

Big Dams of the New Deal Era: A Confluence of Engineering and Politics. By *David P. Billington and Donald C. Jackson.* Norman: University of Oklahoma Press, 2006. Index, notes, bibliography, photographs, illustrations, maps, figures. iv + 369 pp. Cloth, \$36.95. ISBN: 0-806-13795-9.

Reviewed by Michael R. Adamson

David P. Billington and Donald C. Jackson use a model of interest-group politics to argue that the big dams that were constructed across the West during the 1930s constitute nothing less than “monuments to democracy.” In their narrative, farmers, municipalities, and other interests expressed their desire for navigation, irrigation, flood control, electric power, and other functions to their respective members of Congress, who called on engineering experts to design solutions to these problems. Thus, the U.S. Reclamation Service and the Army Corps of Engineers acted as conduits, responding to the will of the people. Intertwined with this democratic process were progressive ideas on developing regional economies and natural resources, as well as the widespread cultural belief in the ability of humans to master nature. All in all, dam building served the general interest. This perspective is far more benign than the interpretations of many scholars, including Patricia Limerick, Marc Reisner, Richard White, and Donald Worster, who assign far more power to economic elites and state-based experts in influencing outcomes.

Key moments in legislative history, including the flood-control act of 1916 and the river and harbors acts of 1920 and 1925, provide the historical signposts for the strategy of using federal civil-engineering projects to spur economic development at the regional and state level. The 1925 act, in particular, set the stage for multipurpose dam construction, as it assigned the water agencies the task of submitting surveys of river basins and proposals for meeting the needs of constituents through dam building. The delivery of the ambitious Boulder Canyon Project plan soon followed, demonstrating that river-basin planning and the design of multipurpose dams predated the New Deal. Nevertheless, it was the New Deal imperative of job creation that fueled the proliferation of dam construction. Indeed, the desire to create jobs—at their peak, each dam employed

thousands of workers—often trumped the conclusions of engineering experts in determining both the location and the number of dams within a particular river basin. The book emphasizes the larger sense of national accomplishment and progress that dam construction inspired during what Thomas Hughes has labeled “an era of technological exuberance.” According to Billington and Jackson, the functions that the engineering features of the projects deliver continue to provide “enormous service to society despite the costs they incur” (p. 298).

The structure and approach of the book reflect the National Landmarks Study that spawned it. Two chapters discuss the evolution of the Reclamation Service and the Corps as agencies dedicated to the intensive development of water resources. Four chapters follow, each discussing the planning and construction of major water-storage dams within a large river basin: Colorado, Columbia, Missouri, and Sacramento. The strength of the book is its focus on the engineering features that make each dam distinctive and significant, in keeping with the criteria by which structures nominated for national landmark status are judged. The four river-basin chapters discuss at length the debates on design and describe in detail the construction of each dam. More than 130 photographs, drawings, and maps provide compelling evidence of the extent to which the projects reshaped the landscapes of the West. Billington and Jackson contribute to the literature by showing the interagency debates between Reclamation and Corps engineers over the science and technology of dam building. That is, their differences involved more than the intense institutional competition to build the most dams that other historians have emphasized.

Much diminished in this account of the mastery of engineering over nature and the role of the federal water agencies in the political economy of the New Deal are the negative impacts of dam building. There is no discussion, for example, of how the common belief among politicians, planners, engineers, and others in the superiority of their European American culture, if not their outright racism, resulted in the devaluation of the cultural practices and economic activities of native peoples in decisions to locate a dam. Thus the dams of the Columbia River destroyed salmon runs that had sustained generations of Native Americans. At the site of Garrison Dam on the Missouri River, the confluence of engineering and politics resulted in several tribes of North Dakota losing

their land. In this case, the U.S. government selected the dam site, presented the tribes with a *fait accompli*, and then dismissed tribal claims of compensation during brief negotiations that took place only at the behest of concerned members of Congress. As Katrine Barber explains in her recent book, *Death of Celilo Falls* (2005), these lamentable chapters in the history of federal–Indian relations were “shockingly unremarkable and predictable” (p. 184).

Barber’s narrative, for one, reminds us of the tremendous costs of large civil-engineering projects, which include dislocation of communities, destruction of cultural resources, deprivation of economic opportunity, ecological destruction, and the redistribution of power to political and economic elites. Billington and Jackson concede that big dams have cost more economically and environmentally than they have returned. Yet the amount of space they devote to describing the unfolding drama of big-dam construction reflects the study’s final tally of benefits and costs. For example, in the case of Garrison Dam, twelve pages describe its design and construction. Two pages discuss the details of Indian removal.

Still, Billington and Jackson want their readers to know that planners and experts gave some thought to the environmental consequences of their projects. In the case of dam building on the Columbia River, for instance, engineers “took seriously the fish problem.” Yet the experts’ solutions reflect the cursory attention that they paid to the problem. Engineers “assumed that fish ladders and other mitigation measures could keep the problem to manageable proportion.” As late as 1994, the authors note, the former director of the National Marine Fisheries Service conceded, “We still don’t know the best way to protect the fish” (p. 197). So much for engineering expertise. As Karl Boyd Brooke points out in *Public Power, Private Dams: The Hells Canyon High Dam Controversy* (2006), New Deal planners, managers, and engineers attached little permanent value to the environments and peoples that they encountered. Thus, both salmon and native peoples could be moved or removed, as required.

The ambivalence of Billington and Jackson on mid-twentieth-century dam building is perhaps best illustrated by the caption to the photograph on page 251 of white Americans enjoying the lake created by the construction of Garrison Dam: “While American Indians in North Dakota suffered the loss of treasured tribal land inundated by

Garrison Dam, other residents in the region appreciated the new reservoir as a ‘playground’ offering new recreational opportunities for fishing and boating.” The photograph is a stark reminder of how the assertion of power by European Americans diminished native peoples’ control of the rivers of the West. The text captures the essence of the New Deal–era accounting that justified a decades-long spree of dam building across the West.

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