

Effect of NEPA on the Corps of Engineers' New Melones Project

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INTRODUCTION

Since the enactment of the National Environmental Policy Act of 1969 (NEPA), a good deal of attention has been given to the preparation of environmental impact statements and to litigation regarding the adequacy of such statements. While it may be fair to say that more statements are being written and their quality is improving, there is still some question whether this activity is leading to substantive changes in federal agency decision making. Put another way, the question remains whether the contents of impact statements and the environmental quality goals set forth in NEPA are being taken seriously in the design of federal projects.

The data-gathering and analysis required to answer such questions definitively have not yet been undertaken. This article reports the results of a study designed to investigate these questions for a single U.S. Army Corps of Engineers project—the highly controversial New Melones project in California. This study illustrates the effect of NEPA on an important class of federal water resources projects, namely those in which the project authorization and much of the project planning took place prior to the passage of the Act. The long time periods associated with the planning of federal water projects suggests that there are still a substantial number of such projects in this class.

There are several ways in which NEPA could influence a federal water resources project that was authorized and, for the most part, planned prior to 1970. At one extreme, NEPA might serve to bring about the preparation of a statement meeting only the formal requirements for an environmental impact statement and therefore having no influence on decision making. At the other extreme, the

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process of preparing the draft statement and responding to the comments raised during the course of its review might lead to a major reformulation of the proposed action. Among other things, this study was designed to see where the Corps of Engineers' planning of New Melones would lie on the spectrum between each extreme.

In describing the influence of NEPA on the New Melones project, particular attention will be given to the so-called "102 process," *i.e.*, the process involved in preparing and reviewing impact statements under Section 102(2)(C) of NEPA. Although the final statement represents the output from this process, it is the process itself that involves the generation and consideration of information influencing decisions. The 102 process involves the analysis of environmental quality issues and the dissemination of findings in the form of various drafts, together with the final environmental impact statement. The 102 process also involves a feedback mechanism via the comments and criticisms of those who review preliminary drafts. Such comment and criticism can be used as the basis for reformulating or modifying agency proposals, and must be considered in preparing the final statement. Thus, in order to determine how NEPA influenced decision making in any given circumstance, it is necessary to examine the entire 102 process.

In analyzing the influence of NEPA on decision making, it is also necessary to recognize that, even prior to NEPA, agencies like the Corps of Engineers were under pressure to consider environmental values in their decision making. Thus, it is also necessary to describe the kinds of environmental quality issues which would have influenced the project design even in the absence of NEPA. This is difficult, since it is impossible to know with certainty how the project would have evolved otherwise. However, in the case of New Melones at least, there is evidence linking specific information flows and project modifications to the 102 process. To discover this evidence, it is first necessary to analyze the history of the New Melones project, since most of the planning occurred prior to the passage of NEPA and since a number of environmental factors were considered during the pre-NEPA period. This historical analysis is taken up in the first section of the article.

The second section of this article considers the 102 process in detail. This is done first by examining how the process was executed, and then by describing the extent to which NEPA may have brought

about some recent changes in project design. The third section of the article uses the New Melones case to examine the effectiveness of the 102 process as a mechanism for achieving the environmental quality goals set forth in NEPA. The fourth and final section contains the principal conclusions.

NEW MELONES: AN HISTORICAL ACCOUNT

The New Melones project, presently under construction, was originally authorized by Congress under the Flood Control Act of 1944¹ and reauthorized under the Flood Control Act of 1962.² The project has been designed to impound 2.4 million acre feet (maf), and provide for flood control, irrigation, power generation, recreation, fish and wildlife enhancement, and water quality control.³ New Melones is to be operated by the U.S. Bureau of Reclamation as a part of the Central Valley Project.⁴ Water conserved by the project was initially envisioned to feed the Bureau's proposed East Side Canal, but that canal project may not be built; details regarding the use of the conserved water remain unspecified.⁵ An historical account of the planning of the New Melones project and the various environmental controversies that have erupted during the course of its planning is given below.

Pre-Authorization Planning: pre-1962

Toward initial authorization: pre-1944

A major flood on the Stanislaus River in 1938, and subsequent flooding in the early 1940's, led the Corps of Engineers to propose a flood control project on the river at approximately the site of the Melones reservoir, a nonfederal irrigation project of 112,500

1. Pub. L. No. 78-534, 16 U.S.C. § 460d (1970).

2. Pub. L. No. 87-874, 16 U.S.C. § 460d (1970).

3. U.S. Army Corps of Engineers, Sacramento District, Environmental Impact Statement (Final), New Melones Lake, Stanislaus River, California (May 1972) [hereinafter cited as "Final EIS"], at 11.

4. *Id.* at 2.

5. U.S. Bureau of Reclamation, Mid-Pacific Regional Office, Sacramento, California, Supplemental Data on Use of Conservation Yield, Environmental Impact Statement, New Melones Lake, Stanislaus River, California (January 1973) [hereinafter cited as "Bureau of Reclamation, Supplemental EIS"], at 1.

acre feet built in 1926. See Figure 1, General Location Map of the Stanislaus River Basin. The proposed Corps project, which came to be known as New Melones, was described in a survey report⁶ and authorized pursuant to this report in the Flood Control Act of 1944.⁷ The project included a 450,000 acre-feet capacity reservoir which would inundate the smaller Melones, but still make use of its power house.⁸ Provisions were also made for possible enlargement to 1.1 maf at a later date.⁹

Subsequent studies: 1944-1962

Additional studies made by the Corps, the State of California, and the Bureau of Reclamation in the late 1940's concluded that a project of 1.1 maf of multi-purpose storage would be preferred, since it would help meet California's expanding water needs.¹⁰

In 1958, the Bureau of Reclamation conducted studies for its proposed East Side Division of the Central Valley Project, and determined the need for a large reservoir. It concluded that the New Melones site was the most economical for this development and proposed that studies be undertaken to determine the feasibility of a 2.4 maf reservoir at the site.¹¹ In 1959, the Bureau and the Corps received congressional approval to use previously allocated funds for studies of an enlarged project.¹² Those studies concluded that a New Melones reservoir of 2.4 maf would be economically justified.¹³

In October 1960, a public hearing on New Melones was held in Modesto. Because the Stanislaus River had experienced extreme flooding in 1950, 1952, and 1955, local residents supported the need for additional flood protection. However, there was less agreement

6. U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON FLOOD CONTROL, H.R. DOC. NO. 2/78/2, 78th Cong., 2d Sess. (1944).

7. Pub. L. No. 78-534, 16 U.S.C. § 460d (1970).

8. H.R. Doc. No. 453, 87th Cong., 2d Sess. 19 (1962).

9. *Id.*

10. This recommendation was included in H.R. Doc. No. 367, 81st Cong., 1st Sess. (1949). In response to congressional requests in 1953 (S. Rep. No. 298, May 25, 1953, and H.R. Rep. No. 1030, July 29, 1953), the results of studies on this alternative were presented in U.S. Army, Chief of Engineers, Report on Economic Feasibility (March 1, 1957).

11. H.R. Doc. No. 453, 87th Cong., 2d Sess. (1962).

12. *Id.* at 20.

13. *Id.*

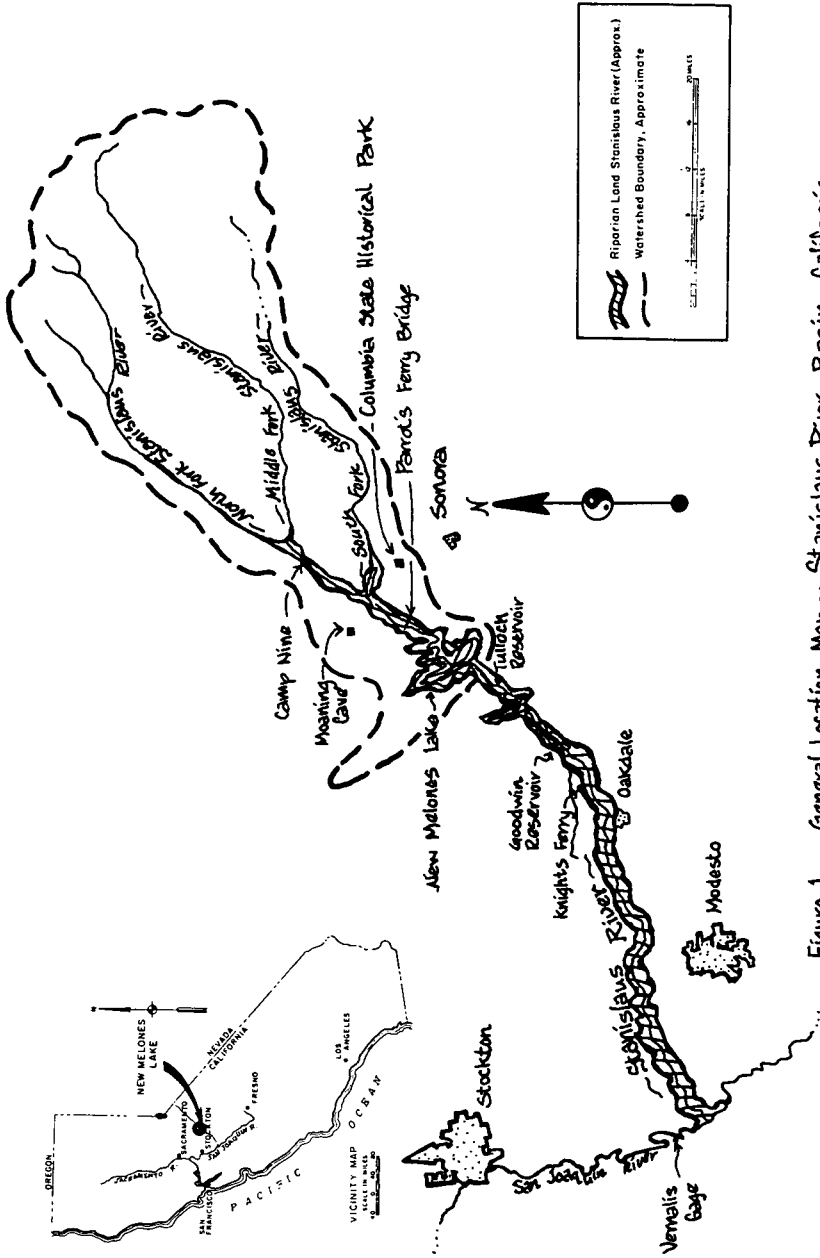


Figure 1. General Location Map ~ Stanislaus River, Basin, California

on the need for the 2.4 maf impoundment for water conservation purposes. While the irrigation interests in the Southern San Joaquin Valley gave the project full support, others were uncertain. The California Department of Water Resources supported the project on the condition that water be used for local basin needs before any diversion out of the areas of origin took place.¹⁴ Several local irrigation districts and county agencies opposed the construction of a federal project. They formed the Stanislaus River Basin Group which in October 1961, proposed a 1.1 maf reservoir to be planned and constructed by local interests with federal support for flood control.¹⁵ However, the state's Department of Water Resources favored the federal project, stating:

While it is generally desirable to have local development of water to satisfy local needs, it is also desirable to obtain optimum development of the water resources of the State... [From Corps and Bureau studies] it appears that a multi-purpose reservoir with a storage capacity of 2,400,000 acre feet at the New Melones site would optimize development of the waters of the Stanislaus River.¹⁶

In April 1961, the U.S. House of Representatives Committee on Public Works adopted a resolution requesting the Corps to review the reports on New Melones to determine whether modification of the authorized project was advisable.¹⁷ In response, the Corps prepared a "Review of the Reports on the New Melones Project,"¹⁸ (hereafter described as the "Review Report") and submitted it to Congress in June 1962. It recommended a 2.4 maf reservoir project with provisions for flood control, irrigation, recreation, and power generation.

In response to the Fish and Wildlife Coordination Act of 1958,¹⁹ the U.S. Bureau of Sports Fisheries and Wildlife and the California Department of Fish and Game made a series of recommendations to the Corps beginning in December 1959.²⁰ Their recommendations, that water be stored for periodic release to enhance down-

14. *Id.* at xvi.

15. *Id.* at xv.

16. *Id.* at xv-xvi.

17. *Id.* at 18.

18. *Id.*

19. Pub. L. No. 85-624, 16 U.S.C. § 661 (1970).

20. The Bureau of Sports Fisheries and Wildlife and the California Fish and Game Commission collaborated in their coordination with the Corps, and produced

stream fisheries and that the protection of fish and wildlife resources be included as project purposes, became provisions of the 1962 authorizing legislation.²¹

The Flood Control Act of 1962

In October 1962, Congress passed the Flood Control Act of 1962,²² which included authorization for the New Melones multi-purpose project. The Act authorized approximately \$114 million for the planning and construction of the 2.4 maf reservoir project,²³ and indicated that the project was to: (a) be operated by the Bureau of Reclamation as an "integral part of the Central Valley project";²⁴ (b) maintain the downstream channel of the Stanislaus to its confluence with the San Joaquin River to a capacity of 8000 cubic feet per second (cfs);²⁵ (c) meet water needs within the basin before export out of the basin;²⁶ (d) insure preservation and propagation of fish and wildlife;²⁷ (e) include nonreimbursable provisions for public recreation;²⁸ (f) provide for power generation, with reservation of up to 25% of that generated for Tuolumne and Calaveras Counties needs;²⁹ (g) provide for reservoir releases for water quality control downstream.³⁰

Post-Authorization Planning: 1962-1970

After receiving this authorization, the Corps initiated its detailed studies. The period from 1962 to 1970 was characterized by: (1) incorporation into the project design of the pertinent Flood Control

separate recommendations which were quite similar. The Bureau suggestions were issued in a December 1959 letter, in formal comments to the Review Report, and in an August 1962 report on the effects of New Melones on fish and wildlife resources. Fish and Game commented on the Review Report and issued a 1964 report similar to the Bureau's report of 1962.

21. 76 Stat. 1191, Pub. L. No. 87-874, 16 U.S.C. § 460d (1970).

22. *Id.*

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.*, 76 Stat. 1191, 1192.

30. *Id.*, 76 Stat. 1192. This final provision was made possible by 33 U.S.C. § 1153(b) (1970), the Federal Water Pollution Control Act Amendments of 1961, which permitted low flow augmentation to be included as a project purpose.

Act provisions; (2) coordination with local public groups; and (3) the initiation of construction.

Incorporation of authorized provisions

In its post-authorization planning, the Corps implemented two of the recommendations made by the federal and state wildlife agencies. First, water releases for downstream fisheries of 98,000 acre-feet (69,000 acre-feet in a dry year) and a release schedule were specified.³¹ Second, additional land acquisition was provided to mitigate the inundation of wildlife habitats.³² In its "New Melones Review Report,"³³ the Corps proposed project land requirements of 14,000 acres.³⁴ In their early recommendations, both the federal and the state agencies proposed the acquisition of about 6,000 additional acres in the reservoir area for wildlife habitat mitigation and for multi-purpose recreation.³⁵ These agencies also made recommendations for the acquisition and preservation of 3,400 acres of downstream riparian habitat and the preservation of downstream spawning gravels.³⁶ As of 1970, these latter recommendations had not been incorporated into the project. However, by the time of the Corps' "General Design Memorandum"³⁷ in 1967, the planned project area had grown to 22,185 acres.³⁸

The authorizing legislation also required the provision of low-flow augmentation for purposes of controlling water quality.³⁹ In January 1965, the U.S. Public Health Service issued a report to the Corps on the water quality control aspects of the New Melones project.⁴⁰

31. Final EIS, *supra* note 3, at 54. The releases were made in accordance with the recommended downstream flows specified in a letter from the U.S. Bureau of Sport Fisheries and Wildlife to the Army Corps of Engineers, Sacramento District, on August 14, 1962.

32. *Id.*

33. 12,500 acres were to be inundated by the reservoir; and an offsetting 1500 acres were to be acquired for recreational facilities. H.R. Doc. No. 453, 87th Cong., 2d Sess. 33 (1962).

34. *Id.* at 66.

35. *Id.* at xxvii, xl.

36. *Id.*

37. U.S. Army Corps of Engineers, Sacramento District, General Design Memorandum No. 10, New Melones Reservoir, Stanislaus River, California (July 1967) [hereinafter cited as "General Design Memorandum"].

38. *Id.*

39. 76 Stat. 1192, Pub. L. No. 87-874, 16 U.S.C. § 460d (1970).

40. U.S. Public Health Service, Division of Water Supply and Pollution Control,

This report recommended the maintenance of total dissolved solids concentrations below 500 milligrams per liter (mg/l) in the San Joaquin River at Vernalis (about 60 miles below the dam site) and a minimum of 5 mg/l of dissolved oxygen in the Stanislaus. Reservoir releases necessary to maintain these levels were estimated in the report. Using this information, the Bureau of Reclamation, being the agency responsible for the operation of the project, allocated up to 70,000 acre-feet of the conserved water for this purpose.⁴¹ In 1967, the Corps decided that local interests would not have to repay the federal government for the benefits resulting from these water releases.⁴²

Interaction with local publics

While the post-authorization planning was progressing, a rapid Sierra snowmelt in December 1964 resulted in high Stanislaus flows and the flooding of 7,000 acres at Salida causing \$2 million in damages. In January 1965, local farmers and ranchers formed the Stanislaus River Flood Control Association to argue for the rapid completion of the New Melones project. In response to their encouragement and that of Congressman John J. McFall (D-Man-teca), the U.S. House of Representatives Appropriations Subcommittee on Public Works increased the fiscal year 1966 project appropriations from an anticipated \$1 million to \$1.5 million;⁴³ this led to a moderate acceleration in project planning.

During 1966 and 1967, various negotiations were undertaken with public agencies and individual land owners. In 1966, the Bureau of Reclamation began water rights negotiations with local irrigation districts and ranchers; these negotiations, which related to expected water needs, continued through 1972. Between December 1966 and May 1967, the Corps held three public meetings dealing with real estate and lands for wildlife protection. .

Water Supply and Water Quality Control Study, New Melones Project, Stanislaus River Basin, California (January 1965).

41. Final EIS, *supra* note 3, at 3.

42. U.S. Army Corps of Engineers, Sacramento District, Statement of Findings, New Melones Lake, California (May 31, 1972) [hereinafter cited as "Statement of Findings"], at 7.

43. *Hearings on Fiscal Year 1966 Appropriations Before the Subcomm. on Public Works of the House Comm. on Appropriations*, 89th Cong., 1st Sess., pt. 1, at 337 (1965).

Completion of design and initiation of construction

The Corps' General Design Memorandum,⁴⁴ completed in 1967, outlined the general features of the then estimated \$137 million project, including: land requirements of 22,185 acres; reservoir releases for downstream fisheries and water quality; power generating capacity of 150,000 kilowatts; and flood control and water conservation features. The memorandum also included general specifications for the diversion and power outlet tunnel, the dam and spillway, and the 2.4 maf reservoir. At that time, recreation plans were still being formulated.

In October 1966, initial construction on access roads, the resident engineer's facilities and a downstream visitor overlook was begun. This construction was not completed until 1968 because of a decrease in congressionally appropriated funds in the late 1960's. By June 1970, substantial funds became available and construction was begun on the \$26 million diversion and power outlet tunnel. Also in 1970, upon recommendation of the Federal Power Commission, the planned power capacity was increased to 300,000 kilowatts.

Toward a Political Climax: Planning in the 1970's.

Since initiation of construction of the diversion tunnel in 1970, the New Melones project has been subject to intense political pressure and court action. It is convenient to discuss the activities of this period in the following terms: (1) Enactment of NEPA: January 1, 1970; (2) Emergence of opposition: 1970; (3) The Corps' environmental impact analysis; (4) Positions of various local interests; (5) Positions of various environmental groups; (6) Environmental Defense Fund vs. Armstrong, U.S. District Court, June 1972; (7) California Water Resources Control Board Decision 1422, April 1973; (8) Ninth Circuit Court of Appeals, November 1973; (9) Proposition 17: The Stanislaus River Protection Act.

Enactment of NEPA: January 1, 1970

On January 1, 1970, President Nixon signed the National Environmental Policy Act of 1969⁴⁵ into law. In addition to declaring a national environmental policy "to create and maintain conditions

44. General Design Memorandum, *supra* note 37.

45. Pub. L. No. 91-190, 42 U.S.C. § 4321 *et seq.* (1970).

under which man and nature can exist in productive harmony,"⁴⁶ the Act provides that for any federal activity which has a significant effect on the environment, the agency involved must prepare a detailed statement specifying the environmental impacts.⁴⁷ NEPA also provides that this statement be made available for review by interested parties, including state and federal agencies and the public.⁴⁸

Although the Act itself is ambiguous in places, its requirements have been clarified by subsequent directives and guidelines issued by the Council on Environmental Quality (CEQ)⁴⁹ and individual agencies,⁵⁰ and especially by judicial interpretations. Of principal importance to New Melones have been those court decisions which have made the requirements of NEPA applicable to projects authorized before its passage, but still in the process of planning or construction at the time of enactment.⁵¹ Those decisions which emphasized the need to integrate environmental considerations into agency planning and decision making have also become important.⁵²

Emergence of opposition: 1970

At about the time the requirements of the NEPA were becoming clearer, opposition to the New Melones project began to surface. During 1970, California conservationists were voicing opposition to the East Side Division, the proposed Bureau of Reclamation canal project which New Melones was to feed. They feared the East Side Division would divert fresh water flows needed for flushing the Sacramento-San Joaquin Delta and the Suisun and San Francisco Bays. They also feared that it would require additional water from other wild rivers on the north coast of California, or that water from

46. 42 U.S.C. § 4321 (1970).

47. 42 U.S.C. § 4322 (1970).

48. *Id.*

49. *E.g.*, Council on Environmental Quality, Preparation of Environmental Impact Statements: Guidelines, 38 Fed. Reg. 20549 (1973).

50. *E.g.*, U.S. Army, Office of the Chief of Engineers, *Planning: Preparation and Coordination of Environmental Statements*, ER 1105-2-507 (April 15, 1972).

51. *E.g.*, Environmental Defense Fund v. Corps of Engineers, 470 F.2d 289, 2 E.L.R. 20740 (8th Cir. 1972), *cert. denied*, 412 U.S. 931, 93 S. Ct. 2749, 37 L. Ed. 2d 160 (Gillham Dam). *See also* CEQ Guidelines, *supra* note 49; F.R. Anderson, *NEPA in the Courts*, RESOURCES FOR THE FUTURE (1972), at 142.

52. *E.g.*, Calvert Cliffs Coordinating Committee v. A.E.C., 146 U.S. App. D.C. 33, 449 F.2d 1109, 1 E.L.R. 20346 (1971), which specified that an impact statement be more than "tack-on" information, but that it involve an analysis which influences project decision-making.

those rivers would in any event have to be diverted to replenish the fresh water diverted from rivers flushing the Delta.

Another environmental quality issue which emerged at this time concerned the use of the Stanislaus for whitewater rafting. The Stanislaus was first scouted for commercial rafting in 1962.⁵³ From 1966 to 1970 commercial rafting in the nine-mile reach from Camp Nine to Parrot's Ferry Bridge increased by nearly 1000%.⁵⁴ Use of this reach for rafting, kayaking, and trout fishing increased to an estimated 58,000 recreation days in 1970⁵⁵ and 68,000 recreation days in 1971,⁵⁶ making this stretch of the Stanislaus the most heavily used whitewater area in California⁵⁷ and the second most popular in the country.⁵⁸ This nine-mile reach would be completely inundated by the proposed reservoir.⁵⁹

Much of the planning for New Melones took place at a time before the Stanislaus became a popular whitewater area.⁶⁰ Moreover, the whitewater recreation issue had not become clear to the Corps until after the ground had been broken for the \$26 million diversion tunnel. Thus the Corps was somewhat committed to the designed project before the values associated with the whitewater were fully appreciated. The commitment of dollars, time and manpower that was associated with construction of the tunnel limited the Corps' ability to objectively reevaluate the project in light of these emerging values.

53. D.A. Kay, Presentation to the Board of Supervisors on the Values of the Stanislaus River to the Recreational and Economic Development of Calaveras and Tuolumne Counties, February 1971 (unpublished).

54. *Id.* at 2.

55. Final EIS, *supra* note 3, at 36.

56. Letter from Environmental Defense Fund to the U.S. Army Corps of Engineers, Final EIS, *supra* note 3, Attachment "C".

57. U.S. Army Corps of Engineers, Sacramento District, Draft Environmental Impact Statement, New Melones Lake, Stanislaus River, California (December 1971) [hereinafter cited as "Draft EIS"], at 36.

58. American Rivers Conservation Council, Disasters in Water Development, April 1973.

59. The Stanislaus is far from a wild, natural river; the year-round whitewater is made possible by the regulated flows from upstream reservoirs. There are presently eleven dams on the Stanislaus. The whitewater issue is not necessarily over the preservation of *nature*, but more over the preservation of a form of *man-manipulated* nature which has certain aesthetic and recreational values associated with it.

60. Even after the whitewater recreation area was developed, the Corps did not reflect *disbenefits*, resulting from recreational values lost by the project, in the benefit-cost computations. See Final EIS, *supra* note 3, at 9.

The Corps' environmental impact analysis

In early 1971, the Corps initiated an environmental analysis of the New Melones project in response to NEPA. Four stages of this analysis can be distinguished by the following documents: an environmental working paper completed in October 1971,⁶¹ a draft environmental impact statement completed in December 1971,⁶² a final statement completed in May 1972,⁶³ and a supplemental analysis of the use of the conservation yield, performed by the Bureau of Reclamation and completed in January 1973.⁶⁴

To analyze the impact of New Melones, the Corps utilized their in-house expertise, previous studies on fish and wildlife and water quality, and special outside studies. These latter studies included a flora-and-fauna inventory of the area, reports on the natural caves and archeological features in the project area, and an assessment of the whitewater potential of the upper forks of the Stanislaus.

The Corps' working paper and draft statement generated a good deal of comment from various agencies and public groups. The information generated by the 102 process and its effect on the design of the New Melones project is considered in detail in subsequent sections of this article.

Positions of various local interests

As the controversy over New Melones began to develop, local public opinion on the merits of the project became clearer. Local irrigation districts, namely the South San Joaquin and Oakdale Irrigation Districts, had long opposed a federally built project, preferring a locally built project of a smaller size. Like the conservation interests these irrigation districts opposed the export of water out of the basin. However, their concern was over *local* needs rather than the ecological integrity of the Sacramento-San Joaquin Delta. Other local opposition came from landowners around the reservoir and downstream, whose property was being acquired for the project.

On the other hand, most local interests, including county agencies

61. U.S. Army Corps of Engineers, Sacramento District, Environmental Working Paper, New Melones Lake, Stanislaus River, California (October 1971) [hereinafter cited as "Working Paper"].

62. Draft EIS, *supra* note 57.

63. Final EIS, *supra* note 3.

64. Bureau of Reclamation, Supplemental EIS, *supra* note 5.

and landowners *below* the project site extending as far as Stockton, favored the project for the flood protection it would provide. Although those opposed to the project suggested that a much smaller reservoir would supply adequate flood control, those advocating flood control were concerned with obtaining it as soon as possible—which meant no further delays in the already designed project. The Stanislaus River Flood Control Association, the principal interest group advocating flood control, lobbied Congress each year for additional appropriations.

In general, many local residents and agencies did not share the environmentalists' perspective regarding the values of the whitewater. On the contrary, the sudden influx of whitewater enthusiasts from outside regions into an area ill-equipped to handle them had placed a burden on many private landowners' property to the extent where many would "just as soon see the whitewater inundated."⁶⁵ Tuolumne County, which had been promoting tourism for years, was beginning to feel that the costs of services they had to provide (police, etc.) were about as much as the revenues the tourists were bringing in. In March 1971, Gerald Meral⁶⁶ and David Kay⁶⁷ delivered a presentation before the Boards of Supervisors of Tuolumne and Calaveras Counties on the economic benefits associated with the whitewater. It failed to convince the Boards.⁶⁸

The positions of various local groups as regards the impact of an increase in tourist activity were not consistent. While the aforementioned Boards of Supervisors were concerned about the costs of services for the increasing numbers of whitewater enthusiasts, there were several local organizations that were favorably impressed by the revenues that would be associated with the estimated 4 million recreation days per year provided by the New Melones project.⁶⁹ By June 1972, these organizations, which included the Tuolumne

65. Interview with Keith Chrisman, Chief Engineer, Oakdale Irrigation District, Oakdale, California, July 13, 1973.

66. California chairman of the River Conservation Committee of the Sierra Club.

67. Information Director for the American River Touring Association.

68. The Daily Union Democrat (Sonora, California), March 2, 1971.

69. Final EIS, *supra* note 3, at 9. It is uncertain whether this impressive reservoir recreation use would actually materialize. There are twenty significant flat water recreation areas within 75 miles of New Melones, eleven of which are closer to Sacramento and fifteen of which are closer to the San Francisco Bay Area. G. Meral, A Report on the Stanislaus River, with Emphasis on the New Melones Project, March 1971 (unpublished). Some feel that a demand for the reservoir recreation to be provided by New Melones will not materialize. Interview with Keith Chrisman, *supra* note 65.

County Taxpayers Association, Sonora County Vacationland, and several local chambers of commerce, had expressed strong support for the New Melones project.

Positions of environmental groups

The most significant opposition to New Melones came from outside the Stanislaus River Basin. The Sierra Club and the Environmental Defense Fund initially worked closely with the Corps, through informal communication and the formal environmental impact statement review process. They aroused public concern over the whitewater values of the Stanislaus by distributing petitions; 130,000 persons signed a petition urging President Nixon to save the whitewater of the Stanislaus.⁷⁰ The Sierra Club and EDF induced Senators John Tunney and Alan Cranston, Congressman John McFall (the local sponsor of the project) and Governor Ronald Reagan to urge the Corps to mitigate the whitewater loss.

Although it ultimately became a party in the lawsuit against the Corps, the Sierra Club was not unanimous in its opposition to the project. While its national headquarters was expressing opposition to the East Side Division and concern over the whitewater loss, the Yokut wilderness group of the local Mother Lode Chapter was favorably impressed by several features of the project: the water quality and fishery releases; and especially the emerging Lower Stanislaus Plan, a plan to acquire riparian wildlife habitat on the lower Stanislaus to offset the loss of riparian land to be inundated by New Melones Lake.

In October 1971, the national Sierra Club headquarters threatened to sue the Corps if they were to contract for the dam construction before the final impact statement was completed.⁷¹ In response, Colonel James Donovan, Sacramento District Engineer, assured the Sierra Club that this would not occur.⁷² Although bids for the dam construction were scheduled to be accepted on March 15, 1972, the statement was not complete in March. At that time, Donovan called for an "unprecedented" 4½ month delay on the bids so that environmental analysis could be completed.⁷³

70. ENVIRONMENTAL DEFENSE FUND, INFORMATION SHEET, *New Melones Dam, California* (1973).

71. *The Modesto Bee*, October 12, 1971.

72. *Id.*

73. *The Modesto Bee*, March 13, 1972.

In May 1972, the final impact statement was completed. In June, the Mother Lode Chapter of the Sierra Club withdrew the objections it had raised regarding the draft.⁷⁴ Although it reserved the right to support any lawsuit necessary to impede the East Side Division, it considered the Lower Stanislaus Plan and reservoir releases for water quality and fisheries environmentally beneficial. This local chapter position initially weakened the Sierra Club headquarters' opposition to the project.

In response to the public pressure and information which the 102 process provided regarding the whitewater issue, the Corps made attempts to mitigate the loss by creating a kayaking run on a four-mile reach below the project site; this provided only partial mitigation. However, in the words of Colonel Donovan, the Corps position was that:

[Even] if it were not possible to completely mitigate the loss of the upstream whitewater area, continued construction and completion of the New Melones Lake would provide economic, social, and environmental benefits of such magnitude that they would be a desirable tradeoff for the environmental losses incurred.⁷⁵

Since the Corps felt that their impact statement was not only adequate, but in the words of Colonel Donovan, "the best ever written by the Federal government,"⁷⁶ and that their project was, in balance, beneficial, they were determined to go forward with their plans to advertise for bids for the dam construction on August 1, 1972.

EDF et al. v. Ellis Armstrong et al., U.S. District Court, June 1972

The Environmental Defense Fund, arguing that the New Melones environmental impact statement was inadequate, filed suit against the Corps and the Bureau in June 1972.⁷⁷ They sought to enjoin the project in order to delay the Corps' accepting a construction bid for the dam until the adequacy of the impact statement was estab-

74. The Sacramento Bee, June 23, 1972, reprinted in Final EIS, *supra* note 3, Appendix "C".

75. Statement of Findings, *supra* note 42, at 7.

76. The Modesto Bee, May 30, 1972.

77. Environmental Defense Fund, Inc. v. Armstrong, 352 F. Supp. 50 (N.D. Cal. 1972), *supplemented*, 356 F. Supp. 131, *aff'd*, 487 F.2d 814 (9th Cir. 1973), *cert. denied*, 416 U.S. 974, 94 S. Ct. 2002, 40 L. Ed. 2d 564 (1974).

lished. The EDF argument posed two fundamental issues: whether there was need for irrigation water from New Melones in light of the project's initial connection with the East Side Division; and whether the loss of whitewater values required modifications in the project design.⁷⁸

The Environmental Defense Fund argued that the impact statement did not meet the requirements of NEPA because it did not adequately discuss environmental impacts associated with the use of the conservation yield.⁷⁹ The impact statement said that specific areas of irrigation use were unknown at present, and that prior to the initiation of the project operations, the Bureau would prepare an impact statement covering the operation and the use of the new water yield. The Environmental Defense Fund's position was that since all the environmental impacts of the project were not specified, the requirements of NEPA were not met.

The Defense Fund also argued that the impact statement did not adequately consider alternatives to the project design.⁸⁰ They indicated that although the impact statement contained a brief section on alternatives, those alternatives were not adequately discussed in terms of their environmental impacts. Missing, they argued, were specific alternatives which combined structural and non-structural provisions and those which provided for a two-stage dam involving construction of a 1.1 maf reservoir with provisions for possible enlargement to 2.4 maf if needed.⁸¹

The Defense Fund also contended that there was no demonstration of need for the amount of water to be conserved, and that a smaller reservoir could supply all of the necessary project purposes while still retaining at least some of the upstream whitewater values.⁸² Lawyers for the Fund argued that if the environmental impact statement was modified to consider the impact of the conserved water use as well as the *uncertainty* of its need, and address this issue when discussing project alternatives, the document could be an objective display of options available to decision-makers.

78. *Id.* Memorandum in Support of Plaintiffs' Motion for Preliminary Injunction, Civ. No. C-72-1057 CBR [hereinafter cited as "EDF Memorandum"]. For a critique of the Corps' economic analysis for New Melones, see T. Parry & R. Norgaard, *Wasting a River*, 17 ENVIRONMENT 17 (Jan.-Feb. 1975).

79. *Id.* at 26.

80. *Id.* at 47.

81. *Id.* at 51.

82. *Id.*

In August 1972, the bids for the dam construction were advertised as scheduled, and in September the case was heard before U.S. District Court Judge Charles B. Renfrew. The Sierra Club intervened on behalf of the Defense Fund,⁸³ and twenty-five cities, counties and agencies joined on the side of the Corps.⁸⁴ These twenty-five expressed their support of the project because of the need for flood control and water supply. Judge Renfrew initially expressed support of the environmentalists' stand, stating that "a reservoir 1/2 the size might be sufficient while a full-size one might stimulate water needs rather than serve them."⁸⁵ As the case progressed, spokesmen for the Bureau admitted that they did not know where the water would be used and had not received the rights to take the water from the river.⁸⁶ In describing the Corps' position, Colonel Donovan admitted that the impact statement was incomplete in its omission of water use impacts.⁸⁷

The court directed the defendants to reexamine the construction schedule to allow supplementation of the impact statement.⁸⁸ Colonel Donovan supplied a revised schedule which Judge Renfrew subsequently accepted.⁸⁹ It called for a six week delay in the contractors' notice to proceed, and specified that no actual construction would begin until March 1973. In the meantime, the Bureau would supply the court with supplemental information assessing the environmental impacts associated with several possible alternative uses of the conserved water.

Judge Renfrew was impressed by Donovan's attitude toward the situation and commended the Colonel in his November 1972 decision.⁹⁰ In that decision, Judge Renfrew ruled that the Corps' discussion of alternatives was adequate and allowed the contract for the dam to be awarded on December 1, 1972.⁹¹ In March 1973, Judge Renfrew approved the Bureau's supplement to the environmental impact statement.⁹²

83. 352 F. Supp. 50.

84. *Id.*

85. The Daily Union Democrat (Sonora, California), September 29, 1972.

86. The Daily Union Democrat (Sonora, California), October 2, 1972.

87. *Id.*

88. Environmental Defense Fund, Inc. v. Armstrong, 352 F. Supp. 50, 53 (N.D. Cal. 1972).

89. *Id.* at 53.

90. *Id.*

91. *Id.* at 53, 57.

92. 356 F. Supp. 131.

The Environmental Defense Fund was not happy with this decision and still felt that the project alternatives had not been adequately discussed. In addition, they felt Judge Renfrew had made his decision prematurely. While the case was pending in federal court, the California Water Resources Control Board was holding hearings on the Bureau's applications for water rights to the Stanislaus,⁹³ and EDF felt that Judge Renfrew should have waited for a decision from the Board. In connection with this, Judge Renfrew had requested from the U.S. Department of the Interior an opinion regarding the effect which the state Water Resources Control Board's decision would have on New Melones.⁹⁴ He seemed satisfied with the position of Assistant Secretary of the Interior James R. Smith, who indicated that states have no jurisdiction over congressionally authorized projects.⁹⁵

In November 1972, EDF appealed the district court decision to the Ninth Circuit Court of Appeals⁹⁶ arguing that the environmental impact statement was still inadequate and that the Water Resources Control Board decision was relevant. The appeals court granted a series of temporary injunctions to prevent initiation of the dam construction.⁹⁷ Although Governor Reagan supported the project, in January 1973 California Attorney General Evelle Younger urged the court to enjoin further work on the project until additional consideration had been given to environmental impacts.⁹⁸

WRCB Decision 1422: April 1973

In October 1972, hearings commenced before the California Water Resources Control Board concerning Bureau of Reclamation applications for Stanislaus River water rights permits.⁹⁹ About fifty parties protested the permit applications, resulting in long and ex-

93. State of California, Water Resources Control Board, *Transcript of Hearings on U.S. Bureau of Reclamation application for water rights permits on the Stanislaus River*, October-December 1973 [hereinafter cited as "Control Board Hearings"].

94. 352 F. Supp. 52, 62.

95. Telegram from James R. Smith, Assistant Secretary of the Interior, to Judge Charles B. Renfrew, October 5, 1972, *quoted*, 352 F. Supp. 52, 62.

96. *Environmental Defense Fund v. Armstrong*, 487 F.2d 814 (9th Cir. 1973) (Civ. Nos. 72-2997 and 72-3170).

97. 487 F.2d 814 (9th Cir. 1973).

98. EDF INFORMATION SHEET, *supra* note 70.

99. Control Board Hearings, *supra* note 93.

tensive hearings which lasted until December 14, 1972. Of great interest in the hearings was the testimony concerning the needs of the Central Valley Project, into which New Melones was to be integrated. The Bureau's Exhibit 46, with supplements, had a great impact on the subsequent Board decision. It showed that

CVP has substantial quantities of water that are not being used and are not under contract . . . [and] that *without* the yield of the New Melones Reservoir the Bureau can meet the estimated build up of demands under present contracts for a long period of time. [Emphasis in the original.]¹⁰⁰

The Control Board hearings resulted in the April 1973 WRCB Decision No. 1422, the "New Melones Project Water Rights Decision."¹⁰¹ Asserting authority over water rights, and thus over storage of water behind the dam and operation of the project¹⁰²—as opposed to authority to prevent construction, which rests only with the federal government—the Board ruled that "the public interest requires that the use of the Stanislaus River for whitewater boating, stream fishing, and wildlife habitat be protected to the extent that water is not needed for other beneficial uses."¹⁰³

The state granted water rights to the Bureau of Reclamation, subject to 25 conditions and limitations. Decision 1422 included three stipulations. First, the reservoir could be filled to approximately 0.65 maf to provide for local in-basin water rights and for specified project releases for water quality and downstream fisheries.¹⁰⁴ Second, the reservoir could be filled to approximately 1.1

100. State of California, Water Resources Control Board, Decision 1422 ("New Melones Project Water Rights Decision"), April 1973 [hereinafter cited as "*Decision 1422*"]. The decision is reproduced in part at 487 F.2d 814, 819 n.11, and can be found in full at Appendix, Defendants-Intervenors' Brief on Appeal, Civ. Nos. 72-2997 and 72-3170 (9th Cir. 1973).

101. *Id.*

102. The question of this authority is presently being litigated among the State of California, the U.S. Bureau of Reclamation and the U.S. Department of Justice. See cases, *infra* note 115.

103. *Decision 1422*, at 26-27.

104. While the Board's decision itself did not specify the amount of water that could be impounded, it did specify that the water yield could be used only for local in-basin water rights and for fisheries and water quality releases. *Decision 1422*, at 30. Based on a Water Resources Control Board staff operation study, Walt Pettit, personal communication, January 24, 1975, the decision noted that 1,100,000 was "the appropriate size estimated to be required to provide for prior rights, flood control, and water for [fisheries and water quality releases] . . . [and that] 450,000 acre-

maf in times of floods, but it should be drawn down again as soon as possible to the 0.65 maf level.¹⁰⁵ Finally, no additional impoundment would be allowed for power generation and recreation. Further impoundment for a specific use (e.g., irrigation water for outside the basin) would require an additional permit issued by the Board. Issue of such a permit would have to be preceded "by a showing that the benefits that will accrue from a specific proposed use will outweigh any damage that would result to fish, wildlife and recreation in the watershed above New Melones dam and the permittee has firm commitments to deliver water for such other purposes."¹⁰⁶

In short, the decision allowed the Bureau to fill the reservoir to only one-quarter of its proposed storage capacity, except in times of flood flows when one-half the capacity could be utilized. The decision, which was designed to save 6.5 miles of the nine-mile raft-run of the upper Stanislaus, called this whitewater area "a unique asset to the State and the nation."¹⁰⁷ The decision placed greater value on this resource than on the benefits which could be accrued from the irrigation, power and reservoir recreation features of the proposed project. It noted that most of the additional power would have been used in pumping the irrigation water to out-of-basin areas proposed by the Bureau.¹⁰⁸

If implemented, Decision 1422 would have a great effect on the operation of the project. In light of this, on April 17, 1973, Russell Train, then chairman of the Council on Environmental Quality, wrote Army Undersecretary Kenneth Belieu, asking what effect the decision, if implemented, would have on the environmental analysis and impact statement already completed, and on the economic justification of the project.¹⁰⁹ Train suggested that a supplemental draft statement "would be [a] logical vehicle"¹¹⁰ for discussing the effects of 1422.

feet of the 1,100,000 acre-feet is required for flood control." *Decision 1422*, at 19. These storage figures were verified by previously finished Corps operation studies. Control Board Hearings, *supra* note 93, at Corps' Exhibit 62.

105. *Decision 1422*, *supra* note 100, at 19-20.

106. *Id.* at 30.

107. *Id.* at 24.

108. *Id.* at 22-23.

109. Over 70% of the computed annual project benefits are due to irrigation, power generation, and reservoir recreation.

110. Letter from Russell Train to Kenneth Belieu, April 17, 1973, *reproduced*, 487 F.2d at 818 n.9.

On May 18, 1973, Belieu responded by indicating that a supplemental impact statement was not required.¹¹¹ He reiterated the opinion of the Justice Department that states do not have jurisdiction over federal projects. Belieu commented that Decision 1422 ruled not on the construction of the project, but on its operation, and that by the admission of the Water Resources Control Board, the full capacity of the reservoir would be utilized at some time in the future.¹¹² He added that, even with the implementation of the decision, the project would still be economically justified by the Corps' calculations.

Decision 1422 did not seem to greatly affect the attitude of the Corps. In the words of Colonel Donovan: "We hope we can comply with the State decision and still have a viable project. . . . We hope we can make everyone happy. . . . The decision seems to offer half-a-loaf of bread to everyone."¹¹³ Assuming that the project would be operated at full capacity sometime in the future, the Corps recomputed the benefit-cost ratio and found it to be greater than one.¹¹⁴

In contrast, the Bureau adopted the position of the Justice Department which indicated that Decision 1422 was irrelevant to the project. The legal point was left unresolved, and it was felt that the Justice Department or the Bureau of Reclamation would take the state to court over the issue. However, in June 1973, the California Water Resources Control Board filed suit against the Bureau over the latter's position on Decision 1422.¹¹⁵ The suit is expected to be a test case defining the limits of state and federal powers and will likely go to the United States Supreme Court before a final decision is reached.

111. Letter from Kenneth Belieu to Russell Train, May 18, 1973.

112. Based on information compiled by the Bureau from local county projections, Decision 1422 stated that "[t]he record contains substantial evidence that the full conservation yield of the New Melones Project, and more, will eventually be needed in Tuolumne, Calaveras, San Joaquin and Stanislaus Counties." *Decision 1422*, *supra* note 100, at 16.

113. The Modesto Bee, April 11, 1973, at A-5.

114. Interview with Jack Bernard, Environmental Resources Branch, Sacramento District, Corps of Engineers, July 16, 1973.

115. *Cal. ex rel. State Water Resources Control Board v. Morton*, Civ. No. C73-984 S 2924 (N.D. Cal., filed July 24, 1973). In a counter suit, *U.S. v. California*, Civ. No. S 3014 (E.D. Cal., filed Oct. 15, 1973), the federal government maintained that the Bureau need not observe state restrictions on its reclamation projects. For a discussion of this controversy, see Note, *Allocation of Water from Federal Reclamation Projects: Can the States Decide?*, 4 *ECOLOGY LAW Q.* 343 (1974).

Ninth Circuit Court of Appeals: November 1973

While the Control Board hearings and subsequent decisions were unfolding, project construction was halted by a series of injunctions granted by the Ninth Circuit Court of Appeals.¹¹⁶ The Control Board decision, the Justice Department position, and the Train-Belieu correspondence were all presented in the briefs,¹¹⁷ and the court heard the case on July 9, 1973. After four months of deliberation, on November 12, 1973, the court concurred with the decision of the district court on the adequacy of the EIS and allowed construction to proceed.¹¹⁸ During the one year delay, however, the contractor for the dam construction had withdrawn his bid and a further contract would have to be awarded. The Environmental Defense Fund appealed the case to the United States Supreme Court, but in April 1974, the Supreme Court declined to hear the appeal.¹¹⁹

Proposition 17: The Stanislaus River Protection Act

After the circuit court decision, a number of conservationists decided that a strategy unrelated to NEPA litigation might be necessary to prevent inundation of the whitewater area.¹²⁰ They planned a public campaign to add two sections of the Stanislaus River to the State Wild and Scenic Rivers System. One section extends from Camp Nine to Parrot's Ferry Bridge, and the other extends from 100 yards below Goodwin Dam to the junction of the San Joaquin River. The preservation of these sections would prohibit the construction of a 2.4 maf reservoir, but would allow for the

116. 487 F.2d 814, 818.

117. *Environmental Defense Fund, Inc. v. Armstrong*, 487 F.2d 814 (9th Cir. 1973).

118. The decision firmly stated the position of the Ninth Circuit that judicial review under NEPA is limited to procedural issues:

We do not read the National Environmental Protection [sic] Act to give the courts the ultimate authority to approve or disapprove construction of a properly authorized project where an adequate EIS has been prepared and circulated in accordance with the NEPA requirements. There has been some uncertainty in the views of other courts upon this issue. . . . We have taken the view that final judgments of project justification are not subject to review in an action to consider the adequacy of an EIS statement under NEPA.

487 F.2d at 822.

119. *Environmental Defense Fund v. Stamm*, 416 U.S. 974 (1974) (certiorari denied; Mr. Justice Douglas would have granted certiorari).

120. Telephone interview with David Oke, Peninsula Conservation Center, Palo Alto, June 27, 1974.

construction of a smaller reservoir providing flood control and water supply.¹²¹

The campaign to put the so-called "River Initiative" on the ballot yielded over 385,000 signatures; this was well above the required number. The initiative thus became the only citizen initiated proposition on the state ballot and was one of the most hotly contested issues of the November 1974 election. Although the legal implications of the referendum were unclear, spokesmen for the Corps stated their belief that Congress would abandon the project if it had passed.¹²²

However, the proposition failed by a 6% margin.¹²³ Although the newly elected California governor, Edmund G. Brown, Jr., endorsed the proposition during the election campaign, it seems likely that he will adopt a position consistent with that of the electorate.¹²⁴

The dam continues to be constructed and is scheduled for completion in June 1979.¹²⁵ The only question that remains is how the project will be operated. The answer will depend on the outcomes of the state and federal suits pending in the federal district courts.

EXECUTION OF THE 102 PROCESS FOR NEW MELONES

The historical analysis presented above provides the framework for discovering how NEPA has influenced the New Melones project. This section describes the information which was developed as part of the Corps' 102 process for New Melones. The section that follows discusses the extent to which this information led to changes in the design of the project.

The Nature of the 102 Process

NEPA has, as one of its principal objectives, the integration of environmental quality considerations into federal agency planning. The 102 process provides a mechanism for achieving that integra-

121. Friends of the River, Proposition 17: A Fact Sheet (September 1974), at 1.

122. San Francisco Examiner, Aug. 23, 1974, at 1.

123. San Francisco Chronicle, Nov. 7, 1974, at 9, col. 9.

124. Indeed, the proposition failed by a margin greater than the margin of Brown's victory.

125. Mr. Greenstein, Public Information Office, U.S. Army Corps of Engineers, Sacramento District, in a personal communication, January 28, 1974.

tion. The environmental impact statement, *per se*, acts as a full-disclosure document displaying the agency's environmental impact analysis, and its reactions to comments received during the review of the preparatory drafts.

In gauging the influence of NEPA on New Melones, the adequacy of the impact statement is only one consideration, and it is probably not the most important one.¹²⁶ The key issue concerns the extent to which the Corps, in proposing its actions on the Stanislaus River, has accounted for those environmental values embodied in the 102 process.

The Corps' 102 process for New Melones is outlined in Figure 2.

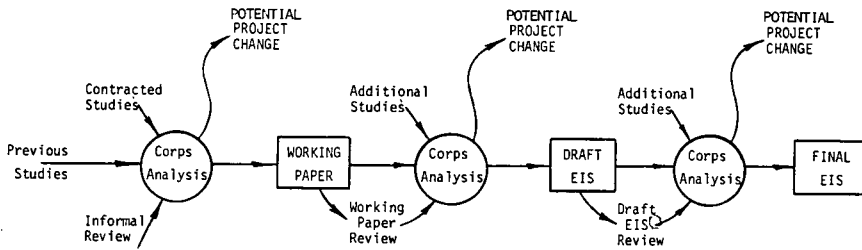


Figure 2 The Corps' 102 Process for New Melones

The key documents produced during the course of this process were: the environmental working paper,¹²⁷ completed in October 1971; the draft EIS,¹²⁸ completed in December 1971; and the final EIS,¹²⁹ completed in May 1972.¹³⁰ The sources of information used in developing these documents included studies prepared by the Sacramento District staff and out-of-house contractors, and the reviews conducted by other agencies and interested publics. The

126. As stated by the Eighth Circuit in its decision concerning Gillham Dam: The unequivocal intent of NEPA is to require agencies to consider and give effect to the environmental goals set forth in the Act, not just to file detailed impact studies which will fill government archives. 470 F.2d 289, 299.

127. Working Paper, *supra* note 61.

128. Draft EIS, *supra* note 57.

129. Final EIS, *supra* note 3.

130. The data developed by the Bureau of Reclamation in its "Supplemental EIS," *supra* note 5, did not influence the Corps' planning and is not considered further herein.

addition of environmental information at each stage of the 102 process provided the Corps with new data which could lead to project modification. Since, however, such new data could well have been developed in the absence of the 102 process, from sources such as pre-NEPA interagency cooperation, public pressure by various interest groups and the Corps' own inevitable increasing sensitivity to environmental issues, the discussion which follows will be directed toward isolating that new information which was attributable solely to NEPA and the new 102 process.

Content of 102 Process Documents

A significant feature of the 102 process is the degree to which the initial working paper differed from its successor, the draft environmental impact statement, and the degree to which the final impact statement differed from each of its progenitors. The significant changes in these documents are summarized in Table 1. One type of change involved the addition of *previously available information*. These changes made for a more complete draft and final EIS, but they provided little new information to the Corps planning staff. An example of this type of change is the inclusion of data from a 1965 water quality study¹³¹ by the U.S. Public Health Service.

A second type of change involved *additional information* gained directly from 102 process studies. These studies, which were performed by and for the Corps as part of the environmental impact analysis, were a valuable source of new information. Two small studies were performed in-house by the Corps, one on downstream temperature,¹³² the other on secondary impacts.¹³³ Three studies were performed for the Corps by outside consultants. A "flora and fauna study"¹³⁴ provided a good deal of information for the section

131. U.S. Public Health Service Study, *supra* note 40.

132. U.S. Army Corps of Engineers, Sacramento District, Downstream Temperature Study, New Melones Lake Project, Stanislaus River, California (November 1971). This study addressed the impact of using a single-stage, rather than a multi-stage, reservoir outlet.

133. U.S. Army Corps of Engineers, Sacramento District, Student Intern Report, New Melones Lake Project Secondary Effects (April 1972).

134. Jones & Stokes Associates, A Preliminary Assessment of Flora and Fauna Affected by New Melones Reservoir, Sacramento, December 1971.

on the vegetative and wildlife "setting" of the area, and on the values of riparian vegetation.¹³⁵ A "salamander study"¹³⁶ responded to information that a rare species existed in the region; however, no such salamanders were located in the project area. A "whitewater study"¹³⁷ searched for a "mitigation area" to replace a section of the Stanislaus which was to be inundated by New Melones lake; the study could find no satisfactory reach on the upper forks of the Stanislaus. In addition to the aforementioned studies, the National Park Service funded preliminary surveys and excavations to locate and remove archeological artifacts to be inundated by the project.¹³⁸ Also, the National Speleological Society performed a study at no cost to the Corps.¹³⁹ It provided the Corps with their only information on the area's cave resources, and with recommendations for mitigation of cave loss.

There was also a third type of change. As the 102 process evolved, the documents were modified to include *additional discussion of the merits of the project* as distinguished from its environmental impact alone. The controversy over irrigation needs was brought out with increasing strength in comments resulting from various stages of review. In response to these comments the draft statement expanded upon discussion of the environmental impact of irrigation use in general, while the final impact statement went on to describe the Central Valley Project and to explain the Project's benefit-cost computations. As it happens, this process resulted in the inclusion of the water use issue under "Unreconciled Conflicts"; the federal district court later ruled that the impact statement was not complete without a full discussion of the environmental impact of the water

135. As summarized in the final impact statement, the study pointed out: Since natural vegetative values away from the river have been largely replaced by man's activities, the abundant riparian vegetation within the river's flood way provides an important scenic aspect for the region in addition to the intrinsic values of the numbers and kinds of vegetation and its uses.

Final EIS, *supra* note 3, at 21.

136. Jones & Stokes Associates, Search for Salamanders of the Genus *Hydromantes* in the Canyon of the Stanislaus River, Sacramento, March 1972.

137. Hammond, Childress, and Anderson, A Preliminary Assessment of Three Forks of the Stanislaus for Whitewater Boating, Winters, California, November 1971.

138. This is part of a five-year, \$46,000 program which is outlined in Central California Archeological Society, The New Melones Archeological Project, August 1970 (preliminary report).

139. National Speleological Society, Cave Conservation Task Force, New Melones Project, Draft Report of Study, November 1971.

Table 1

Summary of significant document modifications
in Draft and Final EIS

Addition of previously available information

<i>SECTION OF EIS</i>	<i>CHANGES IN DRAFT</i>	<i>CHANGES IN FINAL</i>
Project Description	more on irrigation	more on project operation lake area clearing described "benefit-cost" computations included
Environmental Setting	more on water quality	
Environmental Impact	more on fisheries	impact on groundwater added more on water quality
Alternatives	1.5 maf alternative added	
Coordination with others	public participation section added	special meetings described

Addition of information provided by new studies, including 102 process studies

<i>SECTION OF EIS</i>	<i>CHANGES IN DRAFT</i>	<i>CHANGES IN FINAL</i>
Project Description		description of Lower Stanislaus Plan
Environmental Setting	more on archeology more on wildlife, riparian habitat	flora and fauna study
Environmental Impact	more on whitewater more on cave resources	more on whitewater more on cave resources more on biological species
Coordination with others	unreconciled conflicts added	

use and ordered that a supplemental document describing this impact be prepared by the Bureau of Reclamation.¹⁴⁰

Reviews of the Working Paper and Draft EIS

An important part of the 102 process is the formal review of the draft EIS by interested public groups and governmental agencies. The Corps requires that both the working paper and the draft environmental impact statement be circulated for review by interested parties.¹⁴¹ The Corps guidance further requires that an individual response be made to each comment received during the course of the review. While some comments generated only words of explanation from the Corps and others met with a "no action" response, many comments prompted the Corps to "act"¹⁴² by revising the impact statement or by studying an issue further. The working paper generated 129 comments and the Corps took action on 84% of these.¹⁴³ There were 201 comments received on the Draft EIS; 40% of these prompted action by the Corps.¹⁴⁴ The comments on the working paper were very well integrated into the draft statement whereas comments on the draft were less well integrated into the final impact statement. One reason for this is that the Corps was further along with its analysis at the time the draft was distributed; they knew better what they wanted and thus were less open to suggestion. This supports the view that coordination early in the planning process can generate a more constructive response than review at a later time.

The Corps obtained valuable information from the review process. Although many of the comments explored wording or minor information changes, several were at least indirectly responsible for changes, not only in the draft or final versions, but also in the project itself. Fourteen significant revisions of the working paper

140. *Environmental Defense Fund, Inc. v. Armstrong*, 3 E.L.R. 20294 (N.D. Cal. 1973).

141. U.S. Army, Office of the Chief of Engineers, *Planning: Preparation and Coordination of Environmental Statements*, ER 1105-2-507 (April 15, 1974).

142. The term "action" is used here to include only actual *use* of the information given in a comment, either as the basis for additional study or in changing the impact statement itself.

143. U.S. Army Corps of Engineers, Sacramento District, *Comments Received on Environmental Working Paper* (November 1971) [hereinafter cited as "Working Paper Comments"].

144. Final EIS, *supra* note 3.

were made in preparing the draft, and of these seven were influenced by the review process. Of the sixteen significant revisions made in preparing the final statement, ten were effected by the review of the draft. Nearly all of the revisions (90%) that resulted from this comment-and-response procedure were generated by interest groups. Examples of comments received by the Corps, and their subsequent response serve to further illustrate the nature of the review process.

The following Environmental Protection Agency (EPA) comment on the working paper and the Corps' response show how the review resulted in changes in the draft.¹⁴⁵

EPA Comment on Working Paper

When and where is the irrigation water expected to be used with and/or without the East Side Canal?

Corps Response

Issue on irrigation, including relationship to East Side Project, should be clarified.

Review of the draft by the National Speleological Society (NSS) led to the following response:¹⁴⁶

NSS Comment on Draft EIS

There is little evidence that the larger living organisms within the caves will migrate. The ecology of the caves is very confining as well as fragile. . . . Interested persons may be available who could collect specimens prior to inundation for the purposes of relocating them to similar caves above gross pool.

Corps Response

This and related matters are being studied in conjunction with preparation of the master plan. Coordination is continuing . . . to arrange for relocating any unusual and important fauna from caves to be inundated.

The following Bureau of Reclamation and American River Touring Association comments on the working paper illustrate some of the attitudes of these commenting parties, as well as the positions taken by the Corps in their response.¹⁴⁷

Bureau of Reclamation Comments

Flow tabulations . . . are undesirable since they do not reflect favorably on East Side Canal.

Too objective—sounds like you don't care if you build the project or not.

Corps Response

Clarify East Side issue but will still include tabulation.

No action.

145. Working Paper Comments, *supra* note 143.

146. Final EIS, *supra* note 3.

147. Working Paper Comments, *supra* note 143.

Touring Association Comments

The working paper is not objective; it promotes the self-interests of the Corps.

The Corps should not try to impose a reservoir on a more valuable natural recreational resource such as the Stanislaus River.

Corps Response

USBR says exactly the opposite so we must be doing a good job.

I am sure this reflects the opinion of many people, but I don't see what we can do about it. Address under unresolved conflicts.

The Corps' response to the comments received in the course of the reviews was systematic and extensive. The thoroughness of its response is indicated by the numerous revisions which these reviews generated.

Key Factors Influencing the Execution of the 102 Process

There were two factors that had an especially noteworthy effect on the way in which the Sacramento District executed the 102 process. One of these was the strong support for environmentally sensitive planning exerted by the Sacramento District Engineer, Colonel James Donovan, from October 1970 to July 1973. The second was the litigation initiated by the Environmental Defense Fund.

The influence of the District Engineer

Colonel Donovan became deeply involved in the planning of New Melones and played a strong role in the execution of the 102 process. He encouraged an extensive environmental impact analysis. In response to a threat to file suit by the Sierra Club in March 1972, he delayed for 4½ months the contracting for the dam and spillway construction to allow more time for the environmental studies. During the U.S. District Court case, Donovan proposed a "compromise" which called for a supplemental environmental impact statement on the use of the conserved water, and for a slightly delayed construction contracting schedule. Although unacceptable to the environmentalists, it did win the court's approval. He encouraged communication with local conservationists in developing the Lower Stanislaus Plan and urged the Office of the Chief of Engineers to approve it. The extent of the Corps' response to NEPA for New Melones was in large measure due to the direction provided by Colonel Donovan.

The influence of litigation

While the execution of the 102 process was influenced strongly from within the Corps by the District Engineer, it was affected from outside by litigation. This litigation had two important effects.¹⁴⁸ The less important of the two was the effect which specific court decisions had on the project design. In the New Melones case, only supplemental data were required to be added to the impact statement, and no project changes were directed.¹⁴⁹ The second effect, and one that is more subtle and more difficult to measure, relates to the *threat* of litigation. This threat, hanging over the Corps since they began their environmental impact analysis, influenced the actions they took. As mentioned above, the Sierra Club threat of a suit in October 1971 led to Donovan's delaying the contracting for the dam construction by 4½ months. Moreover, it appears that the Corps hoped that the steps taken to mitigate environmental impacts caused by the project would minimize opposition to the project and decrease the likelihood of litigation.

EFFECTS OF THE 102 PROCESS ON NEW MELONES DESIGN

Since a principal objective of NEPA is to promote the integration of environmental considerations into federal actions, the ultimate measure of the Corps' response to the Act is given by the design of the New Melones project itself. Thus, it is necessary to consider how the planners and decision-makers used the information provided by the 102 process to modify the pre-NEPA design of the project. The first part of this section shows how the 102 process led to the addition of three important "mitigation" features to the pre-NEPA design of New Melones. The term "mitigation" refers herein to the addition of a project feature to *offset* an adverse effect *without*

148. A third effect relates to the way the litigation influenced the project construction schedule. The construction delays caused by the litigation have resulted in substantial increases in project costs. While the project was enjoined in the 9th Circuit Court of Appeals, the contractor who was ready to begin construction on the dam was forced to withdraw his \$81 million bid. A year later the same contractor won the contract for the same job with a bid of \$109.7 million.

149. In nearly all NEPA cases to date, courts have ruled strictly on procedural grounds, *i.e.*, on the adequacy of the impact statement itself, and not on the merits of the designed project.

eliminating the adverse effect itself. The second part of the section elaborates on why the Corps of Engineers did not recommend more sweeping revisions to the pre-NEPA project design (*e.g.*, the use of a smaller reservoir to save the key whitewater sections of the Stanislaus).

Mitigation Features Added to the Pre-NEPA Design

Cave resources

Before initiating the 102 process, the Corps had little awareness of the cave resources of the area. To assist the Corps in the preparation of its impact statement, the National Speleological Society formed a task force to study the project's impact on the caves. The task force discovered that, of the seventy caves in the area, ten would be inundated by the New Melones lake. The Society suggested that this loss would be "more than offset"¹⁵⁰ if the Corps were to purchase land containing additional caves, and provide for their protection. Some caves could be preserved and others could be included as part of the recreational master plan associated with the New Melones project. The Corps is presently developing plans for this acquisition, which is expected to be of considerable acreage.¹⁵¹

As the cave mitigation plan was emerging, it was discovered that a unique species of harvestman, or "daddy long legs" spider, inhabited one of the caves to be inundated. In response to this information and with the assistance of the Society and the California Academy of Science, the Corps arranged a procedure to transfer these spiders to caves above gross pool.

It is difficult to assess exactly how differently the Corps would have acted to offset the cave impacts *without* NEPA and the 102 process. Surely, without the National Speleological Society study, the cave mitigation features would not have been developed, if only due to lack of information. The impression given by Colonel Donovan in testimony before the Water Resources Control Board was that, without the 102 process, the Society's study would not have been undertaken.

150. Colonel James Donovan, Control Board Hearings, *supra* note 93, at 313.

151. Telephone interview with Jack Bernard, Corps of Engineers, Sacramento District, Environmental Resources Branch, November 13, 1973.

Whitewater

Through its 102 process, the Corps also became more aware of the whitewater values of the Stanislaus. After a study conducted for the Corps by a consultant showed no feasibility for whitewater development of the *upper* forks of the River, the Corps initiated tests on a four-mile reach downstream from the New Melones site. An Olympic kayak coach and a group of experts conducted these tests at varying flows on the reach from Goodwin Dam to Knights Ferry. The group concluded that there was a potential for intermediate and general recreational kayaking if access and adequate flows were provided and two rough falls were modified. The Corps included this kayak area into their plans for the downstream river. Although by their own admission this would not fully offset the loss of the nine-mile rafting area upstream, the provision was important to Colonel Donovan. Prior to the test he was concerned over the loss of whitewater and was uncertain of how to address the issue in his statement of findings. When the test showed a potential for "at least some partial mitigation of the loss," he was content to proceed with the project.¹⁵²

The whitewater issue was certainly not brought out by the 102 process alone. The political pressure of 130,000 petition signatures, together with letters from Senator Tunney, Congressman McFall and Governor Reagan urging mitigation of the expected whitewater loss had a major impact on the Corps' response. The feasibility study and the test run, though, were conducted as part of the 102 process. The environmental impact analysis served as a vehicle which the Corps used to invest manpower and money to search for a mitigation measure that would satisfy those concerned about whitewater.

Lower Stanislaus Plan

A third New Melones change implemented by the Corps in response to information provided by the 102 process was the addition of a plan for the lower Stanislaus River from Goodwin Dam to its mouth at the San Joaquin River. The plan called for the acquisition of land along this fifty-mile reach to achieve the following objectives: (a) maintenance of a channel capacity of at least 8000 cfs; (b) preservation of existing fish and *riparian wildlife*

152. Colonel James Donovan, Control Board Hearings, *supra* note 93, at 319.

habitat to offset the 16 miles of such habitat inundated by the reservoir; (c) preservation of salmon and steelhead *spawning grounds*; and (d) provision of *public access* to the lower river to insure the assumed downstream fisheries benefits and mitigate the loss of upstream river-based recreation.

The following tentative provisions of the plan were presented November 28, 1973, at a public meeting: (1) acquisition of flowage easements over the 8000 cfs floodway; (2) acquisition in easement of all lands that contain significant riparian vegetation and fish and wildlife habitat; (3) acquisition in easement of limited area to allow members of the public to reach the river's edge; and (4) acquisition in fee title of 12 acres to be developed to support public recreation use.¹⁵³

The plan surely was not the result of NEPA alone. The Flood Control Act of 1962 gave the Corps the authority and the responsibility to maintain channel capacity and otherwise plan for the lower River. State and federal fish and wildlife agencies suggested acquisition of riparian land and preservation of spawning gravels as far back as 1962. And public access was necessary to insure the achievement of fisheries benefits. However, NEPA was an added influence and, according to Corps planner Jack Bernard, a necessary one for the implementation of the plan.¹⁵⁴ The studies undertaken as part of the 102 process provided insight into the values associated with riparian habitat. Moreover, the controversy which developed over the project encouraged the Corps to include whatever environmental features they could. Working with local conservationists beginning in late 1970, the Corps conceived of this lower river plan to make the project as a whole more desirable.¹⁵⁵

153. U.S. Army Corps of Engineers, Sacramento District, Information Sheet on Lower Stanislaus Plan, October 26, 1973. Although the cost of this plan had not been specified, it closely resembled a plan originally presented in March 1973, involving 8000 acres with an estimated cost of \$11.5 million.

154. Interview with Jack Bernard, Corps of Engineers, Sacramento District, Environmental Resources Branch, Sacramento, May 30, 1973.

155. U.S. Army Corps of Engineers, Sacramento District, Information Sheet: Lower Stanislaus River Tentative Plan, March 30, 1973:

The recent controversy and litigation associated with the environmental impact of New Melones Lake has focused sharp attention on the mandate to preserve and propagate resources along the lower Stanislaus River. The U.S. District Court . . . has retained jurisdiction to assure full compliance with the National Environmental Policy Act. Accordingly, it is imperative that plans for fish and wildlife protection on the lower Stanislaus proceed in a timely manner.

Absence of Fundamental Changes in the New Melones Design

The aforementioned mitigative measures provide an indication of the extent to which NEPA influenced the New Melones design. The Corps seemed satisfied that they had responded to the mandate provided by NEPA by adding these three project features to offset expected adverse environmental impacts. However, these changes involved only additions to the pre-NEPA project design. The Corps did not find it necessary to modify the basic project design in light of the information brought forth in the 102 process. It can be argued, however, that a modified New Melones might have best served the range of interests affected by the project. Indeed, the California State Water Resources Control Board ruled that since the need for the water conserved by New Melones could not be demonstrated at this time, the public interest required the protection of the upstream whitewater. The Board also ruled that the reservoir could be only partially filled until a need for the water arose which would outweigh the values associated with the whitewater.

Whether or not the Corps could or should have modified their project in light of the goals of NEPA is difficult to assess. Below we indicate several factors which help explain why the Corps did not make fundamental changes in the pre-NEPA design as a result of the information yielded by the 102 process.

The 102 process provided little information on the water use issue. In comparison to the information regarding the water needs of the Central Valley Project brought out in the WRCB hearings, the Corps' New Melones 102 process shed little light on the water use issue. Matters concerning project operations and the use of the conserved water were under the Bureau of Reclamation's authority, and the Corps had little to say about them. Most challenges to the impact statement regarding water use were dealt with by referring to an additional statement to be completed by the Bureau of Reclamation prior to the operation of the project. It took a district court decision to force the Corps and Bureau finally to discuss the environmental impacts associated with the water use in a supplemental impact statement. No particular use of the water was specified in the supplement, but seven potential service areas were considered. The supplement, however, appears to be little more than an exercise to satisfy a judicial ruling which added very little to the

planning effort.¹⁵⁶ Although responses were made to all comments received on the draft supplement, none of the information provided by the comments was integrated into the final supplement. For example, an EDF comment regarding the supplies and needs of the Central Valley Project was met with the following terse response: "There is not enough water available and new sources are needed."¹⁵⁷

Corps planners believed the proposed project was best. The 102 process was not the sole source of information regarding the water use issue. Assuming the Corps did have information similar to that possessed by the Water Resources Control Board regarding the whitewater values and the water use needs, why did they not act to modify the project? Many planners in the Sacramento District of the Corps considered the proposed New Melones to be the most beneficial project that could be developed at the site, considering the full range of values including whitewater and conserved water use.

There were some constraints on the Corps' ability to modify New Melones. Whether or not Colonel Donovan would have modified the project in a manner that was responsive to the Water Resources Control Board decision if he were in a position to do so is a moot point and of no particular interest. The fact is, however, that he was not in a position to modify the project due to three constraints: the *legislation* authorizing New Melones, the *financial commitments* made to the project as designed, and the Corps' *relationship with the Bureau of Reclamation*.

At the time when New Melones was authorized by Congress, the project was envisioned to be a source of water for the East Side Canal. Although the Flood Control Act of 1962 did not mention East Side, it did require that the project be operated as an "integral part of the Central Valley Project."¹⁵⁸ Events transpiring since 1962 now make it appear the originally planned Initial East Side Division may be deferred.¹⁵⁹ A specific alternative use of the water conserved by New Melones has not been determined. Although the Flood

- 156. Interview with John Morgan, Bureau of Reclamation, Mid-Pacific Regional Office, Sacramento, May 30, 1973.

157. Bureau of Reclamation, Supplemental EIS, *supra* note 5, at B-19.

158. Flood Control Act of 1962, Pub. L. No. 87-874, 16 U.S.C. § 460d (1970).

159. Bureau of Reclamation, Supplemental EIS, *supra* note 5, at 2.

Control Act did not specify a 2.4 million acre foot reservoir (it referred to the survey report which did), a reservoir of lesser capacity would have little to offer the Central Valley Project. A decision to reduce the project size would lead to difficulties in satisfying this authorizing requirement.

In addition to the constraints of authority, the Corps were constrained by commitments made to the pre-NEPA design. Once the range of alternatives narrows to one, further planning generally involves making refinements and additions; and as construction begins, substantial modifications in project design are financially impracticable. The General Design Memorandum for New Melones was completed in July 1967, two and one-half years before NEPA became law. Major construction on the diversion and power outlet tunnel was begun in June 1970, well before the Corps' environmental impact analysis was begun. By 1970, \$10 million had been expended on the project, mostly on planning; and by the end of 1972, \$43 million had been spent.¹⁶⁰ Any modification which would exclude use of the constructed tunnel as would conversion to a 1.1 maf reservoir, would result in a substantial waste of public monies. Such a decision would not be likely to come from the Corps.

Finally, the authorizing legislation specified the New Melones project as a joint Corps of Engineers-Bureau of Reclamation endeavor. The Corps was to build it and the Bureau was to operate it as part of the Central Valley Project. The Corps was constrained in any decisions which would affect project operation. The Corps did not have sole power to evaluate potential environmental impact in relation to potential benefits, and thereby determine the need for project modification.

Each of the aforementioned factors inhibited the Corps from modifying New Melones. The constraints on their decision making, especially that of their relationship with the Bureau, seemed to have exerted the strongest influence.

EFFECTIVENESS OF THE 102 PROCESS IN ATTAINING NEPA'S GOALS

The environmental impact statement requirements set forth in Section 102(2)(C) of NEPA are widely acclaimed as the provisions

160. *Hearings, supra* note 43, at 188.

of the Act which force federal agencies to consider the environmental quality goals of NEPA in their planning and decision making. But just how effective have the Section 102(2)(C) provisions been in encouraging agencies to consider environmental factors? Although the results from the New Melones experience do not provide the basis for a generalized response to this important question, they do provide some insights. The New Melones experience is timely, inasmuch as it involves a situation that will be common over the next several years: it involves a project for which planning was largely completed prior to the enactment of NEPA.

It seems fair to say that the 102 process for New Melones was effective in providing a good deal of information regarding the environmental impact of the proposed project. The process yielded new information on cave resources, and the values associated with whitewater and riparian vegetation. However, because of the ambiguity associated with the use of the conserved water, the full range of environmental impact was not described until the courts interceded.

In contrast, the 102 process yielded relatively little information on the range of possible alternative actions and the environmental impacts that would be associated with such actions. Indeed, the entire discussion of alternatives and their impacts occupied a mere six pages of the final environmental impact statement. Furthermore, because the New Melones project was in such an advanced stage of planning when the 102 process was initiated, the process did little to bring about the consideration of environmental factors in the *formulation* of possible Corps' actions; the only exception here concerns the various features which the Corps added to the pre-NEPA project design to mitigate adverse effects.

Moreover, even when the opportunity existed to consider environmental factors in formulating alternatives, as was the case in the Bureau's supplemental statement, the opportunity was not seized. The supplemental impact statement for New Melones involved an environmental impact analysis that was performed before alternatives were delineated. Since no specific service area for the conserved water was known, seven potential areas were specified and an analysis of the impacts associated with the water use in each was performed. Although it would seem that such an analysis would be helpful to the Bureau in planning water use in light of NEPA objectives, some in the Bureau felt that it did not help the planning

effort and would have been done better later.¹⁶¹ It appears the Bureau was more interested in writing a legally adequate impact statement than in integrating environmental factors into the project planning.

One area in which the 102 process for New Melones seemed especially effective as a technique for attaining the goals of NEPA related to the extent to which it gave both agencies and public groups an opportunity for review and comment. Of the thirty major changes that occurred in progressing from the working paper to the final EIS, seventeen were significantly influenced by the review process. Of these seventeen, however, only four changes were born of the comments of other agencies. Because the history of the New Melones project was characterized by considerable agency interaction, there may have been relatively little left to say. An exception was the State of California's comments, which raised several important new issues. These comments indicated that previous communication between the Corps and the State may have been deficient. The importance of interagency review of the EIS appears to be inversely proportional to the extent of previous interaction between agencies.

The New Melones 102 process also demonstrated the utility of the working paper or any preliminary form of a draft statement. The Corps acted on 84% of the comments on the working paper, but acted on only 40% of the comments on the draft impact statement. The effectiveness of the review and coordination clearly depends upon *when* it occurs in the 102 process. As demonstrated by the New Melones case, there is much to be gained by conducting a review and coordination effort well before the point at which the draft is prepared.

The 102 process provided the public with a structured opportunity to review and comment on the proposed project. Of the review process comments which led to changes in the final statement, most were generated by members of the public. Through the review process, the public could provide the Corps with *information* regarding the impact of the project and possible methods of mitigation, and *evaluative comment* on the project as a whole. However, the effectiveness of the 102 process as a mechanism for public participation in planning depends on who takes part in the review, and what

161. Interview with John Morgan, *supra* note 156.

influence the comments have. Few of the public groups or communities who would be directly affected by the New Melones project became involved in the review. Formal comment came exclusively from conservation groups. Moreover, because planning was at a very advanced stage, the influence which the comments had was minimal. The principal influence of the review was in developing features to mitigate adverse impacts.

The 102 process provided the public with a full disclosure document—the environmental impact statement. Since such a document did not exist earlier, it had considerable utility. It aided communication between the Corps and the “outside world,” and displayed the impact of the proposed project on the environment. Yet the action which could have been taken on such a disclosure was limited. Past judicial review of impact statement preparation has stressed procedural issues rather than substantive issues. It is doubtful that courts will rule on the substance of agency decision making in the future. The New Melones case serves to support the National Water Commission recommendation for a board of review, independent from the agency, to more objectively weigh projects in terms of the public interest.¹⁶²

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162. NATIONAL WATER COMMISSION, WATER POLICIES FOR THE FUTURE 406-09 (June 1973).