

# RESTORATION PROJECT IMPLEMENTATION MODULE

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## 1.0 Introduction

At the conclusion of the restoration planning process, a preferred restoration alternative is selected. The next step is to implement this alternative. Implementation includes all the activities necessary to execute the selected restoration alternative and achieve restoration goals and objectives. Although implementation is typically considered the “doing,” not the “planning,” successful restoration implementation demands a high level of advance scheduling and foresight that constitutes planning by any measure.

Implementation is carried out under a wide variety of scenarios. Implementation of the preferred alternative may be led by the trustee bureau, a co-trustee, or by the responsible party, and the selected alternative may encompass any number of restoration projects. The responsible party may retain control and take the lead in implementing the preferred alternative, or the restoration funds may come to an affected trustee who will, in turn, take the lead in implementation. The selected alternative may encompass any number of restoration projects, including those involving construction, land acquisition, or both. From an implementation standpoint, the most challenging of these scenarios is when the restoration funds are provided to the trustee, several discrete restoration projects have been selected, extensive construction is involved, and the trustee bureau representative has project management responsibilities.

The information provided in this module discusses development of a Project Management Plan (PMP), available engineering resources, applicable labor laws, permits, contracts, and agreements. This module also provides guidelines for project management, project oversight, and site protection mechanisms, and discusses considerations for long-term maintenance. For restoration projects where the responsible party retains control, or no significant construction or land acquisition/easements are involved, it may not be necessary to follow all of the steps outlined in this module.

## 2.0 Decide the Approach

The overarching goal of restoration implementation is to restore or rehabilitate the injured natural resources to a condition where they can provide the same level of services provided before the injury, or to replace or acquire the equivalent natural resources capable of providing such services. Underlying project objectives are specified during the restoration planning process, however project-specific details are often developed subsequent to the release of the final restoration plan.

As planning for project implementation proceeds, the following list of questions should be answered with respect to the selected restoration alternative:

- (1) Is land acquisition or an easement involved? If yes, see Section 10.0 of this module.
- (2) Is permission needed for site access? If so, who is responsible for obtaining written permission?
- (3) Will contractors be utilized? If so, for what activities?

- (4) Is construction involved? If so, the following determinations will need to be made:
- Are surveys, and/or engineering plans and specifications required? If so, who will prepare them? (See Section 5.0 of this module for engineering assistance options.)
  - Are permits required? If so, who will prepare the permits and submit them? (See Section 9.0 of this module.)
  - Who will contact utility companies to determine the location of any underground utilities?
  - Will the restoration planning, design, or construction/implementation be contracted or performed in house? If it is to be contracted, who will handle the contracting? If your bureau will do the contracting, you should contact your contracting office immediately to determine if there is a standing contract available or what information is needed to bid the work and establish a contract. (See Section 4.0 for a discussion of contracting considerations).
  - Who will provide oversight during the restoration implementation process? Who will be the contracting officer's representative (COR) (also referred to as the contracting officer's technical representative [COTR])? (See Section 6.0 Project Management and Section 7.0 Project Oversight of this module).
- (5) Does the project involve the purchase of materials, supplies, or services? If so, who will be responsible for making these acquisitions? If there is a surplus of materials or supplies left over after the project is completed, who will retain these resources? If your bureau will be responsible for these acquisitions, coordinate with your contracting office as soon as possible to discuss acquisition options.
- (6) Does the project involve the establishment of interagency or cooperative agreements with other agencies or organizations? If so, who will prepare these? If necessary, will an attorney be available to review them? (See Section 4.0 of this module for more details on the use of these instruments.)
- (7) Will the project require long-term monitoring or protection measures? If so, who will be responsible for these activities? (See Section 10.0 of this module for project protection options.)

- (8) Will the project require long-term maintenance and/or monitoring? If so, who will be responsible for these activities? (See Section 11.0 of this module for project maintenance/monitoring provisions.)

Once these questions are answered, the main roles and responsibilities associated with implementing the restoration project are defined. For larger projects with multiple parties involved and shared responsibilities, it is recommended that the project manager develop a PMP. The next section discusses what should be included in a PMP and provides a general template for its use.

## 3.0 Project Management Plan

The Project Management Plan (PMP) is a document that details specific restoration project activities that are part of the preferred alternative identified in the restoration plan. The PMP should be consistent with the restoration plan and Trustee Memorandum of Understanding (MOU), and is typically developed only for large, complex restoration projects; smaller projects usually do not require the development of a detailed PMP. The PMP can be viewed as a step-down document that delineates project implementation requirements through completion and closeout.

The PMP is a management tool for the project manager and the other project team members, and provides a framework that focuses restoration actions on specific objectives and the attainment of restoration goals. The number of sections and specific content of a PMP may vary based on your bureau's guidance and the nature of the project, but in all cases a PMP clearly identifies the project scope, goals, objectives, budget, schedule, and responsibilities of participants in project execution. A PMP also provides a means to assess project success and completion, and specifies reporting requirements. The following sections further discuss the elements of a PMP.

### 3.1 Project Description

This section of the PMP provides a brief summary of the appropriate background information and gives a concise description of the project within the context of the preferred alternative identified in the restoration plan. Most projects for which a PMP is written have an overarching goal or set of goals, and underlying objectives designed to achieve the goal(s).

### 3.2 Statement of Work

This section of the PMP clearly and completely describes the scope of restoration actions that address the project goals. The project manager ensures the statement of work contains complete and concise technical information and direction that must be followed by parties implementing restoration actions. The statement of work may be used by the contracting officer in requests for bid proposals to prospective contractors, and in contracts and assistance agreements. A statement of work example for engineering

support services is found in the Bureau of Land Management (BLM) Project Management Handbook at the link below:

[http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information\\_Resources\\_Management/policy/blm\\_handbook.Par.19962.File.dat/H-1703-4.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.19962.File.dat/H-1703-4.pdf)

### 3.3 Project Team

Once the key questions regarding the approach to restoration are answered (see Section 2.0), the project team is identified and their roles and responsibilities defined. In order for a project to be successful, the project team must have a thorough and complete understanding of their individual roles and responsibilities, and efficient lines of communication between team members need to be established from the outset.

The team makeup can vary greatly, depending on the size and nature of the project. Every team should identify a project manager. The project manager is the project champion and takes the lead in coordinating all of the activities associated with the project (see Section 6 for information on project management). If the project includes government contracts for engineering services or construction, lines of communication are simplified if the project manager also serves as the COR for these contracts. Always communicate with government contractors through the contracting officer or the COR. (See section 4.0 for contracting considerations.)

Possible team members include:

- Project manager
- Contracting officer, if government contracts and/or agreements are involved.
- COR, if government contracts and/or agreements are involved.
- Bureau program representative, if the project is on government property (examples include the Park Superintendent if in a national park, the Refuge Manager if on a national wildlife refuge, or the Area Director if on BLM lands).
- The landowner, if the project is on private land, or the land-holding entity if the project involves a conservation easement or other type of land protection instrument.
- Bureau budget tracking/administrative personnel.
- Design engineer responsible for completing the plans and specifications. This could be a federal government engineer or a representative of a contracted architect/engineering (A/E) firm.
- Construction inspector who oversees the construction phase if the project includes construction. If the project does not include construction, someone should be designated to verify that the restoration project is completed as described.
- Other trustee technical representatives who have a direct role in the implementation. (This should include the restoration project technical representative for the authorized official [AO]).

- Government solicitor
- Government realty specialist, if land acquisition or easements are required.

Once the team members are identified, their roles and responsibilities should be clearly described. Accurately define each team member's lead and supporting roles. Although communication is discussed in a separate section, describe specific coordination and communication responsibilities here as well.

### 3.4 Project Schedule

The project schedule describes the major milestones and interim steps in enough detail to enable the reader to understand how the project will progress to completion. Include information on the duration of tasks, milestones, and how tasks are interrelated. Depending on the complexity of the project, this section may need to be updated several times during the course of the project. For example, for a project requiring surveys, engineering design, permits, and construction, the schedule should be updated after the engineering design is completed, while waiting for permits, and after the construction contractor is selected.

The project schedule should be adjusted if in-house staff or a contractor is unable to meet a milestone under the normal project schedule. Prior to modifying the schedule, the project manager should evaluate the options as to where the schedule can be changed and the risk associated with each change. Schedules need to be realistic but should also be aggressive enough to keep the project moving. When developing the schedule, it is important to consider the sequence in which events need to happen. For example, it may be necessary to complete the survey and preliminary engineering design before permits can be submitted, or perhaps some preliminary site work, such as land clearing, will be done by the landowner or in-house staff before the construction contractor begins work. These types of considerations need to be built into the schedule.

The schedule is important for managing project progress and avoiding resource conflicts during the project. The schedule also aids the project team in understanding the status of the project. On larger projects, it can be very useful to develop a Gantt chart or similar graphical representation of the schedule. This allows the sequence and relative time requirements of each project element to be readily visualized. There are a number of commercially available project management software packages with this capability.

When developing schedules consider the following points:

- All work items and dates should be clearly identified. For example, does the report completion date mean when the report is finished (before going to reproduction) when it is mailed to the team, or when the team members receive the report? The difference may only be a week or a few days, but the impact may be magnified under restrictive schedules.

- The sequence of work should be connected through a system that links the work tasks together. This process requires an understanding of which items must be completed before another task can begin. Computer scheduling programs identify the task that must start or finish before another can begin as “predecessor tasks”. When the tasks are linked together, any changes to one of the individual items will be reflected in all of the subsequent linked tasks.
- All schedules must identify time constraints and, if necessary, any restraints on resources.

### 3.5 Project Budget

The implementation budget must address the following three cost categories associated with implementing a restoration project: (1) planning and design, including permits; (2) restoration contracting or any direct purchases of supplies or services; and (3) project management, including inspection and management during implementation and any post-completion monitoring or protection costs. These three main costs have additional subcategories which should be shown in the actual budget.

At this stage of the project, it is assumed that a settlement has been reached, and the funding amount for the project is known. The initial project budget is based on the cost estimates provided in the restoration plan for the selected alternative. As more detailed cost information becomes available during project planning and design, the budget needs to be adjusted. With a fixed settlement amount, there are limited options for making adjustments to the budget, and inflation must be taken into account if there is a significant delay between the settlement date and the start of restoration activities. If the cost of an element of the restoration project is higher than estimated, adjustments may be made by doing one or more of the following: (1) reducing project scope to meet available funds; (2) reducing contracted elements and utilizing services of trustees or landowner(s) to reduce costs of implementation; or (3) finding additional partners to provide additional funds or services.

Consideration should also be given to how the budget tracking will be addressed during the life of the project. Who will do it? How often will budget statements be generated? What information will be provided with the statements? The project manager/COR should always be given the opportunity to review bills and verify completed work before payments are made to the contractors. This section of the PMP should address all of these issues.

### 3.6 Communication

The major coordination responsibilities should have been identified for individual project team members when the team was established (see Section 3.3). These responsibilities should be restated here, with emphasis on how these responsibilities relate to each other and the flow of communication. For example,

if the project involves a government-hired contractor, communication with that contractor must be through the contracting officer or the COR.

Clearly describe who has responsibility for coordinating document reviews, who will do the reviews, and how much time is allowed. The lines of communication during the implementation process should be described so that team members understand what they can expect in terms of communication and what is expected of them. Regularly scheduled face-to-face meetings and/or teleconferences should occur to encourage communication among project team members.

Even with a comprehensive restoration plan in place, the implementation process will raise additional questions and issues that must be addressed. From the beginning, it is important that team members clearly understand the lines of authority and who will be responsible for making final decisions.

### 3.7 Reporting Requirements

This section of the PMP lists the required progress and completion reports. The project manager is responsible for making sure these reports are completed, submitted and distributed to the appropriate team members. The bureau case manager ensures they become part of the case restoration administrative record. Standard reports required for restoration projects include restoration implementation progress reports, restoration monitoring reports, and restoration completion reports. Reporting frequency must be determined early and included in the PMP. As the projects proceed, adjustments in frequency can be made as needed. Other required reports include progress reports as specified by the project manager to be completed by contractors and other parties who implement restoration projects. Such reports are further discussed in Section 6 of this module. If a restoration project is completed through a construction contract, it is mandatory that daily logs be submitted to the COR by the individuals responsible for construction inspection.

## 4.0 Contracting and Agreements

### 4.1 General

Contracts are often used to prepare technical plans and specifications and implement restoration projects. As stated earlier, once the decision is made to use a contractor, your contracting officer should be contacted and become part of the project team. All tasks are specified in the scope of proposed work and contract provisions. Any special requirements of the agency or project should be included (e.g., the National Park Service [NPS] requires using only native plant material in revegetation projects in national parks). Periodic inspections by engineering personnel and representatives of the trustees are required to ensure that the materials used meet the specifications, the work performed is properly completed, and

project goals are being met. Some issues that should be considered in addressing contractor roles and responsibilities include:

- What constitutes successful completion of the contract obligations with the contractor?
- What is the planned order of work and necessary scheduling?
- Who is responsible for permitting, both for obtaining and for compliance?
- Who is responsible for obtaining permission to work on the property?
- Where are utilities located, and what are related concerns?
- What records and reports will be needed to provide necessary documentation (forms, required job site postings, etc.)?
- What arrangements are needed for traffic control?
- What specific environmental concerns are present on the site? Who has permit responsibility, both for obtaining and for compliance?
- How often, and in what form, do you want reports on the progress of the work?
- Once a contractor is selected, it is helpful to hold a pre-work conference to make sure the contractor clearly understands project details and the proper chain of command under the contract.

## 4.2 Contract and Agreement Preparation

If your bureau will be responsible for preparing and overseeing a contract, cooperative agreement, grant agreement, or other financial instrument, you should consult your local contracting office or contracting specialist as early as possible. The contracting office or specialist can assist in the planning so that you can allocate adequate funding and track the disbursement of funds. They will also help you select the appropriate funding mechanism (e.g., contract, cooperative agreement, etc.), make sure all of the necessary clauses are included, and review your responsibilities. Some of the more important aspects of contract and agreement preparation are summarized below.

### 4.2.1 *Communication*

The importance of communication in establishing a solid working relationship between your contracting specialist, contractor and the rest of the project team cannot be overstated. Many team members do not

have contracting backgrounds, and thus do not recognize that contracting specialists must adhere to their own set of standards and regulations, such as the Procurement Integrity Act and Anti-Deficiency Act, both of which are part of the Federal Acquisition Regulation (FAR). The contracting process goes much more smoothly if members of the project team recognize that their teammates come from diverse backgrounds with differing lines of authority. Please refer to Section 7.0 of this module for a review of communication strategies.

#### *4.2.2 Selection of Appropriate Instruments*

Significant, fundamental differences exist between agreements and procurement contracts/acquisitions (contracts), and both procedures may be used concurrently or separately to implement restoration projects. Their principal purposes are different: the purpose of a contract is to acquire property or services or perform construction for the direct benefit or use of the federal government, while the principal purpose of an agreement is to transfer something of value to a recipient to accomplish a public purpose. Their sources of implementing guidance are different: contracts are governed by the FAR, while agreements are governed by the Federal Grant and Cooperative Agreement Act and circulars issued by the Office of Management and Budget (OMB). One critical difference between agreements and contracts is that assistance agreements are not used to acquire goods or services for the direct benefit of the federal government.

Types of contracts include:

- **Simplified Acquisition Procedures (SAP)** – used for acquisitions of less than \$150,000 (\$5.5 million for commercial items; see FAR 2.101 and 13.500 for more details).
- **Sealed Bidding** – used for acquisitions of greater than \$150,000, and includes two-step sealed bidding (FAR Part 14). Sealed bidding is used when time permits solicitation, submission, and evaluation of bids, award is to be made on the basis of price and price-related factors, discussions are not necessary, and competition is expected.
- **Negotiated Contracts** – used for acquisitions of greater than \$150,000, and requires consideration of price, contractor past performance, and contractor technical capability (FAR Part 15). Negotiated contracts are used when proposals are to be evaluated by a formal panel, a competitive range of proposals is identified, and when discussions/negotiations with the selected offeror(s) is required.

Types of agreements commonly used by DOI bureaus in the NRDAR program include interagency agreements, intra-agency agreements, cooperative agreements, grant agreements, Challenge Cost-Share Arrangements, Indian Self-Determination Act contracts, memoranda of understanding, and private lands agreements. Attributes of these agreements are summarized in Table 1 below:

Table 1. Examples and Definitions of DOI Agreements

TYPE	DEFINITION	REFERENCES
Interagency Agreement	An agreement between a DOI bureau and another federal agency(ies) outside the DOI used to reimburse that agency for goods or services provided to the DOI bureau.	FAR, 48 CFR 17.5; DOI Acquisition Regulation System, Part 1417; FWS Agreements Handbook, Chapter V.
Intra-agency Agreement	An agreement between DOI bureaus used to reimburse an agency(ies) for goods or services.	FAR, 48 CFR 17.5; DOI Acquisition Regulation System, Part 1417; FWS Agreements Handbook, Chapter V
Cooperative Agreement	Used when the primary purpose is to provide “public support or stimulation”, rather than to acquire goods or services for the “direct benefit or use” of the federal government. It must be authorized by federal statute, and there must be substantial DOI bureau involvement.	Federal Grant and Cooperative Agreement Act (FGCAA, Public Law 95-224); Fish and Wildlife Service (FWS) Agreements Handbook; NPS Agreements Handbook, Chapter 4
Grant Agreement	A Grant Agreement is the same as a Cooperative Agreement in all respects, except that there is no program involvement by the DOI bureau during the course of the Grant Agreement, and less control over the outcome.	Federal Grant and Cooperative Agreement Act (FGCAA, Public Law 95-224); FWS Agreements Handbook
Challenge Cost-Share Agreement	A matching fund concept in which existing FWS funds are supplemented, on a mutually agreeable share ratio, with public and private agencies, organizations, institutions, and individuals.	FWS Agreements Handbook; NPS Agreements Handbook
Indian Self-Determination Act Contract	A non-procurement intergovernmental agreement with federally-recognized Tribes to operate federal programs and services currently provided to Tribes by the federal government because of their status as Indians.	Public Law 93-638, as amended, and 25 CFR 900; also see Preamble to <i>Federal Register Notice</i> Vol. 61, No. 122, June 24, 1996, pp. 32482-3253
Memorandum of Understanding	A written agreement between a DOI bureau and another entity(ies) that confirms the use of cooperative policies or procedures to promote individual endeavors; a non-funding agreement.	FWS Agreement Handbook, Chapter VI; NPS Agreements Handbook, Chapter VII

TYPE	DEFINITION	REFERENCES
Private Lands Agreements	An agreement between FWS and any private landowner(s) whereby the landowner(s) join as a participant(s) with FWS in a long-term wildlife management program to complete wildlife habitat development activities on private property.	Public Law 109-294; FWS Agreement Handbook, Chapter III

Cooperative agreements and grant agreements are the two major types of assistance agreements commonly used by DOI bureaus in the NRDAR program, and as noted above, differ only in terms of substantial DOI bureau involvement. This distinction is important, as it relates to the selection of the correct type of agreement and the disbursement of funding to potential cooperators. Examples of substantial involvement include:

- DOI review and approval of one stage before work can begin on a subsequent stage during the period covered by the cooperative agreement.
- DOI and recipient collaboration or joint participation in the performance of the assisted activities.
- Highly prescriptive DOI requirements prior to award limiting the recipient discretion with respect to scope of services offered, organizational structure, staffing, mode of operation, and other management processes, coupled with close DOI monitoring or normal exercise of federal stewardship responsibilities to ensure compliance with these requirements.
- General administrative requirements beyond those included in OMB Circulars A-102 and A-110.

To determine if DOI bureau involvement in an assistance agreement is substantial or not substantial, refer to Public Law 95-224 or contact your contracting specialist. Many DOI bureaus and subdivisions (e.g., the National Park Service and Fish and Wildlife Service regional offices) have developed agreement handbooks that provide guidance on the use of agreements and contracts, and these resources should be consulted when contracting questions arise.

#### 4.2.3 *Catalog of Federal Domestic Assistance*

The Catalog of Federal Domestic Assistance (CFDA) provides a full listing of all federal programs available to state and local governments; federally-recognized Indian tribal governments; territories (and possessions) of the United States; domestic public, quasi-public, and private profit and nonprofit organizations and institutions; specialized groups; and individuals. Some bureaus and their subdivisions have NRDAR-specific CFDA numbers, while others do not require the assignment of CFDA numbers to settlement funds; due to these jurisdictional differences, your contracting specialist should be contacted to determine roles and responsibilities relative to the CFDA process. A user guide for the CFDA is

available at [https://www.cfda.gov/downloads/CFDA\\_Public\\_User\\_Guide.pdf](https://www.cfda.gov/downloads/CFDA_Public_User_Guide.pdf). Once a CFDA number has been assigned to a NRDAR restoration project, in many instances the grant opportunity must be posted on [www.grants.gov](http://www.grants.gov); again, be sure to contact your contracting specialist for specific guidelines, and information for federal grantors can be found at [http://www.grants.gov/agencies/grantors\\_help\\_resou.jsp](http://www.grants.gov/agencies/grantors_help_resou.jsp).

### 4.3 COR or Project Manager Responsibilities

The COR is the contracting officer's representative for contracts and is responsible for ensuring that all work complies with contract requirements. The COR should inform the contractor and report to the project manager and the contract officer all work that does not comply with contract requirements and recommend needed corrective actions. The COR or designated inspector will monitor the contractor's performance by conducting inspections to determine if the work is commensurate with contract requirements and to ensure that labor standards and requirements are being followed. The frequency and method by which the job site is inspected depend upon the complexity of the project.

Although the contractor is directly responsible for the health and safety of his/her employees on the job site, the COR must ensure that government employees and official government visitors adhere to the contractor's safety requirements whenever they are on the job site. If the COR observes a condition or practice that constitutes an imminent danger (immediately threatening to life) to contractor employees, DOI personnel, or visitors, the COR can issue a suspension of work per FAR 52.242-14 and advise the contractor to immediately implement corrective action to bring the dangerous conditions into compliance. Notes should be made of the danger and of the action taken to alleviate it. If not corrected at once, the COR must immediately notify the contracting officer of the observed hazardous condition or practice. Any delay or cost resulting from a safety-related suspension of work will be borne by the contractor.

## 5.0 Engineering Assistance

During the restoration planning process, conceptual designs are used to compare the various alternatives. At this level of design, the basic project is established and estimates of restoration quantities and costs are made. Conceptual designs are adequate for comparison of alternatives, but are not sufficient for hiring a contractor.

If your bureau is responsible for hiring a contractor to create a restoration design, discuss the specific needs with your contracting office. Normally, additional engineering assistance will be required to prepare the construction documents or design specifications before bids are solicited. Details describing the specific material and method requirements for the project are necessary for contractors to prepare accurate bids and for the contracting agency to ensure the construction will meet the minimum standards required.

There are a number of options for obtaining engineering assistance:

- If a contractor was used during the restoration planning process to develop the conceptual designs, the same contractor may be available to complete the design and provide construction documents or design specifications. The same mechanism that was used to hire the contractor for the restoration planning could potentially be used to hire them to do further work.
- Your bureau may have central or regional engineering offices that have in-house expertise to assist with the project or have access to indefinite delivery/indefinite quantity (ID/IQ) engineering contracts that could be used.
- Other programs within your bureau (e.g., the FWS's Partners for Fish and Wildlife and National Wildlife Refuge programs) may have in-house engineering expertise or contractors capable of assisting with the project.
- Other bureaus or agencies, such as the NPS, Bureau of Reclamation (BOR), U.S. Army Corps of Engineers (Corps), or Natural Resources Conservation Service (NRCS), may be able to assist with the needed engineering work through an interagency agreement (IA).
- If a state or tribal trustee is involved, in-house or contracted engineering services may be available through memoranda of understanding (MOUs).
- Some conservation organizations have engineering expertise on staff and may be available.

Designing a restoration project requires a unique set of skills and a thorough understanding of overall project goals and objectives. Regardless of which source is used to obtain the necessary engineering assistance, it is important that the design engineer involved be made an integral part of the project team and that the team is comfortable with his or her skills and understanding of the project's goals.

## 6.0 Project Management

Implementation of restoration projects usually involves a team of people with different skills and responsibilities. Normally, the larger and more complex the project, the larger and more complex the team. Successful implementation of a restoration project often hinges on the ability of the project manager to keep this complex team moving in the right direction, and his or her ability to communicate effectively with the team.

During the implementation phase of a restoration project, it is the responsibility of the project manager to ensure that:

- Restoration goals for the project are met;
- The project is completed within available funds;
- The schedule is adhered to;
- Reporting requirements have been met; and
- The trustees are satisfied with the end result.

Some of the duties the project manager will need to perform in order to meet these responsibilities are:

- Ensuring that there is sufficient communication among team members and between the team and the trustees;
- Coordinating necessary meetings;
- Developing any necessary contracts and/or agreements and ensuring that all work is in compliance with contract or agreement requirements;
- Acting as the point of contact for team members, contractors, and trustees;
- Coordinating the sequencing of site work;
- Monitoring work progress and analyzing upcoming work for any problem areas;
- Resolving existing or anticipated problems;
- Documenting work quality and progress;
- Reviewing and approving payment requests made through the contracting officer;
- Reviewing the project budget and communicating any funding issues to other team members and the trustees as appropriate;
- Ensuring that any bureau personnel assisting with the project have received proper health and safety training for their assigned duties and that all site work is in compliance with health and safety requirements;
- Ensuring compliance with all applicable environmental laws and statutes; and
- Ensuring permits are approved prior to construction, and work is performed in compliance with all permit conditions.

Project managers must possess a diverse set of skills. They must be able to work well with people in order to communicate the necessary information and coordinate the work. They must have good analytical skills to identify and solve problems. They need to understand their bureaus' contracting and financial systems in order to track the budgets and manage the contracts. They must have good organizational skills in order to maintain schedules and document work progress. They must have a thorough understanding of the restoration plan to ensure that the project is implemented in a way that meets the restoration goals.

On large, complex projects, or where multiple projects are being managed by one project manager, the following options should be considered:

- Use project management software to help with budgeting, scheduling, and tracking work. This can be especially beneficial when multiple projects are involved. The software can generate a single schedule for multiple projects, which can easily highlight conflicts or potential conflicts with your time.
- If construction is involved, delegate the construction inspection duties. There are a number of options available. Engineering offices in your bureau may have professional construction inspectors on staff who could be “borrowed” for periodic site visits. Other agencies may have similar staff that could be hired for this work. Private engineering firms can be hired to provide this service. Depending on the complexity of the project, other agency personnel familiar with construction practices may be able to provide assistance. The FWS Construction Inspection Handbook is a good resource for construction inspectors. It is available at: <http://www.fws.gov/policy/consthdbk-1.pdf>.
- If extensive construction is involved and there is an adequate budget, the project manager may consider hiring a full-time construction manager. The construction manager would have expanded duties, as compared to the construction inspector, and can perform the majority of the project manager’s duties for the construction phase of the project. Sources for this type of assistance would be the same as those listed in Section 4.0.
- Use a PMP; see Section 3.0 and your bureau’s project management handbook. PMPs are an excellent tool for organizing a large, complex project and providing guidance to a project team. Professional project managers almost always develop a PMP at the outset of a new project and will update it as needed throughout the life of the project.
- Consult the following handbooks for bureau specific guidance:
  - BLM Handbook:  
[http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information\\_Resources\\_Management/policy/blm\\_handbook.Par.19962.File.dat/H-1703-4.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.19962.File.dat/H-1703-4.pdf)
  - FWS Project Management Handbook Chapter: <http://www.fws.gov/policy/360fw2.pdf>
  - NPS Damage Assessment and Restoration Handbook:  
[http://www.fws.gov/contaminants/FWS\\_OSCP\\_05/fwscontingencyappendices/P-NationalParkServiceManual/DO14Handbook.pdf](http://www.fws.gov/contaminants/FWS_OSCP_05/fwscontingencyappendices/P-NationalParkServiceManual/DO14Handbook.pdf)

## 7.0 Project Oversight

An important component of implementation is to ensure that the project is conducted as intended. This can be very time consuming. Experience indicates that for large or complex projects with multiple components, one-half full-time equivalent (FTE) should be allocated for oversight. Oversight includes anything from coordinating with the trustee council, reviewing project plans, attending planning meetings, conducting site visits, and reviewing monitoring methods and results. A more thorough up-front planning effort helps to minimize the number of unexpected delays and problems that occur. However, given that successful restoration projects are dependent on suitable weather and influenced by nearby events (e.g., groundwater pumping), some unexpected problems and delays are likely. Projects have been delayed by such things as contaminants and exotic plant and animal species found at the restoration site that must be removed before the project can begin. Also, expect to do a lot of troubleshooting. Issues that have surfaced on past restoration projects include trespass onto the restoration site, legal issues surrounding water rights in a drought year, and potential impacts on the restoration of proposed groundwater pumping nearby.

One important aspect of oversight is coordination and communication. It is important to know who to contact when you find something not going as planned or agreed upon. Do you stop the backhoe operation? Talk to the onsite project supervisor? Or contact the project manager at the headquarters office? This should be decided and agreed upon before beginning implementation. The more partners or parties involved, the more complex project coordination will be. The following are a few helpful suggestions:

- Require detailed written plans to be submitted with a specified review period and require that the plans be approved by the trustee council and project manager. The trustees or project manager may end up responsible for handling details that are not explicitly mentioned in the contract or cooperative agreement.
- Conduct regular (perhaps every other week or monthly, depending on the pace of the project) conference calls and project team meetings, making sure to keep the trustee representatives informed of progress and issues. It is usually best that these be entirely technical in scope and involve participation by members of the project team and others with the expertise needed to resolve potential issues.
- Require monthly/quarterly progress reports. The reports should address the status of the project schedule and the existing budget, specify which permits have been applied for and approved, which approvals have been obtained (e.g., permission to work on the restoration site), and the data necessary to ensure that performance standards and criteria are being met.
- Conduct scheduled and unscheduled site visits to ascertain that things are going as stated in

monthly/quarterly reports and as outlined in the project plans.

- For large projects, consider a facilitated pre-project planning meeting, including all of the groups involved, to discuss designated contacts, discuss communication among participants and with the community and media; clarify concerns and stated goals, objectives, performance standards, and criteria; discuss what will happen if the project does not go as planned (various realistic ‘what if’ scenarios); and clarify how long monitoring will continue and what result will be considered a “success.” Document any decisions in the PMP.
- It is beneficial to develop a communication plan for interaction with the public on large projects.

A second important aspect of oversight is ensuring that the project is completed within budget. If there is a cost ceiling for the project, make sure the entity contracting the work is receiving a competitive price from contractors; this may involve getting bids or basing reasonable costs on previous market rates. Once the project starts, it is important for the project manager to reconcile monthly/quarterly progress reports and bills to make sure payments are consistent with the work accomplished. While the project manager is responsible for oversight, it is possible to have each trustee help especially in reviewing documents and conducting site visits. Additionally, other staff may be brought in where specific technical skills are needed for oversight (e.g., construction inspection). A decision should be made early regarding which individuals will perform which oversight tasks, and this should be described in the PMP.

## 8.0 Safety, Health, and Other Requirements

### 8.1 Occupational Safety and Health Administration (OSHA)

Each DOI bureau is required by the OSHA to provide a safe and healthful work environment to employees. Safety and health regulations and standards are found primarily in OSHA’s General Industry Standards (29 CFR 1910) and Construction Safety Standards (29 CFR 1926), DOI Safety and Health Manual (485 Departmental Manual), and individual bureau safety standards. Restoration projects being implemented by DOI bureaus should be covered by existing safety programs. It is the responsibility of the project manager to confer with a safety officer to identify hazards associated with the planned restoration projects. However, if a restoration project involves duties that are not normally part of a government employee’s job (e.g., going to a hazardous waste site, operating machinery, etc.), a safety officer should be consulted before beginning the restoration to make sure safety issues have been identified and addressed and that any necessary training is accomplished. Full-time and collateral duty safety officers are available to answer specific hazard identification and prevention questions and to provide assistance in implementing an effective safety program; contact your regional office to locate the appropriate contact(s) for your project.

If a restoration project is being accomplished by contract, the primary applicable safety standards a contractor must adhere to are the OSHA's Safety and Health Regulations for General Industry (29 CFR 1910) and Construction (29 CFR 1926). The contractor will be responsible for implementing a specified written safety plan and for implementing all safety measures required under the contract. The contractor must also abide by any applicable state or tribal and local safety, health, sanitation, and construction codes and standards. In the event that OSHA regulations and other standards conflict, the more stringent regulation or standard will govern. Consult your contracting officer and safety office for further information on applicable standards.

## 8.2 Labor, Civil Rights, and Socioeconomic Requirements

The Department of Labor provisions concerning wages, benefits, work hours, and other labor standards are mandatory for many contracts. Most projects involving construction will require Davis-Bacon Act minimum wage and benefit clauses. Many other types of service contracts will require Service Contract Act wage and benefit clauses. Contracting officers will ensure that these are included where appropriate. If you plan to use contracts to accomplish your restoration project, check with your contracting officer before estimating restoration project costs to determine how these requirements will affect your project. Federal contracts also must include clauses that assure compliance with the civil rights laws and regulations. Many construction contracts will also include socioeconomic clauses that require or strongly encourage hiring minorities, women, veterans, etc., and the use of small and minority-owned businesses.

## 9.0 Permits

A variety of permits may be required depending on the nature and location of the project. While this section provides brief summaries and website resources for many of the federal permits or clearances that may be required for restoration projects, there may be additional state, tribal, and/or local requirements. It is important to review any potential permit requirements during the planning phase, as this will allow you to streamline environmental reviews and avoid delays or situations where project changes must be made in response to permit requirements. In some cases, a permit request to a federal agency may trigger an environmental review requirement.

At times, contracts and associated specifications for restoration work require the firm or entity awarded the contract(s) to obtain necessary permits, licenses, certificates, or other required authorizations, but projects can be expedited by having the government obtain permits prior to the contract being awarded. The contractor(s) engaged to do restoration work must comply with the applicable permit requirements to the satisfaction of the project manager. Usually, the required permits must be in the contractor's (or operator's) hands, with copies appropriately distributed (and properly displayed) before on-the-ground restoration work begins or a particular phase of activity gets underway or is likely to be initiated.

Since the need for a permit arises within the authority issuing it, the decision to require a permit rests solely with the regulatory and/or issuing agency. The project manager cannot make that determination. Self assessment screening checklists or forms prepared by a permitting agency and designed to be filled out by permit applicants can help answer questions about whether or not a permit is needed. If the project manager suspects a permit may be necessary, the responsible team member should be directed to contact the appropriate issuing agency. In this circumstance, the contractor or operator must subsequently provide a copy of the permit or proof that the permit is not required. The project manager cannot determine the permit holder's compliance with standards, terms, or conditions of permits issued by other federal, state, or local agencies or tribal authorities. However, this does not mean the matter of compliance with other agency permits is ignored. Responsible project managers may inspect for compliance with other agencies' permit standards, terms, and conditions and report suspected noncompliance to the permitting agency. The permitting agency (not the AO or project manager) is solely responsible for formally determining compliance or noncompliance with permit requirements. The responsible trustee agency representative may, however, issue a Notice of Noncompliance with contract term, based on the other agency's determination, for failing to conform to permit standards. In addition, though relatively unlikely, two different agencies may assert concurrent or overlapping jurisdiction and may not agree on either the need for a permit or on permit standards. In that event, the responsible trustee representative should take no compliance action until the other agencies have resolved the disagreement and given the contractor a final decision on the issue.

It is unlikely that any one project will be affected by all of the federal laws summarized in this section. Some of the more common permits and clearances required for restoration projects are listed below, along with additional points of contact.

## 9.1 Clean Water Act (33 U.S.C. 1251 *et seq.*)

The Clean Water Act (CWA) established a goal of “fishable and swimmable” water for every American and established programs to restore and maintain the chemical, physical, and biological integrity of the Nation’s water. Federal water quality standards, discharge limitations, and permits are the primary means to achieve the purpose of the CWA. The states and the Environmental Protection Agency (EPA; when state programs are not certified) administer and enforce a National Pollution Discharge Elimination System (NPDES) permit system to control “point source” discharges into waters of the United States. The requirements of two provisions are particularly pertinent to restoration project implementation:

**Section 319.**—Water quality degradation from diffuse pollution sources, or “nonpoint sources,” are addressed in Section 319. Under Section 319, states develop nonpoint source management plans and prescribe best management practices to stem nonpoint source problems. Nonpoint source programs are not enforceable by EPA or the states but should be taken into consideration when evaluating project impacts. However, states are authorized to review federal agency plans and

development projects under 319(k) to assure consistency with the state's nonpoint source pollution management programs. Restoration proposals may require a state 319 consistency review.

**Section 404.**—Restoration proposals that potentially create discharges of dredged or fill material into waters of the United States, or modification of wetland substrates, normally require department of the Army Section 404 permit, as issued by the U.S. Army Corps of Engineers (Corps). Federal projects that meet the conditions of Section 404(r) of the CWA do not require a Corps permit.

The Corps issues two types of Section 404 permits: individual permits and general permits. Individual permits are usually required for projects that can potentially cause significant impacts to the aquatic environment and, typically, involve a 30-day public notice comment period. The Corps issues most individual permits within 120 days, but permits for large or complex projects may take longer to complete. General permits are typically used to authorize projects that will cause only minimal impacts on the aquatic environment, and represent an expedited form of permit review. General permits may be developed at the national, regional, or statewide basis to authorize a category of similar actions (e.g., road crossings, utility line construction, cleanup of hazardous and toxic waste), and are usually issued within 30 days. In general, the Section 404 permit program requires that applicants design their projects to avoid and minimize wetland impacts to the extent practicable, and provide compensation (i.e., wetland mitigation) for all unavoidable wetland impacts.

If a Corps permit is required for a proposed project, the project proponent must also obtain water quality certification under Section 401 of the CWA before starting the work authorized by the permit issued by the Corps. In most cases, the Section 401 program is administered by the states. Some states also have additional permit requirements for any work in or around water bodies, even if the work does not involve significant excavation or filling of wetlands. These are often referred to as “hydraulic” or “hydrology” permits. Contact your state's department of natural resources (or similar agency).

## 9.2 Endangered Species Act (18 U.S.C. 1531 *et seq.*, 50 CFR Parts 17, 222, 224)

The Endangered Species Act (ESA) established a national policy that all federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of the Act. In order to meet this policy, the ESA describes how federal agencies will consult with the Secretary of the Interior or Commerce to ensure that any action authorized, funded, or carried out by an action agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of proposed critical habitat.

The federal action agency determines whether the action may affect proposed and listed species, or proposed and designated critical habitat. The action agency notifies the responsible Service (FWS or the National Oceanic and Atmospheric Agency's National Marine Fisheries Service) of its determination in a

request for concurrence letter. The responsible Service may concur or not concur with the request, depending on the anticipated effects of the action on species and critical habitat. If the action agency finds that the action may affect, but is not likely to adversely affect, species, then the responsible Service may concur with that determination and end consultation. This happens when the effects on species are expected to be discountable, insignificant, or completely beneficial. If the responsible Service does not concur with the determination, it can recommend that the action agency initiate formal consultation. Formal consultation is initiated when the action is likely to adversely affect species or critical habitat. The responsible Service determines if the action will jeopardize species or destroy or adversely modify critical habitat.

Although resource restoration will generally have a beneficial effect on threatened and endangered species, there are many activities that could result in negative effects if mitigation measures are not implemented. For example, introduction of heavy equipment into an area, excavation, increased sedimentation, or runoff from restoration activities could kill or injure threatened and endangered species. Consultation, including internal Service consultation, is necessary for restoration projects. Consultation and any additional studies should be conducted simultaneously with development of the Restoration Plan/Environmental Assessment (RP/EA).

The ESA also requires action agencies to avoid making any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures after initiation of consultation. This entails a commitment of resources from the onset that precludes the implementation of conservation measures that could mitigate the effects of the action. For more details, see Section 7(d) of the ESA. For further information about section 7(a)(2) consultation procedures, contact a FWS consultation biologist, or refer to the *Endangered Species Consultation Handbook*, March 1998, 50 CFR 402 (available online at [http://www.nmfs.noaa.gov/pr/pdfs/laws/esa\\_section7\\_handbook.pdf](http://www.nmfs.noaa.gov/pr/pdfs/laws/esa_section7_handbook.pdf)).

### 9.3 National Historic Preservation Act (16 U.S.C. 470)

The National Historic Preservation Act (NHPA) established the *National Register of Historic Places*. Section 106 requires federal agencies to take into account the effects of their actions on sites listed or eligible for listing on the register. No RP/EA and prospective implementation effort can assume that cultural resources will not be affected, and it is recommended that the project manager consult with their bureau archeologist to determine if an archeological survey will be required in any areas to be disturbed by any proposed restoration projects. Consultation with the State Historic Preservation Officer (SHPO) and/or the Tribal Historic Preservation Officers (THPOs) is required for any action affecting, or potentially affecting, sites having cultural, historic, or archeological value. Identifying sensitive sites within the project impact area may be delegated to project proponents. Consultation with the affected tribe(s), and other interested parties is required throughout the Section 106 process. Private consultants or other knowledgeable sources, such as universities, may be used to obtain required data.

Section 106 ensures that federal agencies formally consult with state and local groups before nonrenewable cultural resources (such as archeological sites and historic structures) are destroyed. Formal consultation under the NHPA ("Section 106 consultation") may be made concurrently with restoration planning and the NEPA process. Consultation with the SHPO/THPO may occur during regional restoration decision-making, particularly where cultural resource evaluations are a regional concern. Consultation with the SHPO/THPO may also identify a need for additional consultation in advance of subsequent local, site-specific restoration proposals. Consultation may result in project modification to avoid or minimize impacts to significant resources, and may require mitigation where significant impacts are unavoidable. SHPOs or THPOs can be identified at the following website: <http://www.achp.gov>. This website provides substantial information about the NHPA and its implementation. The website also includes links to the bureaus under DOI. DOI's in-house cultural resource expertise may assist in planning restoration activities.

#### 9.4 Other Permitting Requirements

Depending on land ownership status, nature of the project, location, and local land use, it may be necessary to address ordinances and building permits. Contact the local jurisdiction, which will normally be the township or county. In the western United States, water rights can be a significant issue if the project proposes to use or impound any water. Most DOI agencies have in-house water resource experts who can be consulted on any potential water right-related issues. If your project is within a drainage or soil conservation district, there may be additional permit requirements or restrictions on wetland or stream restoration projects. The drainage or soil conservation district manager should know if there are any requirements.

Informational requirements for the permits listed above (and others that may be required) can vary greatly. In most cases, at least a conceptual level of design is required, showing the location and configuration of the project. It may also be necessary to have accurate estimates of the quantity and location of earth to be moved, locations and dimensions of water control structures, etc.

Before contacting the permitting agencies, you should discuss your project with your bureau staff that has experience with similar projects in your area. This can help you understand what permits are actually required, who in the permitting agency may be especially helpful, and what level of design information is required. Contractors can also be hired to make permit determinations and acquire the necessary permits. However, your bureau still needs to review the determinations to make sure they are correct as well as sign and approve any permit applications. In addition to the information and website resources provided above, some possible sources of information about permitting requirements include the FWS Partners for Fish and Wildlife and National Wildlife Refuge programs, agency engineering offices, and non-governmental conservation organizations that are partners in the project.

## 10.0 Realty-Based Site Protection Mechanisms

While the success of a restoration project is primarily determined by good project design and implementation, other external factors also affect its success. Changes in land use at or near the restoration site can significantly influence the prospects for project success or failure. The time to anticipate and address restoration site protection needs (whether realty-based or not) is as early as possible in restoration planning. This provides both a basis for a reasoned selection from among the alternatives analyzed in detail and a helpful record for implementation.

Mechanisms to protect restoration projects from incompatible uses range from fencing, posting signs, and increasing patrols to realty-based measures, such as deed restrictions, acquisition of interests in land, land trusts, and other project arrangements. These realty-based protective actions may apply to sites (or to portions of sites) with surface lands not managed by, and under the jurisdiction of, DOI or another federal land management agency. Realty-based site protection is frequently an element in restoration planning for non-federal sites.

Before proposing acquisition of land, or an interest in land, the project manager must determine whether the restoration protection requirements may be met some other way. Thoughtful review of other ways to protect the restoration investment is appropriate, given the procedural requirements, expense, and complexities associated with real estate transactions. That review, like realty-based protection alternatives, must consider the time factor in planning project protection. In other words, for how long will the protection be needed? When the preferred alternative is acquisition of an interest in land, including deed restriction, the type of acquisition adopted in the RP/EA will normally be the minimum required for the level of protection needed. In every case, proposed acquisition of lands or interests in lands must be within the limitations of applicable authorities and consistent with the restoration funding plan.

Many different land ownership patterns and possible combinations of interest may be encountered in natural resource damage restoration. The expertise of realty specialists on staff, or available via other DOI bureaus or offices or other co-trustee agencies, may be crucial to effective use of realty options, as is the advice of the appropriate solicitor assigned to your particular case. The specific circumstances and conditions involved with any particular restoration case make it impossible to do more than generally describe realty options in this handbook. However, considering how land and interests in land can be tailored under the law to particular circumstances, countless arrangements are realistically possible. Some common situations illustrate the potential range of options:

- The responsible parties, or trustee(s), acquire other property, or an interest in other property, to replace the services of injured resources.
- The responsible party deeds the damaged site, or an interest in the site to the trustee.
- The property acquisition(s) may be limited to a certain time or be in perpetuity.

- A trustee agency may award a grant or cooperative agreement to a non-governmental agency, who in turn purchases land or an interest in land on the agency's behalf.
- There may be simple transactions involving other land ownerships or lease holders, or there may be complicated third party transactions (land exchanges are an example of the latter).
- Property donations or gifts are also transactions that can be a factor in planning and arranging for project protection.

## 10.1 Site Protection Alternatives

The following sections describe major forms of interest in land that may apply to restoration project planning and protection situations.

### *10.1.1 Covenants, Conditions, and Restrictions (CC&Rs)*

The English system of common law, adopted in the United States, allows imposing certain restrictions on property use and requiring one party (usually the owner or lessee) to do, or refrain from doing, certain things. CC&Rs are an aspect of land use control that exists outside of the zoning regulatory body that typically regulates land uses at the local level. CC&R are the "fine print" in property deeds, frequently used in planned subdivisions and communities to protect and enhance the value, desirability, and attractiveness of residential property. These restrictions or covenants transfer with the deed from seller to buyer. Such restrictions may be enforced in the courts long after a sale.

Even though CC&Rs, or "deed restrictions," are legally binding rules that are filed with the real property record, their effectiveness is highly dependent upon consistent and continuing enforcement. In the real world, their effectiveness depends, in large measure, upon the cooperation of the party(ies) who possess the property. This compliance dilemma is readily seen in planned communities, where enforcement depends upon the willingness of members of the homeowners association to enforce the rules (e.g., deed clauses).

### *10.1.2 Easements*

An easement is a non-possessory interest in land that entitles the owner or holder thereof, as matter of right and not merely by way of a permissive license that can be revoked at any time, to enter upon land possessed by another person (usually an owner, tenant, or lessee) for a particular purpose in the form of a prescribed use to be made of the land (e.g., conservation, right-of-way, scenic, solar, air space, etc.). The deed holder has full rights of possession and enjoyment of the property. However, the easement holder can only use the land for a stated purpose.

Because an easement is an interest in land owned by another person, its transfer and use must be subject to laws governing real property. Unless otherwise specified in the easement document, or by subsequent amendment or termination, the term is perpetual. Such laws continue regardless of how many times the

property changes hands. Renegotiation is necessary only if all parties agree to it. Unlike other real property, an easement can be considered valid and recorded with a locatable legal description. The value of an easement is determined by a “before” and “after” appraisal and equals the amount of reduction in the property’s value resulting from the easement restrictions.

On the other hand, if the easement is granted by someone other than the fee title owner, it is valid only for the duration of that person’s estate in the property. For example, an easement granted by a tenant under a 10-year lease terminates with the lease. An easement can also be terminated when it no longer serves the purpose for which it was granted or when an owner releases or abandons his or her interest in the easement.

### *10.1.3 Conservation Easement*

This specific class of easement prohibits the landowner(s) from doing things which otherwise would be lawful upon his estate in order to protect specified natural resources and/or conservation values. A conservation easement may be tailored to meet the restoration requirements of the situation. Limitations may be made on the number and location of land use activities and land disturbances that can take place: at the site of the injury or at an off-site property when circumstances justify. They are highly flexible instruments and may cover many situations (e.g., habitat conservation, stream clearance, rights-of-way, habitat improvement structure, etc.). The gift of a conservation easement, if it meets IRS requirements, qualifies as a tax deductible charitable contribution by the donor.

### *10.1.4 Exchanges*

The process of "trading" or "swapping" real estate is referred to as an exchange. Land may be exchanged by responsible parties (or DOI trustees under limited circumstances) for lands owned by corporations, individuals, states, or local governments for off-site restoration. Exchanges are only pursued with willing landowners. Through exchanges, non-federal parties can acquire lands with restoration value. Monetary value and location are key considerations in the exchange mode. The federal government, when it is a party to an exchange, may acquire lands offering public recreation, wildlife, and resource values. Land exchanges may involve two, three, or more landowners.

### *10.1.5 Gifts*

An owner may make a voluntary offer of property without being approached by restoration officials. An owner may also decide to donate an interest to the United States once an offer has been made to acquire land or interest in land. Gifts of land should be obtained free of reservations. If this is not possible, such gifts may be accepted subject to reservations or outstanding rights which will not interfere with the restoration and associated purposes for which they were donated. DOI policy and cautions associated with acquiring real property are set forth in the Departmental Manual (see 602 DM 2). This policy is

aimed at minimizing potential liability for DOI and its bureaus from property that is contaminated by hazardous materials or other environmental problems.

#### *10.1.6 Fee Title*

An acquisition of a tract or parcel in fee may be appropriate as an alternative to an easement. A situation where easement acquisition cost approaches the total property value might justify fee acquisition.

#### *10.1.7 Intergovernmental Agreements*

A cooperative arrangement, though not involving an interest in land, made between a bureau and either a non-DOI or non-federal government agency may provide for the conditional use of land in another agency jurisdiction to sufficiently safeguard restoration projects.

#### *10.1.8 Private Agreements*

A cooperative arrangement, though not involving an interest in land, that is made between a responsible party, or DOI bureau, and other private owner(s) may provide sufficient basis for access to, and for the protection of, restored resource values, particularly under circumstances involving a federal right of reciprocal value to the private owner(s). An example of such an arrangement is the use of the FWS Partners for Fish and Wildlife Program to provide short- to mid-term protection (10-15 years) for restoration projects identified in a restoration plan.

#### *10.1.9 Withdrawals*

Withdrawals can be made by the Secretary of the Interior, through the BLM, to protect restoration while it is being conducted and once it is completed. Withdrawals are essentially the withholding of an area of federal land and/or minerals from settlement, sale, location, or entry under some or all of the general land laws and/or mineral laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area. Withdrawals can also reserve the area for a particular purpose or program such as an environmental education center as part of a restoration plan or for a restored recreational use. Withdrawals can also be used to transfer jurisdiction over an area of federal land from one department, bureau, or agency to another department, bureau, or agency (for example, transferring jurisdiction of a restoration project that produces a significant waterfowl site from BLM to FWS).

## **10.2 Control, Enforcement, and Duration**

Control, enforcement, and duration are key variables in realty-based protection strategies. The amount of control that can be exercised by the trustee, the responsible party (as restoration requirements), or a designated third party varies directly with the interest in land that is involved. Unrecorded covenants, conditions, and restrictions are examples of limited control. Fee title provides maximum control. The enforceability of needed resource protection depends on the degree of control of the parcel(s) or tract(s) at

the site. Enforceability becomes a bigger issue as the degree of interests in land decreases. Private, unrecorded covenants, conditions, and restrictions may not provide needed protection over time without a dependable enforcement entity.

How long will any particular restoration project need protection? This critical question is integral to restoration planning. It is highly germane to realty-based protection alternatives, though it may, depending upon the particular set of circumstances, be equally important where interest in land is not an issue. A reasonably foreseeable adverse change, (for example, to a type of land use at a project site that will not be conducive to habitat restoration objectives) might justify some form of realty-based protection. The opportunity, via a low-cost or no-cost realty transaction to ensure long-term project protection may also be a valid reason to include a realty-based option in a restoration plan. The importance of the project, in terms of attributes specific to the injured natural resource(s) (e.g., rarity, criticality, genetic factors, etc.), may also warrant using some form of realty action.

### 10.3 Authorities

DOI bureaus responsible for trust resources derive various acquisition authority through federal statutes. Some statutes provide a general authority that a bureau may use, depending on the circumstances. Other statutes set out narrow and highly limited authority for acquiring real estate and/or interest in lands or accepting land donations. In some cases, congressional approval may be required for acquisitions. Use the bureau list below for further information about these authorities.

#### *10.3.1 Bureau of Indian Affairs*

March 2, 1931 (25 U.S.C. 409a, as amended by Act of June 30, 1932) - for tribal land that will be held in trust by the Bureau of Indian Affairs (BIA). Land being transferred to BIA from another agency would be handled by BLM under their authorities.

#### *10.3.2 Bureau of Land Management*

BLM processes lands transactions, such as acquisitions, disposals, or exchanges of lands between the BLM and responsible parties, in accordance with the Federal Land Policy and Management Act (FLPMA) of October 21, 1976, as amended (43 U.S.C., Section 1715, Acquisitions of public lands. . .; Section 1716, Exchanges; Section 1718, Documents of conveyance; terms, covenants, etc.). Other authorities governing lands transactions include the Federal Land Exchange Facilitation Act of 1988; the NHPA, as amended; the ESA, as amended; and the NEPA. Departmental guidance for lands transactions can be found in Departmental Manual 602 DM2, as well as regulations such as 43 CFR 2200 (exchanges) and 2700 (sales), which require certain actions on the part of DOI, such as public notice and consideration of public comments to the proposal. According to the Federal Land Transaction Facilitation Act of 2000 (Public Law 106-248), proceeds from land sales may be used by the BLM, as well as other bureaus and agencies, to purchase other lands.

### *10.3.3 Bureau of Reclamation*

The basic authority for acquiring lands, by direct purchase or condemnation, is the Reclamation Act of 1902 (32 Stat. 388 and 389), and amending and supplementary acts. Additional authorities include The Federal Power Act of June 10, 1920 (41 Stat.1063), the Reclamation Project Act of August 4, 1939, Section 14 (53 Stat. 1187), and the Federal Water Project Recreation Act, PL 89-72 (70 Stat. 231), as amended.

### *10.3.4 Fish and Wildlife Service*

The FWS has authority to purchase land, accept donations of land, exchange land, and/or transfer land from another federal agency under a variety of authorities, including the National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended, and the Migratory Bird Conservation Act (16 USC 715-715r), as amended. Further information on these and other FWS acquisition and management authorities can be found at the following websites:

<http://policy.fws.gov/340fw1.html>

<http://www.fws.gov/policy/640fw1.html>

### *10.3.5 National Park Service*

The guiding law in federal land acquisition is PL 91-646, which sets the parameters for any federal acquisition. In addition, the NPS would follow all laws and regulations as stated in Director's Order 25, Land Acquisition, as well as any other relevant (hazardous material, relocation, etc.) laws and regulations.

### *10.3.6 General DOI Requirements*

Regulations pertaining to acquisitions and exchanges can be found at 43 CFR, Group 2100, Acquisitions - Part 2110, Gifts; Part 2120, Leases; Part 2130, Acquisition of Lands and Interests in Lands by Purchase or Condemnation; and Part 2200, Exchanges.

In addition, bureaus are required to perform a preacquisition environmental site assessment to determine the likelihood of the presence and extent of hazardous substance-related or other environmental liability associated with real property prior to acquisition. See the Departmental Manual, specifically 602 DM 2. This can be accessed at [http://elips.doi.gov/app\\_home/index.cfm?fuseaction=home](http://elips.doi.gov/app_home/index.cfm?fuseaction=home) (then enter 602 DM 2 in "Search" box).

### *10.3.7 States and Tribes*

In the event that a state or tribe will assume jurisdiction of land acquired for restoration purposes, distinct rules and regulations not addressed by federal law may apply. Check with your state or tribal trustees to ensure that the proper authorities are being followed.

## 10.4 Administrative Guides

Certain manuals and handbooks by other United States agencies are source documents for many procedures in acquisitions. Examples are:

- OMB Circular A-94, revised October 29, 1992, “Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs” (check with OMB on applicability)
- Department of Justice, “Title Standards 2001”: A guide for the preparation of title evidence in land acquisitions by the United States of America
- Department of Justice, 1972, “A Procedural Guide for the Acquisition of Real Property by Governmental Agencies” (pamphlet)
- Interagency Land Acquisition Conference, “Uniform Appraisal Standards for Federal Land Acquisitions”

Within DOI bureaus, the following manual and handbooks may be useful:

- FWS Realty Operations: <http://www.fws.gov/policy/342fw3.pdf>
- BLM Manual of Surveying Instructions:  
<http://www.blm.gov/cadastral/Manual/73man/id1.htm>

## 10.5 Solicitor’s Office and the Department of Justice Functions

DOI bureaus do not have the authority to perform certain critical functions necessary to complete the acquisition process. These functions are vested in the Department of Justice and in DOI’s Solicitor’s Office. These offices perform essential functions in the acquisition process.

### 10.5.1 *Approval of Title*

Bureaus do not have the authority to approve title in connection with acquisition transactions. The Attorney General (40 U.S.C. Section 255) has this authority which, with respect to DOI, has been delegated to the Solicitor, with certain stated exceptions. (The exceptions are contained in Attorney General Order 440-70, 35 *Federal Register* 16084 (1970); Assistant Attorney General redelegation, dated October 2, 1970, as amended; 209 DM 3; and Solicitor’s Regulations, Chapter 6.) The Solicitor has redelegated this authority to the Associate Solicitors, Regional Solicitors, and Field Solicitors.

### 10.5.2 *Acquisition Forms*

Deed form approval is the Solicitor’s responsibility. (See 109 Departmental Manual 3.1, 200 Departmental Manual 1.6c and 209 Departmental Manual 3.)

### *10.5.3 Appraisal*

The DOI Office of Valuation Services is responsible for the Department's real estate appraisal program. Any DOI bureau acquisitions must comply with Secretarial Order #3300 ([http://elips.doi.gov/app\\_so/act\\_getfiles.cfm?order\\_number=3300](http://elips.doi.gov/app_so/act_getfiles.cfm?order_number=3300)). Consult with your Field or Regional Solicitor to ensure that all appraisals have been reviewed prior to moving forward with land acquisition efforts.

## 10.6 Key Terms

### *10.6.1 Deed*

A legal document conveying title to a property. A deed serves to implement and evidence a present transfer of the title to land, or of certain interest in land (for example, easement interest), by the purported owner (referred to in the deed as the "grantor") to a new owner (the "grantee"). State law typically imposes prerequisites to the recording of a deed regarding grantor age, mental competency, signatures, witnesses, etc. A deed to privately owned land must always be delivered to, and be accepted by, the grantee in order to complete the transfer of title.

### *10.6.2 Interest in Land*

The law recognizes that each of a number of persons can hold or own a different group, or collection, of rights or privileges in the same parcel of land at one and the same time. Each group of rights, and the duties that accompany them, can be thought of as an "interest in land." To a great degree, the laws of the state in which the land is located govern acquisition transactions.

### *10.6.3 Title*

The right to, or ownership of, property. The word may be thought of as synonymous with the words "right," "interest," and "estate," which denote the degree, quantity, nature, and extent of the interests that a person, or entity, may have in property.

## 11.0 Long-Term Maintenance

If long-term site maintenance is needed (e.g., removal of invasive species on a regular basis, fire management, biological monitoring, etc.), arrangements should be made at the outset of the restoration project for the maintenance to be provided after project completion. In some cases, the property owner will agree to do the necessary maintenance as part of ongoing property management. The parcel being restored may be part of a larger tract that is already under a management plan that includes regular habitat maintenance activities. In such cases, no additional planning may be needed. In other cases, a

management agreement may be necessary to ensure that the restored habitat will be properly maintained for the necessary time period, based on the settlement agreement, court ruling, and the restoration plan.

The issue of who will fund the maintenance must be addressed. Will the property owner agree to fund these activities? Will funds need to be set aside for a certain period of maintenance? Will funds need to be transferred to a third party for restoration site maintenance? Endowment funds with discrete funding codes for maintenance, biological monitoring, and other long-term needs may be established through the DOI NRDAR Fund if desired (contact the DOI NRDAR Fund Manager for details). These are important issues because the long-term success of the restoration may depend upon ongoing maintenance activities.