

**1.1 Background**

A major goal of the Oil Pollution Act of 1990 (OPA)<sup>1</sup> is to make the environment and public whole for injury to or loss of natural resources and services as a result of a discharge or substantial threat of a discharge of oil (referred to as an “incident”). This goal is achieved through returning injured natural resources and services to the condition they would have been in if the incident had not occurred (otherwise referred to as “baseline” conditions), and compensating for interim losses from the date of the incident until recovery of such natural resources and services through the restoration, rehabilitation, replacement, or acquisition of equivalent natural resources and/or services.

The U.S. Department of Commerce, acting through the National Oceanic and Atmospheric Administration (NOAA), issued final regulations providing an approach that public officials (trustees) may use when conducting Natural Resource Damage Assessments (NRDA) under OPA.<sup>2</sup> These NRDA regulations (the OPA regulations) describe a process by which trustees may:

- Identify injuries to natural resources and services resulting from an incident;
- Provide for the return of injured natural resources and services to baseline conditions and compensation for interim lost services; and
- Encourage and facilitate public involvement in the restoration process.

The OPA regulations are included in Appendix A of this document for reference. The preamble discussion of the OPA regulations, along with a summary of and response to public comments received on the proposed regulations, is published at 61 Fed. Reg. 440 (January 5, 1996).

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<sup>1</sup> 33 U.S.C. §§ 2701 *et seq.*

<sup>2</sup> The OPA regulations are codified at 15 CFR part 990 and became effective February 5, 1996.

## 1.2 Relation to the National Environmental Policy Act (NEPA )

Under OPA, damages for injuries to natural resources and services resulting from an oil spill incident must be based on a restoration plan developed with opportunity for public review and comment.<sup>3</sup> To meet this requirement, the OPA regulations require that trustees provide the public with an opportunity to review and comment on a draft restoration plan before final restoration actions are selected.

The restoration planning process under the OPA regulations is patterned after the National Environmental Policy Act (NEPA).<sup>4</sup> NEPA is the statute that has allowed Federal agencies to incorporate environmental effects on the human environment in their decisionmaking. The Council on Environmental (CEQ) regulations (or the NEPA regulations)<sup>5</sup> serve to implement NEPA and describe the NEPA planning process in detail. The NEPA regulations are found in Appendix B of this document.

The principal reason for using the NEPA planning process as the template for restoration planning under OPA is two-fold. First, the NEPA planning process follows the fundamental principles of any sound decisionmaking procedure by openly evaluating all relevant information and involving all interested parties. The NEPA planning process is not intended to be burdensome by creating additional paperwork. Instead, given its inherent flexibility, the NEPA planning process will expedite decisionmaking, reduce transactions costs, and avoid litigation. Second, evaluation of restoration alternatives designed to reach an environmentally beneficial decision is at the heart of both OPA and NEPA.

## 1.3 Purpose and Scope of this Document

The NEPA regulations state that:

“Federal agencies shall to the fullest extent possible...[i]ntegrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively.”  
NEPA regulations at § 1500.2(c)

The purpose of this document is to provide trustees with general guidance to develop restoration plans under OPA that comply with NEPA’s procedural requirements. The focus of this document is to more fully describe the processes and products required for restoration planning under the OPA regulations.

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<sup>3</sup> OPA § 1006(c)(5).

<sup>4</sup> 42 U.S.C §§ 4321 *et seq.*

<sup>5</sup> The CEQ regulations implementing NEPA or NEPA regulations (40 CFR part 1500 *et seq.*) were promulgated on November 29, 1978 (43 Federal Register §§ 55,978 *et seq.*).

In the process of implementing the guidance detailed in this document, trustees may need to refer to other relevant NRDA-related guidance. Appendix C lists these related guidance materials.

## **1.4 Intended Audience**

The primary users of this document are expected to be:

- Federal trustees who intend to conduct restoration planning under OPA and who must also comply with NEPA;
- State trustees who intend to conduct restoration planning under OPA and who must comply with their NEPA-equivalent laws, known as State Environmental Policy Acts or SEPA; and
- Other trustee agencies who seek guidance on the process of restoration planning under OPA, although not obligated to any NEPA or NEPA-equivalent compliance requirements.

When developing a site-specific restoration plan, trustees should consider their own agency NEPA requirements.

## **1.5 The NRDA Process**

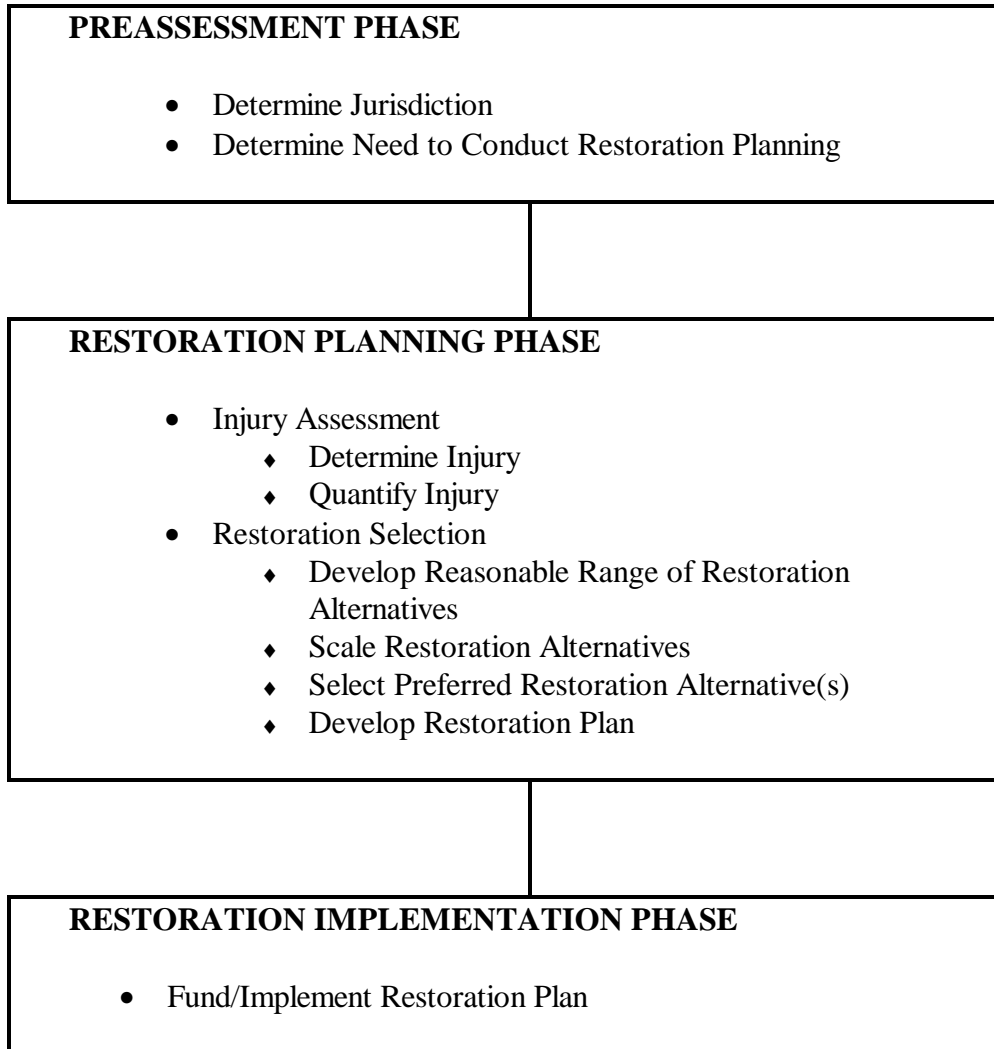
The NRDA process shown in Exhibit 1.1 in the OPA regulations includes three phases outlined below: Preassessment; Restoration Planning; and Restoration Implementation.

### **1.5.1 Preassessment Phase**

The purpose of the Preassessment Phase is to determine if trustees have the jurisdiction to pursue restoration under OPA, and, if so, whether it is appropriate to do so. This preliminary phase begins when the trustees are notified of the incident by response agencies or other persons.

Once notified of an incident, trustees must first determine the threshold criteria that provide their authority to initiate the NRDA process, such as applicability of OPA and potential for injury to natural resources under their trusteeship. Based on early available information, trustees make a preliminary determination whether natural resources or services have been injured. Through coordination with response agencies, trustees next determine whether response actions will eliminate the threat of ongoing injury. If injuries are expected to continue, and feasible restoration alternatives exist to address such injuries, trustees may proceed with the NRDA process.

**NATURAL RESOURCE DAMAGE ASSESSMENT**  
**Oil Pollution Act of 1990**  
**Overview of Process**



**Exhibit 1.1** NRDA process under the OPA regulations.

## **1.5.2 Restoration Planning Phase**

The purpose of the Restoration Planning Phase is to evaluate potential injuries to natural resources and services and use that information to determine the need for and scale of restoration actions. The Restoration Planning Phase provides the link between injury and restoration. The Restoration Planning Phase has two basic components: injury assessment and restoration selection.

### **1.5.2.1 Injury Assessment**

The goal of injury assessment is to determine the nature, degree, and extent of any injuries to natural resources and services. This information is necessary to provide a technical basis for evaluating the need for, type of, and scale of restoration actions. Under the OPA regulations, injury is defined as an observable or measurable adverse change in a natural resource or impairment of a natural resource service. Trustees determine whether there is:

- Exposure, a pathway, and an adverse change to a natural resource or service as a result of an actual discharge; or
- An injury to a natural resource or impairment of a natural resource service as a result of response actions or a substantial threat of a discharge.

To proceed with restoration planning, trustees also quantify the degree, and spatial and temporal extent of injuries. Injuries are quantified by comparing the condition of the injured natural resources or services to baseline, as necessary.

### **1.5.2.2 Restoration Selection**

#### **(a) Developing Restoration Alternatives**

Once injury assessment is complete or nearly complete, trustees develop a plan for restoring the injured natural resources and services. Under the OPA regulations, trustees must identify a reasonable range of restoration alternatives, evaluate and select the preferred alternative(s), and develop a Draft and Final Restoration Plan. Acceptable restoration actions include any of the actions authorized under OPA (restoration, rehabilitation, replacement, or acquisition of the equivalent) or some combination of those actions

Restoration actions under the OPA regulations are either primary or compensatory. Primary restoration is action taken to return injured natural resources and services to baseline, including natural recovery. Compensatory restoration is action taken to compensate for the interim losses of natural resources and/or services pending recovery. Each restoration alternative considered will contain primary and/or compensatory restoration actions that address one or more specific injuries associated with the incident. The type and scale of compensatory restoration may depend on the nature of the primary restoration action, and the level and rate of recovery of the injured natural resources and/or services given the primary restoration action.

When identifying the compensatory restoration components of the restoration alternatives, trustees must first consider compensatory restoration actions that provide services of the same type and quality, and of comparable value as those lost. If compensatory actions of the same type and quality and comparable value cannot provide a reasonable range of alternatives, trustees then consider other compensatory restoration actions that will provide services of at least comparable type and quality as those lost.

#### **(b) Scaling Restoration Actions**

To ensure that a restoration action appropriately addresses the injuries resulting from an incident, trustees must determine what scale of restoration is required to return injured natural resources to baseline levels and compensate for interim losses. The approaches that may be used to determine the appropriate scale of a restoration action are the resource-to-resource (or service-to-service approach) and the valuation approach. Under the resource-to-resource or service-to-service approach to scaling, trustees determine the appropriate quantity of replacement natural resources and/or services to compensate for the amount of injured natural resources or services.

Where trustees must consider actions that provide natural resources and/or services that are of a different type, quality, or value than the injured natural resources and/or services, or where resource-to-resource (or service-to-service) scaling is inappropriate, trustees may use the valuation approach to scaling, in which the value of services to be returned is compared to the value of services lost. Responsible parties (RPs) are liable for the cost of implementing the restoration action that would generate the equivalent value, not for the calculated interim loss in value. An exception to this principle occurs when valuation of the lost services is practicable, but valuation of the replacement natural resources and/or services cannot be performed within a reasonable time frame or at a reasonable cost. In this case, trustees may estimate the dollar value of the lost services and select the scale of the restoration action that has the cost equivalent to the lost value.

### **(c) Selecting a Preferred Restoration Alternative**

The identified restoration alternatives are evaluated based on a number of factors that include:

- Cost to carry out the alternative;
- Extent to which each alternative is expected to meet the trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses;
- Likelihood of success of each alternative;
- Extent to which each alternative will prevent future injury as a result of the incident, and avoid collateral injury as a result of implementing the alternative;
- Extent to which each alternative benefits more than one natural resource and/or service; and
- Effect of each alternative on public health and safety.

Trustees must select the most cost-effective of two or more equally preferable alternatives.

### **(d) Developing a Restoration Plan**

A Draft Restoration Plan will be made available for review and comment by the public, including, where possible, appropriate members of the scientific community. The Draft Restoration Plan will describe the trustees' preassessment activities, as well as injury assessment activities and results, evaluate restoration alternatives, and identify the preferred restoration alternative(s). After reviewing public comments on the Draft Restoration Plan, trustees develop a Final Restoration Plan. The Final Restoration Plan will become the basis of a claim for damages.

#### **1.5.3 Restoration Implementation Phase**

The Final Restoration Plan is presented to the RPs to implement or fund the trustees' costs of implementing the Plan, therefore providing the opportunity for settlement of the damage claim without litigation. Should the RPs decide to decline to settle the claim, OPA authorizes trustees to bring a civil action for damages in federal court or to seek an appropriation from the Oil Spill Liability Trust Fund (FUND) for such damages.

## 1.6 Basic Terms and Definitions

Legal and regulatory language often differ from conventional usage. This section defines and describes a number of important terms used in this document. Additional definitions can be found in Appendix A (OPA regulations at § 990.30) and Appendix B (NEPA regulations at § 1508).

### 1.6.1 Baseline

"*Baseline* means the condition of the natural resources and services that would have existed had the incident not occurred. Baseline data may be estimated using historical data, reference data, control data, or data on incremental changes (e.g., number of dead animals), alone or in combination, as appropriate." (OPA regulations at § 990.30)

Under NEPA, the base for determining and comparing the effects of alternatives to a proposed project is the *no action* alternative. The *no action* alternative under NEPA is normally considered the current condition or current condition projected to the future without implementing the proposed project. This differs from the concept of *baseline* under OPA, which requires restoration of the environment (i.e., natural resources and services) to pre-incident conditions. Thus, if under the OPA regulations the trustees determine that injury has occurred, that feasible restoration alternatives exist, and that restoration should be pursued, the trustees have essentially negated the applicability of the NEPA *no action* alternative.

### 1.6.2 Incident

"*Incident* means any occurrence or series of occurrences having the same origin, involving one or more vessels, facilities, or any combination thereof, resulting in the discharge or substantial threat of discharge of oil into or upon navigable waters or adjoining shorelines or the Exclusive Economic Zone, as defined in section 1001(14) of OPA (33 U.S.C. 2701(14))." (OPA regulations at § 990.30)

When a discharge of oil occurs, natural resources and/or services may be injured by the actual discharge of oil, or response activities related to the discharge. When there is a substantial threat of a discharge of oil, natural resources and/or services may also be injured by the threat or response actions related to the threat.



### 1.6.3 Injury

“*Injury* means an observable or measurable adverse change in a natural resource or impairment of a natural resource service. Injury may occur directly or indirectly to a natural resource and/or service. Injury incorporates the terms “destruction,” “loss,” and “loss of use” as provided in OPA.” (OPA regulations at § 990.30)

Section 1002(b)(2)(A) of OPA authorizes natural resource trustees to assess damages for “injury to, destruction of, loss of, or loss of use of” natural resources. The definition of *injury* incorporates these terms. The definition also includes the injuries resulting from the actual discharge of oil, a substantial threat of a discharge of oil, and/or related response actions.

Injury can include adverse changes in the chemical or physical quality, or viability of a natural resource (i.e., direct, indirect, delayed, or sublethal effects). Potential categories of injuries include adverse changes in:

- Survival, growth, and reproduction;
- Health, physiology and biological condition;
- Behavior;
- Community composition;
- Ecological processes and functions;
- Physical and chemical habitat quality or structure; and
- Services to the public.

Although injury is often thought of in terms of adverse changes in biota, the definition of injury under the OPA regulations is broader. Injuries to non -living natural resources (e.g., oiled sand on a recreational beach), as well as injuries to natural resource services (e.g., lost use associated with a fisheries closure to prevent harvest of tainted fish, even though the fish themselves may not be injured) may be considered.

#### 1.6.4 Natural Resources and Services

“*Natural resources* means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the Exclusive Economic Zone), any State or local government or Indian tribe, or any foreign government, as defined in section 1001(20) of OPA (33 U.S.C. 2701(20)).” (OPA regulations at § 990.30)

Natural resources provide various services to other natural resources and to humans, and loss of services is included in the definition of injury under the OPA regulations.

“*Services (or natural resource services)* means the functions performed by a natural resource for the benefit of another natural resource and/or the public.” (OPA regulations § 990.30)

Natural resource services may be classified as follows:

- Ecological services - the physical, chemical, or biological functions that one natural resource provides for another. Examples include provision of food, protection from predation, and nesting habitat, among others; and
- Human services - the human uses of natural resources or functions of natural resources that provide value to the public. Examples include fishing, hunting, nature photography, and education, among others.

In considering both natural resources and services, trustees are addressing the physical and biological environment, and the relationship of people with that environment.

#### 1.6.5 Recovery

“*Recovery* means the return of injured natural resources and services to baseline.” (OPA regulations at § 990.30)

The concept of recovery acknowledges the inherent tendency for natural resource and service attributes to vary over space and time. Projecting recovery involves determining the likelihood and rate at which natural resources and/or services will return to baseline. The availability and quality of baseline information can influence recovery projections. Trustees should use the best available baseline information that can be gathered relative to the incident and associated injuries.

## 1.6.6 Restoration

"*Restoration* means any action (or alternative), or combination of actions (or alternatives), to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources and services. Restoration includes: (a) Primary restoration, which is any action, including natural recovery, that returns injured natural resources and services to baseline; and (b) Compensatory restoration, which is any action taken to compensate for interim losses of natural resources and services that occur from the date of the incident until recovery." (OPA regulations at § 990.30)

Section 1006(c) of OPA requires natural resource trustees to develop and implement a plan for the "restoration, rehabilitation, replacement, or acquisition of the equivalent," of the natural resources under their stewardship. The OPA regulations have addressed this requirement by defining restoration to encompass all the preceding terms.

The OPA regulations also include the concepts of primary and compensatory restoration. Primary restoration is any action that returns injured resources and services to baseline conditions, including natural recovery. Natural recovery refers to the taking of no human intervention to directly restore the injured natural resources and services. Depending on the injury of concern, primary restoration actions may include actions to actively accelerate recovery or simply to remove conditions that would make recovery unlikely. For each injury (or loss), trustees must consider compensatory restoration actions to compensate for the interim loss of natural resources and services pending recovery.