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Environmental Review of Western Water Project Operations:

Where NEPA Has Not Applied, Will It Now Protect Farmers From Fish?

Reed D. Benson*

The U.S. Bureau of Reclamation operates hundreds of dams in seventeen western states; the storage and release of water at these dams often causes serious environmental impacts. In operating these dams, however, the Bureau has largely been excused from complying with the environmental review requirements of the National Environmental Policy Act (NEPA). This article analyzes relevant NEPA cases involving these Bureau projects, and argues that the Bureau should conduct NEPA reviews for long-term project operations even if they are not legally required. It also describes and critiques District Judge Oliver Wanger's recent decisions applying NEPA to the Bureau's efforts to comply with the Endangered Species Act (ESA) in operating the Central Valley Project. The article concludes that the Bureau should use NEPA as a tool for making long-term decisions on project operations, but that courts should not insist on NEPA compliance that would interfere with efforts to protect endangered species.

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^{*} Professor, University of New Mexico School of Law. The author wishes to thank Keri Hatley, a 2010 UNM law graduate, for her excellent research assistance; Dean Kevin Washburn and the UNM School of Law for their financial support of the work that went into this article; and the many people (especially attorneys Hal Candee, Joan Drake, and Kate Poole) who took their valuable time to discuss some of the relevant issues. All opinions, conclusions, and errors of omission or judgment are the author's alone.

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· I. Introduction

Few federal agencies are as well known for their environmental impacts as the U.S. Bureau of Reclamation. The Bureau spent much of the 20th century building hundreds of dams across seventeen western states, resulting in what Marc Reisner called "the most fateful transformation that has ever been visited on any landscape, anywhere[.]" The construction and closing of these dams wiped out many magnificent places across the western United States. Opposition to proposed Bureau dams has

^{1.} The Bureau today operates 476 dams. Bureau of Reclamation Quick Facts, BUREAU OF RECLAMATION, http://www.usbr.gov/facts.html (last updated Jan. 18, 2011). The seventeen Reclamation states are the six Great Plains states from North Dakota down to Texas, the three West Coast states, and the eight states of the Interior West. See 43 U.S.C. § 391 (2006).

^{2.} MARC REISNER, CADILLAC DESERT 166 (Penguin Books rev. ed. 1993).

^{3.} In the words of Dr. MacDonnell,

In little over 100 years, this waterscape of the arid West has been transformed as completely and inalterably as the landscape. Accounts of the almost jungle-like

been credited with galvanizing the modern conservation movement,⁴ and there is little doubt that environmental opposition helped bring an end to the era of major federal dam construction.⁵

Today, the Bureau operates hundreds of existing dams, storing and releasing water for irrigation, hydropower, drinking water, and other human uses.⁶ Operation of these dams, however, creates a variety of serious and ongoing environmental impacts throughout the West. Most notably, reservoir operations change the quantity, quality, and timing of downstream river flows, often damaging aquatic ecosystems and harming native species.⁷ In-

delta at the mouth of the Colorado River, the vast marshes and wetlands of places like Tulare Lake in the south Central Valley of California, and Lake Winnemuca and the Lahontan wetlands in the Great Basin of Nevada read like fairy tales—did these places actually exist? The more recently inundated natural wonders like Celilo Falls on the Columbia River and Glen Canyon on the Colorado River have also become mythical places of the past.

Lawrence J. MacDonnell, Managing Reclamation Facilities for Ecosystem Benefits, 67 U. Colo. L. Rev. 197, 198-99 (1996) (footnotes omitted).

- 4. The Sierra Club played a key role in defeating a proposed Bureau dam within Dinosaur National Monument, at the confluence of the Yampa and Green Rivers. "Conservationists say that the Dinosaur victory was the birth of the modern conservation movement—the turning point at which conservation became something more than contour plowing." John McPhee, Encounters with the Archdrud 165 (1971). Part 3 of McPhee's book addresses the competing views of the Bureau and the Sierra Club regarding new dams, and features an entertaining account of a Grand Canyon river trip including legendary conservationist David Brower and powerful Reclamation Commissioner Floyd Dominy. *Id.* at 153.
- 5. See Donald J. Pisani, Federal Reclamation Law in the Twentieth Century: A Centennial Retrospective, 2 The Bureau of Reclamation: Hist. Essays from the Centennial Symp. 611, 625 (2008), available at http://www.usbr.gov/history/Symposium_2008/Historical_Essays.pdf.
- 6. The Bureau claims that its facilities deliver irrigation water to ten million acres and 1/5 of the West's farmers, generate seventeen percent of the nation's hydropower, provide municipal water supplies serving thirty one million people, and have attracted ninety million recreational visits. Bureau of Reclamation Quick Facts, supra note 1.
- 7. Richter and Thomas summarize the typical downstream effects of dams (not necessary Bureau dams) as follows:

Of all the environmental changes wrought by dam construction and operation, the alteration of natural water flow regimes has had the most pervasive and damaging effects on river ecosystems and species (Poff et al. 1997, Postel and Richter 2003). Below we discuss the ways that dam operations induce hydrologic changes, the nature of which is strongly influenced by the operating purposes of the dam. Dams can heavily modify the volume of water flowing downstream, change the timing, frequency, and duration of high and low flows, and alter the natural rates at which rivers rise and fall during runoff events. Although much has been written about the ecological consequences of hydrologic alteration, Bunn and Arthington (2002) summarize their review of this literature by highlighting four primary ecological impacts associated with flow alteration: (1) because river flow shapes physical hab-

deed, a 1996 study of counties in the western United States "found that the number of ESA-listed fish species in a county correlated positively with the level of irrigated agriculture reliant on surface water in the county. In particular, the number of species depended positively on water-supply levels of the Bureau of Reclamation." Where project operations have harmed species protected by the Endangered Species Act,9 the ESA has sometimes forced the Bureau to modify its operations, generating major legal and political controversy.¹⁰

Another of the nation's monumental environmental laws, however, has had virtually no impact on the Bureau's project operations. The National Environmental Policy Act¹¹ (NEPA) recently marked its 40th anniversary, and President Obama issued a proclamation calling it "the cornerstone of our nation's modern environmental protections." NEPA's key requirement is that federal agencies prepare an Environmental Impact Statement (EIS) on their proposed actions which could significantly affect environmental quality. The Bureau today conducts a significant number of environmental reviews under NEPA, covering a wide range of activities. As this article explains, however, federal courts have held—rightly or wrongly—that the Bureau's

itats such as riffles, pools, and bars in rivers and floodplains, and thereby determines biotic composition, flow alteration can lead to severely modified channel and floodplain habitats; (2) aquatic species have evolved life history strategies, such as their timing of reproduction, in direct response to natural flow regimes, which can be desynchronized through flow alteration; (3) many species are highly dependent upon lateral and longitudinal hydraulic connectivity, which can be broken through flow alteration; and (4) the invasion of exotic and introduced species in river systems can be facilitated by flow alteration.

Brian D. Richter & Gregory A. Thomas, Restoring Environmental Flows by Modifying Dam Operations, 12 Ecology & Soc'y 2 (2007), available at http://www.ecologyandsociety.org/vol12/iss1/art12.

- 8. Michael R. Moore et al., Water Allocation in the American West: Endangered Fish Versus Irrigated Agriculture, 36 NAT. RESOURCES J. 319, 348 (1996).
 - 9. Endangered Species Act, 16 U.S.C. §§ 1531-1544 (2006).
- 10. For an in-depth analysis and account of the controversy surrounding Bureau project operations and the ESA in the Klamath River Basin, see Holly D. Doremus & A. Dan Tarlock, Water War in the Klamath Basin (2008). For a review of the parallel controversy in the Middle Rio Grande basin, see Ethan R. Hasenstein, Note, Frankenstein and Pitbull? Transmogrifying the Endangered Species Act and "Fixing" the San Juan-Chama Project After Rio Grande Silvery Minnow v. Keys, 34 Envil. L. 1247 (2004).
 - 11. National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370f (2006).
- 12. Proclamation No. 8469, 3 C.F.R. 181 (2010), available at http://www.white house.gov/the-press-office/presidential-proclamation-40th-anniversary-national-environmental-policy-act.
 - 13. See 42 U.S.C. § 4332(2)(C) (2006).

"routine" project operations do not require an EIS. Thus, despite their environmental impacts, the Bureau's decisions regarding project operations have mostly been immune from NEPA requirements to develop alternatives, involve the public, and assess environmental consequences.

One can understand why the Bureau might be reluctant to do more environmental reviews of project operations. NEPA compliance at existing projects would require a significant investment of time and resources, and would expose the Bureau to litigation risks. These are serious drawbacks, but applying NEPA to project operations also offers potentially significant benefits. It would bring the Bureau's practices in line with prevailing law and policy regarding NEPA implementation. It would ensure that the Bureau meets its commitment to integrate environmental factors into its decisions. It would expand opportunities for public involvement, and thus, ensure that a wide range of interested groups have the chance to be informed and engaged regarding project operations. Finally, it would assist the Bureau in making long-term plans for responding to changed conditions, including those arising from climate change.

One court has ordered the Bureau to comply with NEPA, however, in ongoing litigation over the operation of the massive Central Valley Project (CVP) in California. Recently adopted measures to protected endangered fish species, along with drought and other factors, have caused serious cutbacks in CVP water deliveries for irrigation and other purposes, provoking a major legal and political controversy. If In cases brought by California water users challenging the federal government's actions, U.S. District Judge Oliver Wanger has held that the Bureau violated NEPA by adopting and implementing the ESA measures without an EIS, and that water users deserve injunctive relief pending NEPA compliance. It is too soon to tell the effects of these May 2010 decisions, Is but they potentially mean that NEPA contributes to the extinction of at least one highly imperiled spe-

^{14.} See Matt Jenkins, Breakdown: 'The Cadillac of California Irrigation Districts' Has More than a Tiny Fish to Blame for Its Troubles, High Country News (Apr. 21, 2010), http://www.hcn.org/issues/42.1/breakdown (describing political rallies against ESA and efforts in Congress to lift ESA restrictions on CVP pumping).

^{15.} Consol. Salmonid Cases, 713 F. Supp. 2d 1116 (E.D. Cal. 2010); Consol. Delta Smelt Cases, 717 F. Supp. 2d 1021 (E.D. Cal. 2010).

cies,¹⁶ and that the "cornerstone" of US environmental law poses a burden on environmental protection and a boon to water users who seek to reduce or delay economic losses.

This article addresses the role of NEPA regarding the Bureau's operation of existing water projects. Part II provides basic information on the Bureau's project operations and the general requirements of NEPA for federal agencies. Part III addresses the Bureau's NEPA policies and practices, analyzes relevant NEPA cases involving Bureau projects, and argues that the Bureau should conduct NEPA reviews for long-term project operations even if not required by the courts. Part IV summarizes the Bureau's obligations in operating its projects under the ESA, then describes and critiques Judge Wanger's application of NEPA to the Bureau's recent decisions regarding ESA compliance and CVP operations. The article concludes with comments on the role of these two environmental laws in relation to operation of the Bureau's water projects.

II. LEGAL BASICS

A. Reclamation Project Operations

Congress launched the federal reclamation program in 1902, enacting a statute¹⁷ that authorized the Interior Secretary to build "irrigation works for the storage, diversion, and development of waters"¹⁸ in the western states and territories. As originally conceived, these projects would supply irrigation water to farmers who would settle on designated lands and "reclaim" them for irrigated agriculture, repaying the government's construction costs over a ten-year period.¹⁹ From the beginning, the Bureau was to manage and operate project reservoirs, and to retain ownership and control of them even after the farmers had paid their share of project costs.²⁰

The 1902 Reclamation Act authorized projects solely for irrigation, and under that statute the Bureau got off to a rather slow

^{16.} See Jenkins, supra note 14 (noting that Delta smelt populations had fallen to record lows by 2004 and were "on the razor's edge" of extinction, quoting Barry Nelson of the Natural Resources Defense Council).

^{17.} Reclamation Act, ch. 1093, 32 Stat. 388 (1903) (codified at scattered sections of 43 U.S.C. §§ 371-498 (2006)).

^{18.} Id. § 2 (codified at 43 U.S.C. § 411 (2006)).

^{19.} Id. §§ 4-5.

^{20.} Id. § 6 (codified at 43 U.S.C. § 498 (2006)).

start.²¹ The pace of construction picked up dramatically in the 1930s,²² in part because the reclamation program expanded to serve new purposes. By 1939, Congress had recognized that reclamation projects could serve multiple purposes, including hydropower, flood control, navigation, municipal water supply, and other "miscellaneous purposes."²³ As stated by historian Donald Pisani, "[n]ot until the 1930s, when the 'High Dam Era' gave the bureau responsibilities for providing water to cities as well as farms, did it become the most important federal agency in the West. From 1930 to 1970 the water and power provided by the bureau transformed the region[.]"²⁴

The 1902 Act and other programmatic statutes lay out general rules for the reclamation program, but each project operates within its own legal framework, including project authorizing statutes and water supply contracts.²⁵ The authorizing statutes specify (among other things) the purposes for which the projects are constructed and operated: for example, Congress authorized the multipurpose Washita Basin Project in Oklahoma:

[F]or the principal purposes of storing, regulating, and furnishing water for municipal, domestic, and industrial use, and, for the irrigation of approximately twenty-six thousand acres of land and of controlling floods and, as incidents to the foregoing for the additional purposes of regulating the flow of the Washita River, providing for the preservation and propagation of fish and wildlife, and of enhancing recreational opportunities.²⁶

This example indicates that authorizing statutes may dictate the priorities as well as the functions of a project. The specific

^{21. &}quot;By the time Theodore Roosevelt left office in 1909, two dozen projects had been launched, at least one in every state and territory, but none had been completed." Pisani, *supra* note 5, at 611.

^{22. &}quot;Within its first thirty years, [the Bureau] had built about three dozen projects. During the next thirty years, it built nineteen dozen more." Reisner, supra note 2, at 145.

^{23.} Reclamation Project Act of 1939, ch. 418, § 9(a), 53 Stat. 1187, 1193 (1939) (codified at 43 U.S.C. § 485h(a) (2006)). Well before 1939, however, Congress was already authorizing reclamation projects for multiple purposes; for example, the Boulder Canyon Project Act authorized construction of Boulder (Hoover) Dam for purposes of river regulation, improvement of navigation, flood control, "irrigation and domestic uses and satisfaction of present perfected rights," and also provided for hydropower development at the dam. Boulder Canyon Project Act, ch. 42, § 6, 45 Stat. 1057, 1061 (1929).

^{24.} Pisani, supra note 5, at 611.

^{25.} For a general overview of these arrangements governing reclamation project water, see generally Reed D. Benson, Whose Water Is It? Private Rights and Public Authority Over Reclamation Project Water, 16 VA. ENVIL. L.J. 363 (1997).

^{26.} Act of Feb. 25, 1956, ch. 71, § 1, 70 Stat. 28, 28-29 (1957).

water supply obligations of a project are governed by contracts between the Bureau and an entity such as an irrigation district or a municipality,²⁷ which in turn delivers the water to end users such as irrigators or homeowners. Under the typical "repayment" contract, the water supply entity repays its defined portion of the project's construction costs over a period of years; by contrast, a water service contract requires the user to pay a certain charge in return for water delivery for a set period of years, after which the contract may be renewed.²⁸ Either way, the water supply contracts for a project largely dictate operations for that project, *i.e.*, reservoir storage and releases: water is stored when available and released when contractors call for water to meet their needs.²⁹

The Bureau develops official operating plans for some projects; for example, the Klamath Project has operated under annual plans since at least the mid-1990s.³⁰ The 2010 plan forecasts the amount of water available to the project for the year, then sets requirements for downstream releases, establishes both "target" and "floor" levels for Upper Klamath Lake (the project's main source of storage), and estimates the amount of water available for both farms and wildlife refuges that rely on the project for their water supply.³¹ Most reclamation projects, however, operate under a less formal and more general (though not necessarily more flexible) set of criteria.³² For example, the "Op-

^{27.} See 2 WATERS & WATER RIGHTS § 41.05(c) (Robert E. Beck & Amy K. Kelley eds., 3d ed., LexisNexis 2009) (discussing the Bureau's water delivery obligations under its water supply contracts).).

^{28.} See generally Grant Cnty. Black Sands Irrigation Dist. v. U.S. Bureau of Reclamation, 579 F.3d 1345 (Fed. Cir. 2009) (explaining repayment contracts, long-term water service contracts, and other water service contracts, and examining statutes addressing these various forms of contracts).

^{29.} See, e.g., Rio Grande Silvery Minnow v. Keys, 469 F. Supp. 2d 973, 991 (D. N.M. 2002) (The Bureau "owns El Vado Dam and Reservoir and is authorized by federal law and state permit to store native Rio Grande water there for [a water supply district]. [The Bureau] releases that water at [the district's] call as agreed by contract and authorized by the state permit."), aff'd, 333 F.3d 1109 (10th Cir. 2003), vacated as moot, 355 F.3d 1215 (10th Cir. 2004).

^{30.} For a brief history of the Bureau's practice of producing annual Klamath Project operating plans through 2001, see Reed D. Benson, *Giving Suckers (and Salmon) an Even Break: Klamath Basin Water and the Endangered Species Act*, 15 TULANE ENVIL. L.J. 197, 218-20 (2002).

^{31.} U.S. Bureau of Reclamation, Klamath Project 2010 Operations Plan (May 6, 2010), available at http://www.usbr.gov/mp/kbao/operations/2010/2010_OPS_PLAN. pdf (last visited Sept. 26, 2011).

^{32.} By contrast, U.S. Army Corps of Engineers projects typically operate under official plans that prescribe operations rather specifically. See 33 C.F.R. § 222.5

erations Fact Sheet" for El Vado Reservoir describes the factors governing water storage (chiefly the Rio Grande Compact) and release (chiefly irrigation and tribal water demands), and notes that the Bureau targets winter releases of 150-185 cfs for fish habitat and summer weekend releases of 400-600 cfs for rafting.³³

As noted above, the reclamation program as a whole provides substantial benefits for a range of water uses, including irrigation, municipal water supply, hydropower, and recreation³⁴—but those multiple benefits also suggest the complex operational choices that the Bureau must make. In operating any reservoir, the Bureau may face recurring trade-offs between such uses or between any of them and environmental protection.³⁵ Water releases that maximize hydropower revenues, for example, may well harm downstream aquatic ecosystems to the detriment of native fisheries. Holding water in reservoirs to benefit recreational fisheries reduces the amount that can be released for downstream uses such as navigation. Cutting releases in times of drought may benefit irrigators who use stored water while harming those who depend on healthy fisheries below the dam. In short, the Bureau's project operating decisions create winners and losers among competing uses of water, and the consequences of these decisions grow as water supplies shrink.

B. NEPA Requirements for Environmental Impact Review

The National Environmental Policy Act was signed into law on Jan. 1, 1970,³⁶ setting the tone for a decade in which Congress enacted many of the nation's major environmental statutes. "NEPA was the first major environmental law in the United States and is often called the 'Magna Carta' of environmental laws,"³⁷ indicating its importance as well as its seniority.

^{(2010) (}Corps rules for "water control plans" governing operation of Corps projects). See also South Dakota v. Ubbelohde, 330 F.3d 1014, 1020, 1027-30 (8th Cir. 2003) (describing the Corps' Master Manual for Missouri River operations, and determining that the Master Manual is binding on the Corps).

^{33.} U.S. Bureau of Reclamation, Operations Fact Sheet, El Vado Dam and Reservoir (Aug. 12, 2005), available at http://www.usbr.gov/uc/albuq/water/SanJuan Chama/Reservoirs/fs/sjc_elvado.html.

^{34.} See Bureau of Reclamation Quick Facts, supra note 1; see also supra text accompanying note 6.

^{35.} See Richter & Thomas, supra note 7, at 3.

^{36.} National Environmental Policy Act (NEPA), Pub. L. No. 91-190, 83 Stat. 852 (1969) (codified at 42 U.S.C. §§ 4321-4347 (2006)).

^{37.} COUNCIL ON ENVIL. QUALITY, A CITIZEN'S GUIDE TO NEPA (2007) [hereinafter Guide to NEPA].

True to its name, NEPA establishes a national environmental policy, albeit in very broad terms. In section 101(a), Congress declares the policy of the federal government "to use all practical means and measures" so as to promote certain general goals, including "to create and maintain conditions under which man and nature can exist in productive harmony."38 Section 101(b) states that in order to carry out this policy, the federal government has a continuing duty "to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate federal plans, functions, programs, and resources" to achieve certain goals relating to resource use, environmental quality, and quality of life for present and future Americans.³⁹ These policy statements have been of dubious practical importance, since the federal courts determined long ago that they do not impose binding, substantive obligations on the federal government.⁴⁰ NEPA continues to state the nation's official environmental policy, however, and the executive and judicial branches "share responsibility for enforcing the Act so as to achieve the substantive requirements of section 101."41

The key section in practice has been section 102, which directs the government "to the fullest extent possible" to (1) interpret and administer federal laws, policies, and regulations in accordance with NEPA's policies, ⁴² and (2) to:

^{38. 42} U.S.C. § 4331(a) (2006).

^{39.} Id. § 4331(b). Specifically, this section directs the government to take measures to serve these ends:

⁽¹⁾ fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

⁽²⁾ assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

⁽³⁾ attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

⁽⁴⁾ preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

⁽⁵⁾ achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

⁽⁶⁾ enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

^{40.} See, e.g., Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971); see also Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223 (1980) (per curiam).

^{41. 40} C.F.R. § 1500.1(a) (2010). This statement appears in the first section of the Council on Environmental Quality's (CEQ) NEPA implementing rules, explained *infra* at notes 46-49 and accompanying text.

^{42. 42} U.S.C. § 4332(1) (2006).

[I]nclude in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) the alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.⁴³

This requirement of a detailed statement—known as an Environmental Impact Statement or EIS—on certain proposed federal agency actions has been NEPA's most significant provision.

The EIS requirement applies to all federal agencies,⁴⁴ and Congress established a new entity called the Council on Environmental Quality (CEQ) within the White House⁴⁵ to oversee implementation of NEPA across the federal government. CEQ must conduct studies, produce reports, and develop policies, as well as "review and appraise the various programs and activities of the Federal Government" as they relate to NEPA's policies.⁴⁶ Most significantly, CEQ has developed rules⁴⁷ that define key statutory terms and delineate federal agency duties in implementing the procedural requirements of section 102. These rules bind all federal agencies,⁴⁸ and the U.S. Supreme Court has stated that courts owe these rules substantial deference.⁴⁹

^{43.} *Id.* \$4332(2)(C). NEPA \$ 102(2) applies to all agencies of the federal government, and states several requirements in addition to the "detailed statement" mandate of subsection (C), one of which is to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." *Id.* §\$ 4332, 4332(C), 4332(2)(E).

^{44.} Id. §4332(2).

^{45.} NEPA created CEQ, to be located within the Executive Office of the President. Pub. L. 91-190, § 202, 83 Stat. 854 (1969) (codified at 42 U.S.C. § 4342 (2006)).

^{46. 42} U.S.C. § 4344(3) (2006).

^{47.} See 40 C.F.R. §§ 1500-1508 (2010).

^{48.} Id. § 1500.3.

^{49.} See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 355-56 (1989) (citing Andrus v. Sierra Club, 442 U.S. 347, 358 (1979)).

NEPA is implicated when a federal agency proposes a "major federal action." The statute does not define this term, and the CEQ rules explain it at some length but never state a definitive meaning. Under the rules, the term "includes actions with effects that may be major and which are potentially subject to Federal control and responsibility." They further explain that actions include "new and *continuing* activities, including projects or programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies," along with "new or revised agency rules, regulations, plans, policies, or procedures." The rules also identify four categories that federal actions "tend to fall within": adoption of official policy, adoption of formal plans, adoption of programs, and approval of specific projects. Under the rules, then, NEPA applies to a range of proposed federal activities, including ongoing ones.

Not every federal action, of course, will significantly affect environmental quality.⁵⁴ A great many federal actions proceed without an EIS, following issuance of a Finding of No Significant Impact (FONSI)⁵⁵ by the agency. The agency bases its FONSI on a document known as an Environmental Assessment (EA), defined in the rules as "a concise public document for which a Federal agency is responsible that serves to briefly provide sufficient evidence for determining whether to prepare" an EIS or a FONSI.⁵⁶ An EA must briefly discuss the need for the proposal, alternatives to the proposed action, and environmental impacts of the proposal and the alternatives.⁵⁷ In practice, far more agency actions proceed on the basis of an EA/FONSI than the more detailed EIS.⁵⁸ Below the EA in the NEPA compliance

^{50. 42} U.S.C. § 4332(2)(C) (2006).

^{51. 40} C.F.R. § 1508.18 (2010).

^{52.} Id. § 1508.18(a) (emphasis added). The term also includes proposing legislation and excludes bringing enforcement actions. Id.

^{53.} Id. § 1508.18(b).

^{54.} The CEQ rules explain in some detail the factors to be considered in determining whether a proposed action will "significantly" affect the environment. *See id.* § 1508.27.

^{55.} A FONSI is a document whereby an agency briefly explains why its proposed action will not significantly affect the environment, and will therefore not be the subject of an EIS. See id. § 1508.13.

^{56.} Id. § 1508.09(a)(1). The rule also notes that an EA serves to "aid an agency's compliance" with NEPA when an EIS is not needed, and to facilitate preparation of an EIS if one is needed. Id. § 1508.09(a)(2)-(3).

^{57.} See id. § 1508.09(b).

^{58.} A 1997 CEQ study found that as of the early- to mid-1990s, federal agencies were producing only about 500 EISs per year, compared to about 50 thousand EAs

hierarchy is the quick-and-dirty Categorical Exclusion, which the rules authorize for certain actions with individually and cumulatively insignificant environmental effects, and which therefore do not require either an EIS or an EA.⁵⁹

This article focuses on the applicability of NEPA to water project operations, rather than on the requirements for an acceptable NEPA review (i.e., an adequate EIS or EA/FONSI). Two aspects of a NEPA document,60 however, are particularly relevant for these purposes. First, either an EIS or an EA must identify alternatives to the proposed action, and discuss the environmental effects of both the proposal and the alternatives.⁶¹ Analysis of alternatives is crucial to NEPA's design, and the statute—separately from the EIS requirement⁶²-calls on agencies to develop alternatives "in any proposal which involves unresolved conflicts concerning alternative uses of available resources."63 The CEO rules call the alternatives section "the heart" of an EIS, which must "rigorously explore and objectively evaluate all reasonable alternatives," specifically including the "no action" alternative, and must "devote substantial treatment to each alternative considered in detail . . . so that reviewers may evaluate their comparative merits."64

Second, a NEPA document must identify mitigation measures.⁶⁵ The rules define mitigation to include several things,

during this period. Council on Envil. Quality, The National Environmental Policy Act: A Study of its Effectiveness after Twenty-five Years 19 (1997).

^{59. 40} C.F.R. § 1508.4.

^{60.} I use the term "NEPA document" to include an EIS, an EA, or a FONSI. See 40 C.F.R. § 1508.10 (defining "environmental document" to include these three documents, plus a notice of intent to prepare an EIS).

^{61.} The statute requires an EIS to identify alternatives. 42 U.S.C. § 4332(2)(C)(iii). The rules define what is needed for an adequate consideration of alternatives in an EIS, 40 C.F.R. § 1502.14, and also require identification and discussion of alternatives in an EA, 40 C.F.R. § 1508.9(b).

^{62.} See 42 U.S.C. § 4332(2)(E) (2006) (requiring alternatives) and § 4332(2)(C) (setting for the EIS requirement).

^{63.} Id. \$4332(2)(E). Like everything else in \$ 102(2), this requirement applies to all federal agencies, and like all of \$ 102, it applies "to the fullest extent possible." Id. \$4332.

^{64. 40} C.F.R. § 1502.14.

^{65.} This requirement at least applies to an EIS, which as part of its examination of alternatives, must include "appropriate mitigation measures not already included in the proposed action or alternatives." *Id.* § 1502.14(f). The rules do not specifically require an EA to include mitigation measures, but they do require an EA to identify and discuss alternatives. *Id.* §1508.09(b). The EIS mitigation language appears in the rule regarding alternatives. *Id.*

ranging from avoiding an impact entirely by not taking an action, to minimizing the impact by altering the action, to compensating for the impact by providing "substitute resources or environments." NEPA itself makes no mention of mitigation but it has become a key concept in the implementation of the statute, particularly in the form of the "mitigated FONSI," whereby an agency relies partly on mitigation measures for its determination that an action will have no significant impact and thus does not require an EIS. 67

These requirements are less significant than they may appear, however, because the courts have long held that NEPA "does not mandate particular results, but only prescribes the necessary process." Thus, while an EIS must discuss measures to mitigate a proposed action's environmental impacts, it need not contain a fully developed plan to eliminate those impacts, nor must an agency ensure that the impacts are mitigated before proceeding with its proposal. And even though an EIS must identify and evaluate alternatives, nothing in NEPA requires an agency to select the best (or reject the worst) for the environment. In the often-quoted words of the Supreme Court, "Other statutes may impose substantive environmental obligations on federal agencies, but NEPA merely prohibits uninformed—rather than unwise—agency action."

^{66.} Id. § 1508.20. The rules do not specify a hierarchy or state a preference among these types of mitigation.

^{67.} CEQ guidance indicates that agencies may rely on mitigation measures only in limited circumstances and "should not rely on the possibility of mitigation as an excuse to avoid the EIS requirement." Council on Envil. Quality, Nepa's Forty Most Asked Questions, 46 Fed. Reg. 18026, 18038 (Mar. 23, 1981). However, CEQ's online version of this guidance states that courts have "disagreed with CEQ's position" on this issue. Council on Envil. Quality, Nepa's Forty Most Asked Questions, http://ceq.hss.doe.gov/nepa/regs/40/30-40.HTM#39 (last visited Aug. 9, 2010). In fact, agencies have come to rely commonly on mitigation measures to support a FONSI. Council on Envil. Quality, The National Environmental Policy Act: A Study of its Effectiveness after Twenty-five Years 19-20 (1997).

^{68.} Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) (stating this principle was "now well settled").

^{69.} See id. at 351-53. "[1]t would be inconsistent with NEPA's reliance on procedural mechanisms-as opposed to substantive, result-based standards-to demand the presence of a fully developed plan that will mitigate environmental harm before an agency can act." Id. at 353.

^{70.} See Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227-28 (1980) (per curiam).

^{71.} Robertson, 490 U.S. at 351 (footnote omitted).

A court reviewing a NEPA document applies a "rule of reason" standard to the question of whether the document includes an adequate set of alternatives.⁷² The narrow "arbitrary and capricious" standard⁷³ applies to agency decisions on whether environmental impacts are significant.⁷⁴ The Supreme Court has stated that these questions of significance are primarily factual, implicating agency expertise in technical matters, and that reviewing courts should therefore defer to "the informed discretion of the responsible federal agencies." Nonetheless, challenges to agency implementation of NEPA are common, and courts have often found problems with agency compliance and have ordered a remedy. The frequency of litigation and judicial intervention under NEPA and the associated delays in agency actions have led to much criticism of the statute in recent years.

^{72.} See, e.g., Davis v. Mineta, 302 F.3d 1104, 1120 (10th Cir. 2002) (stating that "a rule of reason and practicality" applies (quoting Airport Neighbors Alliance, Inc. v. United States, 90 F.3d 426, 432 (10th Cir. 1996))); see also Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, 435 U.S. 519, 551 (1978) ("Common sense also teaches us that the 'detailed statement of alternatives' cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man. Time and resources are simply too limited[.]").

^{73.} See Marsh v. Or. Natural Res. Def. Council, 490 U.S. 360, 378 (1989). See generally 5 U.S.C. § 706(2)(A) (2006). See also Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983) (explaining the factors courts should consider in deciding whether agency action is arbitrary and capricious).

^{74.} See Marsh, 490 U.S. at 377 (applying "arbitrary and capricious" standard to agency decision not to supplement a final EIS based on a lack of significant new information).

^{75.} Id. (quoting Kleppe v. Sierra Club, 427 U.S. 390, 412 (1976)).

^{76.} According to the CEQ's annual summaries of NEPA litigation, 132 NEPA cases were filed in 2008, 86 were filed in 2007, and 108 were filed in 2006. Council on Envil. Quality, 2006 Litigation Survey, available at http://ceq.hss.doe.gov/nepa/nepanet.htm; Council on Envil. Quality, 2007 Litigation Survey, available at http://ceq.hss.doe.gov/nepa/nepanet.htm; Council on Envil. Quality, 2008 Litigation Survey, available at http://ceq.hss.doe.gov/nepa/nepanet.htm. As of 2008, 233 cases were pending. 2008 Litigation Survey, supra. In NEPA cases decided in 2008, the government won seventy seven ("judgment for defendant"), and there were seventy three "adverse dispositions"—remands, injunctions, or dismissals favorable to plaintiffs. 2008 Litigation Survey, supra. In the previous two years, the government finished below .500 in these cases: 87 wins versus 95 "adverse dispositions" in 2007, and 84 wins vs. 120 "adverse dispositions" in 2006. 2007 Litigation Survey, supra; 2006 Litigation Survey, supra.

^{77.} In the words of an American Farm Bureau Federation official,

Because of the threat of litigation and because courts have so often stepped into the process, government agencies try to insulate projects as thoroughly as possible from courts becoming involved. Their protracted investigations and paperwork can be best described as overkill.

NEPA litigation has been used to delay or scuttle federal projects, rather than to inform and provide reasonable options. Activists have used NEPA as the basis for

The Supreme Court has recently emphasized that injunctive relief is not automatic in cases of agency NEPA violations. Rather, a plaintiff seeking a permanent injunction in a NEPA case must show that (1) it has suffered irreparable injury, (2) money damages or other legal remedies will not adequately address that injury, (3) an injunction is warranted given the balance of hardships between plaintiff and defendant, and (4) an injunction would not be contrary to the public interest. A plaintiff seeking a preliminary injunction must show that irreparable injury is likely, regardless of the chances of success on the merits. To the extent that the Supreme Court has raised the bar for injunctive relief in these cases, ti may reduce the practical impact of NEPA litigation and potentially discourage future claims.

Despite the procedural nature of NEPA, and the increasingly uncertain value of judicial review, the environmental review process has always served two important functions:

It ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.⁸¹

A recent publication on the merits of NEPA examined several "success stories" of the environmental review process, and summarized the benefits as follows: "NEPA recognizes that when the public and federal experts work together, better decisions are made; public participation really matters; NEPA requires the government to explain itself; judicial review has played a key role in NEPA's success."82

lengthy court battles. It would appear, through the use of NEPA, the desires of the majority have been thwarted too many times, especially as the courts have extended the reach and enforcement of NEPA.

Rick Krause, *Time for a New Look at NEPA*, ENVTL. FORUM, May-June 2005, at 38. 78. Monsanto Co. v. Geertson Seed Farms, 130 S. Ct. 2743, 2756 (2010) (quoting eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006)).

^{79.} See Winter v. Natural Res. Def. Council, Inc., 129 S. Ct. 365, 375 (2008).

^{80.} In both the *Winter* and *Monsanto* cases, the Court noted that the lower courts had applied an incorrect (9th Circuit) legal standard that made it too easy for plaintiffs to obtain an injunction. *See Monsanto*, 130 S. Ct. at 2756-57; *Winter*, 129 S. Ct. at 375-76.

^{81.} Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

^{82.} Envtl. Law Inst., NEPA Success Stories: Celebrating 40 Years of Transparency and Open Government 6-7 (2010), available at http://www.elistore.org/Data/prod-ucts/d20-03.pdf.

The next section examines the applicability of NEPA's environmental review requirements to the Bureau of Reclamation, specifically in the context of the operation of existing water projects.

III.

NEPA AND THE BUREAU'S PROJECT OPERATIONS

In addition to the statute, CEQ rules, and case law applicable to all federal agencies,⁸³ the Bureau is subject to some agency-specific NEPA requirements. As directed by the CEQ rules, individual agencies adopt their own procedures, supplemental to the rules, for implementing NEPA.⁸⁴ Within a cabinet department such as the Department of the Interior, such procedures may apply to all its elements, or only to one "major subunit" such as a particular Service.⁸⁵ Both types cover the Bureau.

A. The Bureau's NEPA Rules, Procedures, and Policy

The Interior Department promulgated its general NEPA implementing rules in 2008,86 codifying procedures that had previously appeared only in departmental guidance.87 Interior's rules define a few terms,88 list several types of activities subject to a categorical exclusion,89 state requirements for EAs,90 and address various other matters relating to NEPA implementation. The departmental rules provide that a proposed agency action is subject to NEPA "if it would cause effects on the human environment (40 CFR 1508.14), and is subject to bureau control and responsibility (40 CFR 1508.18)."91 In promulgating the rules, Interior stated that it was retaining its constituent units' NEPA

^{83.} See 40 C.F.R. § 1500.3 (2010) (CEQ rules applicable to and binding on all federal agencies for implementing NEPA); 40 C.F.R. § 1507.1 (2010) (stating all federal agencies shall comply with the CEQ rules).

^{84.} Id. § 1507.3(a) (With certain time limits, "each agency shall as necessary adopt procedures to supplement these regulations. . . . They shall confine themselves to implementing procedures.").

^{85.} Id. (Within a department, "major subunits are encouraged (with the consent of the department) to adopt their own procedures.").

^{86.} Implementation of the National Environmental Policy Act of 1969, 73 Fed. Reg. 61292 (Oct. 15, 2008) (codified at 43 C.F.R. Part 46 (2010)).

^{87.} Id. (codifying NEPA implementing procedures "currently located in . . . the Departmental Manual").

^{88. 43} C.F.R. § 46.30 (2010).

^{89.} Id. § 46.210.

^{90.} Id. § 46(D).

^{91.} Id. § 46.100(a). The rules also note that some actions are not subject to NEPA because they are exempt from the requirements of § 102(2). Id.

implementing procedures and guidance, which would continue to appear in the Departmental Manual.⁹²

The Bureau's own NEPA implementing procedures date to 2004.⁹³ These procedures contain little detail apart from a list of activities—30 in all—subject to a categorical exclusion.⁹⁴ By contrast, only six types of activities are identified as those normally requiring an EIS (or EA);⁹⁵ three of the six relate to planning or construction of a new water project,⁹⁶ a fourth relates to major research projects,⁹⁷ and a fifth relates to new or revised water supply contracts.⁹⁸ For purposes of this article, the most relevant item on this list of activities requiring environmental review is "[p]roposed modifications to existing projects or proposed changes in the programmed operation of an existing project that may cause a significant new impact."

The Reclamation Manual, which contains the Bureau's internal guidance on a wide range of subjects, 100 includes a one-page directive on NEPA implementation. 101 This 1998 directive declares an objective which paraphrases the national policy of NEPA section 101(a), 102 then states, "Reclamation will integrate environmental considerations into all decisionmaking that poten-

^{92.} Implementation of the National Environmental Policy Act of 1969, 73 Fed. Reg. at 61292.

^{93.} DEP'T OF THE INTERIOR, DEPARTMENTAL MANUAL, PART 516 CH. 14 (2004). The final notation in Chapter 14 is "Replaces 3/18/80 #3511," indicating that the 2004 procedures supplanted an earlier version from 1980. *Id.*

^{94.} Id. § 14.5.

^{95.} *Id.* § 14.4.A. The manual states that these six types of proposed actions "will normally require the preparation of an EIS." *Id.* § 14.4.A. However, the manual also provides that an EA may be prepared if the agency initially decides not to prepare an EIS. *Id.* § 14.4.B.

^{96.} See id. § 14.4.A.(1) (feasibility reports on water resources projects); § 14.4.A(2) (planning reports on water resources projects); § 14.4.A(4) (initiation of construction of a project or major unit thereof).

^{97.} Id. § 14.4.A.(6).

^{98.} Id. § 14.4.A.(3).

^{99.} Id. § 14.4.A(4).

^{100.} BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, RECLAMATION MANUAL (2008), available at http://www.usbr.gov/recman. The manual states "requirements" for the conduct of Bureau activities, among other things. BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, RECLAMATION MANUAL RCD P03 (2008), available at http://www.usbr.gov/recman/rcd/rcd-p03.pdf.

^{101.} Bureau of Reclamation, U.S. Dep't of the Interior, Reclamation Manual ENV P03 (1998), available at http://www.usbr.gov/recman/env/env-p03.pdf.

^{102.} Id. at 1.A ("Reclamation will use all practicable means and measures to create and maintain water development and management conditions under which people and nature can exist in productive harmony"); see also 42 U.S.C. § 4331(a) (2006).

tially affects the environment."¹⁰³ The directive then lists five elements of this policy, including commitments to "provide all reasonable opportunity for input and involvement from the public" and other agencies on environmental issues; to "integrate, as practicable, all applicable environmental laws" (including NEPA) into the Bureau's decisionmaking; and to develop and assess "[a]ppropriate and reasonable alternatives . . . for actions that may significantly affect the environment."¹⁰⁴

The 1998 directive concludes by stating that the Bureau's NEPA Handbook provides guidance on the application of NEPA to the Bureau's activities. Thus, the Handbook offers the most specific instructions as to the subjects, process, and substance of the Bureau's environmental reviews. As of mid-2011, however, the Bureau's NEPA Handbook was under revision and unavailable to the public; the Bureau was hoping to complete the revisions in the near future. The surface of th

B. USBR's Practice in Implementing NEPA

The Bureau's history of NEPA compliance goes back to the early 1970s, when it was still very much in the business of planning and constructing big new water projects (or major units of existing projects). Thus, the Bureau completed EISs before 1975 on the Central Arizona Project, on the Garrison Diversion Unit of the Pick-Sloan Missouri Basin Project, and on several important features of the CVP.¹⁰⁸ By the turn of the century, however, the Bureau was engaging in environmental reviews on different

^{103.} Bureau of Reclamation, supra note 101, at 1.B.

^{104.} Id. at 1.B.(1)-(3).

^{105.} Id. at 1.B.(5).

^{106.} As of this writing, the NEPA page on the Bureau website stated, "Reclamation's NEPA Handbook is currently being revised. If you have any questions, please contact us." BUREAU OF RECLAMATION NEPA HANDBOOK, http://www.usbr.gov/nepa (last visited Sept. 16, 2011). According to the responsible Bureau official, "Reclamation's draft handbook is no longer available for distribution as it is the process of being revised." E-mail from Theresa Taylor, Envtl. Prot. Specialist, Bureau of Reclamation, to author (June 30, 2010, 10:21 MDT) (on file with author).

^{107.} E-mail from Theresa Taylor, Envtl. Prot. Specialist, Bureau of Reclamation, to author (Aug. 19, 2010, 16:33 MDT) (on file with author).

^{108.} Bureau of Reclamation, U.S. Dep't of the Interior, Budget Request – FY 2010, apps. 44-52 (2009), available at http://www.usbr.gov/budget/2010/CONTENTS.pdf.

kinds of activities,¹⁰⁹ reflecting a shift in its workload away from giant new construction projects.¹¹⁰

The Bureau today does a large volume of NEPA work on a wide range of activities. To fully quantify and categorize the Bureau's NEPA compliance activities would be a major undertaking, well beyond the scope of this article; however, two relevant points appear from the Bureau's regional office websites. ¹¹¹ First, the Bureau has engaged in hundreds of NEPA processes, primarily EAs, over the past ten years or so. As of August 2010, the Mid-Pacific Region website alone listed nearly 200 EAs and EISs from the last five years or so, ¹¹² and three other regional websites totaled another 200-plus NEPA documents from the last ten years or so. ¹¹³ Second, many of these NEPA reviews ad-

^{109.} See id. (identifying NEPA documents on cleaning up and closing the San Luis Drain and Kesterson Reservoir (1986), the Orange County Regional Water Reclamation Project (2000), and the Trinity River Restoration Program (2000)).

^{110.} See generally Beck & Kelly, supra note 27 (summarizing history of reclamation program, including the shift away from major project construction in recent decades).

^{111.} The Bureau is organized into five regions, whose territories correspond to major river basins: the Great Plains (primarily the Missouri River, Arkansas, and Red River Basins, plus most of Texas); the Lower Colorado (the Colorado River Basin below Glen Canyon Dam), plus the Southern California area receiving water from the Colorado); the Mid-Pacific (the Sacramento-San Joaquin and Klamath Basins, the California coastal basins, and most of Nevada); the Pacific Northwest (the Columbia River Basin and the coastal basins of Oregon and Washington; and the Upper Colorado (the Colorado River Basin above Glen Canyon Dam, the Rio Grande Basin, and most of Utah). Reclamation Offices, BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, http://www.usbr.gov/main/regions.html#regionmap (last updated May 25, 2011).

^{112.} BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, MID-PAC. REGION PROJECT LIST, available at http://www.usbr.gov/mp/nepa/nepa_base.cfm?location=all (last visited Aug. 19, 2010). I counted over 190 EA or EIS items on the list. *Id.* The list shows no date for most items, but none of the dates shown is older than 2006, and when I clicked on the "more info" tab for several items on the list, the oldest date I found for any item was 2006. *Id.*

^{113.} See Quarterly NEPA Action Reports, Bureau of Reclamation, Great Plains Region, U.S. Dep't of the Interior, http://www.usbr.gov/gp/nepa/quarterly.cfm (last visited Aug. 19, 2010); Environmental Documents: EA/EIS and Associated Documents, Bureau of Reclamation, Pac. Northwest Region, U.S. Dep't of the Interior, http://www.usbr.gov/pn/programs/envirodocs.html (last visited Aug. 19, 2010); Upper Colorado Region Environmental Documents, Bureau of Reclamation, Upper Colorado Region, U.S. Dep't of the Interior, http://www.usbr.gov/uc/envdocs/ (last visited Aug. 19, 2010). On the Great Plains region website, I counted thirty six more-or-less active NEPA processes, plus another twenty two archived NEPA documents, most of which were EAs. Quarterly NEPA Action Reports, Bureau of Reclamation, Great Plains Region, U.S. Dep't of the Interior, http://www.usbr.gov/gp/nepa/quarterly.cfm (last visited Aug. 19, 2010). All the listed dates were 2006 or later, although the list gave no dates for some archived items. Id. The Pacific Northwest region website showed about 60 NEPA documents, mostly from 2005 or

dressed proposals for new or renewed water supply contracts;¹¹⁴ others involved proposals such as small modifications to (or maintenance of) existing water projects,¹¹⁵ title or access to lands or water delivery facilities,¹¹⁶ water conservation or reuse/recycling projects,¹¹⁷ or projects to improve fish passage or habitat at particular sites.¹¹⁸

Very few of the Bureau's environmental reviews, however, have involved regular operations at existing reclamation projects. Some such reviews have addressed proposed *changes* in project

later, but some as old as 2001. Environmental Documents: EA/EIS and Associated Documents, Bureau of Reclamation, Pac. Northwest Region, U.S. Dep't of the Interior, http://www.usbr.gov/pn/programs/envirodocs.html (last visited Aug. 19, 2010). The Upper Colorado region website listed nearly 100 NEPA documents, of which 12 were EISs. Upper Colorado Region Environmental Documents, Bureau of Reclamation, Upper Colorado Region, U.S. Dep't of the Interior, http://www.usbr.gov/uc/envdocs/ (last visited Aug. 19, 2010). Most of the EAs were 2005 or later, but the earliest was dated 2001. Id. All but two of the EISs were from 2004 or later. *Id.* The Lower Colorado region website contains a much shorter list of NEPA documents. U.S. Bureau of Reclamation, Lower Colorado Region Environmental Documents for Public Review, Reclamation: Managing Water in the West, http://www.usbr.gov/lc/region/g2000/envdocs.html (last updated June 2011).

114. See, e.g., EA for contract with the Town of Silt for Ruedi Reservoir water (Great Plains); EA for long-term contract renewal in the Shasta and Trinity Divisions of the CVP (Mid-Pacific); EA for proposed Greenberry Irrigation District water service contract (Pacific Northwest); EA for San Juan-Chama contract amendments with the City of Santa Fe, and others (Upper Colorado). See supra notes 112-13 (listing regional website addresses where documents are located).

115. See, e.g., pending review of Lower Yellowstone Diversion Dam modifications (Great Plains); EA on Santa Clara Conduit shutdown, inspection and repair project (Mid-Pacific); Programmatic EA on Tyler Creek Wasteway stabilization (Pacific Northwest); and EA on Escondida Drain rehabilitation (Upper Colorado). See supra notes 112-13 (listing regional website addresses where documents are located).

116. See, e.g., EA on McGee Creek Water Delivery Facilities Title Transfer (Great Plains); EA on Annexation of Subordinate Lands within Chowchilla Water District (Mid-Pacific); EA on Indian Rock Estates Access Road Easement (Pacific Northwest); and EA on Exchange of Real Property between the U.S. Government and Provo City, Utah (Upper Colorado). See supra notes 112-13 (listing regional website addresses where documents are located).

117. See, e.g., EA on City of Austin Title XVI Project (Great Plains); EA on Delta Diablo Sanitation District and City of Pittsburg Recycled Water Project (Mid-Pacific); EA on Sunnyside Division RRM Water Conservation Project (Pacific Northwest); EA on Water District No. 11 Bear River Innovative Water Conservation Measures (Upper Colorado). See supra notes 112-13 (listing regional website addresses where documents are located).

118. See, e.g., EIS on Red Bluff Diversion Dam Fish Passage Project (Mid-Pacific); Programmatic EA for Implementing Fish Habitat Improvement Measures in Four Mountain Snake Province Subbasins (Pacific Northwest); EA on City of Albuquerque Habitat Restoration Project (Upper Colorado). See supra notes 112-13 (listing regional website addresses where documents are located). Curiously, the Great Plains Region list showed none of these types of projects, but the other three regions all listed quite a few. Id.

operations, for example, the EA on the Proposed Lake Roosevelt Incremental Storage Releases Project, 119 which would lower the level of Washington's Lake Roosevelt (behind Grand Coulee Dam) by about a foot in most years, for purposes of irrigation water deliveries. 120 Where the Bureau has done NEPA reviews on project operations, it has typically been responding to some external requirement. Perhaps most famously, the Bureau did an EIS on the operations of Glen Canyon Dam as they affect the downstream Grand Canyon,121 but that EIS was specifically required by Congress in the Grand Canyon Protection Act. 122 An EIS on Upper Columbia Alternative Flood Control and Fish Operations, involving both Bureau and Corps of Engineers dams and led by the Corps, 123 came in response to an Endangered Species Act biological opinion¹²⁴ calling for measures to improve Columbia Basin river conditions for certain fish species. 125 The Bureau began a San Joaquin River Restoration Program EIS process in response to a litigation settlement that required certain actions to restore river flows and fish habitat below the Bureau's Friant Dam. 126 In other words, the Bureau has not made a habit of undertaking NEPA reviews of project operations on its own initiative.

In short, the Bureau today does a ton of NEPA work, but very little of it addresses the continuing impact of project operations. The underlying reason is that the courts have allowed the Bureau

^{119.} Bureau of Reclamation, U.S. Dep't of the Interior, Lake Roosevelt Incremental Storage Releases Project: Finding of No Significant Impact and Final Environmental Assessment (2009), available at http://www.usbr.gov/pn/programs/ea/wash/lakeroosevelt/ea-fin-roosevelt2009.pdf.

^{120.} See Ctr. for Envtl. Law & Policy v. U.S. Bureau of Reclamation, 715 F. Supp. 2d 1185, 1187 (E.D. Wash. 2010). The court in this case held that the Bureau's EA and FONSI were adequate under NEPA. *Id.* at 1195.

^{121.} See Grand Canyon Trust v. U.S. Bureau of Reclamation, 623 F. Supp. 2d 1015, 1018-19 (D. Ariz. 2009) (summarizing the 1995 EIS and its background).

^{122.} Reclamation Projects Authorization and Adjustment Act of 1992, Pub. L. No. 102-575, § 1804(a), 106 Stat. 4600, 4670.

^{123.} Notice of Availability of a Final Environmental Impact Statement - Upper Columbia Alternative Flood Control and Fish Operations, 71 Fed. Reg. 25572 (May 1, 2006).

^{124.} See infra notes 211-22 and accompanying text for a brief explanation of biological opinions under the ESA.

^{125.} Upper Columbia Alternative Flood Control and Fish Operations Environmental Impact Statement and Records of Decision, Bureau of Reclamation Pac. Nw. Region, U.S. Dep't of the Interior, http://www.usbr.gov/pn/programs/fcrps/varq/index.html (last visited Aug. 20, 2010).

^{126.} San Joaquin River Restoration Program, 72 Fed. Reg. 42428 (Aug. 2, 2007).

to avoid NEPA reviews in these circumstances, as discussed in the next part.

C. Cases Addressing NEPA Requirements and Reclamation Project Operations

The first major case involving NEPA and the operation of an existing reclamation project dates back to 1977. In *County of Trinity v. Andrus*,¹²⁷ the Bureau had proposed to draw down Clair Engle Lake and reduce downstream releases to the Trinity River in response to serious drought conditions in California, and the County sued to prevent the Bureau from taking these actions without first preparing an EIS.¹²⁸ The court had no trouble in finding NEPA inapplicable to the Bureau's actions in the summer of 1977, as they were specifically exempted under a statute enacted earlier that year.¹²⁹ More importantly for purposes of precedent, the court decided that the Bureau's operation of a project built before the enactment of NEPA was not a "major federal action" triggering the EIS requirement.¹³⁰

The County of Trinity court offered both legal and practical reasons for this conclusion. On the law, although existing CEQ guidelines called for environmental review of certain federal actions "even though they arise from projects or programs initiated prior to" the date of the statute, 131 the court determined that no EIS was needed because nothing had really changed. It declared that the Bureau had "neither enlarged its capacity to divert water from the Trinity River nor revised it procedures or standards for releases into the Trinity River and the drawdown of reservoirs," but instead was "simply operating the Division within the range originally available pursuant to the authorizing statute, in response to changing environmental conditions." 132 The court referred to two district court decisions that had refused to require an EIS for the operation of a water project that predated NEPA. 133

^{127.} Trinity Cnty. v. Andrus, 438 F. Supp. 1368 (E.D. Cal. 1977).

^{128.} *Id.* at 1387. The case also involved other claims under federal and state law. *Id.* at 1374.

^{129.} Id. (quoting Pub. L. No. 95-18, § 5, 91 Stat. 36 (1977)).

^{130.} Id. at 1390.

^{131.} Id. at 1388 (quoting 40 C.F.R. § 1500.13 (1976)).

^{132.} Id. at 1388-89.

^{133.} Id. at 1389 (citing Sierra Club v. Morton, 400 F. Supp. 610, 645 (N.D. Cal. 1975) and Morris v. Tenn. Valley Auth., 345 F. Supp. 321, 324 (N.D. Ala. 1972)). In *Morton*, the court rejected the application of NEPA to increased pumping of water

As a practical matter, the *County of Trinity* court was concerned that requiring an EIS for an existing project would be either pointless or infeasible. The kind of EIS normally done for a proposed project would have no real value, said the court, because the environmental review certainly would not lead to a complete shutdown of the project or a major overhaul of its facilities. On the other hand, applying NEPA to annual operating plans would be unworkable for the Bureau, both because the EIS process would take too long for a yearly decision and because the requirement would logically apply to all ongoing projects. 135

While *County of Trinity* allowed lower lake and river levels without an EIS, it did acknowledge that these actions would have significant environmental effects. ¹³⁶ Moreover, the court admonished the Bureau to (someday) review the environmental impacts of operating the project. "[T]he Bureau does have an obligation under NEPA to reassess its operation of the Trinity River Division in light of its environmental impacts. Should it fail to do so, an action challenging that failure would . . . be quickly heard by this court."¹³⁷

The leading case on NEPA and Bureau project operations, *Upper Snake River Chapter of Trout Unlimited v. Hodel*, arose from a multi-year drought in eastern Idaho. A coalition of environmental and angling groups sued to require the Bureau to produce an EIS before cutting releases from Palisades Dam below 1,000 cfs, arguing that the Bureau's proposed release of 750 cfs would harm the blue-ribbon fishery in the South Fork Snake River. 138 The district court denied the requested injunction, finding that

by existing facilities, so long as those facilities were operating within their authorized capacity. 400 F. Supp. at 645 ("If NEPA were construed to require application to ongoing projects which were fully completed prior to January 1, 1970, most federal agencies would become trapped in an endless web of EIS paperwork."). The case dealt primarily with the Rivers and Harbors Act. *Id.* at 620-51. The Supreme Court later decided the case on those grounds without reaching the NEPA issue. *See* California v. Sierra Club, 451 U.S. 287 (1981).

^{134.} Trinity Cnty. v. Andrus, 438 F. Supp. 1368, 1389 (E.D. Cal. 1977).

^{135.} Id. at 1389-90.

^{136.} *Id.* at 1388 (stating "defendants do not appear to dispute that the actions significantly affect the environment" and that an EIS would clearly be appropriate if NEPA \$102(2)(C) applied to the project).

^{137.} *Id.* at 1391. The court based this statement on the existing CEQ guidelines, which provided that federal agencies "have an obligation to reassess ongoing projects and programs in order to avoid or minimize adverse environmental effects." *Id.* at 1388 (quoting 40 C.F.R. § 1500.13 (1976)).

^{138.} Upper Snake River Chapter of Trout Unlimited v. Hodel (Upper Snake I), 706 F. Supp. 737, 738-39 (D. Idaho 1989).

the Bureau was simply operating the dam as it had during previous droughts, and that NEPA did not apply to ongoing project operations which represented no change from established practices.¹³⁹

The Ninth Circuit Court of Appeals affirmed,¹⁴⁰ relying on earlier cases holding that no EIS is needed for a federal action that does not change the status quo.¹⁴¹ The court found the district court's reasoning in *County of Trinity* "particularly instructive,"¹⁴² and relied solely on that case to brush aside CEQ rules making the EIS requirement applicable to ongoing agency actions and programs.¹⁴³ The opinion indicated that Palisades Dam releases below 1,000 cfs were somewhat rare, occurring on 4.75 percent of the total days that the dam had been in operation.¹⁴⁴ The Ninth Circuit acknowledged that such low releases would harm the downstream fishery,¹⁴⁵ but concluded that these impacts—and the operational decisions leading to them—were nothing new:

The federal defendants in this case had been operating the dam for upwards of ten years before the effective date of the Act. During that period, they have from time to time and depending on the river's flow level, adjusted up or down the volume of water released from the Dam. What they did in prior years and what they were doing during the period under consideration were no more than the routine managerial actions regularly carried on from the outset without change. They are simply operating the facility in the

^{139.} *Id.* at 740-41. The court also found that the plaintiffs would suffer no irreparable injury, and that the balance of hardships did not favor them. *Id.* at 741.

^{140.} Upper Snake River Chapter of Trout Unlimited v. Hodel (Upper Snake II), 921 F.2d 232, 236 (9th Cir. 1990).

^{141.} *Id.* at 235 (citing Burbank Anti-Noise Grp. v. Goldschmidt, 623 F.2d 115, 116 (9th Cir. 1980) and Comm. for Auto Responsibility v. Solomon, 603 F.2d 992 (D.C. Cir. 1979)).

^{142.} Upper Snake II, 921 F.2d at 235. Interestingly, the district court decision in *Upper Snake I* did not even mention *Trinity County*. Upper Snake I, 706 F. Supp. 737

^{143.} Upper Snake II, 921 F.2d at 235-36, n.3 (citing 40 C.F.R. §§ 1502.1, 1508.18(a) (1988) and Trinity Cnty. v. Andrus, 438 F. Supp. 1368, 1388 (E.D. Cal. 1977)).

^{144.} Palisades Dam had been in operation for about thirty years at the time the case was brought, and the court indicated that releases had fallen below 1,000 cfs in ten of those years, for a total of 555 days. Upper Snake II, 921 F.2d at 233-34. Monthly average releases had been below 1,000 cfs in a total of thirteen months of the dam's operational life. *Id.*

^{145.} Id. at 234 (quoting Upper Snake I, 921 F.2d at 739). The court, however, did not reach the issue of whether the impact was significant for purposes of the EIS requirement, because it determined that the Bureau's project operations were not a "major Federal action." Id. at 234 (quoting 42 U.S.C. § 4332(2)(C)).

manner intended. In short, they are doing nothing new, nor more extensive, nor other than that contemplated when the project was first operational. Its operation is and has been carried on and the consequences have been no different than those in years past.¹⁴⁶

The Upper Snake decision seemingly settled the issue of NEPA's applicability to reclamation project operations: so long as the Bureau was only doing what it had done prior to 1970, no EIS was required. When an environmental group sued the Bureau for lowering lake levels without an EIS in operating the Klamath Project, the Ninth Circuit rejected the plaintiff's NEPA argument in a single paragraph of an unpublished memorandum decision.¹⁴⁷ This time the court said nothing about the actual lake levels at issue or the history or expected impacts of such levels.148 The court provided no analysis based on the text of the statute or the CEQ rules, relying solely on Upper Snake to determine NEPA's applicability: "It is undisputed that water levels in Upper Klamath Lake have been raised and lowered by the Bureau to meet changing needs and water supplies since the inception of the project The [plaintiff] has presented no evidence that the Bureau departed from its ongoing, pre-NEPA routine[.]"149

More recently, Grand Canyon Trust v. Bureau of Reclamation held that the Bureau need not conduct NEPA review of annual operating plans for Glen Canyon Dam on the Colorado River, even though its operations had changed greatly over the years. The dam had long been operated to maximize hydropower without much regard for environmental concerns, but since the 1992 Grand Canyon Protection Act and a subsequent EIS directed by the 1992 statute, releases had been modified to limit daily fluctuations for purposes of reducing downstream impacts. Despite this earlier EIS, the plaintiff argued that the annual operating

^{146.} Upper Snake II, 921 F.2d at 235.

^{147.} Or. Natural Res. Def. Council, Inc. v. U.S. Bureau of Reclamation, No. 93-35591, 1995 WL 163303, at *1 (9th Cir. Apr. 7, 1995).

^{148.} Id. In fact, the level of Upper Klamath Lake was extremely low in 1992 and a record low in 1994. See Benson, supra note 30, at 218.

^{149.} Or. Natural Res. Council, Inc., No. 93-35591, 1995 WL 163303, at *1 (citing and quoting *Upper Snake II*, 921 F.2d at 235).

^{150.} See Grand Canyon Trust v. U.S. Bureau of Reclamation, No. CV-07-8164-PHX-DGC, 2008 WL 4417227, at *17 (D. Ariz. Sept. 26, 2008).

^{151.} See id. at *11-14. The Grand Canyon Protection Act specifically directed the Bureau to complete a Glen Canyon Dam EIS. Id. at *11 (citing Reclamation Projects Authorization and Adjustment Act of 1992, Pub. L. No. 102-575, § 1804(a), 106 Stat. 4600 (1992)).

plans were subject to NEPA because they contained the Bureau's decisions about monthly releases of flow into the Grand Canyon. Citing *Upper Snake*, the court determined that the annual operating plans were not subject to NEPA because they only implemented an operating program adopted earlier by the Interior Secretary, following the EIS. "Like the dam releases in *Upper Snake River* and *County of Trinity*, the AOP's projections constitute operations within the planned limits of the project and in response to changing environmental conditions. They are not, therefore, major federal actions within the meaning of NEPA." 152

Another district court had ruled similarly in an earlier decision involving a Corps of Engineers dam and reservoir on the Kern River in California.¹⁵³ The plaintiff argued that the Corps violated NEPA by raising the level of Isabella Reservoir - and thus inundating habitat used by an endangered bird - without first producing an EIS. In response, the Corps maintained that it was managing the reservoir in accordance with an established plan providing for flood control and conservation storage. The court relied exclusively on *Upper Snake* in holding that the Corps was not required to comply with NEPA when it altered reservoir levels, "so long as that fluctuation does not result in a change from the Corps's routine operation of Isabella pursuant to its water management plan."154 Under this interpretation of Upper Snake, even greatly revised dam operations need no environmental review, so long as they fall within a previously established operational framework.

The foregoing NEPA cases involving Bureau project operations have two major things in common.¹⁵⁵ All involved environmental plaintiffs concerned that fish or wildlife would be harmed by water project operations affecting lake or river levels. And in

^{152.} Id. at *17. The court aptly noted that Glen Canyon Dam operations had at least been the subject of a full EIS, so the annual plans for that dam were even less appropriate for NEPA review than those in *Upper Snake II*. Id. at *17, n.10.

^{153.} Sw. Ctr. for Biological Diversity v. Klasse, No. CIV S-97-1969 GEB JF, 1999 WL 34689321 (E.D. Cal. Apr. 1, 1999).

^{154.} Id. at *10.

^{155.} Actually, the cases share a third common trait, as all were decided by the Ninth Circuit Court of Appeals or district courts within the Ninth Circuit. Or. Natural Res. Def. Council, Inc. v. U.S. Bureau of Reclamation, No. 93-35591, 1995 WL 163303 (9th Cir. Apr. 7, 1995); *Upper Snake II*, 921 F.2d 232 (9th Cir. 1990); Grand Canyon Trust v. U.S. Bureau of Reclamation, No. CV-07-8164-PHX-DGC, 2008 WL 4417227 (D. Ariz. Sept. 26, 2008); *Upper Snake I*, 706 F. Supp. 737 (D. Idaho 1989); Trinity Cnty. v. Andrus, 438 F. Supp. 1368 (E.D. Cal. 1977).

every case, the court decided that project operating decisions did not require an EIS.¹⁵⁶ Thus, regardless of the environmental impacts associated with "routine" operation of reclamation projects, NEPA has had little or no application to the Bureau's decisions regarding such operations.

D. Are the Cases Correct in Exempting "Routine" Project Operations from NEPA?

For the past two decades, courts have relied almost entirely on the Ninth Circuit's decision in *Upper Snake* to decide the applicability of NEPA to reclamation project operations. The case now stands for the proposition that environmental review is simply not required for "routine" project operations. For various reasons, however, the courts need to revisit the issue, starting with a re-examination of that determinative case.

The first major problem is that *Upper Snake* is ambiguous, and courts, not surprisingly, have drawn different lessons about its meaning. The plaintiffs in that case sought to enjoin dam releases below 1,000 cfs without an EIS, and the court noted that the Bureau had made such releases on 4.75% of all days, and in roughly one-third of the years that the dam had been in operation. The court went on to state that the Bureau had always adjusted dam releases based on river levels, and was "doing nothing new, nor more extensive, nor other than that contem-

^{156.} One district court case, notably decided by Judge Wanger, does not fit this description. Westlands Water Dist. v. U.S. Dep't of Interior, Bureau of Reclamation (Westlands Water I), 850 F. Supp. 1388 (E.D. Cal. 1994). Plaintiff water users challenged the Bureau's failure to comply with NEPA before implementing a key requirement of the Central Valley Project Improvement Act (CVPIA), Pub. L. No. 102-575, § 3401-12, 106 Stat. 4600 (1992). See Westlands Water I, 850 F. Supp. 1388. A key purpose of the 1992 CVPIA was to address fish and wildlife concerns associated with CVP operations, and a key provision was a requirement that the Bureau dedicate 800,000 acre-feet of CVP water for fish and wildlife-effectively reallocating it for this purpose and away from irrigation. See id. at 1395. Judge Wanger held the plaintiffs had a viable NEPA claim against the Bureau for failing to conduct an environmental review before implementing that requirement, and refused to dismiss that claim. Id. at 1414-20, 1427. Judge Wanger rejected the government's argument based on Upper Snake II, finding the CVPIA mandate and resulting reductions in water deliveries did represent a change in CVP operations triggering the EIS requirement. Id. at 1415-16. The Ninth Circuit reversed, however, holding that no EIS was needed because the CVPIA language requiring the dedication of 800,000 acre-feet "upon enactment" did not allow for NEPA compliance. Westlands Water Dist. v. Natural Res. Def. Council, 43 F.3d 457, 461-62 (9th Cir. 1994) (Westlands Water II) (quoting Central Valley Project Improvement Act (CVPIA), Pub. L. No. 102-575, 106 Stat. 4600, § 3406(d)(1) (1992)).

^{157.} Upper Snake II, 921 F.2d at 233-34.

plated when the project was first operational. Its operation is and has been carried on and the consequences have been no different than those in years past." These observations focus on the Bureau's actual practices in operating the dam, and suggest that NEPA does not apply so long as lake or river levels, however unusual, remain within the historical range. Levels outside the historical level, however, could be construed as "new" or "more extensive," and certainly could be said to produce more severe consequences than those of the past.

In response to plaintiffs' argument that the Bureau's actions were not routine because extended periods of dam releases below 1,000 cfs had occurred in only three years, the *Upper Snake* court responded,

However, a particular flow rate will vary over time as changing weather conditions dictate. In particular, low flows are the routine in drought years. What does not change is the Bureau's monitoring and control of the flow rate to ensure that the most practicable conservation of water is achieved in the Minidoka Irrigation Project. Such activity by the Bureau is routine.¹⁵⁹

. In other words, environmental review was not needed because the Bureau had always operated the project by using its discretion to adjust releases so as to preserve water stored for irrigation. This passage suggests that NEPA does not apply so long as the Bureau does not change its basic approach to operations even if the resulting lake or river levels are lower (or higher) than they have ever been. Under this view, neither the historical record nor the actual impacts of the Bureau's operating practices would be relevant so long as the practices themselves have not changed. Such a broad reading conflicts with the court's reliance on the principle that NEPA is not needed for federal actions that would not change the status quo160—unless, of course, "status quo" is defined so narrowly as to exclude environmental conditions or impacts. Yet the Ninth Circuit apparently adopted this interpretation in an unreported 1995 decision involving the Klamath Project. 161

Later district court decisions have stretched *Upper Snake* even further, citing it to support the proposition that dam operations

^{158.} Id. at 235.

^{159.} Id. at 235-36.

^{160.} Id. at 235 (citing Burbank Anti-Noise Grp., 623 F.2d at 116 and Comm. for Auto Responsibility, 603 F.2d 992.).

^{161.} See supra notes 147-49 and accompanying text.

do not trigger NEPA so long as they fall within a previously defined operating regime. 162 Upper Snake says no such thing. Although it mentions that the Bureau was operating the project "in the manner intended,"163 the case focuses entirely on practices rather than plans. Moreover, the district court decisions arguably conflict with (and fail to mention) Environmental Defense Fund v. Andrus, 164 where the Ninth Circuit held that an EIS was needed before the Bureau could commit to supply water for industrial use from a Montana project, even though the project was authorized for that use and the Bureau had decided (before NEPA) to allocate water for industrial purposes. 165 Andrus may be distinguished because it dealt with allocation decisions and not solely operations, but at least it addressed whether consistency with established plans will exempt an action from NEPA an issue not even discussed in Upper Snake. 166 The fact that courts now ignore Andrus on this issue, and instead cite Upper Snake, shows the degree to which the latter case has been extended over time.

Courts instead should interpret the ambiguous *Upper Snake* narrowly for at least three reasons. First, the case is arguably wrong—an improperly narrow application of NEPA and the CEQ rules. The court seemingly ignored the statutory command that agencies meet the EIS requirement "to the fullest extent possible," 167 as well as precedent calling for NEPA to receive the broadest possible interpretation. 168 More specifically, the court failed to explain why ongoing project operations were not covered by the CEQ rule defining the statutory term "major federal action." The rule states that the term includes actions "potentially subject to federal control and responsibility," 169 and specifically provides that "[a]ctions include new and continuing

^{162.} See supra notes 150-54 and accompanying text.

^{163.} Upper Snake II, 921 F.2d at 235.

^{164.} Envtl. Def. Fund, Inc. v. Andrus, 596 F.2d 848 (9th Cir. 1979).

^{165.} Id. at 850-53.

^{166.} Upper Snake II understandably does not mention the earlier Andrus because the former case deals solely with practices, not plans. See Upper Snake II, 921 F.2d 232; Andrus, 596 F.2d 848.

^{167.} National Environmental Policy Act, 42 U.S.C. § 4332 (2006). The "fullest extent possible" direction applies to all aspects of NEPA § 102, including the EIS requirement of § 102(2)(C). *Id.* The court quoted this language at *Upper Snake II*, 921 F.2d at 234 n.2, but never discussed it. 921 F.2d 232.

^{168.} Jones v. Gordon, 792 F.2d 821, 826 (9th Cir. 1986) ("[I]t appears to be the congressional desire that we make as liberal an interpretation as we can to accommodate the application of NEPA.").

^{169. 40} C.F.R. § 1508.18 (2010).

activities."¹⁷⁰ Noting in a footnote that the rules apply to ongoing government actions, the court stated only that "such ongoing activity must rise to the level of major federal actions to warrant preparation of an EIS," and pointed vaguely toward *County of Trinity*. ¹⁷¹ That case predated the relevant CEQ rules (adopted in 1978), ¹⁷² and at that time the "merely advisory" CEQ guidelines were less clear about whether ongoing activities qualified as major federal actions. ¹⁷³ In any event, nothing on the cited page of *County of Trinity* explained why the "continuing activity" of dam operations should fall outside the rule defining major federal action.

The *Upper Snake* court found the reasoning of *County of Trinity* "particularly instructive," but failed to acknowledge two important aspects of that earlier district court case. As discussed above, *County of Trinity* was decided before the relevant CEQ rule, to which the court owed deference. In addition, *County of Trinity* focused largely on perceived practical problems of NEPA review of ongoing project operations The problems that would certainly prove surmountable, as shown by later Bureau project operations EISs. In short, although *County of Trinity* was factually similar to the Palisades Dam case, it offered tenuous legal support for the Ninth Circuit's holding.

A second reason for courts to read *Upper Snake* narrowly is that they need not order injunctive relief where project operations are proceeding without a completed NEPA document. As

^{170.} Id. § 1508.18(a).

^{171.} *Upper Snake II*, 921 F.2d at 235, n. 3 (citing Trinity Cnty. v. Andrus, 438 F. Supp. 1368, 1388 (E.D. Cal. 1977)).

^{172.} Final NEPA Regulations, 43 Fed. Reg. 55978-01 (Nov. 29, 1978).

^{173.} Trinity Cnty., 438 F. Supp. at 1388, n.13 (citing 40 C.F.R. § 1500.13 (1976).

^{174.} Upper Snake II, 921 F.2d at 235. The Upper Snake II court quoted a paragraph from Trinity County stating the Bureau had "neither enlarged its capacity to divert water from the Trinity River nor revised its procedures or standards" for dam releases or reservoir drawdowns, but was "simply operating the [project] within the range originally available pursuant to the authorizing statute, in response to changing environmental conditions." Id. (quoting Trinity Cnty., 438 F. Supp. at 1388-89).

^{175.} See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 355-56 (1989) (citing Andrus v. Sierra Club, 442 U.S. 347, 358 (1979)) (stating these rules are entitled to deference by the courts).

^{176.} See supra notes 134-35 and accompanying text.

^{177.} See supra notes 119-126 and accompanying text.

^{178.} Upper Snake I also made no mention of Trinity County's closing admonition that "the Bureau does have an obligation under NEPA to reassess its operation of the [project] in light of its environmental impacts." Upper Snake I, 706 F. Supp. 737 (D. Idaho 1989); Trinity Cnty., 438 F. Supp. at 1391. No similar language or conclusion appears in the later case. Upper Snake II, 921 F.2d 232.

the Supreme Court has recently stated and restated, plaintiffs in NEPA cases qualify for a permanent injunction only if they can meet a four-part test, including factors of irreparable harm, the balance of hardships, and the public interest.¹⁷⁹ This test sets a higher bar for injunctive relief in NEPA cases than the Ninth Circuit, at least, previously required.¹⁸⁰ Thus, even if the Ninth Circuit were to overrule Upper Snake, courts would have to consider the balance of hardships and the public interest before enjoining project operations pending NEPA compliance. Based on the balance of hardships and the public interest, a court might well deny a request for injunctive relief in times of drought, especially if protecting river or lake levels might seriously reduce water supplies for irrigation or other purposes. Notably, the district court in Upper Snake denied a preliminary injunction, based partly on its determination that plaintiffs had shown no irreparable injury and the balance of hardships "tipped sharply in favor of the defendants."181 Needless to say, the four-part test for injunctive relief may undercut the value of NEPA litigation for protecting the environment.¹⁸² But the four-part test should fully address any concerns that applying NEPA to project operations will automatically trigger sweeping injunctions that would greatly disrupt the Bureau or unduly harm project beneficiaries.

A third argument for a narrow reading of *Upper Snake* is simple: reclamation project operations undoubtedly have serious environmental impacts, especially in times of drought. The relevant NEPA cases do not suggest otherwise; in both *County of Trinity*

^{179.} Monsanto Co. v. Geertson Seed Farms, 130 S. Ct. 2743, 2747-48, 2756 (2010) (quoting eBay, Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006) and citing Winter v. Natural Res. Def. Council, 129 S. Ct. 365 (2008)). The other factor is that the plaintiff must show that other legal remedies, such as money damages, are inadequate to compensate for the injury. *Id.* at 2748.

^{180.} *Id.*, 130 S. Ct. at 2756-57 (quoting Idaho Watersheds Project v. Hahn, 307 F.3d 815, 833 (9th Cir. 2002) and Nat'l Parks & Conservation Ass'n v. Babbitt, 241 F.3d 722, 737 n.18 (9th Cir. 2001)).

^{181.} Upper Snake I, 706 F. Supp. at 741. Earlier the court had noted that lower dam releases would indeed harm the fishery, but the associated economic losses were slight in comparison to the damages that would result from reduced water deliveries for irrigation. Id. at 739. See also Trinity Cnty. v. Andrus, 438 F. Supp. 1368, 1382 (E.D. Cal. 1977) (discussing nature and seriousness of potential losses to irrigators and others if all Trinity River diversions to the Central Valley were enjoined).

^{182.} See Winter, 129 S. Ct. 365 (applying the four-part test to overturn injunction limiting the Navy's use of sonar testing pending compliance with NEPA). As another recent case makes clear, however, injunctive relief in NEPA cases is not an allor-nothing proposition; courts have discretion to structure an injunction that provides limited relief. See Monsanto, 130 S. Ct. at 2758.

and *Upper Snake*, the courts noted that the defendants did not argue that the proposed operations would cause no harm.¹⁸³ Of course, the determination of whether the impact of Bureau operations may be "significant" will necessarily be project- and proposal-specific; many (if not most) projects may require only an EA rather than a full EIS.

Current case law, however, requires no environmental review whatsoever for "routine" project operations, regardless of the nature or severity of the resulting impacts. The judicially-created exemption is simply inconsistent with Congress' mandate that, "to the fullest extent possible, the . . . laws of the United States shall be interpreted and administered in accordance with the policies set forth" in NEPA.¹⁸⁴ It also allows the Bureau to opt out of the CEQ policy requiring federal agencies to "[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment."¹⁸⁵ The next section suggests that, regardless of caselaw, the Bureau should opt *in* to that policy.

E. If NEPA Review is Not Required for Operations, Should the Bureau do it Anyway?

The legal issue regarding the applicability of NEPA is whether the Bureau is required to conduct an environmental review for a particular action. Nothing would suggest that the Bureau is *prohibited* from using the NEPA process to evaluate the operation of its existing projects.¹⁸⁶ And there are good reasons why the Bureau should indeed apply NEPA to identify alternatives, evaluate impacts, and involve the public in decisions regarding project operations.

Following the NEPA process for project operations would bring the Bureau into line with federal law, including Congress'

^{183.} Trinity Cnty., 438 F. Supp. at 1388 ("[D]efendants do not appear to dispute that the actions significantly affect the environment."); Upper Snake I, 706 F. Supp. at 739 (noting"[i]t is without controversy that reducing the stream flows below 1,000 cfs will have a negative impact on the downstream fishery," although the extent of the injury is disputed).

^{184. 42} U.S.C. § 4332 (2006).

^{185. 40} C.F.R. § 1500.2(e) (2010). See also id. § 1500.2 (beginning "[f]ederal agencies shall to the fullest extent possible").

^{186.} That is, nothing in the statute, CEQ rules, or the Interior Department's implementing rules indicates that following the NEPA process would ever be contrary to law, except for circumstances where another statute specifically exempts an action from NEPA. See id. § 1507.3(b); 43 C.F.R. §§ 46.20(a), 46.100(a) (2010).

command to implement section 102 to the fullest extent possible. According to the CEQ rules, that mandate means that each federal agency "shall comply with that section unless existing law applicable to the agency's operations expressly prohibits or makes compliance impossible." These rules further state that each agency's NEPA implementing procedures must comply with the CEQ rules unless a statute requires otherwise. The CEQ rules, of course, define "major federal action" to include continuing agency activities. 190

The statute and rules also indicate that agencies must develop alternatives to "any proposal which involves unresolved conflicts concerning alternative uses of available resources," even where no EIS is required under section 102(2)(C). This requirement of section 102(2)(E) has been described as "independent of the question of environmental impact statements," and "supplemental to and more extensive in its commands" than the EIS requirement. Given that project operating decisions almost inevitably involve trade-offs among competing uses of water, this language indicates that NEPA ordinarily requires the Bureau to develop alternatives to its proposed operations. A very recent case involving a Corps of Engineers dam strongly suggests that federal agencies should indeed conduct NEPA reviews in determining project operations, with a focus on alternatives.

^{187. 42} U.S.C. § 4332 (2006).

^{188. 40} C.F.R. § 1500.6 (2010).

^{189.} Id. § 1507.3(b).

^{190.} Id. § 1508.18(a).

^{191.} The CEQ rules state that agencies *shall* take certain measures to implement section 102. *Id.* § 1507.2(a) (2010) (emphasis added). One such measure is to "[s]tudy, develop, and describe alternatives" to proposals involving unresolved conflicts over resource use; the rules state, "This requirement of sec. 102(2)(E) extends to all such proposals, not just the more limited scope of sec. 102(2)(c)(iii) where the discussion of alternatives is confined to impact statements." *Id.* § 1507.2(d).

^{192.} River Road Alliance, Inc. v. Corps of Eng'rs of U.S. Army, 764 F.2d 445, 452 (7th Cir. 1985).

^{193.} Envtl. Def. Fund, Inc. v. U.S. Army Corps of Eng'rs, 492 F.2d 1123, 1135 (5th Cir. 1974).

^{194.} See supra note 6 and accompanying text.

^{195.} In re Tri-State Water Rights Litigation, No. 3:07-md-01 (M.D. Fla. July 21, 2010) (on file with author). The case involves the long-running dispute over the operation of Corps of Engineers facilities in the Apalachicola-Chattahoochee-Flint (ACF) basin. Numerous parties argued that the Corps violated NEPA by failing to conduct an environmental review of its plan for operating the Jim Woodruff Dam, on the Apalachicola River at the Georgia-Florida border. The court indicated that the government had offered a weak defense to these NEPA claims, *id.* at 21-22, and strongly admonished the Corps for failing to conduct an environmental review of its 1989 Water Control Plan (WCP) for the ACF projects:

Applying NEPA in this context would also be consistent with the Bureau's own policies. The policy statement on NEPA implementation commits the Bureau to "integrate environmental considerations into all decisionmaking that potentially affects the environment."196 More specifically, the Bureau will "integrate, as practicable," NEPA and other environmental laws into its decisionmaking; "provide all reasonable opportunity for input and involvement from the public" and other agencies on environmental issues: and evaluate reasonable alternatives for actions that may have significant impacts.¹⁹⁷ A 2008 policy statement, "The Bureau of Reclamation's Commitment to Environmental Stewardship,"198 says that the Bureau will not only comply with all applicable environmental laws, but will also "[i]ncorporate environmental considerations into long-term water and power operand day-to-day activities."199 Thus, the Bureau acknowledges that project operating decisions must take account of environmental factors . . . and, of course, NEPA is the established mechanism by which federal agencies normally consider the environmental implications of their actions.

The Court is troubled by the Corps's refusal to take responsibility for its utter failure to conduct any sort of environmental analysis whatsoever on the plan by which it has operated the ACF basin for more than 20 years. Of course, the lack of an EIS for the 1989 WCP is not to be blamed solely on the Corps.... However, it is the Corps's ultimate responsibility to ensure that its actions conform to the law, and the law is clear that actions of the scope and magnitude of the 1989 WCP require the comprehensive environmental analysis performed in an EIS. More importantly, an analysis of the environmental impacts of the Corps's operations under the 1989 WCP might have helped break the stalemate that has paralyzed this litigation for two decades. It is possible that if the parties had more information about the true effects of the Corps's operations, resolving their differences would have been easier.

Id. at 22-23. While the court determined that the NEPA claims were prudentially moot because the Corps was already preparing a new WCP (with an EIS), the decision ended with a warning to the Corps that future courts would not "look favorably on the Corps's stubborn insistence on excluding from its analysis all reasonable alternatives in the ACF basin. . . . The Georgia parties are correct that all decisionmakers would benefit from the comprehensive analysis of a range of potential activities in the ACF basin" Id. at 24-25 (emphasis added).

196. Bureau of Reclamation, Reclamation Manual ENV P03 1.B, Bureau of Reclamation's Directives System (1998), *available at* http://www.usbr.gov/recman/env/env-p03.pdf.

197. Id. at 1.B(1)-(3).

198. Bureau of Reclamation, Reclamation Manual ENV P05, Bureau of Reclamation's Directives System 3 (2008), available at http://www.usbr.gov/recman/env/env-p05.pdf.

199. Id. at 5.A, 5.D (emphasis added).

Moreover, the NEPA process would provide a forum for the Bureau to make better decisions on project operations, taking account of multiple factors that are increasingly important to the West. These factors include, significantly, public opinions and priorities as to the uses of rivers and reservoirs; the western identity and economy are increasingly based on environmental and recreational amenities, which should carry weight as the Bureau considers the trade-offs associated with storing and releasing water at a particular project. Of course, NEPA gives no assurance that the Bureau will make operating decisions that actually benefit environmental or recreational interests. But one of the major aims of NEPA is to inform and involve citizens in agency decisions,²⁰⁰ and the NEPA process offers an approach to public participation that both the Bureau and its constituency groups already understand.

The other major purpose of NEPA is to ensure that agencies evaluate the environmental consequences of their actions,²⁰¹ and here again, the NEPA process could prove useful in helping the Bureau make appropriate long-term plans for changing conditions. For example, a NEPA review of, say, a proposed ten-year project operating plan could help the Bureau address the environmental and water supply impacts of a future drought—perhaps through changes in normal water storage or releases at a project, or perhaps through locally appropriate mitigation strategies such as water conservation projects, water banks, or habitat restoration efforts.²⁰² Moreover, the Bureau could use NEPA to anticipate the potential impacts of climate change on water supply and demand, and consider a range of alternatives for addressing them. Congress has already directed the Bureau to develop a program for identifying and mitigating the effects of climate change in major western river basins,²⁰³ and NEPA provides an

^{200.} See supra notes 81-82 and accompanying text.

^{201.} See supra note 81 and accompanying text.

^{202.} Congress in 2009 authorized a program by which the Bureau could support such efforts, but only through grants to or agreements with a State, Indian tribe, or water supply entity. Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, §§ 9504, § 9502(7), 123 Stat. 991 (2009), available at http://www.blm.gov/pg data/etc/medialib/blm/wo/Law_Enforcement/nlcs.Par.9712.File.dat/PublicLaw111-11.pdf.

^{203.} Congress authorized a "Reclamation Climate Change and Water Program" in 2009. Pub. L. No. 111-11, § 9503, 123 Stat. 991 (2009). The program directs the Bureau to assess "specific risks to the water supply of each major reclamation river basin," including risks relating to changes in snowpack or in the timing and quantity of runoff, as well as any increases in water demand or reservoir evaporation. *Id.* at

avenue for the Bureau to assess impacts and develop strategies at the project level.

In addition to the significant time and resources required for environmental reviews, perhaps the greatest objection to using the NEPA process for project operations might be the potential for litigation over the sufficiency of the Bureau's NEPA compliance. That risk is substantial, of course, but it is significantly tempered by two factors. First, the federal courts thus far have not been overly strict in reviewing the Bureau's NEPA documents relating to project operations.²⁰⁴ Second, the recent Supreme Court cases regarding injunctive relief in NEPA litigation²⁰⁵ indicate that injunctions may be increasingly hard to get in these cases, particularly in circumstances where an injunction might disrupt the operations of an ongoing project with established beneficiaries. The district court in Upper Snake certainly believed that it would harm the public interest to issue an injunction regarding the Bureau's operation of Palisades Dam²⁰⁶ . . . but also thought that "an EIS would be helpful" to the Bureau.²⁰⁷

Helpful or not, the Bureau has rarely conducted NEPA reviews on project operations, and the courts have allowed this practice to continue. Despite the time, money, and litigation risk associated with environmental reviews, there are good legal and policy reasons why the Bureau should begin applying NEPA to long-term operations planning. One court, however, has insisted on NEPA compliance in the specific context of project operations involving an ESA consultation, as addressed in the next section.

^{§ 9503(}b)(2). The Bureau must also "consider and develop appropriate strategies to mitigate" the identified impacts of water supply changes caused by climate change; these strategies may include modification of reservoir operations. *Id.* at § 9503(b)(2). The statutory section establishing this program is codified at 42 U.S.C. § 10363, available at http://www.blm.gov/pgdata/etc/medialib/blm/wo/Law_Enforcement/nlcs.Par.9712.File.dat/PublicLaw111-11.pdf.

^{204.} See, e.g., Grand Canyon Trust v. Bureau of Reclamation, 623 F. Supp. 2d 1015, 1025-31 (D. Ariz. 2009) (upholding EA for 2008 experimental plan for Glen Canyon Dam/Grand Canyon operations); Ctr. for Envtl. Law & Policy v. Bureau of Reclamation, 715 F. Supp. 2d 1185, 1186-95 (E.D. Wash. 2010) (upholding EA for proposed change in Grand Coulee Dam/Lake Roosevelt operations).

^{205.} See supra notes 79-80 and accompanying text.

^{206.} Upper Snake I, 706 F. Supp. 737, 740-42 (D. Idaho 1989).

^{207.} Id. at 742.

IV. NEPA AND ESA COMPLIANCE AT BUREAU PROJECTS

A. Endangered Species Act Section 7 Requirements for Federal Agency Actions

Enacted in 1973, the ESA is one of the nation's most important environmental laws. The ESA's purpose is to conserve endangered and threatened species²⁰⁸ and the ecosystems on which they depend.²⁰⁹ As the Supreme Court stated, "[E]xamination of the language, history, and structure of the legislation... indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities."²¹⁰ All federal agencies have ESA duties, but the two most responsible for determining the status and needs of imperiled species are the U.S. Fish and Wildlife Service (FWS) in the Interior Department, and for oceangoing species such as salmon, the National Marine Fisheries Service (NMFS) within the Department of Commerce.

ESA section 7²¹¹ imposes special obligations, both substantive and procedural, on federal agencies. Most important is section 7(a)(2), which commands that every federal agency "shall . . . insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence" of any threatened species, or adversely modify its designated critical habitat.²¹² Section 7(a)(2) couples this substantive standard of "no jeopardy" with a mandatory process known as "consultation."²¹³ The Ninth Circuit has explained the consultation triggers and process as follows:

In order to ensure compliance with the Act, the ESA and its implementing regulations require federal agencies ("action agencies") to consult with the appropriate federal fish and wildlife agency . . . whenever their actions "may affect an endangered or threatened species." See 50 C.F.R. § 402.14(a). Thus, if the agency determines

^{208. 16} U.S.C. § 1532 (2006). The ESA defines an endangered species as one that is "in danger of extinction throughout all or a significant portion of its range." *Id.* §1532(6). A threatened species is one that is "likely to become an endangered species within the foreseeable future." *Id.* § 1532(20). Through rules issued under section 4(d) of the ESA, the law typically applies equally to both types of species. *Id.* § 1533(d).

^{209.} Id. § 1531(b).

^{210.} Tennessee Valley Auth. v. Hill, 437 U.S. 153, 174 (1978).

^{211. 16} U.S.C. § 1536.

^{212.} Id. § 1536(a)(2).

^{213.} Id.

that a particular action will have no effect on an endangered or threatened species, the consultation requirements are not triggered. If the action agency subsequently determines that its action is "likely to adversely affect" a protected species, it must engage in formal consultation. *Id.* Formal consultation requires that the consulting agency . . . issue a biological opinion determining whether the action is likely to jeopardize the listed species and describing, if necessary, reasonable and prudent alternatives that will avoid a likelihood of jeopardy. *See* 16 U.S.C. § 1535(b)(3)(A).²¹⁴

If the Service determines that the proposed action may jeopardize the species, it must suggest a "reasonable and prudent alternative" (RPA) to avoid jeopardy while meeting the purposes of the proposal.²¹⁵ The ESA implementing rules define RPA as "alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purposes of the action," that are within the action agency's authority and jurisdiction, that are "economically and technologically feasible, and that the Director believes would avoid the likelihood" of jeopardizing the species or impairing critical habitat.²¹⁶ According to these rules, a "jeopardy" biological opinion (BO) must include a RPA unless none can be identified.²¹⁷

The ESA implementing rules further provide that after a BO is issued, the action agency "shall determine whether and in what manner to proceed with the action in light of its section 7 obligations and the Service's biological opinion."²¹⁸ If the BO finds jeopardy, the agency must "notify the Service of its final decision on the action."²¹⁹ The agency must not proceed with the proposed action until consultation is completed.²²⁰ If the agency wants to go ahead with the proposed action despite a jeopardy

^{214.} Pac. Rivers Council v. Thomas, 30 F.3d 1050, 1054 n.8 (9th Cir. 1994) (emphasis added).

^{215. 16} U.S.C. § 1632(b)(3)(A).

^{216. 50} C.F.R. § 402.02 (2010).

^{217.} Id. § 402.14(h)(3).

^{218.} Id. § 402.15(a).

^{219.} Id. § 402.15(b).

^{220. 16} U.S.C. § 1632(d) ("[a]fter initiation of consultation . . . [the agency] and the [applicant] shall not make any irreversible or irretrievable commitment of resources [that] would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures").

opinion, it may seek an ESA exemption from the cabinet-level Endangered Species Committee.²²¹

Federal courts, especially the Ninth Circuit, have emphasized the importance of federal agency compliance with the ESA's procedural requirements, which provide for "a systematic determination of the effects of a federal project on endangered species. If a project is allowed to proceed without substantial compliance with those procedural requirements, there can be no assurance that a violation of the ESA's substantive provisions will not result. The latter, of course, is impermissible."²²²

Once a species is listed as threatened or endangered, section 9²²³ prohibits "tak[ing]" of any member of a protected species of fish or wildlife.²²⁴ This prohibition applies to "any person,"²²⁵ and the Act defines "person" to include virtually any conceivable entity, including a federal agency.²²⁶ Under the Act, "'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."²²⁷ FWS by rule has defined "harm" in this context to include "significant habitat modification or degradation where it actually kills or injures wildlife,"²²⁸ thus bringing some habitat destruction within the prohibition of take.²²⁹ A federal agency action may incidentally result in take of a member of a listed species, but if the agency has followed the requirements of section 7 with respect to that action, it may receive an "incidental

^{221. 50} C.F.R. § 402.15(c). The membership, standards, and procedures of the Endangered Species Committee, sometimes called the "God Squad," are found in 16 U.S.C. § 1632(e).

^{222.} Thomas v. Peterson, 753 F.2d 754, 764 (9th Cir. 1985) (citing TVA v. Hill, 437 U.S. 153, 184-93 (1978)). *See also* Natural Res. Def. Council v. Houston, 146 F.3d 1118, 1125 (9th Cir. 1998) (regarding ESA requirements for water contract renewals by the Bureau).

^{223. 16} U.S.C. § 1538 (2006).

^{224.} Id. § 1538(a)(1)(B).

^{225.} Id. § 1538(a)(1).

^{226.} Id. § 1532(13).

^{227.} Id. § 1532(19).

^{228. 50} C.F.R. § 17.3 (2010).

^{229.} The Supreme Court upheld this rule in Babbitt v. Sweet Home Chapter of Cmtys. for a Great Oregon, 515 U.S. 687 (1995). Under ESA § 10, the Services may issue an Incidental Take Permit to a non-federal entity, allowing legalized "take" of protected species where the take would be "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." 16 U.S.C. § 1539(a) (2006). The applicant for such an incidental take permit must submit a conservation plan, better known as a habitat conservation plan or HCP, describing (among other things) the applicant's steps to mitigate or minimize take and the funding available for these efforts. 16 U.S.C. § 1539(a)(2)(A).

take statement" from the relevant Service that essentially authorizes a certain level of take in connection with that action.²³⁰

B. The Bureau's Section 7 Duties

Several cases have helped clarify the Bureau's responsibilities under ESA section 7. In NRDC v. Houston,²³¹ environmental plaintiffs challenged the agency's failure to consult before renewing water service contracts with CVP irrigators.²³² The Ninth Circuit held that the Bureau violated its section 7(a)(2) duties by failing to request consultation with NMFS over the effects of contract renewals on salmon protected by the ESA,²³³ and upheld the district court's decision to rescind the renewed contracts pending the completion of consultation.²³⁴

More importantly, courts have held that section 7 applies to existing reclamation projects where operations and water deliveries may adversely affect species protected by the ESA. Perhaps the most significant case on this point is *Pacific Coast Federation of Fishermen's Associations v. U.S. Bureau of Reclamation*,²³⁵ where the district court held that the Bureau violated its section 7 duties by not completing consultation on its Klamath Project operations for the year 2000,²³⁶ and essentially enjoined project water deliveries until consultation was completed for 2001.²³⁷ The results of that consultation, along with an extreme drought, resulted in a severe cutback in water deliveries to pro-

^{230. 16} U.S.C. § 1536(b)(4); see Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 422 F.3d 782, 790 (9th Cir. 2005).

^{231.} Nat'l Res. Def. Council v. Houston, 146 F.3d 1118 (9th Cir. 1998).

^{232.} The Bureau had renewed 14 water service contracts with irrigation districts and other water user organizations, each for a 40-year period, on terms similar to those of the original contracts. *See id.* at 1123-24.

^{233.} *Id.* at 1126-29. "The Bureau had an affirmative duty to ensure that its actions did not jeopardize endangered species, and the NMFS letter clearly disagreed with the agency's determination of no adverse impact." *Id.* at 1127.

^{234.} Id. at 1129.

^{235. 138} F.Supp.2d 1228 (N.D. Cal. 2001).

^{236.} *Id.* at 1247. The court took a particularly dim view of the Bureau's failure to consult on its 2000 operations, given that the agency had consulted in previous years and seemingly recognized the need to consult. *Id.* at 1244-45. The court insinuated that the agency may have acted in bad faith by failing to move forward with the consultation process in 2000. *Id.* at 1246.

^{237.} Pending completion of consultation, the court required the Bureau to ensure specified Klamath River flows before delivering any project water for irrigation. *Id.* at 1250.

ject irrigators, leading to the 2001 "water crisis" in the Klamath Basin.²³⁸

Some cases have raised the threshold question of whether pre-ESA legal obligations require the Bureau to operate its projects in a way that essentially leaves no room to consider the needs of listed species. The existence or absence of discretion is a key question because of an ESA implementing rule that limits the applicability of section 7 to discretionary agency actions. This issue has been hotly contested in the *Rio Grande Silvery Minnow* litigation, where both the district court and the Tenth Circuit held that the Bureau does indeed have discretion to operate the Middle Rio Grande Project for the benefit of listed species, although the issue remains open because all the earlier decisions have been vacated as moot. 242

The Ninth Circuit has stated that the Bureau's duties under section 7(a)(2) take priority over its contractual commitments to project water users. In a case involving both the ESA and the Central Valley Project Improvement Act,²⁴³ the court rejected arguments by water users that the Bureau breached their contracts by reducing water deliveries during certain dry years.²⁴⁴ And in a case involving operational control of the Klamath Pro-

^{238.} For an account of the factors underlying the Klamath Basin dispute and the events leading up to the 2001 crisis, see Benson, *supra* note 30, at 214-228. For a more complete analysis of the Klamath water crisis, including events after 2001, see DOREMUS & TARLOCK, *supra* note 10.

^{239.} See Natural Res. Def. Council v. Houston, 146 F.3d 1118 (9th Cir. 1998) (Bureau has discretion in renewing Central Valley Project water service contracts); Defenders of Wildlife v. Norton, 257 F. Supp. 2d 53 (D. D.C. 2003) (Bureau has no discretion to operate its projects on the Lower Colorado River for the benefit of species existing solely in Mexico).

^{240. 50} C.F.R. § 402.03 (2010). The Supreme Court upheld this rule in *National Association of Home Builders v. Defenders of Wildlife*, 551 U.S. 644 (2007), where it determined the Environmental Protection Agency's decisions on whether to delegate Clean Water Act section 402 permitting authority to states were non-discretionary for purposes of ESA section 7.

^{241.} Rio Grande Silvery Minnow v. Keys, 333 F.3d 1109 (10th Cir. 2003), aff d, 469 F. Supp. 2d 1003 (D. N.M. 2005). But see Defenders of Wildlife v. Norton, 257 F.Supp. 2d 53 (D. D.C. 2003) (holding the Bureau has no discretion to operate projects on the Lower Colorado River for the benefit of endangered species located in Mexico).

^{242.} Rio Grande Silvery Minnow v. Keys, 355 F.3d 1215 (10th Cir. 2004) (vacating the 10th Circuit's 2003 decision); Rio Grande Silvery Minnow v. U.S. Bureau of Reclamation, 601 F.3d 1096 (10th Cir. 2010) (vacating other decisions in the case).

^{243.} One provision of the CVPIA requires the Bureau to dedicate 800,000 acrefeet of project water per year to fish and wildlife restoration. See Cent. Delta Water Agency v. U.S. Bureau of Reclamation, 452 F.3d 1021, 1024 (9th Cir. 2006).

^{244.} O'Neill v. United States, 50 F.3d 677, 687 (9th Cir. 1995).

ject, the Ninth Circuit stated flatly that the Bureau's responsibilities under the ESA "override the water rights of the Irrigators."²⁴⁵ Within the jurisdiction of the Ninth Circuit, at least, the Bureau clearly must operate its projects to avoid jeopardy even if that means cutting water deliveries for irrigation and other contracted uses.²⁴⁶ Resulting cutbacks in water deliveries have resulted in claims for compensation by water users,²⁴⁷ and the recent restrictions involving the CVP have triggered intense political controversy.²⁴⁸

Until recently, at least, the Bureau has not been required to comply with NEPA in the course of meeting its section 7 requirements. The issue arose in the 2001 Klamath Basin water crisis, after a severe drought and two new jeopardy opinions on the operation of the Klamath Project had forced the Bureau to slash irrigation water deliveries for that year. Irrigators sought a preliminary injunction, and one of their claims in Kandra v. United States was that an EIS was needed because the Bureau had changed project operating priorities to favor fish (and tribes with treaty rights) over farmers. The court brushed aside that argument, based in part on earlier cases holding that the Bureau had to operate the Klamath Project in accordance with the ESA and tribal treaty rights, Indianate Project in accordance with the ESA and tribal treaty rights, Indianate Project in accordance with the ESA and tribal treaty rights, Indianate Project in accordance with the ESA and tribal treaty rights, Indianate Project in accordance with the ESA and tribal treaty rights, Indianate Project in accordance with the ESA and tribal treaty rights, Indianate Project Projec

^{245.} Klamath Water Users Protective Ass'n v. Patterson, 204 F.3d 1206, 1213 (9th Cir. 1999). The case focused on whether the Bureau and the utility Pacificorp had acted properly in modifying their contract for control of a Klamath Project Dam, where the modification had the effect of benefiting listed species but increasing risks to irrigators.

^{246.} See Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation, 426 F.3d 1082, 1094 (9th Cir. 2005) (rejecting flows provided for listed salmon in first eight years of the Bureau's ten-year operating plan for the Klamath Project as insufficient to meet ESA obligations).

^{247.} See, e.g., Stockton East Water Dist. v. United States, 583 F.3d 1344 (Fed. Cir. 2009) (government breached contracts by delivering less water than contractual minimum amounts in several years).

^{248.} See Jenkins, supra note 14, at 13 (describing Fox News commentator Sean Hannity's broadcast from the Central Valley, during which he said that the federal government "has put the interests of a two-inch minnow before all of the great people you see out here," and Congressman Devin Nunes said, "[L]iberals and the radical environmental groups have been working... to turn this into a desert," and that Democratic leaders intended to do the same "to the rest of America.").

^{249.} See Kandra v. United States, 145 F. Supp. 2d 1192, 1198-99 (D. Or. 2001). 250. Id. at 1202, 1204. The Bureau had issued an EA on the 2001 plan, but the irrigators argued for a full EIS. See id. at 1203.

^{251.} The most important of these cases was Klamath Water Users Ass'n v. Patterson, 204 F.3d 1206 (9th Cir. 1999). Irrigators in that case had also challenged the Bureau's failure to comply with NEPA in making decisions affecting the operation of the Klamath Project, but had lost on summary judgment in the district court. See

tion" was legally mandated and thus not subject to NEPA.²⁵² "Whether an EIS is required for the Plan's implementation of the recommended RPAs is a closer question," said the court, noting that the plan would have unprecedented consequences and undisputed environmental impacts.²⁵³ But the court rejected the irrigators' argument, stating that an EIS would be infeasible for an annual operating plan based on recent forecasts of water availability for the year, and citing *County of Trinity* for its refusal to require an EIS for that reason.²⁵⁴ The court also noted that they would not necessarily be entitled to an injunction even if they could show a likely NEPA violation.²⁵⁵

Although the *Kandra* court held that the Bureau's RPA implementation for the Klamath Project did not require an EIS, it also chided the agency for its failure to comply with NEPA in making long-term project operating decisions:

I am disturbed, however, that Reclamation has failed to complete an EIS analyzing the effects and proposed alternatives of a long-term plan. Reclamation represented in past proceedings that such a plan would be completed long before 2001. Yet, no plan exists. In essence, Reclamation is avoiding its duties under NEPA by relying on annual plans to which NEPA cannot realistically apply. During oral argument, government counsel represented that the long-term EIS is scheduled to be completed in February 2002. However, it awaits the completion of an updated NMFS BiOp, slated to be completed in June 2001. The court intends to monitor Reclamation's compliance with its representations. This dispute highlights the need for long-term planning to minimize the effects of future dry years. 256

Klamath Water Users Protective Ass'n v. Patterson, 15 F. Supp. 2d 990, 991 (D. Or. 1998).

^{252.} Klamath Water Users, 204 F.3d at 1204-05 (citing Nat'l Wildlife Fed'n v. Espy, 45 F.3d 1337, 1343 (9th Cir. 1995) and Forelaws on Bd. v. Johnson, 743 F.2d 677, 681 (9th Cir. 1984)).

^{253.} Id. at 1205.

^{254.} *Id.* The *Trinity County* decision is discussed *supra*, notes 127-37 and accompanying text.

^{255.} *Id.* at 1205-06. The court noted Klamath Project operations would still be subject to the ESA and the Bureau's tribal trust responsibility, even if the 2001 plan were set aside. The court had earlier stated that the balance of hardships did not necessarily favor the irrigators despite their economic losses, both because of the national policy of the ESA and because tribal and commercial fishing interests would be harmed if irrigation water deliveries were increased. *Id.* at 1200-01.

^{256.} *Id.* at 1206. The mention of "past proceedings" very likely refers to *Klamath Water Users*, *supra* note 245.

In 2002 the Bureau did indeed produce a long-term operating plan for the Klamath Project based on new RPAs,²⁵⁷ but never has delivered the promised EIS on that plan.²⁵⁸ Thus, the Bureau has resisted doing NEPA reviews in connection with ESA consultation on project operations, even when implementing a ten-year RPA, and even where the courts have warned the Bureau of the need for an EIS. Perhaps it would be unfair to say that the Bureau has been asking for trouble . . . but it would be fair to say that the Bureau eventually found it, in litigation over CVP operations.

C. The CVP Controversy: Judge Wanger's Decisions Regarding NEPA and the ESA

Litigation over the application of section 7 to the CVP goes back to the early 1990s.²⁵⁹ While a number of threatened or endangered species are potentially affected by the Bureau's decisions regarding the CVP,²⁶⁰ the most significant recent cases have primarily involved two fish species, the Chinook salmon²⁶¹

257. See Pac. Coast Fed'n of Fishermen's Ass'ns v. Bureau of Reclamation, 426 F.3d 1082, 1087-89 (9th Cir. 2005) (describing the ten-year operating plan RPA developed in 2002). This ten-year plan ran into trouble in the courts. See id. at 1089 (describing a key aspect of the plan struck down in the district court and not appealed), 1095 (holding that another key aspect of the plan was arbitrary and capricious).

258. According to its website, the Bureau published a Notice of Intent in 2003 to prepare a Klamath Project Long-Term Operations Plan EIS, but never got much further, and the last update on this item was made in 2005. *Klamath Project Long-term Operations Plan EIS*, BUREAU OF RECLAMATION, MID-PAC. REGION, U.S. DEP'T OF THE INTERIOR, http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=86 (last visited Aug. 27, 2010).

259. See, e.g., Madera Irrigation Dist. v. Hancock, 985 F.2d 1397 (9th Cir. 1993) (effect of ESA and NEPA on water service contract renewal); Barcellos & Wolfsen, Inc. v. Westlands Water Dist., 849 F. Supp. 717 (E.D. Cal. 1993), aff'd sub nom. O'Neill v. United States, 50 F.3d 677 (9th Cir. 1995) (effect of ESA and Central Valley Project Improvement Act on the Bureau's water delivery obligations under existing contracts). Another case relating to events from the Bureau's CVP activities in the 1990s was decided only recently. Stockton East Water Dist. v. United States, 583 F.3d 1344 (Fed. Cir. 2009) (addressing liability for Bureau's failure to meet water delivery contracts due to ESA and CVPIA obligations).

260. See Consol. Salmonid Cases, 688 F. Supp. 2d 1013, 1015 n.1 (E.D. Cal. 2010) (identifying two runs of Chinook salmon, two runs of steelhead, and two other oceangoing species involved in the Bureau's consultation); Natural Res. Def. Council v. Rodgers, 381 F. Supp. 2d 1212, 1230 (E.D. Cal. 2005) (identifying seven terrestrial and freshwater species involved in the Bureau's consultation, including the Delta smelt).

261. Chinook are the biggest salmon, with individual fish often exceeding forty pounds; they are prized by fishermen, and are more likely to spawn in the mainstem of larger rivers than other salmon species. Fact Sheet: West Coast Chinook Salmon,

and Delta smelt.²⁶² The latest round of litigation was brought by water users in response to a 2009 NMFS BO regarding the effects of CVP operations²⁶³ on Chinook and other oceangoing species (Salmon BO),²⁶⁴ and a 2008 FWS BO on the Delta smelt (Smelt BO).²⁶⁵

Water users filed several challenges in the Eastern District of California, where they were assigned to Judge Oliver Wanger²⁶⁶ and consolidated into two sets of cases, one each for the Salmon and Smelt BOs.²⁶⁷ One of the plaintiffs' key arguments in these cases²⁶⁸ is that the government violated NEPA by producing the

NAT'L MARINE FISHERIES SERV. (2008), available at http://swr.nmfs.noaa.gov/psd/99 chinfs.htm (last visited Sept. 1, 2010). Two ESA-listed runs of Chinook (Oncorhynchus tshawytscha)— the endangered Sacramento River winter run and the threatened Central Valley spring run—are affected by CVP operations. See Consol. Salmonid Cases, 688 F. Supp. 2d at 1015 n.1.

262. The Delta smelt, Hypomesus transpacificus, was listed as a threatened species in 1993, at which time the U.S. Fish & Wildlife Service stated that the species had declined nearly ninety percent in the past twenty years, primarily because of water exports and diversions from the Sacramento and San Joaquin rivers. Determination of Threatened Status for the Delta Smelt, 58 Fed. Reg. 12854 (1993). In 2010, the Service determined that listing the Delta smelt as an endangered species was warranted, but precluded by higher priorities. 12-Month Finding on a Petition to Reclassify the Delta Smelt From Threatened to Endangered Throughout Its Range, 75 Fed. Reg. 17667 (2010). The smelt is a slender bodied fish, typically two to three inches in length, native to the Sacramento-San Joaquin rivers and estuary, where it was formerly very common. *Id.* at 17667-68.

263. The BOs actually involve the "coordinated operations" of both the CVP and the California State Water Project. See Consol. Salmonid Cases, 688 F. Supp. 2d at 1015; San Luis & Delta-Mendota Water Authority v. Salazar (Delta Smelt Consol. Cases), 666 F. Supp. 2d 1137, 1139 (E.D. Cal. 2009). "Although CVP is a federal project managed by the Bureau of Reclamation ("BOR") and SWP is a state project managed by the Department of Water Resources ("DWR"), the two projects share a coordinated pumping system that requires, as a practical matter, that the systems be operated in concert." Tulare Lake Basin Water Storage Dist. v. United States, 49 Fed. Cl. 313, 314 (2001). These two projects "share water resources, storage, pumping, and conveyance facilities to manage and deliver one third of the water supply for the State of California." Consol. Salmonid Cases, 688 F. Supp. 2d at 1021-22.

264. See Consol. Salmonid Cases, 688 F. Supp. 2d at 1015.

265. Delta Smelt Consol. Cases, 666 F. Supp. 2d at 1139.

266. Judge Wanger has a long history of deciding cases involving the CVP. See, e.g., Barcellos & Wolfsen, Inc. v. Westlands Water Dist., 849 F. Supp. 717 (E.D. Cal. 1993); Westlands Water Dist. v. Dep't of the Interior, 850 F. Supp. 1388 (E.D. Cal. 1994); Cent. Valley Water Agency v. United States, 327 F. Supp. 2d 1180 (E.D. Cal. 2004).

267. Consol. Salmonid Cases, 688 F. Supp. 2d at 1004 (noting consolidation of six cases challenging Salmon BO); Delta Smelt Consol. Cases, 666 F. Supp. 2d at 1139 (noting consolidation of five cases challenging Smelt BO).

268. Plaintiffs have raised numerous arguments unrelated to NEPA in challenging the BOs. See, e.g., Delta Smelt Consol. Cases, 663 F. Supp. 2d 922 (E.D. Cal. 2009) (addressing argument that application of the ESA to the Delta smelt was unconstitutional because the species had no commercial value and inhabited a single state);

BOs with no environmental review; they argue that because the BOs effectively forced CVP operational changes resulting in significant impacts, they were major federal actions requiring an EIS.²⁶⁹ The federal defendants and the intervenor environmental groups have maintained that issuance of a BO is not a major federal action for purposes of NEPA.²⁷⁰

Judge Wanger addressed the NEPA claims relating to the Smelt BO in November 2009,²⁷¹ and those relating to the Salmon BO four months later,²⁷² issuing very similar memorandum decisions on summary judgment. Both decisions accept the government's argument that the BO was not binding on the Bureau,²⁷³ and distinguish a case in which the Ninth Circuit held that issuance of a BO had triggered NEPA.²⁷⁴ The Smelt decision concludes that it was a "close call" as to whether issuance of the BO was a major federal action triggering NEPA, but does not actually decide the question.²⁷⁵ The Salmon decision is somewhat ambiguous on this point,²⁷⁶ but repeatedly suggests that issuance

San Luis & Delta-Mendota Water Auth. v. Locke, No. 1:09-cv-01053 OWW DLB, 2010 WL 500455 (E.D. Cal. 2010) (addressing argument that Salmon BO was arbitrary and capricious because of substantive flaws).

^{269.} See Consol. Salmonid Cases, 688 F. Supp. 2d at 1020-26 (explaining and analyzing plaintiffs' arguments regarding BO issuance as "major federal action" under NEPA).

^{270.} See id. at 1032-34; Delta Smelt Consol. Cases, 686 F. Supp. 2d 1026, 1037-38 (E.D. Cal. 2009).

^{271.} Delta Smelt Consolidated Cases, 686 F. Supp. 2d 1026 (E.D. Cal. 2009).

^{272.} Consol. Salmonid Cases, 688 F. Supp. 2d 1013 at 1020-26.

^{273.} Id. at 1022, 1025; Delta Smelt Consol. Cases, 686 F.Supp.2d at 1040-41.

^{274.} The earlier case had involved NMFS' issuance of a BO and Incidental Take Statement which effectively allowed state fishing regulators to establish salmon fishing seasons, subject to the restrictions of the Incidental Take Statement. Ramsey v. Kantor, 96 F.3d 434, 439 (9th Cir. 1996). The Ninth Circuit concluded that NMFS' action was "functionally equivalent to a permit because the activity in question [i.e., salmon fishing under state authorization] would, for all practical purposes, be prohibited but for the incidental take statement." Id. at 444. In the Salmon and Smelt cases, however, Judge Wanger distinguished Ramsey because "the CVP is an entirely federal project, operated by Reclamation, a federal agency, rendering Ramsey's 'functional equivalency' analysis largely irrelevant." Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1036; see also Consol. Salmonid Cases, 688 F. Supp. 2d at 1021-22.

^{275. &}quot;It is a close call whether FWS's issuance of the BiOp and its RPA under these circumstances is major federal action under NEPA. This call need not be made" Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1044.

^{276.} The Salmon decision never states that issuance of the BO did not trigger NEPA; nor does it specifically reject the argument that it did. It does quote the "close call" that "need not be made" language from the Smelt decision and states, "A similar conclusion is warranted here." Consol. Salmonid Cases, 688 F. Supp. 2d at 1024.

of the Salmon BO was *not* major federal action for purposes of NEPA.²⁷⁷

Both decisions do find a NEPA violation, however, in the Bureau's acceptance and implementation of the Smelt and Salmon RPAs. The Smelt decision concludes that the Bureau "violated NEPA by failing to perform any NEPA analysis prior to provisionally adopting and implementing the 2008 BiOp and its RPA."²⁷⁸ The Salmon decision reaches the same conclusion²⁷⁹ after first determining that the Bureau's operation of the CVP to comply with the Salmon RPA is major federal action under NEPA,²⁸⁰ and that this action could have significant environmental impacts.²⁸¹

Judge Wanger's rationale for this holding that the Bureau violated NEPA is threefold. First, he finds that the RPAs in the Salmon and Smelt BOs were not necessarily binding,²⁸² but when the Bureau chose to accept them and operate the CVP according to their terms, it took "major federal action" for purposes of NEPA.²⁸³ Second, he determines that the RPAs would result in

^{277. &}quot;[I]t is the coordinated operation of the projects, rather than the proposed modification of operations offered by the BiOp, that triggers NEPA." *Id.* at 1022. "NMFS played a key role in formulating, planning, and implementing the RPA. But, this does not change the fact that it is the operation of the projects by Reclamation, not the issuance of the BiOp that triggers NEPA." *Id.* at 1025. "It would be futile to require NMFS to prepare NEPA documentation on a set of actions that the action agency is free to disregard or substantially modify. The major federal action here is implementation of the RPAs as a part of coordinated project operations." *Id.* (emphasis original). "It is the implementation of the RPAs, as part of overall project operations, not the issuance of the BiOp, that is the "major federal action" in this case." *Id.* at 1027.

^{278.} Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1051.

^{279.} Consol. Salmonid Cases, 688 F. Supp. 2d at 1035.

^{280.} Id. at 1024.

^{281.} Id. at 1034.

^{282.} Id. at 1022, 1025; Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1040-41.

^{283. &}quot;Reclamation was free to accept, in whole or in part, FWS's recommendations and advice prescribed in [the Smelt] RPA." Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1040-41. "Reclamation was not 'bound' by the BiOp until it chose . . . to implement the RPA. Once Reclamation did so, operation of the Projects became the relevant agency 'action,' and Reclamation, as action agency, is the more appropriate lead agency under NEPA." Id. at 1044. In the Salmon decision, the court wrote,

Again, until Reclamation determined that it would provisionally accept the RPA's, the BiOp was not binding upon Reclamation. NMFS had no way of knowing whether its recommendations (in the form of RPAs) would be accepted, accepted in part, or rejected outright. The BiOp did not "guide" or "prescribe" anything until it was provisionally accepted. After Reclamation provisionally committed to implement the RPAs, they became binding and effective. No party has suggested that NMFS has the expertise or ability to implement the RPAs on its own... The

significant changes to CVP operations,²⁸⁴ so the Bureau's decision to implement them is not exempt from NEPA review under the "status quo" principle of *Upper Snake*.²⁸⁵ Third, he finds that serious questions exist about the environmental impacts of the Bureau's action—especially impacts on farmers and agricultural communities²⁸⁶—so the Bureau must prepare a NEPA document to address those questions.²⁸⁷

Having determined that the Bureau's acceptance and implementation of the RPAs triggered NEPA, Judge Wanger brushed aside arguments that requiring NEPA compliance in this context

major federal action here is implementation of the RPAs as a part of coordinated project operations.

Consol. Salmonid Cases, 688 F. Supp. 2d at 1025 (emphasis original).

284. The parties disputed whether RPA implementation would actually result in CVP operations that would be different from historical practices, but the court resolved this factual dispute in the plaintiffs' favor. *Delta Smelt Consol. Cases*, 686 F. Supp. 2d at 1046-49; *Consol. Salmonid Cases*, 688 F. Supp. 2d at 1031-33.

285. "Here, in contrast to the 'routine' activities described in *Upper Snake River* and *Trinity* (cited in *Upper Snake River*), Reclamation's decision to implement the RPA is a 'revis[ion] [of] its procedures or standards' for operating [key CVP facilities].... Reclamation's implementation of the BiOp is major federal action because it substantially alters the status quo in the Projects' operations." *Delta Smelt Consol. Cases*, 686 F. Supp. 2d at 1049. "Here, implementation of the RPA constitutes a non-trivial 'revision of procedures or standards' for the operation of the Projects with draconian consequences. Upper Snake River and Trinity indicate that such revisions do, in fact, trigger NEPA." *Consol. Salmonid Cases*, 688 F. Supp. 2d at 1032

286. Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1050. In the Salmon case, the court noted that reduced water deliveries caused by RPA implementation

will contribute to and exacerbate the currently catastrophic situation faced by Plaintiffs, whose farms, businesses, water service areas, and impacted cities and counties, are dependent, some exclusively, upon CVP and/or SWP water deliveries. The impacts overall of reduced deliveries include irretrievable resource losses (permanent crops, fallowed lands, destruction of family and entity farming businesses); social disruption and dislocation; as well as environmental harms caused by, among other things, increased groundwater consumption and overdraft, and possible air quality reduction.

Consol. Salmonid Cases, 688 F. Supp. 2d at 1034 (quoting from an earlier order in the case regarding plaintiffs' request for emergency injunctive relief).

287. After identifying potential impacts of the Bureau's implementation of the Salmon RPA, the court continued, "This is not to say that such effects will definitely occur[,] . . . but there can be no dispute that 'there are substantial questions' about whether coordinated operation of the CVP and SWP under the RPAs'may cause significant degradation of the human environment.' No more is required to trigger NEPA." Consol. Salmonid Cases, 688 F. Supp. 2d at 1034 (quoting Native Ecosystems Council v. Forest Service, 428 F.3d 1233, 1239 (9th Cir. 2005)). See also Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1050 (noting the government had acknowledged that reduced CVP water deliveries could increase demands on groundwater, and stating that this impact "in and of itself, raises the kind of 'serious questions' about whether a project may cause significant degradation of the human environment, requiring NEPA compliance").

might interfere with ESA implementation. Responding to an argument that applying NEPA to the issuance of a BO would "frustrate the purposes of the ESA,"288 he wrote that "[i]t is not necessary to address this argument because it is not necessary to decide whether NEPA applies to FWS's issuance of the BiOp. NEPA applies to Reclamation's acceptance and implementation of the BiOp and its RPA. This dispute over statutory priority is premature."289 He also rejected an argument in the Smelt case that the tight timelines for producing the BO precluded any compliance with NEPA, indicating that three-plus months seemed to allow time for some type of environmental review, and noting that no one had suggested that NEPA compliance regarding the Smelt BO was impossible.²⁹⁰

Having deferred on remedies at the summary judgment stage,²⁹¹ Judge Wanger took up the issue in two lengthy rulings issued in May 2010.²⁹² The rulings address both NEPA and ESA issues, in response to plaintiffs' motions to enjoin certain elements of the Smelt and Salmon RPAs.²⁹³ Neither ruling specifically grants injunctive relief,²⁹⁴ but both conclude that "[u]ntil Defendant Agencies have complied with the law, some injunctive relief pending NEPA compliance is appropriate, so long as it will not further jeopardize the species or their habitat."²⁹⁵

^{288.} Both the government and the environmental interveners made this argument in the *Smelt* case. *Delta Smelt Consol. Cases*, 686 F. Supp. 2d at 1050. In the *Salmon* case, it appears that only the environmental groups took this position. *Consol. Salmonid Cases*, 688 F. Supp. 2d at 1050.

^{289.} Consol. Salmonid Cases, 688 F. Supp. 2d at 1035 (quoting Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1050).

^{290.} Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1051.

^{291.} *Id.*; Consol. Salmonid Cases, 688 F. Supp. 2d at 1035 (noting the "interplay between the NEPA violation and jeopardy is a complex one that has not been properly briefed").

^{292.} Consol. Salmonid Cases, No. 1:09-cv-1053 OWW DLB, 2010 WL 2011016 (E.D. Cal. May 18, 2010); Consol. Delta Smelt Cases, Nos. 1:09-CV-00407 OWW DLB, 1:09-cv-00480-OWW-GSA, 1:09-cv00422-OWW-GSA, 1:09-cv-00631-OWW-DLB, 1:09-cv-00892-OWW-DLB, 2010 WL 2195960 (E.D. Cal. May 27, 1010).

^{293.} Consol. Salmonid Cases, 2010 WL 2011016, at *1-2; Consol. Delta Smelt Cases, 2010 WL 2195960, at *1-3 (describing plaintiffs' motions for injunctive relief).

^{294.} In the Salmon case, Judge Wanger issued a supplemental opinion on June 1 granting limited injunctive relief from one element of the Salmon RPA, and denying a request to stay the injunction pending appeal. Consol. Salmonid Cases, 2010 WL 2011016, at *53-61 (E.D. Cal. June 1, 2010).

^{295.} Consol. Salmonid Cases, 2010 WL 2011016, at *51. The later order in the Smelt case has the identical sentence, except that it states that injunctive relief pending NEPA compliance "may be appropriate;" there is no explanation of the reason for, or potential significance of, this change in wording. Consol. Delta Smelt Cases, 2010 WL 2195960, at *49.

Judge Wanger reaches this conclusion despite recognizing that the Smelt and the Salmon runs involved in these cases are gravely at risk of extinction.²⁹⁶ He also acknowledges that the ESA requires that these species be protected from jeopardy resulting from federal actions,²⁹⁷ although he also implies (without support) that the ESA may allow courts to balance harm to humans against the risk of extinction to species.²⁹⁸ But even if the ESA prohibits balancing of the equities, he concludes, "[t]here is no such bar in NEPA injunction proceedings."²⁹⁹

Under these decisions, NEPA provides a sort of counterweight to the ESA, imposing obligations on federal agencies to balance human harm against species protection. After noting the ESA's

296. Consol. Delta Smelt Cases, 2010 WL 2195960, at *4 (noting the Delta smelt is "in imminent danger of extinction," and the population continues to decline); Consol. Salmonid Cases, 2010 WL 2011016, at *4-6 (noting the Sacramento River winterrun Chinook, the Central Valley spring-run Chinook, and the Central Valley Steelhead are all "not viable" at this time, and that "the risk of extirpating" one population of the Steelhead "is very high").

297. "The species and their critical habitats are entitled to protection under the ESA. The species have been and will be protected. That is the law." Consol. Salmonid Cases, 2010 WL 2011016, at *51; Consol. Delta Smelt Cases, 2010 WL 2195960, at *48.

298. Judge Wanger distinguishes *Tennessee Valley Auth. v. Hill*, 437 U.S. 153 (1978), in which the Supreme Court famously held that ESA § 7 prohibited completion of a nearly-finished federal dam, because closing the dam would jeopardize the endangered snail darter. The order in the *Smelt* case states,

Plaintiffs have advanced a human welfare exception and contend that unlike any of the prior cases, this case juxtaposes species' survival against human welfare, requiring a balancing of the BiOp's threats of harm to humans, health, safety, and protection of affected communities. No case, including TVA v. Hill, which concerned the competing economic interest in the operation of a hydro-electric project and prohibited federal courts from balancing the loss of funds spent on that project against the loss of an endangered species, expressly addresses whether the ESA precludes balancing of harms to humans and the human environment under the circumstances presented here.

This case involves both harm to threatened species and to humans and their environment. Congress has not nor does TVA v. Hill elevate species protection over the health and safety of humans.

Consol. Delta Smelt Cases, 2010 WL 2195960, at *46. The order in the Salmon case has slightly different wording. Consol. Salmonid Cases, 2010 WL 2011016, at *49 ("This case is at the intersection of harm to threatened species and humans and their environment"). The Salmon order also notes that "other human communities," including Indian tribes and the salmon fishing industry, face harm from declining salmon populations. Id.

299. Consol. Salmonid Cases, 2010 WL 2011016, at *48; Consol. Delta Smelt Cases, 2010 WL 2195960, at *46. Judge Wanger also notes, however, that a court should not enjoin agency action under NEPA where doing so "would result in more harm to the environment than denying injunctive relief." Consol. Salmonid Cases, 2010 WL 2011016, at *49; Consol. Delta Smelt Cases, 2010 WL 2195960, at *46 (both citing Save Our Ecosystems v. Clark, 747 F.2d 1240, 1250 (9th Cir. 1984).

policy of preventing species extinctions,³⁰⁰ and stating that NEPA's policy "favors protecting the balance between humans and the environment,"³⁰¹ the orders declare, "If both these objectives can be realized by astute management, it is the government's obligation to do so."³⁰² Because the plaintiff water users and their communities face a variety of serious harms—mostly economic and social³⁰³—from implementation of the Salmon and Smelt RPAs, they deserve an injunction that would increase their water supply. However, "[t]his must be done without jeopardizing the species and their critical habitat."³⁰⁴

Thus, the rulings essentially demand more water for traditional uses without increasing the extinction risk to listed species, and order the agencies to pursue this end using NEPA:

The species and their critical habitats are entitled to protection under the ESA. The species have been and will be protected. That is the law. Nonetheless, NMFS and Reclamation, as the consulting and action agencies, must take the hard look under NEPA at the draconian consequences visited upon Plaintiffs, the water supply of California, the agricultural industry, and the residents and communities devastated by the water supply limitations imposed by the RPA Actions. Federal Defendants have failed to comprehensively and competently evaluate whether RPA alternatives can be prescribed that will be mutually protective of all the statutory purposes of the Projects.

This is a case of first impression. The stakes are high, the harms to the affected human communities great, and the injuries unac-

^{300. &}quot;The ESA advances a Congressional policy to 'halt and reverse the trend toward species extinction, whatever the cost." Consol. Delta Smelt Cases, 2010 WL 2195960, at *47 (quoting Tennessee Valley Auth., 437 U.S. at 184); Consol. Salmonid Cases, 2010 WL 2011016, at *49.

^{301.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *49 (citing 42 U.S.C. § 4321).

^{302.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *49

^{303.} The orders state that the plaintiffs, "who represent a substantial population of water users in California," should receive injunctive relief

to enhance the water supply to reduce the adverse harms of destruction of permanent crops; fallowed lands; increased groundwater consumption; reducing groundwater supplies; land subsidence; reduction of air quality; destruction of family and entity farming businesses; and social disruption and dislocation, such as increased property crimes and intra-family crimes of violence, adverse effects on schools, and increased unemployment leading to hunger and homelessness.

Consol. Delta Smelt Cases, 2010 WL 2195960 at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *49.

^{304.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *49.

ceptable if they can be mitigated. NMFS and Reclamation have not complied with NEPA. This prevented in-depth analysis of the potential RPA Actions through a properly focused study to identify and select alternative remedial measures that minimize jeopardy to affected humans and their communities, as well as protecting the threatened species. No party has suggested that humans and their environment are less deserving of protection than the species.³⁰⁵

Thus, while litigation continues over the Salmon and Smelt BOs, and the issue of injunctive relief remains complicated,³⁰⁶ Judge Wanger has clearly stated his position regarding the government's duty to use NEPA to address ESA-related impacts on project water users.

D. Criticism of Judge Wanger's Conclusions Regarding NEPA³⁰⁷

These decisions in the Salmon and Smelt cases present a conflict between two of the nation's most important environmental laws. Although Judge Wanger insists that any relief for the water users must not raise risks to the species, his rulings plainly interfere with the government's efforts to save these particular fish from a very real threat of extinction. More broadly, his conclusion that injunctive relief of RPA implementation is "appropriate" pending NEPA compliance can only complicate agency efforts to carry out their responsibilities under ESA section 7.

These NEPA rulings regarding the Salmon and Smelt BOs are well grounded in some respects. For example, the Bureau's decision to accept and implement the BO probably does meet the definition of "major federal action" in the NEPA implementing rules.³⁰⁸ This decision regarding CVP operations is probably not

^{305.} Consol. Salmonid Cases, 2010 WL 2011016, at *51. Here again, the order in the Smelt case has slightly different wording, calling the calling the consequences to plaintiffs "severe" (rather than "draconian") and stating that Central Valley residents and communities have been "impacted" (rather than "devastated") by reduced water deliveries. Consol. Delta Smelt Cases, 2010 WL 2195960, at *48-49.

^{306.} See Consol. Delta Smelt Cases, 2010 WL 2195960, at *49; Consol. Salmonid Cases, 2010 WL 2011016, at *52, *53-61 (discussing need to demonstrate that injunctive relief will not harm listed species).

^{307.} This article does not address Judge Wanger's analysis of ESA issues (which are a major focus of his May 2010 decisions), except as it relates to his application of NEPA.

^{308. 40} C.F.R. §1508.18 (2010); see supra notes 50-53 and accompanying text.

exempt from NEPA review under *Upper Snake*,³⁰⁹ although that is unclear given the factual dispute regarding the actual effects of RPA implementation.³¹⁰ And NEPA does indeed provide for consideration of the kinds of economic and social impacts that might result from the Bureau's CVP operating decisions,³¹¹ although only if they result from changes in the physical environment.³¹²

In other key respects, however, the Salmon and Smelt NEPA decisions are highly questionable. The rulings lack detailed analysis of whether requiring compliance with NEPA before RPA implementation would defeat the purposes of the ESA, what duties NEPA imposes in this context (if it applies at all), and whether enjoining RPA implementation pending NEPA compliance is legally proper. In addressing these difficult but crucial issues at the intersection of NEPA and ESA compliance, Judge Wanger's decisions are unpersuasive at best.

Most fundamentally, the summary judgment decisions hold that the Bureau acted illegally by implementing the RPAs with no environmental review, but fail to consider whether a NEPA requirement in this context would undercut the ESA. The court brushed aside this issue in both cases, saying that it was "not necessary to decide whether NEPA applies to [issuance of the BO]. NEPA applies to Reclamation's acceptance and implementation of the BiOp and its RPA. This dispute over statutory priority is premature."

The court does not explain why it was unnecessary or premature to decide this issue as applied to the *Bureau's* section 7 compliance; to the contrary, the rulings state that the only reason why the Bureau had operated the CVP in accordance with the RPAs "was to meet the mandate of the ESA and the BiOp." In the later orders regarding remedies—when the

^{309.} As discussed above, however, *Upper Snake* itself is both arguably incorrect and somewhat ambiguous regarding the scope of its exemption from NEPA requirements. *See supra* notes 157-84 and accompanying text.

^{310.} See supra note 286.

^{311. 40} C.F.R. § 1508.8 (2010) (defining "effects" for purposes of NEPA reviews to include those "ecological . . . , aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative").

^{312.} Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772-74 (1983).

^{313.} Delta Smelt Consol. Cases, 686 F. Supp. 2d 1026, 1050 (E.D. Cal. 2009); Consol. Salmonid Cases, 688 F. Supp. 2d 1013, 1035 (E.D. Cal. 2010) (quoting the Smelt decision).

^{314.} Consol. Salmonid Cases, 688 F. Supp. 2d at 1023 (quoting Delta Smelt Consol. Cases, 686 F. Supp. 2d at 1041).

issue was unquestionably ripe for decision—the court still did not analyze the evident conflict between species protection and NEPA compliance, except to declare that the ESA would protect the species in any event.³¹⁵

At no point did Judge Wanger address a Ninth Circuit decision that had held NEPA inapplicable to designation of critical habitat under the ESA³¹⁶—a context more conducive to NEPA review than section 7 compliance, because critical habitat designation requires consideration of economics and other factors.³¹⁷ The Ninth Circuit stated in that case that "the ESA furthers the goals of NEPA without requiring an EIS,"³¹⁸ and that requiring the agency to prepare an EIS before designating critical habitat "would only hinder its efforts at attaining the goal of improving the environment."³¹⁹ In rejecting an Oregon logging county's attempt to require NEPA compliance before critical habitat designation for the Northern Spotted Owl, the court concluded that it was "reluctant . . . to make NEPA more of an 'obstructionist tactic' to prevent environmental protection than it may have already become."³²⁰

As to the obligations of federal agencies under NEPA, Judge Wanger suggests that it imposes substantive duties, despites decades of caselaw to the contrary.³²¹ Most notably, the remedy orders state that the "policy underlying NEPA favors protecting the balance between humans and the environment," citing NEPA section 2;³²² even if that were a complete and accurate paraphrase of the statutory policy,³²³ it ignores the fact that courts

^{315.} See supra notes 297-99, 306, and accompanying text.

^{316.} Douglas Cnty. v. Babbitt, 48 F.3d 1495 (9th Cir. 1995). The Tenth Circuit reached the opposite conclusion on this issue, making no mention of the Ninth Circuit Decision. Middle Rio Grande Conservancy Dist. v. Norton, 294 F.3d 1220 (10th Cir. 2002).

^{317. 16} U.S.C. § 1533(b)(2) (2009).

^{318.} Douglas Cnty., 48 F.3d at 1506.

^{319.} Id. (quoting Pac. Legal Found, v. Andrus, 657 F.2d 829, 837 (6th Cir. 1981)).

^{320.} Id. at 1508 (citing Pac. Legal Found. v. Andrus, 657 F.2d at 838).

^{321.} See supra notes 68-71 and accompanying text.

^{322.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *49, citing 43 U.S.C. § 4321 (2006).

^{323.} The section of NEPA which actually contains Congress' statement of national environmental policy is section 101(a). There, Congress "recognizes the profound impact of man's activity on interrelations of all components of the natural environment," and declares a continuing policy that the federal government should "use all practicable means and measures" so as "to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." 43 U.S.C. § 4331(a) (2006).

have found mandatory duties only in section 102 of NEPA.³²⁴ Nonetheless, the court then declares that if both these objectives—that is, the stated policies of both NEPA and the ESA—"can be realized through astute management, it is the government's obligation to do so."³²⁵ The rulings do not explain how NEPA's non-binding statement of policy came to impose this "obligation."

The remedy rulings imply that NEPA compliance for RPA implementation will require the government not only to identify alternative measures that will protect the species,³²⁶ but also "to identify and select alternative remedial measures that minimize jeopardy to affected humans and their communities, as well as protecting the threatened species."³²⁷ If that is Judge Wanger's prescription for NEPA compliance,³²⁸ it too is contrary to established caselaw, which holds that NEPA does not require an agency to select the least environmentally damaging option.³²⁹ It is also inconsistent with the ESA implementing rules, which require only that a RPA be "economically and technologically feasible,"³³⁰ not that it be the least burdensome on affected entities. In short, the remedy rulings are unclear on what NEPA requires of the government in this context, but to the extent that they indicate more than procedural duties, they are wrong.

^{324.} See, e.g., Calvert Cliffs Coordinating Comm., Inc. v. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971).

^{325.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *49, citing 43 U.S.C. § 4321.

^{326.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *48; Consol. Salmonid Cases, 2010 WL 2011016, at *51.

^{327.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *49; Consol. Salmonid Cases, 2010 WL 2011016, at *51 (emphasis added).

^{328.} The rulings are ambiguous on this point, stating only that the government's failure to comply with NEPA "prevented in-depth analysis of the potential RPA Actions through a properly focused study to identify and select alternative remedial measures . . . " Consol. Delta Smelt Cases, 2010 WL 2195960, at *49; Consol. Salmonid Cases, 2010 WL 2011016, at *51. Thus, one could read the rulings to say only that the agencies could have selected less burdensome options if they had complied with NEPA, not that NEPA would have required that result. Judge Wanger repeatedly suggests, however, that the government had a duty to craft a RPA that would protect the species while minimizing other harm. Consol. Delta Smelt Cases, 2010 WL 2195960, at *47; Consol. Salmonid Cases, 2010 WL 2011016, at *50 (stating that the agencies had "completely abdicated their responsibility to consider alternative remedies in formulating RPA actions that would not only protect the species, but would also minimize the adverse impact on humans and the human environment.").

^{329.} See, e.g., Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227-28 (1980) (per curiam).

^{330. 50} C.F.R. § 402.02 (2010) (defining reasonable and prudent alternatives).

Finally, the rulings make an incomplete and dubious case for enjoining implementation of the Smelt and Salmon RPAs. They do cite relevant Ninth Circuit precedent regarding injunctive relief in NEPA cases, noting that a court should not enjoin government action under NEPA where granting the injunction would result in greater environmental harm than denying it.331 This principle certainly argues against enjoining government actions that would prevent jeopardy to threatened or endangered species, especially those in imminent danger of extinction.³³² But the court never explains why enjoining the RPAs would do no more environmental harm than good. The ruling in the Salmon case says only that "it appears that interim relief is justified, if deepening of the species' jeopardy can be avoided"333 . . . but that, of course, is a big "if,"334 which effectively requires the court to decide for itself whether any given proposal would cause jeopardy to the relevant species.³³⁵

The rulings also cite the Supreme Court's decision in the NEPA case of *Winter v. NRDC* regarding the requirements for preliminary injunctive relief,³³⁶ and note that "*Winter* altered the Ninth Circuit's general preliminary injunctive relief standard by

^{331.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *36; Consol. Salmonid Cases, 2010 WL 2011016, at *35 (citing Save Our Ecosystems v. Clark, 747 F.2d 1240, 1250 (9th Cir. 1984); Am. Motorcyclist Ass'n v. Watt, 714 F.2d 962, 966 (9th Cir. 1983); and Alpine Lakes Prot. Soc'y v. Schlapfer, 518 F.2d 1089, 1090 (9th Cir. 1975). The court also notes that issuing injunctive relief is improper where it would cause a violation of another statute, such as section 7. Consol. Delta Smelt Cases, 2010 WL 2195960, at *36; Consol. Salmonid Cases, 2010 WL 2011016 at *35.

^{332.} See supra note 298.

^{333.} Consol. Salmonid Cases, 2010 WL 2011016 at *49. The court said even less in ruling on injunctive relief in the Smelt case. Consol. Delta Smelt Cases, 2010 WL 2195960 at *46.

^{334.} The rulings do, however, recognize the dire state of the species, and require a showing that any requested injunction "will not deepen jeopardy to the affected species or otherwise violate other laws," and find that the evidence does not yet do so. *Consol. Delta Smelt Cases*, 2010 WL 2195960, at *49; *Consol. Salmonid Cases*, 2010 WL 2011016, at *52.

^{335.} See Consol. Salmonid Cases, 2010 WL 2011016, at *53-61 (ordering short-term injunctive relief after analyzing the potential effects of that remedy on the affected species).

^{336.} Consol. Delta Smelt Cases, 2010 WL 2195960 at *3; Consol. Salmonid Cases, 2010 WL 2011016 at *2, citing Winter v. Natural Res. Defense Council, 129 S. Ct. 365, 374 (2008) (preliminary injunctive relief is appropriate only if the plaintiff establishes four factors by a preponderance of the evidence: likelihood of success on the merits, likelihood of irreparable harm without injunctive relief, balance of equities in the plaintiff's favor, and public interest favoring the injunction).

making that standard more rigorous "337 In applying that standard, Judge Wanger identifies various harms that may result from a reduction in water deliveries mandated by the Salmon and Smelt RPAs,³³⁸ and he lists these harms in support of his conclusion that the public interest favors an injunction.³³⁹ But he never finds that the balance of equities favors the water-user plaintiffs—an omission that is particularly glaring in the Salmon case, where he notes that any balancing of the harms would be "complicated by the harm caused to other human communities by the reduced abundance of salmonids, such as to the salmon fishing industry and the Winnemem Wintu Tribe."340 He also never explains why the public interest favors an injunction, despite the job losses and other human impacts of declining salmon runs,341 the grave and imminent risk of extinction to the Delta smelt,342 and the Congressional policy—reflected in the ESA and recognized by the Supreme Court—that protection of endangered species should be "the highest of priorities."343 Thus, the rulings do not provide, and certainly do not support, the necessary findings that the plaintiffs have established the four elements needed to enjoin the Salmon and Smelt RPAs.

In summing up the decision on NEPA, the rulings state, "[n]o party has suggested that humans and their environment are less

^{337.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *46; Consol. Salmonid Cases, 2010 WL 2011016, at *48. The same rulings also stated, however, that federal agency actions taken in violation of NEPA "will be set aside," and quoted a pre-Winter decision of the Ninth Circuit. Consol. Delta Smelt Cases, 2010 WL 2195960, at *34; Consol. Salmonid Cases, 2010 WL 2011016, at *35 (quoting High Sierra Hikers Ass'n v. Blackwell, 390 F.3d 630, 640 (9th Cir. 2004)).

^{338.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *28-34; Consol. Salmonid Cases, 2010 WL 2011016, at *27-34.

^{339.} See supra note 305.

^{340.} Consol. Salmonid Cases, 2010 WL 2011016, at *49. The ruling also discusses the impacts of reduced salmon populations on tribal and non-tribal fishing interests. *Id.* at *33-34.

^{341.} The ruling noted that low salmon runs had caused a shutdown in commercial fishing for 2008-09, resulting in the loss of about 4,200 jobs on the West Coast. *Id.* at *34. The ruling suggested that reduced water deliveries in the Central Valley may also have cost 4,200 jobs in the agricultural sector, although another expert estimated that fewer than 2,000 jobs had been lost there. *Id.* at *32.

^{342.} See supra note 298.

^{343.} Tennessee Valley Auth. v. Hill, 437 U.S. 153, 174 (1978). The rulings did acknowledge TVA v. Hill, but suggested that it did not control in the Salmon and Smelt cases, because "evidence of harm to the human environment in the form of social dislocation, unemployment, and other threats to human welfare were not present in Hill. They are in this case." Consol. Delta Smelt Cases, 2010 WL 2195960, at *48; Consol. Salmonid Cases, 2010 WL 2011016, at *50.

deserving of protection than the species."³⁴⁴ However deserving "humans and their environment" may be in the abstract, however, the question is whether these plaintiffs have adequately made a case for a NEPA violation and an injunction. Judge Wanger clearly believes that Central Valley farmers and agricultural communities deserve some relief, but it is less clear that he has correctly applied the law in reaching that conclusion.

V. Conclusion

While it may always be known as the builder of destructive water projects, the Bureau today clearly recognizes the need to consider the environmental consequences of operating these projects. Current Bureau policy emphasizes "[p]rotecting the public and the environment through the adequate maintenance and appropriate operation" of its facilities, and managing its projects "to fulfill water user contracts and protect and/or enhance conditions for fish, wildlife, land, and cultural resources." The Bureau's project operations must now account for environmental concerns, as well as delivering water for irrigation and other traditional uses.

As the Bureau has become increasingly involved with environmental matters, it has grown very familiar with the environmen-

^{344.} Consol. Delta Smelt Cases, 2010 WL 2195960, at *49; Consol. Salmonid Cases, 2010 WL 2011016, at *51.

^{345.} MISSION/VISION, BUREAU OF RECLAMATION, U.S. DEP'T OF THE INTERIOR, http://www.usbr.gov/main/about/mission.html (last visited Sept. 17, 2010). The Bureau's website currently contains a "vision statement," and these items are the second and third of seven listed items within "The Commissioner's plan for how Reclamation will attain its vision." *Id.*

^{346.} This one-paragraph summary of the Bureau's priorities, presented by Commissioner Michael Connor in his Congressional testimony on the Bureau's 2010 budget request, indicates the significance of environmental concerns for the Bureau's operations:

Reclamation's FY 2010 priority goals are directly related to fulfilling contractual requests to deliver water and power. These include addressing a range of other water supply needs in the West, playing a significant role in restoring and protecting freshwater ecosystems consistent with applicable State and Federal law, and enhancing management of our water infrastructure while mitigating for any harmful environmental effects. Reclamation will deliver roughly 28 million acre-feet of water to meet contractual obligations while addressing other resource needs (for example, fish and wildlife habitat, environmental enhancement, recreation, and Native American trust responsibilities).

Michael L. Connor, Commissioner, Bureau of Reclamation, Statement before the Subcommittee on Energy and Water Development, U.S. Senate Appropriations Committee (June 18, 2009), *available at* http://www.usbr.gov/newsroom/testimony/detail.cfm?RecordID=1401 (last visited Apr. 20, 2010).

tal reviews and public involvement provided under NEPA. Because of the cases that effectively exempt "routine" project operations from the EIS requirement, however, NEPA remains largely irrelevant to the Bureau's decisions regarding the operation of most reclamation projects. The Bureau's environmental pressures and priorities were much lower in 1977 and even in 1990, when *County of Trinity* and *Upper Snake* were decided. Back then it may have seemed reasonable to immunize the Bureau's operating decisions from the requirements of NEPA, but it seems nonsensical today.

The ESA, of course, has had a much greater impact on the Bureau and its projects.³⁴⁷ Where its project operations affect a listed species, the Bureau has taken measures to avoid jeopardizing the species' survival and recovery, as required by ESA section 7. Where these actions have caused or threatened a reduction in water deliveries to irrigators or other users—as in the Klamath Basin, the Middle Rio Grande, and the CVP—intense legal and political controversy has ensued.

Facing water shortages related to the Bureau's ESA compliance, it is understandable that irrigators have turned to NEPA in an effort to stave off cutbacks. These irrigators sued the Bureau under NEPA to force consideration of alternatives beyond the Bureau's proposal, to ensure a public process where their voices could be heard, and to buy time in hopes of improved conditions or a more favorable outcome. Of course, the environmental groups lost those cases—just as Klamath Basin irrigators did when they sued the Bureau in 2001 and before. Thus, while NEPA has been a disappointment to those suing the Bureau over project operations, it has at least been equally disappointing to all kinds of plaintiffs.

Judge Wanger's decisions would represent a major change, not only by requiring environmental review of some Bureau operat-

^{347.} Roughly one-third of the Bureau's 2011 budget request was for endangered species programs and other environmental efforts in several river basins. Most of the nearly \$350 million requested for these purposes involved CVP and Bay-Delta efforts, but it also included \$16.5 million for the Lower Colorado endangered species program, \$23.7 million for the Platte River endangered species program, \$22.5 million for (mostly) environmental purposes on the Klamath Project, and \$25.1 million for the Middle Rio Grande Project, "of which a significant portion is to support environmental activities developed through the ESA Collaborative Program." Press Release, U.S. Bureau of Reclamation, Reclamation's FY 2011 Budget Request is \$1.1 Billion (Feb. 1, 2010), available at http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=31461 (last visited Apr. 20, 2010).

ing decisions, but also by tying NEPA compliance to ESA implementation. NEPA would now apply to project operations, but only where the Bureau is also working under ESA section 7. NEPA would now provide a means of challenging operating decisions, but only for those who oppose the Bureau's measures to avoid jeopardy to species facing extinction.

Not surprisingly, other courts have not required environmental reviews by federal agencies carrying out their ESA duties, refusing to allow NEPA compliance to undercut the purpose of protecting listed species.³⁴⁸ Although one Ninth Circuit case has held that NEPA was triggered by agency compliance with ESA section 7, it is an isolated case involving very different facts than the Bureau's operation of a federal water project, as Judge Wanger has recognized.³⁴⁹ Thus, even if his decisions stand, it seems doubtful that they will persuade other courts to require other federal agencies to follow the NEPA process before implementing section 7 requirements.

The Bureau has left itself particularly vulnerable to NEPA claims arising from ESA implementation because it rarely applies NEPA to project operations. The Bureau could protect itself from such claims by pursuing ESA consultation and the NEPA process at the same time for particular projects.³⁵⁰ Because the consultation process is ordinarily supposed to take no more than a few months,³⁵¹ the Bureau could face delays unless it prepares a NEPA document on project operations *before* the start of ESA consultation. It could then base (or "tier"³⁵²) any

^{348.} Pac. Legal Found. v. Andrus, 657 F.2d 829, 837-38 (6th Cir. 1981) (no NEPA review for species listing decisions under ESA § 4); Douglas Cnty. v. Babbitt, 48 F.3d 1495, 1506-08 (9th Cir. 1995) (no NEPA review for critical habitat designation under ESA § 4); but see Middle Rio Grande Conservancy Dist. v. Norton, 294 F.3d 1220, 1230-31 (10th Cir. 2002) (requiring EIS for critical habitat designation and seeing no conflict with ESA purposes).

^{349.} See supra note 276.

^{350.} The ESA implementing rules indicate that consultation "may be consolidated" with a NEPA review. 50 C.F.R. § 402.06(a) (2010). The NEPA rules state that an agency should prepare its draft EIS "concurrently" with ESA consultation. 40 C.F.R. § 1502.25(a) (2010).

^{351.} The ESA implementing rules state that the federal action agency (here the Bureau) "shall complete the biological assessment within 180 days after its initiation" and that formal consultation should conclude within ninety days, after which the Service should deliver the BO within forty five days. 50 C.F.R. §§ 402.12(i), 402.13(e). These timeframes may be extended, subject to certain requirements and limitations.

^{352.} The CEQ rules encourage agencies to "tier" NEPA documents by basing later, more specific NEPA reviews on earlier, broader documents. The issues discussed in an earlier review can be incorporated by reference into a later one, which

ESA-related NEPA document to the earlier one. A general project operations EA or EIS might also reduce the uncertainty and hardship of any required ESA compliance by helping the Bureau anticipate future problems (e.g. drought-related impacts on habitat) and take steps that could protect both users and species (e.g., standing agreements with water users to lease water for endangered species in dry years). Thus, there is no necessary conflict between the obligations imposed by NEPA and the ESA *if* the Bureau were to conduct environmental reviews of project operations in advance of section 7 consultations.

The Salmon and Smelt cases, however, order a new NEPA review for already-completed consultations, and threaten to enjoin endangered species protections until it is done. It would be ironic at best if NEPA were never triggered by the serious, ongoing environmental impacts of reclamation project operations, but were triggered by the Bureau's actions to avoid jeopardy to listed species as required by the ESA. And it would be bizarre if the "cornerstone" of American environmental law had no real relevance to the operation of these projects, *except* for protecting consumptive water users from economic harm caused by another landmark environmental law. That is simply not what NEPA should do.

Judge Wanger is correct, however, in noting that an EIS could have real value in helping identify alternatives to the Bureau's proposed CVP operations. Other courts have also recognized this benefit of the NEPA process in the context of water project operations.³⁵³ This article suggests that the Bureau, for reasons of both law and policy, should indeed conduct environmental reviews of multi-year operating plans. The NEPA process could assist the Bureau in long-term planning for project operations, providing for public involvement and meaningful consideration of alternatives and impacts.³⁵⁴ And that is exactly what NEPA should do.

can then focus on the more site-specific issues associated with that particular proposed action. 40 C.F.R. \S 1502.20.

^{353.} See supra notes 197, 209 and accompanying text.

^{354.} In the foreword to a recent publication titled "NEPA Success Stories," former CEQ Chair (and EPA Administrator) Russell Train wrote, "These quiet success stories... fundamentally examine how public involvement and careful consideration of alternatives has produced better outcomes—for the agencies themselves, for the nation, and for the human environment." Envil. Law Inst., supra note 82, at 4.