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Estimating Administrative and Procedural Costs
for
Natural Resource Restoration Settlements

Running Head Title: Estimating Administrative and Procedural Costs

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Abstract

Response and damage assessment costs incurred by natural resource trustee agencies (i.e., the federal, state, Indian tribe, and/or foreign officials authorized to act on behalf of the public interest concerning natural resources) are recoverable elements of natural resource damage claims under the Oil Pollution Act and Comprehensive Environmental Response, Compensation, and Liability Act (Superfund Act). Once a natural resource damage claim is settled, trustee costs for implementing and/or overseeing restoration and compensatory actions are charged against the settlement, except as may be specifically defined in settlement provisions. Consequently, trustee agencies must accurately anticipate their post-settlement costs and/or include provisions for covering these costs in settlement terms. Failure to address cost elements such as trustee management oversight, administrative, and procedural requirements along with the provisions for project design, construction, and performance monitoring, in settlements may force trustee agencies to absorb these costs. The range of post-settlement cost factors which should be considered in developing settlement terms for natural resource damages are identified and discussed. A framework for outlining trustee post-settlement planning assumptions and estimating the most common management oversight, administrative, and procedural cost elements is provided.

Keywords natural resources, restoration, damage settlements, OPA, CERCLA, trustee costs

The goal of natural resource damage assessment actions undertaken subsequent to the release of oil or hazardous substances into the environment, is to make the environment and public whole for injuries to natural resources and services. The "Responsible Party Pays" is the underlying principal for natural resource damage claims under the Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)(Superfund) 42 U.S.C. 9601 et seq., the Oil Pollution Act of 1990 (OPA) 33 U.S.C. 2701 et seq., and complementary state legislation, usually referred to as State Environmental Policy Acts (SEPA). These laws authorize designated natural resource trustee agencies (i.e., federal, state, Indian tribe, and/or foreign officials) to act on behalf of the public to address the actions required for the restoration of natural resources and for compensating for associated service losses.

Once the magnitude of the natural resource injury, lost service value, and scale of the required restoration are determined, the trustees may settle these claims through negotiation with PRPs or through litigation. These settlements may be structured in terms of project implementation actions with trustee oversight and approval, cash payments to the trustees, or some combination thereof.

The damage assessment costs incurred by the natural resource trustees are recoverable elements of natural resource damage claims against the potential responsible party(ies) (PRPs) (OPA,15 CFR Part 990/CERCLA, 43 CFR part 11). However, once a damage claim is settled, any additional costs incurred by the trustees will be charged against the settlement account, except as may be specifically provided for in the settlement provisions. Consequently, trustees must accurately anticipate their post-settlement requirements for implementing and managing necessary restoration actions, and/or include provisions for covering these costs in the settlement terms.

Failure to fully account for trustee post-settlement management, oversight, administrative, and procedural costs

usually means these costs will reduce the funds available for implementing the actual restoration projects to levels less than the total dollar amount provided by the settlement. This type of administrative and procedural cost can, unless clearly identified, lead to unmet public expectations relative to what can actually be accomplished with the settlement funds, unless trustees are willing and able to cover these "overhead" costs from existing agency internal budgets.

The published literature has not addressed the issue of the cost of administering natural resource settlements. The technical literature has focused on estimating the actual construction costs for wetland creation and restoration projects or on costs for project operation and monitoring (e.g., Shreffler, D, et.al., 1995; King and Costanza, 1994; King, Bohlen, and Kraus, 1994; King and Bohlen, 1994; and King, 1992). Related literature has focused on the assignment of economic "human use" value to the natural resources themselves (e.g., Kopp and Smith, 1993; Unsworth and Bishop, 1994; Smith, 1996; Bergstrom, Stoll, Titre, and Wright, 1990; Farber and Costanza, 1987)).

NOAA's Restoration Center program experience indicates post-settlement management, administrative, and procedural costs for an individual restoration project are not inconsequential, and can range from a low of around \$50K to more than \$500K per trustee. For example on one of our smaller cases, World Prodigy, these costs were over \$160K or more than 25% of the restoration implementation costs. These costs may vary for individual cases depending on the structure of the settlement agreement, natural resources involved, area of the country, project site, number, and requirements of the trustee agencies involved, management and oversight responsibilities, performance monitoring required, and regulatory compliance requirements.

Natural resource damage settlements can be categorized into two broad types:

- 1) cost/value based cash settlements, where settlement funds are deposited in a court registry account or similar financial vehicle and the state/Federal trustee agencies assume responsibility for implementing appropriate restoration or

compensatory actions;

2) project based settlements, where the responsible party(ies) directly fund and/or implement agreed upon restoration or compensatory projects in accordance with trustee oversight and approval.

Trustee agencies continue to incur costs under both categories of settlements, until all settlement compliance and performance monitoring conditions are met and the case file is closed. If administrative and procedural costs are not fully anticipated in settlement terms or controlled by the trustees, they can quickly erode settlement funds needed for implementing proposed restoration actions, or force the trustees to absorb these costs.

The management, administrative, and procedural costs involved with trustee agency operations, can not be assumed to be linearly related or directly proportional to the scale of natural resource damages or the total settlement value or restoration project construction costs. A small incident may cost the trustee agencies almost as much to administer as a larger one. For example, under cash settlements when the trustees serve as "general contractors" for implementing restoration projects, these administrative and procedural costs have the potential to represent a significant percentage of the total settlement amount. This is especially true where relatively small settlements are involved. However, these costs may vary by a number of factors such as number of trustee agencies involved, relationship with responsible party(ies), number of resource injury and restoration categories, etc. This means the trustees must evaluate each case and its circumstances to determine the cost factors involved and associated funding levels necessary to cover required trustee actions. In most instances, a straight percentage assessment would not adequately address the range of post-settlement circumstances and cost factors likely to be encountered. The use of a percentage assessment would likely result in an underestimate of these costs, especially for the smaller scale incidents.

Some of these trustee post-settlement costs can be

minimized or “moved off the post-settlement books” where planning and procedural requirements are met prior to settlement (and thereby constitute an “up-front” cost recovery claim component of the settlement). Some of these costs can also be reduced or avoided where the responsible parties assume responsibility for implementing settlement/restoration provisions.

This paper identifies the most common post-settlement cost elements likely to be encountered by trustees, and provides a framework for estimating these costs. This includes trustee costs to manage and administer; planning, construction, compliance oversight, performance monitoring, and approval and in meeting associated permitting, procedural, and administrative requirements.

Legislation and Regulations

Trustees must comply with numerous statutes and regulations which prescribe the procedural requirements for implementing natural resource restoration actions. The major types of legislative and procedural requirements governing the trustees are briefly discussed in Appendix A. These administrative and procedural requirements all represent trustee costs above the actual cost for engineering and constructing a restoration project.

Development of Damage Claim Settlements

Federal regulations (CERCLA: 43 CFR Part 11, Subpart C-E, §11.30-84; OPA: 15 CFR Part 990, Subpart B, §990.27) provide trustee agencies with various procedures and tools which can be used to establish the magnitude and value of natural resource damage claims. These include the use of mathematical models, compensation tables, comprehensive damage assessment studies, field or laboratory studies, technical literature-based values, or some combination or modification of these procedures.

The models (e.g., Natural Resource Damage Assessment Model for Coastal and Marine Environments (NRDAM/CME) - Type-A model; and to the extent compensation tables are derived from Type-A based model runs) may include a factor to cover trustee costs for

restoration planning and oversight activities. This factor is assumed to be a one-time fixed cost and is derived for each injury category based on labor and expense estimates associated with each category. For the NRDAM/CME-Type A model, this factor is \$18,300 1/ for each injury category. The amount provided for trustee administrative/procedural costs by a model based claim depends on the number of resource injury categories involved (e.g., 1 category = \$18.3K; 3 categories = \$54.9K; etc.).

The trustee cost factors currently included in the models usually significantly under-estimate the trustee's actual administrative and procedural costs. This is because these estimates do not include the full costs for procedural requirements associated with NEPA compliance and public participation, administrative actions involved with coordinating trustee decision making, restoration implementation oversight and approval, financial record keeping, administrative record maintenance, etc.

With sufficient case experience and cost documentation, more representative trustee cost factors could be developed for use in these models. A more direct way to ensure that damage claim settlements are adequate to cover post-settlement administrative and procedural costs, would be for the trustee agencies to develop a model-independent estimate of their expected costs, on a case-by-case basis. These trustee cost estimates could then be used as an add-on cost component to the model/compensatory table derived damage claim.

Where injury assessment studies are conducted and trustees base damage claims on the cost of restoration projects, it is important that damages recovered (settlements) include specifically identified components for post-settlement administrative and procedural costs. For example, with restoration project-based claims, the actual site acquisition, engineering, and construction costs are considered, but administrative and procedural costs associated with trustee decision, oversight, contracting, monitoring, or NEPA and permitting costs may be overlooked in the final settlement figures. Consequently, in presenting natural resource damage claims, the trustees again need

to develop independent assessments of these costs as an add-on component to ensure sufficient funds are provided for these activities in settlements.

Where estimates of lost service value using economic analysis provide the basis for damage claims, the resulting claims also do not include a specific component for administrative and procedural costs. However, these costs are charged against the settlement amount when the lost service/compensatory restoration projects are implemented. This would potentially result in a diminution in the scope of the actual replacement service values which could be provided with the settlement funds, unless the trustee agencies absorb these costs. In order to meet public expectations relative to the scope of the compensatory restoration projects the trustees again need to develop assessments of their administrative and procedural costs; either to inform the public as to the settlement fund/cost element allocations, or define these add-on cost components to ensure sufficient funds are provided in the lost service value based settlements to allow for projects which will fully replace the lost service values plus cover trustee costs.

Recovery of Trustee Management, Administrative and Procedural Costs

Once a settlement is reached, trustees need to continue to maintain accurate cost accounting records throughout the post-settlement period. This cost accountability begins with the terms of the trustee post-settlement (Restoration Implementation Phase) Memorandum of Agreement (MOA), where the terms and procedures for receipt, allocation and release of settlement funds should be outlined. An accurate system of cost accounting is needed for management control of funds and to provide a basis for documenting trustee actions and expenditures. These records are critical for possible court review and to address inquiries from the responsible parties and the public on trustee use of settlement funds. They will also provide a basis for refining trustee post-settlement costs factors and cost estimates for use in developing future settlement terms.

Where there is a cash settlement, the trustees should clearly identify the portion of the settlement earmarked for implementation of proposed restoration actions and ensure the settlement includes sufficient funds for covering all the post-settlement management, administrative, and procedural requirements. This trustee cost component should be clearly identified in the settlement agreement and/or subsequent trustee post-settlement Memorandum of Agreement, along with procedures for administering the settlement funds and their allocation among the trustees.

Restoration project based settlements, where the responsible party(ies) directly fund and/or implement agreed upon restoration or compensatory projects, should include specific provisions for funding trustee oversight, approval, and associated costs. This may include mechanisms such as one-time fixed or phase scheduled cash advances to the trustees to cover estimated post-settlement costs; establishment of special fund accounts against which the trustees can draw to reimburse incurred costs; a cost approval/billing procedure for direct reimbursement by the responsible party(ies); or some other form or combination of an agreeable funding arrangement. Again, an accurate cost accounting system will be required to develop and support trustee reimbursement claims with any of these funding mechanisms.

Post-Settlement Cost Factors

The major cost categories that trustees need to consider when making provision for post-settlement administrative and procedural costs include:

- case management and administration,
- procedural requirements, (NEPA, APA, Contracting, etc.)
- restoration planning/management operations, and
- performance monitoring.

The major trustee post-settlement cost categories are summarized in Table 1.

The nature of the individual case settlements and responsibilities assumed by the individual trustees and/or PRPs will determine the composition and magnitude of these costs and

their allocation. A trustee post-settlement Memorandum of Agreement should be used to define the manner in which costs are to be managed.

Management and Administration

This category includes the direct costs for all the trustee actions associated with the management and administration of restoration activities. These include, staff time involved with document preparation and review, preparation for and participation in trustee coordination and project oversight and decision meetings, and time and cost of associated travel. Trustee management actions include review and approval of project design compliance and performance monitoring reports. Staff support required for the financial management of settlement funds and associated time and cost record keeping would be included in this category. Trustee legal staff advice and participation in settlement implementation oversight could either be included as an administration cost element or treated as a separate cost category (see Legal Support, below).

Procedural Requirements

This category includes the costs associated with trustee compliance with administrative procedural requirements. This includes actions involved with ensuring opportunity for public participation in governmental decision making (e.g., publication of public notices, document printing and distribution, and arrangements for document review and public hearings). This may include costs for compliance with the National Environmental Policy Act (NEPA) which has its own requirements for public participation. NEPA requirements include preparing analysis of project implementation alternatives and assessments of environmental consequences of proposed actions, along with Federal agency compliance review and approval procedures. This may also involve assessment of cultural and historical considerations associated with proposed projects. Other requirements involve determining consistency of proposed actions with existing program or planning documents, such as the Coastal Zone Management Plan consistency determination as required under the Coastal Zone Management Act, and Executive Orders for Wetlands and Floodplain Development.

Other procedural costs may be incurred in obtaining required Federal, state and local permits for project implementation. This may include requirements such as dredge and fill (Sec. 404) permits, plant material collection permits, and permits relative to potential involvement of species covered by state or Federal protected species acts (Marine Mammal Protection Act, Endangered Species Act).

Restoration Planning/Management Operations

Trustee costs associated with restoration project implementation will vary depending on the nature of the settlement and responsibilities assumed by the responsible party(ies) for project implementation.

Where a settlement is based on a responsible party implemented project(s), the trustee role is usually focused on developing project design and performance standards, review of procedural compliance related activities, and project documentation and report review and approval, including compliance and performance monitoring reports. These are costs which could be considered under the general management and administration category discussed above.

When the trustees assume responsibility for project implementation (i.e., where there is a cash settlement) the administrative and procedural costs which should be included in the settlement terms would be much greater. These include costs for preparation and refinement of a Final Restoration Plan, which may involve conducting pilot projects to evaluate restoration methods and/or land and contaminant surveys to support project site selection and acquisition decisions. Contracts for architectural design and engineering studies may be required to develop engineering specifications required for preparing contracting documents. It should be noted that actual project construction and implementation costs would not be included in the trustee administrative cost estimates; but would represent separate cost categories. Once project implementation and construction contracts are awarded, the trustees will incur costs associated with providing management oversight for project

implementation, either using in-house technical expertise or through contract engineering services. In either case, the trustees will incur costs for a government Contract Officers Technical Representative (COTR) oversight and associated contract administration actions. The trustees will also need to provide for on-site verification of completed project compliance with design criteria.

Performance Monitoring

Trustees have an obligation to determine whether a project is functioning in accordance with pre-established performance criteria, following certification of its structural completion in compliance with design specifications. Final acceptance of a restoration project by the trustees is usually dependent upon a period of monitoring to determine whether the project performance criteria are being met. This requires the development of technical information to permit the trustees to make decisions on the need for and nature of any mid-course structural corrections or maintenance requirements. The trustees may incur performance monitoring costs associated with activities such as the development of a monitoring protocol design and ecological performance evaluation criteria, and for undertaking data acquisition from baseline/control sites, as well as for the actual on-site monitoring data collection and analysis. The trustees will also incur costs for monitoring activities whether they are conducted by agency technical staff or if oversight is provided for a monitoring contract.

Legal Support

The trustee cost for legal staff support continues into the post-settlement or restoration phase in natural resource damage cases. Legal support is needed for establishing operational protocols among trustee agencies, such as the development of post-settlement trustee Memorandum of Agreement and for filing documentation to secure fund release from court registry accounts. The trustees need to keep legal staff informed of project implementation status and proposed management actions. This continuing legal staff involvement is critical for cases where unanticipated procedural disagreements or other conflicts develop or there is a failure to perform on the part of co-trustees,

contractors, or the responsible party. Legal review of information dissemination documents and release of reports should also be considered. Legal guidance is also needed relative to maintenance of the post-settlement Administrative Record and for actions involved with case close-out with the courts and oversight of case document archiving.

Other Costs

Indirect Costs: This includes Federal and state trustee agency indirect overhead assessments. Indirect costs include a pro-rated assessment for elements such as trustee program infrastructure maintenance and support services (e.g., agency management, telephone/fax, computer systems, xerox machines, utilities, rent, etc). The indirect cost components and rates vary by trustee agency, but are usually assessed as a standard percentage of labor costs or total project or contract value.

Affiliated Agency Assessments: This category of costs may include items such as a U.S. Department of Justice assessment on settlements.

Project Monitoring Operations/Contract Costs: This is the cost of verifying that the project is actually constructed in accordance with the approved project design parameters and performs in accordance with design criteria. In settlements where the responsible party(ies) assumes responsibility for contracting for the independent monitoring and reporting of results to the trustees, most of these costs would not be included in trustee cost estimates. However, the trustees will want some direct oversight activity/cost recovery to assure the independent monitoring party is performing to specifications. In cash-based settlements, where one or more trustee agency acts as general contractor and/or directly implements approved monitoring activities, these costs become part of the total post-settlement cost package.

Estimating Administrative/Procedural Cost Components

Financial records on actual costs for administering projects similar to those being proposed in a natural resource settlement should provide the best source of cost factors and time and

equipments requirements for estimating trustee post-settlement administrative/procedural costs.

Where the trustees do not have relevant experience or actual cost records; cost factors can be developed by outlining the procedural steps involved and estimating the labor, travel, and equipment costs required for each category of action. Where this cost factor estimating approach is used, the assumptions and cost figures should be documented so they can be compared with actual project implementation experience to provide a basis for refining post-settlement cost estimating. As an aid to structuring administrative cost estimates an abbreviated example of this approach is provided in Appendix B. A complete electronic cost assumptions/estimating worksheet for each of the cost factor categories outlined in Table 1 is provided on the NOAA Restoration Center web site (<http://kingfish.ssp.nmfs.gov/r.schrib/rc/rc.htm>).

Certain categories of costs may be overlooked or underestimated when developing cost estimates. For example, natural resource damage settlements are usually co-trustee actions and costs for participation by all trustee agency program and technical representatives and their legal staff will need to be included in developing the damage claim cost components. Labor costs should include benefits, overhead and other assessments which make up "normal" billing/reimbursement rates. Time involved with trustee travel, participation in coordination meetings and conference calls, reviewing documentation, and preparation of reports are often overlooked or under estimated. Estimates for private contractor support should include provisions for profit, performance bonds, and contingency funds. Procedural requirements involved with Federal and/or state contracting are often under estimated, and should include time required for document preparation, Request for Proposal solicitation, bid evaluation/rating, contract awards processes, and potentially responding to contested awards.

When working with estimates of future costs, the values need to be adjusted to present value terms through discounting and/or inflation adjustments, depending on the payment schedule required by the settlement.

Recommendations/Conclusions

Trustees should carefully evaluate natural resource damage claims and settlement proposals to ensure adequate funds are included to cover all costs of restoration including the specific identification of funds to cover trustee post-settlement management, administrative and procedural requirements.

Trustees should structure settlements to include sufficient funds to cover unexpected contingencies, (e.g., site erosion, drought, etc.) or contain specific provisions for covering actual trustee costs for addressing these types of uncontrollable events, in addition to meeting settlement cash payment/project implementation requirements.

Trustees must keep accurate post-settlement activity and cost records. These records are critical for potential court review of settlement implementation. This information will also facilitate development of reliable planning assumptions and cost factors to provide a basis for refining post-settlement cost estimating. Estimates of administrative and procedural costs may be a useful element in developing criteria for guiding trustee decisions on case selection and restoration strategies. These estimates would also help in developing budget projections and allocations for controlling post-settlement costs and assigning responsibilities among trustees.

Trustees should make provisions for addressing management, administrative, and procedural cost add-on's to damage claim cost estimates derived from models, compensation tables, or direct damage assessments. In situations where damage assessment models and compensation tables are deemed appropriate methodologies, the underlying models should be refined to include distinct sub-model components which fully account for trustee post-settlement costs. Actual trustee experience and cost records should be used to develop cost values for development of these sub-models.

Trustees should specifically identify their management, administrative, and procedural costs and how these will be

accommodated where settlements are restoration project or value based, to ensure public expectations for restoration projects are consistent with settlement fund allocations.

Trustees and PRP(s) should consider the benefits of project based settlements with responsible party implementation. These types of settlements, where a cooperative responsible party(ies) is involved, have the potential to be more cost effective since they avoid many of the costs associated with the government serving as general contractor. This approach also puts the burden of performance on the responsible party, rather than on the trustees, for presenting a successful project.

Note

1. Cost of Restoration Actions, 12.2.1.4 and Table 12.11
Summary of Unit Costs for Habitat Restoration Actions in The
CERCLA Type A Natural Resources Damage Assessment Model for
Coastal and Marine Environments (NRDAM/CME), Technical
Documentation, Volume I-Part 2, Model Description, French,
Deborah P., et. al., Applied Science Associates, Inc. for Office of
Environmental Policy and Compliance, U.S. Dept. of Interior,
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Table 1 :

Summary of Major Post-Settlement Cost Categories

Settlement Management and Administration:

- Trustee Coordination
 - Program decision and implementation tracking
 - Economic value/cost analysis
- Financial Management
- Legal Support

Restoration Plan Development:

- Final Plan Development/Refinement
- Pilot Project Studies (where needed to evaluate feasibility/success of alternative methods)
- Site Survey/Selection
 - Site Survey/Records Screening
 - Preliminary NEPA Compliance Documentation
 - Contaminants Screening
 - Biological and Geological Resources Survey
 - Cultural Resources Survey
 - Site Selection Reports

Design and Engineering:

- Project Design and Specifications Development
 - Concept/Technical Design
 - Logistical/Support Requirements Assessments
 - Engineering Performance Criteria
 - Biological/Ecological Performance Criteria
- Project Implementation/Construction
(Not included in Administrative Cost Estimates)

Procedural Requirements:

- Administrative Procedures/Public Notices
- NEPA
 - Environmental Assessments
 - Environmental Impact Statement
 - Cultural Resource Assessments
 - ESA Section 7 Consultations
- Coastal Consistency Determinations
- Permitting
 - Materials Collection
 - Construction/Dredge/Disposal
 - Protected Species

Contracting Process Administration:

- RFP Preparation and Selection/
Rating Criteria Development
- Contractor Solicitation and Selection
- Contract Award
- Contract Modification/Change Orders

Project Implementation Management Oversight:

- COTR Oversight and Administrative Actions
- On-Site Verification of Compliance with
Project Design Criteria
- Performance Bond
- Contingency Fund
(Cover unanticipated events; e.g., weather delays)

Monitoring:

- Baseline/Control Data Acquisition
- Monitoring Protocol Design and Ecological
Performance Evaluation Criteria
- Monitoring Contract COTR Oversight
- On-site Monitoring Data Collection/Analysis
(Not included in Administrative Cost Estimate)
- Trustee Technical Information Exchange/
Mid-course Recommendations Development
- Maintenance/Mid-course Correction Fund
(Escrow account-to revert to RP if unused)

Case Closure:

- Legal Staff Actions/Administrative Record Closure
- Information Dissemination/Reports
- Archiving of Case Documents

Estimated Administration/Procedural Costs
Plus Indirect Overhead Costs
 - Federal Agency Overhead Assessments
 - DOJ 3% Assessment on Settlements (under discussion - may be dropped)
 - State Agency Overhead Assessments
Plus Project Implementation Operations Contract Costs
Plus Project Monitoring Operations Contract Costs

Total Post-Settlement Cost Estimate

Appendix A

Legislation and Regulations Governing Natural Resource Restoration Actions

Federal legislation and implementing regulations provide for collection of damages from the responsible party(ies) for injuries to and lost services from natural resources resulting from the release of oil and hazardous substances into the environment and/or for physical damage to marine sanctuary resources (National Marine Sanctuaries and Research Reserves Act (NMSRRA)/National Marine Sanctuaries Act (NMSA) (16 U.S.C. 1431 et seq.)).

The Oil Pollution Act (OPA) regulations (15 CFR Part 990; §990.62-66) provide for assessment cost recoveries and natural resource damage claims, which include all trustee costs associated with implementing the Final Restoration Plan.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA-Superfund) (43 CFR part 11; §11.80-93) provides for damage claims to include payment of costs for actions described in the Restoration Methodology Plan/Restoration Plan.

The purpose of the natural resource damage elements of this legislation is to make the environment and public whole for injuries to natural resources and services. This is to be accomplished through the expeditious and cost-effective restoration of the natural resources and services injured as a result of an incident which damages these resources. The OPA regulations emphasize the federal focus on scaling appropriate restoration actions rather than assessing financial damages to responsible parties.

Procedural requirements applicable to the implementation of these natural resource trustee authorities are also prescribed by legislation (e.g., National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq. /40 CFR Chapter V), Administrative Procedures Act (APA) (5 U.S.C. 551 et seq.), etc. Other legislation prescribes permits, approvals, and consistency determinations for certain types of activities or where certain resources would be affected by proposed NRDA restoration or compensatory actions, (e.g., Federal Water Pollution Control Act/Clean

Water Act (CWA) (33 U.S.C. 1321 et seq.) , Marine Mammal Protection Act (MMPA) (16 U.S.C.1361 et seq.), Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531 et seq.), Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), Coastal Zone Management Act of 1972 (CZMA) (16 U.S.C. 1451 et seq.)). The implementation of restoration projects may also require obtaining state and/or Federal land use and construction permits. A number of these administrative and procedural requirements impose additional time and costs on the Natural Resource Damage Assessment-NRDA and subsequent restoration processes, which are often not included in damage assessment claims. For example, the trustee agencies usually must prepare formal planning documents to support and justify restoration project decisions and permitting activities and to facilitate public participation in the governmental decision making processes.

Government contracting imposes its own set of specialized administrative and procedural requirements. For example, this may involve costs which range from the preparation and publication of requests for proposals, project proposal/bid evaluation and selection panels, and appeal processes. Contract awards may require designating a Contracting Officer's Technical Representative (COTR) to oversee contract performance.

Appendix B

Cost Factor Assumptions and Estimating

Administrative Support: (Admin., financial records, trustee oversight)

- Direct Costs

- Trustee Coordination; \$ _____ K

- Total of trustee staff hour, travel, and other costs until case closure

- Assumption: ___ meetings of ___ days ea. for ___ years to achieve trustee acceptance of project(s)

- Trustee(for each Trustee): \$ _____K

- Average of ___ staff per meeting; est. ___ hr. meeting & travel X ___ participants = ___ staff hours per meeting X ___ meetings = ___ total staff hours

- Labor cost estimate \$ ___/hr. X ___ staff hours = \$___K

- Travel costs/per diem; est. \$_____/trip X___ trips = \$___K

- Other costs per meeting; est. \$___/meeting X ___ meetings=\$___K

- Legal Support: \$ _____ K

- Total of legal staff hour, travel, and other costs until case closure

- Assumption: ___ meetings of ___ days ea. for ___ years to achieve trustee acceptance of project(s)

- Trustee- Legal (for each Trustee): \$ _____K

- Average of ___ staff per meeting; est. ___ hr. meeting & travel X ___ participants = ___ staff hours per meeting X ___ meetings = ___ total staff hours

- Labor cost estimate; \$ ___/hr. X ___ staff hours = \$___K

- Travel costs/per diem; est. \$_____/trip X___ trips = \$___K

- Other costs per meeting; est. \$___/meeting X ___ meetings=\$___K

- Document preparation/processing; est. \$ ___/hr. X ___ staff hours = \$___K

- Administrative Record maintenance/archiving; est \$___/hr. X ___ staff hours = \$_____

Dept. of Justice/State Attorney General: \$ ____ K

Average of ____ staff per meeting; est. ____ hr. meeting & travel X ____ participants = ____ staff hours per meeting X ____ meetings = ____ total staff hours

Labor cost estimate; \$ ____/hr. X ____ staff hours = \$ ____K

Travel costs/per diem; est. \$ ____/trip X ____ trips = \$ ____K

Other costs per meeting; est. \$ ____/meeting X ____ meetings = \$ ____K

Document review/approval processing; est. \$ ____/hr. X ____ staff hours = \$ ____K

- Financial Management; case record keeping: \$ ____ K

(not included with indirect overhead costs)

Trustee-Financial (for each Trustee): \$ ____K

____ financial management specialist(s); est. ____hr./month; X ____ months (years) = ____ staff hours

Labor cost estimate; \$ ____/hr. X ____ staff hours = \$ ____K

• Trustee Indirect Cost Assessments \$ ____ K

- Trustee Agency Admin. Overhead/Support

Trustee (for each Trustee) \$ ____K

____% indirect cost rate X \$ ____K project cost = \$ ____K

Restoration Plan Development:

• Final Plan Development/Refinement: \$ ____ K

Assumes a Damage Assessment and Restoration Plan was completed in pre-settlement phase; plans required for ____ restoration project(s)

Assumes trustees implementing restoration

Assume cooperative plan development with Federal, state, and other trustees, may include contractor support

Trustee-Planning (for each Trustee) \$ ____ K

____ projects with plan documents

Preparation of contract/task orders; est. ____ contracts/task orders @ ____ hr. each = ____ hr. @ \$ ____/hr. = \$ ____ K

Trustee technical staff plan drafting/review; est. ____ plans @ ____ hr. each = ____ hr. @ \$ ____/hr. = \$ ____K

- Project Site Survey/Selection: \$ ____ K
 (includes information on ownership, easements, adjacent land use, etc.)
 (standard cost factors ?) (site specific costing)
 (This cost element could be included in restoration project planning cost estimate)
 Assumes responsibility for each survey assigned to only one trustee
 Trustee - Project Site Analysis; \$____K
 - Sites/Records Screening; ____ project sites @ est. \$ ____ K each = \$ ____ K
 - Site Evaluation and Topographic Survey; ____ sites; @ est \$____K each = \$____K
 - Contaminants Survey; ____ sites;@ est. \$ ____ K each = \$ ____ K
 - Cultural Resources Survey; ____ sites; @ est. \$ ____ K each = \$ ____ K
 - Site Selection Report(s); ____ project reports X est. preparation @____hr. each = ____ staff hours @ ____ \$/hr.= \$ ____ K

- Project Plan Document Preparation: \$____K
 Printing of Plan Documents; est. ____ copies @ \$____K each = \$____K;
 Public Information Brochures;
 Preparation est. ____ staff hours @ \$____/Hr. = \$____K each;
 Printing ____ copies @ \$____K/1000 = \$____K

- Pilot Project Studies: \$ ____ K
 (Design/Implementation/Evaluation)
 Assume management of each study assigned to only one trustee
 Assume results review costs included in trustee Direct Administrative Coordination
 Trustee - Pilot Project Management: \$____K
 Assume ____ pilot projects; (e.g., seagrass, mangrove, other ?)
 Preparation of contract/task orders; est. ____ contracts/task orders @ ____ hr. each = ____ hr. @ \$____/hr. = \$ ____ K
 Implementation costs for ____ projects @ \$____K each = \$ ____ K)

Design and Engineering:

Assume management of each project design assigned to only one trustee
 Assume results review costs included in trustee Direct Administrative Coordination

Trustee - Project Design and Engineering Management: \$____K

- Project Design and Specifications Development: \$ ____ K
 (This cost element could be included in the restoration project cost estimate)
 - Conceptual/Technical Design and Engineering Specifications \$ ____ K
 ____ projects @ est. \$ ____ K each = \$ ____ K
 - Logistical/Support Requirements Assessment \$ ____ K
 ____ projects @ est. \$ ____ K each = \$ ____ K
 - Engineering Performance Criteria Development \$ ____ K
 ____ projects @ est. \$ ____ K each = \$ ____ K
 - Biological/Ecological Performance Criteria Development \$ ____ K
 ____ projects @ est. \$ ____ K each = \$ ____ K
- Project Implementation/Construction Costs
 This would not be included in Administrative/Procedural Cost Estimates; but should be treated as a separate cost category within the claim/settlement
 Case specific for each project; determined through design and logistics costing and/or issuing requests for proposals/bids.

Procedural Requirements:

- Administrative Procedures/Public Notice: \$ ____ K
 - Notice of Availability for Public Review \$ ____ K
 - Federal Register Notices: \$ ____ K
 - Manhour projections (drafting notices) \$ ____ K
 - Trustee (each): ____ @ ____ hr. each = ____ hr. @ \$____/hr. = \$ ____ K
 - Publication \$ ____ K
 est. ____ @ 1 column each = ____ columns @ \$____ each = \$ ____ K

Public Notices - Newspaper: \$ ____ K
 est. ____ local newspapers @ \$____/day each (____ line;____ column) for ____ days = \$ ____ K

Public Notices - NOAA Weather Radio; no cost

- Public Hearings \$ ____ K
- Public Hearing Arrangements = \$____ K
 (Public hearing cost estimates range from \$1,500-\$3,000 each)
 Estimate ____ hearings @ \$____K each = \$ ____ K

Preparation/follow up: = \$ ____ K
 Assume local representation w/no travel/per diem costs
 Trustee (for each trustee): \$____ K
 est.____ hearings @ ____ hr/hearing = ____ hr @ \$____/hr = \$ ____ K

- NEPA/State Equivalent: \$ _____ K
 - NEPA = National Environmental Policy Act; many states have equivalent legislation
Assume Federal NEPA compliance fulfills state requirements

- Environmental Assessment (EAs) \$ _____ K
 - Assume EAs may not be required for some projects where categorical exclusions exist under Corps of Engineers (Sec. 404) General Permits.
 - Estimate ___ project EAs required @ average of \$___K each = \$ _____ K

- Environmental Impact Statements \$ _____ K
 - Assume an EA will yield a FONSI for most restoration projects and an EIS will not be needed; some multi-resource/multi-site projects may require a programmatic EIS with EA's tiered off for each site/resource project.
 - Cost determinations need to be made on a case specific basis

- Cultural Resource Assessments \$_____K
 - Survey of restoration sites as required under the Archeological Resources Protection Act and National Historic Preservation Act; usually included as a component of an EA or EIS
 - Estimate ___ site surveys @ average of \$_____K each = \$_____K

- ESA Section 7 Consultations \$_____K
 - Estimate ___ manhours @ \$___/hr. for inter-agency consultation on implications for endangered species on ___ project(s)= \$_____K

- Coastal Consistency Determinations \$_____K
 - Estimate _____ manhours @ \$___/hr. for certifying compliance of Restoration Plan or _____ project(s) with Coastal Zone Management Plans under Coastal Zone Management Act and Executive Orders for Wetlands and Floodplain Development = \$_____K

- Permitting: \$ _____ K
 - Permit Application Data Collection \$_____K
 - Estimate ___ manhours @ \$___/hr. = \$___K;
 - Assume field survey costs of \$ ___K
 - Materials Collection/Acquisition Permits \$ _____ K
 - Estimate ___ projects (e.g., seagrass, mangrove) will require permits for collecting planting stock from wild populations @ \$ _____ K per permit = \$ _____ K
 - (assume _____ project covered under existing permits)
 - (assume _____ project will not require special permit)

- Construction/Dredge/Disposal Permits \$ ____ K
 Estimate ____ projects (e.g., shellfish beds planting, filling seagrass scour holes, marsh elevation adjustments) will require permits @ \$ ____ K per permit = \$ ____ K
 (assume disposal of contaminated materials ____ covered under response/cleanup)
- Protected Species \$ ____ K
 These cost elements could be included in restoration project cost estimates
 Marine Mammal Scientific Permit \$ ____ K
 Assume a single general permit for incidental take/harassment will cover all actions associated with case restoration projects
 Estimate preparation and processing costs for 1 permit @ \$ ____ K
 Endangered Species Permit \$ ____ K
 Assume a single general permit for incidental take/harassment will cover all actions associated with case restoration projects
 Estimate preparation and processing costs for 1 permit @ \$ ____ K

Contracting Process Administration:

- Request For Proposal Preparation and Selection/Rating Criteria Development: \$ ____ K
 Assume ____ projects will be contracted through competitive bidding;
 Estimate preparation of bid packages for ____ projects X ____ staff hours @ \$____/hr per project = \$ ____ K
- Contractor Solicitation and Selection: \$ ____ K
 Assume where existing trustee agency contracts for administrative support services are available, they would not be included in this cost element estimate
 Assume ____ projects requiring contracts for construction/implementation
 Estimate ____ contracts @ processing costs of \$ ____ K each = \$ ____ K
 (includes Commerce Daily, State notices, newspaper; proposal review and recommendation; contract award/notification; response to losing bidder challenges, etc.)

Project Implementation Management Oversight:

- Trustee Contract Management Oversight and Administrative Actions:
 \$ ____ K
 Estimate ____ projects (implementation duration ____ days) will require ____ staff hours (____ days/month) of COTR oversight each @ \$____K/hr = \$ ____ K + travel/per diem of \$ ____ K for ____ inspection/meeting trips = \$ ____ K

- On-Site Verification of Compliance with Project Design Criteria: \$ ____ K
- Technical team meetings/site reviews: \$ ____ K

Assume ____ projects, each with a ____ person technical team, with site visits and associated meetings at 2-3 project stages plus a final project acceptance review, at an estimated ____ days per meeting/site visit.

Estimate ____ staff hours @ \$____/hr = \$ ____ K plus \$ ____ K travel/per diem = \$ ____ K per visit/meeting X ____ visits per project = \$ ____ K per project for ____ projects = \$ ____ K

- Contingency Fund \$____K

Assume ____% (e.g., 20%) of project cost of \$____K = \$____K

(Recommend including this provision in claim estimate, or a re-opener clause, to cover any unanticipated post-settlement circumstances which impact trustee cost estimating assumptions, e.g., cover any shortfall which might result from underestimating procedural or project costs.)

(This contingency provision should be separate from any maintenance/mid-course correction funds which might be held in escrow, to revert to PR if not used.)

Monitoring:

Assumption that cost elements included may vary according to monitoring plan design

- Baseline/Control Data Acquisition: \$ ____ K
- Literature/agency data search: \$ ____ K
- Assume ____ projects/resource injury categories
- Estimate ____ staff hours @ \$____/hr = \$ ____ K for literature/data search X ____ resource injury category/project site = ____K
- Field assessment of control sites: \$ ____ K
- Assume ____ project sites
- Estimate ____ person team ____ days on site/travel = ____ staff hours plus ____ hr. field data analysis and ____ hr report preparation = ____ staff hours @ \$____/Hr. = \$____K plus \$____K travel/per diem = \$____K per project)

- Monitoring Protocol Design and Ecological Performance Evaluation

Criteria: \$ ____ K

Assume ____ projects

Estimate ____ person project team, participating in an ____ day workshop = ____ hr @ \$____ /hr = \$____ K, plus travel/per diem \$____, plus ____ hr team leader preparation/team review of monitoring protocol/performance criteria guidance document per project @ \$____ /hr = \$____ K; = per project cost of \$____ K, X ____ projects = \$____ K)

- Monitoring Contract; COTR Oversight: \$ _____ K
Assume ____ projects monitored over ____ year period
Estimate ____ hr (____ days per year) @ \$____ /hr = \$____ K per year for
____ years = \$____K per project.)

- On-site Monitoring Data Collection/Analysis: \$ ____ K
The cost of this contract would not be included in Administrative/Procedural Cost
Estimates; but should be treated as a separate cost category within the
claim/settlement
Case specific for each project; determined through design and logistics costing and/or
issuing requests for proposals/bids.

- Trustee Technical Information Exchange/Mid-Course Recommendations Development: \$ _____ K

Assume ___ meeting(s) per year of _____ state/Federal trustee case team representatives meeting with the _____ project technical team leaders and contract COTRs

Estimate ___ meeting(s) per year of ___ days each for ___ people = ___ manhours @ \$___/hr = \$___ K, plus est. \$___ K travel/per diem = approx. \$_____ K per year, X ___ years = \$_____ K)

- Maintenance/Mid-course Correction Fund \$_____K

Assume ___% (e.g., 20%) of project cost of \$___K = \$___K

(This contingency provision should be included to provide for any maintenance/mid-course correction which might be required; funds could be held in escrow to revert to PR if not used.)