

Emerging Regulatory Experiments in Permit Process Coordination for Endangered Species and Aquatic Resources in California

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Summary

Many practitioners and scholars view enhanced permit coordination as beneficial due to purported efficiency gains and potentially better conservation outcomes, but scholarship on interagency coordination is still limited. The authors conducted extensive interviews and dialogue sessions to evaluate a range of efforts to coordinate proposed California Habitat Conservation Plans/Natural Community Conservation Plans with freshwater aquatic resource permits under federal and state laws. In this Article, the authors share their findings, which revealed both benefits and challenges, and make policy recommendations for going forward.

Practitioners involved in developing several proposed California Habitat Conservation Plans (HCPs)/Natural Community Conservation Plans (NCCPs) under the federal Endangered Species Act (ESA)¹ and California's NCCP Act² are currently undertaking a range of efforts to coordinate those endangered species permitting efforts with freshwater aquatic resource permits under the federal Clean Water Act (CWA)³ §§404 and 401 and similar state laws. Many practitioners and scholars view enhanced permit coordination as beneficial due to purported efficiency gains and potentially better conservation outcomes,⁴ although scholarship on interagency permit coordination is still relatively limited.⁵ These emerging regulatory experiments provide an opportunity to explore the extent of such benefits, as well as some of the costs and challenges.

Preliminary research, including interviews⁶ and dialogue sessions,⁷ indicates that most respondents strongly

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1. 16 U.S.C. §§1531-1544, ELR STAT. ESA §§2-18.
2. Natural Community Conservation Plan (NCCP) Act, CAL. FISH & GAME CODE §§2800-2835.
3. 33 U.S.C. §§1251-1387, ELR STAT. FWPCA §§101-607.
4. See generally Peter A. Buchsbaum, *Permit Coordination Study by the Lincoln Institute of Land Policy*, 36 URB. LAW. 191 *passim* (2004) (suggesting that permit coordination in the HCP context has promise as a way of encouraging and guiding private development while protecting environmental values).
5. See *id.* at 192 (noting how little attention has been given to intergovernmental coordination of land use controls, such as permitting coordination); see also Eric Biber & J.B. Ruhl, *The Permit Power Revisited: The Theory and Practice of Regulatory Permits in the Administrative State*, 64 DUKE L.J. 133, 150-55, 173-76 (2014) (discussing the lack of scholarship specifically focused on permit coordination and design).
6. The University of California Irvine School of Law Center for Land, Environment, and Natural Resources (CLEANR) conducted interviews and preliminary research to survey the current permit coordination efforts among California HCP/NCCPs. CLEANR conducted interviews with the following: Katie Barrows, Coachella Valley Association of Governments; Jim Bartel, U.S. Fish & Wildlife Service (FWS) (retired); Michael Beck, Endangered Habitats League; Thomas Cavanaugh, U.S. Army Corps of Engineers; Loren Clark, Placer County Planning Department; Dan Cox, FWS; Kim Delfino, Defenders of Wildlife; Abigail Fateman, East Contra Costa County Habitat Conservancy; Lesley Hill, Orange County Transportation Authority; John Hopkins, California Habitat Conservation Planning Coalition; Paul Jones, U.S. Environmental Protection Agency (EPA); Jan Knight, FWS; Charles Landry, Western Riverside Regional Conservation Authority; Chris Lee, Solano County Water Agency; Jennifer Norris, FWS; Galen Schuler, Green Diamond Resource Company; Edmund Sullivan, Santa Clara Valley Habitat Agency; Eric Tattersall, FWS; Robert D. Thornton, Nossaman LLP; Michael Wellborn, California Watershed Network; and Doug Wheeler, Hogan Lovells.
7. On July 30, 2015, CLEANR co-convoked a roundtable on the issue of permit process coordination with the Center for Collaboration in Governance (CCG) that was hosted by the Environmental Law Institute (ELI) [hereinafter ELI Roundtable]. The dialogue at the ELI Roundtable built on CLEANR's research seeking to identify opportunities for coordinated

support reliance on these new approaches to coordinating planning and permitting for endangered species and aquatic resources. Because the initiatives are nascent, whether the purported efficiency, effectiveness, and legitimacy benefits will be achieved remains to be determined. An accurate, comprehensive assessment of the potential strengths and weaknesses of these permit process coordination efforts will only be possible after they are further along. However, there is solid evidence that clearer guidance from federal agency headquarters that promotes permit streamlining without sacrificing democratic and environmental protection goals would likely provide the best opportunity for promoting beneficial permit coordination while minimizing potential challenges and drawbacks.⁸

I. From Regulatory Silos to Modest Coordination

Historically, environmental statutes were designed to operate under separate but often overlapping regulatory schemes, each focused on managing a single (or even a fragment of an) environmental resource, such as air, water, or endangered species. When the ESA and the CWA were enacted over 40 years ago, their regulatory frameworks were not designed to interact significantly. Decades later, many of the plans adopted under the ESA's HCP program and California's state equivalent NCCP program pioneered the concept of intergovernmental, multispecies habitat conservation planning, seeking to conserve not only listed endangered species, but also ecological communities. However, the local governments, working together with the state and federal wildlife agencies, still focused predominantly on species and habitat conservation. As the programs have evolved, applicants and regulators have recently begun to

explore interagency permit coordination across multiple media and statutes.

California's wetlands, particularly vernal pool areas, provide habitat for many endangered species. The interconnected relationship between wetlands and endangered species has spurred efforts to coordinate the respective permitting processes with the prospect of improving the effectiveness of conservation measures and/or enhancing permit process efficiency for agencies and applicants.⁹ Some plan applicants reported experiencing redundancies, inefficiencies, and uncertainty in their attempts to comply with both the CWA and HCP/NCCP requirements due to a lack of coordination among the regulatory agencies and the agencies' tendency to operate within defined silos.

In 2003, staff from four counties working on regional conservation planning efforts in northern California approached the U.S. Army Corps of Engineers (the Corps) and the U.S. Fish and Wildlife Service (FWS) to request consultation on coordinating wetlands and endangered species permitting.¹⁰ Ultimately, the four northern California counties, the Corps, FWS, the U.S. Environmental Protection Agency (EPA), the California Department of Fish and Wildlife (CDFW), and the Institute for Ecological Health formed the Northern California Wetlands and Endangered Species Permits Working Group, with the goal of determining whether it would be possible to coordinate regional permit processes for wetlands and endangered species.¹¹ The working group met several times over the course of six months and helped elucidate the opportunities and challenges of such coordination.¹²

As a result of this process, a number of proposed or planned HCPs have begun to pursue or accelerated their work toward permit coordination. However, the efforts are not part of an overarching programmatic approach to coordination. Rather, they are decentralized efforts,¹³ with each HCP/NCCP negotiating its own approach to harmonizing conventionally separate permit processes.

Though these efforts at permit coordination are pioneering, it is important to note that they nonetheless are fairly modest efforts to reconcile fragmented regulatory processes. Currently, some plans, such as the proposed Placer County Conservation Plan (PCCP) HCP/NCCP, Solano Multi-Species HCP, South Sacramento HCP, and Orange County Transportation Authority (OCTA) HCP/NCCP, are pursuing permit process coordination simultane-

permitting and the purported benefits and challenges of such coordination. Participants at the ELI Roundtable included: Alejandro Camacho, U.C. Irvine; Kathryn Campbell, ELI; Denny Grossman, Strategic Growth Council; Melissa Kelly, U.C. Irvine; Mark Kramer, The Nature Conservancy; Kate Kurgan, American Association of State Highway and Transportation Officials; Jaimee Lederman, U.C.L.A.; Lindell Marsh, CCG; Jim McElfish, ELI; Jim Murley, South Florida Regional Planning Council; Steve Quarles, Nossaman LLP; Wayne Spencer, Conservation Biology Institute; Elizabeth Taylor, U.C. Irvine; Marty Wachs, U.C.L.A.; and David Zippin, ICF International. The takeaways from the discussion were shared at a second roundtable also co-convened by CLEANR and CCG and hosted by the President's Council on Environmental Quality.

8. Cf. David J. Hayes, *Leaning on NEPA to Improve the Federal Permitting Process*, 45 ELR 10018, 10018-19 (Jan. 2015) (discussing the Barack Obama Administration's recent initiative, including the development of an interagency guidance document, to improve federal permitting for complex infrastructure projects). See also OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, M-15-20, GUIDANCE ESTABLISHING METRICS FOR THE PERMITTING AND ENVIRONMENTAL REVIEW OF INFRASTRUCTURE PROJECTS 1 (Sept. 22, 2015) (providing guidance on interagency permit coordination), available at <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2015/m-15-20.pdf>; STEERING COMM. ON FED. INFRASTRUCTURE PERMITTING AND REVIEW PROCESS IMPROVEMENT, IMPLEMENTATION PLAN FOR THE PRESIDENTIAL MEMORANDUM ON MODERNIZING INFRASTRUCTURE PERMITTING 1 (May 2014) (documenting and planning the interagency coordination efforts), available at <http://www.permits.performance.gov/sites/permits.performance.gov/files/docs/pm-implementation-plan-2014.pdf>.

9. Telephone Interview with John Hopkins, Dir., Cal. Habitat Conservation Planning Coal. (June 25, 2015).

10. The four counties were Contra Costa, Placer, Solano, and South Sacramento.

11. NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., OPPORTUNITIES FOR COORDINATING PERMITTING UNDER SECTION 404 OF THE CLEAN WATER ACT WITH REGIONAL HABITAT CONSERVATION PLANNING 1 (2004), available at http://www.conservationplanning.info/pdfs/404-ESA_white_paper_11-16-04.pdf.

12. *Id.*

13. However, there is an informal dialogue occurring between some HCP/NCCP program managers to share experiences and confirm consistency in agency communications and actions on applications. This is particularly true for Placer and South Sacramento counties. E-mail from Loren Clark, Assistant Planning Dir., Placer Cnty. Planning Dep't, to author (Sept. 25, 2015, 04:42 PM PST).

ously with the planning of the HCP/NCCP. Other plans, such as the Santa Clara Valley (SCV) HCP/NCCP and Coachella Valley Multiple Species HCP/NCCP, already have their HCP/NCCP approved and are now attempting to make their CWA permits consistent with the already-issued HCP/NCCP permits. To date, only the East Contra Costa County (ECCC) HCP/NCCP has an approved HCP/NCCP with a coordinated CWA §404 permit.¹⁴

Accordingly, though some applicants are seeking to streamline successive project-specific permits after programwide permit approval, none of these efforts are immediately seeking to establish a “one-stop shop” that fully consolidates the initial plan approval process, under which a single, integrated application results in all permits being issued simultaneously. Rather, the permit process coordination efforts are more modestly aiming to harmonize separate permitting processes that nonetheless are all congruent in their treatment of key resources conserved under the HCP/NCCP document. For example, successful coordination is expected to ensure that conservation or mitigation measures in the HCP/NCCP document will serve as the basis for a regional wetlands compliance process. As such, the challenges (further explained below) in even these modest attempts at coordination illustrate the real difficulties of harmonizing regulatory processes.

II. Alternative Tools for ESA/Aquatic Permit Process Coordination

A. Programmatic General Permits Under the CWA

The tool pursued by HCP applicants and permittees in California that most closely coordinates permitting over water and wildlife resources is the programmatic general permit (PGP). Issued by the Corps, a PGP delegates wetlands permitting authority to a local agency that submits a program for local regulation of wetlands impacts that provides the same or a higher level of environmental protection as the existing Corps regulations.¹⁵ If the program is approved, the local agency adopts an ordinance and detailed procedures to implement the locally led regulatory process. PGPs expire after five years and must be renewed.

The proposed PCCP HCP/NCCP and the proposed South Sacramento HCP are currently developing programs that seek to combine permitting processes for waters of the United States under CWA §§404 and 401, waters of the state under the Porter-Cologne Water Quality Control

Act,¹⁶ and streams, rivers, lakes, and ponds under California Fish and Game Code §1602.¹⁷ These proposed programs are seeking to provide a process through which the HCP/NCCPs’ conservation strategies for aquatic resources are implemented.¹⁸ For example, PCCP HCP/NCCP’s proposed program will establish a reserve system to support the mitigation and conservation requirements of both the proposed program and the HCP/NCCP.¹⁹

If adopted, these burgeoning initiatives would be the most coordinated water/species permitting processes being considered at this time. Though the processes for obtaining the initial permits under each statute remain fairly independent, if adopted, the plan will combine the Corps, FWS, CDFW, and the regional water quality control board’s processes for regulating impacts to aquatic resources and endangered species into a single implementation program. However, for that same reason, some consider PGPs to be too great an undertaking and instead are pursuing permit coordination between endangered species and specific aquatic resources separately, as discussed below.

B. Regional General Permits Under CWA §404

A regional general permit (RGP) is another tool available for coordinating implementation of endangered species permitting with permitting for waters of the United States under CWA §404. Similar to a PGP, an RGP authorizes activities in waters of the United States within the HCP/NCCP plan area “that are substantially similar in nature and cause only minimal individual and cumulative impacts.”²⁰ However, unlike a PGP, the local agency is not the applicant for an RGP. For an RGP, subsequent project proponents still must individually apply for authorization from the Corps, but the permit conditions and mitigation requirements are expected to match those under the adopted HCP/NCCP. Like PGPs, RGPs expire after five years and must be renewed.

The first RGP was issued in May 2012 for activities within the ECCC HCP/NCCP,²¹ which was approved in 2007.²² Similar to the ECCC HCP/NCCP, the SCV

14. U.S. ARMY CORPS OF ENG’RS, SACRAMENTO DIST., ACTION ID SPK-2001-00147, REGIONAL GENERAL PERMIT 1 (May 4, 2012), available at <http://www.spk.usace.army.mil/Portals/12/documents/regulatory/gp/GP-01-w-encls.pdf> [hereinafter ECCC REGIONAL GENERAL PERMIT].

15. It should be noted that programmatic general permits (PGPs) are limited to authorizing activities regulated under CWA §404 that have no more than minimal individual and cumulative adverse environmental effects. 33 U.S.C. §1344(e)(1) (1982). Accordingly, this regulation limits the types of activities expected to occur in an HCP/NCCP that can be covered by a PGP. E-mail from David Olson, Chief, Regulatory Div., Corps, to author (Sept. 22, 2015 04:07 PM PST).

16. Porter-Cologne Water Quality Control Act, CAL. WATER CODE, DIVISION 7.

17. PLACER CNTY. AQUATIC RES. PROGRAM (CARP), DRAFT PLACER COUNTY CARP STRATEGY 1-1, 1-1, 1-2 tbl. 1 (Jan. 28, 2011), available at <http://www.placer.ca.gov/-/media/cdr/Planning/PCCP/PolicyDoc2011/Appendix%20M.pdf>; DEP’T OF CMTY. DEV., PLANNING AND ENVTL. REVIEW DIV., CONTROL NO. 2003-PL-0637, NOTICE OF PREPARATION NOP-2, NOP-2, NOP-4 (Oct. 28, 2013), available at <http://www.per.saccounty.net/PlansandProjectsIn-Progress/Documents/SSCHP/EIR%20Materials%202013-2014/SSHCP%20NOP%202010-2013.pdf>.

18. The PCCP and South Sacramento HCP are also each pursuing creation of an in-lieu fee program, an important component of these efforts because it involves coordinated monitoring and funding to offset wetland impacts. E-mail from Loren Clark, *supra* note 13.

19. See PLACER CNTY. AQUATIC RES. PROGRAM (CARP), *supra* note 17, at 1-1.

20. ECCC REGIONAL GENERAL PERMIT, *supra* note 14, at 1.

21. *Id.*

22. U.S. FWS, ENDANGERED SPECIES ACT SECTION 10(A)(1)(B) INCIDENTAL TAKE PERMIT (July 25, 2007), available at http://www.co.contra-costa.ca.us/depart/cd/water/HCP/documents/USFWS_ESA_Permit_10a1b_Signed.pdf; CAL. DEP’T OF FISH & WILDLIFE, FINDINGS OF FACT AND NATURAL

HCP/NCCP was approved in 2013 before CWA permitting had occurred,²³ and applicants are subsequently pursuing permit coordination through an RGP.²⁴ The Solano Multi-Species HCP is also in the process of obtaining an RGP; however, it is doing so while still in the HCP planning phase.

C. Letters of Permission Under CWA §404

Another tool available for coordinating CWA §404 permitting with species permitting is the letters of permission (LOP) procedure. LOP procedures can be used for projects with small §404 impacts, and according to some practitioners are not useful for HCP/NCCPs with extensive impacts to aquatic resources.²⁵ Like RGPs, project proponents individually apply for wetlands authorization from the Corps, but the process is streamlined because the permit conditions and mitigation requirements match those under the HCP/NCCP.²⁶ While LOPs have expiration dates, some have suggested that LOPs are easier to renew than RGPs.²⁷ The OCTA HCP/NCCP, which is in the HCP/NCCP planning stage, considers LOP procedures and the renewal process to be the most appropriate tool for its permit coordination efforts because it has a defined set of projects (and their impacts) planned out over the next 30 years.²⁸

D. Programmatic Certification Under CWA §401 and the Porter-Cologne Water Quality Control Act

To coordinate species permitting with permitting for impacts to “waters of the United States” under CWA §401 and “waters of the state” under California’s Porter-Cologne Water Quality Control Act, HCP/NCCPs are pursuing a programmatic water quality certification from either the state water resources control board or the regional water quality control board that has jurisdiction in the plan area. Once adopted, programmatic water quality certification

authorizes the local agency to issue subsequent permits for certain projects in the plan area through a streamlined agency approval process.

Both the proposed PCCP HCP/NCCP and proposed South Sacramento HCP are incorporating this permit coordination into their aquatic resources programs.²⁹ With its RGP approved, the adopted ECCC HCP/NCCP is now pursuing a programmatic water quality certification, and the proposed Solano Multi-Species HCP is also in the early stages of pursuing a programmatic water quality certification.³⁰

E. Streambed Alteration Agreements Under California Fish and Game Code §1602

Under California law, streambed alteration agreements (SAAs) are required whenever a public agency or private party diverts or obstructs the natural flow of the bed, bank, or channel of any CDFW-designated rivers, streams, or lakes.³¹ The SAA is not a permit but an agreement resulting from negotiations between the proponent and CDFW.³² CDFW can enter into an SAA that covers routine operation and maintenance, often referred to as a “programmatic” SAA,³³ and/or a long-term agreement covering development activities, known as a “master” SAA.³⁴

The proposed PCCP HCP/NCCP³⁵ and proposed South Sacramento HCP³⁶ are seeking to incorporate a “programmatic” or “master” SAA into their respective aquatic resources programs.³⁷ The adopted ECCC HCP/NCCP intends to pursue an SAA after it obtains a programmatic water quality certification.³⁸ The proposed OCTA HCP/

COMMUNITY CONSERVATION PLAN (NCCP) PERMIT 2835-2007-001-03 FOR THE EAST CONTRA COSTA COUNTY NCCP 1 (Aug. 2007), *available at* http://www.co.contra-costa.ca.us/depart/cd/water/HCP/documents/CDFG_NCCP_Permit_and_Findings_Signed.pdf.

23. U.S. FWS, FEDERAL FISH AND WILDLIFE PERMIT (July 30, 2013), *available at* <http://scv-habitatagency.org/DocumentCenter/Home/View/182>; CAL. DEP’T OF FISH & WILDLIFE (CDFW), NATURAL COMMUNITY CONSERVATION PLAN PERMIT FOR THE SANTA CLARA VALLEY HABITAT PLAN (July 31, 2013), *available at* <http://scv-habitatagency.org/DocumentCenter/Home/View/181>.

24. U.S. ARMY CORPS OF ENG’RS, S.F. DIST., PUBLIC NOTICE, PROJECT: SANTA CLARA VALLEY HABITAT CONSERVATION PLAN, REGIONAL GENERAL PERMIT 1 (May 5, 2014), *available at* http://www.sccgov.org/sites/dpd/DocsForms/Documents/SCVHP_RGP_2012-00302S_PublicNotice.pdf.

25. However, some program managers are pursuing or investigating using letters of permission (LOPs) in addition to PGPs and RGPs. E-mail from Loren Clark, *supra* note 13. The South Sacramento HCP is pursuing all three. U.S. ARMY CORPS OF ENG’RS, CWA 404 PERMIT STRATEGY ALIGNED WITH THE SOUTH SACRAMENTO HABITAT CONSERVATION PLAN 1, 3-5 (Dec. 2015).

26. U.S. ARMY CORPS OF ENG’RS, PERMITTING PROCESS INFORMATION, *available at* <http://www.lrl.usace.army.mil/Portals/64/docs/regulatory/Permitting/PermittingProcessInformation.pdf>.

27. Telephone Interview with Lesley Hill, Project Manager, Orange Cnty. Transp. Auth. (July 1, 2015).

28. *Id.*

29. Telephone Interview with John Hopkins, *supra* note 9; Telephone Interview with Loren Clark, Assistant Planning Dir., Placer Cnty. Planning Dept (June 2, 2015).

30. Telephone Interview with Abigail Fateman, East Contra Costa Cnty. Habitat Conservancy (July 2, 2015); Telephone Interview with John Hopkins, *supra* note 9.

31. CAL. FISH & GAME CODE §§1600-1616.

32. Roy J. Comer, *Navigating the Negotiation of Streambed Alteration Agreements*, 24 L.A. LAW. 13 (Jan. 2002).

33. See NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, at 4 (referring to the streambed alteration agreement (SAA) as “programmatic”).

34. CAL. CODE REGS. tit. 14, §699.5.

35. PLACER CNTY. AQUATIC RES. PROGRAM (CARP), *supra* note 17, at 1-2.

36. COUNTY OF SACRAMENTO ET AL., WORKING DRAFT SOUTH SACRAMENTO HABITAT CONSERVATION PLAN i, 1-1 (July 2010) (referring to the SAA as “programmatic”), *available at* http://www.per.saccounty.net/PlansandProjectsInProgress/Documents/SSHCP/SSHCP_Working%20Draft_Vol%201_CH1-2.pdf; DEP’T OF CMTY. DEV., PLANNING AND ENVTL. REVIEW DIV., CONTROL NO. 2002-PL-0637, NOTICE OF PREPARATION NOP-2, NOP-2, NOP-3 (Oct. 28, 2013) (referring to SAA as a Master SAA), *available at* <http://www.per.saccounty.net/PlansandProjectsInProgress/Documents/SSHCP/EIR%20Materials%202013-2014/SSHCP%20NOP%2010-28-13.pdf>.

37. However, Master SAAs neither give the local land use agency the ability to authorize projects nor contain any regulatory assurances. Placer County still hopes to receive streamlining benefits through a Master SAA because CDFW is expected to issue agreements based on Placer County’s conservation strategy, *supra* note 17, which CDFW approved. E-mail from Loren Clark, Assistant Planning Dir., Placer Cnty., to author (Sept. 29, 2015, 04:45 PM PST).

38. EAST CONTRA COSTA CNTY. HABITAT CONSERVATION PLAN Ass’n, EAST CONTRA COSTA COUNTY HCP/NCCP, ch. 1, Intro., 1-1, 1-5, 1-8, 1-17–18

NCCP,³⁹ adopted Coachella Valley Multiple Species HCP/NCCP, and proposed Solano Multi-Species HCP⁴⁰ are in the early stages of pursuing programmatic SAAs.⁴¹

F. Special Area Management Plans

Last, special area management plans (SAMPs) are an alternative tool for permit process coordination.⁴² SAMPs are similar to HCP/NCCPs in that they are a plan document intended to analyze individual and cumulative impacts in the context of broad ecosystem needs.⁴³ However, SAMPs focus on aquatic resources and are prepared by the Corps, in cooperation with local land use authorities. They serve as a basis for the Corps' authorization of permits, such as an RGP or LOP procedure, and the identification of areas that warrant protection through use as mitigation areas or where more stringent permit reviews (that is, standard individual permits) are conducted.

SAMPs are typically time-consuming and labor-intensive to develop.⁴⁴ As compared to species permitting on a landscape level, SAMPs are more dependent on detailed ecological information and analysis,⁴⁵ including advanced identification of resources that should be given higher levels of protection from development activities.⁴⁶ SAMPs require the complete delineation upfront of wetlands to be impacted by the proposal.⁴⁷ Delineating the boundaries of numerous wetlands to be impacted requires surveying the

area for wetland indicators; on privately owned land, surveys require the landowner's permission.

Further, prioritizing wetlands is itself a difficult process and contestable.⁴⁸ Ecological populations are the easiest values to estimate and agree upon,⁴⁹ but on the ecosystem scale, wetlands provide numerous benefits with real value that are harder to quantify without detailed ecological information.⁵⁰ For these reasons, SAMPs can be particularly difficult to develop because resources within a SAMP or HCP/NCCP are often on privately owned land and impacts are delineated generally (for example, by urban growth boundary), which makes it extremely difficult to prohibit impacts from development.⁵¹

SAMPs are also prepared by the Corps, with varying levels of participation by local and state land use agencies.⁵² While many potential applicants want to coordinate planning efforts with the Corps, many have rejected relying on SAMPs because they are reluctant to hand primary control of the planning process over to the Corps.⁵³

III. Anticipated Benefits

The future success of these various emerging efforts depends on how one defines the goals of permit coordination. If the goal is improved conservation, for example, the benefits and challenges of coordination may be assessed differently than if the goal is simply to issue permits more quickly.⁵⁴ Numerous proponents of species/water permit coordination efforts assert that permit process coordination will promote program effectiveness, efficiency, and legitimacy. The various claimed benefits and challenges are explored below.

Proponents maintain that an HCP/NCCP that takes a regional approach to conservation, in coordination with other agencies, is likely to be more effective at achieving the goals of the various statutes at issue, including promoting long-term water quality and ecosystem or landscape-

(Oct., 2007), available at <http://www.co.contra-costa.ca.us/depart/cd/water/HCP/archive/final-hcp-rev/pdfs/ch01intro.pdf>.

39. ICF INT'L, ORANGE CNTY. TRANSP. AUTH., PUBLIC DRAFT OCTA M2 NATURAL COMMUNITY CONSERVATION PLAN/HABITAT CONSERVATION PLAN i, ES-5, 1-21-22, 5-2, 5-47 (Sept., 2014), available at http://www.octa.net/pdf/OCTA_NCCP_HCP_Plan.pdf.

40. SOLANO CNTY. WATER AGENCY, PUBLIC DRAFT, SOLANO HABITAT CONSERVATION PLAN, VOL. 1, §1, INTRO., 1-i, 1-15, 1-19, 1-20 (Oct. 2012), available at <http://www.scwa2.com/home/showdocument?id=398>.

41. Telephone Interview with Lesley Hill, *supra* note 27; Telephone Interview with Loren Clark, *supra* note 29; Telephone Interview with Abigail Fattman, *supra* note 30; Telephone Interview with John Hopkins, *supra* note 9.

42. Although special area management plans (SAMPs) originated with the Coastal Zone Management Act, 16 U.S.C.A. §1453 (17) (West 2009), the concept of a SAMP applies equally to noncoastal geographically sensitive areas such as wetlands. U.S. ARMY CORPS OF ENG'RS, SPECIAL AREA MANAGEMENT PLANS, REGULATORY GUIDANCE LETTER NO. 05-09 §2(a) (Dec. 7, 2005), available at <http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl05-09.pdf> [hereinafter REGULATORY GUIDANCE LETTER NO. 05-09] (replacing U.S. ARMY CORPS OF ENG'RS, SPECIAL AREA MANAGEMENT PLANS, REGULATORY GUIDANCE LETTER NO. 86-10 (Oct. 2, 1986), available at <http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl86-10.pdf> [hereinafter REGULATORY GUIDANCE LETTER NO. 86-10]).

43. REGULATORY GUIDANCE LETTER NO. 05-09, *supra* note 42, at §3(a); NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, at 7-8.

44. Because SAMPs are labor-intensive, the Corps requires that four factors be present before approval: (1) the area is environmentally sensitive and under strong developmental pressure; (2) there is a supporting local agency; (3) there was public involvement throughout the process; and (4) all parties involved understand that the end result of a SAMP will be a definitive regulatory product. REGULATORY GUIDANCE LETTER NO. 05-09, *supra* note 42, at §3(b), (c).

45. NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, at 7.

46. E-mail from David Olson, Chief, Regulatory Div., Corps, to author (Sept. 23, 2015 08:05 AM PST).

47. NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, 7-8.

48. Daryn McBeth, *Article: Wetlands Conservation and Federal Regulation: Analysis of the Food Security Act's "Swampbuster" Provisions as Amended by the Federal Agriculture Improvement and Reform Act of 1996*, 21 HARV. ENVTL. L. REV. 201, 207-08 (1997); William J. Mitsch & James G. Gosselink, *The Value of Wetlands: Importance of Scale and Landscape Setting*, 35 ECOLOGICAL ECON. 25, 25-26 (2000) (discussing general principles when attempting to value wetlands).

49. Mitsch & Gosselink, *supra* note 48, at 27.

50. *See id.* at 28 ("At the ecosystem scale, wetlands provide flood control, drought prevention, and water quality protection. These ecosystem values are real, but their quantification is difficult and the benefits are generally regional and less specific to individual land owner.").

51. E-mail from David Olson (Sept. 23, 2015), *supra* note 46.

52. E-mail from David Olson (Sept. 22, 2015), *supra* note 15 (asserting that the participation of local or state land use authorities and their long-term commitment to implementing the SAMP as intended are critical to its success).

53. E-mail from John Hopkins, Dir., Cal. Habitat Conservation Planning Coal., to author (Oct. 5, 2015 03:20 PM PST).

54. *See* Amy Wilson Morris & Jessica Owley, *Mitigating the Impacts of the Renewable Energy Gold Rush*, 15 MINN. J.L. SCI. & TECH. 293, 312-14 (2014) (discussing the benefits, relatively quick processing times, and consolidation of permits, in similar efforts to streamline permitting for large-scale solar projects in California). However, the authors also note that many environmental groups have been critical of these fast-tracking or streamlining initiatives as lacking adequate review, *id.* at 337.

level conservation.⁵⁵ Numerous participants and scholars claim that addressing resources concurrently on a regional scale that can take ecosystem and watershed functions into account is more likely to lead to better conservation results, including integrated compliance monitoring and adaptive management.⁵⁶

Certain local environmental organizations, for example, support this coordinated permitting approach because landscape-scale conservation, with its protection of large areas of high-quality wetlands, provides for better long-term conservation outcomes than project-by-project aquatic resource permitting.⁵⁷ Coordinating permit processes brings multiple agencies together and facilitates a discussion among experts that some scholars contend can lead to the development of more effective and innovative conservation measures and methods for permitting.⁵⁸

For some HCP/NCCPs, the local development community has vigorously pursued the development of programmatic §404 permitting in coordination with the conservation plans, at least in part because of the purported effectiveness benefits.⁵⁹ Proponents assert that regulatory mandates can be implemented in a compatible fashion if both wetlands and endangered species regulations are addressed in a concurrent, coordinated planning process.⁶⁰ In addition, having a single entity responsible for an integrated monitoring program (and the possibility of multiple HCP/NCCPs using comparable monitoring methods) could greatly improve understanding of not just the extent and distribution of the resources, but also their individual and collective condition.⁶¹

Proponents anticipate that coordinating permit processes will result in efficiency benefits, such as improved regulatory certainty, cost savings, and time savings, as compared to a project-by-project approach.⁶² Proponents assert that streamlined planning and permitting will minimize duplication of effort by regulatory authorities and

thus reduce the cost to the public of permit processing.⁶³ Under the current system of multiple overlapping permits, regulators are often required to produce the same or similar document twice, such as a duplicate set of findings and biological opinions.⁶⁴

A consolidation of the review process could lead to potential time and cost savings for financially constrained agencies as well as plan applicants, many of whom claim that the current permitting system is expensive and lengthy, and often results in ineffective mitigation.⁶⁵ Applicants also appreciate the enhanced regulatory certainty and lower risk of litigation that result from coordinated rather than individual permitting.⁶⁶ Recently, the Corps' Sacramento District stressed these anticipated benefits in its CWA §404 permitting strategy for the South Sacramento HCP, including greater regulatory certainty and faster, better-informed permitting decisions.⁶⁷ The efficiency benefits are likely to be most present for those alternatives such as PGPs that seek to streamline and even consolidate subsequent permit processing.

Finally, for at least some of the various tools available for permit process coordination, there also may be legitimacy benefits that come with transferring control over permitting from single-purpose federal agencies to more local authorities with generalized jurisdiction. Butressed by the principles of subsidiarity and federalism,⁶⁸ some claim that local agencies are better suited to address on-the-ground issues and that having federal agencies delegate permitting authority to local agencies promotes accountability. Further, by enhancing citizen participation and promoting public acceptance of the regulatory process, some maintain that more localized decisionmaking might lead to better outcomes and thus ultimately a more effective regulatory program.

IV. Observed Challenges

Permit coordination, as evidenced to date by these burgeoning efforts, is not without its challenges. Integrating aquatic resource planning with endangered species planning inevitably adds complexity to the permitting process.⁶⁹ This is potentially compounded by the fact that, unlike the ESA, the CWA does not have a tool for issuing permits across a broad planning area over a time horizon longer than five years.⁷⁰ Because these attempts at coor-

55. Telephone Interview with Doug Wheeler, Partner, Hogan Lovells (July 2, 2015); ELI Roundtable, *supra* note 7.

56. Telephone Interview with Galen Schuler, Green Diamond Resource Co. (June 4, 2015); Telephone Interview with Kim Delfino, Defenders of Wildlife (May 22, 2015); E-mail from Loren Clark (Sept. 25, 2015), *supra* note 13; ELI Roundtable, *supra* note 7. See also Paul Jones, *Toward an Adaptive-Monitoring Paradigm: Addressing Information Needs Over the Next 50 Years*, 35 NAT'L WETLANDS NEWSL. 26, 26-27 (May-June 2013) [hereinafter Jones, *Toward an Adaptive-Monitoring Paradigm*] (outlining a framework for a comprehensive program that integrates federal and state resource permitting, HCPs, and NCCPs).

57. Telephone Interview with Michael Wellborn, Cal. Watershed Network (May 28, 2015); ELI Roundtable, *supra* note 7.

58. Roger Fleming, *Does the Clean Water Act Protect Endangered Species? The Case of Maine's Wild Atlantic Salmon*, 7 OCEAN & COASTAL L.J. 259, 262-63 (2002) (discussing efforts by EPA and the Services to better integrate their respective CWA and ESA programs).

59. Telephone Interview with John Hopkins, *supra* note 9.

60. Telephone Interview with Robert D. Thornton, Partner, Nossaman LLP (June 1, 2015); NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, at 5.

61. See Jones, *Toward an Adaptive-Monitoring Paradigm*, *supra* note 56.

62. Buchsbaum, *supra* note 4, at 197. See also Hayes, *supra* note 8, at 10018-19 (discussing efficiency benefits of improved permit coordination); U.S. ARMY CORPS OF ENG'RS, *supra* note 24, at 3 (noting the potential benefits of a coordinated CWA §404 permit strategy over a project-by-project approach).

63. Telephone Interview with Jim Bartel, Field Supervisor, Carlsbad, FWS (retired) (June 2, 2015); ELI Roundtable, *supra* note 7.

64. ELI Roundtable, *supra* note 7.

65. Telephone Interview with Robert D. Thornton, *supra* note 60. See also E-mail from Abigail Fateman, East Contra Costa Cnty. Habitat Conservancy, to author (Oct. 5, 2015 04:44 PM PST).

66. ELI Roundtable, *supra* note 7.

67. U.S. ARMY CORPS OF ENG'RS, *supra* note 24, at 2-3.

68. See Alejandro E. Camacho & Robert L. Glicksman, *Functional Government in 3-D*, 51 HARV. J. ON LEGIS. 19, 39-40 (2014).

69. See Dave Owen, *Mapping, Modeling, and the Fragmentation of Environmental Law*, 2013 UTAH L. REV. 219, 230-31 (2013) (discussing the challenges and rarity of multimedia permitting integration).

70. While LOP procedures can be in place longer, both PGPs and RGP expire after five years and must be renewed. Some see this five-year limit as an op-

ordinating complicated but fragmented regulatory processes are unprecedented and occurring on an ad hoc basis, it is not surprising that they are encountering hurdles that delay realization of the potential benefits.⁷¹

Limited resources in terms of funding and staff have presented chronic difficulties.⁷² Permit process coordination efforts are less common outside of California, in part because of the limited overlap in other states of aquatic resources and listed species.⁷³ Accordingly, some have reported that it is often more challenging to garner national political and financial support for these efforts.⁷⁴

There is also the challenge of convincing some agency officials and stakeholders to take a long-term view in order to understand the benefits of permit coordination. Despite the potential streamlining benefits through permit coordination, some doubt that the time and financial costs of achieving permit process coordination are outweighed by the efficiency benefits, particularly as such advantages may not be realized for many years down the line. As a result, it can be difficult to get all the relevant players to the table initially.⁷⁵ In some cases, applicants and local authorities are skeptical that permit coordination allows them to better meet their goals because they remain focused on current projects, rather than the subsequent projects that will enjoy the effectiveness and efficiency benefits of permit process coordination.⁷⁶ Similarly, some report that the state and federal wildlife agencies have been more focused on the overall HCP/NCCP, and are not necessarily convinced that considering other aquatic resources, beyond ESA issues, allows them to better meet their habitat conservation and species recovery goals.⁷⁷

Likewise, despite the considerable effort by some to promote permit coordination, there is significant variation between offices within the same agency in their willingness to facilitate permit coordination efforts.⁷⁸ For example, the Western Riverside Multi-Species HCP attempted to integrate its plan with CWA permitting in the early 2000s, but these efforts were unsuccessful due in part to Corps funding challenges and in part to the involvement of a regional water quality control board that was skeptical

of the advantages of landscape-level over project-by-project permitting.⁷⁹ Indifference or resistance to larger scale planning has hampered interagency coordination efforts and led to significant time delays or even roadblocks for other plans.⁸⁰ Some applicants reported that different offices within an agency seemed unable to work together, which led to duplication of effort and increased processing time and costs.⁸¹

Perhaps most importantly, various participants in dialogue sessions reported an apparent lack of retention of institutional knowledge within regulatory agencies due to turnover of personnel and the absence of an infrastructure for collecting such information.⁸² Without any mechanism for information-sharing and assessment of the successes and limitations of these regulatory experiments, pioneering plans have not been able to reap the full extent of potential efficiency benefits that could come with enhanced coordination. Such difficulties are compounded by the lack of guidance from higher level agency policymakers on how to approach permit process coordination. These features have prevented subsequent plans from learning from one another, thus requiring later applicants and regulators to reinvent the wheel.⁸³

V. Conclusions

Permit process coordination efforts for aquatic resources among California HCP/NCCPs are still a relatively new undertaking,⁸⁴ and it is not clear whether such efforts will prove successful. Though some point to the potential for more efficient, legitimate, and effective permitting and resource conservation, others have raised concerns about the significant up-front costs; a limited infrastructure for inter-plan learning; and a lack of high-level guidance and support, resulting in inconsistency between pilot efforts.

The experience of California HCP/NCCPs and the tools tested in pursuing permit coordination are already providing valuable lessons for both current and future applicants, and they almost certainly will continue to do so as they progress. These decentralized, lengthy regulatory experiments have the potential to help future plan preparation and implementation efforts. However, if agencies want to thoroughly explore the potential value of permitting process coordination, higher level support and leadership from federal and state regulators is needed to allow agency staff and applicants the necessary license and support to pursue permit process coordination efforts. The issuance of a policy directive by FWS, working with the relevant federal and state water authorities, could not only provide this needed foundation, but could also provide guidance

portunity because it requires a reexamination of the PGP or RGP during the reissuance process, and lessons learned during the initial cycle can be used to improve the reissued PGP or RGP. E-mail from David Olson (Sept. 22, 2015), *supra* note 15.

71. *But see* Bradley C. Karkkainen, *Collaborative Ecosystem Governance: Scale, Complexity, and Dynamism*, 21 VA. ENVTL. L.J. 189, 217 (2002) (discussing the practical difficulties in interagency cooperation, but rejecting the piecemeal approach, noting that, “in each case, lacking any pre-existing regional coordinating mechanism, it became necessary to invent one; and invented they were, on ad hoc, case-by-case bases, as local exigencies demanded”).

72. *See* NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, at 5.

73. *See* Jones, *Toward an Adaptive-Monitoring Paradigm*, *supra* note 56 (describing the opportunities for collaboration and integrated monitoring programs in California's wetlands).

74. Telephone Interview with John Hopkins, *supra* note 9.

75. Telephone Interview with Charles Landry, Western Riverside Reg'l Conservation Auth. (May 20, 2015).

76. ELI Roundtable, *supra* note 7.

77. *Id.*

78. *Id.*

79. Telephone Interview with Charles Landry, *supra* note 75.

80. ELI Roundtable, *supra* note 7.

81. *Id.*

82. Telephone Interview with Robert D. Thornton, *supra* note 60; ELI Roundtable, *supra* note 7.

83. ELI Roundtable, *supra* note 7.

84. *See* NORTHERN CAL. WETLANDS & ENDANGERED SPECIES PERMITS WORKING GRP., *supra* note 11, at 1-2.

on permit process coordination and consistency by establishing standard practices.⁸⁵

Such guidance could provide a template for the Corps, FWS, EPA, CDFW, and local officials to improve their synchronization of permit reviews, develop common and transparent permit review schedules, and promote training and awareness among agencies to reduce duplication of effort. It should draw on existing and parallel efforts at permit coordination, such as Executive Order No. 13604,⁸⁶ which was adopted after the Barack Obama Administration identified lack of coordination among multiple agencies as a root cause of infrastructure permitting problems such as delays and escalated costs.⁸⁷ To execute federal permitting and review processes with maximum efficiency and effectiveness, the Executive Order directs agencies to provide a transparent, consistent, and predictable path for both project sponsors and affected communities.⁸⁸

In 2014, a federal interagency steering committee released an implementation plan outlining major strategies, reforms, and milestones for modernizing permit processes, including institutionalizing interagency coordination and transparency.⁸⁹ Actions identified in the plan to promote coordination include: (1) developing a mechanism for elevating and resolving interagency issues and disputes; (2) expanding the use of programmatic approaches for routine activities and those with minimal impacts; and (3) establishing a dedicated team, staffed by dedicated subject matter experts and supported by rotating “detailees” from participating agencies, to support the ongoing improvement of permitting and review responsibilities.⁹⁰ The implementation plan also established a clearinghouse to share best practices across agencies and lessons learned from an initial set of projects.⁹¹

A key component of the implementation plan was the further development and deployment of an online permitting “dashboard” to facilitate early collaboration, reduce time associated with permitting, and increase account-

ability by making more project information available to the public.⁹² The dashboard has been expanded to include an internal IT platform that allows agency members to develop collaborative schedules, share project documents, and quickly communicate with each other.⁹³ Recent guidance from the Office of Management and Budget and the Council on Environmental Quality calls on agencies to begin using this dashboard to establish metrics for permitting and environmental review of complex infrastructure projects.⁹⁴

The federal interagency steering committee’s implementation plan also proposed legislative changes and targeted increases in agency funding to enhance agency capacity to implement suggested reforms.⁹⁵ On December 4, 2015, the U.S. Congress approved and President Obama ratified a \$305 billion bipartisan compromise bill that in part advanced certain permit coordination initiatives outlined in the implementation plan.⁹⁶ The Fixing America’s Surface Transportation Act (FAST Act)⁹⁷ is primarily focused on providing flexibility and stability in funding by converting the Surface and Transportation Program to a block grant program, expanding eligibility for the Transportation Infrastructure Finance and Innovation Act, and moving from short-term authorizations to long-term, multi-year funding.⁹⁸

However, the FAST Act also adopted several of the Administration’s proposals to further streamline the environmental review and permitting process to accelerate project delivery. These include: (1) the establishment of a new permitting body dedicated to permit efficiency; (2) a requirement that federal agencies concurrently review project-related information and environmental reviews to the maximum extent possible; (3) authorization of the use in federal permitting processes of certain existing documents prepared under state law procedures; and (4) the creation of a bureau intended as a single site for states and local governments to receive federal financing, funding, and/or

85. Cf. U.S. ARMY CORPS OF ENG’RS, *supra* note 24, at 1-2 (establishing a permit streamlining strategy for the Corps’ Sacramento District that uses a multi-tiered approach of PGPs, RGP’s, and LOP’s, with FWS’ 50-year environmental impact statement serving as the programmatic basis).

86. Improving Performance of Federal Permitting and Review of Infrastructure Projects, Exec. Order No. 13604, 77 Fed. Reg. 18887, 18887 (Mar. 22, 2012). The order expands on and advances the Administration’s prior efforts, *id.* at 18888; Interagency Working Group on Coordination of Domestic Energy Development and Permitting in Alaska, Exec. Order No. 13580, 76 Fed. Reg. 41989, 41989 (July 12, 2011); Improving Regulation and Regulatory Review, Exec. Order No. 13563, 76 Fed. Reg. 3821, 3821 (Jan. 18, 2011); Presidential Memorandum—Speeding Infrastructure Development Through More Efficient and Effective Permitting and Environmental Review (Aug. 31, 2011), available at <https://www.whitehouse.gov/the-press-office/2011/08/31/presidential-memorandum-speeding-infrastructure-development-through-more>.

87. Hayes, *supra* note 8, at 10019.

88. Exec. Order No. 13604, *supra* note 86, at 18888-90 (directing agencies to set and adhere to time lines and schedules for completion of reviews, set clear permitting performance goals, and track progress against those goals).

89. See STEERING COMM. ON FED. INFRASTRUCTURE PERMITTING & REVIEW PROCESS IMPROVEMENT, *supra* note 8, at 5 (identifying four strategies, 15 goals, and 96 near- and long-term milestones to further institutionalize best practices and lessons learned).

90. See *id.* at 7-8.

91. See *id.* at 51-52.

92. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, *supra* note 8, at 1-2.

93. *Report to the President, Rebuilding America’s Infrastructure: Cutting Timelines and Improving Outcomes for Federal Permitting and Review of Infrastructure Projects* i, 3 (May 2013), <https://www.whitehouse.gov/sites/default/files/omb/reports/report-to-the-president-rebuilding-americas-infrastructure.pdf>.

94. See OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, *supra* note 8, at 7-8 (defining complex projects that must be posted on the dashboard, starting Oct. 2015).

95. The plan listed several legislative proposals that allow agencies more flexibility in using federal funds for improving permitting review, including the \$478 billion, six-year GROW AMERICA Act. *Id.* at 44-45. Although Congress did not ultimately adopt the proposed GROW AMERICA Act, U.S. DEP’T OF TRANSP., GROW AMERICA, POLICY INITIATIVES (Apr. 7, 2015), <https://www.transportation.gov/grow-america>.

96. OFFICE OF THE PRESS SECRETARY, STATEMENT BY THE PRESS SECRETARY ON H.R. 22 (Dec. 4, 2015), <https://www.whitehouse.gov/the-press-office/2015/12/04/statement-press-secretary-hr-22>; Keith Lang, *Obama Signs \$305B Highway Bill*, THE HILL, Dec. 4, 2015, at <http://thehill.com/policy/finance/262171-obama-signs-305b-highway-bill>.

97. Pub. L. No. 114-94; 129 Stat. 1312 (2015), available at <https://www.gpo.gov/fdsys/pkg/BILLS-114hr22enr/pdf/BILLS-114hr22enr.pdf>.

98. U.S. DEP’T OF TRANSP., THE FIXING AMERICA’S SURFACE TRANSPORTATION ACT OR “FAST ACT” (Dec. 4, 2015), <https://www.transportation.gov/fastact>.

technical assistance.⁹⁹ Additionally, the FAST Act requires that the Executive Director maintain and update the projects posted to the recently deployed permitting dashboard, including a concise project plan to coordinate interagency project permitting and review, any related memorandums of understanding between agencies, and performance timetables that will not exceed the average project time for reviews and authorizations in similar project categories.¹⁰⁰

Though focused on infrastructure permitting coordination and not specific to activities affecting endangered species and water resources, these efforts demonstrate the federal government's broader interest in permit coordination. Moreover, though it is unclear whether the recent changes authorized by the FAST Act will successfully advance permit coordination without harming other regulatory goals,¹⁰¹ they nonetheless serve as prominent exemplars of permit coordination that should inform efforts in the endangered species and water resources context. Similar policy guidance from FWS could delineate the tools available for endangered species and aquatic resources permitting coordination, as well as what has worked and not worked previously.

Notably, the recent executive initiatives to promote infrastructure permit coordination have focused primarily on procedural mechanisms. Likewise, most of the lessons offered by respondents on species and water resource conservation permit coordination have centered on procedures that may help promote more effective communication or harmonization among authorities and/or parties. For example, respondents have suggested that a clear upfront delineation of the relationship among and responsibilities of the various jurisdictional authorities, including the Corps, FWS, CDFW, the state water quality control board, regional boards, and/or EPA, is more likely to promote more efficient and effective coordination.¹⁰² Further,

some participants assert that the integrated document would benefit from offering a wide variety of stakeholders from the environmental, academic, agricultural, and development communities a more active role in shaping the details of the initial plan, rather than making them mere passive consultants.¹⁰³

In addition, any issues related to developing a coordinated, integrated monitoring program that serves ESA and CWA purposes could be addressed from the outset of the process instead of trying to shoehorn the CWA monitoring into the ESA monitoring at the end of the HCP process.¹⁰⁴ One respondent suggested a memorandum of agreement (MOA) between an HCP applicant, the Services, and the CWA agencies.¹⁰⁵ The MOA would establish the goal of HCP/NCCP integration and include operational terms and conditions for the §§401/404 permitting framework.¹⁰⁶

Beyond providing lessons about effective streamlining of process, FWS guidance could also convey information on substantive issues of agreement or conflict at the intersection of endangered species conservation and aquatic resource protection. For example, respondents have indicated that early planning documents should unambiguously connect the two permit processes by clearly identifying that species conservation permits will seek to advance water resource conservation objectives, and that water resource permits will seek to promote species conservation goals.¹⁰⁷ Such an express linkage would necessarily include an acknowledgement from the outset of the various goals and objectives of the habitat conservation and the wetland, stream, and water quality protection issues. Including both procedural and substantive guidance could be useful not only in promoting more efficient permit processing, but also in facilitating more effective resource conservation.

FWS might consider incorporating such guidance, or at least an acknowledgement of the opportunities for and challenges of permit coordination, in the revisions to the HCP Handbook that are currently underway. A relevant example is the recent update to the Red Book, a federal interagency guidance document among the Corps, FWS, EPA, the U.S. Coast Guard, U.S. Department of Transportation, Federal Highway Administration, Federal Railroad Administration, Federal Transit Administration, and National Oceanic and Atmospheric Administration on permit review coordination that incorporated case studies and best practices designed to enhance syn-

99. U.S. DEP'T OF TRANSP., JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF THE CONFERENCE, 1-2, 12-13 (Dec. 1, 2015), http://transportation.house.gov/uploadedfiles/joint_explanatory_statement.pdf; Jeffrey W. Lepo & Jared R. Wigginton, *New Highway Law Streamlines Federal Permitting and Environmental Review for Large Infrastructure Projects*, STOEL RIVES LLP (Dec. 17, 2015), <http://www.stoel.com/new-highway-law-streamlines-federal-permitting-and-environmental-review-for-large-infrastructure-projects#sthash.vodYzxQP.dpuf>.

100. Fixing America's Surface Transportation Act §41003.

101. For example, the FAST Act places limits on judicial review of the NEPA process that seem to trade off democratic and environmental protection goals for administrative efficiency. To challenge agency authorizations, project opponents must submit comments sufficient to put the agency on notice and file actions challenging federal authorization within two years. Edward McTiernan & Michael B. Gerrard, *Expediting Environmental Permitting of Infrastructure Projects—The 2015 FAST Act and NEPA*, CLIMATE LAW BLOG (Dec. 23, 2015), <http://blogs.law.columbia.edu/climatechange/2015/12/23/expediting-environmental-review-and-permitting-of-infrastructure-projects-the-2015-fast-act-and-nepa/#sthash.rr0QO72f.dpuf>. Additionally, the FAST Act reduces the likelihood that project opponents can obtain preliminary injunctions for NEPA permitting violations, potentially limiting “the heart of NEPA’s purpose: ensuring that key environmental issues are adequately analyzed before permitting decisions are made.” Hayes, *supra* note 8, at 10021.

102. Telephone Interview with Loren Clark, Assistant Planning Dir., Placer Cnty. Planning Dep’t (Nov. 2, 2015); E-mail from Chris Lee, Solano Cnty. Water Agency, Dir. of Envtl. Compliance, Permitting, and Habitat Conservation, Principal Water Resource Specialist, to author (Oct. 26, 2015); E-mail from Paul Jones, U.S. EPA, Wetlands Div., to author (Oct. 26, 2015).

103. E-mail from Paul Jones, *supra* note 102.

104. *Id.* Early planning could identify common management questions from which the integrated monitoring objectives could be developed, which would then drive the methods to obtain the data and the information necessary to inform adaptive management. *Id.*

105. *Id.*

106. *Id.* For example, if the management requirements for CWA mitigation were to include an in-lieu fee program, the program’s “compensation planning framework” should evolve in lock-step with the HCP/NCCP conservation strategy. *Id.*

107. Telephone Interview with Loren Clark (Nov. 2, 2015), *supra* note 102; E-mail from Chris Lee, *supra* note 102; E-mail from Paul Jones, *supra* note 102.

chronization and integration.¹⁰⁸ The Red Book captures lessons learned from previous review synchronization efforts, and breaks down the concurrent review procedure into easy to understand components, affording agencies the opportunity to replicate the procedure or portions of the procedure more widely and without having to execute a formal agreement.¹⁰⁹

A chapter in the new HCP Handbook addressing permit coordination could similarly incorporate case studies and best practices to facilitate more widespread adoption of these efforts to integrate planning and permitting for endangered species and aquatic resources. FWS might also consider establishing a dedicated team of ESA and CWA subject matter experts, supported by rotating detailees from FWS, EPA and the Corps, to support the ongoing improvement of permitting coordination efforts. In addition, the development of an online permitting dashboard to report project schedules and progress could promote transparency and encourage early coordination.

Development of a learning infrastructure that promotes self-reflection and the sharing of lessons learned would also be helpful.¹¹⁰ As these permit coordination initiatives remain nascent, initial guidance necessarily will have to rely on preliminary evidence about what synergies are emerging from using concurrent or consecutive processes for species and water conservation planning. As pilots evolve and new permit coordination efforts are initiated, the various authorities have an opportunity to better develop reliable conclusions and harness these lessons going forward. This could be achieved through the methodical assessment of new pilot coordination efforts. If there are insufficient resources to create new pilot projects, existing HCPs that are in the process of coordinating permitting might be used instead. Only through more systematic assessment will it become clearer whether the purported benefits of these experimental efforts are being realized, or the perceived challenges are proving too great to overcome.

108. U.S. ARMY CORPS OF ENG'RS ET AL., FHWA-HEP-15-047, SYNCHRONIZING ENVIRONMENTAL REVIEWS FOR TRANSPORTATION AND OTHER INFRASTRUCTURE PROJECTS: 2015 RED BOOK 1 (Sept. 2015), available at https://www.environment.fhwa.dot.gov/stmrng/Redbook_2015.pdf [hereinafter 2015 RED BOOK]. The 2015 Red Book acknowledges the efforts of the Steering Committee on Federal Infrastructure Permitting and Review Process Improvement, see generally STEERING COMM. ON FED. INFRASTRUCTURE PERMITTING AND REVIEW PROCESS IMPROVEMENT, *supra* note 8. Agencies are strongly encouraged to use the principles, processes, tools, approaches, and dispute resolution procedures identified in the handbook. See OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, *supra* note 8, at 9-10.

109. 2015 RED BOOK, *supra* note 108, at 1-5.

110. See generally Alejandro E. Camacho, *Adapting Governance to Climate Change: Managing Uncertainty Through a Learning Infrastructure*, 59 EMORY L.J. 1 (2009).