Forested Ecosystems and Regional Economies

For the National Science Foundation, ECO conducted a three-year study to describe, explain and communicate the relationships between forested ecosystems and regional economies. ECO developed a framework to assess and tools to describe the impacts of forests on the local economies. The study included case studies of Oregon, Alaska, New Mexico, North Carolina, New Hampshire and Wisconsin.

Economic Consequences of Alternatives for Natural-Resource Allocation

For the State of Nebraska, ECO described the mechanisms through which the state's natural-resource amenities can drive local economic growth. ECO also examined how resource-related amenities impact the quality of life of people in Nebraska. ECO showed that by redefining the existing natural resources – agriculture paradigm and stimulating the growth of other industries such as recreation, Nebraskans stand to benefit economically.

Economic Analysis of Irrigation and Montana's Economy

For the Montana Department of Natural Resources and Conservation, ECO analyzed the relationship between irrigated agriculture and Montana's economy. ECO described the net economic benefits and impacts on jobs and incomes produced by irrigated agriculture, and identified emerging opportunities for sustaining or expanding irrigated agriculture in Montana, including proposals to develop new infrastructure or rehabilitate existing infrastructure, and opportunities for water conservation through increased water use efficiency, water markets, and payments for ecosystem services.

Analysis of Potential Economic Effects of a Proposed Water-Bottling Plant

For a private client, ECO analyzed the potential economic effects of a large-scale water-bottling facility proposed to be built in small rural community on the west coast. ECO examined long-run trends affecting economic conditions and natural resources in the region, reviewed case studies of water-bottling facilities in other communities, and analyzed the potential economic effects of the facility on local employment, population, public services, and natural resource amenities.

Economic Analysis of Agenda to Restore Puget Sound

For the Puget Sound Partnership, ECO conducted an economic analysis that focused on the costs and benefits of actions that the Partnership may undertake to restore the health of Puget Sound. The Partnership used the study as a tool to guide its funding strategies and identify priorities to frame and target the financing analysis.

Economic Analysis of Electricity-Generating Alternatives in Arkansas

For the Sierra Club, ECO described the potential economic impacts of alternatives for generating electricity in Arkansas, including renewable options, such as wind and biomass, and a 600 megawatt coal-fired electricity generator that Southwestern Electric Power Company proposed to build in Hempstead County, Arkansas.

Impacts of Salmon Conservation

For the Center for Watershed and Community Health, University of Oregon, ECO initiated a multi-year effort to assess the economic costs and benefits of salmon conservation measures in the Pacific Northwest. ECO offered policies to increase both the net benefits of salmon conservation and the probability that the region will accomplish its conservation goals. The project included a handbook on salmon and the economy in Washington and Oregon. ECO presented the study's findings in testimony to the Washington State Legislature and in meetings with legislators, legislative staff, environmental organizations, and representatives of the Pacific Northwest business community.

Economics of Competing Water Demands

For two regional foundations, and a collaborative group with divergent interests, ECO described the competing demands for water and related resources on the Upper Klamath River Basin and outlined win-win alternatives for coping with changes in the competing demands. ECO redefined the traditional framework that views local economies and ecosystem management as adversaries and constructed a new model in which the two contribute together to the well-being of local populations.

Economic Consequences of Development

For Metro, the regional government council for the Portland Metropolitan area in Oregon, ECO described the economic consequences of allowing, limiting, or prohibiting development that would negatively impact significant riparian and wildlife areas. The analysis considered the economic impacts on development as well as the value of ecosystem services provided by riparian areas and wildlife habitat.

Environmental Impacts of the Exxon Valdez Oil Spill

For the seven oiled cities on Prince William Sound, Alaska, ECO documented and described the economic and environmental impacts of the Exxon Valdez oil spill on the affected communities, fishermen and fish processors. ECO developed a framework for monitoring community effects of the spill and recommended ways to contend with problems and plan for future oil development. ECO identified appropriate areas for policy changes, and suggested where and how to apply community monetary or administrative resources to respond to the identified impacts. ECO also formulated legislation to insure protection of key resources and their values into the future.

Economic Trends and Forces in the Pacific Northwest

ECO participated in a workshop sponsored by the Pacific Rivers Council to evaluate economic trends and forces in the Pacific Northwest, the role of natural resources in the Northwest economy, and the role of traditional extraction industries in determining the future economic vitality of individual communities. The workshop was the catalyst for a paper, endorsed by more than five dozen economists, on the importance of environmental protection to economic well-being in the region.

Regional Economic Impacts

The Pacific Northwest's Response to Logging Reductions

For private clients, ECO described the economy's response in the Pacific Northwest to dramatic reductions in logging that occurred during the 1980s and 1990s. ECO explained why the economy had grown despite predictions that timber-harvest reductions would cause it to collapse. ECO also compared recent logging reductions in the Pacific Northwest to the projected reductions in British Columbia, and described the extent to which the economy's future response in British Columbia to logging reductions should resemble what occurred in the Pacific Northwest.

Mitigation of Economic Impacts from Dam Bypasses

For private clients, ECO evaluated the economic impacts of bypassing four federal dams on the Lower Snake River. ECO also developed a plan to mitigate the negative consequences of the bypass. ECO testified on these topics before the U.S. House of Representatives Subcommittee on Fisheries Conservation, Wildlife and Oceans, and the Subcommittee on Water and Power.

Economic Analysis of Forest Protection

For private clients, ECO described the potential economic effects of reduced commercial logging in national forests in Idaho and Alaska. ECO analyzed the costs and benefits of the timber industry on regional economies and how the removal of lands from potential timber production would impact the industry and local economies. ECO also looked at the economic values of goods and services that flow from a standing forest.

Economic Impacts of a National Monument

For a private client, ECO evaluated the potential economic impacts of designating a national monument on land managed by the Siskiyou National Forest and Bureau of Land Management in southwest Oregon. The analysis included impacts on timber and mining industries, tourism and recreation, environmental quality, and quality of life in the region.

Models for Regional Economies in Western Oregon

For the Bureau of Land Management, ECO developed computer models of regional economies for the Bureau's five management districts in western Oregon and for western Oregon as a whole. ECO produced a software package that allowed the Bureau to trace the economic and fiscal impacts of changes in resource uses resulting from the Resource Management Plan alternatives.

Economic Impacts of Forest Management Regulations

For the Washington State Department of Natural Resources, ECO analyzed the economic effects of proposed changes in existing Forest Practices Rules. The analysis included calculating market and non-market values associated with the effects of the proposed rule changes on timber, water, soils, understory vegetation, fisheries, and wildlife resources. ECO developed a model to trace the economic and ecological effects and to enable the Forest Practices Board to evaluate the impact of alternative rule changes relative to the existing situation.

Economic Analysis of Salvage-Logging Policies

For a private client, ECO analyzed the economic impacts of forest-management strategies that would enhance salmon habitat on six national forests in Idaho. In addition, ECO analyzed the full economic costs of salvage logging on federal lands in eastern Oregon, eastern Washington, and Idaho.

Impact Analysis of Forest Management Policy

For the Wilderness Society, ECO assessed local economic conditions with and without a change in forest management policy that would protect most or all of the remaining old-growth forest on federal lands. ECO examined three timbersheds: Grays Harbor and Pacific counties in Washington, Linn and Lane counties in Oregon, and Siskiyou County in California.

Economic Impacts of a Ban on Snowmobiles

For a private client, ECO estimated the potential economic impacts of a ban on snowmobiles in Yellowstone National Park, Grand Teton National Park and the John D. Rockefeller, Jr., Memorial Parkway.

Economic Benefits of Restoring Streamflows in the Eel River

For the Center for Environmental Economic Development, University of Oregon, ECO assisted with an analysis comparing the positive and negative economic consequences of restoring natural streamflows in the Eel River, California, rather than diverting the water to the Russian River. ECO analyzed these economic values in the context of salmon-population restoration and its impact on the well-being of humans.

Economic Consequences of Salmon Conservation

ECO authored a letter outlining six analytical principles for assessing the economic consequences of salmon conservation and circulated it among professional colleagues. More than 75 co-signers endorsed the letter, which was sent to the governors of the four Pacific states and the premier of British Columbia. The letter particularly emphasized the need to consider the benefits of salmon conservation as well as the costs, and the positive as well as the negative impacts on jobs and incomes.

Salmon, Timber, and the Economy

For private clients, ECO evaluated the potential economic consequences of efforts to restrict logging and related activities on private and state timberlands in Oregon to restore salmonid habitat and prevent further degradation.

Impacts of Habitat Protection to Groundfishery in Alaska

For a private client, ECO estimated the potential economic consequences of restricting Alaska's Groundfishery in the area of critical habitat for the endangered Stellar sea lions. ECO reviewed programs aimed at mitigating the impacts of fish-harvest loss, including aiding workers dislocated from the fishery industry.

Socioeconomic Impacts of a Water-Management Program

For a private client, ECO described the current conditions in the Columbia Basin and analyzed the socioeconomic impacts associated with different components of the Columbia River Water Management Program. The Program seeks to balance competing demands, such as agriculture and endangered aquatic species. ECO's analysis was included in a Draft Programmatic Environmental Impact Statement.

Economic Assessment of Upper Rio Grande Basin Resource Management

For the Western Water Policy Review Advisory Commission, ECO described the competition for scarce water and related resources in the Upper Rio Grande Basin and identified critical problems relating to economic development, environmental protection, public health, tribal self-determination, and public land management. ECO also evaluated efforts to resolve the problems and recommended policies and actions to help resolve them.

Economics of Watershed Planning

For Whatcom County, Washington, ECO conducted an economic analysis in support of a comprehensive watershed-planning process. ECO estimated the employment, income, population, and non-market economic impacts from alternative management scenarios. ECO also estimated the water use, by sub-basin, for each scenario.

Economic Benefits of Protecting Natural Resources

For a private client, ECO conducted a preliminary study of the economic benefits of protecting the water, wildlife, and other natural resources of Brice Prairie, an area in Wisconsin on a stretch of the Upper Mississippi River. ECO also considered the potential impacts that the construction of an asphalt plant would have on the natural resources of Brice Prairie.

Alternative Plans for Water-Resource Allocation

For the Grand Canyon Trust, ECO assisted with an evaluation of the importance of the Virgin River, Utah to the economy of the surrounding region. ECO evaluated the economic consequences of alternative river-management strategies.

Environmental and Economic Impacts of a Gold Mine

For the Blackfoot Legacy in Montana, ECO evaluated the economic consequences of a proposed gold mine in the Blackfoot River watershed. ECO reviewed the potential impacts of the mine on employment, environmental quality, and quality of life in the watershed.

Economic Assessment of the Proposed Animas-La Plata Project

For a private client, ECO assessed the potential economic benefits and costs of the reservoir, related infrastructure, and activities included in the proposed Animas-La Plata project in southwestern Colorado. ECO compared the project with an alternative that involved increased water conservation and the voluntary transfer of water rights to affected tribes.

Economic Damages from an Oil Spill

For the plaintiffs, ECO analyzed the economic damages incurred by citizens of the State of Yap, in the Federated States of Micronesia, from a ship that grounded on the coral reef and spilled oil into the mangrove-reef ecosystem.

Impacts of Nuclear Waste Repository

For the Washington Department of Ecology, ECO coordinated a team of researchers working on the analysis of the economic, demographic, fiscal, and community-service impacts of siting a proposed high-level nuclear waste repository at Hanford, Washington. This analysis involved developing a baseline profile, forecasting future conditions assuming the repository would be built, and tracing the repository's impact on the local, state, and regional economies.

Economic Analysis of Columbia River Environmental Impact Statement

For the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), ECO assisted in preparing a response to the Draft Environmental Impact Statement for the Columbia River System Operation Review written by federal water-management agencies. ECO developed a framework for assessing the potential economic consequences of alternative resource-management proposals and applied the framework to describe the economic consequences of implementing CTUIR's alternative proposal for managing the Columbia and Snake Rivers.