GLOSSARY

benefit-cost analysis — a technique to compare the relative economic efficiency of different states of the world usually brought about by undertaking projects or policies. A comparison is made between gross benefits of a project or policy and the opportunity costs of the action. Benefits and costs are measured as changes in consumer and producer surpluses accruing to individuals in society.

consumer surplus — a money measure of an individual or group's welfare from consumption of a good or service or the existence of a particular state of the world. This surplus is the difference between the maximum the individual is willing to pay for consumption of the good and the amount that has to be paid.

contingent valuation — a methodology to determine money measures of change in welfare by describing a hypothetical situation to respondents and eliciting how much they would be willing to pay either to obtain or to avoid a situation.

demand — in economics, the usual inverse relationship between quantity consumed (or otherwise used or even preserved) and a person's maximum willingness-to-pay for incremental increases in quantity. Market prices often (but not always) reveal the increments of willingness-to-pay. Other factors influencing willingness-to-pay include income, prices of substitutes, and, in recreational fishing, catch rate. Unlike planning where demand refers to the size of the quantity variable, economic demand is a behavioral relationship.

discounting — is a procedure to use when comparing value streams (benefits or costs) occurring in different magnitudes at different dates in the future. The procedure "discounts" future values in order to obtain the present value of the stream.

environmental valuation — procedures for valuing changes in environmental goods and services, whether or not they are traded in markets, by measuring the changes in the producer and consumer surpluses associated with these environmental goods.

existence value — see nonuse value

gross domestic product (GDP) — aggregate annual output of the economy before deducting the value of the assets of the economy that have been used up or depreciated in the production process during the year. Gross domestic product provides a summary measure of the Nation's overall economic performance.

hedonic method — a methodology for estimating the relationship between the price of a good (e.g. housing) and the characteristics of the good (e.g. number of bedrooms, air quality, proximity to amenities, etc.). Can sometimes be used to value changes in environmental characteristics.

input-output model — a methodology that models the linkages between input supplies, outputs, and households in a regional economy that can be used to predict the impact of changes on economic activity (e.g., industry revenues and household incomes) within the region.

market benefits — benefits from goods or services bought and sold in normal commerce so that there is a revealed price that reflects consumers willingness-to-pay for the quantity offered and suppliers marginal production costs.

non-market benefits — benefits that accrue to individuals for goods, services, experiences or states of nature that are not normally traded in commerce.

nonuse value (see also **use value**) — value of knowing that something exists in a particular state even though there is no sensory contact with the resource.

opportunity cost — the highest value a productive resource such as labor, capital, land or a natural resource could return if placed in its best alternative use.

producer surplus — total revenue minus the opportunity cost of production, including the opportunity costs of the entrepreneurs skills, labor, capital, and ownership of natural resources.

random utility model (RUM) — an extension of the travel cost method which explicitly considers individuals participation decisions and the selection among alternative recreation sites.

supply — schedule of the quantities of goods and services that a business is willing to sell at various prices. Other factors that affect supply include input prices.

travel cost method — a methodology which relies on travel-related costs as a surrogate for price in a non-market situation in order to estimate demand and money measures of willingness-to-pay.

use value — value derived from either the consumption of a good, the utilization of a service, or that otherwise involves some sensory contact with the resource. For example, whale-watching is not consumptive but involves visual contact with the whales.

value — what one is willing to give up in order to obtain a good, service, experience, or state of nature. Economists try to measure this in dollars.

welfare economics — a field of inquiry within the broad scope of economics that is concerned with money measures of individual and social well-being, particularly in changes in well-being due to implementation of public policies.