

Economic analyses evaluate costs/benefits of water management rules

The Department of Ecology (Ecology) and other state agencies write administrative rules or regulations to implement state law. Adoption of rules follows a specific legal process, as described in the Administrative Procedures Act (RCW 34.05) and the Regulatory Fairness Act (RCW 19.85). Under these two statutes, three different types of economic analyses are generally required for instream flow and water management rules.

- **Cost Benefit Analyses** evaluate if the benefits of adopting a rule are greater than the costs of implementing the rule.
- **Least Burdensome Alternative Analyses** determine the least burdensome alternative for those who must comply with the rule, while still achieving the goals and objectives of the law being implemented. (Included in the same document as the Cost Benefit Analysis.)
- **Small Business Economic Impact Statements** determine if a rule has a disproportionate impact on small business as compared to large companies and if so, try to ease that impact where legal and feasible.

An “economic analysis” is defined as “a systematic approach to determining the optimum use of scarce resources.” The analyses done for Ecology proposed rules are done by professional economists. The law does not require an agency to examine the costs of a rule at the individual level; rather the analyses are done at the broader public scale. This helps ensure the rule best serves the current and future needs of Washington’s citizens and environment. This publication provides a brief look at these three analyses in the context of water management rules, using examples from the Quilcene-Snow rule (WAC 173-517, adopted in late 2009). [Note: Some instream flow and water management rules also require a maximum net benefits analysis, which is not covered in this publication. See

<http://www.ecy.wa.gov/programs/wr/rules/images/pdf/pol2025.pdf>]

Administrative Procedures Act requires two economic analyses

New rules which set instream flows and have other water management provisions are usually considered “significant legislative rules”.¹ These are rules which will affect individuals, businesses, communities, etc. (as opposed to correcting a typographical error, for example). The Administrative Procedures Act requires both a cost benefit and a least burdensome alternative analysis before adoption of a significant legislative rule.

¹ As defined in RCW 34.05.328(5)(c)(iii)

WHY IT MATTERS

Economic analyses are integral to rulemaking. Ecology uses the information to ensure that the rule is consistent with legislative policy and existing law, and to provide access for the public and legislature to Ecology’s decision-making processes.

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Benefits must exceed costs before Ecology can adopt a rule

A Cost Benefit Analysis (CBA) evaluates the benefits and costs of adopting a rule -- to the public, the environment and businesses. If the benefits do not exceed the costs, Ecology cannot adopt the rule. A preliminary version of the CBA is posted on Ecology's web site and available for public comment at the time Ecology officially files draft rule language. A final version is issued when the rule is adopted. The CBA looks at the rule's effects on people in the watershed, compared to the current baseline (the legal framework and conditions). The CBA describes each major element of the rule, evaluates it against the baseline, and discusses if and how the rule would change the existing baseline situation. Generally, a 20-year timeframe is used.

When data is incomplete or not readily available, and because individual impacts vary, the analyses use estimates, assumptions and averages, all of which are clearly documented. Wherever possible, costs and benefits are quantified (assigned a numerical value). For example, metering all new water uses was an element of the Quilcene-Snow rule. To evaluate the costs associated with metering (the types of costs are itemized in the analysis), Ecology estimated that 869 wells would be drilled within the study timeframe. Based on existing studies, the estimated cost of metering and reporting for 869 new wells was averaged at \$500 per meter. The total cost for metering new well uses was calculated to be $869 \times \$500$, or \$434,500.

Taking into account inflation (this calculation is also in the text), this gives a present value of \$341,083.² Some variables are harder to quantify than others. Two examples from the Quilcene-Snow CBA are: how will the impacts of climate change affect the existing hydrologic regime, and what is the price of improved certainty for securing future water rights? These kinds of "qualitative" variables are identified and considered as part of the CBA.³

Ecology must determine that a proposed rule is the least burdensome alternative for those required to comply

A Least Burdensome Alternative Analysis (LBA) must determine that a proposed rule is the least burdensome alternative for those required to comply, while still achieving the goals and objectives of the law being implemented. Draft rules are modified during discussions with the public, governments, Tribes and other interested stakeholders. Using these drafts and other rule-related work, the LBA explains how the final rule proposal represents the least burdensome alternative. The LBA is included in the same document as the agency's CBA.

Regulatory Fairness Act requires that new state regulations ease disproportionate impacts to small businesses as much as possible

A "small business" is defined in the Regulatory Fairness Act (RFA), RCW 19.85.020, as a business with 50 or fewer employees. If a proposed rule would result in disproportionate costs to small businesses, Ecology must reduce them to the extent possible while still meeting the objectives of the laws upon which

² Final Cost Benefit, Maximum Net Benefit and Least Burdensome Analyses for the Quilcene-Snow Watershed, Ecology publication #09-11-029, pages 16-17.

³ Ibid. page 1.

the rule is based. The RFA, however, does not prohibit adoption of a rule because it results in a disproportionate cost to small business.

A “Small Business Economic Impact Statement” (SBEIS) is prepared in accordance with RCW 19.85.040. The SBEIS describes the cost of compliance for businesses impacted by the proposed rule, the industries affected, and Ecology’s communications with small businesses and local governments during the rulemaking process. Ecology uses the State Office of Financial Management input-output model to estimate the number of jobs that will be created or lost as a result of rule compliance (<http://www.ofm.wa.gov/economy/io/default.asp>). For example, the SBEIS for the Quilcene-Snow rule showed 819 new jobs in 32 sectors expected as a result of the rule.⁴ The SBEIS is published in the *State Register* with the agency’s Rule Proposal Notice, and available for review during the rule’s public comment period.

⁴ Small Business Economic Impact Analysis for the Quilcene-Snow Watershed, Ecology pub. #09-11-015, page 10.