

about the relevant substitute sites (or there are no substitute sites). If a single-site model is employed without full accounting for substitutes, an appropriate adjustment should be made to the estimate of trip value.

In cases where the change in resource services to be analyzed is out of the range of data on actual travel behavior, trustees may choose to collect contingent behavior data. Contingent behavior refers to the behavior of users or potential users of a resource service under hypothetical conditions presented to them in the travel cost survey.

C. Factor Income Approach

This approach relies upon the production function model that relates the contribution of inputs to the production of an output. (Inputs are also referred to as factors of production.) Changes in the availability or price of inputs will affect the availability and price of the output and hence the level of income accruing to the producer. Where unpriced natural resources are an input in the production process, producer income will include both economic profit (the amount of profit a producer requires to keep capital in this use in the long run) and economic rent (the income accruing to a producer as a result of access to an unpriced resource). A discharge may decrease the quality and/or quantity of a resource and thereby effectively increase the cost of acquiring the natural resource input. As a result, the injury may reduce the economic rent accruing to the producer from use of the public trust resource. The change in economic rent attributable to a discharge can be evaluated by calculating the change in surplus either in the product market or in the input markets. Where the output price is not affected, the change in economic rent is simply the sum of the change in factor costs (or factor income) for each affected input.

D. Hedonic Price Model

The hedonic price model relates the price of a marketed commodity to its various attributes. In the natural resource damage assessment context, it may be used to determine the change in value of some nonmarket services from public trust resources (for example, environmental amenities such as water or air quality) where they function as attributes of private market goods, such as property. For example, the value of beach front property may be directly related to the quality and accessibility of the adjacent coastline. Reduction in the quality or accessibility, as may occur due to a discharge, will be captured in the value of the property. All else equal, the decrease in property values as a result of a discharge measures the change in use value of the injured coastline resources accruing to local property owners. This measure of the reduction in value of coastline resources will not capture any loss in value of the resources that may accrue to members of the public who own no property in the area.

E. Market Models of Demand and Supply

For those goods and services regularly traded in markets, economists typically rely upon market transactions to reveal the values that individuals place on the goods and services and the costs of producing them.

When the quality of the resource directly affects the value individual consumers place on a good or service, the correct measure of damage is the change in consumer surplus, or individuals' willingness-to-accept compensation plus the economic rent component of producer surplus, if any, for the injuries associated with the discharge.

F. Contingent Valuation

The contingent valuation (CV) method determines the value of goods and services based on the results of carefully designed surveys. The CV methodology obtains an estimate of the total value, including both direct and passive use values of a good or service by using a questionnaire designed to objectively collect information about the respondent's willingness to pay for the good or service. A CV survey contains three basic elements: (1) A description of the good/service to be valued and the context in which it will be provided, including the method of payment; (2) questions regarding the respondent's willingness to pay for the good or service; and (3) questions concerning demographics or other characteristics of the respondent to interpret and validate survey responses.

G. Conjoint Analysis

A conjoint analysis is a survey technique that is used to derive the values of particular attributes of goods or services. Information is collected about individuals' choices between different goods that vary in terms of their attributes or service levels. With this information, it is possible to derive values for each particular attribute or service. If price is included as an attribute in the choice scenarios, values can be derived in terms of dollars which can be used with the valuation approach.

Alternatively, it is possible to value attributes in terms of units of replacement services. Survey respondents would be presented with choices between two or more options that may represent resource projects with varying levels of services. The goal is to obtain the value of the injured services in terms of alternative resource services so that restoration projects can be scaled directly using the service-to-service approach.

H. Benefits Transfer Approach

Benefits (or valuation) transfer involves the application of existing value estimates or valuation functions and data that were developed in one context to address a sufficiently similar resource valuation question in a different context.

Where resource values have been developed through an administrative or legislative process and are relevant and reliable under the circumstances, the trustees may use these values, as appropriate, in a benefits transfer context. NOAA solicits comment on the type of administratively and legislatively established values that would be appropriate for this purpose. Other values may be used so long as three basic issues are considered in determining the appropriateness of their use: the comparability of the users and of the natural resource and/or service being valued in the initial studies and the transfer context; the comparability of the change in quality or

quantity of resources and/or services in the initial study and in the transfer context (where relevant); and the quality of the studies being transferred.

National Environmental Policy Act, Executive Order 12866, Regulatory Flexibility Act, and Paperwork Reduction Act

The National Oceanic and Atmospheric Administration has determined that this rule does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, no further analysis pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) has been prepared. The Assistant General Counsel for Legislation and Regulation, in accordance with the Regulatory Flexibility Act, certifies to the Chief Counsel for Advocacy, Small Business Administration, that this proposed rule will not have a significant economic effect on a substantial number of small entities. The proposed rule is intended to make more specific, and easier to apply, the standards set out in OPA and CERCLA for assessing damages for injury to natural resources as a result of actual or threatened discharges of oil. The rule is not intended to change the balance of legal benefits and responsibilities among any parties or groups, large or small. To the extent any are affected by the rule, it is anticipated that all will benefit by increased ease of application of law in this area.

It has been determined that this document is a significant rule under Executive Order 12866. The rule provides optional procedures for the assessment of damages to natural resources. It does not directly impose any additional cost.

It has been determined that this rule does not contain information collection requirements that require approval by the Office of Management and Budget under 44 U.S.C. 3501 et seq.

List of Subjects in 15 CFR part 990

Coastal zone, Endangered and threatened species, Energy, Environmental protection, Estuaries, Fish, Fisheries, Fishing, Gasoline, Historic preservation (archeology), Hunting, Incorporation by reference, Indian lands, Marine pollution, Migratory birds, National forests, National parks, National Wild and Scenic Rivers System, Natural resources, Navigable waters, Oil, Oil pollution, Petroleum, Plants, Public lands, Recreation and recreation areas, Rivers, Seashores, Shipping, Waterways, Water pollution control, Water