

Michael A. Downs

Principal Social Scientist



EDUCATION

- 1985 Ph.D., Anthropology, University of California - San Diego
- 1981 M.A., Anthropology, University of California - San Diego
- 1979 B.A., Psychology/Anthropology, University of Michigan

PROFESSIONAL AFFILIATIONS

- American Fisheries Society
- North American Association of Fisheries Economists
- Society for Applied Anthropology

EXPERIENCE

February 2016–present
Principal Social Scientist, Northern Economics, Inc.

1997-2016
Principal/Senior Social Scientist, AECOM, Inc.

1981-1997
Vice President/Senior Social Scientist, Impact Assessment, Inc.

Selected projects include:

North Pacific Fisheries Projects

- **North Pacific Fishery Management Council, Central Gulf of Alaska Rockfish Program 5-Year Program Review Social Impact Assessment.** Principal investigator for a social impact assessment component of the Central Gulf of Alaska rockfish quota shares program. The analysis focused primarily on Kodiak, but included other Alaska communities engaged in the fishery as well as Seattle, Washington and Lincoln County, Oregon. Completed October 2017.
- **North Pacific Fishery Management Council, American Fisheries Act Program Review, Community Development Quota and Fishing Communities Component.** Principal investigator for social impacts analysis of the American Fisheries Act program review. Work focused on contrasting Community Development Quota regional and fishing community impacts documented in the Council's 2002 Report to Congress and those seen in the subsequent 15 years. Completed July 2017.
- **North Pacific Fishery Management Council, Gulf of Alaska Trawl Bycatch Management Analysis Social Impact Assessment, Gulf of Alaska, Alaska.** Principal investigator for a social impact assessment detailing existing conditions and potential community impacts related to a proposed rationalization program for the Gulf of Alaska trawl fisheries to achieve reduced prohibited species catch while harvesting at optimum yield levels. Communities specifically analyzed in detail included Kodiak, Sand Point, and King Cove, with Anchorage, Petersburg, Homer, Seward, Akutan, and Unalaska/Dutch Harbor, Alaska; and Seattle, Washington and Newport, Oregon included to a lesser extent. The analysis included an examination of historic

groundfish harvests as well as potential changes to halibut and chinook salmon commercial, sport, and subsistence/personal use fisheries. Completed December 2016.

- **North Pacific Fishery Management Council, Bering Sea/Aleutian Islands Crab Rationalization 10-Year Program Review Social Impact Assessment.** Project director for an analysis of the socioeconomic impacts associated with the establishment of a rationalization program for six crab fisheries. The analysis described the effects of the program after 10 years and detailed the impacts in Unalaska/Dutch Harbor, King Cove, Akutan, Kodiak, Sand Point, Adak, St. Paul, and St. George, Alaska; and Seattle, Washington. Completed August 2016.
- **North Pacific Fishery Management Council, Alaska Fishing Community Profiles.** Project director for an effort that developed historical background, demographic information, and fisheries participation information for a range of fishing communities for use in a publicly distributed free-standing volume of summary community profiles. Completed January 2016.
- **North Pacific Fishery Management Council, Bering Sea/Aleutian Islands Halibut Prohibited Species Catch Limits Revisions Social Impact Assessment.** Project director for a social impact analysis assessing proposed changes to various groundfish fisheries meant to reduce halibut bycatch. Analysis was conducted for each Community Development Quota region as well as at the community level for those communities most directly engaged in the fishery. The work included the assessment of confidential fishery catch and landings data, as well as the description of existing commercial groundfish and commercial, subsistence, and sport halibut fishing activity in the region. Completed July 2015.
- **National Oceanic and Atmospheric Administration Fisheries, Implementation of a Gulf of Alaska Trawl Fishery Social Survey.** Project director for field implementation Gulf of Alaska groundfish trawl fishery Alaska Fisheries Science Center social survey focused on collecting demographics, fisheries participation, connections, perspectives on rationalization, and processing activities of all people associated with the fishery. Results are to be used to provide a pre-implementation baseline for later analysis of a new, yet to be defined, rationalization program for the fishery. The survey included development of a web-based system, phone surveying, and a robust fieldwork effort that included in-person surveys in four Alaskan communities. Completed October 2014.
- **National Marine Fisheries Service, Steller Sea Lion Protection Measures for Groundfish Fisheries for the Bering Sea and Aleutian Islands Management Area Environmental Impact Statement, Community Impacts Analysis.** Project director of the community impacts analysis for an EIS evaluating alternative management measures to govern groundfish fisheries so NMFS could authorize fisheries that do not jeopardize the western distinct population segment of the Steller sea lion, or adversely modify its critical habitat. The analyses compared the impacts of the various alternatives on specified geographic, minority, and low-income communities. Analysis also discussed the impacts to federally recognized Alaska Native tribes potentially affected. Completed May 2014.
- **North Pacific Fishery Management Council, Gulf of Alaska Halibut Prohibited Species Catch Limits Reduction, Social Impact Assessment.** Principal in charge of a social impact assessment of proposed changes to various groundfish fisheries in the Gulf of Alaska meant to reduce halibut bycatch. Included the assessment of confidential fishery catch and landings data, as well as the description of existing commercial, charter, and subsistence halibut fishing activity in the region. Completed March 2013.

- **North Pacific Fishery Management Council, Bering Sea/Aleutian Islands Crab Rationalization 5-Year Program Review.** Principal in charge responsible for an analysis of the socioeconomic impacts associated with the establishment of a rationalization program for six crab fisheries in Alaska. The analysis described the effects of the program after five years and detailed the impacts in Unalaska/Dutch Harbor, King Cove, Akutan, Kodiak, Sand Point, Adak, St. Paul, St. George, Alaska; and Seattle, Washington. Completed December 2010.
- **National Marine Fisheries Service, Steller Sea Lion and Northern Fur Seal Research Permit Policy Implementation Support Document.** This limited effort was provided as a supplemental update to the more comprehensive EIS work done in 2006. Completed January 2009.
- **North Pacific Fishery Management Council, Bering Sea/Aleutian Islands Crab Rationalization 3-Year Program Review.** Principal in charge responsible for analysis of the socioeconomic impacts associated with establishment of a rationalization program for six Bering Sea/Aleutian Islands crab fisheries in federal waters off Alaska. The analysis described the effects of the program after three years and detailed the impacts across multiple communities, with a primary focus on the Alaska communities of Unalaska (Dutch Harbor), King Cove, Akutan, Kodiak, Sand Point, Adak, St. Paul, and St. George, Alaska; and Seattle, Washington. Completed November 2008
- **North Pacific Fisheries Management Council and North Pacific Research Board, Comprehensive Commercial Fishing Community Profiles - Volume 2, Sand Point, Adak, St. George, and St. Paul, Alaska.** Principal in charge of the compilation of comprehensive community profiles of four key Alaska fishing communities substantially engaged in and dependent upon federally managed fisheries offshore of Alaska. Report included detailed information on each community's demographics, local economy and links to commercial fisheries, and local governance and revenues. Completed June 2008.
- **National Marine Fisheries Service, Alaska Groundfish Harvest Specifications Environmental Impact Statement.** Analyst for environmental justice component of the EIS. The study provided decision makers and the public with an evaluation of the environmental, social, and economic effects of alternative harvest strategies for the federally managed groundfish fisheries in the Gulf of Alaska and the Bering Sea and Aleutian Islands. The EIS examined alternative harvest strategies that complied with federal regulations, the fishery management plans for the groundfish fisheries, and the Magnuson-Stevens Act. The harvest strategies were applied to the best available scientific information to derive the total allowable catch estimates for the groundfish fisheries. Completed January 2007
- **National Marine Fisheries Service, Steller Sea Lion and Northern Fur Seal Research Permit Environmental Impact Statement, Various Locations, Alaska.** Analyzed socioeconomic impacts on local communities experiencing economic and non-economic effects of researchers' interactions with northern fur seal and Steller sea lion. Analyzed how research methodology alternatives affect subsistence harvesting and promoted educational opportunities for local community members. Analysis also included an environmental justice assessment. Completed November 2006.
- **National Marine Fisheries Service, Essential Fish Habitat Environmental Impact Statement, Various Locations, Alaska.** Principal investigator/task manager for the social and community assessment component for the essential fish habitat existing conditions documentation and alternatives analysis. Work involved analysis of Alaska and Pacific Northwest communities engaged in the fisheries, and analysis of potential differential distribution of impacts under the

various alternatives to meet the requirements of NEPA, National Standard 8 under the Magnuson-Stevens Act, and the Executive Order on Environmental Justice. Completed April 2005.

- **North Pacific Fisheries Management Council and North Pacific Research Board, Comprehensive Commercial Fishing Community Profiles - Volume 1, Unalaska, Akutan, King Cove, and Kodiak, Alaska.** Principal in charge of the compilation of comprehensive community profiles of four key Alaska fishing communities substantially engaged in and dependent upon federally managed fisheries offshore of Alaska. Report included detailed information on each community's demographics, local economy and links to commercial fisheries, and local governance and revenues. Completed March 2005.
- **North Pacific Fishery Management Council, Gulf of Alaska Fisheries Rationalization Social Impact Assessment.** Study examined the socioeconomic, social, and community impacts of proposed federal commercial groundfish fishery management changes in the Gulf of Alaska region. Involved fieldwork in Sand Point and Chignik communities. Project concluded in February 2005.
- **National Marine Fisheries Service/North Pacific Fishery Management Council, Bering Sea/Aleutian Islands Crab Fishery Rationalization Program Environmental Impact Statement Social Impact Assessment.** Provided technical oversight for the social and community assessment component. Work involved research in Alaska and Pacific Northwest communities (Washington and Oregon) engaged in the fisheries, and (pre-implementation) analysis of potential differential distribution of impacts under the various rationalization alternatives to meet the requirements of NEPA, National Standard 8 under the Magnuson-Stevens Act, and the Executive Order on Environmental Justice. Completed August 2004
- **National Marine Fisheries Service, North Pacific Groundfish Programmatic Supplemental Environmental Impact Statement.** Task leader for the social assessment component of the socioeconomic assessment of the North Pacific (Bering Sea and Gulf of Alaska) groundfish fishery management plan in Alaska, Oregon, and Washington. In addition to research management responsibility, task involved fieldwork working with communities in Alaska and the Pacific Northwest, industry sectors, and Alaska Native entities, and encompassed subsistence analysis as well. Completed June 2004.
- **North Pacific Fishery Management Council, Report to the U.S. Congress and the Secretary of Commerce, Impacts of American Fisheries Act Social Impact Assessment, Fishing Community Impacts.** Principal investigator on the social and community level impacts of the implementation of the American Fisheries Act regulating the groundfish fishery in the Gulf of Alaska and the Bering Sea. Completed February 2002.
- **National Marine Fisheries Service, Steller Sea Lion Protection Measures in the Federal Groundfish Fisheries Off Alaska, Supplemental Environmental Impact Statement.** Lead investigator for the social impact assessment of proposed fishery management measures designed to protect endangered Steller sea lion populations in the North Pacific Ocean. This work involved the characterization of regional and community socioeconomic contexts in Alaska, Washington, and Oregon. The commercial fishery in these communities was described in relation to the overall community structure, and the role of the relevant species fisheries within the overall fishery was characterized. Completed November 2001.
- **North Pacific Fishery Management Council, North Pacific Groundfish Fishery, Sector and Regional Profiles, Various Locations, Alaska.** Principal investigator for regional and community profiles component of comprehensive analysis of existing conditions in the North

- Pacific Groundfish Fishery in Alaska, Washington, and Oregon. Work involved profiling data for six regions spanning coastal Alaska and the Pacific Northwest. Project originated as a task under the original Groundfish Programmatic EIS, and was later picked up by the NPFMC as a separate task and subsequently published on their web site. Completed December 2000.
- **National Marine Fisheries Service, North Pacific Groundfish Fishery Supplemental Environmental Impact Statement.** Provided technical oversight on regional/social impact component of socioeconomic analysis for the supplemental EIS. Work involved fieldwork in Alaska, Washington, and Oregon, and analysis of Alaska and Pacific Northwest regions. Completed December 2000.
 - **Lake and Peninsula Borough and Bristol Bay Borough, Fishing Disaster Impact Report and Economic Recovery Plan for the Lake and Peninsula and Bristol Bay Boroughs, Alaska.** Responsible for analysis of social impacts of the 1997-1998 disaster to communities in the Lake and Peninsula, and Bristol Bay Borough regions. Conducted interviews with fishers, governmental officials, and private business owners in seven communities. Completed June 1999.
 - **North Pacific Fishery Management Council, Inshore/Offshore-3 Amendment Package, Socioeconomic Description and Social Impact Assessment.** Senior social scientist, field researcher, analyst, and writer on the proposal (for commercial groundfish quota allocations) for the Bering Sea/Aleutian Islands region. Conducted project field research and was responsible for overall study coordination and management. Conducted ethnographic research, key-person interviews, and the differential distribution analysis of secondary data. Completed July 1998.
 - **North Pacific Fishery Management Council, Fisheries License Limitation Alternatives Supplemental Social Impact Assessment.** Senior social scientist and technical analyst for assessment of proposed changes in groundfish and crab regulatory schemes for the Gulf of Alaska and Bering Sea/Aleutian Islands fisheries. Focused on several narrowly defined license limitation management approach configurations. The research built upon the earlier, more general research on broad options. The analysis looked at the distribution of impacts across industry sectors and regions, and included Alaska Native communities spanning several regions. Completed March 1995.
 - **North Pacific Fishery Management Council, Regulatory Changes in the Groundfish and Crab Fisheries of Gulf of Alaska and Bering Sea/Aleutian Islands Sector Description and Preliminary Social Impact Assessment.** Senior social scientist, field researcher, analyst, and writer for the proposed changes in groundfish and crab regulatory schemes for the Gulf of Alaska and Bering Sea/Aleutian Islands fisheries, including individual fishing quotas or license limitation management approaches. Research required the analysis of existing secondary data combined with the gathering and analysis of primary data on fisheries' participation and dependency by various harvest and processing industry sectors in both Alaska and the Pacific Northwest. Conducted field research in coastal communities. Completed October 1994
 - **North Pacific Fishery Management Council, Inshore/Offshore Allocation Amendment Proposal, Social Impact Assessment.** Senior social scientist, field researcher, analyst, and writer on the proposal (for commercial groundfish quota allocations) for the Gulf of Alaska and Bering Sea. Conducted project field research in Sand Point and Dutch Harbor/Unalaska and was responsible for overall study coordination and management. Conducted ethnographic research, key-person interviews, and the differential distribution analysis of secondary data. Completed March 1991.

Other Selected Fisheries Projects

- **Mid-Atlantic Fishery Management Council, Atlantic Surfclam and Ocean Quahog ITQ Fishery Program Review.** Principal investigator on first program review for the first domestic IFQ fishery. Project is ongoing.
- **Gordon and Betty Moore Foundation, West Coast Groundfish Trawl Rationalization Program and Northeast Groundfish Sector Management Program Social Impact Assessment, Various Locations, New England and US West Coast.** Co-Principal investigator of a project providing a third-party assessment of the social impacts of two different groundfish fishery catch share management programs. Work included being responsible for applying social data from external programs to the relevant indicators, data collection and analysis of information for social indicators for use in program evaluation, and the survey design for data collection. Project is ongoing.
- **Pacific Fishery Management Council, West Coast Limited Entry Trawl Fishery - Individual Fishing Quota and Permit Stacking Analysis, Various Locations, California.** Provided technical oversight for community impact assessment of proposed changes in management approach of the federal groundfish fisheries off the coasts of Oregon and Washington.
- **Caribbean Fishery Management Council, Proposed Marine Conservation District Rapid Socioeconomic Evaluation, St. John, Virgin Islands.** Responsible for the rapid socioeconomic evaluation of the proposed district. Through fieldwork, identified and described existing user groups of the proposed district area and characterized use types (such as commercial fishing, charter sport fishing, and commercial diving operations), including variation by geographic base, ethnicity, vessel class/type, gear types, and other socioeconomic and distributional factors. Additionally, provided a general-level social impact assessment, discussing preliminary findings regarding differential distribution of potential impacts along several dimensions.
- **Island Resources Foundation, Anegada Sea Turtle Recovery: A Community Assessment, Anegada, British Virgin Islands.** Responsible for the community assessment component of the project. Conducted field research to determine existing resource utilization pattern and recommended management plans for endangered sea turtle. Worked with Native West Indians to examine traditional and customary use patterns and potential interactions with coastal development projects.
- **National Oceanic and Atmospheric Administration Fisheries, Marine Outreach and Education US Virgin Island-Style Initiative, Outreach, and Education Plan, St. Thomas and St. Croix, Virgin Islands.** Ethnographer assisting with researching existing communication strategies occurring within the USVI with regard to fishery management information, as well as formulating an outreach and education plan that implements improved outreach and education strategies based on focus group feedback, key person interviews, a literature review, and gap analysis.
- **National Park Service, Biscayne National Park Fishery Management Plan, Miami, Florida.** Provided socioeconomic analysis to the NPS for the development of the fishery management plan and associated environmental impact statement. Involved follow-up fieldwork among fishermen and associated support service entities.
- **Gulf States Marine Fisheries Commission, Gulf of Mexico Blue Crab Fishermen Study, Various Locations, Louisiana.** Quality assurance reviewer and fisheries technical expert for the social and cultural profile of blue crab fishermen in the Gulf of Mexico.

- **National Marine Fisheries Service, Pelagic Fisheries of the Western Pacific Supplemental Environmental Impact Statement, Pago Pago, American Samoa.** Project involved analysis of displacement of pelagic fisheries effort from Hawaii to US flag territories resulting from endangered species issues. Conducted fieldwork in American Samoa to examine impacts of industrial fleet on small-scale localized traditional fisheries.
- **National Marine Fisheries Service, Pelagic Fisheries of the Western Pacific Environmental Impact Statement.** Principal investigator of the social impact component of EIS for the fishery management plan revisions. Primary issues involved endangered species interaction conflicts with commercial fishery in Hawaii, with second tier issues in American Samoa, Guam, and Commonwealth of the Northern Mariana Islands. Conducted fieldwork in Hawaii.
- **US Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge Subsistence Resource Utilization Impacts Study.** Social scientist, field researcher, analyst, and writer on the study of subsistence resource utilization impacts of the refuge. The project included description of affected environment, environmental impact statement, and ANILCA 810 evaluation.
- **California State Lands Commission, San Onofre Nuclear Generating Station Offshore Conduit Removal, San Diego County, California.** Project involved removal of cooling water conduits offshore of SONGS. Conducted detailed socioeconomic impact assessment for commercial fisheries of the area as well as environmental justice analysis of the proposed project.
- **City of Morro Bay and City of Monterey, Fishing Community Sustainability Plan, Morro Bay and Monterey, California.** Technical advisor providing peer review and strategic planning associated with the assessment of social impacts for two fishing community sustainability plans. Both plans identified, assessed, and analyzed key performance measures for community fisheries and provided suggestions for the sustained participation of the community in regional fisheries.
- **California State Lands Commission, Coastal Commercial and Recreational Fisheries Impacts.** Performed a CEQA-compliant review and an EIR for the installation of fiber optic cable networks from the Pacific Rim of Asia to the California coast. Social science focus was on the potential impacts of cable installation on commercial and recreational fishing off the California coast. Involved performing third party, detailed analysis for each of three projects. Addressed fisheries specific issues as well as associated indirect impacts to communities.
- **San Diego Association of Governments, Regional Beach Sand Project II, Phase 2, Environmental Impact Report/Environmental Impact Statement, San Diego County, California.** Social scientist for an EIR/EIS analyzing the potential impacts resulting from a second phase of beach replenishment in San Diego County. In addition to analyzing possible impacts to demographics, housing, and the economy, the report also included a comprehensive analysis of possible impacts to the commercial fishery in San Diego County.
- **San Diego Association of Governments, San Diego Regional Beach Sand Project Environmental Impact Report/Environmental Assessment and Permitting, San Diego County, California.** Provided socioeconomic analysis of potential impacts to commercial fishing in the project area, utilizing secondary data as well as information developed through interviews.

Selected Energy Projects

- **US Bureau of Ocean Energy Management, Bowhead Whale Hunting Subsistence Activities in the Beaufort Sea - Potential Impacts Quantitative Description, North Slope, Alaska.** Principal investigator for development of research design, research protocols, staffing schedule, and itinerary for implementation of survey, ethnographic, and archival research concerning the effects of offshore oil development activities on subsistence hunting for bowhead whales among the Inupiat of the North Slope of Alaska.
- **US Department of Energy and State of Hawaii, Interisland Wind Project and Interisland Undersea Cable Project Preliminary Environmental Impact Statement.** Principal in charge of a multidisciplinary environmental document that details the possible programmatic environmental and socioeconomic impacts of the installation of wind power generation and interisland energy cables between the islands of Molokai, Lanai, Maui, and Oahu, including fisheries interactions.
- **US Bureau of Ocean Energy Management, Social Impacts of the Exxon Valdez Oil Spill, Cleanup, and Litigation.** Co-principal investigator and project manager of Exxon Valdez Oil Spill, Cleanup, and Litigation: A Collection of Social Impacts Information and Analysis for the Minerals Management Service, Alaska Outer Continental Shelf Region. The project primarily involved compilation of existing secondary materials, and integration of these data into a CD-ROM database with query functions.
- **Alaska Conference of Mayors, Exxon Valdez Oil Spill Economic, Social, and Psychological Impact Assessment.** Responsible, in part, for field studies and analysis coordination and primary coordinator of the project's third interim report that focused specifically on the social and psychological impacts of the spill. Conducted field research in the communities of Kenai, Seward, Soldotna, and Valdez.
- **US Bureau of Ocean Energy Management, Researching Technical Dialogue, North Slope, Alaska.** Project involved an assessment of the efficacy of technical dialogue communication processes between the agency and the public in two regions of Alaska. This includes an analysis of the role of linguistic and cultural factors as obstacles to communication in these regions.
- **Bureau of Ocean Energy Management, Traditional Knowledge of Alaska's North Slope, North Slope, Alaska.** Leader of subcontract effort to assist UIC in compiling a traditional knowledge database for Minerals Management Service, Alaska OCS office. The project involves an effort to incorporate Iñupiat traditional ecological knowledge into the environmental management decision-making process.
- **US Bureau of Ocean Energy Management, Ethnographic Analysis, Point Lay and Point Hope, Alaska.** Social scientist, field researcher, analyst, and writer on Minerals Management Service Socio-Economic Studies Program project to prepare an ethnography, including comparative material from Point Hope. Primary field researcher for the Point Hope portion of the study.
- **US Bureau of Ocean Energy Management, Northern Institutional Profile Analysis, Anaktuvuk Pass and Point Hope, Alaska.** Coordinated an 8-village study on Alaska's North Slope including field research. The project involved in-depth characterization of local and regional political, economic, social, and cultural institutions along with detailed community profiles for each village.
- **US Bureau of Ocean Energy Management, Rural Alaska Villages Economic Analysis, Various Locations, Alaska.** Analyst, writer, and editor on Minerals Management Service Socio-

- Economic Studies Program project to describe and analyze rural village economies through the intensive study of three selected villages.
- **US Bureau of Ocean Energy Management, Institutional Change in Nome 1980-1986, Nome, Alaska.** Analyst and writer on monitoring study of sociocultural change.
 - **US Bureau of Ocean Energy Management, Aleut Institutional Response and Change, Atka and Unalaska, Alaska.** Social scientist, field researcher, analyst, and writer to refine a sociocultural monitoring methodology to assess impacts caused by offshore oil development in Alaskan coastal regions and subsequently apply it to the Aleutian Pribilof region.
 - **US Bureau of Ocean Energy Management, Aleut Institutional Response and Change - Workshop Proceedings, Various Locations, Alaska.** Prepared Minerals Management Service Socio-Economic Studies Program Technical Report #126.
 - **US Bureau of Ocean Energy Management, Ethnographic Case Study, Unalaska, Alaska.** Responsible for four months of field data collection and assisted in the analysis and write up of the materials. Prepared a baseline study to document the community structure, including fisheries engagement, in the exploration phase of offshore oil development.
 - **US Bureau of Ocean Energy Management, Region Ethnographic Studies, Bristol Bay, Alaska.** Writer on study focused on interaction of fisheries and offshore oil and gas development.
 - **US Bureau of Land Management, North Aleutian Shelf Forecast Analysis, Various Locations, Alaska.** Prepared non-OCS forecast analysis of the North Aleutian Shelf offshore oil lease sale. Collected and analyzed published, unpublished, and field materials on communities of the southern Alaska Peninsula area.
 - **US Bureau of Ocean Energy Management; Institute for Coastal and Marine Resources at East Carolina University, Offshore Oil Exploration/Development Socioeconomic Study, Various Locations, North Carolina.** Project manager, social scientist, field researcher, analyst, and writer on a minerals management service project to provide socioeconomic baseline characterization for subsequent impact analysis of the effects of offshore oil exploration/development, including fisheries interactions, on a 5-county region.
 - **Confidential Client, Mazama Exploration Plan Environmental and Social Impact Assessment, Gulf of Mexico, Louisiana.** Technical advisor for an analysis related to the proposed construction, operation, and decommissioning two oil and gas test wells in the Gulf of Mexico. The socioeconomic analysis details the potential impacts to population, housing, education, regional economics (including commercial fisheries), land use, maritime navigation, port use, recreational resources, archaeological, and environmental justice.
 - **Confidential Client, Mad Dog Phase II Environmental and Social Impact Assessment, Gulf of Mexico, Louisiana.** Technical advisor for an analysis related to the proposed construction, operation, and decommissioning of an oil and gas well. The socioeconomic analysis details the potential impacts to population, housing, education, regional economics (including commercial fisheries), land use, maritime navigation, port use, recreational resources, and environmental justice.
 - **Confidential Client, MC608 EA-2 Environmental Assessment, Gulf of Mexico, Louisiana.** Technical advisor for an analysis related to the proposed plugging and abandonment of an oil and gas well. The socioeconomic analysis briefly described the potential impacts to population, regional economics (including commercial fisheries), land use, maritime navigation, port use,

and recreational resources. Task also included mapping sensitive habitat and key socioeconomic features along the gulf coast.

- **Total E&P, Matterhorn Gas Export Pipeline Survey, Gulf of Mexico, Louisiana.** Provided technical oversight for a socioeconomic analysis related to proposed export pipeline replacement from the Total Matterhorn oil platform to shore. The socioeconomic analysis detailed the potential impacts to population, housing, education, regional economics (including commercial fisheries), land use, maritime navigation and port use, recreational resources, and environmental justice.
- **Clark County Nuclear Waste Steering Committee, Yucca Mountain Proposed High-Level Nuclear Waste Repository Socioeconomic Impact Assessment, Clark County, Nevada.** Project manager and social scientist for project socioeconomic impact assessment. The project was under the direction of the steering committee, composed of representatives of both the county and its constituent municipalities. Clark County, which encompasses the incorporated community of Las Vegas, as well as unincorporated areas that include the Las Vegas Strip, had substantial concerns about potential adverse socioeconomic impacts associated with the repository project. The multidisciplinary project involved economic-demographic/fiscal, transportation, and emergency management and planning as its major analytic components. Managed both field and analytic project phases, emphasizing emergency planning and management, and sociocultural analyses.
- **Washington Department of Ecology, High-Level Nuclear Waste Repository, Socioeconomic Assessment, Hanford, Washington.** Social scientist, field researcher, analyst, and writer on a project for assessment of the socioeconomic impacts of a potential high-level nuclear waste repository. The site is now mostly decommissioned, but still contains about two-thirds of the nation's high-level radioactive waste by volume, and was under consideration at the time of the analysis to become the site of the nation's permanent high-level repository. Served in the management as well as the socioeconomic group for the study.

Selected Planning Projects

- **National Park Service, Biscayne National Park Ethnographic Overview and Assessment, Miami, Florida.** Produced a report identifying communities traditionally associated with terrestrial and marine resources (including fishery resources) at Biscayne National Park and summarizing and synthesizing existing ethnographic information on the present and recent cultures of those communities. Additional research products provided information on (a) the utility of existing data for park management (e.g., for both ongoing resource management analytic needs internal to the NPS and for the development of interpretive materials by the NPS for public outreach) and (b) significant gaps in the data for park project needs.
- **National Park Service, Biscayne National Park General Management Plan, Miami, Florida.** Provided socioeconomic analysis to the NPS for the development of the general management plan and associated environmental impact statement. Involved follow-up fieldwork in the fishing communities adjacent to the park.
- **National Park Service, Jean Lafitte National Historic Park and Preserve - Traditional Use Study, New Orleans, Louisiana.** Assisted in performing a traditional use study of the Barataria Preserve Unit of the park and preserve. Identified and described local resources, identified traditional users, described and mapped use patterns, described and mapped subsistence resources and uses, and assessed NPS interaction with concerned stakeholders.

- **National Park Service, New River Gorge National River - African American Heritage, Glen Jean, West Virginia.** Principal investigator for a project exploring the traditional uses of resources, including fishery resources, within New River Gorge National River by the historical and contemporary African-American communities associated with the area. The project included a series of ethnographic interviews, the collection of historical documents and photographs, and a description of historical changes in the area related to African-Americans.
- **Bureau of Land Management, King Range National Conservation Area Resource Management Plan, Northern California, California.** Project manager for preparation of a resource management plan and environmental impact statement for the King Range National Conservation area in northern California. The project also involved community characterization and substantial socioeconomic analysis.
- **National Park Service, Hopewell Culture National Historical Park Ethnographic Overview and Assessment, Ross County, Ohio.** Responsible for project involving identification of affiliated Native American groups, survey of contemporary Native American leaders (including fieldwork in Oklahoma), and a summary of Native American Graves Protection and Repatriation Act (NAGPRA) legal issues related to the park.

Selected Forestry Projects

- **US Department of Agriculture - Forest Service, Kenai Peninsula Sale Program Subsistence Analysis.** Field researcher, analyst, and writer on the Chugach National Forest project to provide socioeconomic and subsistence analysis of proposed program. Primary responsibility for Primrose Creek/Snow River environmental assessment socioeconomic analysis.
- **US Department of Agriculture - Forest Service, Control Lake Environmental Impact Statement.** Senior social scientist, field researcher, analyst, and writer on the EIS. Conducted research activities including subsistence and socioeconomic analysis of proposed timber sale options on Prince of Wales Island in the Tongass National Forest.
- **US Department of Agriculture - Forest Service, Tongass National Forest Madan Environmental Impact Statement.** Responsible for the socioeconomic component of the EIS. Project involved subsistence, and traditional- and customary-use analysis.
- **US Department of Agriculture - Forest Service, Tongass National Forest - Twin Creek Environmental Assessment.** Responsible for the socioeconomic component of Twin Creek EA.
- **US Department of Agriculture - Forest Service, Lab Bay Environmental Impact Statement.** Senior social scientist, field researcher, analyst, and writer on EIS. Conducted research activities including subsistence and socioeconomic analysis of proposed timber sale options on Prince of Wales Island in the Tongass National Forest.
- **US Department of Agriculture - Forest Service, Kootenai National Forest - Social Assessment, Various Locations, Montana.** Social scientist, field researcher, analyst, and writer on the social assessment of the project. Gathered public input through extensive interviews in multiple communities on the adequacy of existing forest management plans and current Forest use by various user groups. Also gathered responses to proposed changes for future management plans in two primary counties (Lincoln and Sanders) and several secondary counties in Montana and Idaho. Contextualized this input through ethnographic description. Responsible for field research and analysis for Sanders County field sites.

Summaries of selected transportation, water, and military projects available upon request.