Michael Shelly, PhD





Dr. Shelly is a Senior Project Officer within ERM based in Rochester, NY. He has 27 years of experience in the field of Economics.

He is a professional economist experienced in managing and completing complex environmental and environmental/health projects on five continents. He has specific experience on environmental, health, infrastructure and energy projects. He has been the project manager of multidisciplinary teams with strong analytical and quantitative skills. He has worked in a large multinational company, a specialist economics consulting company and environmental consulting.

Fields of Competence

- Economic analysis of projects
- Natural resource damage assessment
- Cost-benefit analysis
- Economic impact studies
- Environmental management plans
- Statistical and data analysis
- Hydrofracking
- Valuation of health impacts
- Climate change
- Report writing
- Proposals and SOQS

Key Industry Sectors

Energy

Education

- Doctor of Philosophy (PhD), Economics, University of Edinburgh, Scotland, 1988
- Master of Arts (MA), Economics, University of Warwick, England, 1982
- B.Sc.(Econ), Economics, Queen Mary, University of London, England, 1981

Languages

• English, native speaker

Honors & Awards



Key Projects

Marine Coal Spill Natural Resource Damages Claim, Colombia, Confidential Client. Author of a literature survey on the biological and chemical impacts of marine coal spills in defense of a mining company being sued by the government of Colombia for environmental damages.

Economic Impact Studies, United States, US Navy and Confidential Energy Client. Estimated the direct, indirect and induced changes in employment, earnings and economic output due to changes in personnel and aircraft numbers at military bases and for a proposed electricity transmission line linking wind energy sites to the transmission grid.

<u>Financial Analysis of Water Supply Alternatives, State of Louisiana, State of Louisiana</u>. Evaluated the financial viability and relative cost of alternative projects to reduce extraction from the state's five groundwater aquifers.

Naturally Occuring Asbestos Contamination, Washington State, US Environmental Protection Agency. Author of a statistical evaluation of house price impacts from naturally occurring asbestos contamination along rivers in Washington State.

Socioeconomic Impacts of Hydrofracking, New York State, Department of Environmental Conservation. Coauthor of the section of New York State's Environmental Impact Statement for the hydraulic fracturing of natural gas wells ("fracking") that contained estimates of the potential income, jobs and local tax revenues arising from hydrofracking.

Health Impacts of Fertilizer Production, Morocco, Confidential Client. Author of a report on the health impacts of particulate emissions from phosphate mining and fertilizer manufacturing.

Estimation of Carbon Revenues for Electric Power Plants, New York State and Commonwealth of Pennsylvania, Confidential Clients. Estimated the revenues from potential carbon dioxide cap and trade programs for proposed coal-fired plants with carbon capture and sequestration in Jamestown and Lackawanna in New York State and a plant in Pennsylvania.

Kuwaiti Environmental Damage Claims, Kuwait and United States, State of Kuwait. Lead preparer of loss valuation reports for Kuwait's \$3 billion in successful claims for environmental damage caused by Iraq during the 1990-91 Gulf War. Project manager of a large multidisciplinary, international team that prepared Kuwait's successful \$109 million Gulf War environmental monitoring and assessment claims. Managed the writing of, and edited, nine programmatic management plans intended to guide field contractors as they implemented Kuwait's remediation/restoration projects funded by their Gulf War claims, and wrote the sections and reports dealing with environmental and social assessment procedures, reporting procedures, and organizational arrangements.

Natural Resource Damage Assessment and Restoration and Guidance Review, United States, Bureau of Land Management. Reviewer for the Bureau of Land Management's Natural Resource Damage Assessment and Restoration Guidance Manual.

Saudi Arabian Health Claims, Kuwait and United States, Kingdom of Saudi Arabia. Leader of the team that developed the Kingdom of Saudi Arabia's \$18 billion claim for health damages resulting from the Gulf War. Appeared before the UNCC tribunal in Geneva in defense of the claim.

Smoking Health Care Costs, United States, Confidential Client. Author of a report on the impacts of smoking on health care costs related to states' multi-billion dollar toxic tort case against the tobacco companies. Used SAS to handle the data, probit analysis to model individual's decision to seek medical care, the negative binomial model to model the number of such events and used multiple regression to model medical costs.

<u>Financial and Economic Analysis, China, World Bank</u> and Asian Development Bank. Completed the financial and/or economic analysis of major infrastructure projects (totaling hundreds of millions of dollars) funded by the World Bank and the Asian Development Bank in China. The projects included natural gas production and distribution facilities, district heating plants, wastewater

treatment facilities, water supply projects, a cement plant, and hazardous waste treatment facilities.

Lake Clean Up Plans, China, Asian Developmen Bank and Asian Development Bank. Author of the section of the Tai Lake (near Shanghai) water quality improvement plan that suggested repayment sources for the China Development Bank proposed \$2 billion loan. Prepared the implementation costs, benefit estimates and timetables, and nominated the responsible implementing agencies, for the Chao Lake (China) water quality improvement plan financed by the Asian Development Bank.

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