
A Vibrant Ottawa River: What's it worth?

The numbers may surprise you!

Valuation & Coordination

Water valuation studies – the case for doing things differently

European Union and Australia – examples of coordinated efforts to rehabilitate watersheds

Ecological Goods and Services Valuation

- Emerging field to ‘speak the language’ of economics in making a case for protection or rehabilitation
- Assesses benefits to human welfare measures
- Watershed benefits can include:
 - Uses (drinking, fishing, agriculture, boating)
 - Ecosystem services (climate, air quality, nutrient cycling)
 - Intrinsic value and benefits to future generations

Cost-Benefit Case – The Great Lakes

- Brookings Institute study – Great Lakes (US focus)
 - \$26B invested in ecological restoration of the Great Lakes would return \$30-50B in short term benefits to the regional economy and over \$50B to the national economy
- Great Lakes (Canada)
 - Investments in green infrastructure and wetland aquatic habitat protection/restoration would have positive returns, based on analysis for densely populated areas
- Valuations do *not* include many ecosystem services that could not be monetized – e.g. flood protection, biodiversity

The Cost-Benefit Case: Why Positive?

- High water quality increases property values
- Increased fish abundance is valued by anglers
- Increased number days beaches open
- Aesthetic beauty valued by property owners, wildlife enthusiasts, tourists, etc
- Avoided costs of infrastructure (including less land for storm water ponds), energy use
- Avoided potable water use for outdoor uses
- Erosion reduction, flood attenuation, carbon sequestration
- Plus: all the services that can not be monetized
- Does not include economic impacts – jobs, tourism

Examples of Economic Valuation Stats

From economic valuation study literature:

- Recreational fishing - \$9 to \$155 per fishing day
- Aesthetic and amenity values- 1.9% to 4.7% increase in house prices
- Wildlife watching - \$4 to \$282 per wildlife watching day
- Ecological services – various estimates for water supply, nutrient cycling, soil retention, waste treatment, gas regulation, habitat, disturbance prevention

The Ottawa River

A Cost-benefit study has not been done on the Ottawa River, but we know:

- Recreation and tourism opportunities
- Sailing, boating, fishing, camping, bird watching, hiking
- Healthy watersheds, clean water, rich biodiversity create value and enable vibrant communities

Coordination is an issue but we can learn from other watersheds with far more challenging watershed health issues and numerous jurisdictional players

European Union – Multi-jurisdictional Rivers

- Multi-jurisdictional issues
 - For example, The Rhine:
 - 1,320 km long; catchment area 170,000 km²;
 - Source in Switzerland, flows through France, Germany, the Netherlands;
 - Catchment area also includes 5 other countries.
- Capacity issues – resources, skills
- Data issues – varied history of monitoring and reporting

EU – Going all out for Watersheds

- European Union's Water Framework Directive- Integrated river basin management for Europe (2000)
 - River basin management plans to be established and updated every six years
 - Good ecological status: biological community, the hydrological characteristics and the chemical characteristics
 - If objectives not met, must address both source pollution controls and receiving water quality standards
 - Monitoring and reporting requirements
- Required to achieve Good Ecological Status by 2015

Conclusion

- Emerging field of economic valuation of ecological goods and services is proving what we intuitively know:
 - Healthy watersheds are good for business
- Opportunities to learn from other watersheds with far more challenging watershed health issues and more complicated multi-jurisdictional challenges

Thank You

Questions and Discussion