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The Rainbow Bridge Case and Reclamation Projects in Reserved Areas

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THE RAINBOW BRIDGE CASE AND RECLAMATION PROJECTS IN RESERVED AREAS*

Friends of the Earth v. Armstrong[1] was an action against the Commissioner of the Bureau of Reclamation and the Secretary of the Interior to compel them to limit the surface level of Lake Powell behind the Glen Canyon Dam so as to avoid encroaching on Rainbow Bridge National Monument.[2] The United States District Court for the District of Utah granted the plaintiffs' motion for summary judgment and issued the injunction prayed for.[3] The Tenth Circuit reversed,[4] and the Supreme Court denied certiorari.[5]

It is the purpose of this comment to advance and test the thesis that an invasion of a reserved area by a reclamation project will be permitted by Congress when two or more projects threatening to invade different reserved areas are proposed to Congress simultaneously. The politics of reclamation are complex,[6] and the structural element focused on here will be just one of a number of considerations in the tactical assessment of future reclamation proposals. The holding of the *Rainbow Bridge* case and its impact as a political precedent will be analyzed in the course of testing this thesis against the several reclamation controversies involving reserved areas that have concerned the federal government since the turn of the century.

MULTIPLE-PROJECT CONTROVERSIES

There have been two multiple-project controversies against which the thesis can be tested. The first such controversy involved the

*For the purposes of this comment "reserved areas" include national parks, national monuments, and wilderness areas. Compare the definitions of the National Park System at 16 U.S.C. § 1c (1960) and the National Wilderness Preservation System at 16 U.S.C. §§ 1131(a), (c), 1132 (Supp. 1974).

1. 485 F.2d 1 (10th Cir. 1973).

2. Rainbow Bridge National Monument was created by Presidential Proclamation of May 30, 1910, 36 Stat. 2703, pursuant to the Antiquities Act of 1906, 34 Stat. 225, § 2 (codified at 16 U.S.C. § 431,(1960)). A description of Rainbow Bridge can be found in the district court opinion, Friends of the Earth v. Armstrong, 360 F. Supp. 165, 169-177 (D.C. Utah 1973).

3. 360 F. Supp. 165, at 194 (D.C. Utah 1973).

4. 485 F.2d 1 (10th Cir. 1973).

5. Friends of the Earth v. Stamm, 414 U.S. 1171 (1974).

6. *See, e.g.*, H. Ingram, Patterns of Politics in Water Resource Development: A Case Study of New Mexico's Role in the Colorado River Basin Bill (1969); O. Stratton & P.

Colorado River Storage Act[7] of 1956 which resulted in the flooding of Rainbow Bridge National Monument. The second involved the Colorado River Basin Project Act[8] of 1968 which authorized a reservoir in the Gila Wilderness.

A. Rainbow Bridge

The Colorado River Storage Act of 1956 authorized Glen Canyon Dam. The maximum level of the reservoir to be created by the dam was such that with the reservoir at full capacity the water would be well within Rainbow Bridge National Monument and about 48 feet deep under Rainbow Bridge itself, but still some twenty-five feet below the actual base of the bridge.[9] The initial Report of 1950[10] for the development of the Upper Colorado River Basin, which was circulated by the Bureau of Reclamation[11] after a decade of study, proposed the eventual construction of ten major dams on the Colorado and its major tributaries, the San Juan, the Gunnison, the Yampa, and the Green.[12] In particular, the Bureau proposed the construction on the Green River of the Echo Park Dam which would flood a significant part of Dinosaur National Monument.[13] Ultimately, the Bureau and the Department of the Interior recommended only Glen Canyon and Echo Park to Congress for construction in the initial phase of development.[14]

Both Glen Canyon Dam and Echo Park Dam threatened national monuments, but the opposition to Echo Park was the great battle of the time. Echo Park was strongly endorsed by the Bureau for the reason that it was second only to Glen Canyon in its power production capability. It would therefore be important in meeting the Bureau's schedules for repayment of construction costs.[15] The other

Sirotkin, The Echo Park Controversy (1959); W. Warne, The Bureau of Reclamation (1973); *and* R. Berkman & W. Viscusi, eds., Damming the West (1973).

7. Act of April 11, 1956, Pub. L. No. 84-485, 70 Stat. 105 (codified at 43 U.S.C. §§ 620, 620a, 620b, 620d, 620e-620o (1964).

8. Act of Sept. 30, 1968, Pub. L. No. 90-537, 82 Stat. 885 (codified in scattered sections of 43 U.S.C.).

9. *See* 485 F.2d at 3; notes 28-31, *infra*, and accompanying text.

10. Bureau of Reclamation, Colorado River Storage Project and Participating Projects (1950), *printed in* H.R. Doc. No. 364, 83d Cong., 2d Sess. 59-290 (1954) [hereinafter cited as 1950 Report].

11. Descriptions of the Bureau of Reclamation can be found in Warne, *supra* note 6; Berkman & Viscusi, *supra* note 6; and Stratton & Sirotkin, *supra* note 6, at 9-12.

12. 1950 Report, "Report of the Regional Director," at 3-9.

13. *Id.; see id.*, "Statement of the National Park Service," at 37-43. Dinosaur National Monument was created by Presidential Proclamation of Oct. 4, 1915, 39 Stat. 1752, and was enlarged by Presidential Proclamation of July 14, 1938, 53 Stat. 2454.

14. H.R. Rep. No. 1087, 84th Cong., 2d Sess. 20 (1956), *printed in* 1956 U.S. Code Cong. & Ad. News 2346, 2365.

15. Stratton & Sirotkin, *supra* note 6, at 27, 31, 32.

advantages of Echo Park included its large storage capacity, second again only to Glen Canyon, and its capability for regulating river flow to increase power production downstream.[16] Utah strongly supported Echo Park because it was the only way for Utah to obtain the 500,000 acre feet of water allocated to it annually under the Upper Colorado River Compact of 1948.[17]

Echo Park was opposed by the National Park Service and a coalition of more than thirty conservation organizations because of the considerable impairment to the monument that would result and because of the danger of setting a precedent for the exploitation of the National Park System.[18] In addition, there was broad-based opposition to the whole Report of 1950, including Glen Canyon, because of the interest-free financing of the irrigation components of the plan.[19] California opposed the whole plan in order to protect the quantity and quality of its Colorado River water and its sources of hydroelectric power at Hoover and other Lower Basin dams.[20] In contrast, everyone appears to have been convinced by the Bureau's assurances that protection of Rainbow Bridge National Monument would be simple and inexpensive and would be undertaken as an integral part of the Glen Canyon project.[21] Consequently, Glen Canyon was authorized and Echo Park was not.[22]

The question before the courts in *Friends of the Earth v. Armstrong* was not whether Lake Powell would damage Rainbow Bridge, but whether Congress had made a decision to allow the reservoir to come up under the bridge.[23] Section 3 of the Storage Act reads as follows: "It is the intention of Congress that no dam or reservoir constructed under the authorization of this Act shall be within any national park or monument."[24] Invoking the plain meaning rule of statutory interpretation,[25] the plaintiffs alleged that this section was being violated by the Commissioner of the Bureau of Reclamation and the Secretary of the Interior and that those officials should be

16. *Id.* at 6, 27, 31, 32.

17. *Id.* at 27, 34, 35. The Upper Colorado River Compact is set out at 63 Stat. 31. The Upper Basin states are Wyoming, Utah, Colorado, and New Mexico. The dividing point between upper and lower basins is Lee Ferry, Arizona.

18. Stratton & Sirotkin, *supra* note 6, at 16-23, 36-40.

19. *Id.* at 32-34, 79-85.

20. *Id.* at 86-91.

21. *Hearings on H.R. 270, H.R. 2836, H.R. 3383, H.R. 3384, & H.R. 4484 Before the Subcomm. on Irrigation & Reclamation of the House Comm. on Interior & Insular Affairs*, 84th Cong., 1st Sess., ser. 4, pt. 1, at 304-308 (1955). *See* Brower, *supra* note 90.

22. 70 Stat. 106, 43 U.S.C. § 620 (1964).

23. Brief for Appellants at 2, Brief for Appellees at 2, Friends of the Earth v. Armstrong, 485 F.2d 1 (1973); 485 F.2d at 2.

24. 70 Stat. 107, 43 U.S.C. § 620b (1964).

25. Brief for Appellees, *supra* note 23, at 20.

enjoined therefrom. Arguing by syllogism, they pointed to the facts that Lake Powell is a "reservoir constructed under the authorization of the Act" and that Rainbow Bridge and the surrounding 160 acres are a national monument. Therefore, it was argued, the federal defendants were violating the intent of Congress declared in section 3.[26]

The plain meaning rule, however, should not force the court to put on blinders. As Justice Cardozo once wrote, "the meaning of a statute is to be looked for, not in any single section, but in all the parts together and in their relation to the end view."[27] The "end view" of the 1956 Act was the construction and operation of Glen Canyon Dam and participating reclamation projects.[28] If this is true, what meaning did the term "Glen Canyon Dam" have in Congress at that time? This question is answered readily by the Report of 1950 and the committee reports which show clearly that Glen Canyon Dam was to be a 700-foot concrete barrier on the Colorado River fifteen miles downstream from the Arizona-Utah border.[29] A 700-foot dam at Glen Canyon would create a reservoir that would partially flood the monument.[30] The continual Congressional appropriations during the years of construction demonstrate that the end view remained unchanged throughout.[31]

Thus, there is an apparent conflict between the authorization of the 700-foot dam, the natural consequence of which would be to back water into Rainbow Bridge National Monument, and the declaration in section 3 of the Act that Congress intended that no reservoir should enter a national monument. In order to resolve this apparent conflict and to carry out fully Justice Cardozo's advice it is necessary to refer to the following language in section 1: *Provided further,* That as part of the Glen Canyon Unit the Secretary of the Interior shall take adequate protective measures to preclude impairment of the Rainbow Bridge National Monument."[32] At the time the foregoing language was enacted Congress had before it the proposal of

26. *Id.* at 19-58.

27. Panama Refining Co. v. Ryan, 293 U.S. 388, 439 (1934) (dissenting opinion).

28. This is clear from reading the entire Act, 70 Stat. 105-111. The express purposes of the act are set out in the text accompanying note 46, *infra.* The committee reports, *e.g.*, H.R. Rep. No. 1087, *supra* note 14, are in accord.

29. 1950 Report, "Substantiating Materials," at 49; H.R. Rep. No. 1087, *supra* note 13, at 9; 1956 U.S. Code Cong. & Ad. News at 2352.

30. *See* 1950 Report, "Substantiating Materials," at 49 *and id.*, "Statement of the National Park Service," at 9-11.

31. The yearly appropriations from 1956 through 1959 can be found at 70 Stat. 474, at 477; 71 Stat. 415, at 420; 72 Stat. 50, at 58; 72 Stat. 1572, at 1576; and 73 Stat. 491, at 496. See note 48, *infra,* for appropriations after 1959.

32. 70 Stat. 106, 43 U.S.C. § 620 (1964).

the Bureau of Reclamation to build a barrier dam below the monument to prevent the reservoir waters from entering the area. Such a solution was possible because the water would be contained in the narrow canyon leading to the bridge.[33] To take care of the flow of flash floods down the canyon spanned by the rainbow a second dam above the monument with a diversion tunnel to direct the flow into a neighboring canyon was contemplated.[34] In 1956 it was estimated that the protective works would cost at most four million dollars.[35] Final plans for the protective works had not been formulated, however, at the time of the passage of the Act.[36]

Thus, the protective works alluded to in the proviso of section 1 would make compatible the 700-foot dam at Glen Canyon and the declaration of congressonal intent in section 3 that no reservoir, namely, Lake Powell, should enter a national monument, namely, Rainbow Bridge. In short, a comprehensive reading of the statute itself, with reference to the committee reports only to explain the bald terms of the statute, dictates the conclusion that Congress included the general intention language of section 3 upon the assumption that Lake Powell water would be kept out of Rainbow Bridge National Monument by a barrier dam. There is no indication that Congress entertained the possibility that the level of Lake Powell would be held below the design level of Glen Canyon Dam in order to comply with section 3: the water would be kept out by protective works or not at all. The total capacity of the lake, with the waters under Rainbow Bridge, is estimated to be 27,000,000 acre feet.[37] The capacity with the waters at the level of the lower boundary of the monument is about 12,751,000 acre feet,[38] or approximately 47 percent of total capacity. With the water at the lower level, many industrial, municipal, and private water consumers would be deprived of water already contracted to them.[39]

In addition, the feasibility of the financing system incorporated in the 1956 act was not such as would allow Glen Canyon to operate at half capacity. The revenues derived from the sale of electrical power generated by the turbines in the dam were to defray much of the

33. For a description of the bridge and the surrounding area, see the district court opinion, *supra* note 3, at 169-177.

34. *Hearings, supra* note 21, at 305.

35. *Id.* at 306.

36. *Id.*

37. 485 F.2d at 4.

38. In normal years, another million acre feet would have to be discharged to ensure that the spring run-off would not cause the reservoir to enter the monument. 485 F.2d at 4, 10.

39. Interview with Paul Bloom, Counsel to the New Mexico State Engineer and to the New Mexico Interstate Stream Comm'n., in Santa Fe, N.M., Sept. 18, 1973.

cost of its own construction[40] and operation as well as that of the participating projects.[41] The amount of power generated by the turbines, however, depends on the head of water behind the dam.[42] The head of water would be reduced 94 feet to meet the limiation proposed by the plaintiffs.[43] Why build it to its projected height of 700 feet if there were a foreseeable possibility that it would be only half-used? The courts must assume that Congress has acted reasonably.[44]

Holding down the water level would also appear to contravene other provisions of the 1956 Act. Section 7 requires that the hydroelectric powerplants be operated "so as to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates."[45] And operation at half capacity would impair the attainment of the purposes of the Act stated in section 1:

> That, in order to initiate the comprehensive development of the water resources of the Upper Colorado River Basin, for the purposes, among others, of regulating the flow of the Colorado River, storing for beneficial consumptive use, making it possible for the States of the Upper Basin to utilize, consistently with the provisions of the Colorado River Compact the apportionments made to and among them in the Colorado River Compact and the Upper Colorado River Basin Compact, respectively, providing for the reclamation of arid and semiarid land, for the control of floods, and for the generation of hydroelectric power, as an incident of the foregoing purposes, the Secretary of the Interior is hereby authorized . . .[46]

And finally, section 13 expresses the objective of attaining "the fullest practicable use of the waters of the Upper Colorado River system."[47]

40. The dam was projected to cost $421,270,000. H.R. Rep. No. 1087, *supra* note 14, at 14; 1956 U.S. Code Cong. & Ad. News at 2358.

41. 70 Stat. 107, 43 U.S.C. § 620d (1964); 1956 U.S. Code Cong. & Ad. News at 2354-2359, 2376-2386, 2396-2406, 2423; Stratton & Sirotkin, *supra* note 6, at 31-34, 79-85.

42. *See* 485 F.2d at 10; Stratton & Sirotkin, *supra* note 6, at 27.

43. The maximum height of the reservoir above sea level is 3700 ft. The lower boundary of the monument is at 3606 ft. 485 F.2d at 3.

44. See the cases in which the courts have construed statutes so as to make them constitutional because to do otherwise would be to assume unreasonable action on the part of congress: *e.g.*, Crowell v. Benson, 285 U.S. 22, 62 (1932), Ashwander v. T.V.A., 297 U.S. 288, 348 (1936) (Brandeis, J., concurring).

45. 70 Stat. 109, 43 U.S.C. § 620f (1964).

46. 70 Stat. 106, 43 U.S.C. § 620 (1964). Section 14 directs the Secretary to comply with the provisions of the Colorado River Compact. The compact is set out at 70 Cong. Rec. 324, 325 (1928).

47. The section reads in full:

> In planning the use of, and in using credits from, net power revenues available for the purpose of assisting in the pay-out costs of participating projects herein

Consequently, Congress was in effect saying that water would be allowed to flood the canyon beneath Rainbow Bridge when it began to incorporate the following proviso into appropriations acts beginning with fiscal year 1961: "*Provided,* That no part of the funds herein appropriated shall be available for construction or operation of facilities to prevent waters of Lake Powell from entering any national monument."[48] Construction of the dam to its full 700-foot height was well along at the time the first proviso was enacted.[49] The proviso was apparently the result primarily of two facts which had come to light after the passage of the 1956 Act: (1) water standing beneath Rainbow Bridge would not damage it structurally,[50] and (2) the cost of protective works would be approximately $20 million, a tremendous increase above the original estimate of not more than four million dollars.[51]

In sum, the 1956 Act appears to have tentatively authorized the exclusion of the waters of Lake Powell by means of protective works, if at all, and not by limiting the level of the reservoir to half capacity. Consequently, when Congress enacted the appropriations provisos, it was making a conscious decision to flood the monument, and one must conclude that the Tenth Circuit was correct in its judgment. The court went to unnecessary lengths beyond the foregoing considerations, however. The 1956 Act, the appropriations provisos, and the committee reports are sufficient to dispose of the issue; there was no need to rely on collateral references in a later act of Congress indicating an assumption that Glen Canyon would be operated at full capacity.[52]

Exception must be taken to the court's opinion for its failure to take up a strong argument made by the plaintiffs. They pointed out

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and hereafter authorized in the States of Colorado, New Mexico, Utah, and Wyoming, the Secretary shall have regard for the achievement within each of said States of the fullest practicable use of the waters of the Upper Colorado River System, consistent with the apportionment thereof among such States.

70 Stat. 110, 43 U.S.C. § 620ℓ (1964).

48. The appropriations provisos can be found at 74 Stat. 743, at 747; 75 Stat. 722, at 726; 76 Stat. 1216, at 1221; 77 Stat. 844, at 849; 78 Stat. 682, at 687; 79 Stat. 1096, at 1102; 80 Stat. 1002, at 1008; 81 Stat. 471, at 476; 82 Stat. 705, at 710; 83 Stat. 323, at 339; 84 Stat. 890, at 896; 85 Stat. 365, at 369; 86 Stat. 621, at 625. On the issue of implied repeal of substantive legislation by means of appropriations acts, see 54 B. U. L. Rev. 457 (1974).

49. *See* 485 F.2d at 3.

50. H.R. Rep. No. 1634, 86 Cong., 2d Sess. 31 (1960).

51. *Id.;* S. Rep. No. 1097, 87th Cong., 1st Sess. 35 (1961).

52. *See* 485 F.2d at 5, 11. There is no doubt, however, that later acts of Congress can be relevant to the determination of congressional intent in an earlier act. *See* New York, P. & N. R.R. v. Peninsula Produce Exch., 240 U.S. 34, 39 (1916); Glidden v. Zdanok, 370 U.S. 530, 541 (1962).

that Congress had refused to repeal expressly the crucial language of sections 1 and 3, although amendments to that effect had been urged on the Congress eight different times.[53] They argued, with precedent,[54] that this legislative history demonstrated congressional intent to retain section 3 in full force.[55] Surprisingly, the court chose not to deal with this argument.

In addition, the court directed the district court to retain jurisdiction of the matter for ten years to allow the plaintiffs to seek further relief should structural damage to the bridge appear or should the water levels exceed those assumed by Congress.[56] By so doing, the Tenth Circuit is encroaching upon the prerogatives of Congress. If the scientific information upon which Congress based its actions turns out to be wrong, it is for Congress, and not the district court, to decide what adjustments must be made. By its action the court has also changed the focus of the issue from the protection of the whole monument (as it was in the 1956 Act) to the protection of the bridge itself. This is unjustified in view of the narrow question presented to the court.[57]

B. The Gila Wilderness

In addition to the 1956 Colorado River Storage Act, there has been one other act of Congress which has authorized the violation of a reserved area as a result of a multiple-project proposal. That was the Colorado River Basin Project Act[58] of 1968, the result of the celebrated attempt by Arizona and the Bureau of Reclamation to dam the Grand Canyon.[59]

The 1968 Project Act created the Central Arizona Project (CAP), capping twenty years of effort by its proponents.[60] The core of the CAP is the Granite Reef Aqueduct through which water is to be transported from Lake Havasu on the Colorado River behind Parker

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53. S. 3180, 86th Cong., 2d Sess. (1960); S. 175, 87th Cong., 1st Sess. (1961); S. 1188, 87th Cong., 1st Sess. (1961); S. 333, 88th Cong., 1st Sess. (1963); S. 1555, 90th Cong., 1st Sess. (1967); S. 307, 91st Cong., 1st Sess. (1969); S. 1057, 93d Cong., 1st Sess. (1973); H.R. 6255, 93 Cong., 1st Sess. (1973).

54. Georgia v. Pennsylvania, 324 U.S. 439, 457 (1944), *cited by the district court at* 360 F. Supp. at 190. *Compare* 1973 Utah L. Rev. 808, 818 (1974) *with* 54 B. U. L. Rev. 457, 461 n.32 (1974).

55. Brief for Appellees, *supra* note 23, at 31, 32.

56. 485 F.2d at 12.

57. 485 F.2d at 13, 14 (dissenting opinion). *See* text accompanying note 23, *supra.*

58. Act of Sept. 30, 1968, Pub. L. No. 90-537, 82 Stat. 885 (codified in scattered sections of 43 U.S.C.).

59. *See generally* Ingram, *supra* note 6; *and* Berkman & Viscusi, *supra* note 6, at 105-130.

60. Ingram, *supra* note 6, at 20, 21; Berkman & Viscusi, *supra* note 6, at 108-111.

Dam up to Phoenix and Tucson on the Central Arizona Plateau. The water will be raised 900 feet above Lake Havasu by pumps. The power to operate the pumps was to be generated by two dams on the Colorado River. One was to be at Bridge Canyon downstream of Grand Canyon National Park (Hualapai), and the other was to be at Marble Gorge in the stretch between the Grand Canyon and the Glen Canyon Dam. The water behind these dams was not intended for industrial or agricultural uses. The sole purpose of the dams was to provide electrical power for the pumps and to provide revenue to offset the cost of the project.[61] These dams were ultimately dropped from the bill in the face of intense opposition by the Sierra Club and other organizations.[62]

Although Congress dropped the Grand Canyon dams from the Project Act, it nevertheless authorized Hooker Dam (or suitable alternative) on the Gila River in southwestern New Mexico.[63] Hooker Dam was not proposed by the backers of the CAP. It was proposed by New Mexico to make it possible for that state to utilize its allotment of water on the upper Gila.[64] The project will also provide flood control and recreation.[65]

A dam at the Hooker site would cause the first invasion of a wilderness area by a reservoir since the enactment of the Wilderness Act.[66] The reservoir, at full capacity, would inundate land in the Gila Primitive Area and would back water through the Gila Gorge seven to nine miles into the Gila Wilderness.[67] The Gila was the first wilderness area in the United States, established at the urging of Aldo Leopold by administrative action in 1924.[68] It was incorporated into the National Wilderness Preservation System by the Wilderness

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61. Berkman & Viscusi, *supra* note 6, at 117, 118.

62. Ingram, *supra* note 6, at 29-36. The power to operate the pumps is now to come from the Navajo Power Plant which is being constructed at Page, Arizona, not far from the Glen Canyon Dam. The plan is to use coal strip mined on the Hopi Indian Reservation. Berkman & Viscusi, *supra* note 6, at 118. On Jan. 20, 1969, the day before he left office, President Johnson created the Marble Canyon National Monument where the Marble Gorge Dam would have been built. Proclamation 3889, 3 C.F.R. 390 (Supp. 1971), 83 Stat. 924.

63. 82 Stat. 888, 43 U.S.C. § 1521(a)(4) (Supp. 1974).

64. The dam was necessary in order to accommodate the water, in addition to that allocated to New Mexico by the Supreme Court in Arizona v. California, 376 U.S. 340 (1964), which Arizona had unwillingly given up to New Mexico in order to obtain Senator Anderson's support for the whole CAP package. *See* Ingram, *supra* note 6, at 57-69.

65. Ingram, *supra* note 6, at 1.

66. *Id.* at 70.

67. *Id.* The Hooker Site itself is downstream of the wilderness area. *Id.* at 73.

68. Set aside by order of the Chief of Lands and the Chief of Forest Management, Southwestern Region, U.S. Forest Service (June 3, 1924). *See* S. Udall, The Quiet Crisis 154 (1963).

Act.[69] It contains approximately 434,000 acres,[70] 134 acres of which would be inundated by the reservoir.[71]

The conservationist opposition to the dam was subdued in comparison with the fight over the Grand Canyon. The Sierra Club, in order not to upset their recent victories on the Colorado, was willing to accept compromise on the Gila.[72] The Wilderness Society, whose primary purpose is to portect and enlarge the wilderness system, was quite concerned, however.[73] Their strategy was to present alternaatives to the Hooker site that would not violate the wilderness.[74] Their efforts, although less than completely successful, resulted in the modification of the authorization to read, "Hooker Dam and Reservoir or suitable alternative."[75] If Hooker is built, it will be the second time that an invasion of a reserved area will have been permitted by Congress when two projects threatening to invade different reserved areas were proposed simultaneously.[76]

SINGLE-PROJECT CONTROVERSIES

The first attempt to construct a dam and reservoir in a national park came just after the turn of the century. It involved the Hetch Hetchy Valley in Yosemite National Park. The city of San Francisco, desiring a new source of power and water, proposed to dam the Tuolumne River and flood the floor of Hetch Hetchy.

The proposal put at odds the two great conservationists of the time: Gifford Pinchot and John Muir. Pinchot, with the help of President Theodore Roosevelt, had put a halt to much of the wholesale ravaging of the nation's forests by the timber barons and their congressional allies.[77] He was not a purist, however. He fought for sustained-yield forestry; to him, untrammeled wilderness was a form of waste.[78] At hearings on the Hetch Hetchy bill he said:

> As we all know, there is no use of water that is higher than the domestic use . . . the fundamental principle of the whole conserva-

69. *See* 16 U.S.C. § 1132(a) (Supp. 1974).

70. *See* Southwestern Region, U.S. Forest Service, Wildernesses in Southwestern National Forests 4 (1974). The adjacent Gila and Black Range Primitive Areas bring the total close to 734,000 acres. *Id.* at 4, 5.

71. Letter from Clinton P. Anderson to Henry Zeller, May 31, 1967, *printed in* Ingram, *supra* note 6, at 80.

72. *See* Ingram, *supra* note 6, at 70-75, 82-85.

73. *Id.* at 71.

74. *Id.*

75. 82 Stat. 888, 43 U.S.C. § 1521(a)(4) (Supp. 1974).

76. In addition to the presence of water in the wilderness, the recreational uses of the reservoir may create problems. The Forest Service will have difficulty enforcing its regulations against motorboats in wilderness areas. *See* 36 C.F.R. § 293.6 (1973).

77. *See* Udall, *supra* note 68, at 97-108.

78. *Id.* at 119, 120.

> tion policy is that of use—to take every part of the land and its resources and put it to that use in which it will best serve the most people . . .[79]

Muir, on the other hand, was a purist. Although he recognized the need of the country for natural resources, his highest priority was to preserve the finest areas:

> These temple destroyers, devotees of ravaging commercialism, seem to have a perfect contempt for Nature, and, instead of lifting their eyes to the God of the Mountains, lift them to the Almighty Dollar.
>
> Dam Hetch Hetchy! As well dam for water tanks the people's cathedrals and churches, for no holier temple has ever been consecrated by the heart of man.

Yosemite was the first scenic reserve created by federal action.[81] At the urging of Horace Greeley and Frederick Law Olmstead[82] Congress had ceded Yosemite Valley to the State of California in 1864, "for public use, resort, and recreation [and] shall be inalienable for all time."[83] Subsequently, Muir had persuaded Congress to create Yosemite National Park surrounding the valley.[84] Thereafter, Muir and the newly-established Sierra Club set out to make the state-owned valley part of the national park. This was accomplished in 1906.[85] The decade of battle over Hetch Hetchy, however, ended in victory for the reclamationists,[86] resulting in the first and, so far, the last dam and reservoir to be constructed in a national park.

Three years after the authorization of Hetch Hetchy, the National Park Service was created;[87] and shortly thereafter, in 1920, farming interests in Idaho proposed to build at their own expense a series of

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79. *Hearings on H.R. 7207 Before the House Public Lands Comm.*, 63d Cong., 1st Sess. (1913), *reprinted at* 50 Cong. Rec. 3895 (1913).

80. Udall, *supra* note 68, at 121.

81. *Id.* at 112.

82. Council on Environmental Quality, Third Annual Report 313 (1972).

83. Act of June 30, 1864, ch. 184, § 1, 13 Stat. 325 (codified at 16 U.S.C. § 48 (1960).

84. Act of Oct. 1, 1890, ch. 1263, 26 Stat. 650 (codified at 16 U.S.C. § § 55, 61, 471c, 471d (1960)). *See* Udall, *supra* note 68, at 113-116.

85. Act of June 11, 1906, Res. 27, 34 Stat. 831 (codified at 16 U.S.C. § § 47, 48 (1960)).

86. Act of Dec. 19, 1913, ch. 41, 38 Stat. 242.

87. Act of Aug. 25, 1916, ch. 408, § 1, 39 Stat. 535 (codified at 16 U.S.C. § 1 (1960)): The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

dams in the southwestern part of Yellowstone National Park.[88] The park at that time had been in existence for almost a half century. President Grant signed the act making it the first national park in 1872.[89] Proponents of the bill granting the easments necessary to construct and maintain the dams and irrigation works described the proposed reservoir area as 8,000 acres near the center of a 100,000 acre swamp.[90] But Stephen Mather, the first director of the National Park Service, and Horace Albright, Superintendent of Yellowstone, vigorously opposed the bill.[91] After passing the Senate, it was defeated in the House.[92]

CONCLUSION

The Rainbow Bridge and Gila Wilderness experiences bear out empirically the thesis that an invasion of a reserved area by a reclamation project will be permitted by Congress when two or more projects threatening to invade different reserved areas are proposed simultaneously. In such situations the projects may, and often will be, proposed by different interest groups.

More than two tests are needed, of course, to provide statistical certainty that the thesis is valid. It is necessary, therefore, to examine the circumstances of each controversy that supports the thesis to determine how strongly each supports it. The Rainbow Bridge controversy itself does not give strong support to the thesis because it does not appear to signal a reversal of the long-standing national policy against such violations of the national park system,[93] even when such violations are proposed simultaneously with proposals of other violations.

The decision to flood Rainbow Bridge National Monument was made by Congress when its choices were severely limited. Construction of Glen Canyon Dam began in 1956[94] and was well along by the time the decision not to build the protective works was made in 1960.[95] The dam was already there. An enormous commitment had

88. *See* 59 Cong. Rec. 5234, 5235, 5856-5861 (1920); Third Annual Report, *supra* note 82, at 319.

89. Act of March 1, 1872, ch. 24, 17 Stat. 32 (codified at 16 U.S.C. § 21 (1960)).

90. 59 Cong. Rec. 5856 (1920) (Rep. Smith of Idaho).

91. Third Annual Report, *supra* note 75, at 319. *But see* 59 Cong. Rec. 5857 (1920). The bills were S. 3895 & H.R. 12466, 66th Cong., 2d Sess. (1920). The text of S. 3895 is set out at 59 Cong. Rec. 5235 (1920).

92. 59 Cong. Rec. 5235 (1920); Third Annual Report, *supra* note 82, at 319.

93. *See, e.g.*, 16 U.S.C. § 1, *supra* note 87. Hetch Hetchy is, of course, the one other exception to that policy.

94. The initial dynamite blast was detonated by remote control by President Eisenhower on October 15, 1956. Stratton & Sirotkin, *supra* note 6, at 95, 96.

95. *See* 485 F.2d at 3.

already been made. And what was to be lost? As far as Congress knew, there would be no structural damage to the bridge. Because they were no longer at the planning stage, the question was no longer merely whether a national monument should be invaded as opposed to other means of meeting projected water and power needs. Three courses of action were open to Congress at that late date: (1) flood the monument, (2) build protective works around the monument, or (3) limit the level of the reservoir. That Congress did not choose either of the last two courses was predictable given (1) the fivefold increase of the estimated price tag on the protective works to $20 million, (2) the environmental damage that construction of the protective works would entail, (3) the unchallenged geological findings that the water would not endanger the structural integrity of the bridge, (4) the considerable expenditures already made at Glen Canyon, and (5) the considerable reliance even then on the projected water and power supplies.

It is a further indication that the invasion of Rainbow Bridge National Monument is a minor exception rather than the harbinger of a new trend in National Park System policy that Congress has refused to repeal the general policy language of section 3 of the 1956 Storage Act despite many attempts over the years to do so.[96]

In addition, if the conservationists in the early 1950's had handled their opposition differently, water might not have been allowed to flood the monument. Timing is very crucial in the development of the coalitions necessary to push reclamation legislation through Congress,[97] so they might have done well to stop passage completely, at least until reliable facts and figures could be developed on protective works.[98] Indeed, it was imperative that the satisfaction of the demands of the conservationists not be delayed until great commitments weighed against them.

Initially, the authorization of Hooker Dam or suitable alternative may also seen to give only weak support to the thesis in view of the facts that there is some possibility that the dam will not be built at

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96. *See* note 53, *supra.*

97. *See* Ingram, *supra* note 6, at 66.

98. See text accompanying note 36, *supra.* The general opinion among environmentalists today seems to be that the bill should have been stopped completely. David Brower, executive director of the Sierra Club has subsequently lamented:

> The conservationists' last chance vanished when the alliance against the Colorado River Storage Project dissolved in ignorance, false assumption, and in naivete—ignorance about the beauty of the place, false assumption about the necessity of the dam, and futile hope that the Bureau of Reclamation would honor an agreement not to impair the National Park System.

Brower, *Foreword* to F. Leydet, Time and the River Flowing: Grand Canyon at 5 (1964).

the Hooker site,[99] and even it if is built there, the reservoir will inundate only .03 percent of the acreage in the Gila Wilderness. Other facts, however, show that it is a relatively strong precedent. The mitigating circumstances surrounding the Rainbow Bridge decision in Congress were not present in the Gila controversy. It was clear at the time of authorization, in view of the compromises agreed to, that the dam would probably be built at the Hooker site, and that if it were, the reservoir would violate the wilderness. And in contrast to the laws governing the National Park System, the Wilderness Act provides for approval by the President of reservoirs in wilderness areas without congressional action.[100] Thus, the national policy against encroachment on reserved areas by reclamation projects would seem to be less formidable with regard to the National Wilderness Preservation System than with regard to the National Park System. Consequently, the validity of the thesis may well depend on the type of reserved area.

The Yellowstone Park episode supports the obverse of the thesis: that a proposal to invade a single reserved area should fail. Hetch Hetchy, on the other hand, does not. Perhaps Hetch Hetchy can be characterized as an aberration on the basis that it was the earliest attempt to invade a reserved area, occurring as it did even before the establishment of the National Park Service. It certainly was not the beginning of a trend for the national parks, as the Yellowstone and Grand Canyon controversies have shown. The obverse, then, would seem to be valid at least for national parks.

The validity of the thesis itself can now be analyzed. It does describe accurately the outcome of the only reclamation controversies to which it purports to apply. Some modification of it should be made, however, to take into account the fact that only two situations have arisen so far to which it is directly applicable. Congress seems to have been acting more straightforwardly in authorizing the violation of the Gila Wilderness than it was in authorizing the violation of Rainbow Bridge National Monument. It can be said, therefore, that from past experience an invasion of an area within the National Wilderness Preservation System by a reclamation project will be permitted by Congress when such invasion is proposed simultaneously with a proposal to invade another reserved area. An invasion of an area within a national park or monument in such a context can be expected only when the normal alternatives open to Congress are limited.

99. *See* H.R. Rep. No. 1312, 90th Cong., 2d Sess. (1968), *reprinted in* 1968 U.S. Code Cong. & Ad. News 3666, 3708.

100. 16 U.S.C. § 1133(d)(4) (Supp. 1974).

The empirical thesis described here, as noted at the outset, is not concerned with, and is not a substitute for, the very real and unavoidable political complexities that must be dealt with in reclamation controversies. It is crucial, however, that the consequences of various alternatives available in the context of one's political strength be clearly perceived at an early stage. In the Rainbow Bridge controversy, for example, early, and therefore full, consideration apparently was not given by the conservationists to the environmental impact of constructing protective works in the vicinity of the bridge. Today, the roads, heavy equipment, and blasting in close proximity to the arch seem environmentally destructive to a high degree. Attention to the structural criteria isolated by the thesis should be helpful in the early planning of overall strategies and in determining whether, and to what extent, environmental values must be compromised.

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