

10.6 Socioeconomic Impact Study Plan

The Socioeconomic Impact Study will consist of collecting primary data (through interviews and observations) and reviewing existing data sources to obtain specific information on Project-related issues. The Study will identify the socioeconomic benefits, costs and other socioeconomic externalities of the Project to the region. The Study will address those benefits and costs that are directly and indirectly affected by the Project.

10.6.1 Pertinent Issue Questions

2. What are the socioeconomic benefits (direct, indirect and induced) and costs of the UARP to El Dorado County and the Region?
5. What are the benefits and costs (local and regional) of the UARP to federal land agencies?
25. What are the public safety needs of induced recreation on law enforcement, medical, and search and rescue (risks, issues and mitigation)?

10.6.2 Background

The relicensing process for the Upper American River Project is prompted by the upcoming expiration of the SMUD's 50-year license. This license was granted in 1957 and expires in 2007. SMUD's Upper American River Project (UARP) is located in the rugged Sierra Nevada Mountains between the southern shores of Lake Tahoe and Sacramento. A majority of the UARP facilities are located within the Eldorado National Forest and the 85,000-acre Crystal Basin Recreation Area. The three UARP storage reservoirs – Ice House, Union Valley and Loon Lake, and their associated recreation facilities, provide significant recreational opportunities. These recreation facilities help meet the local, regional and state public demand for high quality outdoor experience. Facilities include campsites (seven hundred), boat ramps, picnic areas, paved bicycle trails, sanitation stations, winter warming huts and mountain top observation points.

10.6.3 Study Objectives

The objectives of the Socioeconomic Impact Study are:

- Identify the socioeconomic benefits of Project-related recreation opportunities and other externalities to the region.
- Identify the socioeconomic costs of Project-related recreation opportunities and other externalities to the region.

10.6.4 Study Area

Project Region – El Dorado County. The study area will mainly cover the Crystal Basin even though the impact of the recreation use in this area will be analyzed for the entire El Dorado County. Locations will include developed Project recreation facilities and dispersed (undeveloped) areas with a probable or potential association to the UARP. In addition, the surrounding area will be studied to determine the regional impact. This study area does not include any analyses of the economic impacts of the Chili Bar reach.

In explanatory terms, the study area will comprise of the following:

- Individual recreation sites: where recreational activities and direct economic impacts occur.
- Recreation focal area (trade area): surrounding the site or facility development which may be considered a “local impact” zone (this could consist of one or more counties). It is likely to be the source of most direct recreation employment.

- Travel corridor: from the consumer residence area to the site and the economic impacts that occur along the travel route.
- Sub-state or multi-state regions: surrounding the site where both direct and indirect impacts occur. It will depend upon the inspection of the visitor data.

10.6.5 Study Methods

Information for this study will be obtained through telephone and face-to-face interviews, observational trips to the study area, secondary sources, and existing literature. Information will be obtained on the following: visitor demographics (age, income, gender, place of residence), origin and destination of the trip, distance traveled (one way), type of accommodation used, length of stay, mode of transportation, day trip versus multi-day, multiple destination trip, average number of trips undertaken, number of people per party and party composition (family, friends etc.), equipment type (for example, those with RVs may have different expenditure patterns than those with family auto).

Expenditure data will be obtained on the following: lodging (private and public accommodation, camping fees), licenses, food and beverage (restaurants), groceries, liquor stores, gasoline, car rental, boat rental, public transportation, camera and films, outdoor recreation equipment rental, souvenirs, hospital services, outfitter and guides, and amusements. These variables have been identified and used by several economic impact studies (Schaffer, 1985; Propost et al., 1989; Stevens & Rose, 1989; English et al., 1994; Douglas & Harpman, 1995; Blaine & Mohammed, 1991).

Interviews

Service and facility providers will be interviewed to estimate costs associated with providing services for Project-related recreation. Local, regional, state and federal officials with jurisdiction in the Project region will be interviewed to identify qualitative and quantitative costs associated with the Project.

Information will be obtained from the following sources in the El Dorado County: The Eldorado National Forest Interpretive Association, The El Dorado County Sheriff's Department, All-volunteer El Dorado ski Patrol, El Dorado County Search and Rescue Operations, Economic Development Officer, Chamber of Commerce, Director of Tourism, and the Information Centers.

Other contacts for secondary sources will be: Pacific Southwest Forest and Range Experiment Station; Station Director, Pacific Southwest Research Station; and Program Manager, Ecology and Management of Western Forests Research, Development, and Application Program. In addition, the Outdoor Recreation Planner and the Research Social Scientist at the North Pacific Experiment Station will be interviewed.

Secondary Sources

Existing literature will be used to determine visitor expenditures and trip behavior. Economic impact studies conducted on similar study areas will also be examined. Previous literature will also be used to identify the non-market value (Scarpa et al., 2000; Hoehn & Randall, 1987; Lindberg & Johnson, 1997; Johnson & Moor, 1993) of Project-related recreation based on RVDs.

10.6.6 Study Analysis

Economic Impact

After identifying average expenditures for all pertinent recreation sectors, USDA's IMPLAN (input/output) model will be used to calculate the economic impact of Project-related recreation to the region.

The Model will help to understand the economic structure, interdependencies of different sectors of the economy, the size and structure of the recreation and tourism industry in a given region and its linkages to the economy. Such

understandings assist in identifying potential partners for the tourism industry as well as targeting industries as part of regional economic development strategies. Recreation and tourism can have a variety of impacts. Visitors are expected to contribute to sales, profits, jobs, tax revenues, and income in an area (Wagner, 1997; Fletcher, 1989; Alward, G.E., 1995). Through secondary effects, recreation is expected to affect most sectors of the economy. The economic impact analysis will trace the flow of money from visitor spending, first to businesses and government agencies where tourists spend their money and then to other businesses that are supplying goods and services. Taxes will be identified: sales tax from recreation-related spending, hotel tax from lodging, and property tax revenue from the UARP properties.

Regional multipliers will be calculated through IMPLAN and will apply to all the recreation sectors. An economic impact multiplier is very attractive to both analysts and decision makers (Chapelle, 1985; Otto & Johnson, 1991; Milne, 1987). Multipliers represent the value of total economic activity in a particular sector. They measure the interdependence of sectors in an economy. Type I and SAM multipliers will be calculated for this Study. Type I multiplier will capture the indirect effects of purchases among industries, while SAM multiplier will capture the effect of household expenditures induced by changes in labor income.

Total Costs

Total cost associated with the recreation use of the study area will be estimated in terms of additional burden upon the environment and the local economy through existing information and interviews. Impact on property values, additional burden on infrastructure, public safety, medical services and other facilities will be evaluated. In addition, social costs such as effects on the lifestyle of local residents will be considered.

The data is going to be real-time data and is not to be used for projections into the future.

10.6.7 Study Output

A presentation of the study results will be made to the Socioeconomic TWG. The ultimate study output will be mostly a narrative report with tables and charts displaying the economic impact results with regard to output, income, value added, and employment. Tables will also be used to provide information on the costs and non-market value of recreation opportunities to the residents of El Dorado County. The report will include the following: issue questions, objectives, study area, methods used collect information, methods used to analyze the data, findings, discussion, conclusion and recommendations. The report will be prepared in a format so that it can easily be incorporated into the Licensee's draft environmental assessment that will be submitted to FERC with the Licensee's application for a new license.

10.6.8 TWG and Plenary Group Endorsement

The Socioeconomic TWG approved the draft study plan on March 17, 2003. The participants at the meeting who said they could "live with" the plan were El Dorado County Water Agency, City of Sacramento, Placer County Water Agency, U.S. Forest Service, Sue Britting and SMUD. None of the participants at the meeting said they could not "live with" the draft study plan. The Plenary Group approved the plan on April 2, 2003. The participants at the meeting who said they could "live with" this study plan were U.S. Forest Service, American River Recreation Association & Camp Lotus, El Dorado County Water Agency, National Park Service, U.S. Bureau of Land Management, City of Sacramento, and SMUD. None of the participants at the meeting said they could not "live with" this study plan.

10.6.9 References

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