

Funding Water Resource Projects with Compensatory Restoration, Mitigation, and Resource Equivalency Analysis

Steven Michelson
Applied Water Resources Corp.

ABSTRACT

Projects that benefit water resources can be funded by third parties with compensatory restoration or mitigation responsibilities. Resource equivalency analysis (REA) can be used to appropriately size, or scale, the project by both measuring and equating the injury to the water resource and the benefits derived from a water restoration project. Unlike typical injury and project valuations based in dollars, REA provides a resource-based metric common to both the predicted water resource injury and benefit.

Because the reliability and uncertainty of a dollar valuation of a resource injury remains the subject of considerable debate among economists, REA is a viable, defensible, and acceptable alternative. Several regulatory mechanisms currently allow the public, via a resource trustee, to be compensated for impacts to water resources, including the NEPA process, NRDA, settlement of CWA violations.

The water equivalency approach assures that the water resource injury will be adequately and cost-effectively compensated. The process is transparent and allows scientists, policy-makers, regulators, and the public to readily understand the predicted impact and compensatory benefit. The process selects the most cost-effective project based on greatest resource benefits derived per dollar spent. This approach avoids the appearance of arbitrary penalties or mitigation settlements based in dollars. The process appropriately directs the public's away from dollars and towards the resource enhancement project and benefits.