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ARTICLE

Choosing Your Ground on the Endangered Species Act: How Do the Ninth, Tenth, and District of Columbia Circuit Courts of Appeal Evaluate Water Management Decisions Made by Federal Water Agencies?

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The natural formation of the country is the soldier's best ally, but a power of estimating the adversary, of controlling the forces of victory, and of shrewdly calculating difficulties, dangers, and distances, constitutes the test of a great general. He who knows these things, and in fighting puts his knowledge into practice, will win his battles. He who knows them not, nor practices them, will surely be defeated.

- Sun Tzu, "The Art of War", ca. 450 B.C.

I. INTRODUCTION

It is, perhaps, overly dramatic to label litigation as a war, waged with word-spears on the field of battle in a courtroom, fought by modern-day knights dressed in ornate battle-garb.

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Overly dramatic, perhaps, but not necessarily inaccurate. If we continue the metaphor, then the difficulties, dangers, and distances within the courtroom, and the natural formation of the country, the courtroom itself, are what the lawyer today must master, lest he or she be defeated on the field.

Federal agencies, such as the U.S. Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (Army Corps), operate a large number of water development and delivery projects throughout the western United States. Agency managers of the projects make operational decisions that govern how those projects are implemented. These decisions are discretionary actions subject to the requirements of section 7(a)(2) of the Endangered Species Act (ESA).¹ Agency implementation of the ESA on water projects is often the target of litigation filed under the ESA's citizen suit provision.²

The purpose of this article is twofold. First, federal agencies are responsible for the development and implementation of ESA documents, and knowing what a court will look for and at when that document is challenged can help the agencies to develop a document that can better survive court review. Second, a plaintiff who challenges such a document can benefit from that same knowledge, by knowing which elements of the document to best challenge. The intent of this article is to provide practitioners, both agency and non-, with an introduction to that knowledge, to identify some of those difficulties, dangers, and distances, with the ultimate goal of adding clarity to an often confusing battlefield.

This article first provides, in Part II, an overview of how the ESA applies to federal actions, and then discusses in Part III how the Ninth, Tenth, and District of Columbia Circuit Courts of Appeal analyze, under the ESA, the decisions made by the federal agencies. The discussion includes specific analytic tests the courts have developed. Finally, in Part IV, the article describes a hypothetical decision on a large river system with multiple dams

1. Endangered Species Act, 16 U.S.C. §§ 1531-1544 (2012).
2. *Id.* § 1540(g).

operated by Reclamation and the Army Corps as a hypothetical³ case study to illustrate the Courts' tests.

Different federal circuits utilize different tests to determine whether or not the decisions made under the ESA satisfy the statute and court precedent. The intent of this article is to illustrate the particular criteria some of the courts use in those tests, and thus to provide information for federal agencies and litigants to use in crafting their documents and, if necessary, their arguments.

II. THE ENDANGERED SPECIES ACT

The ESA has been called "the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."⁴ Part II discusses the application of the ESA to federal actions. The heart of that application is the interagency consultation requirements of section 7 of the ESA,⁵ but section 7 does not exist in a vacuum. To understand section 7, an understanding of sections 4 and 9 of the ESA is first necessary. In short, section 7 prohibits federal agencies from taking discretionary actions which will jeopardize the existence of a species listed under section 4, or which will destroy or adversely modify its critical habitat.⁶ Critical habitat is ideally but not always designated under section 4 when a species is listed,⁷ and applies only to discretionary federal actions.⁸ In addition, all persons, including federal agencies, are subject to the prohibitions of section 9.⁹ This article provides a brief history of the ESA, followed by a discussion of sections 4 and 9 before moving to section 7.

3. The hypothetical operating decision described in this paper is derived from actual decisions made by federal water managers, but is not based on any specific decision made by any specific agency.

4. *Tenn. Valley Auth. (TVA) v. Hill*, 437 U.S. 153, 180 (1978).

5. 16 U.S.C. § 1536.

6. *Id.* § 1536(a)(2).

7. *Id.* § 1533(a)(3)(A).

8. *Id.* § 1536(a)(2).

9. *Id.* § 1538(a)(1).

Congress passed the Endangered Species Preservation Act (ESPA, or 1966 Act), the forerunner to the ESA, in 1966, and amended it in 1969 as the Endangered Species Conservation Act (ESCA).¹⁰ The Department of the Interior issued the first listings of species under the ESCA.¹¹ Originally, the Department of the Interior was responsible for implementation of the ESCA, but the responsibilities were later split between the Secretaries of the Interior (through the U.S. Fish & Wildlife Service, USFWS) and Commerce (through the National Marine Fisheries Service NMFS, now NOAA Fisheries) in 1970.¹² The ESA itself, which repealed the 1966 Act,¹³ was passed by Congress, and signed into law by President Nixon in 1973.¹⁴ Currently, the implementing responsibilities of the ESA remain split between the two Departments, with Commerce responsible for marine and anadromous fish and most marine mammals and invertebrates, and Interior responsible for terrestrial species and all birds.¹⁵ The two Departments share responsibility for the ESA and its application to sea turtles.¹⁶

A. Section 4

Section 4 is the first substantive step under the ESA to species protection. Species are listed under section 4 of the ESA as

10. U.S. FISH & WILDLIFE SERV., A HISTORY OF THE ENDANGERED SPECIES ACT OF 1973, at 1 http://www.fws.gov/endangered/esa-library/pdf/history_ESA.pdf [<https://perma.cc/4DTS-HCVT>].

11. *See, e.g.*, 32 Fed. Reg. 3961, 4001 (Mar. 8, 1967).

12. U.S. Code, Title V, Appendix 1, Reorganization Plan No. 4 of 1970, 35 Fed. Reg. 194 (Oct. 6, 1970).

13. Endangered Species Act of 1973, Pub. L. No. 93-205, § 14, 87 Stat. 903 (1973) (codified as amended at 16 U.S.C. §§ 1531-1544).

14. 16 U.S.C. §§ 1531-1544.

15. Reorganization Plan No. 4 of 1970, 3 C.F.R. 202 (1971), *reprinted in* 84 Stat. 2090-93 (1970), *and in* 35 Fed. Reg. 15627-30 (1970), *and reprinted with amendments in* 5 U.S.C. app. At 1557-61 (1994).

16. U.S. FISH & WILDLIFE SERV. & NAT'L MARINE FISHERIES SERV., MEMORANDUM OF UNDERSTANDING DEFINING THE ROLES OF THE U.S. FISH AND WILDLIFE SERVICE AND THE NATIONAL MARINE FISHERIES SERVICE IN JOINT ADMINISTRATION OF THE ENDANGERED SPECIES ACT OF 1973 AS TO MARINE TURTLES (July 18, 1977), http://www.nmfs.noaa.gov/pr/pdfs/species/turtle_mou.pdf [<http://perma.cc/CVK3-FCCN>].

endangered¹⁷ or threatened.¹⁸ The Secretary (of Interior or Commerce, depending on the species) may on his/her own initiative begin the listing process.¹⁹ Alternatively, any person may petition the Secretary to list a species.²⁰ To the maximum extent practicable, within ninety days after receiving such a petition the Secretary must make a determination (a “90 day finding”) “whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted.”²¹ If so, the Secretary must then commence a twelve month status review, including requesting information from the public about the species and its status, as well as threats to the species.²² The USFWS has issued a policy to establish how they will prioritize listing decisions.²³

At the end of that twelve months, the Secretary must make one of three possible findings: 1) that listing the species is not warranted; 2) that listing the species is warranted, after which she must publish in the Federal Register a proposed rule for the listing; or 3) that the listing is warranted but precluded by other pending listing proposals.²⁴ In making her determinations, the Secretary may only consider five factors: “A) the present or threatened destruction, modification, or curtailment of its habitat or range; B) overutilization for commercial, recreational, scientific, or educational purposes; C) disease or predation; D) the inadequacy of existing regulatory mechanisms; or E) other natural or manmade factors affecting its continued existence.”²⁵

The Secretary is to consider the best scientific and commercial data available, and to take into consideration any efforts by states

17. “In danger of extinction throughout all or a significant portion of its range.” 16 U.S.C. § 1532(6).

18. “Likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” *Id.* § 1532(20).

19. *Id.* § 1533(a)(1).

20. *Id.* § 1533(b)(3)(A).

21. *Id.*

22. *Id.* § 1533(b)(3)(B).

23. Methodology for Prioritizing Status Reviews and Accompanying 12-Month Findings on Petitions for Listing Under the Endangered Species Act, 81 Fed. Reg. 49,248 (July 27, 2016).

24. 16 U.S.C. § 1533(b)(3)(B).

25. *Id.* § 1533(a)(1).

or foreign nations to protect the species.²⁶ The Secretary may not consider economic factors in the listing decision.²⁷ The same process is used to determine if a species that is currently listed should be delisted or have its status changed.²⁸ The listing process is subject to the rule making requirements of the Administrative Procedures Act (APA).²⁹

Section 4 also governs the designation of critical habitat,³⁰ and like listing species is subject to the rule making requirements of the APA.³¹ Critical habitat is

- (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
- (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.³²

The Secretary, in designating critical habitat, is to make the decision based on “the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impact, of specifying any particular area as critical habitat.”³³ In making her decision, the Secretary publishes with the proposed rule a draft economic analysis of the rule, describing the economic effects of the proposed designation.³⁴

26. *Id.* § 1533(b)(1)(A).

27. Act of Oct. 13, 1982, Pub. L. No. 97–304, 96 Stat 1411 (1982).

28. 16 U.S.C. § 1533(b)(3)(A).

29. *Id.*; 5 U.S.C. § 553 (2012); *TVA v. Hill*, 437 U.S. 153, 161 n.11 (1978).

30. 16 U.S.C. § 1533(a)(3)(A).

31. 5 U.S.C. § 553.

32. 16 U.S.C. § 1532(5)(A).

33. *Id.* § 1533(b)(2).

34. 50 C.F.R. § 424.19(a) (2016).

Finally, for purposes of this article, section 4 also governs the development of recovery plans for listed species.³⁵ Recovery plans are “road maps” designed by the Secretary to guide the conservation and survival of listed species, to the point where the species is no longer in need of the ESA’s protections.³⁶ “Recovery goals must include: (1) “site-specific management actions . . . necessary to achieve the plan’s goal for the conservation and survival of the species,” (2) “objective, measurable criteria” that would lead toward delisting, and (3) time and cost estimates “to carry out those measures.”³⁷ “The Secretary must also provide the opportunity for public notice and comment before final approval of a recovery plan, and “prior to implementation of a new or revised recovery plan, consider all information presented during the public comment period.”³⁸ Compliance with recovery plans is voluntary,³⁹ but USFWS and NOAA Fisheries must consider the effects of a proposed federal action on species recovery when writing biological opinions.⁴⁰

In sum, under section 4 of the ESA the USFWS and NOAA Fisheries must identify species that are in danger of extinction or that may become endangered, as well as the habitat that is critical to their survival and recovery. In addition, section 4 requires the agencies to develop road maps of specific actions and criteria that will lead to the recovery of each species.

B. Section 9

Section 9 is the “prohibited acts” section of the ESA. It applies to any person,⁴¹ a definition that includes

an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department,

35. 16 U.S.C. § 1533(f).

36. *Id.*

37. *Grand Canyon Tr. v. U.S. Bureau of Reclamation*, 691 F.3d 1008, 1023 (9th Cir. 2012) (citing 16 U.S.C. § 1533(f)(1)(B)).

38. *Id.* (citing 16 U.S.C. §§ 1533(f)(4)-(5)).

39. *Friends of Blackwater v. Salazar*, 691 F.3d 428, 432-33 (D.C. Cir. 2012); *Fund for Animals v. Rice*, 85 F.3d. 535, 547 (11th Cir. 1996).

40. *Grand Canyon Trust*, 691 F.3d at 1023; see discussion of section 7, *infra*.

41. 16 U.S.C. § 1538(a)(1).

or instrumentality of the Federal Government, of any State, municipality, or political subdivision of a State, or of any foreign government; any State, municipality, or political subdivision of a State; or any other entity subject to the jurisdiction of the United States.⁴²

It prohibits the import, export, and taking of any endangered fish or wildlife species within the U.S. or its territorial seas or any threatened species protected by regulations issued under the ESA, and the sale or shipping for interstate or foreign commerce.⁴³ Take is defined to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”⁴⁴ The USFWS has further defined, by regulation, ‘harm’ as “an act which actually kills or injures wildlife,” including by habitat modification.⁴⁵ ‘Harass’ is defined, also by regulation, as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns.”⁴⁶ The take prohibition as it relates to habitat applies to all of the habitat that a species relies on, but the destruction or adverse modification of critical habitat applies only to federal actions and is separate from the requirements of section 9.⁴⁷ In contrast to fish and wildlife species, listed plants may not be imported or exported, removed from federal property, cut or dug up or damaged or destroyed in knowing violation of any state law, or sold or shipped for interstate or foreign commerce, but the ESA does not specifically prohibit ‘take’ of listed plants.⁴⁸

Thus, in relevant part section 9 applies to federal agencies, and prohibits those agencies from taking listed species, including by damaging habitat those species rely on.

42. *Id.* § 1532(13).

43. *Id.* § 1538(a)(1).

44. *Id.* § 1532(19).

45. *Babbitt, Sec’y of Interior, et al. v Sweet Home Chapter of Cmty. for a Great Or., et al.*, 515 U.S. 687, 691 (1995) (50 C.F.R. § 17.3 (2016)).

46. 50 C.F.R. § 17.3 (2016).

47. 16 U.S.C. § 1536(a)(2).

48. *Id.* § 1538(a)(2).

C. Section 7

Section 7 of the ESA governs interagency (between federal agencies) cooperation.⁴⁹ Section 7(a)(2) requires each federal agency to insure that any action (“all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas”)⁵⁰ it authorizes, funds, or carries out does not jeopardize the existence of a listed species or destroy or adversely modify designated critical habitat.⁵¹ To jeopardize the existence of a species is to engage in an action that would, directly or indirectly, be reasonably expected to reduce the likelihood of the survival and recovery of the species in the wild, by reducing numbers, reproduction, or distribution of that species.⁵² A similar definition in the regulations for adverse modification of critical habitat was held to be invalid by several courts.⁵³ As a result of those opinions, the Secretaries by policy disavowed the regulatory definition of adverse modification, and used the intent of the statute to guide their interpretation of the term.⁵⁴ The Secretaries then promulgated a revised regulation redefining adverse modification of critical habitat as a

direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a

49. *Id.* § 1536.

50. 50 C.F.R. § 402.02 (2016).

51. *Bennett v. Spear*, 520 U.S. 154, 158 (1997) (citing 16 U.S.C. § 1536(a)(2)).

52. 50 C.F.R. § 402.02.

53. *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059, 1069 (9th Cir. 2004); *N.M. Cattle Growers Ass’n v. U.S. Fish & Wildlife Serv.*, 248 F.3d 1277, 1285 (10th Cir. 2001); *Sierra Club v. U.S. Fish & Wildlife Serv.*, 245 F.3d 434, 441-42 (5th Cir. 2001).

54. *See* Memorandum from William T. Hogarth, Director, Nat’l Marine Fisheries Serv., to the Reg’l Adm’rs, Office of Protected Res. (Nov. 7, 2005) (on file with author) (on the application of the “Destruction or Adverse Modification” Standard under Section 7(a)(2) of the Endangered Species Act).

species or that preclude or significantly delay development of such features.⁵⁵

There are limits to how far section 7 may go. The limit most relevant to this article is that only discretionary federal actions are subject to the section 7 process, while non-discretionary federal actions are not.⁵⁶ A complex federal action which is comprised of multiple elements, some of which are discretionary and some are not, is still subject to section 7 for the entirety of the action, for all elements.⁵⁷ A second limitation is that only affirmative acts are subject to section 7.⁵⁸ What triggers consultation is an agency action, not the listing of a species by USFWS or NOAA Fisheries.⁵⁹ An existing, ongoing action does not require consultation unless one or more of four specific criteria (which are not relevant to this article) are met.⁶⁰

1. The Section 7 Process

The section 7 process, or ‘consultation’, is reasonably straightforward, at least in theory. The federal agency taking the action, also called the ‘action agency’ must first determine whether the action is discretionary.⁶¹ If it is, then the action agency determines if the action may affect a listed species or designated critical habitat.⁶² If not, because there are no listed species in the action area⁶³ or because the action is not one that will affect the

55. Interagency Cooperation – Endangered Species Act of 1973, as Amended; Definition of Destruction or Adverse Modification of Critical Habitat, 81 Fed. Reg. 7214 (February 11, 2016) (to be codified at 50 C.F.R. § 402.02).

56. Nat’l Ass’n of Homebuilders v. EPA, 551 U.S. 644, 666 (2007) (citing 50 C.F.R. § 402.03 (2016)).

57. Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., 524 F.3d 917, 928 (9th Cir. 2008).

58. Cal. Sportfishing Protection All. v. FERC, 472 F.3d 593, 595 (9th Cir. 2006).

59. *Id.* at 597.

60. 50 C.F.R. § 402.16.

61. *Id.* § 402.03.

62. *Id.* § 402.14(a).

63. *Id.* § 402.02 (an action area includes “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action”).

species or the critical habitat, then no consultation is required and the agency's obligation is satisfied.⁶⁴ If the action may affect a species or critical habitat, then the action agency will prepare a Biological Assessment (BA), the contents of which are at the discretion of the action agency, and which evaluates the effects of the proposed action on the listed species and designated critical habitat.⁶⁵ If the action agency determines that the action is not likely to adversely affect the species, and the appropriate regulatory agency concurs in writing, then the action agency's consultation requirements are complete.⁶⁶ If, however, the action is likely to adversely affect the species, then the regulatory agency will prepare a biological opinion (BiOp).⁶⁷

The BiOp is the opinion of the Secretary whether the proposed federal action will jeopardize the existence of the species or destroy or adversely modify the critical habitat.⁶⁸ The BiOp must use the "best commercial and scientific information available" in its analysis,⁶⁹ and will resolve ambiguities in favor of the species.⁷⁰ Note however that the requirement to use the best commercial and scientific information does not require the agencies to use the best information *possible*, only the best information *available*.⁷¹ The regulation also specifies that the BiOp is to be completed within 135 days unless the two agencies agree to a longer time⁷² although no court has issued an order compelling the completion of a BiOp because of violation of that time requirement.⁷³ While the consultation is ongoing, the action agency may not take any action

64. California *ex rel.* Lockyer v. U.S. Dep't of Agric., 575 F.3d 999, 1019 (9th Cir. 2009); Defs. of Wildlife v. Flowers, 414 F.3d 1066, 1069-70 (9th Cir. 2005).

65. 50 C.F.R. § 402.12.

66. *Id.* § 402.13.

67. Endangered Species Act, 16 U.S.C. § 1536(b)(3)(A) (2012).

68. 50 C.F.R. § 402.02.

69. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8).

70. TVA v. Hill, 437 U.S. 153, 194 (1978).

71. San Luis & Delta-Mendota Water Auth. v. Jewell, 747 F.3d 581, 602 (9th Cir. 2014) (citing Bldg. Indus. Ass'n v. Norton, 247 F.3d 1241, 1246 (D.C. Cir. 2001)).

72. 50 C.F.R. § 402.14(e).

73. Courts have issued orders directing agencies to consult, and to complete consultation under case-specific timelines, but none for violation of the statutory timelines.

that would have the effect of preventing the regulatory agency from developing a reasonable and prudent alternative (see below).⁷⁴

The BiOp is, as mentioned, the Secretary's opinion. If the Secretary finds that the action will not jeopardize the existence of a listed species, or destroy or adversely modify critical habitat, then the opinion will provide the rationale for that finding.⁷⁵ If otherwise, then the BiOp will include one or more Reasonable and Prudent Alternatives (RPA), if any are available.⁷⁶ An RPA is an alternative to the proposed action that would not jeopardize a species or adversely modify critical habitat,⁷⁷ which is consistent with the intended purpose of the action, is within the action agency's authority and jurisdiction, and is technologically and economically feasible.⁷⁸ The action agency should be involved in the development of any RPA to be included in the BiOp.⁷⁹

Whether the BiOp finds jeopardy or not, it will also include an Incidental Take Statement (ITS).⁸⁰ The ITS is a description of the take that will occur from the proposed action but is incidental to that action (is not the intent of the action), and will describe the effects of the take on the species.⁸¹ The ITS must, to the extent possible, precisely quantify the amount and extent of the take, although USFWS and NOAA Fisheries have issued regulations that allow the use of surrogates in an ITS when precise quantification is not possible.⁸² When a surrogate is used in an ITS, the ITS must describe

74. 16 U.S.C. § 1536(d).

75. *Id.* § 1536(b)(3)(A).

76. *Id.*

77. *Id.*

78. 50 C.F.R. § 402.02 (2016).

79. U.S. FISH & WILDLIFE SERV. & NAT'L MARINE FISHERIES SERV., ENDANGERED SPECIES CONSULTATION HANDBOOK, 4-43 (1998), https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf [<https://perma.cc/3VR4-EVTB>].

80. 16 U.S.C. § 1536(b)(4).

81. *Id.*

82. Interagency Cooperation – Endangered Species Act of 1973, as Amended; Incidental Take Statements, 80 Fed. Reg. 26,832 (May 11, 2015) (to be codified at 50 C.F.R. § 402.14(g)(7)).

the causal link between the surrogate and the take of the listed species, explain[s] why it is not practical to express the amount or extent of anticipated take or to monitor take-related impacts in terms of individuals of the listed species, and set[s] a clear standard for determining when the level of anticipated take has been exceeded.⁸³

The ITS will also include those Reasonable and Prudent Measures (RPMs) which will, in the opinion of the Secretary, minimize the effect of the take on the species or critical habitat, along with Terms and Conditions that implement the RPMs.⁸⁴ The ITS, with its attendant RPMs, functions as an exemption to the prohibitions against take found in section 9; essentially, the ITS functions as a permit.⁸⁵ The RPMs are mandatory conditions of that permit, and if not adhered to result in the exemption being no longer valid.⁸⁶ In the event an RPA is provided, the action agency has the choice of whether or not to accept and implement the RPA.⁸⁷ Once the consultation process is complete, the action agency may implement the action (or the RPA).⁸⁸ Because the ESA does not specifically prohibit the take of listed plants, no ITS is required for a proposed action which harms such plants.⁸⁹

In sum, when the action agency determines it intends to take a discretionary action that may adversely affect a species listed or critical habitat designated under section 4, it will initiate consultation with the appropriate regulatory agency under section 7. The regulatory agency will respond with an opinion whether or not the proposed action will jeopardize the existence of the species or destroy or adversely modify its critical habitat. The opinion will also include an ITS, which exempts the action agency from the prohibitions of section 9, so long as the mandatory conditions of the exemption are adhered to. The opinion may include an RPA, which will avoid jeopardizing the species or destroying or adversely

83. *Id.*

84. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.02 (2016).

85. 16 U.S.C. § 1536(o)(2); *Bennett v. Spear*, 520 U.S. 154, 170 (1997).

86. *Bennett*, 520 U.S. at 170.

87. 50 C.F.R. § 402.15.

88. *Id.*

89. *See* *Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 833 F.3d 1136 (9th Cir. 2016).

modifying its critical habitat. Once the action agency decides what action it will take, the section 7 consultation process is complete.

The section 7 process is simple and straightforward . . . on paper. In reality, federal agency practitioners devote considerable amounts of time, energy, and expertise to working through what is truthfully a highly complex process. Federal agency biologists, managers, and attorneys do not simply wave their hands, utter a Potter-esque “*Apparent documentum*”⁹⁰ and have the final BA and BiOp arrive neatly on their computer screens. Instead, these practitioners spend countless hours developing processes to analyze the effects of proposed federal actions, and then countless more conducting those analyses. The final BiOp is the result of action and regulatory agencies analyzing, writing, reviewing, reanalyzing, revising, reviewing again, and finally signing.⁹¹ Because these processes are so complex they frequently end up in court as a means of challenging the underlying agency decision, where the document’s survival or reversal/remand turns on how well it meets that court’s test.

III. THE ANALYTIC TESTS OF THE NINTH, TENTH, AND D.C. CIRCUITS

The Ninth Circuit Court of Appeals has come the closest to articulating a specific test for evaluating the adequacy of a BiOp. In part, this is likely the result simply of the Ninth Circuit *hearing* more ESA cases related to BiOps. The D.C. Circuit has not articulated a specific test at all. This, likely, is because the D.C. Circuit is the more typical venue for legal challenges related to listing decisions, critical habitat designations, and recovery plans, instead of challenges to actions taken as a result of those decisions. The Tenth Circuit is somewhere in the middle in regards to its development of a test, having developed one but less clearly than the Ninth Circuit. In addition, the three Circuits selected for this article’s analysis have very different approaches to environmental

90. Latin for “Document appear.”

91. *See, e.g.*, NAT’L MARINE FISHERIES SERV., AN ASSESSMENT FRAMEWORK FOR CONDUCTING JEOPARDY ANALYSES UNDER SECTION 7 OF THE ENDANGERED SPECIES ACT (2004), <http://www.fpir.noaa.gov/Library/PRD/ESA%20Consultation/NMFS%202004%20-%20Analytical%20Framework-2.pdf> [https://perma.cc/MJ5S-WJFL].

review. The Ninth Circuit historically is generally sympathetic to challenges to agency decisions under environmental statutes, the Tenth Circuit less so, and the D.C. Circuit somewhere in the middle. Regardless, this section describes the Ninth Circuit's 'test', and that of the Tenth and D.C. Circuits to the extent one can be identified. All challenges to the adequacy of a BiOp are evaluated, regardless of Circuit, under the familiar arbitrary and capricious standard of section 706 of the APA.⁹² Any piece of the BiOp which can be found to be in violation of that standard, regardless of whether it is part of an express test or not, will likely cause the court to strike down the BiOp and remand it back to the regulatory agency for revision.⁹³

A. The Ninth Circuit

The Ninth Circuit has never explicitly stated its analytic test or tests for determining whether a BiOp and the underlying agency action are compliant with the ESA. Two cases, however, are instructive.

The first is *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Service*.⁹⁴ The relevant holding from this case, that the definition promulgated in regulation by NOAA Fisheries and the USFWS for destroying or adversely modifying critical habitat is invalid, followed the holdings in two prior cases from the Fifth and Tenth Circuits.⁹⁵ The Court found that the definition in the regulations "reads the 'recovery' goal out of the adverse modification inquiry; a proposed action 'adversely modifies' critical habitat if, and only if, the value of the critical habitat for *survival* is appreciably diminished." (emphasis in original).⁹⁶ The court followed the two

92. *Bennett v. Spear*, 520 U.S. 154, 174 (1997).

93. *See, e.g.*, *Ctr. for Native Ecosystems v. Cables*, 509 F.3d 1310, 1320 (10th Cir. 2007); *Oceana, Inc. v Gutierrez*, 488 F.3d 1020, 1025 (D.C. Cir. 2007); *Ariz. Cattle Grower's Ass'n v. U.S. Fish & Wildlife Serv., Bureau of Land Mgmt.*, 273 F.3d 1229, 1235-36 (9th Cir. 2001).

94. *Gifford Pinchot Task Force v. U.S. Fish & Wildlife Serv.*, 378 F.3d 1059 (9th Cir. 2004).

95. *N.M. Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv.*, 248 F.3d 1277, 1283 n.2 (10th Cir. 2001); *Sierra Club v. U.S. Fish & Wildlife Serv.*, 245 F.3d 434, 441-42 (5th Cir. 2001).

96. *Gifford Pinchot*, 378 F.3d at 1069.

prior Circuits in striking down the regulation, and held that the statutory language of the ESA stated that “destruction or adverse modification could occur when sufficient critical habitat is lost so as to threaten a species’ recovery even if there remains sufficient critical habitat for the species’ survival.”⁹⁷ In essence, the court held that the regulatory agencies could not limit their adverse modification analysis, but instead that adverse modification could be found where the value of the habitat is appreciably diminished for the survival *or* the recovery of the species.

The agencies’ regulations were, in the opinion of the courts, placing an unwarranted restriction on the statutory text. The recovery of a species, to the point it no longer needs the protections of the ESA, is a much higher standard than mere survival, but the then regulatory definition made no distinction between the two. The agencies were thus prevented from finding adverse modification of the critical habitat where the federal action merely left enough of the habitat for the species to persist. Accordingly, an evaluation of the value of the habitat for survival or recovery is the first piece of the test the Ninth Circuit will bring to bear in its analysis. The holding from this case, still good law, was the final genesis of the regulatory agencies’ efforts to revise the definition of adverse modification of critical habitat described earlier, and the revised definition was specifically crafted to reflect the holding of this line of cases.⁹⁸

A second case from the Ninth Circuit, *National Wildlife Federation v. National Marine Fisheries Service*,⁹⁹ is more recent, and one in which the court further articulated elements of its analytic approach.

In this case, one in a long line of challenges, environmental groups challenged the BiOp written by NOAA Fisheries (then NMFS) for the Federal Columbia River Power System dams and related facilities.¹⁰⁰ The court first held that the regulatory agency

97. *Id.* at 1070.

98. Interagency Cooperation – Endangered Species Act of 1973, as Amended; Incidental Take Statements. 80 Fed. Reg. 26,832 (May 11, 2015) (to be codified at 50 C.F.R. pt. 402.14(g)(7)).

99. Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv., 524 F.3d 917 (9th Cir. 2008).

100. *Id.*

had to evaluate the effects of the federal action on the environmental baseline,¹⁰¹ which includes “the context of other existing human activities that impact the listed species.”¹⁰² For example, the existence of dams on a river system which are already endangering listed species is one facet of that context within the environmental baseline. The proposed federal action must be evaluated within that baseline.¹⁰³ Part of this analysis is identifying what pieces of the action are discretionary and which ones are not, while evaluating the entirety of the action against that baseline.¹⁰⁴ Identifying correctly what is properly in the environmental baseline is thus another element of the court’s analytic test.

The Ninth Circuit has also held that the regulatory agencies must “consider the near term habitat effects to populations with short life cycles.”¹⁰⁵ To appropriately consider this, the regulatory agency must assess the effects of the action over time, especially when evaluating those effects over the life span of the species.¹⁰⁶ The BiOp thus cannot look only at the long term or the short term effects, but must look at both.

A fourth element the Circuit has articulated is the ability of the action agency and the regulatory agency to definitively identify future actions, either as part of the baseline or as mitigation, for their analyses. The action agency must have a clear commitment and ability to implement the specified future actions before the regulatory agency can correctly include them in the analysis.¹⁰⁷ A general intention to implement some actions intended to benefit

101. 50 C.F.R. § 402.02 (2012). The environmental baseline is, essentially, the current conditions of the action area in addition to the anticipated effects of federal actions which have already undergone section 7 consultation. It is what the effects of the proposed action are measured on.

102. *Nat’l Wildlife Fed’n*, 524 F.3d at 930.

103. *Id.* at 930-31.

104. *Id.* at 928.

105. *Id.* at 934 (citing *Pac. Coast Fed’n of Fishermen’s Ass’ns v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1094 (9th Cir. 2005)).

106. *Pac. Coast Fed’n*, 426 F.3d at 1094.

107. *Nat’l Wildlife Fed’n*, 524 F.3d at 935-36 (“... [W]e are not persuaded that even a sincere general commitment to future improvements may be included in the proposed action in order to offset its certain immediate negative effects, absent specific and binding plans.”).

listed species is not definitive enough to be included in the analysis or relied on in it.¹⁰⁸ When the action agency has the desire but lacks the power or authority to reasonably guarantee that the desired actions will be implemented, the regulatory agency must “exclude them from the analysis and consider only those actions that are reasonably certain to occur.”¹⁰⁹ Thus, the project description must be accurate, complete, and within the power of the action agency to implement.

Finally, the court has identified one last element. For the BiOp to have a valid analysis, the regulatory agency must have some idea of at what point the existence of that listed species will actually be in jeopardy.¹¹⁰ It is not enough for the regulatory agency to suspect that a species will be jeopardized, the agency must have a basis in science and the law to sustain the jeopardy determination.¹¹¹ When habitat is already degraded the regulatory agency should logically “know roughly at what point survival and recovery will be placed at risk before it may conclude that no harm will result from ‘significant’ impairments to habitat.”¹¹² Thus, the regulatory agency cannot assert without reason that the proposed federal action will or will not violate section 7(a)(2), it must have a basis to support its opinion based on knowledge of the “tipping point” of the species.

Ultimately, then, the Ninth Circuit’s analytic test, as derived from the discussion above, tests the following points:

- 1) an evaluation of the value of the habitat for survival or recovery;
- 2) an identification of what is properly in the environmental baseline;
- 3) an analysis of both the long term and the short term effects;
- 4) a project description which is accurate, complete, and within the power of the action agency to implement; and

108. *Id.*

109. *Id.* at 936 n.17.

110. *Id.* at 936.

111. *Id.*

112. *Id.*

- 5) a scientific basis by the regulatory agency of at what point the existence of the listed species will actually be in jeopardy.

B. The Tenth Circuit

The Tenth Circuit has not articulated an especially clear analytic test for evaluating the adequacy of a BiOp. The court has, however, articulated several points that can be assembled into such a test.

The first point is that the BiOp's evaluation of the effects of the proposed action must include a consideration of the action on the species recovery.¹¹³ The court in *Cables* articulated a rationale similar to that of the Ninth Circuit's opinion in *NWF*, although phrased differently.¹¹⁴ In *Cables*, environmental groups challenged the U.S. Forest Service and the USFWS related to grazing in areas designated as critical habitat for the Preble's meadow jumping mouse, specifically including the BiOp for the action.¹¹⁵ The court interpreted the definitions within the ESA to establish that the purpose of critical habitat is to identify habitat with characteristics essential to the conservation of the species.¹¹⁶ Conservation was then identified by the court, again based on the statutory text, as encompassing recovery.¹¹⁷ The court then concluded that critical habitat is adversely modified when the federal action adversely affects a species recovery.¹¹⁸ Accordingly, a valid BiOp will consider the effects of the proposed federal action on the recovery of the species.

113. *Ctr. for Native Ecosystems v. Cables*, 509 F.3d 1310, 1322 (10th Cir. 2007).

114. *Id.*

115. *Id.* at 1312-13.

116. *Id.* at 1321-22 ("Thus, critical habitat is impaired when features essential to the species' conservation are impaired."); *see also* *N.M. Cattle Growers Ass'n v. U.S. Fish & Wildlife Serv.*, 248 F.3d 1277, 1281 (10th Cir. 2001) ("Our primary task in construing statutes is to 'determine congressional intent, using traditional tools of statutory interpretation.' 'As in all cases requiring statutory construction, we begin with the plain language of the law.'") (internal citations omitted).

117. *Cables*, 509 F.3d at 1321.

118. *Id.*

The Tenth Circuit has also identified the information relied on in the BiOp to be of importance. As noted above, the ESA requires a BiOp to use the “best scientific and commercial information available.”¹¹⁹ The court has not interpreted this requirement as a mandate that the action agency or the regulatory agency collect new data.¹²⁰ Instead, the agencies must determine what existing data are the “most accurate, reliable, and relevant,” and are good science.¹²¹ The court noted that reliable, peer-reviewed, and scientifically valid methods are the standard against which this element should be measured.¹²²

Finally, courts within the Tenth Circuit have identified a requirement for a clear and definite commitment to implementing actions intended to benefit listed species, essentially mitigating the effects of the proposed action.¹²³ This requirement parallels the Ninth Circuit’s similar element, and in fact the courts cited the Ninth Circuit in identifying and relying on it.¹²⁴

Accordingly, courts within the Tenth Circuit will likely rely on these three elements in evaluating the adequacy of a BiOp:

- 1) an evaluation of the effects of the proposed action on the species recovery;
- 2) the use of valid, peer-reviewed scientific data; and
- 3) a definite commitment to implementing each piece of the proposed action before evaluating it.

C. The D.C. Circuit

The D.C. Circuit has also not articulated any specific test for evaluating a BiOp, other than the standards of the APA.

119. 16 U.S.C. § 1536(a)(2) (2012).

120. *Ecology Ctr. v. U.S. Forest Serv.*, 451 F.3d 1183, 1195 n.4 (10th Cir. 2006).

121. *Id.*

122. *Id.*

123. *See Town of Superior v. U.S. Fish & Wildlife Serv.*, 913 F. Supp. 2d 1087, 1140 (D. Col. 2012).

124. *Id.* (citing *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 935-36 (9th Cir. 2008)).

Accordingly, the arbitrary and capricious standard¹²⁵ is the only universal test within the Circuit.¹²⁶

IV. THE HYPOTHETICAL OPERATING DECISION

A. Introduction

Like the section 7 process generally, as noted above, the tests by which the courts evaluate BiOps are simple and straightforward . . . on paper. The reality is, again, rather more complex. Federal agencies, which each have their own missions, their own statutorily driven requirements for action, and which are faced with increasing demands for more action in an era of shrinking resources, continually struggle with the question of what needs to be in a BA and a BiOp *versus* what should be there *versus* what can be there. Nowhere is this struggle more widespread, complex, and fraught with litigation and litigation risk than in consultations on complex actions on large river systems in the American West. The reader is invited to peruse the countless law review articles discussing lawsuits, and their underlying causes, related to the ESA and major river systems such as the Sacramento and San Joaquin, Columbia, Rio Grande, and Colorado, to name a mere few.

This paper describes a hypothetical operational decision, including the hypothetical (and very superficial) environmental baseline, and then applies the tests identified by the three Circuit Courts of Appeal described above.¹²⁷ The section 7 consultation is

125. Nat'l Ass'n of Homebuilders v. Defs. of Wildlife, 551 U.S. 644, 658 (2007) (citing Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (in which the agency "relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise").

126. It is, however, worth noting that in at least one case, the court has observed with approval the detailed and specific nature of an RPA within a BiOp. See *Oceana v. Gutierrez*, 488 F.3d 1020, 1023 (D.C. Cir. 2007).

127. The operational decision described here is entirely hypothetical, and has been created in this paper for the sole purpose of providing a basis to apply the tests. It is not intended to represent what actually happens on the ground, it is simply an aid to demonstrate how the tests might be applied.

also entirely hypothetical. Although it appears complex, the decision described here is *extremely* simplistic in comparison to a real decision on a system like this. Some elements of the decision have been inspired by federal actions, but the decision described here is not based on any single decision by any federal agency. In addition, none of the details of the decision described here are guaranteed to be exactly what a federal agency might actually decide to do. Operational decisions are based on a vast array of factors that are well beyond the scope of this paper to describe precisely and comprehensively. Finally, this paper assumes that any appeal to the Endangered Species Committee¹²⁸ is not a viable option.

B. The Hypothetical Operations Decision

1. The Operations

The Audubon River (the River) is a major river system that flows for nearly 600 miles, from its headwaters in the ruggedly iconic Sans Pitié Mountains, across and through three states, to its confluence with the Pacific Ocean. The U.S. Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (Army Corps) both operate multiple dams on the River and its tributaries, for water storage and delivery, flood control, and hydropower generation purposes. Each dam is a complete barrier to fish passage up or down the stream, barring some sort of additional passage facility, which some but not all dams have. Each dam has a specific Congressional authorization describing the facility's purposes and function, but which leaves operational decisions to the discretion of the managing agency. There are a total of 29 federal dams on the system. Of those, 14 are primarily hydropower generating, 10 are water storage and delivery based, and 5 are for

128. 16 U.S.C. § 1536 (a)-(h) (2012). The Endangered Species Committee, sometimes popularly referred to as the "God Squad," is a Cabinet level committee comprised of seven specific individual members, plus one member from each affected state, appointed by the President. *Id.* A federal agency, the governor of the state in which the action may occur, or a permit or license applicant, may request the Secretary of the Interior to convene the Committee if a jeopardy BiOp has been issued for the action. *Id.* The Secretary is not required to grant that request. *Id.* The Committee may (but, again, is not required to), after following specific procedures, grant an exemption from the section 7 requirement. *Id.*

flood control. Each dam, regardless of purpose, has some ability to provide for flood control in emergencies. There are no state or privately owned dams on the system.

The federal agencies operating the facilities on the system coordinate their operations with each other, pursuant to a Coordinated Operating Agreement (COA). The current COA is 25 years old, and the agencies are proposing to issue a new COA that accounts for the new and projected future conditions in the system. The new COA's terms are outlined in detail in the agreement itself, and are summarized in relevant part here:

- Term: the COA is proposed to extend for a 25 year period;
- Hydropower dams will pass specific flows through their facilities, depending on the time of year, precipitation conditions in the system, and customers' power needs;
- Water storage/delivery dams will capture and store rainfall and snow melt runoff, then either pump the stored water out of the system to the agency's contracted customers, or release it through the facilities back into the system. The amounts diverted and released are dependent on contractual obligations and the amount of water available for delivery (the timing of each is dependent on the time of year), and water rights obligations pursuant to state water law. The COA acknowledges that the timing may change, depending on the ongoing effects of climate change on precipitation patterns;
- Flood control dams will operate on a 'pass through' schedule for most of the year, in which the amount of water released through the facilities will be the same as the amount of water flowing into the reservoir created by the dam. When heavy rain or snow fall or runoff is anticipated, however, the dams will release enough water to safely store the projected incoming water, based on predicted recession curves which are revised annually;
- The Corps retains the authority to declare a flood emergency in all or part of the system, and to direct specific flow rates and storage in any facility when necessary to protect life or property. The COA acknowledges this authority, but cannot predict the precise conditions under which it will be exercised;

- Five mainstem dams, pending Congressional appropriation and authorization, will design and implement fish passage structures which will allow unimpeded volitional passage for up and down stream movement of fish. Flow through these passage structures will be provided at the appropriate times of year, subject to an upper limit of total amount of water released through each;
- An array of 'mitigation measures' will be implemented throughout the system. Some measures are specifically identified with descriptions and timing, others are left indeterminate over the life of the COA;
- The COA has predicted how much water will likely be available in the system as a whole and in each facility on an annual basis, depending on the type of water year for the current and three prior years. The calculations involved are extraordinarily complex and require considerable scientific and engineering expertise to understand and implement; and
- In addition to the other uses in the system, based on those same calculations, the COA has identified a specific amount of water across the system which will be used to provide 'benefits' to the listed species on an adaptive management basis. Each agency has named three people (one senior management, one operations specialist (an engineer), and one biologist) to a Benefits Team (BT), which can use the water to enhance migration flows, provide additional spawning flow, buffer higher summer temperatures, or any other use the BT determines will benefit one or more species. The COA leaves to the BT the decisions on how to identify those benefits. The COA has roughly allocated about one third of the amount of water to each of three management areas (upper, middle, and lower) within the system.

2. The Species and Habitat

The system is home to multiple species listed as threatened or endangered under the ESA. Four listed anadromous¹²⁹ fish species use the system for spawning, rearing, and migration; critical habitat in the system has been designated for three of those species. Three listed non-anadromous fish species use the River for their entire life cycle; critical habitat in the system has been designated for each. Five listed species of birds use the River for hunting and feeding, two of which typically nest within 300 yards of the water's edge; critical habitat has been designated for only one bird species. One listed mollusk species lives in a single area within one tributary, a short distance downstream of a water storage/delivery dam, and is found nowhere else in the world. All of these species are listed under the ESA, and other than the mollusk all use the entire system to varying degrees. There is a vast diversity of other fish, wildlife, and plants that use the system for one or more portions of their life cycle, in addition to the listed species. Two of the anadromous fish species and one of the bird species have final recovery plans in place.

C. The Section 7 Consultation

Reclamation and the Army Corps determined that the proposed COA would adversely affect all of the listed species except for the non-anadromous fish species, which would be unaffected by the COA. The agencies then jointly prepared and submitted a BA to USFWS (for the birds and the mollusk) and NOAA Fisheries (for the anadromous fish). USFWS did not agree with the determination on the non-anadromous fish and strongly urged the action agencies to include the species in the consultation. Reclamation and the Army Corps declined to revise their determination, and on the advice of counsel USFWS did not address those species in the final BiOp.

129. Anadromous fish are born in fresh water, rear in fresh water for some period of time, out-migrate to the ocean to continue growing, and then return to fresh water to spawn. *Marine and Anadromous Fish*, NOAA FISHERIES (June 29, 2016), <http://www.nmfs.noaa.gov/pr/species/fish> [<https://perma.cc/42CR-LL8M>]. Some species die after spawning (*Semelparity*, CAMPBELL BIOLOGY (J. B. Reece et al. eds., 10th ed. 2011), others return to the ocean to continue their life cycle (*Iteroparity*, *Id.*).

Being cognizant of the risk of issuing mutually incompatible BiOps, USFWS and NOAA Fisheries jointly prepared and issued a BiOp. In the BiOp, USFWS determined that the COA would jeopardize the existence of the mollusk, but would not jeopardize the existence of the birds. The COA would also not destroy or adversely modify the designated critical habitat for the bird. NOAA Fisheries determined that the proposed COA would jeopardize the existence of all four anadromous fish, and would adversely modify the designated critical habitats.

In reaching these determinations, the regulatory agencies relied on a considerable body of peer-reviewed scientific literature on the status of the species within the River system, as well as historic operating patterns of all the dams. They relied in addition on information from monitoring reports compiled by Reclamation and the Army Corps, on projected changes to hydrologic patterns related to climate change, and on casual observations made by observers along the River. The agencies specifically incorporated discussion of the recovery plans (for those species that had them) into the BiOp, and used those plans as a significant part of their analysis for the effects on species recovery. The agencies assumed that all of the mitigation measures would be implemented in full over the course of 25 years, and that the five dams would all have full Congressional appropriation and authorization for passage structures within the next five years. The agencies assessed the effects of the COA on the listed species, on the designated critical habitat, and on the ability of the listed species in the River system to recover over the 25 year COA lifetime. Finally, the agencies assumed that the actions of the BT would provide unquantified benefits to listed species over the lifetime of the COA.

The agencies also developed a draft RPA to address the jeopardy and adverse modification determinations, which they provided to the action agencies for review. The elements of the draft included two representatives on the BT (one from each agency), design and implementation of unimpeded volitional passage for anadromous fish through three additional dams within 5 years, minor changes in flow releases from the dam above the mollusk population, and operational changes for the hydropower and storage/delivery dams that increase flows during times of year that would benefit the anadromous fish.

After reviewing the draft RPA, Reclamation and the Army Corps vigorously objected to all of the elements of the RPA except for the changes to the dam above the mollusk population and the inclusion of additional members of the BT. Reclamation and the Army Corps primarily cited a lack of authority to implement the passage structures, as well as the feasibility of designing and implementing them within the required time frame as the basis of their objections. Both agencies also objected to the scope and extent of the operational changes related to the anadromous fish.

USFWS and NOAA Fisheries issued a final BiOp, including an RPA. The final RPA retained the changes to the BT and the mollusk dam, retained the passage structure requirements on the three dams, but over ten years instead of five, and reduced the extent of the other operational changes. The BiOp also included an ITS that precisely quantified the take for all species except the mollusk. USFWS determined that the mollusk population was too unstable to allow any take, even of the habitat. The ITS included specific and general RPMs, with implementing Terms and Conditions. Reclamation and the Army Corps accepted the revised RPA, signed the new COA, and began implementing its terms.

Almost immediately, environmental groups challenged the BiOp in court, alleging that the document was too lenient and provided insufficient protection to listed species. They also challenged the BiOp on the grounds that it did not address the non-anadromous fish species. Simultaneously, hydropower and water user groups challenged the BiOp in court, alleging that it was too restrictive and constituted an unacceptable reduction in the amounts of water and power available to them.

As described previously, this paper has identified the tests of the three Circuits in which a western water decision is likely to be challenged. The paper will next work through each court's test, as applied to the hypothetical operating decision and BiOp, and predict based on those tests whether the BiOp would be found valid by the courts.

D. The Ninth Circuit

The Ninth Circuit would likely strike down the BiOp, finding parts of it to be legally unacceptable. Recall that the five elements likely to be of most importance to the court are: 1) an evaluation of the value of the habitat for survival or recovery; 2) identifying what

is properly in the environmental baseline; 3) both the long term and the short term effects; 4) the project description must be accurate, complete, and within the power of the action agency to implement; and 5) the regulatory agency must have some idea of at what point the existence of the listed species will actually be in jeopardy. A panel of the Ninth Circuit would likely take issue with the BiOp on elements 3 and 4.

As described in the hypothetical example, the regulatory agencies did consider the effects of the proposed action on the species' recovery. So long as the BiOp contained a reasonably discernable path through which a court can follow the agencies' reasoning, that consideration will likely be upheld by the court.

Likewise, the agencies went to some lengths to evaluate what was properly in the environmental baseline. The description does not discuss to what extent the BiOp identified the pieces of the action as discretionary or non-discretionary, and so a Ninth Circuit panel might strike the BiOp down on that point. A BiOp that more precisely identifies the discretionary actions while analyzing all the actions would likely be more palatable to the court. The document relied on extensive information about the species and their habitats generally, as well as specific to the River system, and included both peer reviewed science and *in situ* monitoring data. Depending on the extent of the discussion of discretionary and non-discretionary (and how well the ITS matched the discretionary pieces) the BiOp would likely survive judicial review in the Ninth Circuit on this element.

A Ninth Circuit panel would, however, likely not be so generous on the third element, evaluation of short and long term effects. As described, the BiOp analyzed the effects over the long term, the 25 year life of the COA. It also analyzed certain actions within the next five to ten years. It did not, however, establish any link to the effects to the species over a generation of the species lifetime. As the *Pacific Coast Federation* court put it, "[I]t is not enough to provide water for the [fish] to survive in five years, if in the meantime, the population has been weakened or destroyed by inadequate water flows."¹³⁰ The BiOp here has no analysis of that aspect, and so would likely fall before the court.

130. *Pac. Coast Fed'n of Fishermen's Ass'ns v. U.S. Bureau of Reclamation*, 426 F.3d 1082, 1095 (9th Cir. 2005).

The panel would likely be equally unimpressed by the BiOp's consideration of the fourth element, a complete, accurate, and implementable project description. As described, the BiOp is relying for its determination on not only uncertain actions by Congress, over which no agency has control, but on uncertain actions in general. The fish passage funding is entirely out of the action agency's ability to direct – Congress will do what Congress will do, and for its own reasons and in its own time. While Reclamation and/or the Army Corps could certainly request funding for the passage structures within the normal budget cycle, the agencies have absolutely no ability to ensure that Congress will appropriate those dollars. In the absence of Congressional appropriations for them, the agencies would have little to no ability to modify the existing dams with the fish passage structures.¹³¹ In addition, the BiOp relied on mitigation measures in the project description that were unclear and uncertain, and which would provide uncertain benefits. A Ninth Circuit panel would be very likely to strike down the BiOp on that point alone.

The final element, some idea of at what point the species actually is in jeopardy, is similar to the second, in that a panel could find either way based on the description given. If the BiOp has a reasonable analysis of how the agencies determined jeopardy or no, adverse modification or no, such that the court can reasonably discern its path, then a panel would likely uphold the BiOp. If not, then it would get struck down. As in any case involving review under the APA's standard, an agency articulating its rationale is the crucial standard, so that the agency's path (of reasoning) "may reasonably be discerned."¹³²

The panel, based on *Lockyer* and *Flowers*,¹³³ would likely rule in favor of the agencies on the claim that the non-anadromous fish

131. One might argue that the agencies could accomplish the structures out of other discretionary funding. This is unlikely at best. Retrofitting a dam for unimpeded volitional passage, or even seasonally impeded passage, is an exercise generally costing in the tens of millions of dollars range. These are not amounts that federal agencies just have lying around ready to hand, especially in the current fiscal climate.

132. *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (citing *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc.*, 419 U.S. 281 (1974)).

133. See *California ex rel. Lockyer v. U.S. Dep't of Agric.*, 575 F.3d 999 (9th Cir. 2009); *Defs. of Wildlife v. Flowers*, 414 F.3d 1066 (9th Cir. 2005).

should have been included in the BiOp. So long as the action agencies are able to articulate a rationale for why they made the determination that the action would have no effect on the species, the court will grant deference to the agency uphold the decision, even if as an original matter the court might find differently.

In summary, were this hypothetical BiOp in front of a Ninth Circuit panel, it would likely be held to be invalid, and remanded back to the regulatory agencies. The panel would likely find that elements 3 and 4 of the test are not met, and could find that elements 2 and 5 are not met as well. A BiOp that did, however, establish the link between the effects to the species over a generation of each species lifetime, that identified what those effects are likely to be, and whether those effects will push the species over the brink into jeopardy would likely find more favor with the court. Similarly, the BiOp as it stands in this hypothetical includes actions that are not only uncertain, but are completely outside the control of the federal agencies to implement. The BiOp could certainly identify those uncertain actions and establish that they are uncertain but may in fact occur, but cannot include them as part of the action the agencies are evaluating. An analytic method that might pass Ninth Circuit muster would be to assume the uncertain actions will not occur, and then analyze those actions that have specific commitments and make a determination of jeopardy or not based on that framework. The agencies could then include an analysis of what the effects of the other, uncertain, actions would be, so that if one or more does occur the effects are included in the consultation and reinitiation¹³⁴ is not necessary.

Strategically, the agencies, by knowing what challenges they will face before a Ninth Circuit panel, could more carefully craft the BiOp to match the test. Alternatively, challengers of the BiOp could use that same knowledge to craft arguments around the weaknesses of the BiOp in relation to the test. The strategy varies

134. Reinitiation of consultation under section 7 is required when a) the amount or extent of incidental take has been exceeded; b) new information reveals effects of the action on listed species or critical habitat in a manner or to an extent not previously considered; c) the federal action is modified in a manner that causes an effect to a listed species or critical habitat that was not previously considered; or d) a new species is listed or critical habitat is designated that may be affected by the federal action. 50 C.F.R. § 402.16 (2016). A more in-depth discussion of reinitiation triggers is not within the scope of this article.

(preserve the BiOp versus strike it down), but the tactics of identify the test and apply the elements remain the same. Identifying the elements (the difficulties, dangers, and distances) and applying them on the formation of the country (the court) most skillfully will be what carries the day on the battlefield.

E. The Tenth Circuit

The Tenth Circuit would also likely strike down the BiOp, finding parts of it to be legally unacceptable. Recall that the three elements likely to be of most importance to the court are: 1) an evaluation of the effects of the proposed action on the species recovery; 2) the use of valid, peer-reviewed scientific data; and 3) a definite commitment to implementing each piece of the proposed action before evaluating it.

The first element is nearly identical to the Ninth Circuit's element, and would likely be upheld in the Tenth Circuit for the same reasons it would in the Ninth.

The second element is also likely to be upheld. The agencies relied on a great deal of scientific peer-reviewed information in developing the BiOp, in addition to monitoring data provided by the agencies from within the River system. While challengers to the BiOp may (and likely will) have their own experts, with the administrative record here, the court is unlikely to take sides in a "duel of experts." The court is more likely to allow the regulatory agency to "rely on the reasonable opinions of its own qualified experts" than to insert itself into the duel, even if the court might find another view more persuasive.¹³⁵

The third element of the Tenth Circuit's test is nearly identical to the Ninth Circuit's fourth element, and would likely be found invalid for the same reasons as described above.

The panel would likely uphold the determination on the non-anadromous fish, on the same basis the Ninth Circuit would.

Accordingly, a panel of the Tenth Circuit would likely rule against the regulatory agencies, and remand the BiOp back to them for revision.

The strategies and tactics in the Tenth Circuit will be similar in form to those in the Ninth. Identification of the tests, and then

135. *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 378 (1989).

either construction of the BiOp around the elements, or construction of the arguments against the BiOp on the same elements, will improve the odds of carrying the day.

F. The D.C. Circuit

The D.C. Circuit is, depending on one's view, either the easiest or the hardest in which to have a BiOp survive review. Recall that this Circuit does not have an explicit test, relying instead solely on the arbitrary and capricious review of the APA. Under such review, the BiOp as described here would likely fail. The uncertainty of relying on Congressional action, the uncertainty of the future federal agency actions, the unquantifiable benefits offered by the action agencies, and the general RPMs are all likely to be found arbitrary and capricious, as they have no rational basis on which the agencies can articulate any reliance. The federal agency would have to hope to convince the reviewing panel that the benefits of the uncertainties are sufficiently certain to allow a reasoned basis for relying on them. This is not a position any court is likely to find convincing. The BiOp would thus likely be remanded by a panel back to the regulatory agencies for revision.

Like the Ninth and Tenth Circuits, the panel would likely uphold the agencies' determination for the non-anadromous fish, and on the same basis as the other courts. The strategies and tactics for dealing with the D.C. Circuit are similar in form to those of the Ninth and Tenth Circuits, and with similar improvement in the chances of victory.

V. CONCLUSION

Each Circuit has a different test, whether express or not, for deciding if a BiOp may survive judicial review. No document, under any test, can be "bullet proof" and guaranteed to survive judicial review. Conversely, there is no "silver bullet" under any test that will guarantee remand of a challenged BiOp. Skilled lawyering will still have a place, no matter what the agencies do in their documents.

That said, the Ninth Circuit has the most explicit test, while the D.C. Circuit appears to rely solely on the arbitrary and capricious standard of the APA. In the author's opinion, the Ninth Circuit is likely to be the easiest Circuit in which to successfully

challenge or defend a BiOp. The court's specific elements make it relatively simple, at least in theory, to craft a BiOp that can successfully withstand review. Alternatively, that same list of elements would make it equally simple for a challenger to find a fatal weakness in the BiOp, one which can bring the document down and sent back to the agency.

The D.C. Circuit is likely to be the hardest in which to challenge a BiOp, as the court relies on the arbitrary and capricious standard as its guide. Such a standard allows for deference to the agencies, but requires them to articulate a rationale for the decisions involved. Without that rationale, the decision falls. With that rationale, the decision stands even if the court would prefer a different result as an original matter.

It is tempting to close this paper with airy pronouncements of ways to "fix" the complications of the section 7 process as it relates to complex water management decisions. There are no such simple fixes. The current Congress is extremely unlikely to take any action that will untangle the skein of conflicting and confusing requirements in a way that continues the successes of the ESA, and the author is pessimistic about any Congressional changes that will do better that are reasonably certain to occur. The prospects in the courts are better, though the varying interpretations of statute, regulation, and precedent that range across the Circuits will continue to confuse and confound practitioners, and provide job security for lawyers, for quite some time to come.

The best hope lies, I think, with the agencies themselves. While the conflicts over the use of water that drive the vast majority of water/ESA litigation will also not be going away any time soon, the agencies that take the lessons of the courts to heart, and use them to build better documents, will bring some consistency and certainty to the process. The answer is not in clamping down and instituting more regional or Washington office review – that way lies madness and delay.¹³⁶ Instead, the agencies that develop more training and experience on the ground and in the field, that understand what the courts look for, that

136. The sardonic truth of the ancient statement, "I'm from the D.C. office and I'm here to help," remains darkly humorous to this day. To everyone not from the D.C. office, at least.

understand what the other agencies can and cannot do, and that incorporate the real lessons from the courts, those agencies will be more often upheld when the courts' attention is brought to bear.

The stakeholder groups who so often litigate have lessons to learn as well, but once those lessons are learned, may bear additional benefits. Stakeholder interests are many and varied, as many interests as there are groups, if not more. The central claim of them all, however, is that misapplication of the ESA in the context of water (among other environmental resource issues, of course) has fundamentally damaged their interests. Taking them at their word, then, groups that can help the agencies learn how to build better documents can add their weight to making the documents, and the decisions that underlie them, better, more defensible, and more certain.

No one claims that the Endangered Species Act is perfect. No one claims that it can be perfect. It can, however, be made better in practice, and learning to calculate the difficulties, dangers, and distances involved, and mastering the natural formation of the country, are the necessary first steps.