Permitting and Compliance Guidance for Meadow Restoration Practitioners V.1.

Levi Keszey

NFWF

The Sierra Meadows Partnership

Collaborative meadow restoration and protection

Contact contributing author, Julie Fair from American Rivers at JFair@AmericanRivers.org for information regarding this document.

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Purpose

The purpose of this document is to improve understanding of permitting requirements for meadow restoration projects in California's Sierra Nevada and Southern Cascades by providing meadow-specific environmental compliance and permitting guidance to restoration practitioners. This project was funded by a grant awarded to California Trout from the National Fish and Wildlife Foundation (NFWF) with technical assistance from the Sierra Meadows Partnership. Specifically, this manual has been reviewed by representatives of the California Department of Fish and Wildlife, U.S. Army Corps of Engineers, California Regional Waterboards (Central Valley and Lahontan), U.S. Fish and Wildlife Service and many NGO practitioners. During the development of this document, there were several instances of conflicting agency interpretations of specific permitting requirements. While most of these inconsistencies have been worked out, it is recommended that practitioners instigate early communication with the appropriate regional offices of permitting agencies. Regional representatives will offer the most modern region-specific requirements, which may differ from requirements of other regions (even within the same agency) and from what is outlined in this document.

The goal of the Sierra Meadows Partnership, in alignment with NFWF's Sierra Nevada Meadow Restoration Program, is to increase the pace, scale and efficacy of meadow restoration throughout the Greater Sierra Nevada. It is our hope that this document will contribute to this goal.

Note: This document emphasizes restoration projects on public lands, although many of the compliance and permitting processes discussed are applicable to all lands.

Part I: Meadow Restoration Conceptual Model

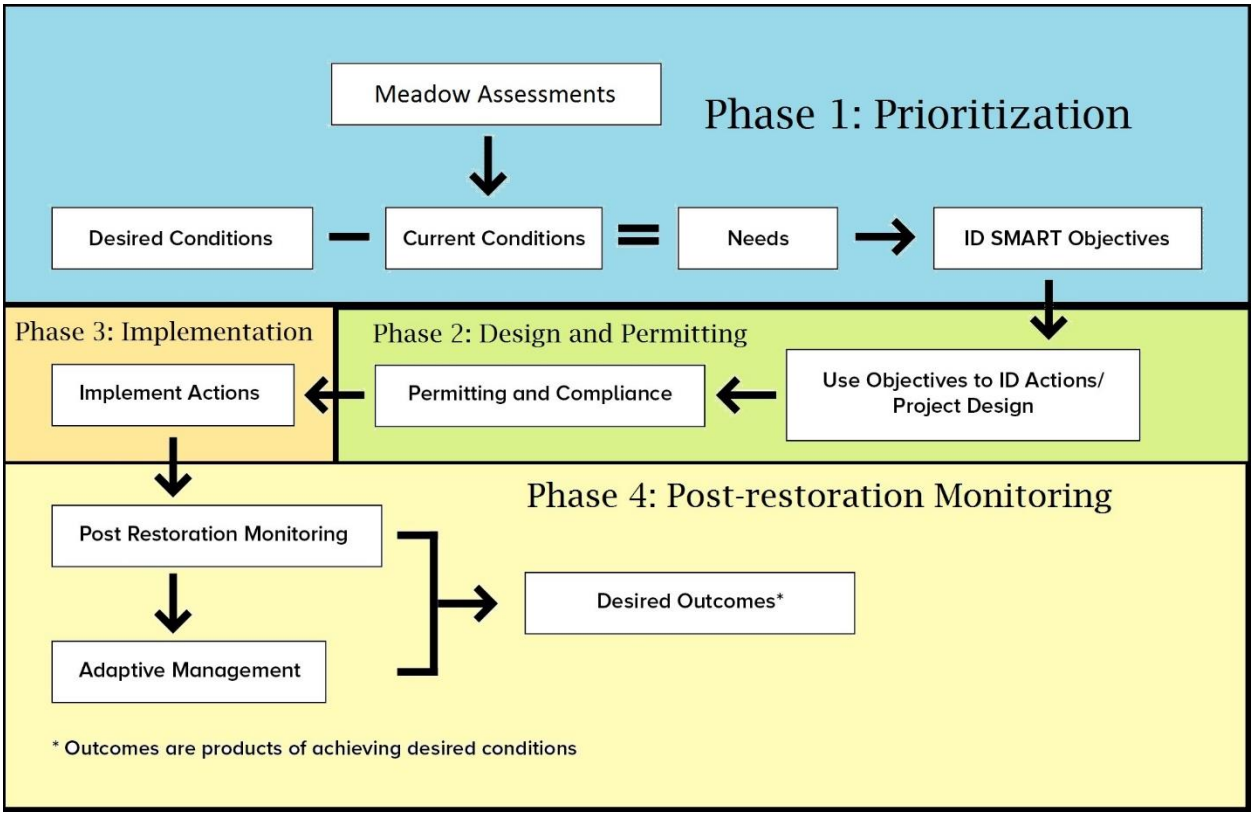


Figure 1: Meadow restoration conceptual model (from Sierra Meadows Strategy, 2016).

Figure 1 outlines the conceptual model for meadow restoration implementation as outlined in the *Sierra Meadows Strategy (2016).* The steps above are meant as guidance rather than a required set of actions. Their primary intent is to ensure that meadows are targeted and designed for restoration and/or protection based upon an assessment of needs and opportunities to most efficiently and directly achieve identified desired outcomes.

As presented in Figure 1, assessment of current conditions relative to desired conditions serve as the basis to determining restoration needs. This assessment can be performed from a landscape to a site-specific scale. Once needs have been identified, SMART objectives (Smart, Measurable, Achievable, Relevant, Timebound) serve as the basis for determining restoration actions. Intended restoration actions form design plans which determine permit and compliance obligations. Obtaining necessary permits and writing the necessary compliance documents then allows for implementation of the permitted actions. Phase 4 aims to assess success of achieving desired conditions through post-restoration monitoring. Data from post-restoration monitoring informs adaptive management to yield desired outcomes.

This document outlines common permitting and compliance requirements for meadow restoration projects as well as a strategic roadmap that offers a timeline for efficient project permitting. In other words, this manual covers the permitting component of Phase II as shown in Figure 1. For additional information and guidance on planning and implementing a meadow restoration project, see *The Sierra Meadows Strategy (2016)* at http://caltrout.org/wpfb-file/sierra_meadow_strategy_full_report_shareable_mid-pdf/.

Part II: An Introduction to Environmental Regulations, Associated Agencies, and Application for Meadow Restoration Projects

National Environmental Policy Act (NEPA)

NEPA requires federal agencies to consider the environmental impacts of proposed actions prior to making decisions. NEPA is a disclosure act, meaning that a federal agency does not have to choose the alternative with the least environmental impacts, but does need to disclose which alternative that is and why they are going to implement another more alternative with greater environmental impacts. NEPA applies whenever a proposed activity or action: 1) is proposed on federal lands, 2) requires passage across federal lands, 3) will be funded in part or in whole by federal money, or 4) will require authorization or other type of permission from a federal agency. NEPA requires an assessment of the effects—direct, indirect and cumulative—of an agency's proposed action on the environment. That assessment includes effects on a wide range of resources, including air, water, cultural resources, animal and plant species and human communities as determined by surveys of these resources and the proposed actions.

NEPA established a nationwide prescribed process for federal decision that requires public involvement, scientific rationale and, where deemed necessary, mitigation measures. It requires all federal agencies to "promote efforts to prevent or eliminate damage to the environment and biosphere" (See Appendix A for NEPA Sec. 101). Specifically, all federal agencies are to prepare detailed statements assessing the environmental impact of, and all feasible alternatives to, major federal actions "significantly" affecting the environment. "Significance" as defined by the Council on Environmental Quality (CEQ) can be found in Appendix D.

Most federal agencies have developed their own NEPA procedures that supplement the CEQ NEPA regulations. These NEPA procedures vary between agencies depending on the missions and activities of the agencies. Thus, in coordinating meadow restoration projects it is important to work within the procedures of the federal agency designated to supervise the preparation of the environmental analysis. This supervising agency is called the "lead agency" and identification and establishment of the lead agency for a given project is a major first step in the compliance process.

In some cases, there may be more than one federal agency involved in the proposed action. In this situation, a lead agency must be designated to supervise the preparation of the environmental analysis, to be responsible for any necessary consolations with resource agencies

and to coordinate with American Tribes and the public. Generally, the lead agency is the federal agency having jurisdiction over the project as determined by the following hierarchy: project proponent, funder, agency landowner, need for authorization or permission. Federal agencies, together with state, tribal or local agencies, may act as joint lead agencies. A federal, state, tribal or local agency having special expertise and not determined to be the Lead can act as cooperating agencies to assist in project scoping, prepare environmental analysis, or make staff support available.

Possible Paths for Compliance (See NEPA Process Flowcharts, Appendix A, Figures 1 and 2

Depending on the likelihood of "significant" environmental impacts, there are three possible paths for NEPA compliance: Categorical Exclusion (CE), Environmental Assessment (EA) or Environmental Impact Statement (EIS). Since meadow restoration projects by their nature generally have a net positive impact on the environment, most projects either fit a CE or require an EA. Since these are the most common for meadow restoration, they will be described in greater detail than the EIS process.

Categorical Exclusion (CE)

A Categorical Exclusion (CE) is an action that a federal agency has deemed to have minimal or no environmental effect and is thus exempt from NEPA. If the lead agency determines that the environmental effects of a proposed action are not likely to be significant, and it fits in the description of one of the agency's CEs, you are eligible to pursue the path of a CE for NEPA compliance. Each federal agency has their own evolving set of CEs. Preparation and approval of a CE usually takes less time than an EA or EIS and is significantly less expensive. If a project is eligible for a Categorical Exclusion, the agency must also document that there are no extraordinary circumstances that would preclude compliance. Extraordinary circumstances include the presence of listed species, municipal (supply) watersheds, congressionally designated areas (such as wilderness areas), cultural or historic sites and other site-specific considerations. Even if eligible for a CE, an EA should be considered for restoration projects that create large-scale disturbance, such as pond and plug, because of the uncertainty of the level of significance of the landscape manipulation required with such a technique.

Due to the distribution of meadows across the west, the United States Forest Service (USFS) will often, though not always, serve as the lead agency for NEPA**. The following procedures are specific to the USFS NEPA process and may or may not apply to a project on non-Forest Service lands.**

United States Forest Service Categorical Exclusions that often apply to meadow restoration include, but are not limited to: *(From USFS NEPA Procedures 36 CFR 220*)

USFS CE #7: Modification or maintenance of stream or lake aquatic habitat improvement structures using native materials or normal practices. This category is applicable when using

native materials to restore hydrologic functionality of a meadow, particularly overland flow for improvement of habitat.

USFS CE # 18: Restoring wetlands, streams, riparian areas or other water bodies by removing, replacing, or modifying water control structures such as, but not limited to, dams, levees, dikes, ditches, culverts, pipes, drainage tiles, valves, gates, and fencing, to allow waters to flow into natural channels and floodplains and restore natural flow regimes to the extent practicable where valid existing rights or special use authorizations are not unilaterally altered or canceled. This CE is applicable when reconnecting a meadow's overland flow regime to its naturally-evolved floodplain. The "modification" of water control structures can include addition of fill material to incised gullies or headcuts, or the removal of historic berms that disrupt natural meadow hydrology.

USFS CE #19: Restoring uplands, wetlands and riparian systems to pre-disturbance conditions, to the extent practicable, by removing debris, sediment, and hazardous conditions following disturbance events. This category of actions is applicable when restoration aims to repair a meadow system from a specific human or naturally caused disturbance.

USFS CE #20: Restoring or stabilizing lands occupied by roads and trails, excluding National Forest System roads and National Forest System trails to natural conditions. Though this CE excludes FS roads and trails, it may be used in other situations where restoration is necessitated by the impact of roads or trails.

Summary of USFS CE Process (Appendix A Figure 2):

1) Enter proposed project information into the Schedule of Proposed Actions (SOPA)
2) Conduct scoping analysis
3) Inform participants and the public of the results of scoping
4) Identify appropriate CE
5) Determine if extraordinary circumstances apply
6) Write and release decision memo

A Decision Memo is written by the Deciding Official within the lead agency and includes: title of the CE, reasons why CE is applicable, justification of no extraordinary circumstances, discussion of public involvement in process, consistency with LA management plans, implementation date and contacts. (Template at https://www.fs.fed.us/emc/nepa/nepa_templates/nepatempDM.htm).

Environmental Assessment (EA)

If environmental effects are uncertain or the category of actions is not adequately addressed by an agency CE, then an EA is the appropriate compliance path. The purpose of an EA is to determine the level of significance of impacts. If environmental effects are found to be significant, an EIS is needed. If, based on the EA, environmental effects are determined to be insignificant, a Finding of No Significant Impact (FONSI) is prepared. If environmental impacts would be significant, but mitigation measures reduce impacts to less than significant, then a Mitigated FONSI may be employed. In two circumstances NEPA requires agencies to make the proposed FONSI available for a 30-day public review period: 1) If the type of proposed action

hasn't been undertaken before by the agency or 2) If the action is something that would typically require an EIS under the agency's NEPA procedures. Following the FONSI process, the lead agency decides whether compliance was met.

Most litigation of EAs include a question of whether the impact of the Proposed Action is indeed significant, and thus an Environmental Impact Statement (EIS) – the highest level of analysis – should be completed. Significance as defined by the CEQ can be found in Appendix D. This can usually be avoided by early and broad stakeholder engagement and through the Public Scoping Process.

Summary of USFS EA Process (Appendix A Figure 2):

1) Enter proposed project information into the Schedule of Proposed Actions (SOPA)
2) Conduct scoping analysis
3) Inform participants and the public of the results of scoping
4) Form interdisciplinary project team
5) Write and release project initiation letter
6) Develop a framework for analysis (i.e. what potential impacts will be assessed)
7) Collect and interpret data
8) Formulate alternatives and analyze effects
9) Determine environmental impacts
10) Write a Notice of Intent (NOI) to announce intent to prepare an EA.
11) Finding of no significant impact (FONSI) or mitigated FONSI
12) Write and distribute EA/Decision Notice

The Decision Notice outlines the findings of the EA whether a FONSI, Mitigated FONSI or need to prepare an EIS. This document contains: project location, purpose and need for proposal, public involvement and tribal consultation, proposed action and alternatives, environmental impacts of proposed action and alternatives, mitigation measures, list of agencies and persons consulted and the EA decision.

(Template at https://www.fs.fed.us/emc/nepa/nepa_templates/nepatempEA.htm).

For both EAs and EIS, a public scoping period is required as follows.

1) A draft EA/EIS is published (along with a Notice of Availability (NOA) of the document) for public review and comment for a minimum of 45 days, after which the involved agencies consider, and incorporate, all substantive comments and if necessary, conduct further analysis.
2) The final EA/EIS is published (and an NOA) that provides responses to public concerns, beginning a 30 day "wait period", in which the agency hears final comments before making a final decision on a proposed action.
3) The NEPA compliance process concludes once a Record of Decision (ROD) has been publicly released by the lead agency that outlines the potential impacts and public

concerns of the project as well as the mitigation measures to be implemented to reduce or eliminate impacts.

Environmental Impact Statement (EIS)

If there is the potential for significant environmental impacts, an EIS, the most in-depth NEPA documentation, must be completed. This process is the most time-consuming because of the level of analysis, the drafting process and multiple public comment periods. An EIS contains much of the same information required for an EA with the major emphasis on a development of alternatives and the environmental impacts of alternatives. This type of environmental document is not usually required for meadow projects, but may be if the lead agency has never implemented proposed actions or if the proposed actions have unknown outcomes. In practice meadow restoration practitioners help coordinate the collection of pre-restoration data (such as archaeological and biological surveys) but leave the writing of the EIS document to staff within the lead agency.

When the lead agency makes the determination that there are potential significant environmental impacts of the proposed project, the lead agency publishes a Notice of Intent (NOI) in the federal register that informs the public of the upcoming analysis and how to be involved in the EIS process. This starts the scoping period outlined above. Figure 2 in Appendix A outlines the USFS EIS process in more depth.

California Environmental Quality Act (CEQA)

Much like NEPA, the purpose of the CEQA review is to identify and prevent significant environmental impacts from proposed actions. CEQA applies to state discretionary projects that may cause either a direct change in the environment or a reasonably foreseeable indirect change in the environment. Specifically, CEQA applies to projects directly undertaken by any California state, regional or local agency (but not Federal), activities financed by a state government agency, or private (or federal) projects which require approval from a state government agency. CEQA requirements apply to public agency projects including "activities directly undertaken by a governmental agency, activities financed in whole or in part by a governmental agency, or private activities which require approval from a governmental agency" (*Id.* At 14 CCR § 15002, subd. (b) (1) -(2)). CEQA also applies to private projects that involve governmental participation, financing, or approval (*Id*. at §§ 15002, subd. (c) & 15378, subd. (a)(2)). At a minimum, an initial review of the project and its environmental impacts must be conducted to determine whether further analysis and documentation is needed.

CEQA is a self-executing statute enforced by the public or public agencies through involvement in administrative review processes or litigation. Thus, there is a need to determine a lead agency who will ultimately determine the level of environmental analysis needed based on potential environmental impacts, regional history, interested parties and threat of litigation. The lead agency is the *state,* local or regional public agency with the principle responsibility for approving or carrying out the project (CEQA Guidelines, Sect. 15367, 15379). In determining the lead

agency for a meadow restoration project, the following criteria can be used to determine which agency should serve as lead:

1) The public agency carrying out the project;
2) The public agency with the greatest responsibility for supervising or approving the proposed project, if the project proponent is not a state, regional or local agency.
3) The public agency with general governmental powers (i.e. city or county rather than the Regional Water Quality Control Board) (CEQA Guidelines Sect 15051).

The other involved public agencies are called either "responsible agencies" or "trustee agencies" and must be consulted with during the CEQA process by the lead agency. For example, CDFW is a trustee agency whenever a project may affect fish and wildlife of the state. Although the CEQA lead agency must be a public agency, the project proponent(s) and their consultants usually lead preparation of environmental analysis and materials used by the lead agency in their decision making. Non-governmental project proponents and consultants can help move the CEQA process forward by supplementing the capacity of the State or local agency.

The CEQA Guidelines are found in the California Code of Regulations, Chapter 3 of Title 14. These guidelines include objectives, criteria and procedures for orderly evaluation of projects and preparation of documents. The general process for CEQA includes evaluation to determine:

1) Whether the project is exempt under CEQA. Certain projects are exempt from CEQA either by law (statutory exemptions) or because they fall within classes of projects that have been determined generally not to have a significant effect on the environment (categorical exemptions).
2) Whether the project may have a significant and adverse effect on the environment; and
3) Which level of CEQA review will be required and which compliance document will be prepared (CEQA Guidelines, Sect. 15002).

Possible Paths for Compliance (See CEQA Process Flowchart, Appendix A, Figure 3)

Categorical Exemption (CE):

The least onerous path for CEQA is through a CE. Information about CEs is included in Article 19 of the CEQA guidelines. Meadow restoration projects with small areas of disturbance are often categorically exempt under Section 15333 Small Habitat Restoration Project. A project may fit this exemption if it, 1) is less than 5 acres of disturbance, 2) assures the maintenance, restoration, enhancement or protection of habitat for fish, plants, or wildlife, 3) does not have significant adverse impact on listed species or their habitat, 4) would not expose the site to hazardous materials and 5) will not result in negative impacts when viewed relating to past or future projects, and it is not precluded from exemption by any exceptions (Section 15300.2)

In practice, for a lead agency to determine where project is exempt under Section 15333, the project proponent needs to provide documentation that it meets the criteria for the exemption (above). This usually includes developing a concise, but informative project description and

maps that explain the nature and size of the project. To demonstrate that the project does not have a significant impact on listed species or their habitat, it also usually includes preparing a Biological Assessment or similar document that analyzes the occurrence or potential occurrence of state and federally listed species and the potential effects of the project on those species (see Endangered Species Consultation section). On public land, if a Biological Assessment has been prepared for the project during the NEPA process, it can provide the appropriate documentation provided it addresses state listed species (not just federal). An initial study can substantiate an exemption as well, but is not usually necessary.

Negative Declaration (ND)

If the project does not fit an exemption, an Initial Study is prepared as a preliminary investigative tool to identify potential environmental effects as the basis for determining whether to prepare an EIR or Negative Declaration. The Initial Study is described in Section 15063 of the CEQA Guidelines. The requirements of an Initial Study can be met by completing the CEQA Environmental Checklist Form for the project. This is found in Appendix G of the CEQA Guidelines. In practice, this requires at least developing documentation of project impacts on biological resources (as described for the CE documentation) and cultural (archeological) resources, and other environmental factors as applicable.

If from the initial study the lead agency determines that the project does not have a significant negative impact on the environment, it may prepare a ND and circulate it for public review through the Governor's Office of Planning and Research State Clearinghouse (state agencies) or County Clerk's Office (local agencies). After a 30-day public review period, the lead agency considers and approves the ND.

Mitigated Negative Declaration (MND)

If the lead agency identifies potential significant negative impacts, but the impacts can be mitigated to a less than significant level, a MND may be prepared and circulated via the state clearinghouse or County Clerk's office for a 30-day public review period. The lead agency must also develop and adopt a Mitigation Monitoring and Reporting Program (MMRP) to ensure continued mitigation of negative environmental effects. NDs and MNDs are common paths for meadow restoration projects which almost never require more environmental review than this level.

Environmental Impact Review (EIR)

An EIR is required for all projects that have the potential to result in significant adverse environmental effects. An EIR requires an agency to identify and analyze feasible alternatives to reduce environmental damage to the extent possible. If an agency decides to move forward with a potentially damaging project it must substantiate its specific benefits despite unavoidable effects and adopt a Statement of Overriding Considerations (SOC) that articulates the ultimate merits of approving a project despite its environmental damage. A MMRP is also required if an agency is pursuing compliance through an EIR. Following the public and agency review and

comment period, the lead agency is required to provide proposed responses to public agency comments at least 10 days prior to certification of the EIR.

Due to the drafting process, public reviews, constant consultation between the lead agency and all responsible agencies and the RO, the EIR process is the most time and cost intensive environmental review for CEQA compliance.

CEQA Completion

In California, the California Department of Fish and Wildlife (CDFW) requires a fee for ND, MND and EIRs prior to CEQA completion. The fees are adjusted annually, but can be found at (https://www.wildlife.ca.gov/Conservation/CEQA/Fees). The CEQA compliance process is complete when a Notice of Determination (NOD) is filed by the lead agency and must be filed within five working days after decision. If the lead agency is a state agency (such as the Regional Water Quality Control Board), the NOD is filed with the Governor's Office of Planning and Research (GOPR) state clearinghouse. If the lead agency is a local agency (such as a county), then the NOD is filed with the county clerk(s) office of the county or counties in which the project will be located.

Opportunities to Combine NEPA and CEQA Processes

Preparing joint NEPA/CEQA documents should be done whenever possible. Conducting joint scoping, noticing, review periods and resource assessments can streamline both permitting processes. The CEQA guidelines contain a section on preparing joint documents. All too often, especially with federal projects, NEPA is done first but doesn't entirely satisfy CEQA requirements and then a separate CEQA document must later be prepared.

U.S. Army Corps of Engineers (USACE)

The U.S. Army Corps of Engineers, through its Regulatory Program, administers and enforces Section 10 of the Rivers and Harbors Act of 1899 (RHA) and Section 404 of the Clean Water Act (CWA). Under RHA Section 10, a permit is required for work or structures in, over or under navigable waters. Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States. For meadow restoration projects, the Corps' jurisdiction is likely limited to Section 404.

California contains three USACE Districts: Sacramento, San Francisco and Los Angeles, all of which are part of the South Pacific Division. Most Sierra meadows fall within the Sacramento District. Projects planned for Siskiyou County are in the San Francisco District; those in southern Mono and Inyo Counties are under the jurisdiction of Los Angeles District.

Section 404 of the Clean Water Act (CWA)

Section 404 of the Clean Water Act provides USACE the authority to regulate discharges of dredged or fill material into waters of the U.S. There are two categories of permit that the Army Corps administers under the CWA: General Permits, which authorize specific activities known to have minimal impacts to aquatic resources; and Individual Permits, which authorize projects proposing greater than minimal impacts. Meadow restoration projects generally fall under

Nationwide General Permit 27 which authorizes activities associated with restoration, enhancement, and establishment of wetlands, riparian areas, streams and other open water areas, provided those activities result in net increases in aquatic resource functions and services.

The first step toward obtaining authorization under Section 404 is an Aquatic Resource Delineation (commonly called a Wetland Delineation) of the project area. There is guidance regarding delineations on the Districts' websites, including the 1987 Wetlands Delineation Manual, Regional Supplements, "Minimum Standards for Acceptance of Preliminary Wetlands Delineations" and "Final Map and Drawing Standards for the South Pacific Division Regulatory Program". Although there is no official certification for delineation practitioners, there are numerous experienced consultants in California. The Sacramento District lists many of these on the website under "Jurisdiction".

When the delineation is complete, it should be submitted to USACE in the form of a Wetland Delineation Report. In the case of mountain meadows, USACE expects the delineation to identify areas of wetlands showing the characteristic hydrophytic vegetation, hydric soil and hydrology. All delineated wetland area is under the jurisdiction of the USACE. If a stream(s) is present, the boundary of USACE's jurisdiction also includes waters below the "ordinary high-water mark" ("Line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means…" 33 CFR 328.3). Unless a project proponent believes that some waters on the project site are not jurisdictional, one would request an aquatic resource delineation verification or a "preliminary jurisdictional determination" (PJD) which identifies the potential limits of wetlands and other aquatic resources at the project site which may be subject to U.S. Army Corps of Engineers jurisdiction under Section 404 of the Clean Water Act. It should be noted, however, that a jurisdictional determination is not necessary for permitting purposes, so the Corps now frequently simply verifies the aquatic resource delineation. Advantages are the speed with which the Corps can complete a PJD or aquatic resource delineation verification and the fact that they do not, like "approved jurisdictional determinations", expire automatically.

Although it is possible that a large, complex meadow restoration project would require evaluation under individual permit procedures, it is much more likely that restoration/enhancement/establishment projects would meet the terms and conditions of Nationwide General Permit (NWP) 27 which covers Aquatic Habitat Restoration, Enhancement, and Establishment Activities. NWP 27 authorizes activities in waters of the United States associated with the restoration, enhancement, and establishment of wetlands and riparian areas, and the restoration and enhancement of streams and other open waters, provided those activities result in net increases in aquatic resource functions and services.

Complex or particularly large restoration projects may warrant a pre-application meeting, but most project proponents can initiate permit processing with submittal of a Pre-Construction Notification (PCN). A fillable PCN form that is used by all three USACE Districts in California and

extensive instructions are located on each District's website. Corps Regulatory Project Managers (PMs) are available to assist in filling out the PCN form, if necessary.

The PCN is intended to provide PMs with adequate information about the proposed project, particularly details regarding impacts to aquatic resources. Thus, an assessment of the functions and ecological services of jurisdictional wetland(s) and/or other waters on the project site will assist PMs in evaluating the potential effects of the proposed project and whether the work complies with the terms and conditions of NWP 27. Although consideration of off-site alternatives is not required, the project proponent should investigate on-site alternatives that could avoid or minimize impacts to waters. For projects proposing the loss of greater than 1/10-acre of wetlands, the PCN should include a description of compensatory mitigation. Note that for wetland meadow restoration, it is expected that the intent of the work is to improve functions and services, and often will increase wetland acreage. This should be clearly stated and justified in the PCN.

As identified in the regulations and in the instructions for the PCN form, USACE must also comply with Section 7 of the Endangered Species Act (see Endangered Species Act Consultations, below) and Section 106 of the National Historic Preservation Act prior to deciding on a permit action. The Corps relies on applicants, such as a meadow restoration proponent, to provide adequate information regarding the presence of listed species and expected effects of the proposed work so that the USACE can initiate consultation with US Fish and Wildlife Service. In addition, the applicant is expected to provide information on historic (over 50 years old) and cultural resources that are in the Area of Potential Effects (APE), so that the USACE can consult under Section 106 with the State Historic Preservation Officer. For projects where the Corps is the lead (or only) federal agency, the APE consists of the waters on the project site and adjacent uplands.

For the purposes of NEPA, Environmental Assessments were prepared at the Headquarters USACE and District levels during the reauthorization of the Nationwide General Permits in 2017. The Corps does, however, prepare a decision document for each permit action which details compliance with the various acts and justifies added Special Conditions and/or compensatory mitigation. This document is called a Verification Letter and signifies receival of a general permit. The verification letter, which the USACE sends the project proponent, will list any Special Conditions, including any that specifically address mitigation.

Finally, even if USACE determines that the proposed meadow restoration project complies with all the terms and conditions of NWP 27, including compliance with Section 7 and Section 106, work cannot commence until the project proponent has obtained Section 401 Water Quality Certification from the State (see Section 401 Water Quality Certification, below).

Endangered Species Consultations

Federal agencies (with input from their project partners or applicants) must consult with National Marine Fisheries Service (NMFS) and/or U.S. Fish & Wildlife Service (FWS) when any

action agency carries out, funds, or authorizes a project that may affect a listed endangered or threatened species or designated critical habitat, as required by Section 7 the Endangered Species Act of 1973 (ESA).

Compliance with the Endangered Species Act for wet meadow and meadow stream restoration projects will typically be through the ESA Section 7 process given the "federal nexus" triggered as result of their designation as "waters of the U.S." by the Clean Water Act or projects occurring on Forest Service or other Federal lands. Projects with no federal nexus may be permitted through section 10 of the ESA. For information on the permitting process through section 10 of the ESA, please contact your local FWS or NMFS office.

NOTE: *If it is determined through the review process that the project could impact federally-listed anadromous species or Essential Fish Habitat, consultation will need to be initiated with NMFS. However, for purposes of this section, the remaining reference to ESA consultation will be referring to consultations with the FWS regarding all non-anadromous federally-listed species.*

Consultation steps for meadow restoration projects (See FWS Flowchart, Figure 5, Appendix A)

Step 1: Review of Listed Species in Action Area

The lead agency (also referred to as the "Action Agency") conducts an environmental review of available resources to determine whether there are any known federally-listed, or proposed-for-listing, species present within the proposed area of potential impact. It's recommended to start this review by initiating a project plan to streamline the review process through the FWS' Information for Planning and Consultation (IPaC) website.

Through the IPaC review process, the project proponent will be able to define the project area and receive an official species list. The Official Species List is required to be retained for any federal project.

It is also recommended to check the California Dept. of Fish & Wildlife's "California Natural Diversity Database" (CNDDB) for known species occurrences within the project area through RareFind or other CNDDB access programs.

Step 2: Technical Assistance (optional)

Lead federal agencies and project applicants may wish to discuss the proposed project during the early stages of project development, prior to initiation of formal or informal consultation with the FWS (see step 3, below for a discussion of the consultation process). While not required, working with the FWS early in the process can help to identify potential adverse effects to listed species, identify potential conflicts early, and the agencies can work together to develop measures to avoid or minimize adverse effects. The FWS may request additional information such as surveys that will aid in the future consultation process.

Step 3: Determine whether informal or formal consultation is necessary

Once all available resources for federally-listed species potentially in the project area have been exhausted, an effects determination may be made. There are three potential determinations

that may be made: (1) no effect; (2) may affect, not likely to adversely affect (informal consultation); or (3) likely to adversely affect (formal consultation).

Below is a summary of appropriate steps for each effects determination:

(1) No effect

The appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat. No further action is required for ESA Section 7and no need to consult with, or contact FWS. Keep records of the review, including Official Species List, in case questions come up later about the determination findings.

(2) May affect, not likely to adversely affect (NLTAA)

This conclusion is appropriate when effects to the species or critical habitat are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact (and should never reach the scale where take occurs), while discountable effects are those that are extremely unlikely to occur. A determination of NLTAA requires an "Informal Consultation" with the appropriate federal agency (NMFS or FWS); The lead agency will provide a cover letter and supporting information to the FWS that explains their determination that the action is not likely to adversely affect listed species and critical habitat and provides the data and any other pertinent information used to make that determination. The FWS will respond with one of the following: (1) a letter stating that they concur with the NLTAA determination (in which case, no further consultation is required); (2) the FWS requests additional information to support the lead agency's conclusion (e.g. species surveys or more detailed project information) or recommends additional avoidance or minimization measures to reduce the project's effects in order to concur with a NLTAA conclusion; or (3) the FWS doesn't concur and believes that "Likely to adversely affect" is the appropriate conclusion and recommends formal consultation (see below).

(3) Likely to adversely affect

The appropriate conclusion when a proposed action is determined to pose effects on listed species or designated critical habitat. A determination of Likely to Adversely Affect requires formal consultation with the FWS. The lead agency prepares a Biological Assessment (BA) for the FWS. The BA contains a project description, a description of the physical and biological attributes of the action area, including current habitat conditions for listed species (and, if known, include population status and trends), an analysis of potential effects to listed species, proposed conservation measures, and other relevant information to aid the FWS in the development of a biological opinion (BO). For critical habitat, identify the primary constituent elements that occur in the action area. See the FWS Section 7 Handbook (FWS/NMFS 1998) for a complete list of information typically provided in a BA. The FWS has 30 days to determine whether there is adequate information to complete consultation. If not, the FWS will indicate what additional information is required. Once all information has been provided, the FWS has

135 days to provide a BO. Even restoration projects that will result in long-term benefits, but have short-term impacts could require a BO.

California Department of Fish and Wildlife (CDFW)

Under California Fish and Game Code, CDFW is the trustee for fish and wildlife resources and must consult with lead and responsible agencies and provide, as available, the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities. (Fish and Game Section 1802).

California Endangered Species Act (CESA)

The California Endangered Species Act directs CDFW to work with interested persons, agencies and organizations to conserve populations of state-listed species. CESA consultation procedure depends on whether the project would affect species that are both federally and state-listed or only state-listed, and whether "take" will occur (as defined by Section 86 of the Fish and Game Code).

The general CESA consultation follows the steps below:

1) Prepare and submit a CEQA document for the project and a Biological Evaluation/Assessment to CDFW.
2) If the project will affect (not necessarily negatively affect) species that are both federally and state-listed, request CESA coordination from DFW. If USFWS determines that the project is not expected to result in take, obtain a letter of concurrence from CDFW. If USFWS determines that the project is likely to result in take, request a Consistency Determination (CD) (pursuant to Fish and Game Code 2080.1) from DFW. A CD states whether CDFW finds the federal documents consistent with CESA.
3) If the project will affect species that are state listed only, send a copy of the BA to DFW to request consultation with a DFW biologist.

If take of state listed species is likely to occur, an Incidental Take Permit (ITP) under CESA is required. Section 2081 subdivision (b) of the Fish and Game Code allows CDFW to issue an Incidental Take Permit (ITP) for a species listed as candidate, threatened or endangered species only if specific criteria are met:

1) The authorized take is incidental to an otherwise lawful activity.
2) The impacts of the authorized take are minimized and fully mitigated
3) The measures required to minimize and fully mitigate the impacts of the authorized take:
   A) Are roughly proportional in extent to the impact of the taking on the species.
   B) Maintain the applicant's objectives to the greatest extent possible and
   C) May be successfully implemented by the applicant
4) Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures.

5) Issuance of the permit will not jeopardize the continued existence of the CESA-listed species.

No ITP can authorize take of "fully protected species" and "specified birds". This is usually not an issue for meadow projects, but a list of these species can be found on the CDFW website (http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fully_pro.html).

To initiate the ITP process, contact the regional CDFW office.

CEQA must be completed before an incidental take permit is issued.

Lake or Streambed Alteration Agreement (LSAA)

Fish and Game Code Section 1602 requires an entity to notify CDFW prior to commencing any activity that may, 1) substantially divert or obstruct the natural flow of any river, stream or lake; 2) substantially change or use any material from the bed, channel or bank of any river, stream or lake; or 3) deposit debris, waste or other materials that could pass into any river, stream or lake. This would necessitate the need for an LSAA on many meadow restoration projects. The need for an LSAA, however, may be impacted by a prior agreement between CDFW and partner agency. Early coordination with CDFW is key for success, and will make clear which permits are needed.

California State Water Resources Control Board (SWRCB)

In California, the California State Water Resources Control Board (SWRCB) administers the National Pollutant Discharge Elimination System (NPDES), which as authorized by the Clean Water Act, controls pollution by regulating point sources. The SWRCB also administers the state's water quality, water pollution control and water rights as prescribed by California's Environmental Protection Agency. The State Board guides and funds the nine Regional WQCBs (Waterboards) which conduct planning, permitting and enforcement in water issues in their region.

Partners at the Waterboards recommend consultation with the Regional Waterboard during the design phase of a project and concurrently or following initial communication with the Army Corps. This can be done by contacting the Regional Waterboard office geographically closest to the project and asking for the Dredge and Fill or 401 Program. After initiation of this communication, a project will typically be assigned a Waterboard employee to act as a point of contact. The two Regional Waterboards that will most commonly administer permits for meadow restoration projects are the Lahontan and Central Valley Regional Water Quality Control Boards. Both Regional Waterboards provide project and basin-specific guidance to practitioners and will frequently review drafts of applications for all permits they administer prior to submission. Early consultation with the Regional Boards help the implementer have clarity regarding which permits may be necessary for a given project as well as helping the Waterboards with their internal workload planning. Region 5 (Central Valley) expects early coordination as permit requirements differ between regions and change over time. Early consultation will ensure that a project is input in the Region's workplan thus reducing delays.

NOTE: Storm water discharges in the Lake Tahoe Hydrologic Unit are regulated by separate construction permits through the Lahontan Regional Waterboard, but still handled via the online Storm Water Multiple Application Report and Tracking System (SMARTS).

Construction Storm Water Permit

A Construction Storm Water Permit also called a Construction General Permit (CGP) is required when a project disturbs more than 1 acre of soil. Construction activities subject to this permit include clearing, grading and excavation. This will typically apply to meadow restoration projects, although the Central Valley Regional Water Quality Control Board (Region 5) may not require a CGP if your project has already been issued a 401 permit and the footprint of the project is within USACE jurisdictional areas. CGPs are issued by the State Waterboard but consultation with Regional Waterboards initiates the permitting process.

The CGP is implemented by the State Waterboard through the NPDES program, which aims to control water pollution by regulating point sources including sediment and other pollution created by construction activities, including restoration. California's Regional Waterboards administer region-specific water quality objectives and these objectives determine which types of activities would be allowed to occur with a CGP. These water quality objectives, along with beneficial uses and prohibitions are outlined on basin-specific scales in planning documents called Basin Plans. Most Regional Waterboards make their Basin Plans available online and it is recommended that project implementers consult the appropriate document for the proposed project area to determine which, if any, basin prohibitions, beneficial uses and water quality objectives may be pertinent to the project. Regional Boards will walk implementers through the pertinent objectives and prohibitions and their associated metrics. Of concern to meadow restoration projects are turbidity standards which require very low sediment loads in most mountain streams. Though successful meadow restoration will decrease sediment loading in the long-term, the actions implemented to restore a site may temporarily increase turbidity above allowable standards. If upon consultation with Regional Waterboards, it is determined that a project will not meet Basin Plan metrics of water quality objectives or falls under a Waste Discharge Prohibition, a Basin Plan Exemption is required. If an exemption to a prohibition is required it will typically be included in the 401 Water Quality Certification; this requirement also triggers CEQA.

Acquisition of a Construction Storm Water Permit begins with contacting the Regional Waterboard office geographically closest to the project site. This consultation is not required, but should be immensely informative regarding permitting process and water quality considerations. Aside from consultation with Regional staff, the majority of the CGP process, including application, reporting and fee payment, occurs via an online system called the Storm Water Multiple Application Report and Tracking System (SMARTS). The GCP Application consists of a collection of documents called Permit Registration Documents (PRDs) which must be uploaded to the SMARTS system prior to construction begins. PRDs include a Notice of Intent (NOI), site map, risk assessment, post-construction calculations, annual fees, a certification statement and a Storm Water Pollution Prevention Plan (SWPPP). Entries to the SMARTS system

for a given project must be managed by the Legally Responsible Person (LRP) who can grant access to Approved Signatories or Data Submitters. A LRP is the individual who is responsible for project compliance, typically the project proponent or the person who has day to day control or ownership over the land. Certification of PRDs must be done by either the LRP or an Approved Signatory who has been authorized by the LRP. Data Submitters have access only to upload monitoring data. A project is permitted once SMARTS assigns and sends to the implementer a Waste Discharge Identification Number (WDID).

Annual fees paid to the Regional Waterboards are calculated based on acreage of disturbance with costs ranging from $442 for one acre to $2500 for 2 acres and $6700 for projects disturbing more than 150 acres. You will continue to receive an annual invoice until a Notice of Termination is electronically submitted via SMARTS and approved by the appropriate Waterboard(s). These fees change annually.

A Storm Water Pollution Prevention Plan (SWPPP) is a component of a Construction Storm Water Permit that outlines how a construction project will minimize storm water pollution. This document is submitted as a Permit Registration Document via the SMARTS System. A SWPPP includes 1) Best Management Practices (BMPs) to minimize erosion and sediment, 2) BMPs to minimize non-storm water discharge, 3) Site inspections and BMP maintenance and 4) sampling, analysis and reporting. When a SWPPP is required, it must be prepared by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP). These contractors can be costly, though many National Forests have staff that are QSD/QSP certified. Alternatively, a non-federal project partner could get certified to perform these tasks.

Section 401 Water Quality Certification (See Figure 4, Appendix A)

Section 401 of the Clean Water Act requires that any applicant for an Army Corps 404 permit also obtain a Water Quality Certification from the State (401 Permit). In California, the Regional WQCBs receive, process and grant 401 permits. The program encourages watershed-level analysis and protection, recognizing that functions of wetlands, riparian areas, and headwater streams— including pollutant removal, flood water retention, and habitat connectivity—are expressed at the watershed or landscape level. The core of the 401-program's protection strategy is demonstration of impact avoidance first, followed by minimization, and then mitigation to compensate for impacts and ensure no net loss of water resources.

The 401 application requires wetland delineation maps, and asks about other permits and coordination with the USFWS and CA DFW. Unlike CGP, Permit Registration Documents (PRD) pursuant to a 401 permit are filed directly with the appropriate Regional Waterboard(s). The Regional WQCBs are required to determine application completeness within 30 days of receipt. Once the Regional Waterboard has confirmed completeness, it will include the project on its monthly posting of new applications. This posting, along with compilation and consideration of comments received, satisfies the public notice component of the permitting process. The region/state then has 60 days to issue, deny or waive certification. Issuance of a 401 permit is a discretionary act that triggers CEQA compliance. Alternatively, if a project is CEQA exempt under

a small habitat restoration project, then the Waterboard can offer a streamlined 401 permit. This streamlined pathway is not possible if federally listed species are present.

California Rapid Assessment Methods (CRAM)

CRAM is a recent addition to the suite of assessments that may be required for restoration of wetlands and meadows. Lahontan Regional Water Quality Control Board is now requiring wetland restoration project implementers to upload project information to the online resource EcoAtlas when a 401 permit is also required. The purpose of this requirement is to gather data regarding aquatic resource management across California. The Lahontan Waterboard had begun to require CRAM assessments for some projects in the Tahoe and Truckee River Watersheds, and may expand this requirement to other watersheds in the future. Other Regional WQCBs require CRAM for certain projects, thus early consultation will clarify whether CRAM is required for a given project.

For meadows, the "Slope Wetlands" protocol is used to assess habitat complexity and condition based on field measurements and remote geo-analysis. A CRAM assessment should be done pre- and post-restoration. This process is like wetland delineation in time commitment, personnel training and approach. Like wetland delineation, there is no formal certification, but rather a class that will legitimize an assessor's qualification to enact the protocol. A surveyor's qualifications will only be called into question in the case of litigation, but it is wise to have trained employees doing CRAM for quality of assessment and pre-restoration data. Currently the Central Valley Waterboard is not requiring CRAM assessments. Again, early coordination with the appropriate regional waterboard will clarify the need, or lack thereof, for a CRAM assessment.

State Historic Preservation Office

Section 106 of the National Historic Preservation Act requires federal agencies to undergo a review process for all federally funded and permitted projects that will impact sites listed on, or eligible for listing on, the National Register of Historic Places. Early coordination (design phase) with the State Historic Preservation Office is encouraged. The only requirement for compliance with section 106 is an archaeological survey report stating that the proposed actions will not impact historical, cultural or tribal resources. This survey is usually done as part of the NEPA/CEQA compliance process.

Section 106 compliance is needed before the Army Corps can issue a permit.

PART III: Strategic Roadmap to Compliance and Permits

This strategic roadmap is meant to provide guidance for non-federal entities coordinating key tasks and permitting requirements for meadow restoration projects on federal lands. Given the range of project permit requirements, this is not a complete checklist, but rather an outline of the most efficient path to compliance, though chronology may differ depending on the project. For details on specific permits and permitting agencies see Part II of this manual. For flowcharts of the specific permitting and compliance processes, see Appendix A.

Phase I: Pre-Application

- ☐ Identify purpose and need for a proposed project.
- ☐ Develop draft project description, including access, staging and timeline. Consider alternatives to avoid impacts to resources.
- ☐ Develop project team. Identify stakeholders (e.g. neighbors, interested agencies, NGOs, academia)
- ☐ Identify lead federal and state agencies for NEPA and CEQA purposes (not required on private lands). See NEPA and CEQA guidance above for information regarding lead agency identification. If the USFS is the LA, they will need to sign a Project Initiation Letter to establish their role in the proposed project.
- ☐ Contact lead agency(ies) for point of contact. If possible identify a project "champion" within the agency to assist in moving the project forward.
- ☐ Consult with point of contact at each agency regarding permitting requirement. Consult with Regional Waterboards concurrently or after initial consultation with Army Corps and once draft project design plans are in-hand.
- ☐ Identify survey/data collection needs and contract with reputable firms (or identify internal partner) for resource surveys, including cultural/archaeological, flora and fauna, wetland delineation, CRAM and federally and state-listed species.
- ☐ Develop a public involvement and project scoping strategy (including a mailing list).
- ☐ Gather and utilize geospatial data for a working site map including area of potential impact.
- ☐ If a large, complex or potentially controversial project, arrange to meet with permitting agencies in person, and preferably on-site. Follow up site visit with a letter or email confirming conclusions and next steps. It is always prudent to back up verbal communications in writing.

Phase II: Permitting and Compliance

- ☐ Prepare (or receive) Biological Assessment and submit to USACE, if necessary.
- ☐ Prepare (or receive) Cultural Report and submit to USACE, if necessary.
- ☐ Release CEQA Preliminary Review Memo (determines scope of analysis for CEQA) and NEPA Proposed Actions documents for 30-day public review period. A public meeting is useful as well.

- ☐ Confirm intended compliance pathway (CE, EA) for CEQA and NEPA with lead agency and notify the public with a Notice of Intent (NEPA) and Notice of Preparation (CEQA), if appropriate.
- ☐ Prepare and submit to USACE application, or likely PCN.
- ☐ Prepare and submit application to appropriate Regional Water Quality Control Board.
- ☐ Prepare and submit applications, as necessary, to State and local agencies, including CDFW (LSAA, CESA).
- ☐ Collect public comments and respond to requests from agencies for more information.
- ☐ Alter and update project design based on resource surveys and public comments.
- ☐ Draft an appropriate joint NEPA/CEQA compliance document for a 45-day public review period (preferred) and send to interested parties. Or, draft appropriate NEPA document for public review and comment for 45 days and draft appropriate CEQA document for public review for 30 days
- ☐ Revise CEQA and NEPA documents to address public comments.
- ☐ After completion of CEQA document, send Notice of Completion to State Clearinghouse and publish notice on newspaper of record. This initiates a 30-day review period.
- ☐ Pay CDFW Filing Fee prior to CEQA NOD.
- ☐ Review comments and file Notice of Determination with appropriate agency to conclude CEQA process.
- ☐ Finalize NEPA Compliance Document and, if necessary, file with the EPA.
- ☐ Finalize and file Record of Decision.

Phase III: Implement permitted actions

- ☐ Make sure that all contractors and involved agencies have received and understand permit terms and conditions prior to initiation of construction.
- ☐ Implement restoration activities according to compliance documents and permit terms and conditions, including BMPs, reporting etc.
- ☐ Implement required mitigation measures, or compensatory mitigation in the agreed-upon manner and timeframe.

Phase IV: Post-Restoration implement mitigation, monitoring and reporting identified in permits and environmental documents

- ☐ Implement required mitigation measures in the agreed-upon manner and timeframe.
- ☐ Working with lead agency, ensure any monitoring requirements are being implemented and reported, including to USACE, USFWS and CDFW.

Conclusion/ Words of Wisdom

Of the lessons learned so far by the Sierra Meadows Partnership, the following words of advice are paramount: Be proactive and inclusive; establish rapport early with all the respective agencies involved; do homework to determine status of listed species; do homework regarding water quality standards; allow for contingency planning in case permits delay a project; and always reach out with questions regarding permitting and compliance rather than "winging-it".

This guide is meant to be a living document that is updated as political and economic climates change. We hope that the information and guidance presented here will aid in alleviating the permitting "bottleneck". We also hope that as regulatory and institution coordination increase, permits will be streamlined and allow for an increase in pace, scale and efficacy of meadow restoration across the American West.

Appendix A: Flowcharts of Permitting Processes

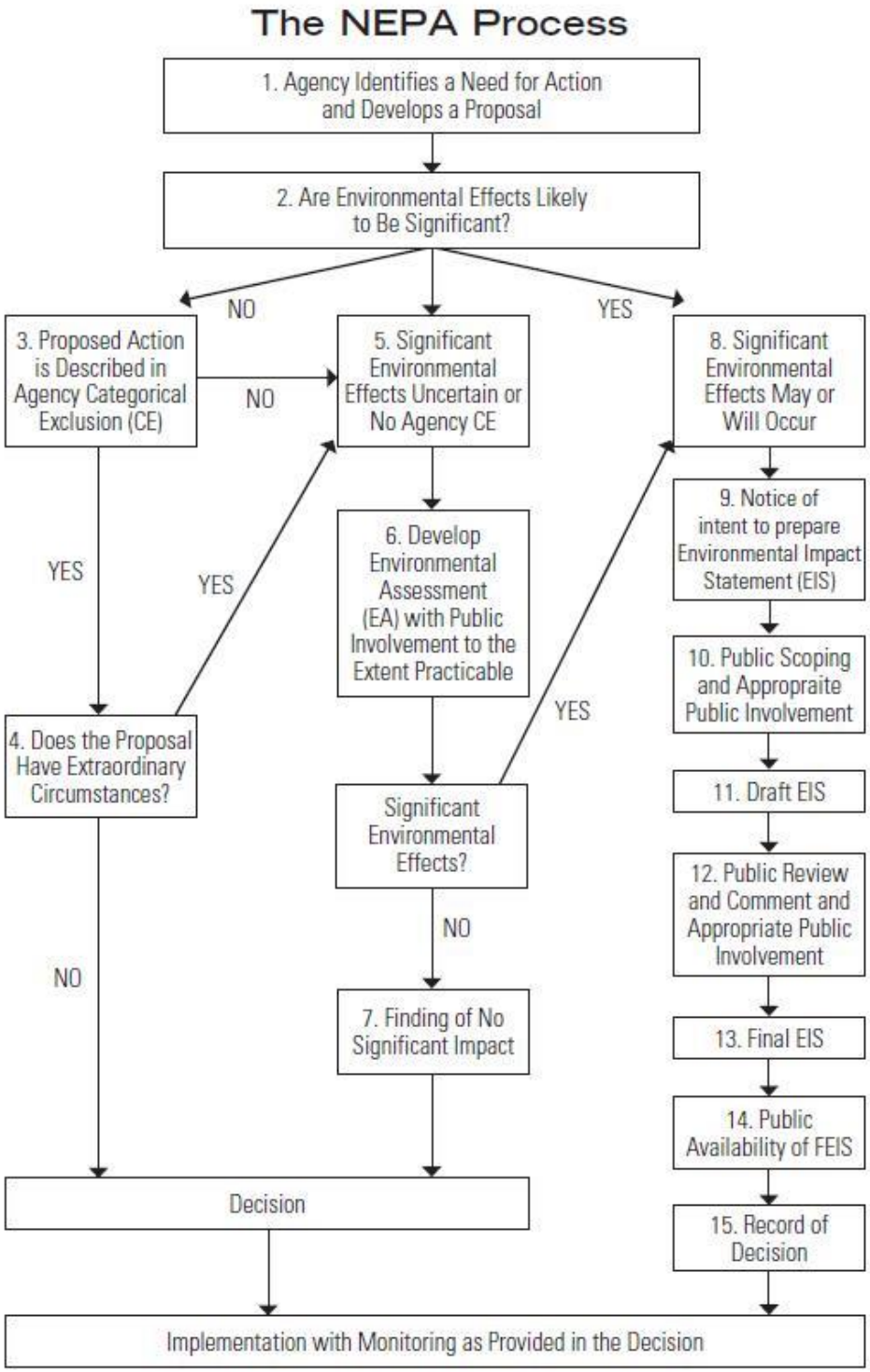


Figure 2: NEPA Process Flowchart from "A Citizens Guide To NEPA", CEQ Office of the President

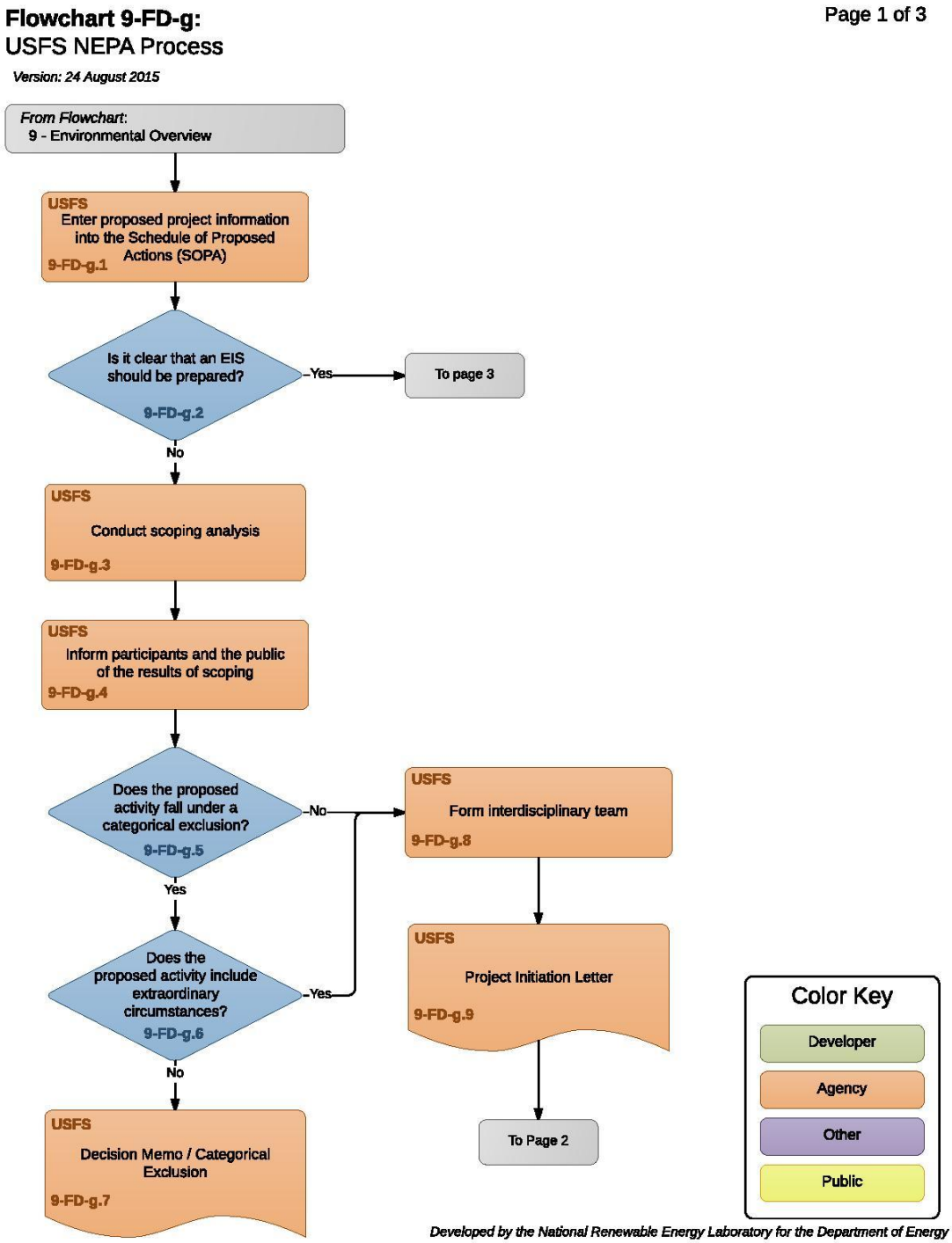
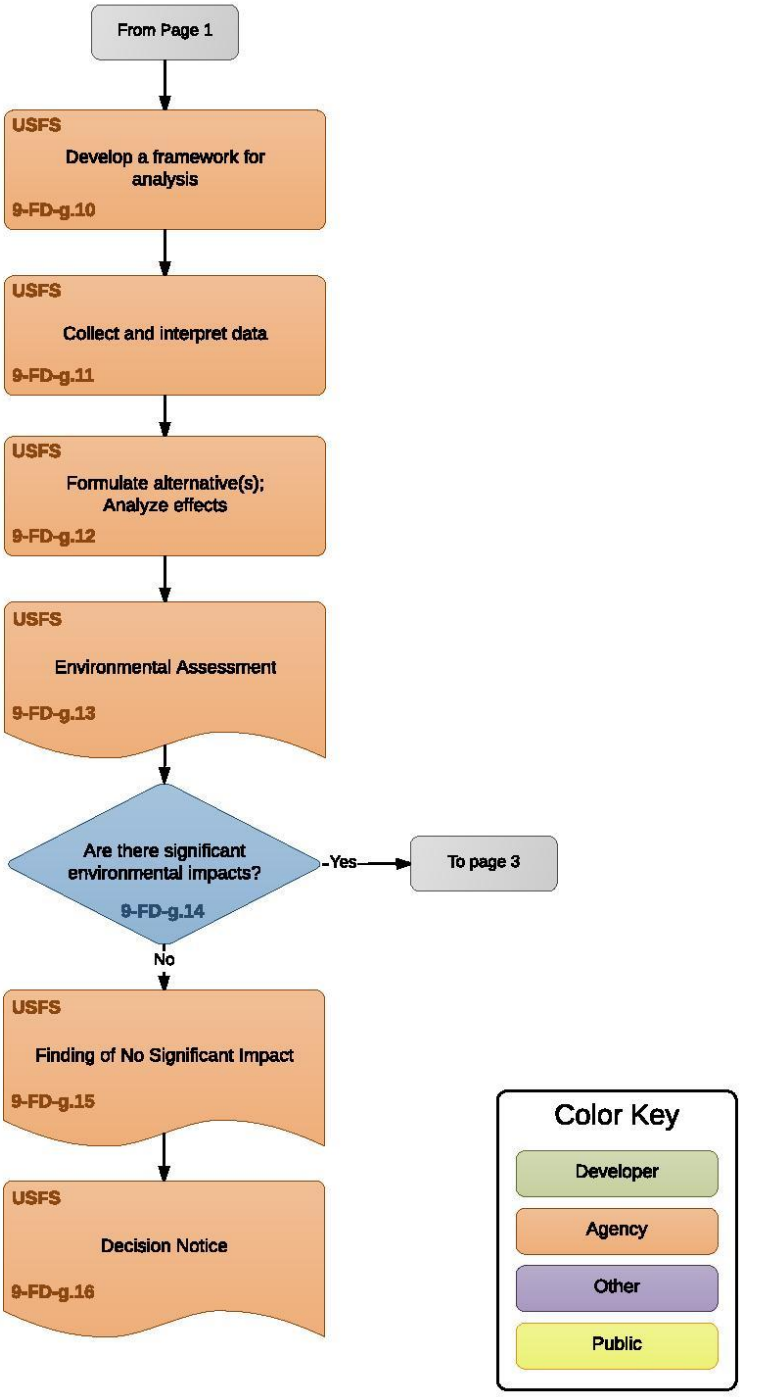


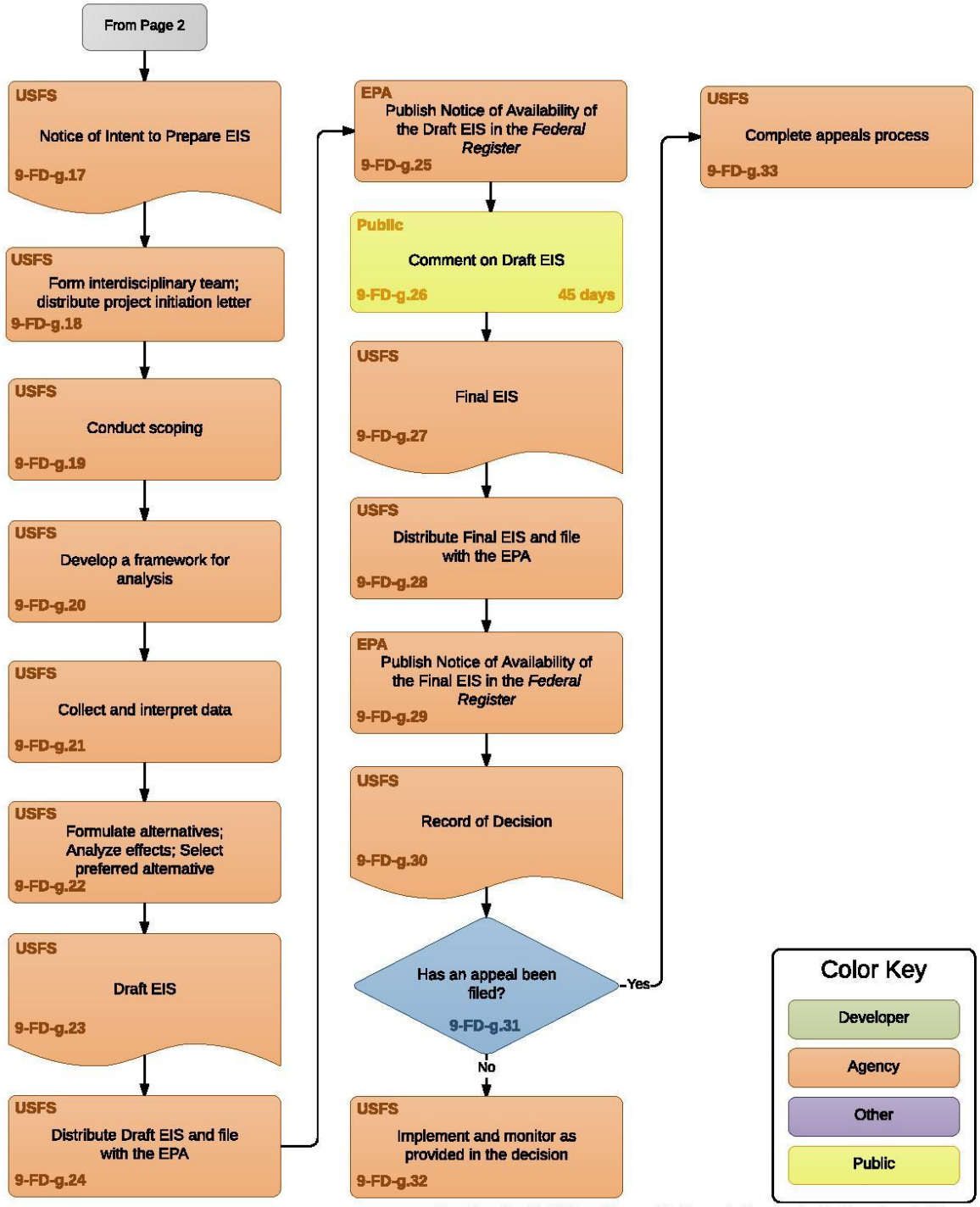
Figure 3: USFS NEPA Process Flowchart

Flowchart 9-FD-g (continued):
USFS NEPA Process



Developed by the National Renewable Energy Laboratory for the Department of Energy

Flowchart 9-FD-g (continued):
USFS NEPA Process



Developed by the National Renewable Energy Laboratory for the Department of Energy

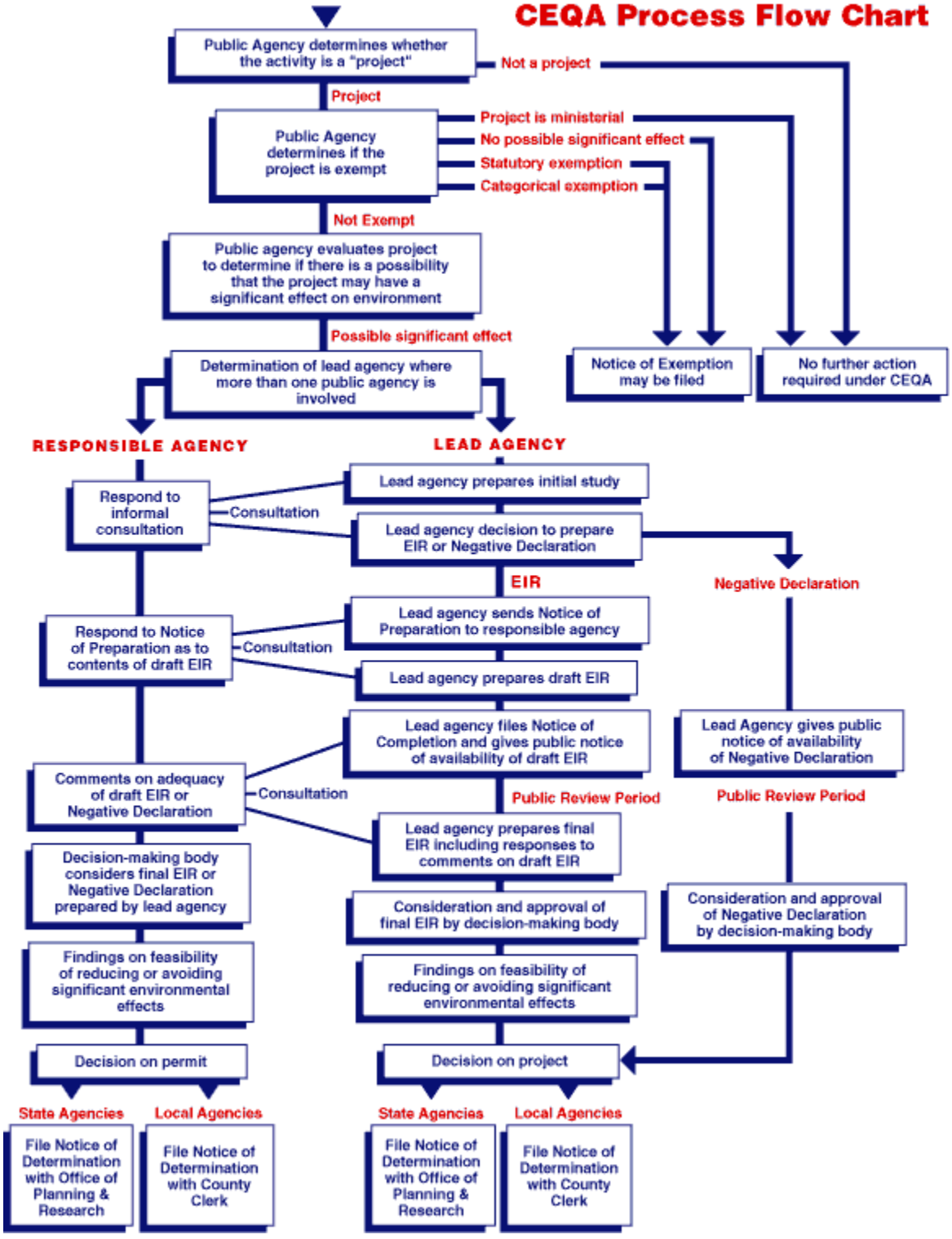


Figure 4: CEQA Flowchart from California Natural Resources Agency

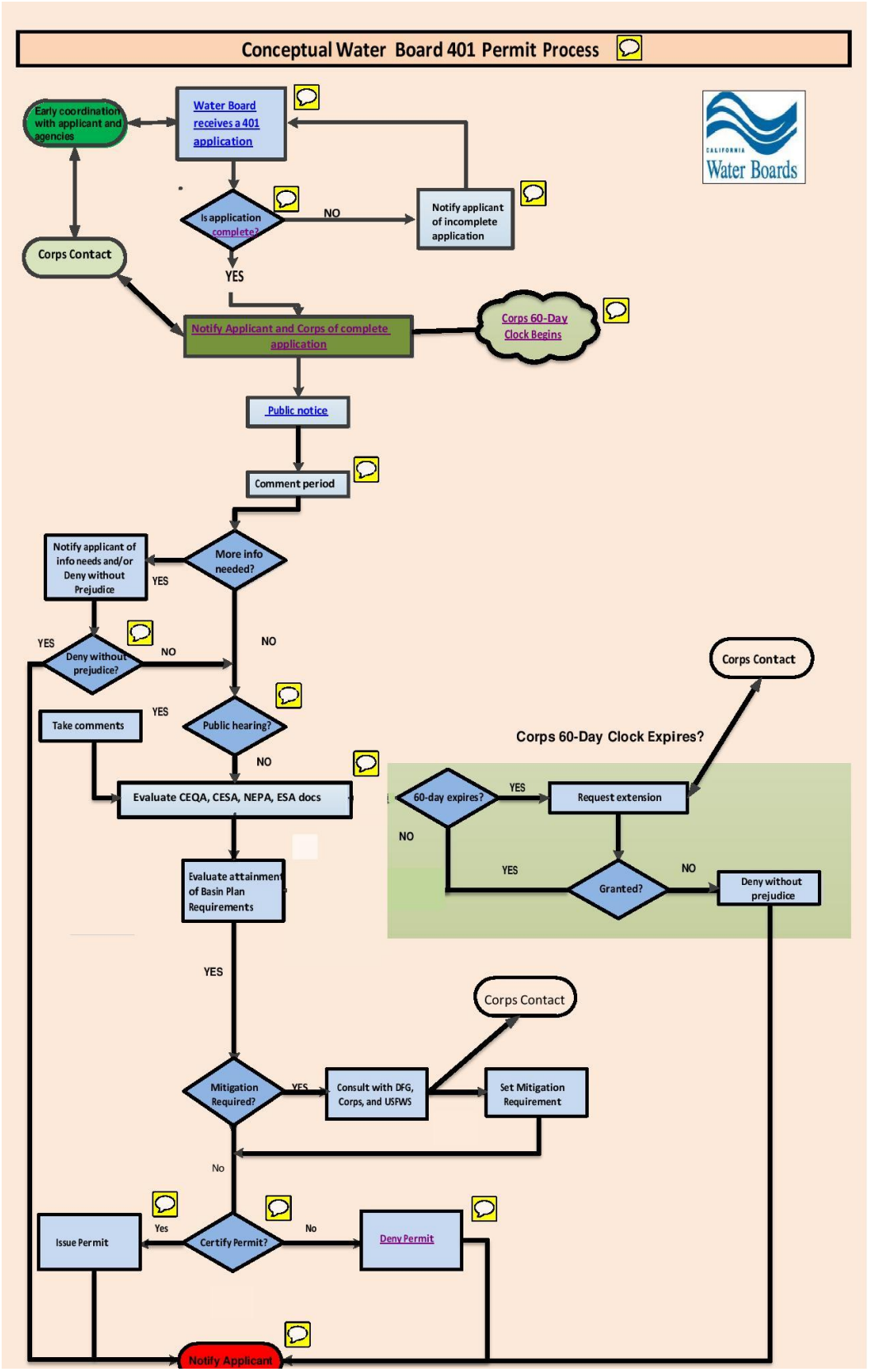


Figure 5: 401 Permit Process from California Water Boards

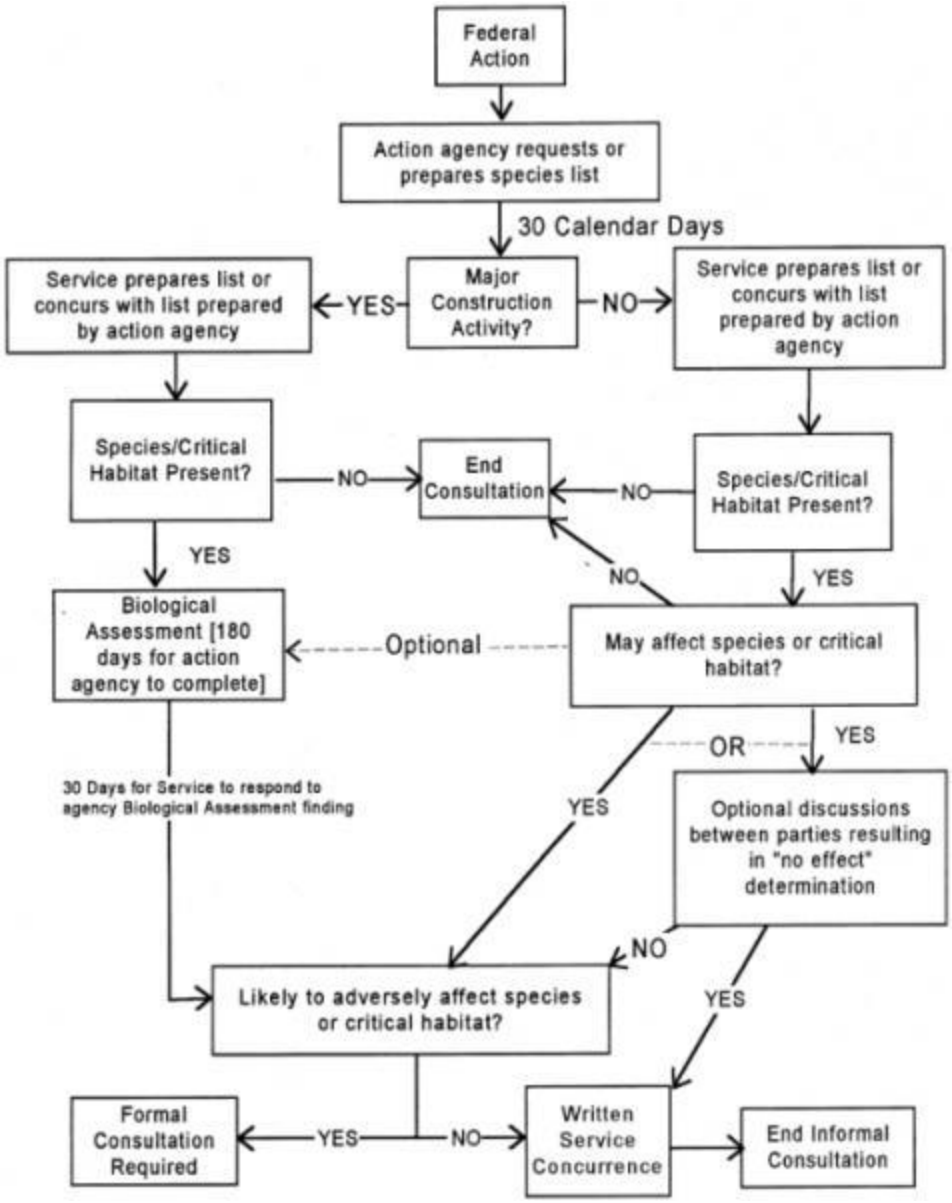


Figure 6: Endangered Species Act compliance flowchart from USFWS

Appendix B: Glossary of Terms and Abbreviations

Appeal: A formal written document filed with the agency after a decision has been issued that makes a case for the agency to reconsider their ruling.

Approved Signatory: An individual who has been authorized by the LRP to sign, certify and submit PRDs or any other information required by the permit, the Waterboards or the EPA.

Area of Potential Effects: The footprint of potential impacts from proposed action. This is an important part of plan designs for permitting.

Basin Plan: A document written by each Regional Waterboard that outlines water quality standards, beneficial uses, waste discharge prohibitions and other implementation measures.

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States from discharges of dredged or fill material; or more broadly, actions/alternatives with the least negative environmental impact to a project site and surrounding areas.

Biological Assessment (BA): An assessment of the potential effects of a proposed action for compliance with article 7 of the Endangered Species Act. This is written by the applicant agency and reviewed by the USFWS.

Biological Opinion (BO): States the US Fish and Wildlife Service's opinion on whether the project is likely to jeopardize a listed species or destroy or adversely modify a listed species' critical habitat. This is the product of formal consultation for adherence to Section 7 of the Endangered Species Act. Also includes an Incidental Take Statement if appropriate.

California Environmental Quality Act (CEQA): A statute that requires state and local agencies to identify the significant environmental impacts of their actions and to mitigate those impacts if possible.

California Endangered Species Act (CESA): Requires early consultation to avoid impacts to rare, endangered and threatened species and to develop mitigation planning to offset impacts.

California Rapid Assessment Method (CRAM): A recent statewide method for monitoring the conditions of habitats throughout California. For meadow restoration, the "Slope Wetlands" protocol is used to assess meadow conditions before and after restoration, often as a condition of receiving USACE permits.

Counsel on Environmental Quality (CEQ): Oversees implementation of NEPA, principally through issuance and interpretation of NEPA regulations that implement the procedural requirements of NEPA. CEQ also reviews and approves Federal agency NEPA procedures, approves of alternative arrangements for compliance with NEPA in the case of emergencies, and

helps to resolve disputes between Federal agencies and with other governmental entities and members of the public.

Categorical Exclusions (CE): Allows the agency to document actions that do not have a significant effect on the environment, and proceed with proposed actions without using an EA or EIS. The lowest level of environmental analysis, developed to streamline the NEPA process for low impact projects. A CE is based on an agency's experience with a action and its environmental effects.

Categorical Exemptions (CE): CEQA equivalent of above except that classes specified by CEQA guidelines rather than by the agency.

Code of Federal Regulations (CFR): Where NEPA regulations are codified and accessible to the public.

Consistency Determination: States whether CDFW finds the Biological Assessment consistent with CESA when a project may affect a federally and state-listed species.

Clean Water Act (CWA): Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States. The Army Corps of Engineers manages this permit program.

Cumulative Effects: Consider all past, present and reasonably foreseeable effects of proposed action.

Decision Memo (DM): A concise written document of the RO's decision and rationale to implement an action.

Direct Effects: Tied to the action and occur at the same space and time.

Environmental Assessment (EA): A mid-level environmental analysis used to test significance of a proposed action. (1) Provides sufficient evidence and analysis to determine whether to prepare an EIS; (2) aids an agency's compliance with NEPA when no EIS is necessary; and (3) facilitates preparation of an EIS when one is necessary. An EA includes a listing of agencies and persons consulted, environmental impacts of proposed actions and its alternatives and outlines the need for the proposal.

Environmental Impact Statement (EIS): Required for NEPA compliance if a federal action is determined to significantly affect the quality of the human environment.

Environmental Impact Report (EIR): A more substantial review of potential affects that may be needed for CEQA approval. The CEQA equivalent of an EIS.

Environmental Management System (EMS): A structure of procedures and policies used to systematically identify, evaluate, and manage environmental impacts of ongoing activities, products, and services.

Endangered Species Act (ESA): Section 7 requires assessment of project/actions that may impact listed or proposed listed species or critical habitats.

Extraordinary Circumstances (EC): Preclude the use of Categorical Exemptions. Includes cultural, environmental and human health impacts that if are possible require the project to prepare an EA or EIS.

Finding of No Significant Impact (FONSI): The determination that a proposed project will not cause any significant environmental impacts. A possible outcome of an EA. Usually allows implementation to proceed, but can require a 30-day public comment period if the type of proposed action has not been done before by the agency or if the action is something that would typically require an EIS under the agency NEPA procedures. A Mitigated FONSI is the determination that the project may result in sig. impacts, but the agency's proposed mitigation measures will reduce impacts to the below significant.

Federal Advisory Committee Act (FACA): A law passed in 1972 to ensure citizen involvement in federal decisions is equitable, and that no one individual or group has undue influence. A federal agency must comply with FACA when it (1) establishes, utilizes (under FACA's definition, "utilize" means "exercise management or control over"), controls, or manages (2) a group with non-federal members that (3) provides the agency with consensus advice or recommendations. Groups must meet all three of these legal elements to be subject to FACA. Subjectivity to FACA is fact-specific and generally requires consultation with the Office of General Counsel (USDA FACA Easy Button Website).

Governor's Office of Planning and Research: CEQA filing destination.

Harass: Defined by the USFWS as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by disrupting patterns including, but not limited to, breeding, feeding or sheltering.

Incidental Take Statement: A component of a Biological Opinion that spells out how much "take" is allowed. Take includes harassing, pursuing, capturing or otherwise harming species or their habitat.

Indirect Effects: Tied to the action but occur later in time or further from the site of action.

Initial Study: A preliminary analysis conducted by the lead agency to determine if a project may have a significant effect on the environment. Also aids in determining what type of environmental document to prepare.

Jeopardy: When an action is reasonably expected, directly or indirectly to diminish a species' numbers, reproduction or distribution such that the likelihood of survival and recovery of the species in the wild is appreciably reduced.

Lead Agency (LA): A public agency designated to supervise the preparation of environmental analysis. For our purposes, the LA is most often the USFS, SWB or CDFW.

Legally Responsible Person (LRP)- Individual who is responsible for project compliance, certification of permit registration documents and receives any notices of violation. Typically, this individual is the project proponent or the person who has day to day control, or ownership over the land.

Likely to Adversely Affect (LAA): As opposed to NLAA

Lake and Streambed Alteration Agreement (LSAA): Required when substantially diverting or obstructing flow of a waterbody, changing or using material from the channel or depositing debris that could pass into a watercourse.

Mitigation Action Plans (MAPs): Describes the plans for implementing commitments to mitigate adverse environmental impacts made in an EIS and its associated record of decision, or when appropriate, an EA or FONSI.

Mitigation Measures: May reduce environmental effects/impacts by avoiding, minimizing, rectifying, eliminating or compensating for the impact.

Mitigation Reporting and Monitoring Program (MRMP): A document outlining mitigation actions to be taken and outcomes when significant impacts have been identified.

Mitigated Negative Declaration (MND): Appropriate when Initial Study has been prepared and a determination can be made that no significant environmental effects will occur because revisions to the project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels. Required for CEQA if impacts are identified but can be mitigated to less than a significant level. Must be circulated to the public.

National Heritage Preservation Act (NHPA): Section 106 requires federal agencies to consider the effects of their actions on historic properties.

National Environmental Policy Act (NEPA): An environmental law passed in 1969 that established the Council on Environmental Quality and requires all branches of government to consider the environment prior to undertaking any federal action (like alteration of federal lands) that may have negative impacts. The law also mandates public involvement in such decisions.

Negative Declarations (ND): Describes the reasons that a project will not have a significant effect on the environment and does not require the preparation of an environmental impact report. Required for CEQA when no significant impact and exemption requirements do not apply.

Notice of Availability (NOA): A formal announcement of the publishing of an environmental document for public review. The EPA publishes a NOA when a lead agency has filed a draft EIS in the federal register.

Notice of Completion (NOC): Sent by lead agency to responsible agency to inform of completion of EIR draft.

Notice of Determination (NOD): Certifies that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the Public and where it can be found. State agencies file with Office of Planning and Research. Local agencies file with county clerk(s). NOD is available to the public for 30 days.

Notice of Exemption (NOE): Notifies state agencies and the public that the lead agency determined that the project is exempt from the CEQA requirements. Filed with the State Clearinghouse

Notice of Intent (NOI): Formal announcement of intent to prepare an EIS filed with the Federal Register. Also refers to a document filed with Waterboards outlining the intent to pursue a Storm Water Construction Permit.

Notice of Preparation (NOP): Filed with state clearinghouse to inform of intent to prepare an EIR for CEQA.

Notice of Termination (NOT): Filed with the California Waterboard SMARTS system, this document notifies the Waterboard of completion of a project. Once this notice is approved by the appropriate Waterboard(s), annual fees will terminate.

Notice of Violation (NOV): Received by the LRP from CA Waterboards indicating a violation of a Waterboard permit.

National Pollutant Discharge Elimination System (NPDES): As authorized by the Clean Water Act, controls pollution by regulating point sources. This program is administered through the Waterboards.

Nationwide Permit 27 (NWP 27): USACE permit for stream/wetland restoration, enhancement or establishment to meet requirement of section 404 of the Clean Water Act. The project must result in a net increase of aquatic functions and values.

Ordinary High-Water Mark (OHWM): Lateral location of average bank full height of water on land; measure useful in determining impact of excavation and necessity of permits; delineates the lateral limits of federal jurisdiction.

Permit Registration Documents (PRDs): The suite of documents required to be submitted to the CA Waterboards via the SMARTS system to apply for a General Construction Permit. This

includes a Notice of Intent package (NOI, Site Map and Fee), Risk Assessment, Post-construction calculations, the SWPPP, a signed certification statement by the LRP and the first annual fee.

Pre-Construction Notification (PCN): Provides Army Corps Project Managers with adequate information about the proposed project, particularly details regarding impacts to aquatic resources.

Qualified SWPPP Developer (QSD)- Individual who is authorized to develop and revise Storm Water Pollution Prevention Plans. There is a suite of credentials that can qualify someone as a QSD including specific training.

Qualified SWPPP Practitioner (QSP)- Manages the daily implementation of the construction permit requirements as set forth by a QSD.

Rain Event Action Plan (REAP)- An attachment to the State Waterboard Construction Storm Water Permit, this is required on Risk Level 2 and 3 construction projects when rain events are expected. This must be written and implemented by a QSP.

Responsible Official (RO): A line officer, such as a Forest Supervisor or District Ranger who, as an employee of a federal agency, designates the lead agency for a project.

Restoration: "Manipulation of the physical, chemical or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded historic resource". FR Vol. 77, No 34 2/21/2012.

Record of Decision/ Decision Document (ROD)/ Decision Memo (DM): Formal mechanism to convey Responsible Official's selected course of action and the rationale used to make that decision. Describes the alternatives the agency considered (including the environmentally preferred alternative) and discusses plans for mitigation and future monitoring. Signifies completion of pre-restoration NEPA process

Regional Water Quality Control Board (RWQCB): Administer the state's water quality, water pollution control and water rights as prescribed by California's Environmental Protection Agency

Scoping: NEPA requires that there be an "early and open" process for determining the scope of the issues to be addressed in assessing the impact of a proposed project. This process is commonly known as "NEPA scoping," during which an agency will solicit input from the public.

Scoping Letter: A letter from the responsible agency to interested parties detailing the proposed action to be included in NEPA and inviting comments.

State Historic Preservation Officers (SHPO): Consultation with SHPO is required to comply with Section 106 of NHPA.

Storm Water Multiple Application and Report Tracking System (SMARTS): Online database for dischargers to file storm water permit documents.

Scope of Analysis (SOA): Describes what portions of an overall project subject to federal action (permit decision) and will be evaluated by the Army Corps of Engineers. The part of the project, its alternatives, and the direct, indirect and cumulative impacts the Corps will consider in evaluating a permit application.

Schedule of Proposed Actions (SOPA): Published in January, April, July, and October, the Forest Service uses SOPA to alert public of intended actions and timeline for review.

State Clearinghouse: Archived by Governor's Office of Planning and Research, a publicly available database of documents filed for CEQA permitting.

Statement of Overriding Considerations (SOC): A statement of the lead agency's views on the ultimate balancing of the merits of approving a project despite its environmental damage.

Statutory Exemptions: Types of projects for which CA state legislature has provided a blanket exemption from CEQA. Found in Article 18 of CEQA.

State Water Resources Control Board (SWRCB): Administers the state's water quality, water pollution control and water rights as prescribed by California's Environmental Protection Agency.

Storm Water Multiple Application Report and Tracking System (SMARTS)- Online system for application for and receival of permits from the CA Waterboards.

Storm Water Pollution Prevention Plan (SWPPP): Outlines how a construction project will minimize storm water pollution during a after construction. Required when a project requires a Construction Storm Water Permit.

Threatened and Endangered (T & E): Also called "Listed" species. Presence of listed species or critical habitats require consultation with USFWS. Information on federally listed species can be found at: https://www.fws.gov/endangered/

Take: Defined in Section 86 of the Fish and Game Code as "hunt, harm, harass, shoot, wound, pursue, trap or collect" a federally listed species.

Waste Discharger Identification Number (WDID)- Assigned and sent by SMARTS, signifies receival of waterboard permits.

Wetland Delineation- A component of an Aquatic Resources Delineation, this procedure determines the footprint of the wetlands near a project. Wetland areas are under the jurisdiction of the Army Corps along with other waters of the U.S. Wetland Delineation requires experience and training, and though there are courses, there is not an official certification.

Appendix C: National Environmental Policy Act (NEPA) Sec. 101 [42 USC § 4331]

(a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) To carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may —

Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

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

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

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

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

Appendix D: “Significance” as defined by the Council on Environmental Quality

"Significantly" as used in NEPA requires considerations of both context and intensity:

Context: This means that the significance of an action must be analyzed in several contexts such as society (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world. Both short- and long-term effects are relevant.

Intensity: This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The degree to which the proposed action affects public health or safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. [43 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979]

Appendix E: Additional Resources

UC Davis CEQA Handbook, 2001

California State and Federal Permitting, The Permit Place, 2008

A Citizens Guide to NEPA: Having your voice heard. CEQ, 2007

Guide to Watershed Permitting for the State of California. California Association of Resource Conservation Districts, 2009

Roadmap for Collaboration Before, During and After the NEPA Process. National Forest Foundation, 2013

U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL DETERMINATION FORM INSTRUCTIONAL GUIDEBOOK

U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. U.S. Army Corps of Engineers and the Environmental Protection Agency. 2007.

http://www.spk.usace.army.mil/Missions/Regulatory/Jurisdiction/

USFS NEPA Guidance (Including NEPA document templates): https://www.fs.fed.us/emc/nepa/