon discovered that the law's processes were too slow and cumbersome to aid withering crops. The result was a series of extralegal agreements that transferred water despite the law. A moral economy trumped the legal economy.[7]

As they were transforming the River, changing its seasonal rhythms to match the needs of crops to be sold in Chicago and Los Angeles and New York, parcelling it out by the acre-foot, the irrigators and the engineers were telling themselves stories to make sense of what they were doing. The stories like the River itself were numerous: they were turning the desert into a garden, making the wilderness bloom, "reclaiming" the wasteland to fashion a new Eden and realize God's plan for the earth.[8] But the garden was a modern space often envisioned as an industrial Eden, a controlled landscape in which the River was a pipeline and the engineers and developers were "understudies of the Creator"[9] who delivered rain on demand –

> For genial showers you need not wait,
> You only have to hoist the gate,
> And let the waters overflow,
> Our valleys rich in Idaho.[10]

The land that the waters overflowed was similarly regimented to produce uniform crops: the goal was to produce potatoes that "look like they were made by machinery."[11]

There were dissenters, to be sure. Annie Pike Greenwood, whose failed attempt with her husband to farm land from 1912 to 1924 is recounted in *We Sagebrush Folks*, suggested a different understanding of the garden: "Adam, I am sure, regretted the lost Garden of Eden,

---

7. *See id.* at 112-16.

8. *See id.* at 42-43, 171-74.

9. *Id.* at 177 (internal quotations omitted). E.B. Darlington, chief engineer for the Twin Falls North Side Land and Water Company, offered the vision of engineers as God's right-hand men. *See id.*

10. *Id.* at 184 (internal quotations omitted). The song was composed by Reverend H.N. Ruddock in 1905. *See id.*

11. *Id.* at 162 (quoting Earl Irwin, a Rupert farmer) (internal quotations omitted).

but I suspect that Eve fed him the apple in order to get off the farm."[12] And the rosy metaphor of a smooth and mechanistic transformation of nature into money – of water, sun, and soil turned alchemically into gold – ignored the harsher realities of floods and droughts, weeds and insects and jack rabbits, crumbling canals and greedy middlemen. Turning sagebrush into Eden created as well destroyed habitat. Irrigation canals were simply streams to muskrats; gophers found irrigated crops tasty; monoculture proved ideal breeding grounds for a variety of diseases and pests. Ditches distributed both water and weeds. At such times, irrigators spoke of farming as gambling. They acknowledged that the godlike control they envisioned was in fact a ceaseless and contingent interaction with a recalcitrant nature that refused to obey their stories.

This is the central storyline in Mark Fiege's richly imagined examination of the development of the Snake River plain, "an agricultural landscape in the American west" – to quote from his book's subtitle. Any precis necessarily simplifies. For example, the doctrine of prior appropriation was not the only legal mechanism brought to bear on the uncertainty facing the farming communities. The law was also used to harness collective power: irrigation district statutes permitted farmers to create legal entities with the power to tax as a way of raising the capital necessary for larger projects; drainage district statutes allowed farmers to undercut the sanctity of private property in land by forcing upper irrigators to pay for draining lower-lying fields that had become waterlogged by irrigation; county officials were empowered to levy taxes to exterminate animal pests and weeds; pure seed laws and standardized grading regulations were used to help create a market by providing the buyer with some assurance of quality. Each statute allowed the community to coerce its recalcitrant members much as prior appropriation sought to coerce the recalcitrant River into behaving rationally.

Fiege's approach to this natural and engineered and legal landscape is to recognize the complexity and uncertainty in its constitutive layers of nature and artifice:

> [W]hat is human in the irrigated landscape, and what is natural, cannot be easily teased apart, if at all. This understanding, of course, runs against the way that we conventionally think of humans and nature in American history. We do not normally interpret heavily used landscapes, places of work

---

12. *Id.* at 197.

> and production, as environments that are also natural. Rather, we tend to see them as departures from nature. These places appear to be degraded or destroyed ecosystems from which nature has vanished; they seem to be environments that have been humanized and transformed by artifice into components of modern industrial society.[13]

These are, in Fiege's term, "hybrid" landscapes: "we try to arrange land and water to suit our objectives. And again nature circumvents our plans. Back and forth it goes, a process of alteration, intermingling, and layering, the result of which is landscape."[14] As Fiege notes, a drive through the irrigated farm lands of the Snake River Plain prompts a variety of metaphors: a desert transformed into a garden; an industrial system producing potatoes; a dead ecosystem of rivers that do not run, falls that do not fall. Fiege's point is indisputable: the Snake River is not dead; it abounds with life. The dichotomy between the garden and the dead is a false one that reflects divergent Eden myths – Eden as the well tended garden and Eden as nature. The actual landscape is one in which the human and the manmade blend indistinguishably: the actual landscape is a hybrid.

But Fiege also overstates the point. Although the Snake River and its plain is not dead, it is a radically simplified ecosystem in which much of the biodiversity has been lost. Sage grouse have largely been replaced by pheasants; salmon have been supplanted by carp; Idaho fescue, winter fat, and the other forbs, grasses, and sagebrush that the Euro-American immigrants first encountered have given way to potatoes and sugar beets. A hybrid landscape seems to imply some balance resulting from a continuing give and take. But the myth that the irrigators and engineers pursued had a violent streak: taming the River was neither gently envisioned nor gently implemented.

As William Kittredge, who grew up in Oregon's Warner Valley and like Fiege is concerned with the role that myth plays, has written:

> The teaching mythology we grew up with in the American West is a pastoral story of agricultural ownership. The story begins with a vast innocent continent, natural and almost magically alive, capable of inspiring us to reverence and awe, and yet savage, a wilderness. A good rural people came from the East, and they take the land from its native inhabitants, and tame it for agricultural purposes, bringing civilization: a notion of how to live embodied in law. The story is as old as

13. *Id.* at 9.
14. *Id.*

> invading armies, and at heart it is a racist, sexist, imperialist mythology of conquest; a rationale for violence – against other people and against nature.
>
> ....
>
> In Warner Valley we thought we were living the right lives, creating a great precise perfection of fields, and we found the mythology had been telling us an enormous lie. The world had proven too complex, or the myth too simpleminded. And we were mortally angered.[15]

I am not sure that Fiege would disagree with Kittredge. It is a matter of emphasis; my questions are in the nature of quibbles with a book that is a masterful environmental history that raises fundamental questions about the relationship between humans and the environment.

As Aldo Leopold noted more succinctly, "To keep every cog and wheel is the first precaution of intelligent tinkering."[16]

15. WILLIAM KITTREDGE, *Owning it All*, *in* OWNING IT ALL 55, 62-64 (1987).
16. ALDO LEOPOLD, *Conservation*, *in* ROUND RIVER 145, 147 (1953).