

Water & Wastewater Economics

Autocase Economic Advisory supports the water and wastewater sector by quantifying and valuing the benefits of investments in water supply, conveyance, wastewater treatment, and reuse. Autocase Economic Advisory is the economic consulting stream of Autocase. Our team of experienced consultants have conducted economic analyses on over \$100 billion worth of projects and successful grant applications, our expertise in water and wastewater is concentrated in:

Economic Analyses

- Capital Investment Planning Valuation and Prioritization
- Carbon Life Cycle Analysis
- Cross Asset Strategic Planning
- Cost Benefit Analysis (CBA)
- Econometric Modeling
- Economic Impact Analysis (EIA)
- Environmental, Social & Governance (ESG)
- Financial Life Cycle Cost Analysis
- Geospatial (GIS) Impact Evaluation
- Grant Application Support
- Life Cycle Cost Analysis (LCCA)
- Multicriteria Decision Analysis (MCDA)
- Real Estate Economic Analysis
- Regulatory Economic Analysis
- Resilience Analysis with Climate Change
- Risk Analysis

Sector Knowledge

- Ecosystem Restoration
- Liquid Stream, Biosolids & Energy Recovery Beneficial Reuse
- NPDES
- Nature-based Solutions
- One Water
- Regional Water Stressors
- Wastewater Treatment Systems
- Water Reuse and Reclamation

Valuation Methods

- Climate Adaptation Evaluation
- Ecosystem Services & Natural Capital
- Hazard Mitigation Evaluation
- Probabilistic Value-at-Risk/Monte Carlo
- Water Scarcity



Quantify

- Acre-feet of Water Conserved
- Ecological Impacts
- Energy-Water Nexus
- MWh and MW Reduced
- Pollutants Removed



Value

- Social Cost of Carbon
- Social Benefit of Water Conservation
- Utility Cost Savings
- Water Quality Human & Ecological Benefits



Communicate

- Case Studies
- KPIs
- Literature Reviews
- Methodology Reports
- Technical Reports
- Stakeholder Seminars



Trusted by Industry



Autocase Economic Advisory crafted a probabilistic risk-adjusted cost benefit analysis for several investments to provide groundwater recharge supply to supplement drinking water supply in Monterey, California. The analysis assessed two desalination facility, indirect potable reuse from the regional wastewater treatment plant, agriculture wash water, tile drainage, and stormwater conveyance designs. We valued water quality and quantity impacts, energy impacts, as well as reliability, resiliency, and redundancy of the supply system.



Conducted a triple bottom line CBA (TBL-CBA) to understand the outcomes from reducing solids loadings into the North Saskatchewan River by investing in residual management facilities at EPCOR's water treatment plants and pursuing a drainage total loadings reduction strategy. Monetized findings included the tradeoffs between benefits of improved aquatic habitat and recreational opportunities versus disbenefits of increased energy costs, chemical usage and solid waste.

Autocase Economic Advisory conducted an economic analysis to better inform the decision to capture stormwater at the Port of Long Beach (POLB), California. POLB was considering over two dozen project sites across six different treatment systems and wanted to better understand the tradeoffs across alternatives. We developed economic models with Monte Carlo risk analysis to determine which combination of location, treatment system, and scale, will provide POLB and the area of Long Beach with the greatest financial savings, and benefits to the environment and human health. The outputs from this project enabled POLB to rank stormwater alternatives by net benefits.



Autocase Economic Advisory prepared a CBA and LCCA on multiple design alternatives under consideration by Charlottetown's Pollution Control Plant in Prince Edward Island. The analysis estimated the outcomes of investments in geothermal energy production, technology to harness heat from liquid waste, solar photo-voltaic panels, an on-site greenhouse, biosolids drying facility, and Smart Infrastructure sensors.



Visit our website for more [project experience](#) and [case studies](#).

About Us

Our team of professional economists conduct rigorous, evidence-based economic analyses of the financial, social, and environmental costs and benefits of sustainable and resilient investments in the infrastructure, real estate, public policy and regulatory worlds.

Our economic analyses help you prioritize investments, understand risks, develop strategic plans, report Environmental, Social, and Governance (ESG) metrics, secure funding, communicate with stakeholders, support climate equity, and understand the holistic trade-offs of your investments and policies. We provide objective, third-party, data-driven quantitative insights to support you.



Interested in our services? Contact us at:

eric.bill@autocase.com or www.autocase.com/advisory-services