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**Reclamation Law and the Belle Fourche  
Irrigation District: A Desperate Fight for  
a Way of Life in Times of Change**

by

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# RECLAMATION LAW AND THE BELLE FOURCHE IRRIGATION DISTRICT: A DESPERATE FIGHT FOR A WAY OF LIFE IN TIMES OF CHANGE

MARTIN J. JACKLEY

*Reclamation is the process of converting desert or otherwise unusable land into agriculturally productive land. The western states have accomplished reclamation through federally supported irrigation projects. This comment will attempt to provide a basic understanding as to what is involved in the development of a federal irrigation project. Once a federal project has been developed, a major concern for the individual irrigation district is the repayment of the construction costs to the federal government. The repayment scheme is a complex procedure continually altered by reclamation reform. This comment focuses primarily on the Belle Fourche Irrigation Project as it was one of the first federally implemented irrigation test projects and is the primary project in South Dakota. The effects of future reclamation reform on the Belle Fourche District, especially in the areas of water conservation and the potential loss of irrigation water, will also be explored.*

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## I. INTRODUCTION

The Reclamation Act of 1902 provided the framework for modern day reclamation law.<sup>1</sup> It was Congress' intent to convert the desert lands of the western states<sup>2</sup> into agriculturally productive land, while preserving the traditional family farm.<sup>3</sup> The Act of 1902 authorized the creation of irrigation projects as a vehicle for providing attractive subsidies<sup>4</sup> to western state farmers.<sup>5</sup> However, participation in the irrigation projects subjected farmers to several restrictions.<sup>6</sup> The most controversial and widely litigated restriction is the excess land limitation.<sup>7</sup> Congress sought to remedy the problems created by the restrictions through the enactment of the Recla-

1. Reclamation Act of 1902, ch. 1093, §§ 1-10, 32 Stat. 388-90 (codified as amended at 43 U.S.C. §§ 372, 373, 383, 391, 392, 411, 416, 419, 421, 431, 432, 434, 439, 461, 491, 498 (1988)) [hereinafter Reclamation Act of 1902]. For a further analysis of the Reclamation Act of 1902, see *infra* notes 21-34 and accompanying text.

2. 43 U.S.C. § 391 (1988). Reclamation has greatly impacted the following 16 western states: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, *South Dakota*, Utah, Washington, and Wyoming. *Id.* (emphasis added). Texas is also included as a 17th state in certain federal statutes and Department of the Interior fact sheets. *Id.* There are a total of 19 western states when Alaska and Hawaii are included. 1 HAROLD H. ELLIS & J. PETER DEBRAAL, WATER RIGHTS LAWS IN THE NINETEEN WESTERN STATES 1 (1971).

3. For a discussion of the original intent of the Reclamation Act of 1902, see *infra* notes 30-34 and accompanying text.

4. 43 U.S.C. § 485h(d) (1988). The irrigation districts receive interest-free money for project funding. *Id.* Money for irrigation projects is directly transferred from the United States Treasury. *Id.* § 421(b). Revenue may also be generated from hydroelectric power and other industrial water revenue. *Id.* § 501. For a further analysis of the subsidies provided by federal project irrigation, see *infra* note 146 and accompanying text.

5. Reclamation Act of 1902, ch. 1093, § 2, 32 Stat. 388 (codified as amended at 43 U.S.C. § 411 (1988)). See also Reclamation Act of 1902, ch. 1093, § 1, 32 Stat. 388 (codified as amended at 43 U.S.C. § 391 (1988)) (creating the reclamation fund to finance the construction of irrigation works).

6. Reclamation Act of 1902, ch. 1093, § 5, 32 Stat. 389 (codified as amended at 43 U.S.C. § 431 (1988)). The 1902 Act contained a 160 acre limitation and a residency requirement. *Id.* Section 46 of the Omnibus Adjustment Act of 1926, which amended the 1902 Act, did not include a residency requirement. 43 U.S.C. § 423e (1988). However, the amended act still contained the 160 acre excess land limitation. *Id.* The Reclamation Reform Act (RRA) of 1982, under which the Belle Fourche Irrigation District is currently operating, increased the acreage limitation to 960 acres. *Id.* § 390dd. The RRA of 1982 explicitly eliminated the residency requirement from reclamation law. *Id.* § 390kk.

7. *Ivanhoe Irrigation Dist. v. McCracken*, 357 U.S. 275, 294 (1958) (holding the excess land provision is not a denial of due process and equal protection of the law); *United States v. Tulare Lake Canal Co.*, 535 F.2d 1093, 1096-97 (9th Cir. 1976), *cert. denied*, 429 U.S. 1121 (1977) (holding the Pine Flat Dam in California was not exempt from the acreage limitations imposed in the reclamation laws); *Peterson v. United States Dep't of the Interior*, 899 F.2d 799, 813-14 (9th Cir. 1990) (holding the RRA's "hammer clause" was constitutional); *Barcellos and Wolfsen, Inc. v. Westlands Water Dist.*, 899 F.2d 814, 825 (9th Cir. 1990) (holding the statutory requirements to sell water to excess land holders at full-cost rates was constitutional).

mation Reform Act (RRA) of 1982.<sup>8</sup> Controversies over water conservation and environmental concerns have subsequently resulted and created requests for new reclamation reform.<sup>9</sup> Irrigation districts, however, are concerned new reclamation reform may result in increased water costs for irrigation farmers and possibly, even the loss of potential irrigation water.<sup>10</sup>

This comment describes the interesting and unique historical background of the Belle Fourche Irrigation Project. It begins with the early pre-reclamation ditch companies, and guides the reader through the historical era of water user associations, irrigation district formation, and project construction under the Reclamation Act of 1902.<sup>11</sup> This comment then furnishes the reader with a survey of the status of South Dakota's current water law. Next, it takes an in-depth look at the changes brought about by the Reclamation Reform Act of 1982.<sup>12</sup> Finally, this comment provides its readers with a look at future developments and expectations in reclamation reform.

## II. HISTORY AND CREATION OF THE BELLE FOURCHE IRRIGATION PROJECT

### A. PRE-RECLAMATION IRRIGATION

Homesteading in the Belle Fourche Valley<sup>13</sup> was widespread by the

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8. Reclamation Reform Act of 1982, Pub. L. No. 97-293, 96 Stat. 1263-74 (codified as amended at 43 U.S.C. §§ 390aa-zz-1 (1988)) [hereinafter Reclamation Act of 1982]. Subsequent Congressional legislation is contained in the Omnibus Budget Reconciliation Act of 1987. *Id.* § 390nn, § 390ww. The Act limits the use of trusts by large landholders to circumvent the acreage limitation of 43 U.S.C. § 390dd. *Id.* § 390nn. For a further analysis of the Reclamation Reform Act of 1982, see *infra* notes 123-221 and accompanying text.

9. Letter from J. William McDonald, Assistant Commissioner of Resources Management at the Department of the Interior, to irrigation districts 1 (Dec. 23, 1993) (letter on file with Belle Fourche Irrigation District) [hereinafter McDonald] (exploring the potential for reclamation reform). The greatest effect of proposed legislation is likely to result in a reduced supply of water with increases in the cost of available water. Letter from William D. Baker, Esq., and Mark Atlas to National Water Resources Association (NWRA) 3 (Nov. 9, 1993) (letter on file with Belle Fourche Irrigation District) [hereinafter Baker] (concerning the use of RRA enforcements to achieve the greatest degree of water conservation and environmental restoration possible). See also Tom Kenworthy, *Department At Odds With Itself; Interior's Challenge Is Balancing Missions*, WASH. POST, Jan. 18, 1993, at A27 (describing the problem hampering the Department of the Interior in terms of the number of agencies within the Department). For a further analysis of the controversies over water conservation and environmental concerns, see *infra* notes 222-36 and accompanying text.

10. Rodney T. Smith & Roger Vaughan, *Acreage Limitations Revisited: The NRDC v. Beard Settlement*, WATER STRATEGIST Oct. 1993, at 14 (exploring reclamation reforms' potential effects on the family farmer). See also Baker, *supra* note 9, at 2-3 (discussing the prospects of water losses and cost increases). For a further analysis of the threat of increased water costs to irrigation farmers, see *infra* notes 293-297 and accompanying text.

11. See generally Reclamation Act of 1902, *supra* note 1. For a further discussion of water user associations and irrigation project construction, see *infra* notes 35-82 and accompanying text.

12. See generally Reclamation Reform Act of 1982, *supra* note 8. For a further discussion of the Reclamation Reform Act of 1982, see *infra* notes 123-221 and accompanying text.

13. BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, *FACTUAL DATA ON THE BELLE FOURCHE PROJECT* (1976) [hereinafter BELLE FOURCHE PROJECT FACTUAL DATA]. The Valley derives its name, "Belle Fourche (meaning 'beautiful forks'), from the name applied by French fur traders to the confluence of the Redwater and Belle Fourche Rivers . . ." *Id.* The Belle Fourche Valley is located in western South Dakota, northeast of the Black Hills. *Id.* See Figure 1, *infra* for location of the Redwater and Belle Fourche Rivers.

mid-1880s.<sup>14</sup> The Black Hill's mining industry attracted many of the early settlers to the Belle Fourche Valley.<sup>15</sup> When a landowner settled the land, he received a homestead patent.<sup>16</sup> The patent would usually be "[s]ubject to any vested and accrued water rights, mining rights and right of way for canals constructed by authority of the United States."<sup>17</sup>

Irrigation in the Belle Fourche Valley dates back to the beginning of settlement and the issuing of the homestead patents.<sup>18</sup> The first ditch company was organized in the Belle Fourche Valley by J. M. Eaton and Jim Newland in 1879.<sup>19</sup> The experience derived from the early ditch companies set the stage for the creation of a large scale federal irrigation project in the Belle Fourche Valley under the Reclamation Act of 1902.<sup>20</sup>

## B. THE RECLAMATION ACT OF 1902 AND THE EXCESS LAND RESTRICTIONS

The Reclamation Act of 1902, commonly referred to as the Newlands Act,<sup>21</sup> constituted a massive federal subsidy program designed to encourage homesteading and irrigation of publicly-owned lands.<sup>22</sup> The Act of

14. 2 STEVEN KELLER ET AL., BELLE FOURCHE RIVER PROJECT EASTERN BUTTE COUNTY SOUTH DAKOTA 31 (1985) [hereinafter KELLER ET AL.] (documenting an archaeological survey of the Belle Fourche study unit in western South Dakota). Attempts to settle the Belle Fourche Valley resulted in efforts to create a separate political subdivision. *Id.* In 1883, Butte County was created in a session of the Dakota Territorial Legislature. *Id.* at 29.

15. *Id.* at 31.

16. CADE OVERPECK LAND & ABSTRACT CO., ABSTRACT OF TITLE TO THE NE 1/4 SEC. 25, T. 8 N R 6 E, B.H.M., BUTTE COUNTY, SOUTH DAKOTA 1 (July 31, 1947) [hereinafter CADE OVERPECK ABSTRACT]. A homestead or land patent creates documentary evidence of title for conveyances of the public domain by the federal government. BLACK'S LAW DICTIONARY 1125 (6th ed. 1990). A patent is a right to ownership in land. *Yellen v. Hickel*, 335 F. Supp. 200, 205 (S.D. Cal. 1971) (holding the residency requirement was a prerequisite for receiving water in the Boulder Canyon Project in California). A water certificate describes the land upon which the water is to be used and provides evidence of a "right to water subject to divestment for failure of application to beneficial use." *Id.*

17. CADE OVERPECK ABSTRACT, *supra* note 16, at 1.

18. KELLER ET AL., *supra* note 14, at 33.

19. *Id.* Eaton's and Newland's company diverted water from the Redwater River and carried it through nine miles of canals along the east side of the lower Redwater River and the south bank of the Belle Fourche River. *Id.* at 33-34. The Minnesela Flour Milling Company also created the Redwater and Belle Fourche Ditch and Water Right Company to carry water 10 miles from the Redwater into the Belle Fourche Valley. *Id.* at 34.

20. *Id.* at 34.

21. See generally Reclamation Act of 1902, *supra* note 1. The Newlands Act was named after Congressman Francis Newlands of Nevada who introduced the legislation. KELLER ET AL., *supra* note 14, at 34.

22. Richard Roos-Collins, *Voluntary Conveyance of the Right to Receive a Water Supply from the United States Bureau of Reclamation*, 13 ECOLOGY L.Q. 773, 776 (1987) (exploring the Bureau's authority in reallocation of agricultural project water to municipal and industrial uses). In 1852, Secretary of State Daniel Webster made the following comment about the arid and semiarid lands of the western states:

What do we want with this vast worthless area - this region of savages and wild beasts, of deserts of shifting sands and whirlwinds of dust, of cactus and prairie dogs? To what use could we ever hope to put these great deserts and those endless mountain ranges, impenetrable and covered to their base with eternal snow?

*Id.* (citing Legislative Reference Serv., Library of Congress, 86th Cong., 1st Sess., Reclamation-Accomplishments and Contributions 2 (Comm. Print 1959)). See also 35 Cong. Rec. 6752 (1902) (Statement by Rep. Jones) (noting the main purpose of the Reclamation Act of 1902 was to make worthless government property valuable). The property clause of the United States Constitution

1902 established a new agency in the Department of the Interior called the United States Reclamation Service, otherwise known as the Bureau of Reclamation.<sup>23</sup> Initially, the Bureau's main function was to "plan, engineer and oversee construction of large-scale irrigation projects."<sup>24</sup> The irrigation projects were to be built by private contractors and financed from a revolving fund created by Congress, called the reclamation fund.<sup>25</sup> The Reclamation Act of 1902 provided:

All moneys received from the sale and disposal of public lands . . . shall be . . . appropriated as a special fund in the Treasury to be known as the "reclamation fund" to be used in the examination and survey for and the construction and maintenance of irrigation works for the storage, diversion, and development of waters for the reclamation of arid and semiarid lands in the said States . . . .<sup>26</sup>

The Bureau has evolved into the nation's largest water utility, providing irrigation water to nearly ten million acres of farmland.<sup>27</sup>

With the development of irrigation came the threat of widespread land speculation.<sup>28</sup> Congress attempted to head off this land speculation by im-

provided Congress with the constitutional authority to enact the Reclamation Act of 1902. U.S. CONST. art. IV. *See generally* Griffiths v. Cole, 264 F. 369, 374 (S.D. Idaho 1919) (interpreting the Reclamation Act of 1902 as conferring upon the Secretary of the Interior authority only for the undertaking of projects with the primary purpose of reclaiming public and not private lands).

23. KELLER ET AL., *supra* note 14, at 34. In June, 1923, the name was changed from Reclamation Service to Bureau of Reclamation. BLACK'S LAW DICTIONARY 1271 (6th ed. 1990). The total Bureau funding for fiscal year 1993 was \$931 million and the requested amount for fiscal year 1994 was reduced to \$869 million. OFFICE OF THE SECRETARY, U.S. DEP'T OF INTERIOR, News Release, *Clinton's Interior Budget Provides Major Investments For Parks And Natural Resource Protection; Urges Bigger Role for Science*, 1993 WL 121381, at \*4 (Apr. 8, 1993) (setting forth President Clinton's fiscal year 1994 budget for the Bureau).

24. KELLER ET AL., *supra* note 14, at 34. The Bureau is currently concentrating more on the management of existing irrigation works. Interview with Loren Hindbjorgen, National Resource Specialist at the Bureau's Belle Fourche Project Office, in Newell, S.D. (Jan. 7, 1994).

25. 43 U.S.C. § 391. Farming has become economically feasible in the arid west largely through irrigation systems financed through the reclamation fund. Amy K. Kelley, *Acreeage And Residency Limitations In The Imperial Valley: A Case Study In National Reclamation Policy*, 23 S.D. L. REV. 621, 621-25 (1978) [hereinafter Kelley I] (analyzing reclamation law's acreage and residency limitations). On September 8, 1916, Congress passed an act authorizing the Secretary of the Interior to sell the unsold and unappropriated portions of land within the town site of Newell, S.D. Act of Sept. 8, 1916, ch. 477, § 1, 39 Stat. 852. The Secretary of the Interior subdivided the remaining portions of land within the town site of Newell into tracts that in his judgment rendered the land most salable. *Id.* Once the tracts of land were appraised, they were sold to the highest bidder at a public auction "for not less than the appraised value . . ." *Id.* The proceeds of the land sales not exceeding \$15,000 were transferred to the special reclamation fund to assist in providing an adequate water system for the Belle Fourche Valley. *Id.* § 2.

26. 43 U.S.C. § 391.

27. Ross-Collins, *supra* note 22, at 776. The Bureau supplies water for approximately 21 million people. *Id.*

28. Kelley I, *supra* note 25, at 623. Congressman Francis G. Newlands stated:

[T]he very purpose of this bill is to guard against land monopoly and to hold this land in small tracts for the people of the entire country . . . . Convey this land to private corporations and doubtless this work would be done, but we would have fastened upon this country all the evils of land monopoly which produced the great French revolution which caused the revolt against church monopoly in South America, and which in recent times has caused the outbreak of the Filipinos against Spanish authority.

*Id.* (citing 35 Cong. Rec. 6734 (1902)). Wide distribution of benefits and anti-speculation remain the focus of modern day reclamation law. 43 C.F.R. § 426.1 (1993).

plementing excess land limitations and residential requirements.<sup>29</sup> The limitations were enacted to insure the federal government's "enormous expenditure will not go in disproportionate share to a few individuals with large land holdings. Moreover, it prevents the use of the Federal Reclamation Service for speculative purposes."<sup>30</sup> The acreage limitation has been designated "the most important part of reclamation law. The excess land provisions are the most economically significant, the most controversial, the most frequently litigated and the most frequently violated."<sup>31</sup>

In setting an acreage limitation, Congress sought to determine a proper farm size which would be consistent with reclamation policies.<sup>32</sup> The Reclamation Act of 1902 had specifically provided, "No right to the use of water for land in private ownership shall be sold for a tract exceeding *one hundred and sixty acres* to any one landowner . . ." <sup>33</sup> Furthermore, before any contract with the Bureau could be entered into for the construction of any new reclamation project, all land held by a private landowner in excess of the 160 acre limitation, had to be disposed of, or such land would be excluded from the project.<sup>34</sup>

### C. THE BELLE FOURCHE VALLEY WATER USERS' ASSOCIATION AND CREATION OF THE BELLE FOURCHE IRRIGATION DISTRICT

Interest in a reclamation project for the Belle Fourche Valley devel-

29. Amy K. Kelley, Comment, *Reclamation Law in Litigation: Acreage and Residency Limitations on Private Lands*, 21 S.D. L. REV. 695 (1976) (analyzing the effects of the acreage and residency limitations on the Boulder Canyon Project in California). Congress first implemented these limitations in the Homestead Act. Homestead Act of 1862, ch. 75, § 1, 12 Stat. 392 (repealed 1976). Excess land limitations may also be found in the Desert Land Act of 1877. 43 U.S.C. §§ 321-23 (1988).

30. *Ivanhoe*, 357 U.S. at 297.

31. Kelley I, *supra* note 25, at 622 (citing Joseph L. Sax, *Federal Reclamation Law*, 2 in WATERS AND WATER RIGHTS § 120 at 209 (Clark ed., 1967)). See also Joseph L. Sax, *Federal Reclamation Law*, 4 in WATERS AND WATER RIGHTS § 41.03 at 384-87 (1991) [hereinafter Sax, *Federal Reclamation Law*] (reemphasizing the controversies evolving around the excess land provisions).

32. Randall F. Koenig & Peter R. J. Thompson, *Acreage, Residency and Excess-Land Sale: Striking a Balance Between Modern Agriculture and Historic Water Policy*, 15 SAN DIEGO L. REV. 887, 891-92 (1978) (examining proposals for more stringent government regulations). The Bureau sought to limit the farm size to one which was "large enough to provide an adequate living." *Id.* at 892. An adequate living has been defined as sufficient financial support to keep a farmer "above the poverty line." *Id.* An adequate living may also be defined as the amount required to pay for water charges and support the family. 43 U.S.C. § 419 (1988).

33. Reclamation Act of 1902, ch. 1093, § 5, 32 Stat. 389 (codified as amended at 43 U.S.C. § 431) (emphasis added). In amending the Reclamation Act of 1902, the Omnibus Adjustment Act of 1926 provided, "[A]ll irrigable land held in private ownership by any one owner in excess of one hundred and sixty irrigable acres shall be appraised . . . and that no such excess lands so held shall receive water from any project or division . . ." 43 U.S.C. § 423e (1988). *But see Id.* § 390dd (extending the limitation to a maximum of 960 acres for qualified recipients).

34. 43 U.S.C. § 418 (1988). The land restrictions were not a taking of vested property rights in either land or irrigation district water. *Ivanhoe*, 357 U.S. at 294-98. The spousal multiplier was a method which permitted a husband and wife to jointly own 320 acres. Koenig & Thompson, *supra* note 32, at 898. The percentage of farm operation by type of business organization is as follows: spousal partnership-38.3%; family partnership-25.4%; individual-16.6%; corporation less than or equal to 10 members-14.3%; corporation greater than 10 members-3.4%. Smith & Vaughan, *supra* note 10, at 2, fig. 1.

oped immediately after passage of the Act in 1902.<sup>35</sup> The Belle Fourche Irrigation Project, commonly referred to as the Orman Dam Project, became one of the first test projects under the Reclamation Act of 1902.<sup>36</sup> President Theodore Roosevelt chose South Dakota as a test site due to his "love for [the] Dakota Territory and his friendship with influential South Dakotans on county, state and federal levels."<sup>37</sup> Antagonists of the Orman Dam Project took heed and immediately labeled the Project as "Roosevelt's Folly."<sup>38</sup>

The Belle Fourche Valley provided an opportune setting for a reclamation test project.<sup>39</sup> In 1903, a survey crew reconnoitered the Belle Fourche Valley and found a project would only be feasible if at least 60,000 acres could be irrigated.<sup>40</sup> In 1904, the Belle Fourche Valley Water Users' Association was incorporated and organized under the laws of the State of South Dakota to act as the agency to sell water from the Belle Fourche Project when it became available.<sup>41</sup> The ultimate purpose of the Association was to distribute and to furnish an adequate supply of water to its shareholders.<sup>42</sup> Landowners received a subscription of stock as part of their Association membership.<sup>43</sup>

The Association and the United States drafted a contract in 1905 for the construction of the Belle Fourche Irrigation Project.<sup>44</sup> Reclamation

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35. KELLER ET AL., *supra* note 14, at 34. The ditch company irrigators who were already present in the Belle Fourche Valley were quick to take advantage of the Act's benefits. *Id.*

36. Rozella Bracewell, *Recognition accorded builders of Orman Dam*, RAPID CITY J., Sept. 19, 1971, at 23 (describing the construction of the Belle Fourche Irrigation Project). Examples of other projects developed under the reclamation fund include: the construction, operation, and maintenance of the Vermejo reclamation project in New Mexico, Act of Sept. 27, 1950, ch. 1057, 64 Stat. 1072; the construction, operation, and maintenance of the Canadian River reclamation project in Texas, Act of Dec. 29, 1950, ch. 1183, 64 Stat. 1124; and the construction, operation, and maintenance of the Trinity River division, Central Valley project in California, Act of Aug. 12, 1955, ch. 872, 69 Stat. 719.

37. Bracewell, *supra* note 36, at 23.

38. *Id.* See also DON WORSTER, *RIVERS OF EMPIRE: WATER, ARIDITY AND THE GROWTH OF THE AMERICAN WEST* 161-62 (1985) (discussing President Theodore Roosevelt's and Congressman Francis Newlands' political involvement with the Reclamation Act of 1902).

39. Bracewell, *supra* note 36, at 23. The Valley offered "year-around flowing rivers, natural water storage basins and vast lowlands suitable for irrigation." *Id.*

40. KELLER ET AL., *supra* note 14, at 34. See also Bracewell, *supra* note 36, at 23 (discussing surveying and engineering recommendations).

41. KELLER ET AL., *supra* note 14, at 35.

42. CADE OVERPECK ABSTRACT, *supra* note 16, at 4. Area farmers organized the Association to register farmers for the purchase of water from the irrigation works. *Id.* The Association had the authority to supply the irrigation water by construction, purchase, lease, condemnation, or by acquiring irrigation works. *Id.* The Association had the power to enter into contracts or other arrangements with the United States. *Id.*

43. KELLER ET AL., *supra* note 14, at 34. One share of stock was delivered for each acre of land held under the homestead patent. CADE OVERPECK ABSTRACT, *supra* note 16, at 2. A landowner with 160 acres of land would receive 160 shares of stock in the Association. *Id.* See generally John H. Davidson, *South Dakota's Special Water Districts—An Introduction*, 36 S.D. L. REV. 499, 508-09 (1991) (discussing incorporation and issuance of stock by mutual ditch and water companies).

44. *Id.* at 3. The contract was recorded in Butte County, S.D., on August 1, 1908. *Id.* It was entered under seal by the Secretary of the Interior, E. A. Hitchcock; the President of the Association, Walter S. Hamilton; and the Secretary of the Association, Francis A. Gaskill. *Id.* The original instrument consisted of 51 pages containing a certified copy of by-laws providing for special



landowners are required to organize an irrigation district under state law.<sup>45</sup> In May, 1922, as a result of Congressional amendments to the Act of 1902, patents and water-right certificates were issued for lands within irrigation districts that the United States had previously contracted for repayment of construction charges and operation and maintenance (O & M) charges.<sup>46</sup> The patents and water-right certificates acted as a lien on the landholder's property for the payment of the charges.<sup>47</sup>

In July, 1923, the Association organized the Belle Fourche Irrigation District which would ultimately replace the Association and dissolve its previously issued stock subscriptions.<sup>48</sup> The District then entered into a new contract with the United States for the completion of the irrigation works.<sup>49</sup> The District agreed to comply with all federal reclamation laws<sup>50</sup>

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meetings, notices, and other matters. *Id.* The instrument also contained the Articles of Incorporation, which authorized the Secretary of the Interior to "cause the construction of said [irrigation] works . . . [T]he rules and principles set out in said Articles of Incorporation shall govern in determining the respective rights to the use of water." *Id.* *But see* *In re Owl Creek Irrigation Dist.*, 253 P.2d 867, 882-83 (Wyo. 1953) (holding private lands cannot be forced into an irrigation district operation under a contract with the United States).

45. 43 U.S.C. § 511 (1988). South Dakota's Constitution provides, "The irrigation of agricultural lands is hereby declared to be a public purpose and the Legislature may provide for the organization of irrigation districts for the irrigation of land . . ." S.D. CONST. art. XXI, § 7 (1978). The South Dakota Legislature authorized the creation of irrigation districts in the state and enacted the following statute:

Twenty-five percent of the electors as defined in § 46A-4-2 owning or holding lands in any proposed district for irrigation may propose organization of an irrigation district by filing a petition with the board of water and natural resources in compliance with the requirements of this chapter. The minimum number of electors required to propose an irrigation district shall be three. However, if the number of electors in a proposed irrigation district is less than seven, all electors within the proposed district must join in the petition.

S.D.C.L. § 46A-4-1 (1987). *See generally* Davidson, *supra* note 43, at 523-24 (describing irrigation district formation in South Dakota).

46. 43 U.S.C. § 512 (1988). *See also id.* § 492 (describing the required O & M charges); 43 C.F.R. § 426.8 (1993) (discussing O & M charges); *United States v. Parkins*, 18 F.2d 643, 644 (D. Wyo. 1926) (holding O & M charges may be assessed even though no water had been delivered to the landholder). Examples of O & M costs experienced by the Belle Fourche District include: employment of a ditch rider to deliver water in the summer, repairing of structures, washouts, reshaping of the canal, unplugging drains, general maintenance, and weed control in the early spring. Interview with Jim Winterton, Belle Fourche Irrigation District Manager, Newell, S.D. (Jan. 8, 1994).

47. 43 U.S.C. § 512. The Secretary of the Interior has authorization to release the liens. *Id.* A lien cannot be released until the owner of the land covered by the lien assents to the assessment, levy, and collection by the irrigation district of taxes against the owner's land. *Id.* The taxes constitute payment to the United States for the landowner's contractual obligation. *Id.* The irrigation district, not the water-users' association, must be legally organized under the laws of the state in which its lands are located, and the district must have the "power to enter into the contract and to collect by assessment and levy against the lands of the district the amount of the contract obligation." *Id.* *See also* CADE OVERPECK ABSTRACT, *supra* note 16, at 29-30 (providing documentary records of the lien releases in the District).

48. Interview with Jim Winterton, *supra* note 46. In March, 1923, the Butte County Board of Commissioners met as a vote canvassing board and determined a majority of the Association landowners favored organization of the District. CADE OVERPECK ABSTRACT, *supra* note 16, at 24.

49. CADE OVERPECK ABSTRACT, *supra* note 16, at 30. The contract of July 16, 1923, was supplemented by a contract dated October 29, 1927, between the District and the United States. *Id.* The Secretary of the Interior has the authority to enter into contracts with "legally organized irrigation district[s]." 43 U.S.C. § 511. The RRA of 1982 defines "contract" as "any repayment or water service contract between the United States and a district providing for the payment of

and assumed the indebtedness for the repayment of construction and O & M charges.<sup>51</sup> Since the District had undertaken the loan repayment obligation, the United States released the liens created by the patents and water-right certificates.<sup>52</sup>

The major construction costs of the Belle Fourche Irrigation Project were paid by the reclamation fund.<sup>53</sup> The Bureau allotted \$2,100,000 from the reclamation fund for the completion of the Project's construction.<sup>54</sup> According to the Reclamation Act of 1914, the Project's remaining construction charges would be paid off in twenty annual installments.<sup>55</sup> However, on several occasions the Secretary of the Interior amended the District's repayment schedule.<sup>56</sup> Absent the Secretary of the Interior's amendments, the District would have easily completed the original construction cost payment.<sup>57</sup> Each time there was a new upgrade or rehabilita-

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construction charges to the United States including normal operation, maintenance, and replacement costs pursuant to Federal reclamation law." *Id.* § 390bb(1). A "district" is "any individual or any legal entity established under State law which has entered into a contract or is eligible to contract with the Secretary for irrigation water." *Id.* § 390bb(2).

50. CADE OVERPECK ABSTRACT, *supra* note 16, at 4. The irrigation districts ensure that the water users comply with federal reclamation law as promulgated by the Bureau, including the acreage limitation and excess land provisions. *Tulare*, 535 F.2d at 1094. Ultimate responsibility for enforcement of the law rests with the Bureau. *Id.* See also *Ivanhoe Irrigation Dist. v. All Parties*, 350 P.2d 69, 82 (Cal. 1960) (noting state legislatures may authorize irrigation districts to cooperate and contract with the United States under reclamation law).

51. CADE OVERPECK ABSTRACT, *supra* note 16, at 20. Without the establishment of a repayment schedule, district farmers would not be permitted to receive any project water. 43 U.S.C. § 485h(d). Under the contract the District entered into with the United States, the District agreed to repay the United States for the total cost of the irrigation project. *Id.* § 511. Irrigation districts may enter into subcontracts with the property owners and water users within the irrigation district. CADE OVERPECK ABSTRACT, *supra* note 16, at 4.

52. CADE OVERPECK ABSTRACT, *supra* note 16, at 30 (releasing the liens in December 1927).

53. 43 U.S.C. § 391.

54. KELLER ET AL., *supra* note 14, at 35. The Act of 1902 advanced money to the reclamation fund for completion of projects initiated prior to June 25, 1910. 43 U.S.C. § 397 (1988).

55. 43 U.S.C. § 475 (1988). The installments were to be implemented on a graduated scale. *Id.* The first four installments were each set at 2% of the total construction charges owed at that time, the next two installments were each set at 4%, and the next 14 installments were set at 6% each. *Id.* Due to the disallowance of interest on the unamortized capital cost, the irrigation districts receive an impressively high government subsidy. Roos-Collins, *supra* note 23, at 814 (citing RUCKER & FISHBACK, *The Federal Reclamation Program: An Analysis of Rent-Seeking Behavior*, in WATER RIGHTS: SCARCE RESOURCE ALLOCATION, BUREAUCRACY, AND THE ENVIRONMENT 53, table 2-1 (T. Anderson ed. 1983)). The government subsidy for a 40 year repayment period is shown by the following example:

For a 40-year repayment period (plus the standard 10-year grace period), with payments made in equal installments, the interest subsidy is an estimated 57% of allocated projects costs at a 3% rate of discount, 79% at a 6% discount, and 91% at a 10% discount.

*Id.* at n.216.

56. Interview with Jim Winterton, *supra* note 46. On March 25, 1976, the repayment contract was amended due to improvements made to the irrigation works. *Id.* On October 10, 1984, the District again entered into a new repayment contract. *Id.* The upgrading programs included: underground piping, a new diversion dam, water veins on the canals, new turnout structures, lining on canals, and new check point structures. *Id.* The Secretary of the Interior has the authority to amend existing repayment contracts, limiting the longer extension to 40 years from the date the first installment was due. 43 U.S.C. § 485b (1988). The Secretary can determine the installment payment schedule to be an undue burden and adjust the schedule based on the water users' ability to pay. *Id.* § 485b-1(b). On November 29, 1949, the repayment contract for construction charges was amended, thereby extending the repayment period. *Id.*

57. Interview with Jim Winterton, *supra* note 46.

tion program, the existing contracts were amended, thereby increasing the amount owed by the District.<sup>58</sup> The District's repayment to the federal government is funded by assessing charges to the water users for the use of the water based on both the acreage the water user irrigates and the class of land being irrigated.<sup>59</sup> The District benefits from the federal government's continued involvement since the Bureau provides additional support for future problems that may arise with the irrigation works.<sup>60</sup>

#### D. CONSTRUCTION OF THE BELLE FOURCHE IRRIGATION PROJECT

The initial design called for the construction of a coffer dam across the Belle Fourche River<sup>61</sup> to act as a temporary diversion which would dry out the Belle Fourche River bed for the construction of the main diversion dam.<sup>62</sup> Once the coffer dam was completed, the main diversion dam was constructed on the Belle Fourche River approximately one and one-half miles northeast of the town of Belle Fourche.<sup>63</sup> The main diversion dam channels water from the Belle Fourche River into off-stream storage in Belle Fourche Reservoir on Owl Creek,<sup>64</sup> through a six and one-half mile-long inlet canal.<sup>65</sup>

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58. *Id.* As of 1990, the District still owed the Bureau \$1,513,000. *Id.* The District's current repayment schedule is \$42,700 per year until payment is complete. *Id.* These payments are likely to increase due to the implementation of new rehabilitation programs. *Id.*

59. 43 U.S.C. § 390gg (1988). Currently, there are approximately 370 water users benefiting from water supplied by the District. REGION WATER AND POWER RESOURCES SERVICE, U.S. DEP'T OF INTERIOR, PUB. NO. 777-494, BELLE FOURCHE PROJECT 4 (1980) [hereinafter BELLE FOURCHE PROJECT II]. There are four classes which the District recognizes. Interview with Jim Winterton, *supra* note 46. Class I land has higher productivity, better drainage, and usually requires more water per acre. *Id.* Classes II and III have lower productivity than class I land. *Id.* Class IV lands have the lowest productivity and are not required to pay original construction charges. *Id.* There is only a slight difference between the water charges for the classes because all four classes pay O & M charges. *Id.* Some of the class I water users in the District would like to receive more water at an additional cost since the class I land is more productive and does require more water. *Id.* On the other hand, the class IV water users believe all land in the project should continue to receive the same amount of water. *Id.* For a further discussion of class equivalency determinations, see *infra* notes 190-92 and accompanying text.

60. *Id.* By keeping the federal government somewhat involved, the Bureau would step in if something went wrong with the irrigation works and make the necessary repairs through an amendatory contract with the District. *Id.*

61. KELLER ET AL., *supra* note 14, at 7. The Belle Fourche River's location is as follows: The Belle Fourche River emanates in northeastern Wyoming near the center of the Powder River Basin. After following a northeasterly course, the river curves around the northern end of the Bear Lodge Mountains and flows southeast along the northern periphery of the Black Hills. From Belle Fourche the river proceeds east and south across the plains to its confluence with the Cheyenne River.

*Id.*

62. Bracewell, *supra* note 36, at 23.

63. BELLE FOURCHE PROJECT FACTUAL DATA, *supra* note 13. The Belle Fourche Diversion Dam "has a concrete weir 400 feet long and 36 feet high, with a 2,100-foot-long earth embankment on the right abutment." *Id.* See also Figure 1, *infra* for location of the diversion dam.

64. BELLE FOURCHE PROJECT FACTUAL DATA, *supra* note 13. Owl Creek is "an intermittent stream tributary to the Belle Fourche River." *Id.* See Figure 1, *infra* for the location of Owl Creek.

65. BELLE FOURCHE PROJECT II, *supra* note 59, at 1. The inlet canal has a capacity of 1,600 cubic feet per second. *Id.* Water is also diverted from the inlet canal to approximately 2,500 irrigated acres. *Id.* See also Figure 1, *infra* for the location of the inlet canal.

The Belle Fourche Reservoir, commonly referred to as Orman Dam,<sup>66</sup> was constructed ten miles northeast of the town of Belle Fourche.<sup>67</sup> Orman Dam acts as a storage reservoir for the water which is diverted from the inlet canal on the Belle Fourche River and from the flood waters of Owl Creek.<sup>68</sup> A canal system was also constructed to provide for water distribution along twenty-five miles of the Belle Fourche Valley.<sup>69</sup> Irrigation water is diverted from the dam and from the inlet canal to crops through open ditches and both underground and above-ground pipe lines.<sup>70</sup>

On May 10, 1904, the Project plan and design received approval from the Secretary of the Interior.<sup>71</sup> The town of Newell<sup>72</sup> was developed on government land and was designated as Project headquarters by the Bureau.<sup>73</sup> The construction of the irrigation works was to be completed by several private construction firms and began in the spring of 1905.<sup>74</sup> In 1905, the only major mechanical equipment available for the construction of the dam was rail engines.<sup>75</sup> Men and horse teams were the main power used in "harnessing the Belle Fourche River."<sup>76</sup> In 1908, water began to

66. Bracewell, *supra* note 36, at 23. Orman Dam derived its name from the private construction firm of Orman and Crook of Pueblo, Colo., which contracted for the diversion dam across Owl Creek. *Id.*

67. BELLE FOURCHE PROJECT FACTUAL DATA, *supra* note 13. See also Figure 1, *infra* for the location of the Belle Fourche Reservoir.

68. BELLE FOURCHE PROJECT FACTUAL DATA, *supra* note 13. The storage reservoir has been described as:

The Belle Fourche Dam (formerly known as Orman Dam) is a homogeneous earth-fill structure 6,262 feet long and 122 feet high. . . . An earth-lined spillway . . . located approximately 1 mile south of the right dam abutment . . . [was constructed] to replace the . . . [original] concrete semicircular uncontrolled overflow weir spillway located in the left abutment. The two controlled outlet works consist of two horseshoe-shaped conduits through the base of the dam . . . provid[ing] irrigation water releases to the project area. . . . The Belle Fourche Reservoir has an active conservation storage capacity of 185,200 acre-feet, with a water surface area of 8,000 acres, at elevation 2975 m.s.l. Dead storage is 6,800 acre-feet . . .

*Id.* The dam face contains "1,542,000 cubic yards of earth built in six-inch layers," which were sprinkled and rolled. KELLER ET AL., *supra* note 14, at 35.

69. KELLER ET AL., *supra* note 14, at 35. The water supply, "distribution and drainage systems consisting of 94 miles of irrigation canals, 450 miles of irrigation laterals and 230 miles of drains . . . serve the irrigated lands." BELLE FOURCHE PROJECT FACTUAL DATA, *supra* note 13.

70. Matter of Butte County, 385 N.W.2d 108, 111 (S.D. 1986) (holding that Butte County cannot establish a separate classification for irrigated land for tax assessment). The irrigation water is supplied to the crops through "ditch and gravity flow systems, center pivot sprinkling systems, underground and above-ground pipe sprinkling systems, subsoil irrigation systems, and spreader dams." *Id.* The equipment required by these irrigation systems may include "electric and fuel-driven pumps and engines, sprinklers, gates, pipes, and hose." *Id.*

71. KELLER ET AL., *supra* note 14, at 35. See also 43 U.S.C. §§ 623, 625 (1988) (requiring Department of Interior approval before a lien on the irrigation lands becomes effective).

72. KELLER ET AL., *supra* note 14, at 36. The town site of Newell, S.D., was named for Frederick Haynes Newell, the former Director of the Bureau. *Id.*

73. *Id.* at 36.

74. *Id.* at 35. See also Bracewell, *supra* note 36, at 23 (discussing the construction firms involved in the Project).

75. Bracewell, *supra* note 36, at 23.

76. *Id.* The men of the Project construction crews endured harsh weather, long hours, and hazardous working conditions. *Id.* In 1908, a young Austrian laborer was killed by a run-away dirt car and another worker was killed after a playful co-worker pitched a dynamite cap into a fire. *Id.* The private construction firm of Widdel, Finley and Co. of Chicago, Ill., contracted for the construction of the main Belle Fourche River Diversion Dam. KELLER ET AL., *supra* note 14,

flow in a portion of the Project's canals;<sup>77</sup> but, the main Project canals were not operational until the spring of 1910.<sup>78</sup> The Project was not deemed complete until the Bureau issued its final approval in 1917.<sup>79</sup>

There is a total area of approximately 89,000 acres of irrigable land within the District<sup>80</sup> and approximately 57,100 of those acres are actually irrigated.<sup>81</sup> The main features of the Project are shown below in Figure 1.<sup>82</sup>

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at 35. Heavy rains and flooding resulted in delays and financial loss for the Chicago company and ultimately caused the company to declare bankruptcy in February, 1906. *Id.* The construction firm of Orman and Crook suffered similar delays and losses due to heavy rains and flooding in the spring of 1907. Bracewell, *supra* note 36, at 23. Due to the company's loss of equipment and time, the firm declared bankruptcy in February, 1908. *Id.* The contractor's bonding company hired Hayes Brothers, Peters & Jackson, a Janesville, Wis., firm to complete the project. *Id.*

77. Bracewell, *supra* note 36, at 23.

78. KELLER ET AL., *supra* note 14, at 35. In order to improve the gravity flow of the irrigation water, many of the irrigated fields had to be leveled. *Id.* at 1. *See also* Bracewell, *supra* note 36, at 23 (providing additional commentary on the project's completion).

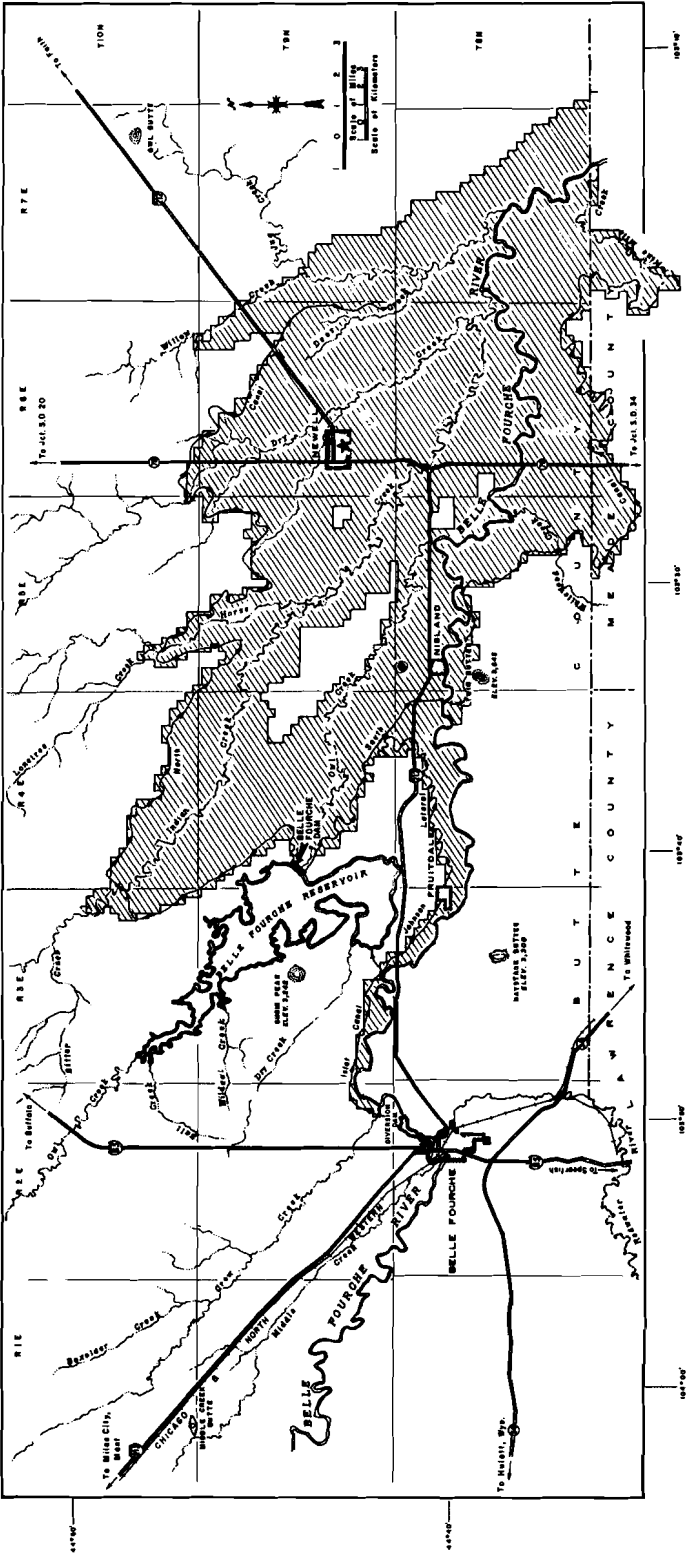
79. Bracewell, *supra* note 36, at 23.

80. CADE OVERPECK ABSTRACT, *supra* note 16, at 23. The District is divided into seven divisions. *Id.* at 22. The divisions are numbered consecutively and are as "equal in size as practicable." *Id.* The divisions are based on the acreage and the number of water users in each region. Interview with Jim Winterton, *supra* note 46. The District and the Angostura Irrigation District are the two main irrigation districts in western South Dakota. *Id.* The District is the larger of the two districts. *Id.* All of the land comprising the District is located within the boundaries of Butte and Meade Counties. CADE OVERPECK ABSTRACT, *supra* note 16, at 22. The majority of the land in the District, approximately 68,000 acres, is located within Butte County. *Id.* *See also* BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, FACTUAL DATA ON THE ANGOSTURA UNIT (1977) (providing additional information on the Angostura Irrigation District).

81. BELLE FOURCHE PROJECT II, *supra* note 59, at 4.

82. Figure 1, *infra*.

Belle Fourche Irrigation District  
Headquarters at Newell, S.D.



### E. THE BELLE FOURCHE RIVER COMPACT AND THE KEYHOLE PROJECT

In 1927, Congress approved a compact between South Dakota and Wyoming with respect to the division and apportionment of the waters in which the two states had a joint interest.<sup>83</sup> The Belle Fourche and the Cheyenne Rivers were the main water supplies effected by the compact.<sup>84</sup> Commissioners from South Dakota and Wyoming then approved the Belle Fourche River Compact on February 18, 1943.<sup>85</sup> Pursuant to Article V of the Compact:

Wyoming and South Dakota agree that the unappropriated waters of the Belle Fourche River as of the date of this compact shall be allocated to each State as follows: 90% to South Dakota; 10% to Wyoming . . . . Either State may temporarily divert, or store for beneficial use, any unused part of the above percentages allotted to the other, but no continuing right shall be established thereby.<sup>86</sup>

Wyoming was allotted unrestricted use of up to twenty acre-feet of the water for exclusively domestic and stock purposes.<sup>87</sup> The compact was essential to South Dakota and to the District in that "[t]he apportioned flow to South Dakota is the principal irrigation water source for the Belle Fourche Project."<sup>88</sup>

Prolonged water shortages in the Project, due to improper water storage and supply facilities, prompted investigations by the Bureau and the Corps of Engineers for additional water facilities.<sup>89</sup> The Keyhole site<sup>90</sup> in

83. Act of Feb. 26, 1927, ch. 216, § 1, 44 Stat. 1247. Wyoming was also a party to the Snake River Compact between Idaho and Wyoming relating to the waters of the Snake River. Snake River Compact Act, ch. 73, 64 Stat. 29 (1950).

84. Act of Feb. 26, 1927, ch. 216, § 1, 44 Stat. 1247.

85. Belle Fourche River Compact Act, ch. 64, 58 Stat. 94 (1944). The following commissioners signed on South Dakota's behalf: M. Q. Sharpe, G. W. Morsman, S. G. Mortimer, and W. D. Buchholz. *Id.* The following commissioners signed on Wyoming's behalf: L. C. Bishop, Samuel McKean, L. H. Robinson, and Mrs. E. E. McKean. *Id.* Howard R. Stinson was appointed as the Representative of the United States. *Id.* The compact was confirmed by Congress in 1944. *Id.* The Belle Fourche River Compact has been codified by the South Dakota Legislature. S.D.C.L. § 46A-17-1 (1987).

86. Belle Fourche River Compact Act, art. V, § A, ch. 64, 58 Stat. 96 (1944).

87. *Id.* Standards of measurement relied on in South Dakota are as follows: [T]he flow of water shall be the cubic foot per second of time; and the standard of measurement of the volume of water acre foot, being the amount of water upon an acre covered one foot deep, equivalent to forty-three thousand five hundred sixty cubic feet; the miner's inch one-fiftieth of a cubic foot per second, in all cases except when some other equivalent of the cubic foot per second has been specially stated by the contract or has been established by actual measurement or use, or by court decree.

S.D.C.L. § 46-1-7 (1987).

88. BELLE FOURCHE PROJECT II, *supra* note 59, at 1. The use of the water may be by direct diversion or storage and the rights to use the waters of the Belle Fourche River exist "to the extent these rights are valid under the law of the State in which the use is made, and shall remain unimpaired hereby." Belle Fourche River Compact Act, art. V, § B, ch. 64, 58 Stat. 96 (1944).

89. REGION WATER AND POWER RESOURCES SERVICE, U.S. DEP'T OF INTERIOR, PUB. NO. 679-981, PICK-SLOAN MISSOURI BASIN PROGRAM, KEYHOLE UNIT 2 (1983) [hereinafter KEYHOLE PROJECT II]. Several investigations of storage facilities were conducted by the Bureau and the Corps of Engineers between 1917 and 1941. *Id.* A drought in the 1930's emphasized the need for additional water supplies. *Id.* See generally HENRY HART, THE DARK MISSOURI (1957) (analyzing the origins of Pick-Sloan and the creation of the Keyhole project); MARIAN E. RIDGEWAY,

northeastern Wyoming was determined to be the most favorable location for construction of a dam which would provide improved water supplies to the Project.<sup>91</sup> The construction of Keyhole Dam began on June 29, 1950, and the Dam was deemed complete on October 25, 1952.<sup>92</sup> As provided by the Belle Fourche River Compact, Wyoming could elect to purchase ten percent of the storage capacity of Keyhole Reservoir to regulate its portion of the unappropriated water.<sup>93</sup> Unlike the Belle Fourche Project, the Keyhole Project is operated and maintained entirely by the Bureau.<sup>94</sup>

## F. SOUTH DAKOTA WATER LAW SYNOPSIS

Despite the Bureau's involvement with the nation's federal irrigation projects, pursuant to section eight of the Reclamation Act of 1902, state water law shall control the distribution of water for irrigation purposes.<sup>95</sup> All water within South Dakota is "the property of the people of the state, but the right to the use of water may be acquired by appropriation . . . ."<sup>96</sup>

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THE MISSOURI BASIN'S PICK-SLOAN PLAN: A CASE STUDY IN CONGRESSIONAL POLICY DETERMINATION (1955) (discussing western water law policy during the Pick-Sloan era).

90. BUREAU OF RECLAMATION FACTUAL DATA ON KEYHOLE DAM AND RESERVOIR, U.S. DEP'T OF INTERIOR, MAP NO. 486-602-100 1 (1978) [hereinafter KEYHOLE PROJECT FACTUAL DATA] (providing factual data, statistics, and recreational works locations for the Keyhole Project). The Keyhole Project consists of the Keyhole Dam and Reservoir. *Id.* The Keyhole Project is located on the Belle Fourche River, 12 miles northeast of Moorcroft, Wyoming. *Id.* The Keyhole Project is approximately 146 river-miles upstream from the Belle Fourche Diversion Dam in South Dakota. *Id.* The Keyhole Project is geologically situated on the northwestern flank of the Black Hills uplift of Wyoming. *Id.*

91. *Id.*

92. KEYHOLE PROJECT II, *supra* note 89, at 3. The Keyhole Project was authorized through the following Congressional enactments:

[T]he Flood Control Act of 1944 (Public Law 534, 78th Congress) which approved the general comprehensive plans set forth in Senate Document 191 and House Document 475 as revised and coordinated by Senate Document 247, 78th Congress [codified as amended at 43 U.S.C. § 390 (1988)]. Initial funds for construction were provided by the Second Supplemental Appropriation Act, 1948 (Public Law 299, 80th Congress).

*Id.* at 2, 3. The dam formed a reservoir with a total capacity of 334,200 acre-feet. *Id.* at 1. The Keyhole Reservoir has a water surface of 13,700 acres. *Id.* The Keyhole Project acts as a multi-purpose facility providing "storage for irrigation, flood control, fish and wildlife conservation, recreation, sediment control, and municipal and industrial water supply." *Id.* See also KEYHOLE PROJECT FACTUAL DATA, *supra* note 90, at 1 (providing additional information on the Keyhole Project features).

93. Act of Feb. 26, 1944, art. V, § A, ch. 64, 58 Stat. 96.

94. KEYHOLE PROJECT II, *supra* note 89, at 3.

95. Reclamation Act of 1902, ch. 1093, § 8, 32 Stat. 390 (codified as amended at 43 U.S.C. § 383 (1988)). See also *California v. United States*, 438 U.S. 645, 653 (1978) (finding that the Congressional intent of reclamation law is to defer to state water laws). See generally William H. Veeder, *Water Rights in the Coal Fields of the Yellowstone River Basin*, 40 LAW & CONTEMP. PROBS. 77, 84-87 (1976) (analyzing the clash between federal and state water rights). But see *City of Fresno v. California*, 372 U.S. 627, 629-30 (1963) (holding the United States has the power of eminent domain and state law will define the property interests for which compensation must be made); *Turner v. Kings River Conservation Dist.*, 360 F.2d 184, 194-95, 197-98 (9th Cir. 1966) (holding that federal officers must recognize state created water rights and pay for them with just compensation if taken); Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4606-31 (1992) (creating a partial divestment of California's control over water use). For a discussion of state primacy under section eight, see *infra* notes 298-301 and accompanying text.

96. S.D.C.L. § 46-1-3. The State of South Dakota "shall determine what water of the state, surface and underground, can be converted to public use or controlled for public protection." S.D.C.L. § 46-1-1 (1987). For a general background on water rights in South Dakota, see James Munro, *South Dakota and the Water Impasse*, 11 S.D. L. REV. 255, 256-62 (1966) (analyzing the



Depending on a particular state's water law, private parties can acquire the right to the use of water, commonly referred to as usufructuary rights, under either the appropriation or riparian doctrines.<sup>97</sup> The riparian doctrine, the original English common law doctrine, derived its name from the Latin word "river bank."<sup>98</sup> A riparian right refers to a landholder's right to use water which is in contact with or adjacent to the land.<sup>99</sup> The doctrine of appropriation was developed in the arid American West, where the riparian doctrine proved to be unsuitable due to the inadequacy of the water supply.<sup>100</sup> The appropriation doctrine created a right to convey water "across riparian lands for use upon non-riparian property."<sup>101</sup>

In South Dakota, the riparian and appropriation doctrines coexist.<sup>102</sup> However, the riparian doctrine has been limited to the recognition of only "vested riparian rights" acquired prior to July 1, 1955.<sup>103</sup> All non-vested riparian rights and appropriation rights are treated alike, and a water user must obtain a permit from the South Dakota Water Management Board in order to appropriate water.<sup>104</sup>

The riparian and appropriation doctrines merely establish methods of acquiring rights in the use of water.<sup>105</sup> State water law also provides rules for determining the amount of water to be granted by such rights.<sup>106</sup> Pursuant to South Dakota law, "[b]eneficial use is the basis, the measure, and the limit of the right to the use [of water] . . ."<sup>107</sup> Beneficial use requires

history of South Dakota water law); Wade Hubbard, Comment, *The Status of Groundwater in South Dakota*, 22 S.D. L. REV. 591, 592-603 (1977) (discussing the basic principles of water law); 22 Op. S.D. Att'y Gen. 75 (1989) (discussing South Dakota's groundwater status and navigable water laws). South Dakota's water law encompasses navigable and nonnavigable surface waters as well as ground water. *Id.* at 85.

97. Hubbard, *supra* note 96, at 598.

98. William A. Garton, *South Dakota's System Of Water Management and Its Relation To Land Use and Economic Development*, 21 S.D. L. REV. 1, 5 (1976) (providing a historical commentary on the riparian and appropriation doctrines).

99. *Id.* Since riparian rights are derived from location rather than use, they are not lost by non-use. *Id.* A riparian right is a property right. *Id.* It is not absolute, in that a riparian owner "may not infringe upon the rights of other riparian owners." *Id.* See also Hubbard, *supra* note 96, at 593-95 (providing additional commentary on riparian rights).

100. Garton, *supra* note 98, at 4.

101. *Id.* at 6, 7. An appropriative right is considered a property right. *Id.* Appropriative rights, unlike riparian rights, are based on use and can be lost by disuse. *Id.* at 7. See also Hubbard, *supra* note 96, at 595-97 (providing additional commentary on the doctrine of appropriation).

102. S.D.C.L. § 46-1-3, -10 (1987).

103. S.D.C.L. § 46-1-10. See also S.D.C.L. § 46-1-9 (1987) (defining vested rights).

104. S.D.C.L. § 46-1-15 (1987).

105. Hubbard, *supra* note 96, at 597.

106. *Id.*

107. S.D.C.L. § 46-1-8 (1987). Beneficial use is broadly defined to include any use that is reasonable, useful, and beneficial to the appropriator. S.D.C.L. § 46-1-6(3) (Supp. 1994). The Belle Fourche River Compact defines 'beneficial use' "to be that use by which the water supply of a drainage basin is depleted when usefully employed by the activities of man, and includes water lost by evaporation, and other natural causes from streams, canals, ditches, irrigated areas, and reservoirs." Belle Fourche River Compact Act, art. II, § C, ch. 64, 58 Stat. 95 (1944). A landowner's water right "does not constitute absolute ownership of the water." S.D.C.L. § 46-5-5 (1987). The water right is still "subject to the principle of beneficial use." *Id.* Even though a landowner may have a beneficial use of water, the landowner must file a notice of intent to appropriate the water with the irrigation district. S.D.C.L. § 46-5-6 (1987).

the best possible utilization of available water supply in order to avoid wasteful use of the water.<sup>108</sup> A water use may be classified as either a natural or an artificial use.<sup>109</sup> A domestic use is considered to be a natural use, while irrigation would constitute an artificial use.<sup>110</sup> The use of water for domestic purposes is superior to artificial uses.<sup>111</sup>

Protected property rights became the focus of attention in *Nelson v. Belle Fourche Irrigation District*.<sup>112</sup> In *Nelson*, the Federal District Court for the Western District of South Dakota held that an irrigation district farmer does not have a protected property right in irrigation water<sup>113</sup> unless the water user has specifically obtained such a right to receive irrigation water from one of three sources.<sup>114</sup> First, a water user may have

108. S.D.C.L. § 46-1-4 (1987). *But see* Fox v. Ickes, 137 F.2d 30, 36 (D.C. Cir. 1943) (holding the Secretary of the Interior cannot make tentative determinations of a water user's right to receive water by construing water applications as contracts with the government). The important distinction between South Dakota's beneficial use standard and the economical use standard is that "[a] property right once acquired by the beneficial use of water is not burdened by the obligation of adopting methods of irrigation more expensive than those currently considered reasonably efficient in the locality." *Id.* at 35. The South Dakota Attorney General has a duty "to bring an action for the general adjudication of the nature, extent, content, scope and relative priority of the water rights and the rights to use water . . ." S.D.C.L. § 46-10-1 (1987). California's Constitution provides that all water rights in California are also subject to a standard of reasonable, nonwasteful use. CAL. CONST. art. X, § 2. *See generally* In re Water Right Claim No. 1927-2 v. United States Fish and Wildlife Service, 524 N.W.2d 855, 858-59 (S.D. 1994) (analyzing how to determine if a use constitutes a beneficial use).

109. Lone Tree Ditch Co. v. Cyclone Ditch Co., 128 N.W. 596, 598 (S.D. 1910) (allowing land owners with riparian rights to irrigate their lands from the waters of Rapid Creek through the Cyclone ditch).

110. *Id.* *See also* S.D.C.L. § 46-1-6(7) (Supp. 1994) (providing a definition for domestic use).

111. S.D.C.L. § 46-1-5 (1987). Ownership of riparian land does not carry with it a "vested right to divert water from a stream for irrigation." *Belle Fourche Irrigation Dist. v. Smiley*, 204 N.W.2d 105, 108 (S.D. 1973) (holding the landowner had a vested riparian right to use water from the Belle Fourche River for domestic uses and previously acquired beneficial uses). Since appropriation and application to a beneficial use is the standard for the use of all waters in South Dakota, a riparian owner:

has a vested right to take and use water from the Belle Fourche River for domestic use which includes water for drinking, washing, sanitary, culinary purposes, and other ordinary household purposes; irrigation of a family garden, trees, shrubbery or orchard not greater in area than one-half acre; and stock watering.

*Id.* at 107-08. Under South Dakota law, a landowner may not prevent the natural flow of a stream or spring from where it starts its definite course. S.D.C.L. § 46-5-1 (1987). A landowner is also not allowed to "obstruct the free navigation of any navigable watercourse within [the] state [of South Dakota]." S.D.C.L. § 46-5-1.1. A landowner may not "intentionally obstruct, tamper, or interfere" with the flow of public waters except under lawful authority. *Id.*

112. No. 93-5068, slip op. (D.S.D. Mar. 8, 1994).

113. *Nelson*, No. 93-5068, at 4-5. *See generally* Joseph L. Sax, *The Constitution, Property Rights and the Future of Water Law*, 61 U. COLO. L. REV. 257, 260-67 (1990) (exploring the limitations on private property interests in water).

114. *Nelson*, No. 93-5068, at 9. South Dakota water law, rather than federal law, governs whether a water user has a protected property right in irrigation water. *Id.* at 6. *See also* Littlefield v. City of Afton, 785 F.2d 596, 615 (8th Cir. 1986) (holding that before a plaintiff may recover under 42 U.S.C. § 1983, the plaintiff is required to show he was deprived of a federally protected right, privilege, or immunity as a result of the actions of persons acting under color of state law). According to the 8th Circuit Court of Appeals:

Property interests are created and their dimensions defined by existing rules or understandings that stem from an independent source, such as state law, rules or understandings that support claims of entitlement to certain benefits. A legitimate claim of entitlement can arise from procedures established in statutes or regulations adopted by states or political subdivisions (citations omitted).

*Id.* at 600 (quoted in *Nelson*, No. 93-5068, at 6). A federal statute also provides for the applica-

“vested rights in water that was used by himself or the prior owners of his land predating 1955 or the formation of the [District in 1923] . . . .”<sup>115</sup> A water user may also obtain a right to receive and to use irrigation water through a “specific contract between himself and the [district].”<sup>116</sup> Finally, a water user may obtain a right to receive and use irrigation water according to the regulations and the bylaws of the District.<sup>117</sup> The District Court relied on the South Dakota Supreme Court’s holding in *Butte County v. Lovinger*,<sup>118</sup> to find the District possessed “the actual property right in the water subject only to regulation under state law.”<sup>119</sup>

The District possesses the right to the irrigation water because it has diverted the flow of the Belle Fourche River for irrigation purposes.<sup>120</sup> Thus, a water user of the District “has no constitutional right to receive and use irrigation water.”<sup>121</sup> Instead, a water user’s right to irrigation water is “derived from his membership in and compliance with the regulations of the [District].”<sup>122</sup>

### III. THE EFFECTS OF THE RECLAMATION REFORM ACT OF 1982

The Reclamation Reform Act (RRA) of 1982,<sup>123</sup> under which the District is currently operating,<sup>124</sup> brought about significant changes to reclamation law.<sup>125</sup> For example, the acreage limitation was expanded to a

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tion of state law in the determination of whether a water user has a protected property right in irrigation water. 43 U.S.C. § 383 (1988).

115. *Nelson*, No. 93-5068, at 9. The court determined that in the particular case before it, the plaintiff had not “alleged any such vested rights” nor had he sought recovery based on such vested rights. *Id.* The court went on to find a resolution of the question of vested water rights between a farmer and an irrigation district is “a determination to be made by the Water Management Board and/or the South Dakota state circuit court . . . .” *Id.* See generally S.D.C.L. § 46-10-2 (1987) (setting forth jurisdiction and venue for the general adjudication of water rights).

116. *Nelson*, No. 93-5068, at 9. The court concluded no such contract existed between the plaintiff water user and the defendant water district. *Id.*

117. *Id.* at 9, 10. See generally S.D.C.L. § 46A-4-48 (Supp. 1994) (setting forth the statutory powers and duties of an irrigation district’s board of directors).

118. 266 N.W. 127 (S.D. 1936).

119. *Nelson*, No. 93-5068, at 10-11 (citing *Lovinger*, 266 N.W. at 132) (holding the irrigation district possesses the actual property right in the water). The South Dakota Supreme Court has adopted the “possessory basis” theory of appropriation rights. *Id.* at 11. Therefore, a water right “vest[s] in those who actually located the right or originally diverted the water’s flow as distinguished from the eventual users of the water.” *Id.* The District has vested rights in the irrigation water that are unaffected by the Reclamation Act of 1902. *Jewett v. Redwater Irrigating Ass’n*, 220 N.W.2d 834, 838-39 (S.D. 1974) (declaring water used for irrigation of land does not gain the status of appurtenance, absent a showing that the predecessor in title to the land succeeded to water rights obtained by the prior holder of title).

120. *Nelson*, No. 93-5068, at 12 (citing *Lovinger*, 266 N.W. at 132; *Jewett*, 220 N.W.2d at 838-39).

121. *Id.*

122. *Id.* See generally S.D.C.L. chs. 46A-4, -5, -7 (regulating how the irrigation district is to control and distribute water).

123. See generally RRA of 1982, *supra* note 8.

124. Interview with Gayle Cleveland, Belle Fourche Irrigation Administrative Assistant, Newell, S.D. (Jan. 8, 1994). The District amended its contract in order to operate under the RRA of 1982. *Id.*

125. Sax, *Federal Reclamation Law*, *supra* note 31, § 41.03(c) at 394-99.

maximum of 960 acres<sup>126</sup> and was applied to all irrigated lands including lands leased and owned.<sup>127</sup> In addition, the RRA of 1982 mandated that the delivery of irrigation water to owned and to leased lands in excess of a landholder's entitlement required payments sufficient to cover O & M charges plus an additional full-cost rate.<sup>128</sup> The RRA of 1982 also required all irrigation water to be priced at a level sufficient to recover all O & M charges a particular district was obligated to pay to the United States.<sup>129</sup> Finally, it also eliminated the residency requirement.<sup>130</sup>

#### A. INCREASED ACREAGE PROVISION

The increased acreage provision was one of the reform measures embodied within the RRA of 1982.<sup>131</sup> As the cost of living has increased, so has the cost of farming.<sup>132</sup> The modern day family farmer requires more land to meet additional farming expenses and to provide an adequate living as compared to a farmer in 1902.<sup>133</sup> In 1982, Congress adjusted to these changes by increasing the acreage limitation from 160 acres<sup>134</sup> up to 960

126. *Id.* § 390dd. A qualified recipient is subject to a 960 acre limitation and a limited recipient is subject to a 640 acre limitation. *Id.* For a discussion of the difference between a qualified recipient and a limited recipient, see *infra* notes 148-54 and accompanying text.

127. 43 U.S.C. § 390bb(6) (1988). The RRA of 1982 defines the term "landholding" to be: [The] total irrigable acreage of one or more tracts of land situated in one or more districts owned or operated under a lease which is served with irrigation water pursuant to a contract with the Secretary. In determining the extent of a landholding the Secretary shall add to any landholding held directly by a qualified or limited recipient that portion of any landholding held indirectly by such qualified or limited recipient which benefits that qualified or limited recipient in proportion to that landholding.

*Id.* The RRA of 1982 included a "hammer clause" to persuade districts to amend their contracts for the purpose of conforming with the RRA of 1982. *Id.* § 390cc(b). Pursuant to the RRA of 1982, the United States has also waived its sovereign immunity for cases arising out of contracts executed under federal reclamation law. *Id.* § 390uu. The United States may be subject to judgments, orders, and decrees of courts having proper jurisdiction. *Id.* A suit may be brought in any United States district court in the state in which the land involved is located. *Id.* Prior to the RRA of 1982, there was nothing in the excess land statutes to indicate Congress had conferred a litigable right upon private individuals claiming injury from the Secretary of the Interior. *Turner*, 360 F.2d at 198.

128. 43 U.S.C. §§ 390ee, 390bb(3) (1988). *But see Id.* § 390ii(b) (providing that the delivery of irrigation water to land owned in excess of 960 acres was generally not permitted). *See also* BUREAU OF RECLAMATION, U.S. DEP'T. OF INTERIOR, FACT SHEET 6, WHAT ARE MY ENTITLEMENTS AS A QUALIFIED RECIPIENT 1-2 (Jan. 1993) [hereinafter FACT SHEET 6] (discussing the exceptions to the general rule which allow excess land to receive reclamation water). For a discussion of the major exceptions to the general rule, see *infra* notes 178-85 and accompanying text.

129. 43 U.S.C. § 390hh (1988).

130. *Id.* § 390kk. For an analysis of the residency requirement, see *infra* notes 206-21 and accompanying text.

131. 43 U.S.C. § 390dd.

132. Alexandra M. Shafer, Comment, *The Reclamation Reform Act of 1982: Reform or Replacement?*, 45 U. PITT. L. REV. 647, 665-66 (1984) (analyzing the RRA of 1982 and its effects on the family farmer).

133. Hamilton Candee, *The Broken Promise of Reclamation Reform*, 40 HASTINGS L.J. 657, 665 (1989). The increased acreage limitation "reflects the view of some western interests that 960 acres is the modern-day equivalent of a 160-acre farm in 1902." *Id.* *See also* Brenda W. Jahns, *Reforming Western Water Rights: Contemporary Vision or Stubborn Revisionism?*, 39 ROCKY MT. MIN. L. INST. 21-14 (1993) (analyzing the Reclamation Projects Authorization and Adjustment Act of 1992).

134. Reclamation Act of 1902, ch. 1093, § 5, 32 Stat. 389 (codified as amended at 43 U.S.C. § 431). *See also* 43 U.S.C. 423e (providing a 160 acre limitation).

acres.<sup>135</sup>

The RRA of 1982 created two types of entitlements: (1) ownership and (2) non-full-cost.<sup>136</sup> The *ownership entitlement* refers to the maximum amount of *owned land* an individual or entity is allowed to irrigate with water from a federal reclamation project.<sup>137</sup> Irrigation or irrigatable land "owned in excess of an individual's or entity's ownership entitlement is referred to as *excess land*."<sup>138</sup> In contrast, the *non-full-cost entitlement* "refers to the maximum amount of *owned and/or leased* land an individual or entity may hold and irrigate at less than the full-cost water rate."<sup>139</sup> The full-cost water rate is the greatest amount farmers are subject to pay because, in addition to O & M charges, a farmer paying the full-cost rate is paying capital charges and interest.<sup>140</sup> The owned and/or leased land which is above the non-full-cost entitlement is referred to as *full-cost land*.<sup>141</sup>

Under the ownership entitlement of the RRA of 1982,<sup>142</sup> all land owned by an individual or an entity is counted against the entitlement.<sup>143</sup> However, only land actually receiving "irrigation water counts against the non-full-cost entitlement."<sup>144</sup> The Bureau allows a farmer to "select any

135. 43 U.S.C. § 390dd(1) (1988). Not all federal irrigation projects are subject to the acreage limitations. Smith & Vaughan, *supra* note 10, at 2. The following projects are not subject to the limitation: Colorado-Big Thompson, which received a statutory exemption from Congress; Elephant Butte in New Mexico, which became exempt after repayment of all construction costs; and Imperial Irrigation District in California, which was developed before the construction of the Boulder Canyon Project. *Id.*

136. FACT SHEET 6, *supra* note 128, at 1.

137. 43 U.S.C. § 390dd. The RRA of 1982 has defined "individual" to mean "any natural person, including his or her spouse, and including other dependents thereof within the meaning of the Internal Revenue Code of 1986 (26 U.S.C. 152)." *Id.* § 390bb(4). A clarification of the acreage limitations' affect on entities is as follows:

The acreage limitation status (qualified, limited, or prior law recipient) of an entity's stockholders, part owners, or beneficiaries does not affect the status of the entity, nor does the acreage limitation status of the entity control the status of each individual associated with such entity. However, an entity's ownership entitlement (the amount of owned land that will be eligible) is dependent on the entitlement of its part owners, as well as on its acreage limitation status. In addition, any land owned by a subsidiary entity is counted against the ownership entitlement of its parent entity.

FACT SHEET 6, *supra* note 128, at 2. See also 43 C.F.R. § 426.6 (1993) (discussing the ownership entitlement).

138. FACT SHEET 6, *supra* note 128, at 1 (emphasis added). See also 43 C.F.R. § 426.7 (1993) (describing the ownership entitlement).

139. FACT SHEET 6, *supra* note 128, at 1 (emphasis added).

140. 43 U.S.C. § 390bb(3)(A). The interest would accrue from October 12, 1982, on both the capital and O & M charges. *Id.* Subsidized water rates and full-cost rates vary among the federal projects, as may be shown by the following example:

In 1988, for example, the subsidized rate under the water service contract for California's Westlands Water District was about \$17/af, while the full-cost rate was \$42/af. Under the repayment contract for the Quincy Water District in the state of Washington, subsidized water costs about \$2/acre, while full-cost rates range from \$54/acre to \$73/acre.

Smith & Vaughan, *supra* note 10, at 2-3. See also 43 C.F.R. § 426.4(i) (1993) (providing a definition for full-cost rate). See generally 43 U.S.C. § 390bb(3)(B)-(C) (defining how to determine the interest rate for reclamation expenditures).

141. FACT SHEET 6, *supra* note 128, at 1 (emphasis added). Full-cost land may receive federal project water only at the full-cost water rate. *Id.*

142. 43 U.S.C. § 390dd.

143. FACT SHEET 6, *supra* note 128, at 3.

144. *Id.* The following example demonstrates how the Bureau determines the amount of excess land:

combination of eligible owned and leased land as . . . non-full-cost acreage."<sup>145</sup> The exception to the rule is when land is determined to be excess land or required by law to be subject to full-cost rates.<sup>146</sup> In either case, the land then cannot be selected as part of the non-full-cost.<sup>147</sup>

The landholder's status determines the amount of acreage to which a landholder is entitled under the landholder's ownership and non-full-cost entitlements.<sup>148</sup> A landholder may be categorized as either a qualified recipient, limited recipient, or prior law recipient.<sup>149</sup> A qualified recipient is subject to a 960 acre limitation.<sup>150</sup> A qualified recipient is "an individual . . . or any legal entity established under State or Federal law which benefits twenty-five natural persons or less."<sup>151</sup> The recipient must also directly own or lease land located in a district subject to the discretionary provisions of the RRA of 1982, or the recipient must have made an irrevocable election to conform to the discretionary provisions.<sup>152</sup> If a landholder has been categorized as a limited recipient, that landholder is then subject to a 640 acre limitation.<sup>153</sup> A limited recipient is "any legal entity established under State or Federal law benefiting more than twenty-five natural persons."<sup>154</sup>

The Bureau also has a third category—prior law recipient.<sup>155</sup> A prior law recipient is an individual or legal entity that has no directly owned or leased land located in a district subject to the discretionary provisions of the RRA of 1982 and has not made an irrevocable election to conform to

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Farmer Z is a qualified recipient with a landholding of 1,000 acres of owned and 500 acres of leased land. Forty of the 1,000 owned acres are in excess of the 960-acre *OWNERSHIP* entitlement for qualified recipients and must be designated by the landholder as *excess land*, ineligible to receive Reclamation irrigation water *at any price*. The remaining 1,460 acres (960 acres of owned land and 500 acres of leased land) will be eligible to receive Reclamation irrigation water, but if Farmer Z irrigates all that land with Reclamation irrigation water, 500 acres (1,460 acres less 960 acres) of owned nonexcess or leased land must be selected as *full-cost land*.

*Id.*

145. *Id.* Leased land may receive irrigation water if the lease agreement is written and does not extend beyond 10 years. 43 U.S.C. § 390yy (1988). *See also* 43 C.F.R. § 426.7 (analyzing what constitutes a lease).

146. FACT SHEET 6, *supra* note 128, at 3. Non-full-cost entitlements are computed using a "cumulative basis" during any water year. *Id.* If the water recipient terminates water deliveries to selected lands, the selected lands will still be considered in the recipient's non-full-cost entitlement for the entire water year. *Id.*

147. *Id.*

148. *Id.* at 1.

149. BUREAU OF RECLAMATION, U.S. DEP'T. OF INTERIOR, FACT SHEET 2, HOW TO DETERMINE YOUR STATUS UNDER RECLAMATION LAW 1-2 (Jan. 1993) [hereinafter FACT SHEET 2] (discussing prior law recipients). *See also* 43 U.S.C. § 390bb(7), § 390bb(9) (providing definitions for limited and qualified recipient).

150. 43 U.S.C. § 390dd(1).

151. *Id.* § 390bb(9).

152. FACT SHEET 2, *supra* note 149, at 1.

153. 43 U.S.C. § 390dd(2).

154. *Id.* § 390bb(7). A limited recipient must own or lease land located in a district subject to the discretionary provisions of the RRA of 1982, or the entity must have made an irrevocable election to conform to the discretionary provisions. FACT SHEET 2, *supra* note 149, at 1.

155. FACT SHEET 2, *supra* note 149, at 1-2.

the discretionary provisions.<sup>156</sup> A landholder who has not conformed to the RRA of 1982 is referred to as a prior law recipient because that landholder is subject to the prior 160 acre limitation.<sup>157</sup> If a particular irrigation district had not entered into an amendment of its contract with the Secretary of the Interior by April of 1987, the landholders became prior law recipients.<sup>158</sup> Irrigation water may still be delivered to lands leased in excess of a landholding of 160 acres but at full-cost rather than the subsidized rate.<sup>159</sup> The application of the 160 acre limitation "attempts to 'hammer' districts to amend their contracts," for the purpose of conforming with the RRA of 1982.<sup>160</sup> Since the District is subject to the discretionary provisions of the RRA of 1982 and there are currently no entities in the District benefiting more than twenty-five persons, all landholders in the District are qualified recipients.<sup>161</sup>

The increased acreage limitation was long overdue.<sup>162</sup> The previous 160 acre limitation was impractical and obsolete as a result of the increased costs involved in a farming operation.<sup>163</sup> The 160 acre limitation was inhibiting a family farmer from earning a productive living, which is contrary to the original intent of the Reclamation Act of 1902.<sup>164</sup> In the future, the acreage limitation is destined to increase as a result of increased farming costs.<sup>165</sup>

## B. WATER DELIVERY TO FULL-COST AND EXCESS LAND

A second change precipitated by the RRA of 1982 related to the price

156. *Id.* at 1. See also 43 U.S.C. § 390cc (setting forth the conditions which will subject a district to the discretionary provisions of the RRA of 1982).

157. 43 U.S.C. § 423e. See generally BUREAU OF RECLAMATION, U.S. DEP'T. OF INTERIOR, FACT SHEET 9, HOW TO BECOME SUBJECT TO THE DISCRETIONARY PROVISIONS 1 (Jan. 1993) (discussing the discretionary provisions of the RRA of 1982).

158. 43 U.S.C. § 390cc(b). In order for both land owners and land lessees to receive fully subsidized water under the 1987 final rules, they must comply with the RRA of 1982. *Water Resources: Reclamation Bureau Issues Final Rules Setting Water Allowances in Western States*, 17 ENVTL. L. REP. (Envtl. L. Inst.) 2130, 2130 (Apr. 17, 1987) [hereinafter *Water Resources*]. Failure to comply will result in categorization as prior law recipients and limit them to 160 acres or 320 acres for married couples. *Id.* The majority of the water districts, subject to acreage limitations, had amended their contracts to receive subsidized water by July, 1988. Smith & Vaughan, *supra* note 10, at 11. Approximately 70% of those districts not amending their contracts were located in the Mid-Pacific Region, which includes central and northern California and portions of Nevada and Oregon. *Id.*

159. 43 U.S.C. § 390cc(b).

160. Lauri Alsop, Comment, *Reclamation Law*, 21 ENVTL. L. 1225, 1236 (1991) (citing 128 Cong. Rec. 26,073 (Sept. 29, 1982) (discussing the statement of Rep. Udall)). The 9th Circuit concluded that requiring water districts which do not amend their contracts to comply with the RRA of 1982 and pay full-cost prices, was not a 5th Amendment taking "because the Water Districts have no vested property right to buy reclamation water for delivery to leased lands . . . ." *Peterson*, 899 F.2d at 813.

161. Interview with Gayle Cleveland, *supra* note 124.

162. Shafer, *supra* note 132, at 665-67.

163. *Id.* at 666.

164. *Id.* See also Reclamation Act of 1902, *supra* note 1. For a further discussion of the original intent of the Reclamation Act of 1902, see *supra* notes 29-34 and accompanying text.

165. Candee, *supra* note 133, at 665. The new limitations were based on 1981 economic studies. *Id.* at 665 n.50. See also Koenig & Thompson, *supra* note 32, at 893 (predicting "larger farm units may be necessary to maintain a viable farming operation over time").

ing of water delivered to full-cost and excess land.<sup>166</sup> Under both the 1902 Act<sup>167</sup> and the Omnibus Adjustment Act of 1926, there was no regulation of leased acreage.<sup>168</sup> Thus, a farmer could receive water for the 160 acres of land he owned and for an unlimited number of leased acres.<sup>169</sup> As a result, a small number of farmers were able to maintain control of a large number of leased acres.<sup>170</sup> However, the RRA of 1982, closed this loophole by applying the acreage limitation to both leased and owned lands.<sup>171</sup>

The RRA of 1982 permits the delivery of project water to an unlimited amount of full-cost land<sup>172</sup> at the full-cost water rate.<sup>173</sup> However, a controversy arises in the determination of whether a landholder should be permitted to receive federal project water for excess land.<sup>174</sup> If a landholder is allowed to receive project water for the excess land, cost becomes an issue.<sup>175</sup> Ideally, a farmer owning excess land would prefer to make only non-full-cost payments.<sup>176</sup> However, in the worst case scenario, a farmer would be precluded from irrigating excess land with water from the federal irrigation project.<sup>177</sup>

Pursuant to the RRA of 1982, “[g]enerally, such [excess] land is *not eligible* to receive Reclamation irrigation water while in the ownership of that landholder.”<sup>178</sup> The Bureau used the word “generally” because there are some exceptions which allow excess land to receive reclamation water.<sup>179</sup> Excess land may receive reclamation water if the excess land is subject to a recordable contract, if the disposal of the owner’s interest in such land is required by an existing recordable contract with the Secretary of the Interior,<sup>180</sup> or if the owner has requested a recordable contract be

166. 43 U.S.C. §§ 390ee, 390bb(3).

167. See generally Reclamation Act of 1902, *supra* note 1.

168. 43 U.S.C. § 423e.

169. Candee, *supra* note 133, at 661 (citing BUREAU OF RECLAMATION, U.S. DEPT OF THE INTERIOR, SPECIAL TASK FORCE REPORT ON THE SAN LUIS UNIT 198-99 (1978)) (exploring circumvention of the Act of 1902 by leasing and multiple ownership arrangements).

170. Candee, *supra* note 133, at 661.

171. 43 U.S.C. § 390bb(6). For a discussion of the alleged farming operation loophole, see *infra* notes 277-84 and accompanying text.

172. FACT SHEET 6, *supra* note 128, at 1. For a further discussion of full-cost land, see *supra* notes 139-41 and accompanying text.

173. 43 U.S.C. § 390ee (1988).

174. FACT SHEET 6, *supra* note 128, at 1, 2. For a further discussion of excess land, see *supra* notes 136-38 and accompanying text.

175. *Id.*

176. *Water Resources*, *supra* note 158, at 2130. Full-cost payments are “five to seven times the subsidized price . . . .” *Id.*

177. FACT SHEET 6, *supra* note 128, at 1, 2. The Bureau actually prefers that excess land be precluded from receiving water from a federal irrigation project. *Id.*

178. *Id.* at 1 (emphasis added).

179. *Id.* at 2.

180. 43 U.S.C. § 390ii(a). Excess land sales contracts shall provide the following:

Any recordable contract covering excess lands sales shall provide that a power of attorney shall vest in the Secretary to sell any excess lands not disposed of by the owners thereof within the period of time specified in the recordable contract. In the exercise of that power, the Secretary shall sell such lands through an impartial selection process only to qualified purchasers according to such reasonable rules and regulations as the Secretary may establish: *Provided*, That the Secretary shall recover for the owner the fair



executed by the Secretary.<sup>181</sup> Excess land may also receive reclamation water if the land was involuntarily acquired within the past five years<sup>182</sup> or if the excess land becomes eligible through a class I equivalency determination.<sup>183</sup> A class I equivalency may be determined by the Secretary of the Interior or the local district, based upon an assessment of the land's productive potential.<sup>184</sup> Excess land which has been designated by legislation or is exempt for some other reason from the ownership entitlement restrictions, can also receive reclamation water.<sup>185</sup>

The RRA of 1982, and its implementation of full-cost pricing, supports the original intent of the Reclamation Act of 1902 by preventing widespread monopolization and by promoting economic efficiency.<sup>186</sup> If a full-

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market value of the land unrelated to irrigation water deliveries plus the fair market value of improvements thereon.

*Id.*

181. *Id.* § 390ii(b).

182. *Id.* § 390pp. Involuntarily acquired land may include property "acquired by involuntary foreclosure, or similar involuntary process of law, by bona fide conveyance in satisfaction of a debt (including, but not limited to, a mortgage, real estate contract, or deed of trust), by inheritance, or by devise . . ." *Id.*

183. FACT SHEET 6, *supra* note 128, at 2.

184. 43 U.S.C. § 390gg (1988). In determining if land should be considered as class I, all factors which significantly affect productivity are taken into account, "including topography, soil characteristics, length of growing season, elevation, adequacy of water supply, and crop adaptability." *Id.* See also 43 C.F.R. § 426.9 (1993) (discussing class I equivalency determinations).

185. FACT SHEET 6, *supra* note 128, at 2. Some examples of legislative exemptions from the ownership entitlement restrictions are as follows:

(1) The Omnibus Budget Reconciliation Act of Dec. 22, 1987, amended the RRA of 1982, allowed trusts to receive legislative exemption from the 960 acre ownership entitlement restrictions. Omnibus Budget Reconciliation Act of 1987, Pub. L. 100-203, § 5302(a), 101 Stat. 1330-268, 1330-269 (codified as amended at 43 U.S.C. § 390nn, § 390ww (1988)). The amended act limited the use of trusts by large land holders to circumvent the acreage limitation. 43 U.S.C. § 390nn. The amendments ended subsidies to the largest farmers who hold land under "extended recordable contracts." *Id.* § 390ww(h). The following limitations apply to trusts:

(a) [L]imitations . . . of Federal reclamation law shall not apply to lands in a district which are held by an *individual or corporate trustee in a fiduciary capacity* for a beneficiary or beneficiaries whose interest in the lands served do not exceed the ownership and pricing limitations imposed by Federal reclamation law . . .

(b) Lands placed in a *revocable trust* shall be attributable to the grantor if-

- (1) the trust is revocable at the discretion of the grantor and revocation results in the title to such lands reverting either directly or indirectly to the grantor; or
- (2) the trust is revoked or terminated by its terms upon the expiration of a specified period of time and the revocation or termination results in the title to such lands reverting either directly or indirectly to the grantor.

*Id.* § 390nn (emphasis added).

(2) Temporary supplies of water may receive legislative exemption from the ownership entitlement restrictions. *Id.* § 390oo. The pertinent limitations are as follows:

(a) [L]imitations . . . of Federal reclamation law shall [not] apply to lands which receive only a *temporary, not to exceed one year*, supply of water made possible as a result of-

- (1) an unusually large water supply not otherwise storable for project purposes; or
- (2) infrequent and otherwise unmanaged flood flows of short duration.

*Id.* (emphasis added).

(3) Furthermore, isolated tracts of land may receive legislative exemption from the ownership entitlement restrictions. *Id.* § 390qq.

[L]imitations . . . of Federal reclamation law shall [not] apply to lands which are *isolated tracts* found by the Secretary to be economically farmable only if they are included in a larger farming operation but which may, as a result of their inclusion in that operation, cause it to exceed such ownership limitations.

*Id.* (emphasis added).

186. Candee, *supra* note 133, at 668.

cost or excess landholder can economically justify paying the higher full-cost rate for the project water, he will continue to make productive use of such land while contributing a higher repayment to the reclamation fund.<sup>187</sup> If it is not economically feasible for the landholder to pay the full-cost rate, he will be induced to dispose of the full-cost or excess land into smaller tracts as the Reclamation Act of 1902 had originally envisioned.<sup>188</sup> The full-cost and excess land provisions have had little effect on the District since there are few landholders above the 960 acreage limitation.<sup>189</sup>

### C. RECOVERY OF OPERATIONAL & MAINTENANCE COSTS

Under the RRA of 1982, the price of irrigation water must at least be sufficient to recover all O & M charges which the irrigation districts are obligated to pay to the United States.<sup>190</sup> When an irrigation district enters into contracts or amends its current contract with the Secretary of the Interior to receive supplemental or additional benefits<sup>191</sup> offered by the RRA of 1982, the Secretary shall determine O & M charges a district is required to pay.<sup>192</sup> When a district contracts or amends its current contract to conform with the RRA of 1982, and its contract rate is equal to or less than O & M charges, the new rate will be increased only to cover O & M charges.<sup>193</sup> There is no additional payment required to cover capital or principal costs on the loan.<sup>194</sup> However, if at the time of the new contract or the amending of the current contract, the district's contract rate is greater than O & M charges, the amount greater than O & M charges is classified as capital costs.<sup>195</sup> Under this second scenario, the district would not only be required to pay O & M charges annually but also the capital costs previously paid.<sup>196</sup> If a district's payments are insufficient, the Secre-

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187. Shafer, *supra* note 132, at 665.

188. *Id.*

189. Interview with Jim Winterton, *supra* note 46.

190. 43 U.S.C. § 390hh(a) (1988).

191. *Id.* § 390cc(a) (1988).

192. *Id.* § 390hh(b). The Secretary of the Interior is authorized to use the reclamation fund for the operation and maintenance of all reservoirs and irrigation works constructed by the Bureau. *Id.* § 491. See generally *Swigart v. Baker*, 229 U.S. 187, 197 (1913) (holding the United States may assess O & M charges against water users as well as construction charges to avoid depletion of the reclamation fund); *United States v. Cantrall*, 176 F. 949, 952-53 (D. Or. 1910) (holding the Secretary of the Interior has the authority to fix and determine the charges against the land including O & M charges).

193. 43 C.F.R. § 426.8. The following example is provided:

A district amends its water service contract for the sole purpose of conforming to the discretionary provisions. Prior to its amendment, the district's contract obligated it to pay a rate of \$3.00 per acre-foot of water for the remaining 10 years of its 30-year contract. At the time of the contract amendment, the district's actual O&M costs are \$6.50 per acre-foot. Since the current contract rate of \$3.00 does not cover these O&M costs, the district's rate will be increased to \$6.50. If the district's O&M costs increase by \$.50 per acre-foot the following year, the district's rate would then be adjusted to \$7.00 per acre-foot.

*Id.*

194. *Id.*

195. *Id.*

196. *Id.*

tary has the authority to amend the district's contract to reflect changes in O & M charges.<sup>197</sup>

Under the payment schedule, a district that was contributing to repay capital owed from the original project is at a disadvantage because the previous capital payment has been set as the minimum that district is required to pay.<sup>198</sup> On the other hand, a district that was contributing less to the capital payment will have a lower minimum payment.<sup>199</sup> However, a district that is capable of paying off its capital costs may be at an advantage because the capital debt would be repaid at an earlier date.<sup>200</sup> Thus, payments could then be used to improve the district, or they could be returned to the farmers as profits.<sup>201</sup>

The District assumes the responsibility of assessing and collecting O & M charges from the water users at the local level.<sup>202</sup> Thus, the only payment the District delivers to the Bureau is for the construction costs.<sup>203</sup> Unfortunately, O & M payment provisions of the RRA of 1982 have resulted in substantial price increases for many districts which are obligated to pay O & M charges to the Bureau.<sup>204</sup> However, the increases were both warranted and beneficial since they aided in preventing the depletion of the reclamation fund.<sup>205</sup>

#### D. ELIMINATION OF THE RESIDENCY REQUIREMENT

National reclamation policy has acted to accelerate land settlement and to provide a wide distribution of benefits.<sup>206</sup> The Reclamation Act of 1902, which imposed a residency requirement, forced landowners to reside on or "in the neighborhood" of their land.<sup>207</sup> The Reclamation Act of 1902 provided, "No right to the use of water for land in private ownership shall be sold . . . to any landowner unless he be an *actual bona fide resident on such land, or occupant thereof residing in the neighborhood of said land* . . . ."<sup>208</sup>

In 1926, Congress sought to achieve a broad anti-monopoly and anti-speculation policy in reclamation law through the adoption of the Omnibus Adjustment Act.<sup>209</sup> Section forty-six of the Act did not include a residency

197. 43 U.S.C. § 390hh(b).

198. 43 C.F.R. § 426.8.

199. *Id.*

200. 43 U.S.C. § 390mm (1988).

201. Interview with Jim Winterton, *supra* note 46.

202. *Id.*

203. *Id.*

204. Candee, *supra* note 133, at 667.

205. *Swigart*, 229 U.S. at 197.

206. *Yellen*, 335 F. Supp. at 207-08.

207. FEDERAL RECLAMATION AND RELATED LAWS ANNOTATED, Vol. 1, at 67 n.41. (Richard K. Pelz ed., 1972). The term "in the neighborhood" may be construed "to mean within 50 miles." *Id.*

208. Reclamation Act of 1902, ch. 1093, § 5, 32 Stat. 389 (codified as amended at 43 U.S.C. § 431) (emphasis added).

209. Omnibus Adjustment Act of 1926, ch. 383, 44 Stat. 646 (codified as amended at 43 U.S.C. §§ 423a-g (1988)). The Act sought to provide relief to farmers residing on irrigation project lands

requirement.<sup>210</sup> However, in *Yellen v. Hickel*,<sup>211</sup> a California District Court held the residency requirement remained in effect and was a prerequisite for receiving water in the Boulder Canyon Project.<sup>212</sup> Pursuant to the Reclamation Reform Act of 1982, "irrigation water made available from the operation of Reclamation project facilities shall not be withheld from delivery to any project lands for the reason that the owners, lessees, or operators do not live on or near [such lands]."<sup>213</sup> The Act made a clear statement that there is no longer a residency requirement for reclamation districts operating under the RRA of 1982.<sup>214</sup>

The abandonment of the residency requirement discarded the original intent of the Reclamation Act of 1902 to prevent land speculation.<sup>215</sup> Proponents of the residency requirement argue the abandonment has made the basic foundation of the family farm more susceptible to the detriments of monopolization.<sup>216</sup> However, the residency requirement, as a mechanism to prevent land speculation, had been circumvented by using corporations, trusts, cotenancies, and leases.<sup>217</sup>

Federal reclamation projects, with their attractive water subsidies, effectually promote monopolization by large corporate entities.<sup>218</sup> Federal reclamation law has the ability to afford additional protection to the family farmer by implementing a flexible involvement requirement.<sup>219</sup> Such a requirement should focus more on a landowner's actual involvement in farming the land, rather than on the landowner's arbitrary distance or location from the land.<sup>220</sup> A flexible involvement requirement should be drafted to allow minimal farming involvement, such as hobby farming and farming

by adjusting construction repayment schedules over longer time periods. 43 U.S.C. § 423d. See also *United States v. Imperial Irrigation Dist.*, 559 F.2d 509, 521 (9th Cir. 1977) (discussing the anti-monopoly and anti-speculation purposes behind the Act of 1926).

210. 43 U.S.C. § 423e. The provisions of the Act concentrated on the 160 acre land limitation. *Id.* The Act required the sale of excess lands over 160 acres if the private land owner wanted reclamation water. *Id.* See also *Imperial Irrigation Dist.*, 559 F.2d at 527-28 (discussing the sale of excess land requirement).

211. 335 F. Supp. 200 (S.D. Cal. 1971).

212. *Yellen*, 335 F. Supp. at 203-04. The excess land provisions of the Omnibus Adjustment Act of 1926 did not repeal by implication the residency requirement of section five of the Reclamation Act of 1902. *Id.*

213. 43 U.S.C. § 390kk (emphasis added).

214. 43 C.F.R. § 426.14 (1993).

215. Shafer, *supra* note 132, at 666. For a further discussion of the original intent of the Reclamation Act of 1902, see *supra* notes 21-34 and accompanying text.

216. Shafer, *supra* note 132, at 666. One commentator's viewpoint is that "[t]he purposes of the 1902 Act could be better served by eliminating the acreage limitation altogether and strictly enforcing a residency requirement." *Id.* at 667. See also Candee, *supra* note 133, at 667 (discussing the controversy over the abandonment of the residency requirement).

217. *Yellen*, 335 F. Supp. at 208.

218. Jahns, *supra* note 133, at 21-30. For a further discussion of federal reclamation project water subsidies, see *supra* notes 4, 146 and accompanying text.

219. 11 U.S.C. §§ 101(18)-(20) (Supp. V 1993). The Bankruptcy Code has implemented a strict involvement requirement by basing the definition of "family farmer" on a percentage of gross income received from the farming operation. *Id.*

220. 43 U.S.C. § 431. The Reclamation Act of 1902 had originally required the landowner to at least reside in the neighborhood of the land. *Id.* For a discussion of the original neighborhood requirement, see *supra* notes 207-08 and accompanying text.

cooperatives, to fall within the requirement while preventing large corporate entities from monopolizing and reaping the benefits of the subsidized water.<sup>221</sup>

#### IV. FUTURE DEVELOPMENTS AND EXPECTATIONS OF RECLAMATION REFORM

The Bureau currently intends to "propose new rules and regulations for implementing the RRA of 1982 . . ."<sup>222</sup> The proposed rules and regulations may have an adverse effect on the District.<sup>223</sup> The rules and regulations may result in a reduced water supply for the District farmers and increased costs for available irrigation water.<sup>224</sup>

In *Natural Resources Defense Council et al. v. Beard*,<sup>225</sup> both the Bureau's rules and the Reagan Administration's failure to prepare a comprehensive Environmental Impact Statement (EIS) were challenged by the Natural Resources Defense Council (NRDC).<sup>226</sup> In 1987, the Bureau published an Environmental Assessment (EA) which found the proposed rule making would have no significant impact on the human environment.<sup>227</sup> In

221. Interview with Michael A. Jackley, Esq., hobby farmer near Sturgis, S.D., in the District (Jan. 3, 1995). Hobby farming provides an important contribution to the farming community. *Id.* Although a hobby farmer may not actually reside on the land he owns, such a farmer is more closely involved in the farming decisions and often contributes physical labor to the farm, unlike the corporate entity. *Id.*

222. McDonald, *supra* note 9, at 1. See also Settlement Contract, Natural Resources Defense Council et al. v. Beard, Nos. 92-15640 and 92-15643, at 3 (9th Cir. Mar. 10, 1992) [hereinafter Settlement Contract]; Letter from William D. Baker, Esq., Phoenix, Ariz., Co-Chair, Reclamation Law Task Force, National Water Resources Association, to Marty Jackley, at 1 (Nov. 4, 1994) [hereinafter Baker II] (concerning the *Beard* settlement deadline extension).

223. Interview with Jim Winterton, *supra* note 46. .

224. Baker, *supra* note 9, at 2, 3. A solution to this problem may be decentralization of the Bureau on a national scale, providing more authority for the local irrigation officials to police their own districts. Kenworthy, *supra* note 9, at A27. For a further discussion of decentralization, see *infra* notes 258-61 and accompanying text.

225. Nos. 92-15640 and 92-15643 (9th Cir. Mar. 10, 1992). The suit was originally filed against Dale DuVall in his acting capacity as Commissioner of the Bureau. Natural Resources Defense Council v. DuVall, 777 F. Supp. 1533 (E.D. Cal 1991). Dan Beard's name was substituted for DuVall's when he became Commissioner of the Bureau. *Beard*, Nos. 92-15640 and 92-15643. The National Resource Defense Council (NRDC) is seeking to remove water from agricultural uses, setting the water aside for environmental preservation. Telephone Interview with William D. Baker, Esq., Phoenix, Ariz., Co-Chair, Reclamation Law Task Force, National Water Resources Association (Jan. 14, 1994). The National Water Resources Association (NWRA) is in support of the individual irrigation districts and their fight to utilize water for agricultural purposes. *Id.*

226. Michael Doyle, *Farms Fear Tighter Clinton Rules On Subsidized Water*, SACRAMENTO BEE, Sept. 8, 1993, at A5.

227. *DuVall*, 777 F. Supp. at 1540. The rationale behind the EA's finding was that the farmers who were unable to obtain subsidized water would simply switch to groundwater pumping. *Id.* at 1540-41. However, a farmer will only switch to groundwater pumping when the cost of groundwater pumping is less than the full-cost water pricing. *Id.* at 1542. The 1987 EA's presumption that farmers would switch to groundwater lacked supporting evidence since farmers may simply convert to dry land farming. *Id.* A farmer switching to groundwater may suffer the following economic losses: (1) the farmer spends more money on federal project water due to increased water prices; (2) the farmer loses farming income since less crops are irrigated; and (3) the farmer pumps additional groundwater, thereby increasing his costs. Smith & Vaughan, *supra* note 10, at 13. The increased use of groundwater may result in the development of new environmental hazards which environmentalists, district farmers, and the Bureau are all seeking to prevent. Gregory S. Weber, Symposium, *The Role of Environmental Law in the California Water Alloca-*

order to avoid further litigation, the NRDC entered into a settlement agreement with the Department of Justice and the Department of the Interior (DOI) in September, 1993.<sup>228</sup> Pursuant to the settlement agreement, the DOI agreed to propose new regulations implementing the RRA of 1982<sup>229</sup> and to prepare an EIS complying with the National Environmental Policy Act (NEPA).<sup>230</sup> The settlement proposal is important to all irrigation districts since it includes rewritten regulations under the RRA of 1982.<sup>231</sup> The settlement proposal could ultimately result in "new limits on who [receives] subsidized water, new requirements for conservation and new restrictions on the total water supply."<sup>232</sup>

The new rules and regulations stemming from the settlement negotiations are expected to dramatically alter reclamation law.<sup>233</sup> The Bureau is considering the implementation of national water conservation rules similar to those imposed under the Central Valley Project Improvement Act (CVPIA).<sup>234</sup> The new rules are likely to contain some version of a tiered pricing system for the purpose of encouraging water conservation.<sup>235</sup> Finally, the Bureau's policy is to adopt "farming operation" as the basis for

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*tion and Use System: An Overview*, 25 PAC. L. J. 907, 913-14 n.36 (citing CALIFORNIA DEPARTMENT OF WATER RESOURCES, GROUNDWATER BASINS IN CALIFORNIA, Bulletin No. 18-80 at 10 (1980)) (exploring the broad contours of the intersection of environmental and water rights law in California). Groundwater pumping "may cause such environmental problems as water quality deterioration, surface subsidence, and surface vegetation losses." *Id.* at 913-14. The Department of the Interior will also consider the following factors in the EIS not addressed in the previous EA:

[The] Interior agrees to consider the beneficial and adverse impacts on water quality from reduced irrigation, particularly on the problems of irrigation drainage and selenium contamination. It also agrees to consider the beneficial and adverse impacts on fisheries and water quality from different pricing requirements, stronger conservation requirements, and stricter acreage limitation enforcement.

Smith & Vaughan, *supra* note 10, at 12-13.

228. Settlement Contract, *supra* note 222, at 1. Pursuant to the settlement agreement, the parties successfully moved the district court to vacate its prior order in *Duvall*, which had required new rules and an accompanying EIS. *Id.* The Central Valley farmers were irate at the Clinton administration and were furious about prospective results stemming from the settlement agreement because the farmers were left out of the negotiations with the environmentalists. Doyle, *supra* note 226, at A5.

229. Settlement Contract, *supra* note 222, at 1. The Clinton administration would "tighten the rules governing the delivery of subsidized irrigation water . . ." Doyle, *supra* note 226, at A5.

230. Settlement Contract, *supra* note 222, at 1. See generally 42 U.S.C. §§ 4321-70 (1988) (setting forth the National Environmental Policy Act). See also Letter from Ronald J. Schuster, Bureau of Reclamation comment evaluator, to irrigation districts at 1 (on file with the District) (providing a historical background of reclamation reform).

231. Smith & Vaughan, *supra* note 10, at 1.

232. Doyle, *supra* note 226, at A5.

233. Smith & Vaughan, *supra* note 10, at 1.

234. Baker, *supra* note 9, at 2. The CVPIA added fishery and wildlife protection to the project goals, thereby making them equally important as irrigation and domestic uses. Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4714-26. See generally Harrison C. Dunning, *Confronting the Environmental Legacy of Irrigated Agriculture in the West: The Case of the Central Valley Project*, 23 ENVTL. L. 943, 950-57 (1993) (discussing the CVP); Settlement Contract, *supra* note 222, at 2 (setting forth the DOI's promise to consider the implementation of conservation rules).

235. Baker, *supra* note 9, at 1. See also Settlement Contract, *supra* note 222, at 1 (setting forth the DOI's promise to consider the implementation of tiered pricing).

the determination of excess land.<sup>236</sup>

#### A. IMPLEMENTATION OF A NATIONAL CONSERVATION PROGRAM

The Bureau's policy is to adopt new rules and regulations which require all irrigation districts to implement a national water conservation program.<sup>237</sup> The new rules and regulations are expected to set more stringent conservation requirements.<sup>238</sup> For example, the new rules may require all irrigation districts to implement the following standards:

- (1) metering all [water] deliveries with an accuracy of  $\pm 6$  percent . . . ;
- (2) implementing pricing incentives (i.e., tiered pricing to district customers); (3) provide or support conservation educational programs, and on-farm irrigation evaluations, such as mobile labs; (4) if allowed under state law, implement a groundwater management program; and, (5) "facilitate alternative uses for lands whose irrigation would lead to unmanageable problems (e.g., drainage that does not meet discharge standards) . . . ." <sup>239</sup>

If such standards are adopted, existing local conservation plans may require a major overhaul.<sup>240</sup> Presently, all irrigation districts that have entered into a repayment contract or water service contract, pursuant to federal reclamation law, are required to "develop a water conservation plan which shall contain definite goals, appropriate water conservation measures, and a time schedule for meeting the water conservation objectives."<sup>241</sup> Current reclamation law lacks enforceability measures, since there is no set deadline for the adoption of such a conservation plan in either the statutes<sup>242</sup> or the regulatory provisions.<sup>243</sup> The enforceability

236. Baker, *supra* note 9, at 2.

237. *Id.* See also Duvall, 777 F. Supp. at 1541 (requiring the Bureau to consider alternatives for encouraging water conservation in preparing the EA in connection with adoption of regulations implementing reclamation reform).

238. Smith & Vaughan, *supra* note 10, at 12. The conservation requirements are expected to be similar to the "best management practices" standards suggested in the Mid-Pacific Regional Conservation Guidebook. *Id.* The "best management practices" may be defined as a policy, practice, rule, or use of devices, equipment or facilities that are either:

- 1) [A]n established and generally accepted practice among water suppliers that results in more efficient use or conservation of water; or
- 2) [P]ractices for which sufficient data are available from existing projects to indicate that significant benefits can be achieved. . . . [T]he practices must be technically and economically reasonable, not environmentally or socially unacceptable, and not otherwise unreasonable for most water suppliers to implement.

*Id.*

239. Baker, *supra* note 9, at 2. In early 1993, the Bureau joined the California Urban Water Conservation Council to develop an "ambitious set of 'best management practices' to achieve efficient water use." BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, News Release, *Clinton Administration Announces New Water Conservation Policy*, 93 WL 459027 at \*1 (Nov. 3, 1993) (announcing reforms in federal water policy which emphasize conservation over expensive new water development projects). For a further discussion of tiered pricing, see *infra* notes 262-74 and accompanying text.

240. Interview with Jim Winterton, *supra* note 46.

241. 43 U.S.C. § 390jj(b) (1988). All districts that have entered into repayment and water service contracts pursuant to the Water Supply Act of 1958 (codified as amended 43 U.S.C. § 390b (1988)) are also required to develop such a conservation plan. *Id.*

242. 43 U.S.C. § 390jj.

243. 43 C.F.R. § 426.19 (1993).

problem can be solved by setting a deadline for the adoption of state conservation programs rather than implementing a large scale national conservation program.<sup>244</sup> If a state fails to adopt an appropriate conservation program within the allotted time period, then the Bureau could step in and implement its own program.<sup>245</sup>

The implementation of environmental and conservation programs is an essential part of irrigation.<sup>246</sup> Logically, the Bureau should allow each district to implement their own programs.<sup>247</sup> The irrigation districts are located in several states with an assortment of state water laws.<sup>248</sup> The irrigation projects also differ in acreage.<sup>249</sup> A few districts are blessed with an abundant water supply, while others must make due with whatever scarce water supply is available.<sup>250</sup> The soil texture of certain districts dictates

244. Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4709-14. Most districts in the Central Valley Project in California are already required to have a conservation plan. *Id.*

245. 33 U.S.C. § 1313 (1988). The Clean Water Act provides an example of this type of legislation. *Id.*

246. Interview with Jim Winterton, *supra* note 46. New developments in the District's water conservation plan include:

[D]evelopment of a draft water conservation plan in cooperation with the Bureau of Reclamation. This plan would be in conformance with a document entitled 'Draft Criteria for Evaluating Water Conservation Plans . . . .' This was recently developed in our region by the Bureau of Reclamation. However we are concerned with all the criteria in this document. The plan itself could be very time consuming and costly to the project.

Letter from Jim Winterton, Belle Fourche Irrigation District Manager, to Bureau of Reclamation Scoping Committee, at 1 (Jan. 10, 1994) (letter on file with the District) [hereinafter Winterton] (commenting on the scope of the RRA and EIS).

247. Interview with William D. Baker, *supra* note 225. The irrigation districts already have strict conservation programs which take into consideration local concerns. *Id.* A national program would run the risk of destroying many of these local plans. *Id.* The Arizona Ground Water Act requiring all ditches to be concrete lined is an example of a local conservation program taking into account local conservation needs. *Id.* Local irrigation districts do not support national programs when such rules are placed on irrigation districts throughout the United States. Interview with Jim Winterton, *supra* note 46.

248. ELLIS ET AL., *supra* note 2, at 1-20.

249. Doyle, *supra* note 226, at A5. An example of a large acreage project is the CVP with three million acres. *Id.* Other smaller districts, like the Belle Fourche Irrigation District, which supplies a little over 57,000 acres, have only a limited number of acres available for irrigation. Interview with Jim Winterton, *supra* note 46. Some districts like those in the CVP may contain several large landholders and corporations centered around large communities. Interview with Gayle Cleveland, *supra* note 124. Other districts may contain farmers with small landholdings centered around a few rural communities. *Id.* The 17 western states contained the following irrigable acres in federal projects subject to acreage limitations in 1981: Arizona 412,800 acres, 4.2%; California 3,929,100, 39.8%; Colorado 249,400, 2.5%; Idaho 1,668,500, 16.9%; Kansas 72,600, 0.7%; Montana 342,700, 3.5%; North Dakota 31,700, 0.3%; Nebraska 498,700, 5.1%; Nevada 73,000, 0.7%; New Mexico 176,800, 1.8%; Oklahoma 47,100, 0.5%; Oregon 478,500, 4.8%; South Dakota 81,000, 0.8%; Texas 115,100, 1.2%; Utah 434,100, 4.4%; Washington 909,200, 9.2%; Wyoming 354,300, 3.6%. Smith & Vaughan, *supra* note 10, at 2 table 1 (emphasis added). California and Idaho contain over half of the total federal project acreage. *Id.*

250. Baker, *supra* note 9, at 2-3. The CVP in California has received near record rainfall and near record reservoir supplies. *Id.* See generally TIM PALMER, ENDANGERED RIVERS AND THE CONSERVATION MOVEMENT (1984) (analyzing non-irrigation use of scarce water resources in the arid West). Available water supply also affects the type of crops and the amount of feed produced in an irrigation district. Interview with Jim Winterton, *supra* note 46. The following excerpt exemplifies the Belle Fourche Valley's agricultural significance in the surrounding area:

Surplus crops in some areas are not surplus crops in other areas. In the Belle Fourche Project area, there is a need for the feed base developed on the project for serving livestock producers. There is a three state area (about 10,000 square miles) that is served for



additional environmental concerns.<sup>251</sup> The wildlife of certain districts may be on the brink of becoming endangered and require special attention.<sup>252</sup> These are all important distinctions which may require development of different rules and regulations, yet the Bureau is seeking to implement rules which ignore these differences.<sup>253</sup>

An additional problem with the implementation of national rules is their origin.<sup>254</sup> The larger districts, such as the CVP, usually encompass a significantly higher number of farmers or have a greater financial interest in reclamation.<sup>255</sup> Thus, they frequently receive more consideration in the development of the rules and regulations.<sup>256</sup> As a result of the rule-making process, smaller irrigation districts are subjected to illogical and unfair regulations.<sup>257</sup> Decentralization of the Bureau would create efficient regulation by developing a heavier reliance on local district decision-making.<sup>258</sup>

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feeding thousands of cattle and sheep. Without the project, feed would have to be hauled hundreds of miles or the livestock would have to be moved. This involves cattle worth \$110,000,000 and sheep worth over \$14,000,000.

Winterton, *supra* note 246, at 2. See also BELLE FOURCHE PROJECT II, *supra* note 59, at 4 (discussing the principal irrigated crops grown in the Belle Fourche Valley).

251. *DuVall*, 777 F. Supp. at 1541.

252. 16 U.S.C. §§ 661-66 (1988). The Fish and Wildlife Coordination Act of 1934 already requires the Secretary of the Interior to consider conservation of wildlife resources in the design and implementation of water projects. *Id.* § 662(a). See generally Frank S. Wilson, Comment, *A Fish Out of Water: A Proposal for International Instream Flow Rights in the Lower Colorado River*, 5 COLO. J. INT'L ENVTL. L. & POL'Y 249, 249-51 (1994) (providing a commentary on endangered species of fish living in the Gulf of California). The California Endangered Species Act (CESA) and the Federal Endangered Species Act (ESA) have led to alterations of diversions and reservoir operations in order to protect Sacramento River winter-run chinook salmon and delta smelt. Weber, *supra* note 227, at 940. Water users fear that additional endangered species listings may further restrict water uses in California. *Id.* Neither the CESA nor the ESA expressly "acknowledge any exemption for existing water rights holders." *Id.* at 942-43. See also *United States v. Glenn-Colusa Irrigation Dist.*, 788 F. Supp. 1126, 1134 (E.D. Cal. 1992) (holding state water rights are no exception to ESA enforcement).

253. Baker, *supra* note 9, at 1-3.

254. Interview with Gayle Cleveland, *supra* note 124.

255. Weber, *supra* note 227, at 924-25. The CVP and State Water Project (SWP) of California are "water projects of almost unparalleled dimension[,] . . ." having an enormous impact on national political considerations in the environmental area. *Id.*

256. Baker, *supra* note 9, at 1, 2. The *Beard* settlement negotiations are centered around water conservation in the CVP. *Id.* California has been the focus of attention in other areas of environmental law, such as the Clean Air Act (42 U.S.C. §§ 7401-7642 (1988)). ZYGMUNT J.B. PLATER ET AL., *Environmental Law and Policy: Nature, Law, and Society* 763 (1992) (discussing environmental law, encompassing such areas as environmental science, environmental economics, and environmental policy).

257. Interview with Gayle Cleveland, *supra* note 124.

258. Kenworthy, *supra* note 9, at A27. Elimination of management and the decentralization of the Bureau is estimated to save taxpayers approximately \$40 million a year. BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, News Release, *Babbitt Signs Order to Make Reclamation One of First "Reinvented" Agencies*, 1994 WL 133880 at \*1 (Apr. 13, 1994) (announcing the restructuring of the Bureau). The DOI is currently restructuring the Bureau by eliminating layers of management, cutting decision-making time, and improving efficiency. *Id.* The following list is an example of the restructuring ordered by the Secretary of the Interior for the Bureau:

- (1) Elimination of the two deputy commissioner and five assistant commissioner positions;
- (2) Consolidation of engineering, research, and resource management functions in Denver [Colorado];
- (3) Removal of the Denver office, formerly [the Bureau of Reclamation's regional] headquarters, from line authority over the Washington regional offices. It will now serve

The federal government should allow the districts to issue their own rules, regulations, and forms with Bureau approval at the state, regional, or national level.<sup>259</sup> The district officials would be able to cater specifically to their particular district's concerns, without being burdened by forms and regulations promulgated in other districts which are irrelevant to their district's needs.<sup>260</sup> The district officials are involved in the irrigation proce-

as a customer-based technical and administrative service center to the other [Bureau of Reclamation] offices;

(4) Redesignation of project offices, formerly charged with the construction, operation, and maintenance of a particular water project, as area offices. They will now be responsible for a geographic area and all the economic, community, and environmental concerns associated with resolution of water resource problems in that area;

(5) Simplified and "flattened" organizational structure for Washington and regional offices;

(6) Restructuring which will result in a reduction of between 300 to 400 positions in Denver this fiscal year, and unspecified reductions in Washington and regional offices.

Overall, the agency will downsize approximately 550 positions by October 1, 1995.

*Id.* President Clinton's new reclamation reform will seek to eliminate all Deputy Commissioner and Assistant Commissioner positions in the Bureau's hierarchy. BUREAU OF RECLAMATION, U.S. DEP'T OF INTERIOR, News Release, *Bureau of Reclamation Announces Reforms: Meets Challenge of the National Performance Review* 1993 WL 453052 at \*1 (Nov. 1, 1993) (announcing President Clinton's plan to reinvent government by reforming the Bureau). In 1993, President Clinton's reform called for the following changes:

Authority over day-to-day resources management activities will be shifted, wherever possible, to the lowest practical level in the organization. Washington headquarters will develop policy and give guidance, but regional and area offices will have more direct decision-making over projects in the region.

*Id.* at \*2. The Commissioner of the Bureau, Daniel P. Beard, made the following statement concerning the 1993 plan for decentralization of the Bureau: "Since much of the overhead is currently charged off to reclamation's water customers, we will save money for both our water users and federal taxpayers." *Id.* at \*1. The Clean Water Act and the ESA exemplify areas impacting water allocation, shifting the identity of critical decision makers from the state towards the federal government. Weber, *supra* note 227, at 968-69. The following commentary further supports the concept of decentralization of federal bureaucracy:

[T]he now heightened federalization of the [water quality planning] process has added an inauspicious political wrinkle to the process. Instead of facing the reallocation choices before it squarely and responsively, the state can pass the buck to the federal agencies. In so doing, the state not only may foster greater delay through interjurisdictional wrangling, but also may attempt to force the federal government to "play the heavy" and bear the political consequences of any reallocation decision. Such abdication of state responsibility trades possible progress on long term solutions to fundamental state infrastructural and quality of life problems for short term political gain.

*Id.* at 967.

259. Kenworthy, *supra* note 9, at A27. Representative Mike Synar's Government Operations subcommittee described the DOI's problem to be that of "extraordinarily lax financial management and accountability." *Id.* Local decisions must be timely made and somewhat consistent with national policy. Interview with Loren Hindbjorgen, *supra* note 24. The federal government's role is still important in such areas as water conservation planning and technical support. DOI 1993 WL 453052, *supra* note 258, at \*2, \*3. See also DOI 1994 WL 133880, *supra* note 258, at \*1 (providing examples of how reduction in the approval process will foster efficiency).

260. Interview with Gayle Cleveland, *supra* note 124. The current paperwork overload on an irrigation district farmer is tremendous, leading to a reduction in efficiency. *Id.* The process has become so complex that the Bureau has provided flow charts to determine which forms are required. BUREAU OF RECLAMATION, U.S. DEP'T. OF INTERIOR, FACT SHEET 3, WHAT FORMS ARE REQUIRED FOR QUALIFIED RECIPIENTS 2, 3 (Jan. 1993). Such forms may include: Form 7-2180—"INDIVIDUAL'S CERTIFICATE OF LANDHOLDINGS"; Form 7-2180-EZ—"EZ CERTIFICATE OF LANDHOLDINGS"; Form 7-2181—"MULTIPLE OWNERSHIP CERTIFICATE OF LANDHOLDINGS"; Form 7-2188—"APPLICATION FOR DESIGNATION OF NONEXCESS LAND"; Form 7-2189—"APPLICATION FOR SELECTION OF NON-FULL-COST LAND." *Id.* at 2. Copies of RRA forms may be obtained at any irrigation district office. *Id.* See also BUREAU OF RECLAMATION, U.S. DEP'T. OF INTERIOR, FACT SHEET 4, WHAT

dures, farming practices, and are more accessible to their constituents.<sup>261</sup>

## B. TIERED PRICING

As a means to encourage water conservation, the Bureau is considering adopting a tiered pricing payment system for all irrigation district farmers.<sup>262</sup> The tiered system is arranged in such a fashion as to gradually increase the construction contract payments through an inverted block rate structure.<sup>263</sup> Under the tiered system, a district farmer may be required to pay the full-cost rate for a portion of his contractual water supply.<sup>264</sup> Both the districts and the farmers oppose the full-cost rate because, in addition to paying the capital and O & M charges, there is an additional interest charge on both the capital and O & M charges.<sup>265</sup>

The concept behind tiered pricing is that if an irrigation district is required to make additional payments for water near or above the contract supply amount, the district will cut back on water usage resulting in water

FORMS ARE REQUIRED FOR LIMITED RECIPIENTS 1-2 (Jan. 1993) (describing the required forms for limited recipients). *But see* OFFICE OF THE SECRETARY, DEP'T OF INTERIOR, News Release, *Interior Assistant Secretary Sayre Announces Regulatory Change to Reduce Paperwork Burden on Farmers*, 1992 WL 296773 at \*1 (Oct. 16, 1992) (discussing the 40-acre threshold used in the determination of reclamation eligibility to reduce paperwork).

261. Interview with Gayle Cleveland, *supra* note 124. A farmer must become an expert in his professional farming capacity in order to provide an "adequate living" for himself and his family. Koenig & Thompson, *supra* note 32, at 891-92. This requires the district farmer to be well versed on the latest fertilizers, weed control herbicides, and hybrid seed. Interview with Jim Winterton, *supra* note 46. The farmer must practice soil conservation as well as wise irrigation practices in order to conserve precious water. *Id.* Modern farming techniques are essential for higher productive crop yields. *Id.* The Bureau's Belle Fourche Project office is next to the District's office in Newell and understands many of the District's needs. *Id.* However, the Belle Fourche Bureau's office often finds its hands tied with impractical rules set by Washington based on a different district's problems. *Id.* A solution would be for the Secretary of the Interior to provide the local Bureau offices with more authority. *Id.* The Secretary of the Interior should allow the individual irrigation districts to operate their own irrigation works, providing the Bureau Project's offices that are in the district's locality with the ability to authorize what the districts are implementing. *Id.*

262. Settlement Contract, *supra* note 222, at 1. *See also* Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4712-13 (imposing tiered pricing on the CVP in California). *See generally* Emergency Relief Appropriation Act of 1935, 49 Stat. 115; First Deficiency Appropriation Act of 1936, 49 Stat. 1622 (authorizing and establishing portions of the CVP); Act of Aug. 26, 1937, ch. 832, 50 Stat. 844 (reauthorizing the construction of the CVP).

263. Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4712-13. Under the tiered system adopted by the CVPIA, irrigation districts in the CVP pay the normal contract rate consisting of capital costs and O & M charges for the first 80% of the districts' contractual supply of water. *Id.* at Stat. 4713. The cost for the next 10% of the districts' contractual water supply will be half-way between the contract rate and full-cost rate. *Id.* All water over 90% of the districts' contractual supply is charged at the full-cost rate. *Id.* The following more stringent version of tiered pricing was also considered for the CVP:

[T]he contract price would have been paid for 60 percent of the water under the contractual entitlement, halfway between the full-cost price and contract price for the next 20 percent, and the full-cost price for deliveries above 80 percent of the contractual entitlement.

Smith & Vaughan, *supra* note 10, at 12.

264. Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4713. *See also* Jahns, *supra* note 133, at 21-23 (discussing the tiered pricing system).

265. 43 U.S.C. § 390bb(3). For a further discussion of full-cost rate, see *supra* note 146 and accompanying text.

conservation.<sup>266</sup> A major problem with tiered pricing is that it is being implemented as a revenue enhancement program rather than a water conservation program.<sup>267</sup> Since most irrigation district farmers are already contributing at or near their maximum potential, tiered pricing is not an effective means to enhance revenue.<sup>268</sup> The implementation of tiered pricing on a national scale would provide very minimal benefit to the federal government while threatening the livelihood of many small family farmers.<sup>269</sup>

If tiered pricing is implemented on a national scale, it will have an adverse effect on the District, since the District would be required to cut back on an already scarce water supply.<sup>270</sup> The District farmers are "presently at or near their ability to pay . . . the existing obligations due under [their] contract with the Bureau."<sup>271</sup> Therefore, a tiered system, along with its full-cost pricing, would place "an unreasonable financial burden on the water users."<sup>272</sup> A tiered pricing or revenue enhancement program could be more effectively implemented on a local rather than national level.<sup>273</sup> A local irrigation district is in a better position to assess its farmers' ability to make the repayments and to implement pricing increases for water conservation purposes.<sup>274</sup>

### C. ACREAGE LIMITATION REVISITED

The new rules and regulations may attempt to utilize the RRA enforcements to return maximum revenues to the United States and to achieve the greatest possible degree of environmental restoration and water conservation.<sup>275</sup> The irrigation districts and farmers may then be subject to further discretionary provisions such as more stringent acreage

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266. Baker, *supra* note 9, at 2. Water saved from conservation measures should be applied as follows:

In case of water savings that the District creates by instituting certain conservation measures, the District wants to be assured that the saved water be made available first to provide adequate supplies to the water users. Historically, the [Belle Fourche] District has averaged only 12 inches allocation of water on the irrigated lands. This is not a sufficient quantity of water for full productivity on the [Belle Fourche] project. We do not foresee water savings to be able to provide additional water outside the project to meet additional fish and wildlife needs. The District is however willing to consider enhancement of the environment around [Orman] dam and within the project itself.

Winterton, *supra* note 246, at 1.

267. Interview with William D. Baker, *supra* note 225.

268. Winterton, *supra* note 246, at 1.

269. Interview with Jim Winterton, *supra* note 46.

270. Winterton, *supra* note 246, at 1.

271. *Id.* at 2.

272. *Id.*

273. Interview with William D. Baker, *supra* note 225.

274. Winterton, *supra* note 246, at 1. Payment increases should be implemented locally within the project. *Id.* The benefit of these increases can be used to improve the financial condition of the district so that conservation measures can be instituted. *Id.* For a further discussion of local irrigation districts' expertise, see *supra* note 262 and accompanying text.

275. Baker, *supra* note 9, at 2. See also Settlement Contract, *supra* note 222, at 2, 3 (setting forth the Secretary of the Interior's promise to explore the use of RRA enforcements). See generally 43 U.S.C. § 390cc (setting forth the conditions which will subject a district to the discretionary provisions of the RRA of 1982).

limitation provisions and additional water conservation rules.<sup>276</sup> Critics of reclamation's current acreage limitation policy argue a loophole exists since Congressional leaders spoke in terms of "farms" and "farming operations," and the Act of 1982 defined the acreage limitation in terms of "landholdings."<sup>277</sup> The new rules and regulations are likely to base the acreage limitation on farm operations, rather than landholdings.<sup>278</sup> By defining farm operation broadly, the acreage limitation may even include individuals with "no economic interest in a crop."<sup>279</sup> If farm operation becomes the basis for the acreage limitation, controversy is likely to arise whether a co-op or individuals sharing equipment will be combined in the determination of the acreage limitation.<sup>280</sup> Under a farm operation-based acreage limitation, "[r]eliance on professional farm management services, equipment sharing, and non-debt financing seem especially likely to trigger

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276. Interview with William D. Baker, *supra* note 225. In the majority of the irrigation district contracts, there is a separate water conservation paragraph. *Id.* The Bureau may attempt to implement any new conservation requirements by simply enforcing the current water conservation paragraph of an irrigation district's contract. *Id.* For a discussion of limitations on the Bureau's authority to implement national programs, see *infra* notes 297-312 and accompanying text.

277. *Water Resources*, *supra* note 158, at 2130. One commentator described the acreage limitation loophole as follows: "Although the rules limit allowable acreage for many farmers, they were met with criticism from members of Congress and their staff, who said the bureau created a major loophole by not placing acreage limitations on farmers operating under 'farm management arrangements.'" *Id.* In 1989, a study by the United States General Accounting Office (GAO) was conducted to examine the implementation of the RRA of 1982. Smith & Vaughan, *supra* note 10, at 11. The committee concluded that Congressional expectations and the actual language of the RRA of 1982 did not coincide. *Id.*

278. Smith & Vaughan, *supra* note 10, at 11. In 1989, the GAO recommended Congress add the following definition of farm or farm operation to the RRA of 1982:

The term 'farm' or 'farm operations' means any landholding or group of landholdings farmed or operated as a unit by an individual, group, entity, trust, or any other combination or arrangement. The existence of a farm or farm operation will be presumed, subject to contrary evidence, when ownership, operation, management, financing or other factors, individually or together, indicate that one or more landholdings are farmed or operate as a unit.

*Id.* The following indicators may help determine which business practices would fall under any newly defined acreage limitations:

- 1) landholdings and farm assets combined as collateral for loans,
- 2) principal owners or lessees agree to cover loan defaults of other principals,
- 3) farm manager or operator bears an economic risk from production and sale of crops,
- 4) same individuals make management decisions for multiple landholdings,
- 5) owners of farm management company that operates small landholdings are same individuals who owned or leased the land before reorganization,
- 6) small landholdings leased from large farm that existed before reorganization,
- 7) same individuals own or lease small landholdings,
- 8) single farm management company operates multiple landholdings,
- 9) crop subsidy records indicate landholdings interrelated,
- 10) small landholdings share equipment or labor, sometimes without charge,
- 11) farm manager or operator acknowledges that small landholdings are operated collectively as one farm.

*Id.* The current acreage limitation is based on landholdings leased and owned. 43 U.S.C. § 390dd. See generally James R. Baarda, *Principles of Farm Enterprise Definition - Some Possible Factors*, 22 S.D. L. REV. 494, 494-518 (1977) (providing an historical commentary on farming operations). For a further discussion of landholdings, see *supra* notes 14-65, 172-77 and accompanying text.

279. Baker, *supra* note 9, at 3.

280. *Id.* Senator Bill Bradley (D-NJ) referred to these legitimate farming practices as mere "paper corporations." *Water Resources*, *supra* note 158, at 2130.

full-cost pricing of water."<sup>281</sup> The reason the farming operation basis is so attractive to the Bureau is that it will stimulate full-cost water rates when the combined acreage of the farm operation exceeds the acreage limitation.<sup>282</sup> The Bureau's best interest includes the repayment of the districts' contractual obligations, preferably at an accelerated rate.<sup>283</sup> However, accelerating the repayments may jeopardize the existence of the family farm, which is contrary to the original intent of the Reclamation Act of 1902.<sup>284</sup>

The recommended definition of farming operation is not only too restrictive but is also impractical.<sup>285</sup> Farming cooperatives, as well as other types of equipment sharing operations, are both legitimate and effective farming tools.<sup>286</sup> A small farmer may be unable to efficiently operate his land without combining his resources with other landowners through equipment and technological sharing operations.<sup>287</sup> Artificial restrictions, such as the recommended definition of farming operation, may actually serve to retard the land's productivity.<sup>288</sup> Once again, by providing more authority to the local districts in the implementation of initial rules and regulations, which would be approved by the Bureau, the districts could effectively police their own projects and develop practical limits for farming operations in order to prevent widespread land speculation.<sup>289</sup>

#### D. CONSEQUENCES OF MISDIRECTED RECLAMATION REFORM

As a result of the water conservation and environmental requirements mandated by the CVPIA, California farmers have suffered.<sup>290</sup> The CVPIA favors environmental values over consumptive values such as irrigation.<sup>291</sup>

281. Smith & Vaughan, *supra* note 10, at 13.

282. Baker, *supra* note 9, at 2-3. For a further discussion of full-cost water rates, see *supra* note 140 and accompanying text.

283. *Id.*

284. See generally Reclamation Act of 1902, *supra* note 1. For a further discussion of the initial intent of the Reclamation Act of 1902 to benefit the family farmer, see *supra* notes 30-34 and accompanying text.

285. Interview with William D. Baker, *supra* note 225.

286. Interview with Jim Winterton, *supra* note 46.

287. Shafer, *supra* note 132, at 666-67. Small farms may not be economically viable and true cost efficiency belongs to the average size (500-1000 acre) operation. *Id.* at 666.

288. *Id.* A decline in food production will most likely result in increased food prices. *Id.*

289. Winterton, *supra* note 253, at 1. The individual districts will most likely suggest that rules and regulations be developed on a local level in order to enable the districts to concentrate on local problems. *Id.* at 3. The following excerpt describes the District's position on changing the existing rules:

One alternative that should be studied is no change in the existing rules. When the Bureau analyzes changes in the rules, they should identify specific reasons and examples of the need for every single proposed change and demonstrate how the changes will cure the problem without undue harm or disruption to water users who are not guilty of any wrongdoings, and describe exactly how the changes will benefit the environment.

*Id.* In order to avoid water shortages and increased water costs, the districts are also likely to propose that minimal or no reclamation reform be implemented on the national level. Interview with William D. Baker, *supra* note 225.

290. Baker, *supra* note 9, at 2-3. The environmental federalization of the CVPIA "presents a mixed bag of benefits and detriments to both the environment and the water allocation process." Weber, *supra* note 227, at 966-67.

291. Weber, *supra* note 227, 966-67. See also *Wildlife: Judge Says State Wildlife Law Applies*

Despite near record rainfall and reservoir supplies, farmers in parts of California have received only fifty percent of their contractual water supplies because the water is being diverted for environmental and municipal purposes.<sup>292</sup>

Large agribusiness, rather than the smaller family farmer, is more likely to survive water transfers and conservation measures since it is able to absorb the additional costs.<sup>293</sup> Favoring the large operator over the smaller family farmer is contrary to the original intent of the Reclamation Act of 1902.<sup>294</sup> Yet, the Bureau intends to propose new rules and regulations for all irrigation districts based on the CVPIA and the ensuing settlement proposals.<sup>295</sup> The Bureau's new rules and regulations are also likely to result in losses to water supplies and increases in water rates for all irrigation districts, if implemented on a national scale.<sup>296</sup> The smaller districts, such as the Belle Fourche Irrigation District, may not be able to adapt to increased water prices or water shortages created by such rules.<sup>297</sup>

#### E. DISREGARD FOR STATE PRIMACY, CONGRESSIONAL INTENT, AND THE FAMILY FARMER

A discussion of the Bureau's authority to impose additional requirements on the irrigation districts through new rules and regulations begins with section eight of the Reclamation Act of 1902.<sup>298</sup> In *California v. United States*,<sup>299</sup> the Supreme Court held section eight "requires the Secretary [of the Interior] to comply with state law in the 'control, appropriation,

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to Federal Dam, BNA (Cal. Daily) (Oct. 28, 1993) (citing Natural Resources Defense Counsel v. Roger Patterson, No. S-88-1658 LKK (E.D. Cal. 1993)) (applying state wildlife law to a federal dam for the first time). Federal and California state officials are required to balance between water releases for irrigation farmers and water releases to restore salmon and trout. *Id.*

292. Baker, *supra* note 9, at 2-3. Water no longer purchased by farmers due to the full-cost water pricing could be reallocated in the following ways: "(1) sold to other project contractors at contract rates; (2) marketed to non-project water users; or (3) reallocated to environmental purposes[.]" Smith & Vaughan, *supra* note 10, at 14. In the Bureau's analysis of its earlier regulations, it predicted the first option. *Id.* The second option is preferred by proponents of water marketing. *Id.* The Beard settlement negotiations "express a preference for the third." *Id.* See generally Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4709-14 (dedicating project water for environmental purposes).

293. Jahns, *supra* note 133, at 21-30. The larger operator is in a better position to absorb the costs since the amount of available water would be sufficiently high to attract the larger purchasers. *Id.*

294. See generally Reclamation Act of 1902, *supra* note 1. For a further discussion of the original intent of the Reclamation Act of 1902, see *supra* notes 30-34 and accompanying text.

295. McDonald, *supra* note 9, at 1.

296. Baker, *supra* note 9, at 2-3. Full-cost water pricing will cause a reduction in agricultural land values in the irrigation districts. Smith & Vaughan, *supra* note 10, at 14.

297. Baker, *supra* note 9, at 3. The District is concerned that environmental programs similar to the CVPIA will be forced upon them with disastrous effects. Winterton, *supra* note 246, at 1, 2. One commentator has predicted, "[A]bsent intervention at the state level, assuming this is still possible . . . it appears that the small family farmer who represented the ideal of the settled American West will finally bite the proverbial dust." Jahns, *supra* note 133, at 21-6.

298. Reclamation Act of 1902, ch. 1093, § 8; 32 Stat. 390 (codified as amended at 43 U.S.C. § 383). State water law shall control the distribution of water for irrigation purposes. *Id.* § 383. For a further discussion of section eight and South Dakota law, see *supra* notes 102-28 and accompanying text.

299. 438 U.S. 645 (1978).

use, or distribution of water' [through a federal reclamation project.]"<sup>300</sup> However, state authority must not be inconsistent with clear congressional intent.<sup>301</sup>

The Bureau cannot force the states and the irrigation districts to adopt a nationwide conservation and environmental program through promulgation of rules and regulations.<sup>302</sup> Reclamation law only provides the Bureau with the authority to "encourage" conservation measures, not the authority to force such measures.<sup>303</sup> Without a Congressional amendment to the existing reclamation law,<sup>304</sup> only the states have the power to implement conservation programs which will effect the "control, appropriation, use, or distribution of water [in federal reclamation projects]."<sup>305</sup>

Existing reclamation law also prevents the Bureau from implementing a tiered pricing system through new rules and regulations.<sup>306</sup> Congress ex-

300. *Id.* at 675 (citing 43 U.S.C. § 383). Justice Rehnquist, writing for the Supreme Court majority, did not overrule the Court's previous holdings in *Ivanhoe* and *City of Fresno*. *Id.* at 672-73. Dictum in both *Ivanhoe* and *City of Fresno* inferred that nothing in section eight compelled the federal government to deliver water on conditions imposed by the state. *Id.* at 673. Justice Rehnquist concluded the prior dictum went "further than was necessary" to decide the two previous cases. *Id.* at 673, 675. The Court further concluded both *Ivanhoe* and *City of Fresno* involved conflicts between section eight and other provisions of Reclamation Acts and should not be narrowly construed to divest states of control. *Id.* at 673. See also Sax, *Federal Reclamation Law*, *supra* note 31, § 41.01 at 401 (acknowledging the states' notable victory in *California*); Jahns, *supra* note 133, at 21-31 through -35 (analyzing *California* and section eight state primacy).

301. *California*, 438 U.S. at 675. The Court determined that the "legislative history of the Reclamation Act of 1902 makes it abundantly clear that Congress intended to defer to the substance, as well as the form, of state water law." *Id.* at 675. See generally Flood Control Act of 1944, ch. 665, § 1, 58 Stat. 888 (establishing that Congress' intent was "to recognize the interests and rights of the States . . ." in water utilization and control); 43 U.S.C. § 666(a) (1988) (subjecting the federal government to state court jurisdiction for general stream adjudications). *But see* Amy K. Kelley, *Staging a Comeback - Section 8 of the Reclamation Act*, 18 U.C. DAVIS L. REV. 97, 117-21 (1984) (criticizing Justice Rehnquist's "selective review of legislative history" in *California*).

302. 43 U.S.C. § 373 (1988), 5 U.S.C. § 552 (1988) (setting forth the general authority of the Secretary of the Interior). One commentator sets forth the following approach for the doctrine of administrative preemption in reclamation law: "When Congress orders the Secretary to make a specific decision, this is a directive that allows preemption of state law. When Congress merely authorizes the Secretary to make general rules and regulations, state law controls." Sax, *Federal Reclamation Law*, *supra* note 31, § 41.04 at 404. Another commentator has set forth that Congress would be required to enact further legislation in order to impose new regulations on all of the irrigation districts. Baker, *supra* note 9, at 2. In order for the proposed rules to affect the District, the Secretary of the Interior will have to propose any rule changes to the President of the United States for submission to Congress. Interview with William D. Baker, *supra* note 225. Congress will then have to specifically authorize additional legislation in order for the proposed rules to apply to all irrigation districts. *Id.* In conclusion, the following quote describes Commissioner Beard's current situation: "[R]umor has it that Commissioner Beard is frustrated because existing laws will not allow him to change the rules and regulations in order to achieve the policies that he has enunciated." Baker II, *supra* note 222, at 1.

303. 43 U.S.C. § 390jj.

304. Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4709-14. Congress has at least partially divested California's control over its irrigation projects. *Id.* However, the CVPIA was a special Act of Congress and it did not divest the other western states of such control. Baker, *supra* note 9, at 1, 2. *But see* Jahns, *supra* note 133, at 21-33 through -35 (exploring whether the CVPIA has created a situation where federal policy leaves the states with no control over water uses).

305. 43 U.S.C. § 383. There is a "consistent thread of purposeful and continued deference to state water law by Congress." *California*, 438 U.S. at 653.

306. 43 U.S.C. § 390mm(c), § 390jj (1988). See also *Id.* § 390ee (providing for the delivery of water at full-cost only for excess land); *Id.* § 390hh (requiring that O & M charges be recovered



plicitly sets forth:

Nothing in [the RRA of 1982] shall be construed as authorizing or permitting lump sum or accelerated repayment of construction costs, except in the case of a repayment contract which is in effect upon Oct. 12, 1982, and which provides for such lump sum or accelerated repayment by an individual or district.<sup>307</sup>

The adoption of a tiered pricing system will require a Congressional amendment since it is being implemented to gradually increase the construction contract repayments and as part of a conservation program.<sup>308</sup>

As with a national water conservation program and tiered pricing, existing reclamation law precludes the Bureau from redefining the excess land limitations based on farming operations.<sup>309</sup> The RRA of 1982 clearly and explicitly defined the acreage limitation in terms of landholdings based on owned and leased acreage.<sup>310</sup> The Bureau does not have the authority through the rule-making process to override express statutory laws; “[t]he short answer is that Congress did not write the statute that way.”<sup>311</sup>

## V. CONCLUSION

The Belle Fourche Valley has remained relatively unchanged during the past thirty years and the failure to attract new industry to the Belle Fourche Valley indicates that “[f]arming, including dryfarmed and irrigated crops, and livestock ranching and industries to support those activities will remain, as they have been since the frontier era, keys to life in the Belle Fourche Valley.”<sup>312</sup> The fate of the farmers in the Belle Fourche Irrigation District may very well be decided by the new rules and regulations steaming from the *Beard* settlement negotiations. Absent intervention by the states, irrigation districts, and farmers to protect their respective property rights, the family farmer in the Belle Fourche Valley may wither and die.

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without mention of tiered pricing system); *Id.* §§ 485(a)-(k) (providing no statutory language for implementation of tiered pricing).

307. *Id.* § 390mm(c).

308. *Id.* §§ 390mm(c), 390jj. The Act of 1992 specifically provided for the implementation of a tiered pricing system in California. Central Valley Project Improvement Act, Pub. L. No. 102-575, 106 Stat. 4712-13 (1992).

309. 43 U.S.C. § 373, 5 U.S.C. § 552.

310. 43 U.S.C. § 390bb(6). *See generally* *Id.* § 390dd (setting forth limitations on land ownership in an irrigation district); *Id.* § 390ii (requiring disposition of excess land).

311. *United States v. Naftalin*, 441 U.S. 768, 773 (1979) (describing how to interpret Congressional intent).

312. KELLER ET AL., *supra* note 14, at 38-39.