

Frequently Asked Questions

First Draft: Guidance for Evaluating the Feasibility of Controls to Meet Water Quality Standards for Dams in Washington
August 2006

Why is Ecology drafting economic feasibility guidance for dams?

The new dam compliance schedule, adopted into the state water quality standards in 2003 [[WAC 173-201A\(510\)](#)], requires that dams contributing to or causing a violation of the standards need to develop and implement a water quality attainment plan. This plan includes several different components, including an assessment of reasonable and feasible alternatives to meet water quality standards or to attain the highest level of improvement. Ecology, in consultation with the public, developed the dam compliance schedule language during the last revision of Washington State's Surface Water Quality Standards.

Ecology divided the feasibility analysis into two components: an engineering review and an economic feasibility review. 401 certifications for dams now contain requirements for development of water quality attainment plans when water quality standards will not be met. Ecology is developing this guidance so that dam owners will know what information Ecology needs to evaluate the dam owners' economic feasibility analyses. The guidance is a tool for the dam owners, Ecology, the public, and others as they review the economic feasibility analyses. **This draft guidance only addresses the economic review.**

What is the status of the draft guidance?

This is the first draft of the guidance. Ecology is distributing the guidance now for several reasons:

- We want to encourage the stakeholders, Ecology, and EPA to continue their dialogue on economic feasibility. This draft will bring out ideas and techniques that can help further that discussion.
- The intent of the guidance is to 1) address in-state needs in implementing the dam compliance schedule, and 2) provide specific analytical tools that can be used for future use attainability analysis and variance requests. Seeing the process laid out and where it applies should help clarify the purpose for this guidance.
- EPA provided technical assistance to Ecology through a contractor. The contract ends at the end of September, 2006. Providing the public with a draft at this time allows for a reasonable public comment period (30 days) and then some time to work with the contractor to address the comments sent in by the public.

To whom does this draft guidance apply?

When finalized, this guidance will apply to Washington State dams that contribute to or cause exceedances of the water quality standards. The emphasis of the guidance is on dams generating hydroelectricity. There are specific sections for public utility districts, investor-owned utilities,

and federally operated dams. However, the methods and approaches in the guidance can be tailored to fit dams other than hydroelectricity generating facilities. The draft guidance encourages any dam owner, conducting a feasibility analysis, to work with Ecology to ensure that the analysis contains the appropriate information for their specific dam.

When will the guidance be used?

Ecology will use the guidance in two specific situations:

1. *Priority 1: For dam compliance schedules in [WAC 173-201A\(510\)](#).* The feasibility analysis is one part of the compliance schedule for dams that cannot comply with water quality standards. The compliance schedule calls for an evaluation of reasonable and feasible alternatives to meet water quality standards and/or to attain the highest water quality possible. Ecology divided the feasibility analysis into two components: an engineering review and an economic feasibility review. This draft guidance addresses just the economic review.

The economic analysis of the dam compliance schedule addresses the dam owners that would finance the compliance costs. This analysis does not address all the dischargers to the waterbody. If the costs are infeasible for the dam, then the water quality improvements would be unworkable. If the costs are feasible, then further analysis is required to see if the water quality improvements would result in unacceptable socioeconomic costs to the surrounding area (such as unacceptably high rate increases or job loss through passing on of water quality improvements costs to the consumers in the area). If the socioeconomic costs are unacceptable then the water quality improvements would be found to be infeasible. In all cases the most cost-effective water quality improvements alternatives should be addressed.

If a water quality improvement is infeasible, then the firm responsible for the dam is also required to show what *is* possible, that is, *what level of water quality can be attained with the available financing.*

The requirements for these analyses will be included in 401 certifications or can be submitted to Ecology when applying for a certification. In all cases, Ecology expects the dam owners to work with Ecology to consider the special needs of each site in the analysis, as well as the most cost-effective options to meet water quality standards.

2. *Priority 2: When evaluating attainable uses and variance requests under the federal regulation [40CFR 131.10\(g\)](#).* The draft guidance contains specific methods for conducting feasibility analysis and socioeconomic analysis. However, while Washington's dam compliance schedule requirements look at what is feasible for the dam itself, the federal requirements to change a use are broader and address a waterbody and all the polluters affecting the waterbody. In the future, if dam owners submit use attainability analyses for Ecology review, we will use the analytical methods described in the guidance, but will follow the requirements outlined in the federal regulations to assess whether a use change is appropriate for the waterbody. Because use changes are for

entire waterbodies and not for individual dischargers, use attainability analyses are much more complex than the dam-level analysis for the dam compliance schedule.

How did the public contribute to this guidance development?

While drafting this guidance Ecology held two public meetings in Lacey (May 25 and July 17, 2006) to discuss the guidance development process, economic feasibility analysis, and to discuss concerns and/or suggestions from the public. Ecology also held two meetings with smaller groups, including environmental interest groups, dam owners, and EPA. Discussions with these groups helped to steer development of the draft guidance.

How can the public be involved in reviewing this guidance?

Ecology released the first draft of the guidance for a 30-day public comment period. During that comment period, Ecology will hold two workshops to discuss the draft guidance. Workshop information, including how to submit your comments to Ecology, is on the UAA webpage: www.ecy.wa.gov/programs/wq/swqs/uaa.html.

How can I find out more about the guidance development process?

You can find out more about the guidance development process on the UAA web page: www.ecy.wa.gov/programs/wq/swqs/uaa.html.

If you have specific questions about the draft guidance please contact Cheryl Niemi by telephone at 360-407-6440 or by e-mail at cnie461@ecy.wa.gov.