

## **APPENDIX C**

# **SAMPLE FORMAT FOR ECONOMIC DAMAGE ASSESSMENT DOCUMENT**

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The following outline is suggested for use in reporting the results of preliminary economic damage assessments. While this outline is potentially applicable for presenting the results of full-scale, comprehensive assessments, reports of such assessments will often need to reflect case specific factors (e.g., separate reports might be prepared for each major study performed), and thus are likely to deviate from this proposed format. This sample format is intended as a general guide, not a template for all cases. Deviations from this format may be appropriate, as warranted by the unique characteristics of each case.

#### I. INTRODUCTION

The introduction should:

- Include an overview of the injured resource and the site of the release (a map of the site may be included);
- Include a summary of the release characteristics (e.g., date(s), hazardous material released);
- Include a brief summary of resource injury or suspected injury due to the release;
- Clearly define the purpose for which the document was developed (e.g., to support assessment planning, settlement negotiations, etc.); and
- Clearly define the scope of the document (e.g., the document is intended to address all known sources of injury; only addresses some sources of injury, a limited geographic area, or a limited time frame).

#### II. SUMMARY OF RESULTS

This section should summarize the estimates of economic damage, including both compensable values and restoration costs. For cases involving several categories of loss (e.g., recreational fishing, commercial fishing and marine transportation), a table of results may be useful. This table should include categories of restoration costs or compensable values for which no monetary damage estimate has been developed due to limits of available data. It may be appropriate to represent the results obtained as ranges, reflecting underlying uncertainty. The text of the summary should, if necessary, explain why certain categories of damages have not been quantified and describe all significant sources of uncertainty. Finally, this section should summarize proposed next steps.

### **III. REVIEW OF NATURAL RESOURCE INJURY**

In order to allow the reader to link injuries to damages and proposed restoration options, the economic damage assessment document should include a brief review of natural resource injuries thought to exist at the site, including the geographic and temporal attributes of these injuries. Substantial uncertainties should be described, as should any ongoing research that might reduce these uncertainties or lead to alternative conclusions regarding economic loss. In cases in which assumptions have been made regarding the likely effectiveness of spill cleanup or site remediation efforts, such assumptions should be described in this section. This review need not be exhaustive, but should provide a general overview of the injury case.

### **IV. ESTIMATION OF RESTORATION COSTS**

This section should include a discussion of:

- The restoration options selected (assumed) for a site, including a table or text explicitly linking the selected options to the natural resource injuries/reductions in service flows resulting from the release.
- The restoration cost estimation methods used, and the assumptions made in these analyses. If a range of assumptions were considered, these should be reported and described. This review should be detailed enough, and present sufficient information, to allow the reader to replicate the results.
- The results obtained, presented as distributions, or as "unknown," where appropriate.
- The principal sources of uncertainty in the restoration cost estimate, including a discussion of restoration actions that were identified but could not be budgeted due to insufficient data.
- Proposed next steps to finalize the restoration cost estimate.

### **V. ESTIMATION OF COMPENSABLE VALUES**

This section should include:

- A listing and discussion of relevant categories of compensable values. This section might include a table linking categories of injury to lost service flows.
- A description of the change in services provided by the injured resource (e.g., lost acres of wetland, lost fishing days). This should include all categories of loss, even those for which no economic damage estimate was developed. A discussion of the impact of selected or assumed restoration actions on the provision, or replacement

of, these service flows should be included (e.g., the ability of the trustees to take actions to restore wetland services in a given period of time).

- A presentation of the methods and data used to monetize lost service flows (e.g., benefits transfer, habitat equivalency). This review should be detailed enough to allow the reader to replicate the results presented.
- A presentation of the results obtained, reported as distributions (or as "unknown") where appropriate. Any possibility of double counting in these estimates should be described.
- A discussion of the principal sources of uncertainty in the compensable value estimates, including a discussion of service flow losses that were identified but which could not be monetized due to insufficient data.
- A list of proposed next steps to finalize the compensable value estimate.

## **SOURCES/BIBLIOGRAPHY**

All documents and other sources relied on for the assessment should be referenced in a manner that allows the analysis to be replicated at a later date.