Recommended Best Practices for Environmental Reviews and Authorizations for Infrastructure Projects

Federal Permitting Improvement Steering Council (FPISC)

Completed pursuant to FAST-41; 42 U.S.C. § 4370m-1(c)(2)(B)

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Applicability

This report does not supersede, amend, or modify any Federal statute. Nor does this report supersede the Office of Management and Budget (OMB) and Council on Environmental Quality (CEQ) "Guidance to Federal Agencies Regarding the Environmental Review and Authorization Process for Infrastructure Projects," which is available at https://www.permits.performance.gov. Some "best practices" noted in this report are not only recommended but legally required for projects covered under FAST-41, or for certain other projects in various instances. The practices are still highlighted here because they are recommended for environmental reviews and permitting of all major infrastructure, regardless of legal mandates. Recommendations within this report do not supersede, amend, or modify National Environmental Policy Act (NEPA) or other applicable laws and regulations, and do not alter the responsibility of any government official to comply with or enforce any statute. The report does not create a presumption that the recommended best practices will necessarily be applied, even to those infrastructure projects covered under FAST-41, or that projects implementing these best practices will be approved or favorably reviewed by any agency.

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Executive Summary

In order to realize the full promise of investments in infrastructure, attention must be given to the permitting process. For the vast majority of infrastructure projects, the Federal government completes its permitting and review actions effectively and efficiently. However, particularly for large and complex infrastructure projects, the diverse set of agency responsibilities can sometimes extend the timeline for permitting decisions. While there are many external factors that may extend the timeframe for permitting decisions, this report highlights actions that Federal agencies may have control over. It provides some of the primary best practices that Federal agencies may be able to apply in order to execute their authorizations and environmental reviews in the most efficient and effective manner.

The U.S. Federal Government has engaged in an intensive initiative to modernize the permitting processes for major infrastructure. Federal agencies have developed procedures and tools to reduce the aggregate time required to conduct reviews and make permitting decisions, while improving accountability, transparency, and outcomes for communities and the environment. For example, the 2015 Red Book on *Synchronizing Environmental Reviews for Transportation and Other Infrastructure Projects*[1] provides processes for interagency synchronization of permitting schedules; the online Permitting Dashboard for Federal Infrastructure Projects,[2] first deployed in 2012, provides improved transparency for Federal permitting processes; and recent developments that clarified and increased use of landscape-scale mitigation banking have helped reduce some of the administrative burdens for permitting.

On December 4, 2015, the Fixing America's Surface Transportation Act (the "FAST Act") was signed into law with bipartisan support in both the House and Senate. Title 41 of the FAST Act (42 U.S.C. § 4370m; "FAST-41") created a new governance structure, set of procedures, and funding authorities designed to improve the timeliness, predictability, and transparency of the Federal environmental review and authorization process for covered[3] infrastructure projects. It does so while upholding the U.S. Government's responsibility to protect public health, welfare, safety, national security, and environmental and community outcomes. FAST-41 codifies many previously identified best practices for

[1] 2015 Red Book on *Synchronizing Environmental Reviews for Transportation and Other Infrastructure Projects*, also known as the "Red Book," available at https://www.environment.fhwa.dot.gov/strmlng/Redbook_2015.asp. The 2015 Red Book is an updated version of the original 1988 Red Book.

[2] www.permits.performance.gov/

[3] Infrastructure projects may be become "covered projects" under FAST-41 only after the project sponsor submits an initiation notice for inclusion under the Act, as described in 42 U.S.C. § 4370m-2(a). For projects to be eligible, they must generally involve construction of infrastructure for renewable or conventional energy production, electricity transmission, surface transportation, aviation, ports and waterways, water resource projects, broadband, pipelines, manufacturing, and be either (1) subject to review under the National Environmental Policy Act (NEPA), likely to require a total investment of more than $200 million, and ineligible for abbreviated authorization or environmental review processes, or (2) subject to NEPA and have the size and complexity that cause the Council to determine that the project would likely benefit from enhanced oversight and coordination. Some infrastructure projects are excluded, such as those covered by the Water Resources Development Act and transportation projects subject to 23 U.S.C. § 139. For details, see 42 U.S.C. § 4370m(6) and note, and the OMB and CEQ "Guidance to Federal Agencies Regarding the Environmental Review and Authorization Process for Infrastructure Projects", 13 January 17, available at https://www.whitehouse.gov/sites/default/files/omb/memoranda/2017/m-17-14.pdf

Federal permitting, such as assignment of a lead coordinating agency for a project and the use of coordinated project plans. The law also established the Federal Permitting Improvement Steering Council (FPISC or Council) as an inter-agency council to oversee implementation of FAST-41. An initial portfolio of 32 covered projects are already realizing benefits from FAST-41. These benefits include enhanced coordination, increased visibility and predictability, and public participation. It is a best practice for Federal agencies to inform the sponsors of additional, potentially eligible infrastructure projects of the availability of FAST-41 processes and the benefits provided under the Act.

FAST-41 directs the preparation of three reports on a regular basis:

- Recommended Best Practices.[4] At least once a year, FPISC will issue recommended best practices for infrastructure permitting.
- Recommended Performance Schedules.[5] Once every two years, the FPISC Executive Director, in consultation with the Council, will publish recommended performance schedules for all environmental reviews and authorizations most commonly required for the categories of projects covered under FAST-41.
- FPISC Executive Director's Report to Congress.[6] This annual report will describe the progress accomplished under FAST-41 during the previous fiscal year, assess Federal agency progress in making improvements consistent with FPISC's Recommended Best Practices report, and assess agency compliance with FPISC's Recommended Performance Schedules report.

This is the FPISC's first annual report on Recommended Best Practices. Many of the best practices described in this report are already widely used by Federal agencies, and in some instances they are required by law. Where this is not the case, Federal agencies are encouraged to make improvements consistent with these recommendations, as appropriate, in the execution of their Federal authorizations and environmental reviews. The best practices are summarized in the table below, which is organized according to the eight categories specified in FAST-41.[7]

[4] 42 U.S.C. § 4370m-1(c)(2)(B)
[5] 42 U.S.C. § 4370m-1(c)(1)(C)
[6] 42 U.S.C. § 4370m-7(a)
[7] 42 U.S.C. § 4370m-1(c)(2)(B)(i)-(viii)

Summary of Recommended Best Practices

Section	Subsection	Recommended Best Practices for Federal Agencies
1. Enhancing early stakeholder engagement	A. Principles and steps for effective stakeholder engagement	• Allocate sufficient resources to support stakeholder engagement • Begin stakeholder engagement as early as practicable • Assist project sponsors in the identification of all affected groups • Ensure that information is presented in plain English • Conduct early scoping • Provide early and continuous information on the project, the process and timetable for decision making, and available avenues for stakeholder engagement • Work to establish a lead for stakeholder engagement as early as possible • Ensure that clear avenues for participation are established • Support facilitated workshops or conversations with the project sponsor to create a more informed level of dialogue and debate • As appropriate, consider involving a neutral third party to facilitate stakeholder engagement • Foster flexibility in stakeholder engagement • Fully consider and, as appropriate, incorporate recommendations provided in comments • Evaluate the effectiveness of stakeholder engagement
2. Ensuring timely decisions	A. Development and assessment of agency performance metrics	• Develop and track agency performance metrics on the time required to reach intermediate and final milestones in permitting processes, if they are not already being tracked
	B. Synchronization of permitting and review processes	• Synchronize activities related to the processing of environmental reviews and authorizations, conducting them concurrently rather than sequentially unless an agency would be precluded from meeting statutory obligations in doing so
	C. Use of General Permits	• Explore opportunities to expand use of General Permits, where appropriate
	D. Mitigation Banking and In-Lieu Fee programs	• Use mitigation banking and In Lieu Fee programs, as appropriate
	E. Programmatic Approaches	• Explore the use of regional- or national-level programmatic approaches for authorizations and environmental reviews, as appropriate
	F. Appropriate resourcing of permitting agencies	• Either seek sufficient resources through the budget process or leverage available resources (e.g. cost recovery authorities)

Section	Subsection	Recommended Best Practices for Federal Agencies
3. Improving coordination between Federal and non-Federal entities	A. Improving coordination between Federal agencies	• Continue to refine and expand unified interagency processes , establish common terminology and data standards across agencies, synchronize reviews, and eliminate duplicated efforts, as consistent with applicable law
	B. Improving coordination between Federal and State governments	• Although State participation in FAST-41 is voluntary, Federal agencies are encouraged to establish and maintain a strong collaborative environment between Federal and State entities and work to develop Federal-State agreements
3. Improving coordination between Federal and non-Federal entities (continued)	C. Improving coordination between Federal and Tribal governments	• Ensure that Tribal consultations are conducted in a way that fully respects the government-to-government relationship • Train Federal agency staff to have an awareness of Trust and Treaty rights • Develop and implement agency-specific policies addressing government-to-government consultation with Federally-recognized Tribal Nations • Initiate government-to-government consultation by providing correspondence with clear information on proposed infrastructure to the correct Tribal representatives, in a consistent and timely manner • Work with Tribes to identify the individuals with the appropriate expertise, and work to eliminate barriers that prevent agencies from fully acknowledging this expertise • Explore avenues to compensate Tribal representatives for the costs associated with providing that expertise • Ensure that government-to-government consultations are accessible • Build strong, ongoing relations with Tribal Nations • Share data with Tribal governments to the maximum extent practicable, on par with other government entities, and consistent with applicable law

Section	Subsection	Recommended Best Practices for Federal Agencies
4. Increased transparency	A. Web tools for providing transparency	• Continue to develop and expand tools that provide transparency on Federal permitting and review processes
	B. Clear and concise presentation of analyses	• Present analyses in a clear and concise manner, without overly technical or industry jargon, consistent with the Plain Writing Act of 2010
5. Reducing administrative burdens	A. Online permit applications	• Develop online or electronic tools so that (1) project sponsors may submit applications and supporting documentation electronically (2) using formats that can be shared easily among agencies, resulting in (3) the online publication of agency authorizations, environmental reviews, and notifications
	B. Tools to help project sponsors produce high quality applications.	• Continue to develop and refine training, instructions, and processes that guide project sponsors to prepare high-quality and complete applications
	C. Create efficiencies within agency processes	• Routinely conduct comprehensive evaluations of agency permitting and review processes, exploring every opportunity to eliminate unnecessary internal process steps, data collection requirements, and other administrative burdens
6. Use of Geographic Information Systems (GIS) and other tools	A. GIS maps for permitting and project planning.	• Ensure that agency personnel are trained and equipped to use existing GIS tools in support of their permitting activities • Support development and integration of GIS tools and data sets that simplify and expedite permitting and project planning efforts
	B. Other public web tools	• Continue to develop and refine integrated web tools that help create efficiencies within the permit process
7. Training	A. Online training	• Continue to create, refine, consolidate, and publicize online training resources on agency permitting processes.
	B. Classroom training for permitting officials	• Continue to provide and refine live training opportunities for Federal, State, Tribal, and local permitting officials.
8. Other best practices	A. Environmental Collaboration and Conflict Resolution (ECCR)	• Continue to use third-party neutral facilitators as appropriate, trained in ECCR
	B. Incorporating stakeholder feedback	• Periodically assess and incorporate feedback from Federal, State, Tribal, and Local governments, and stakeholders, as appropriate,

Recommended Best Practices

FPISC recommends the following best practices for Federal authorizations and environmental reviews. While application of these best practices does not guarantee reduced time for permitting decisions or improved environmental and community outcomes, they do summarize some of the best methods available to achieve these results. Federal agencies are encouraged to make improvements consistent with these recommendations, as appropriate, in the execution of their Federal authorizations and environmental reviews.

1. Enhancing early stakeholder engagement[8]

Early stakeholder engagement is the foundation for success in the permitting and review process. Effective consultation and early coordination among project sponsors, agencies with potential permitting responsibilities, and project stakeholders provide a number of benefits for large infrastructure projects, including:

- Reduced timeframes for permitting. Early engagement allows agencies, project sponsors, and stakeholders to identify alternatives and concerns as early as possible.
- Reduced cost to the project. Early engagement allows the project sponsor to focus available resources on the most workable solutions.
- Improved, sustainable outcomes. Solutions are built on local capacity and knowledge, and address local and regional issues.
- Credibility for agencies and project sponsors. Stakeholder involvement can build trust and may increase stakeholder acceptance of the resulting project.
- Reduced risk of litigation and/or agency appeals processes. Stakeholders are more likely to accept agency decisions when they are fully informed and engaged throughout the process, understand the competing interests, and trust that their concerns are addressed properly.

The vision for effective stakeholder engagement in infrastructure permitting is that the process include fully informed, meaningful discussions with parties on all sides of the issues, substantive communication about realities of the project's potential impacts, representative engagement by all potentially affected parties, and the means to address the interests of all potentially affected parties, to the extent possible. The result should be the eventual achievement of better, more workable outcomes.

A. Principles and steps for effective stakeholder engagement

Federal agencies must carry out stakeholder engagement through the National Environmental Policy Act (NEPA) public engagement process and other stakeholder engagement processes as required by law. Effective stakeholder interaction requires the project sponsor's active engagement as early as possible, and agencies should encourage and plan for stakeholder engagement during pre-application meetings with the sponsor, as applicable. The following recommendations may enhance stakeholder engagement in the permitting of complex infrastructure projects.

[8] This section provides the FPISC's recommended best practices for "enhancing early stakeholder engagement, including fully considering and, as appropriate, incorporating recommendations provided in public comments on any proposed covered project," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(i).

B.P. 1. Allocate sufficient resources to support stakeholder engagement, and recommend to project sponsors that they do the same. Potential resources may include project staff, travel funds, an outreach coordinator or meeting facilitator, and independent professionals specializing in engagement with minority and low income communities.

B.P. 2. Begin stakeholder engagement as early as practicable (e.g. during planning activities for the environmental review process, before NEPA early scoping). For projects covered under FAST-41, the stakeholder engagement process is planned immediately after a project becomes covered under the act and documented in the Coordinated Project Plan along with project-specific permitting timetables for the required environmental reviews and authorizations.

B.P. 3. Assist project sponsors to identify all affected stakeholders, especially those who can contribute information or resources related to project implementation and those who may have significant concerns about the potential impacts of the project. Coordinate with other Federal - and to the maximum extent practicable - State, Tribal, and local agencies, to ensure full inclusion of relevant stakeholders and ensure that minority and low-income communities are engaged. To frame interactions, it may help to determine each stakeholder's expected level of involvement (from active involvement in regular meetings, to limited participation, to information-only); and determine what tools and resources are needed to support the expected levels of involvement.

B.P. 4. Ensure that information about proposed projects and project impacts is presented, whether in writing or verbally, in plain English. Stakeholders may not have capacity or resources to have technical experts and lawyers interpret technical project information. For some, English may be a second language. Federal agencies should diligently work to overcome potential language barriers, tailoring written and oral information and working with translators as required in order to ensure accurate communication.

B.P. 5. Conduct early scoping,[9] an optional step in the public planning and environmental processes that precedes formal NEPA scoping. When applied, early scoping is the first opportunity for the public to learn about a proposed project in regards to the environmental review process. Its purpose is to identify possible issues early, but it can also facilitate the use of planning work later in the formal environmental review process.

B.P. 6. Provide early and continuous information on the project, the process and timetable for decision making, and available avenues for stakeholder engagement. Make use of electronic information tools, such as websites, email distribution lists to disseminate information about the project to stakeholders.

[9] Forty Most Asked Questions Concerning CEQ's NEPA Regulations (CEQ, 1981) (see answer to Question 13).

B.P.

7. Work to establish a lead for stakeholder engagement as early as possible. A lead agency is required to coordinate projects covered under FAST-41. It is considered to be a best practice to establish a lead for stakeholder engagement for all complex projects, even if the projects are not covered under FAST-41.

B.P.

8. Ensure that clear avenues for participation are established, as described in the report from the Morris K. Udall and Stewart L. Udall Foundation on "Principles for Effective Stakeholder Engagement in Infrastructure Permitting and Review Processes."[10]

B.P.

9. Support facilitated workshops or conversations with the project sponsor and stakeholders to create a more informed level of dialogue. Provide information about how regulatory challenges can be addressed.[11] Plan carefully with the presenters to make sure the information is presented in formats that are understandable to all stakeholders.

B.P.

10. As appropriate, consider involving a neutral third party to facilitate stakeholder engagement, as described in Section 8 below. This best practice can be helpful in building good faith and should be considered in anticipation of difficult situations, or when discussing large or complex projects. A facilitator, trained and knowledgeable about engagement and communication with stakeholders, may help focus the parties on the primary concerns and enable the efficient and timely resolution of issues.

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11. Foster flexibility in stakeholder engagement, as described in the Udall report referenced in bullet #8 above.

B.P.

12. Fully consider and, as appropriate, incorporate recommendations provided in comments on any proposed project.[12]

B.P.

13. Evaluate the effectiveness of stakeholder engagement as the project progresses and recommend opportunities for adapting processes as needed to improve stakeholder engagement.

[10] While all of the principles in the Udall report are relevant to stakeholder engagement for permitting decisions regarding proposed infrastructure, this Recommended Best Practices report highlights two ("clear avenues for participation" and "foster flexibility in stakeholder engagement") for particular agency attention.

[11] Agencies may need to consider Federal Advisory Committee Act (FACA) requirements when meeting with entities or individuals outside Federal, State, or Tribal governments.

[12] Specifically noted as a required best practice under 42 U.S.C. § 4370m-1(c)(2)(B)(i).

2. Ensuring timely decisions[13]

The Federal government is a steward of the public trust and the timeliness of its decisions can have major implications for the environment and the economy. Delays in permitting decisions may defer the benefits of proposed infrastructure, increase direct construction costs, and extend the costs of maintaining outdated infrastructure. As such, Federal agencies must strive to execute permitting and reviews with maximum efficiency and effectiveness.

A. Development and assessment of agency performance metrics[14]

B.P.

Federal agencies should develop and track performance metrics on the time required to reach intermediate and final milestones in their permitting processes, if they are not already being tracked. Performance metrics establish a baseline for process timeframes, highlight processes that are working well, provide Federal agency leadership with visibility on process trends, and allow them to make informed decisions regarding agency resourcing. The collection and evaluation of well-defined metrics can help drive process improvement at all levels of an agency.

Performance metrics from FPISC agencies with Federal authorization and environmental review responsibilities will be tracked using data derived from the online Permitting Dashboard for infrastructure projects covered under FAST-41 (see Section 4A). The data collected over the next several years will allow the Federal government to assess whether agencies are effectively completing their authorizations and environmental reviews.[15]

☑ The US Army Corps of Engineers (USACE) Regulatory Program has been collecting detailed metrics of its processes for decades. In FY 2015, USACE processed approximately 79,000 permit-related activities, issued approximately 57,000 permits, and completed approximately 49,000 jurisdictional determinations. Of the issued permits, approximately 94% were authorized by General Permits and 6% authorized by Individual Permits. Since fiscal year 2011, the USACE Regulatory Program has consistently met or exceeded Office of Management and Budget (OMB) national performance metrics, which establish targets for General Permit decisions to be finalized within 60 days and Individual Permit decisions within 120 days. The vast majority (86%) of the General Permit decisions were completed in 60 days or less, and 60% of Individual Permits were completed in 120 days or less. Regulatory statistics from each of USACE's 38 Districts are analyzed and reported at the highest levels of the agency.

☑ The US Coast Guard (USCG) has been collecting metrics on its permitting process. In FY16, USCG processed 31 bridge permits. Of the issued permits, 97% were processed within 180 days.

[13] This section provides the FPISC's recommended best practices for "ensuring timely decisions regarding environmental reviews and authorizations, including through the development of performance metrics," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(ii).
[14] Specifically required in this report per 42 U.S.C. § 4370m-1(c)(2)(B)(ii).
[15] See FPISC's 2016 report on Recommended Performance Schedules, available on https://www.permits.performance.gov/, for details.

B. Synchronization of permitting and review processes

B.P.

Federal agencies should synchronize activities related to the processing of environmental reviews and authorizations, conducting them concurrently rather than sequentially, unless an agency would be precluded from meeting statutory obligations in doing so. Synchronization of multi-agency reviews can reduce the time required for the Federal government to complete its permitting and reviews.

The Council on Environmental Quality (CEQ) NEPA Implementing Regulations[16] state that "Federal agencies shall, to the fullest extent possible, integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively."

For projects covered under FAST-41, Federal agencies must integrate their environmental review and authorization activities, carrying out their obligations concurrently and in conjunction with other agency activities to the maximum extent practicable.[17]

☑ The 2015 Red Book, entitled "Synchronizing Environmental Reviews for Transportation and Other Infrastructure Projects," is a primary resource for agencies seeking to synchronize permitting and reviews for infrastructure projects.[18] It was updated from a 1988 version of the document by an inter-agency Federal team including representatives from the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), USCG, the Environmental Protection Agency (EPA), US Fish & Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), and USACE. The 2015 Red Book describes how Federal agencies can flexibly apply existing regulations, guidance, and policy in order to maximize efficiency by synchronizing agency permitting requirements, such as the USACE regulatory review, USCG bridge permit reviews under Title 33 of the U.S. Code, and Section 7 consultation under the Endangered Species Act. The Red Book provides a single process that satisfies NEPA requirements and provides a framework for meeting other environmental review requirements for all agencies involved. The process includes timely identification of reasonable project alternatives and the preparation of a single coordinated environmental review document and avoids consecutive agency reviews, where allowable within existing laws and regulations. The resulting coordinated effort is expected to expedite the permitting and review of a wide variety of railroad, transit, and highway projects.

[16] 40 CFR § 1500.2 (c)
[17] 42 U.S.C. § 4370m-4(a), paraphrased.
[18] https://www.environment.fhwa.dot.gov/strmlng/Redbook_2015.pdf

C. Use of General Permits

B.P.

Agencies should explore opportunities to expand use of General Permits, for actions requiring approval under the Clean Water Act, the Rivers and Harbors Act and the Marine Protection, Research and Sanctuaries Act, where appropriate. General Permits reduce the amount of time needed to complete permitting and reviews for activities that will result in no more than minimal individual and cumulative adverse environmental impacts.[19] They are generally appropriate for those agencies who review numerous proposals for similar types of activities.

For instance, USACE has been authorized to issue General Permits that incorporate authorizations for activities under the Clean Water Act, the Rivers and Harbors Act and the Marine Protection, Research and Sanctuaries Act. These permits provide an incentive for project sponsors to avoid and minimize their projects' impacts to jurisdictional waters and wetlands, in order to qualify for the more readily obtained General Permit authorization. In addition, General Permits allow USACE districts to focus limited resources on those regulated activities that have the potential for substantial adverse environmental effects and require the more rigorous review process required by individual permits.

General Permits contain terms and conditions that must be met for an activity to be covered by the General Permit. Such conditions include, but are not limited to, compliance with Section 106 of the National Historic Preservation Act (NHPA), Tribal Trust responsibilities, and Section 7 of the Endangered Species Act. USACE may be required to consult with Tribes, resource agencies, and/or other parties, as applicable, before verifying that a proposed activity qualifies for a general permit.

D. Mitigation Banking, In-Lieu Fee, and Conservation Banking programs

Mitigation Banking, In-Lieu Fees, and Conservation Banking programs exist primarily to provide compliance flexibility, lower overall costs and/or to accommodate growth where it can be shown to have the same or similar levels of environmental protection. Nonetheless these policies can reduce permitting timeliness. Accordingly, agencies should use mitigation banking, conservation banking, and In-Lieu Fee programs, as appropriate, to facilitate timely decisions regarding mitigation efforts.

Mitigation banking allows project sponsors to satisfy mitigation requirements and offset their projected environmental impacts by purchasing pre-approved mitigation areas, which were restored in advance by a third-party contractor or organization.[20] Mitigation banks can benefit project

[19] Note that Categorical Exclusions under the NEPA, which are created for categories of actions which do not typically involve individually or cumulatively significant actions, were not highlighted as a best practice within the context of this report because they generally wouldn't apply to major infrastructure projects. However, when agencies approach NEPA analysis for a particular project, it is a best practice to use the level of NEPA review that is appropriate for the action and its potential impacts.

[20] Agencies have been directed to identify opportunities for non-profit and private investors to develop mitigation banks and identify restoration banks in advance of development. See Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, November 3, 2015, available at https://www.whitehouse.gov/the-press-office/2015/11/03/mitigating-impacts-natural-resources-development-and-encouraging-related.

sponsors because the process is much faster than traditional mitigation, and liability is transferred to the third-party.

In-Lieu Fee programs require a similar agreement but specific sites are not necessarily identified in advance. With these programs, the project sponsors pay a fee that will be applied towards planned mitigation efforts that often include multiple sites within a watershed.

Conservation banks are a third form of third-party banking, developed for impacts to species under Endangered Species Act (ESA). Conservation banks are typically permanently protected lands that contain natural resource values, which are conserved and permanently managed for listed species or candidates for listing, or are otherwise species-at-risk. Conservation banks function to offset adverse impacts to these species that occurred elsewhere, sometimes referred to as off-site mitigation. In the conservation banking context, bankers commit to permanently protecting the land and managing it to benefit these species.

☑ Since the promulgation of the USACE 2008 Mitigation Rule,[21] there has been continued growth in the numbers of mitigation banks and new in-lieu fee programs being approved to provide third-party compensatory mitigation and a marked increase in the proportion of the country served by third-party mitigation options. As of September 2016, there were 1,588 mitigation bank sites and 52 In-Lieu Fee programs that have been approved by USACE. The increased availability and reliance on these mitigation options result in reduced permit processing times, since these mitigation options are pre-approved. Permit processing times for authorized activities that required compensatory mitigation were faster when mitigation bank credits (120 days) or in-lieu fee program credits were the approved source of compensatory mitigation (136 days), compared to on-site permittee-responsible mitigation (177 days) and off-site permittee-responsible mitigation (243 days).

☑ The Department of the Interior issued their *Departmental Manual Landscape-Scale Mitigation Policy*, 600 DM 6, on October 23, 2015.[22] This document provides agency-level policy and guidance for implementing landscape-scale mitigation associated with regulatory responsibilities in the management of Federal resources under their jurisdiction.

☑ The Regulatory In-lieu Fee and Bank Tracking System (RIBITS) website, https://ribits.usace.army.mil/, was developed by USACE with support from EPA, USFWS, FHWA, and NOAA to provide better information on mitigation and conservation banking and in-lieu fee programs across the country. RIBITS allows users to access information on the numbers of mitigation bank, conservation bank, and In-Lieu Fee program sites, as well as associated documents, mitigation credit availability, and information on national and local policies and procedures for these programs.

[21] http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/mitig_info/
[22] https://www.doi.gov/sites/doi.gov/files/uploads/TRS%20and%20Chapter%20FINAL.pdf

E. Programmatic approaches

B.P.

Federal agencies should explore the use of regional- or national-level programmatic approaches for authorizations and environmental reviews, as appropriate, for frequently occurring activities as well as those activities with minor impacts to communities and the environment.

Programmatic approaches are broad approaches to facilitate or achieve compliance with one or more Federal laws and regulations. Programmatic approaches are implemented using a standardized set of procedures for consultation, review, and implementation. They focus on appropriate issues ripe for analysis and elimination of unnecessary, repetitive, or duplicative discussions. A programmatic approach can be used for plans, policies, programs, and groupings of projects or activities with similarities that merit a broader rather than a project-by-project approach. For example, the USFWS and National Marine Fisheries Service use programmatic consultations as one tool to create efficiencies in their Endangered Species Act (ESA) Section 7 consultation work.

Once established, programmatic approaches may expedite the permitting and review process and facilitate efficient use of agency resources.

☑ Every Day Counts 2: In 2009, FHWA launched Every Day Counts (EDC) in cooperation with the American Association of State Highway and Transportation Officials (AASHTO) to accelerate transportation project delivery via a series of proven innovations. In the second round of EDC, FHWA aimed to expand the effective use of programmatic agreements. As of now, all 50 states now have a programmatic agreement in place and 37 have two or more. Further, through EDC2, FHWA and the U.S. Fish and Wildlife Service developed and deployed a first of its kind Rangewide Programmatic Consultation for the Indiana and Northern-long eared bat.

3. Improving coordination between Federal and non-Federal entities[23]

Effective coordination among Federal and State agencies, Tribal, and local governments that share permitting and review responsibilities can aid in the permitting of complex infrastructure.

A. Improving coordination between Federal agencies

B.P.

Federal agencies should continue to refine and expand unified inter-agency processes, establish common terminology and data standards across agencies, synchronize reviews, and eliminate duplicated efforts. Agencies should work to ensure that inter-agency coordination established at the headquarters level is implemented at the regional and local levels, where most decisions about Federal authorizations and environmental reviews are made.

Federal inter-agency coordination has improved over recent years through development of Inter-Agency Agreements, Memorandums of Understanding (MOUs), and other agreements, examples of which are listed here.

- The Advisory Council on Historic Preservation (ACHP) and CEQ, with the assistance of a multi-agency working group, completed a publication entitled "Handbook for Integrating NEPA and Section 106," in 2013.[24] The document describes how NEPA and NHPA Section 106 reviews can be coordinated in order to align the independent statutory obligations of NEPA and the NHPA for maximum efficiency and effective public involvement. It discusses how coordination can expedite reviews by avoiding duplication of effort and ensuring that the analysis of alternatives fully considers historic preservation in the early stages of project planning.
- The USCG, FHWA, Federal Transit Administration (FTA), and FRA have entered into a MOU in 2014[25] to enhance the efficiency and transparency of environmental reviews and bridge permitting decisions while maintaining the integrity of the permitting process. Per the MOU, USCG and the U.S. Department of Transportation (DOT) will work in a coordinated effort to identify, early in the process, a reasonable range of design alternatives that do not unreasonably obstruct navigation; prepare a coordinated environmental document that avoids consecutive agency review; and concurrently review Bridge Permit application materials whenever possible.
- The USCG and FHWA have also entered into a MOA in 2014[26] which outlines a detailed process for coordinating bridge permit applications for FHWA projects, including the requirements of MAP-21 and 23 U.S.C. § 144(c). The new process requires a navigation impact report to be conducted by the applicant early in the process to identify sizes and types of present and prospective vessels transiting the waterway. USCG will then make a preliminary determination based on the navigation impact report in order to identify design alternatives that would be an unreasonable obstruction to navigation and should not receive further consideration in the NEPA review process.

[23] This section provides the FPISC's recommended best practices for "improving coordination between Federal and non-Federal governmental entities, including through the development of common data standards and terminology across agencies," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(iii).
[24] http://www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf
[25] https://www.environment.fhwa.dot.gov/strmlng/MOU_multimodal_bridge_permits.asp
[26] https://www.environment.fhwa.dot.gov/strmlng/MOA_USCG_bridge_permits.asp

- Interagency Agreement on Early Coordination of Required Environmental and Historic Preservation Reviews Conducted in Conjunction with the Issuance of Authorizations to Construct and Operate Interstate Natural Gas Pipelines Certificated by FERC (2002).[27]
- Memorandums of Understanding were developed between USACE and FERC for Interstate Natural Gas Pipeline Projects (2005)[28] and for non-Federal hydropower at USACE facilities (2011).[29]
- A Memorandum of Understanding was developed between FERC and the Department of Defense (DOD) to Ensure Consultation and Coordination on the Effect of Liquefied Natural Gas Terminals on Active Military Installations (2007).[30]

The following example illustrates efforts to improve Federal inter-agency coordination.

☑ Transportation Liaisons: Since the enactment of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005, the FHWA has promoted the use of transportation liaisons, and established multiple national transportation liaisons. These liaisons are personnel housed in State or Federal resource and regulatory agencies that facilitate the environmental and permitting review process for transportation projects. To support liaisons across the field, FHWA launched the Transportation Liaison Community of Practice which provides best practices and other resources to liaisons, or agencies interested establishing liaison agreements.

For example, the FHWA-USCG Liaison position was created to improve inter-agency communication and bridge permit process transparency between the two agencies. The liaison and FHWA Headquarters staff have traveled to 24 States to train State DOTs, FHWA regional offices and USCG district offices on the USCG/DOT MOU and the USCG/FHWA MOA. This effort has improved communications and supports a more transparent and predictable USCG bridge permit process.

B. Improving coordination between Federal and State governments

B.P.

Although State participation in the FAST-41 process is voluntary, Federal agencies are encouraged to coordinate to the maximum extent practicable with State entities regarding upcoming authorizations and environmental reviews, particularly when novel, nationally significant, or controversial issues may arise. As applicable and appropriate, to establish and maintain a strong collaborative environment between Federal and State entities. Federal agencies should share requirements, align reviews, and work to the maximum extent practicable to develop Federal-State coordination plans. Examples include:

- FERC established a Memorandum of Understanding with the California State Water Resources Control Board on coordinating pre-application activities for non-Federal hydropower proposals

[27] http://www.ferc.gov/industries/gas/enviro/gas_interagency_mou.pdf
[28] http://www.ferc.gov/legal/mou/mou-30.pdf
[29] https://www.ferc.gov/legal/mou/mou-usace.pdf
[30] http://www.ferc.gov/legal/mou/mou-dod.pdf

in California in 2013 and a Memorandum of Understanding with the State of Colorado to streamline and simplify the authorization of small scale hydropower projects in 2010.[31]

- USACE has joint permit applications in 18 States and the District of Columbia. These applications are generally for USACE and the State water quality agency, although other State and local agencies may also use them. Joint applications reduce the paperwork and regulatory burdens on the public by providing a single form that can be used by multiple agencies. In addition, joint applications can facilitate concurrent, rather than sequential, reviews by agencies because the applications can be submitted to the affected agencies at the same time.
- A successful model of Federal-State coordination is the Department of the Interior's (DOI's) California Renewable Energy Policy Group (REPG). Jointly established by the Secretary of the Interior and Governor of California, the team includes representatives from Federal and State agencies with responsibilities for permitting renewable energy and transmission projects, including Bureau of Land Management (BLM), USFWS, the California Energy Commission, California Department of Fish and Wildlife, the California Independent Systems Operator, the California Public Utilities Commission, and the California State Lands Commission. The Policy Group and REPG meet regularly to jointly review a common set of project applications, identifying and resolving issues early in the process; develop joint project permitting milestones which align Federal and State permitting processes; establish "Best Management Practices" for renewable energy development for project developers; and provide a venue for renewable energy stakeholders to speak directly to Federal and State policy leaders. The team has also created an innovative mitigation program with the National Fish and Wildlife Foundation to enable renewable energy project developers to address mitigation requirements through the use of a deposit account, leading to an increase in the transparency of project mitigation and allowing REPG to pool funds to acquire contiguous blocks of quality wildlife habitat. Building on the success of the team's project-specific reviews, DOI and California also undertook a joint Federal-State long-term planning process to develop the Desert Renewable Energy Conservation Plan, which is expected to facilitate the review and approval of renewable energy projects, including solar thermal, utility-scale solar photovoltaic, wind, and other forms of renewable energy and associated infrastructure such as electric transmission lines necessary for renewable energy development, within about 22.5 million acres of the Colorado and Mojave deserts in California.

[31] https://www.ferc.gov/legal/mou.asp

C. Improving coordination between Federal and Tribal governments

Federally-recognized American Indian and Alaskan Native Tribes are sovereign governments predating the United States, and retaining the inherent right to govern their own people and lands. From this stems a nation-to-nation relationship affirmed in the U.S. Constitution, over 400 treaties, statutes and regulations, executive orders, and judicial decisions.

Tribal consultation is a process that aims to build on effective collaboration with the governments of Federally-recognized Tribes and inform Federal decision-makers.[32] Consultation is built upon a government-to-government exchange of information defined, in part, by meaningful dialogue based upon trust, respect, and shared responsibility. Most importantly, this kind of consultation has a defined, agreed-upon purpose, subject, and objective. Meaningful and effective consultation is pre-decisional, in that Tribes are provided a reasonable opportunity to have a voice in Federal decision making and planning. Early and effective consultation helps to ensure that agencies uphold their Federal Trust Responsibility to Tribes. It also may help to reduce the time required to make permitting decisions. Also, Tribal representatives, like other stakeholders, may be more supportive of agency permitting decisions when they are fully informed and engaged throughout the process, understand competing interests, and can trust that their concerns are addressed properly.

Tribal governments may choose to voluntarily participate in Fast-41 processes. All of the best practices listed above in Section 1A for "effective stakeholder engagement" are applicable to Tribal consultations. In addition, the following best practices are recommended to specifically improve coordination between Federal and Tribal governments.

Recognition and respect for Tribal sovereignty

B.P. Federal agencies should ensure that Tribal consultations are conducted in a way that fully respects the government-to-government relationship that exists between the U.S. Federal Government and Federally-recognized Indian Tribes. An understanding of Tribal sovereignty is the foundation for effective communications and meaningful dialogue based on trust, respect, and shared responsibility. Tribal governments must be incorporated into decision-making processes as governmental entities, rather than treated as members of the public, when they may be impacted or have an interest in the project.

Some aspects of Federal infrastructure reviews are commonly delegated to contractors or States, but agencies must not delegate the legal obligation for government-to-government consultation with Federally-recognized Indian Tribes.

[32] Secretarial Order 3317 §4(b), U.S. Department of the Interior, December 1, 2011.

Trust responsibility and treaty rights. One of the basic principles of Indian law is that the United States has a special trust relationship with all Indian Tribes. Congress has repeatedly reaffirmed the trust relationship, and in some cases, Congress has defined the trust relationship in a specific subject area by statute or has imposed specific fiduciary obligations on Executive branch agencies. Even without specific legislation, there is still a limited trust responsibility to consider the interests of Tribes. This unique trust relationship serves as an underlying basis for Tribal consultation practices.

From this nation's founding until Congress's decision in 1871 to end treaty making, the United States entered into many treaties with Indian Tribes. The treaties are agreements between two sovereign nations and are, along with the Constitution and Federal laws, the supreme law of the land. These treaties not only acknowledge Tribal sovereign authority, but also often contain protections of certain rights, such as hunting and fishing, and the guarantee of goods and services, such as food, education, and healthcare. Treaties were also a means by which the Federal Government acquired vast tracts of Indian land, which was used for homesteading, rights-of-way, and the designation of reservations for use by the Tribes and for Indian allotments.

The trust and treaty relationship distinguishes the relationship and communications with Tribes from the relationship with State or local governments.

B.P. It is a best practice for agencies to train their staff to have an awareness of Trust and Treaty rights. Agencies need expertise on hand to understand the legal aspects of Indian law, Tribal law, and Federal Trust and Treaty responsibilities, and to have mechanisms in place to access this expertise from within the Federal family.

B.P. Agencies should develop and implement agency-specific policies addressing government-to-government consultation with Federally-recognized Tribal Nations, in support of the trust and treaty rights. It is a best practice for Federal agency leadership to work to ensure that these policies are consistently applied by Federal staff engaged in permitting and reviews.

Clear, consistent, and timely notifications

B.P. Agencies should initiate government-to-government consultation by providing correspondence with clear information on proposed infrastructure to the correct Tribal representatives, in a consistent and timely manner. Agencies should consult the Bureau of Indian Affairs (BIA) directory to identify the proper Tribal representatives,[33] and consider methods of proactively notifying Tribes, as was done in the FCC example provided below.

Consistent with applicable law, agencies should ensure that notification goes not only to Tribes whose reservation or trust land may be impacted by the proposed project, but also to Tribes with historic, cultural, and spiritual interests in the land or resources that may be impacted.

Notifications need to be provided early enough to allow Tribes to review the issues and engage in consultation before key decisions about the project, e.g., siting, are made. Federal agencies

[33] https://www.bia.gov/WhoWeAre/BIA/OIS/TribalGovernmentServices/TribalDirectory/

should not rely exclusively on web tools to communicate with Tribes because not all Tribal governments have reliable access to the internet.

Proper Tribal notification and consideration of Tribal concerns will help to overcome the perception among Tribes that government-to-government consultations on projects are sometimes conducted to "check a box" on the permit application rather than engage in meaningful dialogue.

☑ Creating a System for Tribal Engagement through the Tower Construction Notification System (TCNS) at the Federal Communications Commission.

The Federal Communications Commission (FCC) developed the Tower Construction Notification System (TCNS) to ensure that all potentially interested Tribes have an opportunity to comment, through the NHPA Section 106 process, on the proposed construction of communications towers and antennas in connection with FCC-licensed services. The program was designed to ensure FCC permit applicants have a reliable, timely way to get Tribal input and address Tribal concerns as they construct networks and that Tribes have the ability to participate in assessing and mitigating any effects that construction may have.

To start, every Tribe has self-identified in TCNS a geographic area of interest based on the Tribe's understanding of its own history and traditions. These areas of interest are typically designated by county or State. Project sponsors enter into TCNS the locations of their proposed constructions and other relevant information. On a weekly basis, TCNS sends notices to the Tribes listing all new proposed projects within their geographic areas of interest. At the same time, TCNS provides the project sponsors with a list of the Tribes notified for each of their projects, as well as with information that some Tribes have indicated they require in order to complete their reviews. To ensure confidentiality of site and project information, project sponsors can view only their own projects, and Tribes can view only projects within their geographic areas of interest.

Tribes are encouraged to inform the project sponsor whether or not they have concerns about a proposed construction within 30 days of notice. After 30 days, if a project sponsor believes that the Tribe has not responded in a timely fashion, it may, after demonstrating active efforts at contact, refer the matter to the FCC staff, which will make its own effort to engage the Tribe. Project sponsors may also refer on a similar basis cases where communication from the Tribe has ceased after an initial response. In general, under the FCC's process, most cases where a Tribe has entirely failed to respond can be resolved within approximately 60 days after submission to TCNS. Under the FCC's rules, unless every Tribe contacted has confirmed it has no further concerns about effects on historic properties, the sponsor cannot construct without specific authorization from the FCC.

The FCC does not consider the use of TCNS by project sponsors as consultation with the Tribes. Rather, TCNS is a tool through which Tribes and the FCC can determine whether or not consultation is necessary. In most cases, Tribes do not request consultation, and no consultation is needed, either because the proposed project raises no concerns or because the Tribe and the project sponsor have agreed on measures that address any concerns. The Tribe's historic preservation staff or Tribal Historic Preservation Officer may ask the FCC's FPO to

become directly involved in any Section 106 review. The Tribe may also request formal consultation between FCC management and the Tribal leadership.

Tribal expertise

B.P. Tribes are experts on their religions, cultures, and historical and aboriginal territories. Agencies should seek out this expertise in determining whether a proposed project could affect Tribal interests. Agencies should consult with Tribes to identify the individuals with the appropriate expertise, fully acknowledge their expertise, and use the information they provide to make informed permitting decisions.

B.P. Agencies are encouraged to explore avenues, in coordination with the project sponsor, to compensate Tribal representatives for costs incurred when they are asked to provide consultant-type services for their special expertise. It is recommended that Federal agencies develop and maintain cost agreements between the agency and the project sponsor as to how and for what the agency will be distributing funds to reimburse Tribal experts. Examples of reimbursable costs may include costs associated with expert consultants to identify and evaluate sites, monitor activities, and conduct research, and travel to support these activities.

☑ The FCC and the United South and Eastern Tribes (USET) agreed on "Voluntary Best Practices for Expediting the Process of Communications Tower and Antenna Siting Review pursuant to Section 106 of the National Historic Preservation Act"[34] on October 25, 2004. This agreement includes the following text in a section entitled "Compensation for Professional Services"

Advisory Council regulations state that the "agency official shall acknowledge that Indian Tribes and Native Hawaiian organizations possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them." (§800.4(c)(1)). Consistent with the ACHP Memorandum on Fees in the Section 106 Review Process, payment to a Tribe is appropriate when an Agency or Applicant "essentially asks the Tribe to fulfill the role of a consultant or contractor" when it "seeks to identify historic properties that may be significant to an Indian Tribe, [and] ask[s] for specific information and documentation regarding the location, nature and condition of individual sites, or actually request[s] that a survey be conducted by the Tribe." In providing their "special expertise," Tribes are fulfilling a consultant role. To the extent compensation should be paid, it should be negotiated between the Applicant and the Tribe.

Location and participation in consultations

B.P. Agencies should ensure that government-to-government consultations are accessible and local, preferably held on Tribal lands or other locations convenient to the Tribe. Alternately, conference calls may be an appropriate option for certain meetings, though face-to-face meetings are preferable.

B.P. Agencies engaged in permitting activities should, to the extent practicable, work to build strong, ongoing relations with Tribal Nations and create opportunities for regular dialogue between

Tribal authorities and agency decision makers. Efforts should be made to by agencies to maintain awareness of Tribal schedules for events such as elections. Agencies should, whenever possible, participate in existing regularly-scheduled regional and national meetings and summits, including the annual White House Tribal Nations Conference, to share information about upcoming projects, discuss concerns, and build relationships. These meetings should be separate from meetings in support of individual projects.

Sharing data

B.P.

Given the government-to-government relationship with Tribes, agencies should ensure that they share data with Tribal governments to the maximum extent practicable, on par with other government entities, consistent with applicable law. Agencies should also work to safeguard information received from Tribes regarding their sacred or undisclosed sites to the maximum extent possible by law. Agencies should also be transparent about the extent to which they are able to protect sensitive information received.

4. Increasing transparency[35]

Transparency of permitting and review processes, timelines, and delays allows project sponsors, elected officials, and other stakeholders to make informed decisions regarding their resources. It provides them with insight on opportunities for engagement, and allows all parties to identify and resolve concerns as quickly as possible. Finally, transparency facilitates the accountability of Federal agencies and promotes maximum efficiency and effectiveness in government.

B.P.

A. Web tools for providing transparency

Agencies should continue to develop and expand tools that provide transparency on Federal permitting and review processes.

☑ Permitting Dashboard for Federal Infrastructure Projects: Building on prior inter-agency efforts, FAST-41 requires the FPISC's Executive Director to maintain an online database known as the Permitting Dashboard.[36] This online tool provides transparency and facilitates inter-agency coordination on Federal authorization and environmental review processes for certain major infrastructure projects, such as those covered under FAST-41. Federal agencies post project-specific permitting timetables to the site in order to provide increased transparency for project sponsors and the public. The site, when fully developed, will allow the government to develop metrics based on data derived from implementation of agencies' permitting timetables for environmental reviews and authorizations. This data will further be analyzed by FPISC to evaluate agency performance, establish a baseline for future agency improvements, and provide a basis of further process improvements.

☑ ORM2 Public: The USACE Regulatory Program maintains an online interactive website that provides the public with a list of pending and final individual permits. This capability was expanded in 2015 to include finalized Approved Jurisdictional Determinations. USACE also uses web-based avatars and interactive information systems to improve service to the public and stakeholders.

[35] This section provides the FPISC's recommended best practices for "increasing transparency," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(iv).

[36] Required by 42 U.S.C. § 4370m-2(b)(1)(A), available at https://www.permits.performance.gov/

B. Clear and concise presentation of analyses

B.P. Agencies should present analyses in a clear and concise manner, without overly technical or industry jargon, consistent with the Plain Writing Act of 2010. Materials that are more readily understandable support transparent communications.

☑ When the Nuclear Regulatory Commission (NRC) completes a final environmental impact statement (FEIS), they provide a reader's guide that more concisely explains the document as well as a summary of the FEIS. For example: http://www.nrc.gov/docs/ML1335/ML13352A015.pdf

☑ The Implementing Quality Environmental Documentation (IQED) effort, which began under FHWA's Every Day Counts (EDC)-2 initiative, promotes current recommendations and best practices for simplifying and expediting the development of environmental documents. The focus is on ensuring that the three core principles of IQED—tell the story, keep the document brief, and ensure legal sufficiency—form the foundation of the NEPA document, and that project purpose and need, consideration of alternatives, and impacts are appropriately documented and included. The next step in this effort, called EDC-3, builds on EDC-2 by incorporating eNEPA. This results in better, more detailed information and as more projects are completed in eNEPA, FHWA can use this data to identify improvements in the project development process, including new opportunities for programmatic approaches to expedite project delivery.

B.P. Agencies issuing permits should ensure that permit language is clear, specific, measurable, and enforceable. Permit language should concisely identify:

- What needs to happen
- Who needs to do it
- How much they need to do
- When they need to get it done
- Where it is to be done
- Any imposed restrictions, limitations, or conditions
- What monitoring and reporting is required, and to whom reports must be sent
- When the permit may be revoked, suspended, or modified

Where the option exists to express permit requirements as best management practices (BMPs) or performance-based numeric limits, emphasis should be given to clear, specific, and measurable numeric limits. For example, where Clean Water Act TMDLs (Total Maximum Daily Loads) or WLA (Wasteload Allocations) affect stormwater runoff, the practice of including information on which TMDLs and WLAs affect the permit reduces the amount of work required of the permittee in interpreting TMDL/WLA documents, and provides greater clarity for the permittee of what water quality-related requirements may apply.

5. Reducing information collection requirements and other administrative burdens[37]

Synchronized review processes, as described in Section 2B, and many of the inter-agency agreements noted in Section 3, lead to reduced information collection and administrative burdens. Additional best practices are as follows.

A. Online permit applications

B.P.

Agencies should develop online or electronic tools so that (1) project sponsors may submit applications and supporting documentation electronically (2) using formats that can be shared easily among agencies, resulting in (3) the online publication of agency authorizations, environmental reviews, and notifications. Electronic preparation and filing of permit applications as well as electronic permit processing can significantly reduce the administrative burden of permitting and reviews for Federal agencies. Agencies should also revise policies and procedures that require paper-based applications and processing.[38] Additional examples are provided in Section 6C.

☑ The Forest Service, working closely with CEQ, developed eMNEPA (the electronic Modernization of NEPA),[39] a modernized electronic platform for managing the often resource-intensive process of conducting environmental reviews under NEPA. The Forest Service saves approximately $8 million per year by not having to prepare, publish, mail, and file NEPA documents manually and by electronically responding to field data calls using this system. For example, one of the most resource-intensive processes has historically been collecting and responding to public comments—which often number in the thousands. eMNEPA includes a tool designed to manage the analysis of these comments, allowing the agency to respond more quickly to public input and allocate its scarce resources to the core work of analyzing project impacts.

B. Tools to help project sponsors produce high quality applications

Agencies should continue to develop and refine training, instructions, and processes that guide project sponsors to prepare high-quality and complete applications. High quality applications avoid the administrative burdens of repeated information requests, revisions, and repeat reviews, and can greatly reduce the time required for Federal review. Instructions should clearly and concisely explain the information required for efficient review of permit applications, and where appropriate, provide examples indicating the level of detail required. There are a number of examples:

- The ACHP has developed an Applicant Toolkit, available at http://www.achp.gov/apptoolkit.html, which provides an overview of the NHPA Section 106 process along with information on topics such as the roles of consultants, consulting with Indian tribes and Native Hawaiian organizations, involving stakeholders, and avoiding inadvertent activities that may adversely affect historic properties. The ACHP has developed an e-learning

[37] This section provides the FPISC's recommended best practices for "reducing information collection requirements and other administrative burdens on agencies, project sponsors, and other interested parties," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(v).

[38] Agencies may still use paper applications and processing certain projects, as appropriate. Sponsors of major infrastructure generally have web capabilities.

[39] http://www.eforest.us/group/emnepa

course about the Section 106 review process from the perspective of permit applicants. The Applicant Toolkit and e-learning course complement one another in providing access to resources to support effective applicant participation in Federal agency NHPA compliance.

- Pre-application Meetings: USACE regulations outline a pre-application process available to potential permit applicants who would like to meet with USACE and other agencies to discuss their proposals and learn about regulatory requirements. Many USACE Districts have set monthly meetings where these formal pre-application meetings are held with each applicant. Districts also have ad hoc and less formal pre-application meetings at the request of project sponsors. Pre-application meetings help inform project sponsors early in the process of the information that will be necessary to complete their applications. This can reduce permit review times by minimizing the number of times the agency must request additional information.
- The USCG has updated its Bridge Permit Application Guide and is available at http://www.uscg.mil/hq/cg5/cg551/BPAG_Page.asp. It now serves as a one-stop resource for applicants, detailing all environmental and navigational requirements for the USCG bridge permit application process.
- Department of Homeland Security (DHS), DOT, Department of Housing and Urban Development (HUD), EPA, the Department of the Army (Civil Works) DOI, Department of Commerce (DOC); the Department of Agriculture (USDA), Department of Energy (DOE), ACHP, and CEQ have developed a Unified Federal Environmental and Historic Preservation Review Guide to provide applicants with an overview of the environmental and historic preservation review process for disaster recovery projects. It is available in the Unified Federal Environmental and Historic Preservation Review Library. https://www.fema.gov/media-library/assets/documents/98911

C. Creating efficiencies within agency processes

B.P. Agencies should routinely conduct comprehensive evaluations of their permitting and review processes, exploring every opportunity to eliminate unnecessary internal process steps, data collection requirements, and other administrative burdens on agencies, project sponsors, and stakeholders.

☑ In February 2013, USACE amended its regulation to allow district engineers to issue verification letters that can have the same expiration date as the Nationwide Permit. Nationwide Permits are issued every five years but verification letters had historically only been valid for two years. By aligning the expiration dates, USACE reduced the regulatory burden on the public by providing them with more time to complete their work so they would not have to submit time extension requests. This effort decreased USACE's workload. The increase in regulatory efficiency and reduction in regulatory burdens better serves the public and meets legal requirements.

6. Use of Geographic Information Systems (GIS) and other tools[40]

Expanding the use of information technology such as GIS, will enhance transparency and collaboration, and support effective and efficient decision making for infrastructure projects. These tools can make scientific data and other information more readily accessible.

A. GIS maps for permitting and project planning

B.P. Federal agencies should ensure that agency personnel are trained and equipped to use existing GIS tools in support of their permitting activities.

B.P. In addition, agencies should support development and integration of GIS tools and data sets that simplify and expedite permitting and project planning efforts. For example, GIS tools can help project sponsors select project sites that avoid ecologically or culturally sensitive areas and can shorten or even eliminate permitting and review processes pertaining to those resources.

To achieve this best practice, agencies could:

- Expand the availability and development of GIS datasets with relevant environmental, cultural, demographic, and other scientific data to improve project planning and siting; assist in early avoidance, minimization, and mitigation of project impacts; and support effective decision making supported by the evidence.
- Continue to develop GIS-based web tools to communicate information through ensuring adequate protections for sensitive location information.
- Share scientific and environmental data in open-data formats to minimize redundancy and hurdles to sharing data, facilitate informed project planning, and identify data gaps early in the permitting and review process;
- Develop or adopt common data standards and formats across agencies to facilitate interoperability, exchange, and layering of agency data and information submitted by project applicants, while leveraging current IT work streams, including the Federal Geographic Data Committee, Federal Emergency Management Agency (FEMA) Base Maps, Unified Federal Review team, and consulting with relevant State Historic Preservation Offices (SHPOs) and Tribal Historic Preservation Offices (THPOs).
- Build off existing policies to develop a data-sharing policy that facilitates sharing of scientific, environmental, and other data relevant for the planning, permitting, and review of proposed infrastructure projects. The new policy would not, however, allow for such data sharing when it may cause violations of privacy laws; protection of proprietary information; environmental or historic conservation laws or other legal protections; or pose a threat to national security.
- Provide protocols for sharing sensitive locational information in a way that it can be used for planning purposes.
- Identify and promote the use of agency IT tools such as NEPAssist, IPaC, and eNEPA.

[40] This section provides the FPISC's recommended best practices for "developing and making available to applicants appropriate geographic information systems and other tools," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(vi).

- Enhance the NEPAssist tool to include seamless integration with the Geoplatform[41], so that users may readily access and add additional data.

☑ EPA's NEPAssist: NEPAssist is a tool that facilitates the environmental review process and project planning in relation to environmental considerations. The web-based application draws environmental data dynamically from EPA Geographic Information System databases and web services and provides immediate screening of environmental assessment indicators for a user-defined area of interest. These features contribute to a streamlined review process that potentially raises important environmental issues at the earliest stages of project development.

☑ Land Status Viewer: The US Forest Service released the web-based, publicly-accessible Land Status Viewer to facilitate project planning and more accurate applications for major infrastructure projects that potentially affect National Forest System Lands (available at https://apps.fs.usda.gov/fsmapviewer/).

☑ ORM2 geospatial database: In 2016, USACE made additional enhancements to the ORM2 geospatial database to further standardize data entry, and regulators were provided with additional online documentation, training, guidance on data management, and increased interactions with district staff to ensure accurate and consistent database entry in their districts. This database is essential for collecting and reporting data in a consistent manner, including impact, mitigation, and location data. The use of geospatial data from internal and external sources is also a component of the ORM2 system, allowing district regulators to use data and perform analyses in support of the decision making process. As a result, decisions are based on the best available information and science, and are made in a timely manner.

[41] https://www.geoplatform.gov/

B. Other public web tools

B.P. Agencies should continue to develop and refine integrated web tools that create efficiencies within the permitting process.

- The USFWS's Information, Planning and Conservation (IPAC) tool.[42] The IPAC is available to everyone, whether private citizens or public employees, who need information to assist in determining how their activities may impact sensitive natural resources, and who would like to obtain suggestions for ways to address these impacts. IPAC is designed to quickly and easily identify USFWS managed resources and suggest conservation measures for a project. IPaC is also designed to assist the USFWS who is charged with evaluating such impacts.
- FHWA's eNEPA.[43] The FHWA Office of Project Development and Environmental review maintains the eNEPA document review tool. Through eNEPA, FHWA hopes to improve inter-agency collaboration, facilitate concurrent agency reviews and deliver real-time issue resolution all resulting in accelerated project delivery. Use of eNEPA leads to a more transparent process that improves communication. eNEPA was developed with the input of State agencies including Arizona DOT, North Dakota DOT, Washington DOT, Wisconsin DOT and the Utah Transit Authority. This winter, FHWA will be launching an updated version of the eNEPA tool, along with communication and outreach efforts.
- FHWA's INVEST.[44] FHWA's INVEST is a web-based self-evaluation tool comprised of voluntary sustainability best practices, called criteria, which cover the full lifecycle of transportation services, including system planning, project planning, design, and construction, and continuing through operations and maintenance. FHWA developed INVEST for voluntary use by transportation agencies to assess and enhance the sustainability of their projects and programs. The criteria are broken into four sets that comprise a comprehensive self-evaluation tool to aid agencies in evaluating the sustainability performance of their projects and programs. The overall goal of INVEST is to improve the sustainability triple bottom line - the social, economic, and environmental outcomes - of highway programs and projects. Supplementary goals include: establishing a method for identifying sustainability best practices in highway systems, projects, and programs; assisting, aiding, and encouraging the implementation of sustainable practices in the field of transportation; continually "raising the bar" in making progress towards more sustainable highway projects; and providing a forum for the exchange of best practices and emerging technologies.
- FHWA's ESA Webtool.[45] The ESA Webtool is an online tool to streamline preparation of Biological Assessments (BAs) and the consultation process under Section 7 of the Federal Endangered Species Act for projects where FHWA is the lead Federal action agency. The tool contains many resources designed to simplify the BA development and review process, including library, glossary and FAQ resources, a downloadable National Biological

[42] https://www.fws.gov/ipac/
[43] https://ecos.fws.gov/ipac/
[44] https://www.sustainablehighways.org/
[45] https://www.environment.fhwa.dot.gov/esawebtool/

Assessment Template with context sensitive instructions, region-specific contacts and resources, and online file cabinets for BA documentation and collaboration.

- Western Association of Fish and Wildlife Agencies (WAFWA) Crucial Habitat Assessment Tool (CHAT).[46] The Western Governors' Wildlife Council developed tools, including CHAT to assist States in identifying and conserving crucial wildlife habitat and corridors across the region. CHAT, later transferred to WAFWA, is a cooperative effort of 16 Western States to provide the public and industry a high-level overview of "crucial habitat" across the West. CHAT is designed to reduce conflicts and surprises while ensuring wildlife values are better incorporated into land use planning, particularly for large-scale linear projects. It is a non-regulatory tool and not intended for project-level approval. Arizona, California, Kansas, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming have already developed State-specific information on priority species and habitat. In addition, the Southern Great Plains CHAT provides information specific to the lesser-prairie chicken, a species with habitat ranging across five States. Other States are continuing to develop individual systems to provide additional State-specific information.
- U.S. Department of Housing and Urban Development's Tribal Directory Assessment Tool.[47] The Tribal Directory Assessment Tool was developed to help users identify Tribes that may have an interest in the location of a HUD-assisted project, and provide Tribal contact information to assist users with initiating NHPA Section 106 consultation. The tool links Tribal geographic areas of current and ancestral interest down to the county level, and perform a variety of queries related to Tribes.
- Regulatory and Permitting Information Desktop (RAPID) Toolkit: U.S. DOE, with support from the Western Governors' Association, has developed the Regulatory and Permitting Information Desktop (RAPID) Toolkit,[48] which provides a centralized location for information about permitting and regulatory requirements for bulk electric transmission and renewable energy projects. The toolkit is an online public resource that provides information on siting and permitting to a broad stakeholder audience. It is a centralized location for stakeholders to work together on State and Federal bulk transmission and renewable energy regulatory processes by using a wiki environment to share permitting guidance, regulations, contacts, and other relevant information. It is a source of information about application processes; best practices; tools for outreach and engagement; and general information regarding natural, cultural, and visual resources, including assessment approaches and mitigation policies and practices. The toolkit also provides guidance on educational and training resources for Federal agency staff and external stakeholders. The toolkit provides project sponsors with greater clarity and predictability about the information required for, and timelines associated with, Federal permitting and review decisions; enhances transparency and understanding by all stakeholders; and leads to more comprehensive and informed applications and permitting and review processes.

[46] http://www.wafwachat.org/
[47] https://egis.hud.gov/tdat/tribal.aspx
[48] http://en.openei.org/wiki/RAPID

7. Training[49]

Federal agencies often educate Federal, State, Tribal, and local permitting officials on their permitting and review processes through online trainings, classroom training, and public outreach meetings. Trainings may be general in nature or focus on a specific type of infrastructure, such as natural gas pipelines, or a specific type of review, such as mitigation banks.

A. Online training

B.P.

Federal agencies should continue to create, refine, consolidate, and publicize online training resources on their permitting and review processes. There are many examples of such resources:

- CEQ has a comprehensive list of NEPA and NEPA-related training on its website (https://ceq.doe.gov/nepa_information/training_compendium.html).
- National Conservation Training Center NCTC has both on-line and classroom training on many topics, including the ESA. https://training.fws.gov/
- DOI conducts comprehensive web- and classroom-based training on various topics related to the permitting process, including land use planning, habitat conservation planning, simple use authorizations, and ePlanning. These courses are designed to help students learn how to integrate more effective collaboration in the environmental planning process, focusing on planning and design to extend guidance from CEQ's Handbook on Collaboration and NEPA. DOI is also planning training workshops for staff and partners to learn more about the Service-wide Mitigation Policy and landscape scale planning.
- In addition to the ACHP and CEQ handbook described in Section 3A of this report, ACHP and CEQ have developed online training to promote the coordination of NHPA Section 106 and NEPA reviews.

B. Classroom training for permitting officials.

B.P.

Federal agencies should continue to provide and refine live training opportunities for Federal, State, Tribal, and local permitting officials.

- USACE holds regular in-person and webinar-based training courses for its staff each year covering every aspect of the regulatory process, including evaluation and decision making, compliance and enforcement, jurisdictional determinations, and compliance with other laws such NHPA Section 106 , Tribal Trust Responsibilities, and Section 7 of the Endangered Species Act.

[49] This section provides the FPISC's recommended best practices for "creating and distributing training materials useful to Federal, State, Tribal, and local permitting officials," as required by 42 U.S.C. § 4370m-1(c)(2)(B)(vii).

8. Best practices for other aspects of infrastructure permitting[50]

FPISC recommends the following additional best practices for infrastructure permitting.

A. Environmental Collaboration and Conflict Resolution (ECCR)

Agencies should continue to use third-party neutral facilitators, trained in ECCR, as appropriate and practicable.

Conflicts may arise in the permitting process as the Federal Government strives to balance competing interests. Environmental review and permitting can be enhanced by collaborative, constructive, and timely approaches to identify and address affected interests, consider alternatives, and reach solutions before different positions or opinions result in conflict.

The recommended approaches for conflict resolution are summarized in a 2012 OMB and CEQ memorandum on "Environmental Collaboration and Conflict Resolution."[51]

Among other things, the memorandum directs departments and agencies to increase the appropriate and effective use of third-party assisted environmental collaboration and environmental conflict resolution to resolve conflicts. Multi-issue and multi-stakeholder environmental disputes or conflicts often take place in high conflict and low trust settings, where the assistance of impartial facilitators or mediators can be instrumental to reaching agreement. The memorandum provides the following mechanisms and strategies to increase the effective use of environmental collaboration and conflict resolution:

- Integration of environmental collaboration and conflict resolution objectives into department and agency mission statements, Government Performance and Results Act goals, and strategic planning;
- Ensuring that department and agency infrastructure support environmental collaboration and conflict resolution;
- Investing in support of programs; and
- Focusing on accountable performance and achievement.

The memorandum calls upon Federal departments and agencies to document their third-party assisted environmental collaboration and conflict resolution planning and implementation efforts in an annual report submitted to OMB and CEQ.[52]

[50] This section provides the FPISC's recommended best practices for "addressing other aspects of infrastructure permitting, as determined by the Council" as required by 42 U.S.C. § 4370m-1(c)(2)(B)(viii).

[51] http://energy.gov/sites/prod/files/OMB_CEQ_Env_Collab_Conflict_Resolution_20120907-2012.pdf

[52] The U.S. Institute for Environmental Conflict Resolution maintains these reports at https://www.udall.gov/OurPrograms/Institute/ECRReport.aspx

B. Incorporating stakeholder feedback

B.P.

Agencies should periodically assess and incorporate feedback from Federal, State, Tribal, and Local governments, project sponsors, and stakeholders, as appropriate, as they strive for continued improvement in the permitting and review process.

☑ USACE sends out national customer service surveys on an annual basis, with subsections for the public, Federal and State agencies, and non-governmental organizations. The information is used to improve USACE's services. The results of the voluntary survey from fiscal year 2013-16 disclosed that respondents from the public are generally satisfied with the length of processing time for a permit decision and/or jurisdictional determinations, with average overall score of 4.1 out of 5, with 5 indicating the highest satisfaction.

Conclusion

The Federal Government has developed tools and processes that allow for greatly improved execution of its authorization and review responsibilities. This helps our nation balance requirements for infrastructure development with requirements to protect our environmental, historical, and cultural resources, and ensures that low income and minority communities do not disproportionately bear adverse impacts of infrastructure development. FAST-41, combined with the FPISC Executive Director's active involvement in covered projects and implementation of some of the recommended best practices in this report, can and will have a positive effect, leading to advances in the timeliness, predictability, and transparency in the permitting of covered projects.

Appendix 1: Agency Acronym Glossary

Acronym	Organization
ACHP	Advisory Council on Historic Preservation
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CEQ	Council on Environmental Quality
DHS	Department of Homeland Security
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
DOT	Department of Transportation
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FPISC	Federal Permitting Improvement Steering Council
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HUD	Department of Housing and Urban Development
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRC	Nuclear Regulatory Commission
OMB	Office of Management and Budget
RUS	Rural Utilities Service
USACE	US Army Corps of Engineers
USCG	US Coast Guard
USDA	US Department of Agriculture
USFS	US Forest Service
USFWS	US Fish & Wildlife Service