

Mitigation for New Water Presented by Mark Peterson

Background:

Enormous commitments of time, effort and money have been expended in attempts to mitigate for new water withdrawals. These efforts seem to demonstrate that while there is a broad consensus that there should be exchanges of mitigation for new water there is little consensus on how to do such exchanges efficiently and reliably. Exchanges at this time appear to be custom projects that are each relatively unique. This approach has evidenced a number of shortcomings.

Most critically the custom approach has been susceptible to legal challenges. Specifically the mitigation has been criticized as not sufficiently addressing the proposed project burdens. While many of the mitigation packages have met with broad enthusiasm, as long as there is a stakeholder who does not share that enthusiasm the proposal will likely be attacked in this manner.

Making custom proposals attractive to everyone also requires the projects to be very large in scope and complexity. The duration, expense and risk of this approach limits participation to very few persons and entities.

Failure of even one project places not only the applicant's enormous investment at risk but hundreds, if not thousands, of hours of agency and stakeholder time at risk as well.

An inefficient process means less water and less mitigation for all.

Current Policy:

The Department of Ecology (DOE) articulates its current mitigation policy in POL 2035. The policy essentially articulates a preference for mitigation that most closely mimics the proposed detriments. "In kind, in time and in place" attributes make it much easier to conclude that the mitigation will serve its purpose. This is not merely convenience. Both federal and state constitutions require "substantive due process" where governmental acts must be solidly grounded in fact and logic that relates directly to the application. Without such a grounding the action can be viewed as "arbitrary and capricious" and subject the agency and/or its officer to legal liability to the applicant.

Nevertheless a natural tension exists in evaluating mitigation proposals. If the applicant can provide mitigation that has all of the “in kind” attributes then the applicant most likely does not need the mitigation in the first place. Conversely, the more “unkind” the mitigation the harder it is to rationalize its relationship to the proposed detriments. Mitigation risks becoming worthless in either extreme. So to make the best of “out of kind” bedfellows it is mutually beneficial to find a way to assure sufficient kindness for all.

The following is intended to be a short introduction to a couple of approaches to thinking about mitigation in a manner that addresses these issues.

Calculation:

A method of articulating the benefits and burdens of a water right to instream flows is to express the right in terms of the quantity of instream flows over the distance effected. Because the same amount of water is typically much more valuable to a small stream than a large stream the volume is expressed as a percentage of instream flows. A calculation that multiplies the percentage of instream flows over distance generates a metric that approximates the instream wetted useable area. Wetted usable area and percentages of instream flows over distance correlate strongly with not only habitat values but with all of the other values intended to be promoted by instream flow regulation. This direct and strong correlation with not only habitat values but all other instream flow values makes this approach perhaps the most unassailable from a legal point of view.

This basic calculation can be further refined to account for additional factors. Most additional factors within the scope of this presentation that relate to habitat values are identified and evaluated by the WDFW Columbia River Instream Atlas. The Atlas summarizes flow conditions on a scale of one to three. By factoring the previously derived metric by the relevant Atlas flow scores the measure of benefits and burdens in a mitigation analysis can be more precisely equated. A key component of this approach is that the benefits and burdens be calculated in the same manner to assure kindness to all interests.

Using such a calculation is limited to examining mitigation issues associated with the appropriation of a new water right in a basin where the benefits will likely continue in perpetuity like in a closed basin or one that otherwise exhibits traits which will prevent the benefit from being hijacked.

This methodology can be used to evaluate the benefits and burdens of mitigation proposals which may involve multiple benefitted and burdened reaches within the Columbia River Basin to assure that each application for new water is offset by sufficient quantities of trust water to achieve no net loss to instream flows values within the Columbia River Basin. Notwithstanding such an assurance, such a calculation does not relieve the application from demonstrating that no other water right will be impaired or substantially interfered with.

Calculation FAQs:

When does the mitigation happen?

The mitigation calculation is expected to rely on existing vested interests in water rights for benefits that will be fully evaluated and deeded prior to any proposed new appropriation.

How can you prevent a reach from being excessively burdened in exchanges that obtain benefits from other reaches? (“death by a thousand cuts”)

The calculation, if left unfettered, could theoretically result in the benefits to many reaches being offset by burdens being concentrated in only a few reaches. Over long periods of time this is not likely to produce meaningful detriments because as a reach’s flows decline the calculation becomes quite punitive to those who would further degrade the reach and very rewarding to those that would benefit the reach. Still, to assure that no reach is excessively burdened, the cumulative burdens to any reach could be limited to 2% of the average instream flows at the lowest point of the year.

The calculation would produce very large differences in quantities where the base flows of the benefitted and burdened reaches are wildly disparate. A 2% limit would prevent this from excessively burdening a proposed reach.

How can season of use changes be taken into consideration?

The duration of the benefits and burdens can be similarly factored by multiplying the score by the ratio of the respective durations. The key to this approach is to factor relevant benefits and burdens into a calculation. Using the same calculation for benefits as is used for burdens keeps the calculation honest and legally defensible.

Why should I trade “no diminishment of the source” for “net benefits to instream flow values”?

Because “net benefits” is a more reliable definition to achieve statutory, environmental and political goals.

The statutes authorizing the instream flow rules require that the rule serve numerous public interest values. (see RCW 90.54.020(3)(a)) Where it can be demonstrated that net instream flow values will be enhanced, the rule is satisfied without conditioning the right to instream flow quantities. (See KGH SJ order page 20 line 10) Where the values sought to be protected by the rule are enhanced by a proposal in a way that is not achieved by instream flow terms then instream flows must be modified. (See KGH page 23 line 18 citing RCW90.54.040(2) and Swinomish, 178 Wn2d at 591 n. 13)

If the WAC 173-152-020(18) was amended from:

(18) "Water budget neutral project" means a project where diversions or withdrawals of waters of the state are proposed in exchange for at least an equivalent amount of water from other water rights, the trust water program, a water bank, relinquishment of other water rights, or other mitigation projects that result in no diminishment of the source.

To:

(18) "Water budget neutral project" means a project where diversions or withdrawals of waters of the state are proposed in exchange for water from other water rights, the trust water program, a water bank, relinquishment of other water rights, or other mitigation that results in net benefits to other water rights and instream flow values.

The administrative code would better articulate the understanding and intent of the legislature. This definition assures net benefits to instream flow values and an ability to reconcile competing interests where “no diminishment of the source” does not.

How do we protect instream flows and land uses in the tributaries?

Using this same calculation method an amount equal to one third of the mitigation value used to support each new water right could be allocated to enhance instream flows and offset future burdens that are expected from the development of exempt wells downstream of the right and the development and growth of systems developed to meet primarily potable water needs. The mitigation quantities that accumulate for these limited purposes could

be made available to potable water applicants on the same basis as those for other purposes as set forth herein.

What happens if we discover new information or unintended consequences?

The mitigation calculation methods set forth herein can be amended from time to time. It is expected that further refinement to said methods may evolve over time. Additionally the Atlas, watershed plans, instream flows and other data sets are expected to update over time and can be adopted as needed into the calculation.

Compensatory Mitigation:

California has adopted a classification and scoring system for various environmental impacts. Applicant's projects are "appraised" by regulators to determine the classification and magnitude of the environmental degradation likely resulting from the project. The appraisal results in a number of "credits" of various classifications that the applicant must obtain as part of the permitting process. Once this is known the applicant can develop their own mitigation that must be appraised or purchase these credits from the state or from private "mitigation banks" who hold credits that were certified by the state, but have yet to be applied to specific projects. The state sells credits at 30% over cost.

If a project is going to destroy 1 acre of land that is classified as wetland then the credit obtained by the applicant for the project must equate to 1 acre of wetland. The value of wetland credits essentially rises and falls with the cost of creating or rehabilitating one acre of wetland.

This system might be adapted to Washington water rights. A proposed diversion would be classified and then scored based on the impact to the proposed instream flow values. The applicant would then purchase credits from the state at 30% over the cost that the state had incurred for those credits or they would purchase them from a private bank at an agreed price.

Key to this system is the method of classifying and scoring. The WDFW Atlas already classifies many streams within the Columbia Basin and is expected to include more. Quantifying the credits within the various classifications could be achieved using something like the calculation explained above.

Ratios:

Mitigation proposals relating to land development that has environmental impacts often utilize ratios to assure sufficient and reliable mitigation. A project is assessed for impacts such as the destruction of an acre of wetland and is then required to develop an acre or more of wetland elsewhere. To provide a margin of safety sometimes the mitigation is required in quantities that are much greater than the original habitat.

WDFW:

WDFW mitigation policy recognizes the relationship between land and water uses. The policy provides for mitigation of instream flow burdens with land use set asides sized at 2 acres of riparian land per acre foot or enough upland ground to produce 2 acre feet of precipitation infiltration for every acre foot. By recognizing that habitat values require a blend of land and water attributes this approach promises greater certainty of assuring maximum and reliable habitat values from mitigation proposals.

The above calculation utilizes the relationship to land use to water use in much the same way. It greatly incentivizes the production of instream flow benefits in head waters precisely where WDFW policy identifies a need for out of stream mitigation. The production of instream flows is produced by decreasing existing out of stream water use which also decreases the adjacent land uses associated with that out of stream water use. The calculation does so in a way that more precisely calibrates the burdens to benefits and over time assures an effective location for both.

Conclusion:

Current mitigation for new water rights policy can be enhanced by a more precise methodology of relating benefits to burdens. Each of the above approaches has substantial merits that are not mutually exclusive. This could allow for a blended approach that provides reliably favorable results for all stakeholders. Legal challenges will be reduced by a strong demonstrable and proportionate relationship between proposed benefits and burdens. A more precise methodology will allow for the overall scale of projects to be reduced such that more benefits can be secured for more habitat and persons. A programmatic methodology will leverage the vast

investment of the habitat community in knowledge into the reality of a better environment.