

Crow Project

Indian Projects

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The Crow Project

Introduction to the Crow Project

As early as 1903, and possibly much sooner, Reclamation began to contemplate an irrigation project in south central Montana on the Crow Reservation and surrounding lands to serve both Indian and white needs. Preceding the other Indian Projects by almost five years, Reclamation entered new territory and found itself wavering on both sides of a line that divided its commitment to Indians and whites.¹ The Indian Service started work on some canal systems for the reservation in 1885, and with passage of the Reclamation Act of 1902 the possibilities for bringing water to the region blossomed. Reclamation spent the next four years conducting surveys and making big plans for the Crow Project, but the actual construction ultimately fell to the Indian Service. However, it is important to note that the designs and proposals laid out by Reclamation set the precedent for much of the Indian Service's later work.²

Ultimately, Reclamation's involvement in the Crow Project was a casualty of the times. At the turn of the century, Federal officials' dedication to assimilating Indians and improving their economic situation through agriculture combined with the fervor for reclaiming the arid West. These ambitious goals produced an unprecedented amount of legitimate and less worthy proposals for irrigating lands west of the one-hundredth meridian, and Reclamation simply could not construct every project it envisioned to aid Americans. The Crow Project, at first glance, only seemed to help a small number of Indians and did not warrant Reclamation management. It is even questionable whether Reclamation officials ever envisioned Crow as residing within the scope of the Indian Projects. In 1930, some Federal officials came to label the irrigation works

1. For more information on the Indian Projects, see Garrit Voggeser, *The Indian Projects*, Bureau of Reclamation History Program, Research on Historic Reclamation Projects (Denver, Colorado, 2001) and the other individual histories on the Blackfeet, Flathead, Fort Peck, and San Carlos Projects.

2. Albert L. Wathen, "Indian Irrigation," *Reclamation Record*, 13, no. 12 (1941): 323.

on the Crow Reservation as a “white project,” and it seemed that Reclamation should have been involved all along. But by that point, Reclamation had already moved on to construct and plan for other water projects in the region that required its full attention.³

Project Location

Located on lands in and north of the Crow Indian Reservation in south central Montana, Reclamation plans for the Crow Project covered an irrigable area of approximately 120,000 acres. The project included a large area between the Yellowstone River on the north and the Wyoming border on the south, and between the eastern reservation boundary and lands to the west of the Big Horn River. The primary water supply would come from the Big Horn and Yellowstone Rivers and their tributaries. Reclamation divided the project into three sub-projects: Fort Custer, Waco-Sanders, and Big Horn. Fort Custer included lands along the west side of the Big Horn River from Two Leggin Creek (about ten miles south of Hardin, Montana) to the northwest and nearly to the Yellowstone. Waco-Sanders consisted of three tracts of land south of and adjoining the Yellowstone River extending from the town of Huntley on the east to its westernmost point near the town of Forsythe. Big Horn included an area of high bench lands lying west of the Big Horn River and extending approximately forty miles northward from the mouth of the Big Horn Canyon.⁴

Historic Setting

The Crow, of Siouan linguistic background, hailed from the upper Mississippi Valley area of present-day Minnesota and Iowa. Similar to their Hidatsa brethren, the Crow broke from

3. Porter J. Preston and Charles A. Engle, “Report of the Advisors on Irrigation on Indian Reservations,” in *Survey of Conditions of Indians in the United States*, Hearings before a Subcommittee of the Committee on Indian Affairs, U.S. Senate (Washington, D.C.: Government Printing Office, 1930), 2220, 2259.

4. Wathen, 323; DOI, USBR, *Third Annual Report of the Reclamation Service, 1903-1904* (Washington, D.C.: Government Printing Office, 1905), 83-4, 326-7; DOI, USBR, *Fourth Annual Report of the Reclamation Service, 1904-1905* (Washington, D.C.: Government Printing Office, 1906), 225-7.

the main Sioux Nation at an early date. Ethnologists and historians have debated the exact time period of this separation, but most agree that it probably occurred sometime around the mid- to late-seventeenth century. Like many other North American Indian tribes that migrated westward, pressure from growing native populations in the Great Lakes region along with the attraction of buffalo pushed and lured the Crow onto the eastern edges of the plains. They paused in that locale for a time to till the soil, but the increasing numbers of the Cheyenne and Sioux eventually impelled their migration across the plains and into the Yellowstone River Valley. This geographical break subsequently contributed to a profound shift from a semi-sedentary life to that of a nomadic hunting existence.⁵

The Crow inhabited a vast stretch of land within the Rocky Mountains, and along the Powder, Wind, Big Horn, and Yellowstone Rivers. The “fabulous country” offered plentiful resources of wild game, including elk, deer, antelope, big horn sheep, and grizzly bear. Most importantly, the plains east of the Rockies supplied an abundant amount of bison. At contact, Anglos encountered the tribe divided into two groups: the River Crow and the Mountain Crow. The River Crow lived north of the Yellowstone River, while the Mountain Crow resided south of the Yellowstone in the more plentiful hunting regions. The Crow primarily received historical renown from their skills at trading and in the utilization of horses. Interaction with white explorers and trappers complimented those capabilities. In 1805 to 1806, Euro-Americans quickly learned about the benefits of a trading relationship with the Crow and the complications that came with it. As residents of the plentiful river valleys, the Crow proved a lucrative source for beaver and other pelts. When the Crow stealthily absconded with a batch of William Clark’s

5. Michael P. Malone and Richard B. Roeder, *Montana: A History of Two Centuries* (Seattle: University of Washington Press, 1976), 13; Edwin Thompson Denig, *Five Indian Tribes of the Upper Missouri: Sioux, Arickaras, Assiniboines, Crees, Crows*, ed. John C. Ewers (Norman: University of Oklahoma Press, 1961), 137-8, 138n.

(of the Lewis and Clark Expedition) horses they initiated their notorious reputation as what historian John C. Ewers called the “cleverest horse thieves of the American West.”⁶

At the same time that they garnered esteem as adversaries, the Crow also needed American aid to protect them from the powerful incursions of the Blackfeet and Sioux. The Crow frequently cooperated with traders such as Manuel Lisa and Andrew Henry who conducted thriving businesses at forts located near the confluence of the Yellowstone and Big Horn. While many tribes sustained horrible losses from a smallpox epidemic carried by traders to forts across the upper Missouri region in 1837, the Crow evaded much of the disaster by keeping their distance. Despite this ability to negotiate between the good and bad effects of the “white invasion,” the Crow eventually suffered losses. The 1851 Fort Laramie Treaty helped to set a precedent for a strong relationship between the tribe and Anglo Americans that cut both ways. As historians Michael P. Malone and Richard B. Roeder described, “They got along reasonably well with whites...[but] they lost most of their lands anyway.” The treaty provided the Crow with a major portion of the Yellowstone Valley, but within a decade mining rushes threatened the bond of cooperation.⁷

In 1868, Crow retaliation against white prospectors and the impending advancement of Sioux enemies from the East compelled government authorities to renegotiate the treaty with the tribe. The new reservation confined the Crow to a much more limited territory bounded by the divide between the Big Horn and Rosebud Rivers on the east, the Montana-Wyoming border on the south, and by the Yellowstone River on the west and north. Intertribal conflict and hostilities between Indians and whites punctuated the 1860s and 1870s. As miners pressed on the Crow

6. Denig, 139, 144-5; Malone and Roeder, 13, 34; John C. Ewers, *Indian Life On the Upper Missouri* (Norman: University of Oklahoma Press, 1968), 54.

7. Malone and Roeder, 38, 40-2, 47, 93.

from the west and the Sioux and Cheyenne from the east, cattlemen came to dominate the region of the upper Yellowstone north of the tribe. The location of the Crow domain placed them in the midst of a battle for territory and resources – not to mention a way of life – that assailed them from all sides. Ultimately, the Crow sided largely with whites to protect their interests and the remnants of their homeland during the turmoil of the Indian Wars. From 1880-1882, the Crow ceded nearly 1.7 million acres from the western side of their reservation. For the Crow, land and dignity coincided. Unfortunately, the incursions and thus their losses would not end there.⁸

The Dawes Allotment Act of 1887 proceeded from the idea that individual Indians needed their own specific tract of land, usually 160 acres, to simultaneously cultivate crops and civilization. For the Crow, and many other tribes, their cultural background as nomadic hunters made the prospects of the act almost improbable. After the rapid sequence of land cessions, the Crow Reservation itself did not even contain enough land for all the Indians entitled to allotments. The first few decades of the twentieth century brought a series of trials and tribulations for the tribe. Under encouragement from the Indian Service, the Crow made remarkable advances in crop production prior to World War I. The war boom and its demands also brought a huge increase in the number of Indian tracts leased to white farmers and ranchers. Unfortunately, drought from 1919 to 1920 prevented many lessees from making their payments. The problems only worsened as farm prices dropped throughout the 1920s. What had once been such a plentiful domain faltered and there seemed to be little hope for revival. However, throughout the first half of the twentieth century and beyond, the government had one answer to help solve the problems – reclamation.⁹

8. Malone and Roeder, 93-4, 108; Ewers, 114.

9. Malone and Roeder, 108-9; Janet A. McDonnell, *The Dispossession of the American Indian, 1887-1934* (Bloomington: Indian University Press, 1991), 10, 19, 32-3, 38, 64-7.

Project Authorization

Under an act of Congress on April 27, 1904, Federal officials outlined several goals for irrigation on and near the Crow Reservation, but did not specifically authorize the Crow Project. The lands to be irrigated lay mostly within the reservation, but also included a strip of land, embracing 1.1 million acres, in the northern part of the reservation that the Crow ceded to the government. The act provided that the Crow residents of the ceded strip had the choice of securing an allotment from that land, or to have their improvements appraised, sold, and then receive an allotment on the “diminished reservation.” Once the government allotted the lands, the remainder of the ceded portion would be subject to withdrawal and disposition under the Reclamation Act. In the meantime, the act of April 27, 1904, called for Reclamation to conduct investigations on the feasibility of the irrigation project. If the lands withdrawn under the terms of the Reclamation Act had not been disposed of within five years, the Secretary of the Interior would distribute the lands under the homestead, town site, and mineral land laws of the United States. In essence, the act of April 27, 1904 dictated that Congress would only authorize the Crow Project when and if two things occurred: Reclamation properly surveyed, investigated, and made definite, feasible plans for the Crow Project; and, the Indian Service allotted lands to the Crow, allowing the remainder of the land to be withdrawn for the project and settled under the Reclamation Act.¹⁰

Construction History

Reclamation

Soon after the passage of the act of April 27, 1904, Reclamation made preliminary

10. *Third Annual Report*, 83, *Fourth Annual Report*, 225-6; DOI, USBR, “Crow Indian Lands Subjected to Reclamation Law,” in *Federal Reclamation and Related Laws*, vol. 1 (Washington, D.C.: Government Printing Office, 1972), 92-3.

reconnaissance surveys of the area south of the Yellowstone River and on both sides of the Big Horn River. In May, the engineering field parties established camp on the Yellowstone River about two miles east of Billings, Montana. Via the investigations, Reclamation employees located a number of tracts of “fine land” amounting to 120,000 acres that they believed would benefit from irrigation. Reclamation outlined a comprehensive system of irrigation for the Crow Project and divided it into three “sub-projects” or divisions: Fort Custer, Waco-Sanders, and Big Horn. Reclamation engineers also conducted surveys for the Huntley Project that lay to the west of the proposed Crow Project.¹¹ In the next couple of years, Reclamation utilized the surveys to establish detailed estimates of costs and plans for construction. Even with the best laid plans, Reclamation’s aspirations for the project did not get off the ground.¹²

Fort Custer Division

In the Fort Custer division, Reclamation proposed to irrigate approximately 28,000 acres, including 18,000 acres on the ceded part of the reservation and 10,000 acres on the reservation itself. A weir would divert water from the Big Horn River near the mouth of Two Leggin Creek into a forty-three mile long main canal. The diversion dam would divert 405 cfs into the twenty-five foot wide and 7.5 foot deep canal. On the canal lines, a number of drops existed that ranged from twelve to fifty feet and promised opportunities for power development. Because the plans for the division included a larger amount of irrigation water for non-Indians, Reclamation intended to proportionately divide the costs of construction between white landowners and the

11. The Huntley Project was subsequently authorized on April 12, 1905 and construction commenced on October 6, 1905. For more information on the Huntley Project refer to Timothy A. Dick, *The Huntley Project*, Bureau of Reclamation History Program, Research on Historic Reclamation Projects (Denver, Colorado, 1993).
12. *Third Annual Report*, 83-4, 326; *Fourth Annual Report*, 226-7; DOI, USBR, *Sixth Annual Report of the Reclamation Service, 1906-1907* (Washington, D.C.: Government Printing Office, 1907), 102.

Indian Service.¹³

Waco-Sanders Division

The Waco-Sanders division involved three tracts of land adjoining the Yellowstone River along its south bank. The first stretch, the Waco Ditch, would begin just west of the town of Waco on the east side of Bull Mountain Bluffs and extend eastward to the town of Custer. The Huntley Canal, a part of the contemplated Huntley Project, ended on the west side of the bluffs. Reclamation proposed the nineteen-mile long ditch to irrigate 5,000 acres. A second section of canal, the Big Horn tract (not to be confused with the Big Horn division), covered an area of 1,500 acres from the east side of the town of Custer to lands near the confluence of the Yellowstone and Big Horn Rivers. Irrigating this tract would require the “expensive construction” of a pump line to surmount a large elevation increase, and Reclamation engineers proved skeptical about its feasibility.¹⁴ The third section of the division, the Sanders canal, included a “fine body of land” covered by an eighteen-mile long canal extending eastward from the town of Myers. Proposals called for a highline canal to irrigate between 13,000 and 27,000 acres.¹⁵

Reclamation’s vision for the Waco-Sanders division involved numerous big ideas and complications. Reclamation engineers debated designs for the Sanders section. One “scheme,” as they referred to it, called for a gravity system that would only irrigate about 17,000 acres as opposed to another design that required power development and pumping to provide water to as many as 27,000 acres. Either way, the Sanders division involved a substantial amount of

13. *Third Annual Report*, 83-4, 327-9; *Fourth Annual Report*, 226-7; DOI, USBR, *Fifth Annual Report of the Reclamation Service, 1906* (Washington, D.C.: Government Printing Office, 1907), 178; *Sixth Annual Report*, 131.

14. Reclamation officials were ambivalent about irrigating the 1,500 acre tract near the mouth of the Big Horn. The four annual reports between 1903 and 1907 alternated between a negative and positive stance on its construction.

15. *Third Annual Report*, 326-7; *Fourth Annual Report*, 227; *Sixth Annual Report*, 131.

funding. Finally, despite its designation as an “Indian Project,” and similar to the Fort Custer division, the Waco-Sanders division offered few substantial benefits to the Crow.¹⁶

Big Horn Division

Reclamation outlined the most expansive plans for the project, and the ones that promised the most opportunities for the tribe, in the Big Horn division. The division included a large area of high bench lands west of the Big Horn River that Reclamation officials considered the “finest on the reservation.” The irrigable lands lay along a forty mile strip and covered approximately 50,000 acres. To deliver water to the high bench lands, Reclamation proposed a “high diversion dam” at the mouth of the Big Horn Canyon that would abut against solid limestone on either side. Engineers drew up a “rough estimate” for a concrete dam 145 feet high, 130 feet long at the water surface of the river, 232 feet long at a point eighty feet above the river, and about 650 feet long at the top. Designs for the Big Horn High Line Canal, which would deliver water northward through the reservation, included siphons at Beauvais and Woody Creeks, and a drop of 100 feet at Two Leggin Creek. That drop and the dam would generate a substantial amount of power that Reclamation intended to use for pumping.¹⁷

In 1905, engineers projected that upon the completion of the Shoshone Project in Wyoming, southwest of the Crow Project, the discharge of the Big Horn would be “materially decreased,” necessitating an enlargement of the dam. They predicted well. The plans for the “high diversion dam” referred to in the Crow Project came to fruition in the 1960s as Yellowtail Dam on the Yellowtail Unit under the Pick-Sloan Missouri Basin Program.¹⁸ Even though the Big Horn offered more irrigation for the tribe than any other part of the project, the division also

16. *Third Annual Report*, 327-9; *Fourth Annual Report*, 227; *Sixth Annual Report*, 131.

17. *Third Annual Report*, 327, 329; *Fourth Annual Report*, 227; *Sixth Annual Report*, 132.

18. For more information on the Yellowtail Unit see Carolyn Hartl, *Pick-Sloan Missouri Basin Program: The Yellowtail Unit*, Bureau of Reclamation History Program, Research on Historic Reclamation Projects (Denver, Colorado, 2001).

included sizeable amounts of land outside the reservation. The features of Big Horn entailed “some very expensive construction work” that contributed to Reclamation’s doubts about the feasibility of the project.¹⁹

Summing Up Reclamation Work

It is in assessing the Big Horn division that the most revealing clues about Reclamation’s intentions on the Crow Project come to light. The reservation undoubtedly encompassed a large amount of land with great potential for agricultural production. The question remained who was going to reap the benefits of those “fine” lands? Reclamation’s contemplation of the Big Horn division summarized its beliefs about the project as a whole. As one official concluded, “A large portion of the lands...are inside the limits of the Crow Reservation, and for this reason, as well as the high cost per acre, it is probable that nothing will be done to develop this project.” By the close of 1907, plans screeched to a halt. In that year and the next, Reclamation spent a paltry \$20.83 on a few minor survey details. In all, Reclamation’s total price tag for the project only amounted to \$21,032.58.²⁰ It is disputable whether Reclamation ever viewed the Crow Project in a similar manner to its other Indian Projects. Given the large amount of work it conducted on irrigation works surrounding the reservation and throughout Montana in the following years, Reclamation may have partly rejected the Crow Project for its low cost-benefit ratio to Anglo farmers.²¹ The project was also a victim of Reclamation’s diligence and commitment to its goals. By December of 1907, Reclamation had stepped beyond the limits of its funds; the money

19. *Third Annual Report*, 328; *Fourth Annual Report*, 228; *Fifth Annual Report*, 173.

20. This amount is debatable. A number of annual reports listed the cost as \$18,911.96.

21. To further highlight this unfortunate point, one can look to the prolonged legal disputes between the Crow Tribe and the Federal Government over irrigation, water rights, and the uses of water. Contention over the Crow Project itself was a protracted affair. For example, see three important cases: *US v. Powers*, 305 U.S. 527 (1939); *Montana v. US*, 450 U.S. 544 (1981); and, *US v. Big Horn Low Line Canal et al.*, 463 U.S. 545 (1983). Construction of the Yellowtail Unit exacerbated the long-standing disputes. The first argument, in the late-1950s, centered on tribal lands condemned by the government for use in the project. A second dispute, beginning in the 1980s, focused on the usage of power generated by the project.

from land sales that financed irrigation projects were not coming in as fast as the projects were being built. Finally, officials charged that the “desire of private parties to [have] control in the development” of the Crow Project conflicted with Reclamation’s typical management structure on projects. In consequence, Reclamation decided not to withdraw the lands for the project.²²

Construction By Indian Service

The Indian Service made the economical irrigation of the reservation its primary consideration on the Crow Project. This meant that it constructed irrigation works for the tribe, but also eliminated some of the plans put forth by Reclamation. Following Reclamation’s transferral of the project, the Indian Service built a series of distribution systems that diverted water from the Big Horn, Little Big Horn, and their tributaries. However, it did not initially build any structures for storage. By the late-1920s, the ditches and canals irrigated 22,892 acres. Bringing water to the reservation came with a hefty price tag of close to \$2 million because of the widely varied elevation of the region. Unfortunately, while Indians retained ownership of much of the reservation land, they did not meet the Indian Service’s expectations when it came to using the water works. In 1927, for example, the Crow only irrigated 2,703 acres, while white owners and lessees watered over 20,000. In 1931, the Commissioner of Indian Affairs labeled Crow a “minor project” that would not need any new construction in the foreseeable future.²³

But in response to drought and an increasing demand for water during the 1930s, the Indian Service built Willow Creek (Lodge Grass) Dam and Reservoir. Located on Willow

22. *Fifth Annual Report*, 173; *Sixth Annual Report*, 132; DOI, USBR, *Seventh Annual Report of the Reclamation Service, 1907-1908* (Washington, D.C.: Government Printing Office, 1908), 100; DOI, USBR, *Eighth Annual Report of the Reclamation Service, 1908-1909* (Washington, D.C.: Government Printing Office, 1910), 33; Hartl, 7, 17-8; *Sixth Annual Report*, 25-9, 131.

23. *Report of the Commissioner of Indian Affairs, 1924* (Washington, D.C.: Government Printing Office, 1924), 19; *Report of the Commissioner of Indian Affairs, 1922* (Washington, D.C.: Government Printing Office, 1922), 14; Preston and Engle, 2217, 2224-5; *Report of the Commissioner of Indian Affairs, 1931* (Washington, D.C.: Government Printing Office, 1931), 20.

Creek, a tributary of the Little Big Horn, seventeen miles southwest of the town of Lodge Grass, the reservoir has a capacity of 23,000 acre-feet. Completed in 1941, the dam is a zone earthfill embankment with a structural height of 136 feet, a crest width of twenty feet, and a crest length of 2,508 feet. The outlet works, located within the dam embankment, has a discharge capacity of 430 cfs. Two dikes are located about one mile west of the dam. The first dike has a structural height of twenty-one feet, a crest width of ten feet, and a crest length of 547 feet. The second dike has a structural height of thirty-six feet, a crest width of ten feet, and length of 477 feet. Both have upstream slopes protected by riprap and downstream slopes protected by grass cover.²⁴

With the construction of Willow Creek and an enlargement of the distribution system, the Crow Project had the ability to irrigate 53,000 acres – far short of the initial projection of 120,000 acres. It required a number of years, a series of legal disputes, and another other bureau – Reclamation – to substantially increase the possibilities of irrigation. In 1950, after protracted negotiation over the inundation of lands, Congress authorized the construction of the Yellowtail Unit. However, the government did not allocate funds to start the project until 1961. Completed in 1966, the Yellowtail Unit had the potential to irrigate 42,600 acres, but to this date the irrigation works have not been used.²⁵

Settlement on Project Lands

The Act of April 27, 1904 provided for the allotment of lands to the Crow Indians and stipulated the cession of 1.1 million acres in the northern part of the reservation to the United States. President Theodore Roosevelt authorized the opening of the ceded strip to settlement on

24. McDonnell, 42; *US v. Powers*, 305 U.S. 527 (1939); USBR and BIA, *Seed Report on Willow Creek Dam, Crow Agency, Montana* (Denver, Colorado, January 1986), 1; USBR and BIA, *1998 Intermediate Seed Examination Report, Willow Creek Dam, Crow Indian Reservation, Montana* (Denver, Colorado, 1999), 1-2.

25. Wathen, "Indian Irrigation," 323; Hartl, 3, 6-7, 11, 16

July 16, 1906. But, because the lands were not withdrawn under the terms of the Reclamation Act, the “lands were settled without restriction.” By the late-1920s, the lands of the project had largely been settled with 75 percent owned by Indians and the rest by whites. Nevertheless, the status of ownership belied a pivotal factor – white farmers and ranchers leased a large amount of the land actually irrigated by the project. In the ensuing decades, Indians sold a large number of their allotments. By the 1980s, the reservation as a whole included 2.55 million acres of Indian land and nearly 180,000 acres owned by whites.²⁶

Conclusion

While working for the American Fur Company at Fort Union near the mouth of the Yellowstone River, trader Edwin Thompson Denig had ample opportunity to learn about the Crow and their homeland. He observed that the Yellowstone, like all rivers in the West, rose to its full strength with the spring snowmelt. Runoff threatened the communities living in the river’s path. The Crow, Denig commented, were “greatly in fear of the water on these occasions, and suffer[ed] severely when taken unaware.” Denig’s account highlights one of the driving forces behind many Americans’ desire to manage rivers and streams – flood control. More important is the correlative intention of putting the water to beneficial use. Like the mighty Yellowstone that once raged beyond the Indians’ control, Reclamation’s goals for the Crow Project were beyond its grasp. Too many factors – a diminished irrigation fund, a low cost-benefit ratio, unwieldy settlers, and uninterested Indians – combined together to stall Reclamation’s involvement. Reclamation more than made up for the loss with its numerous other projects in the region.²⁷

26. *Fourth Annual Report*, 226; *Sixth Annual Report*, 131; Preston and Engle, 2224; DOI, Water and Power Resources Service, *Project Data* (Denver, Colorado: Government Printing Office, 1981), 1016.

27. Denig, xvi-xvii, 141-2.

About the Author

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