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Policy Pressures on Federal Dam Building Decisions and the Cost Benefit Analysis

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Abstract
Completed in 1915, the Arrowrock Dam was an engineering marvel of its time. Since its construction, changes in national policies have altered the dynamics regarding federal dam building decisions. In 2011, the US Army Corps of Engineers (Corps) acknowledged that the structure was aging, and published a preliminary evaluation of the dam and recommendations for its future. The Corps’ recommendations in their preliminary report were to either raise the height of the dam or build an entirely new facility. Today the National Historic Preservation Act (1966), National Environmental Protection Act (1970), Endangered Species Act (1973), and Archaeological Resources Protection Act (1979) all play a role in the unique situation at the Arrowrock dam. The aim of this case study is to examine the evolution of federal dam building decisions and the incorporation of difficult to quantify values in a cost benefit analysis.

Significance
- Identifying the effect of pertinent federal policies on the calculations of a cost benefit analysis
- Emphasizing the incorporation of historically absent variables in a federal dam building cost benefit analysis
- Contributing to the discussion of how protected variables are observed in a cost benefit analysis

Guiding Question
How can the changes in federal policies influence the cost benefit analysis used to make a final construction decision at the Arrowrock Dam?

Hypothesis
The combination of federal mandated protections will collectively pose significant costs that will make raising the height Arrowrock Dam more favorable as opposed to building a new facility.

Methodology
- Historical comparative of the cost benefit analysis conducted by the federal government at the Arrowrock Dam.
  - 1915 vs. Present
  - Informal cost benefit analysis

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