Mitigating the Exercise of Water Rights and Water Use
A White Paper on Questions Judges May Consider

Prepared by the Dividing the Waters Board of Advisors
October 2015

The Dividing the Waters Program of The National Judicial College expresses its thanks to the members of the Board of Advisors who participated in developing this paper on mitigating water use. Their commitment to improving adjudication of complex water litigation remains a model for the entire water law community.

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In recent years, the issue of water mitigation has arisen in many contexts – priority administration, interstate compact enforcement, fishery impacts, and the groundwater-surface water nexus. The Conveners of the *Dividing the Waters* Program (Program) requested that the Program’s Board of Advisors (Board) advise the judges in the Program regarding how to assess proposals to provide mitigation for the effects from the exercise of water rights. The Conveners thought that the Board of Advisors, coming from different states, would be able to advise the Program’s judicial officers as to common issues and standards for review of mitigation plans.

When the Board convened at The National Judicial College in February of 2015 to discuss mitigation, several members arrived with papers reflecting the mitigation practices or developments in several western states. The discussion opened with presentations from these members on their experiences addressing how to mitigate the effects of water use. Some had direct experience with clients advocating or opposing mitigation proposals. Others had indirect experience working with other parties trying to resolve a water conflict with mitigation. Discussion revealed the diversity of mitigation situations, but also some common challenges that mitigation proponents and opponents encounter in developing mitigation plans. The Board found the cross-cutting issues in four categories:

1) Establishing the Need for Mitigation
2) Developing and Structuring Mitigation Proposals
3) Assessing the Sufficiency of Mitigation
4) Implementing Mitigation Projects

The Board ultimately decided to offer this overview paper of mitigation issues as a vehicle for identifying the questions that judges or other adjudicators may wish to consider in assessing the sufficiency of a proposed mitigation plan. The Board then finalized the individual papers that the members had presented, which are attached as appendices.

I. First Question: Is Mitigation Required?

The first question in any discussion of water use mitigation is whether there is a need for mitigation at all. This question may be hydrological, biological, or legal; or it may be all three. Different natural resources have different needs and may require different kinds of mitigation. For example, a reduced water supply may have a need for replacement water, while a fish may have a need for water for habitat or water at a different time of year. Natural resources, humans, and wildlife may all have differing needs for water at different times of the year. These differing needs contribute to answering the first question as to the need for mitigation.
The many contexts in which mitigation is required underscore the importance of analyzing the issue under the proper legal rubric. For example, under contract law, the injured party is required to mitigate damages. In water law and in some environmental law contexts, the party causing the injury generally must provide mitigation. As in the law of torts, one must always bear in mind the question: To whom and to what extent is the duty of mitigation owed? And, to make matters more difficult, when the conditions causing adverse effects to water supplies or fisheries (e.g., drought) result from “natural events,” to what extent is any mitigation required? There is a very reasonable point of view that the legal order of priority allocates risk and that taking actions outside of that legal order creates uncertainty and makes addressing crises even more difficult.

**Causation** also presents an issue requiring resolution before answering the question as to the need for mitigation. With so many different factors affecting natural resources like water, a duty to mitigate does not arise until science can show some kind of causation. In some cases, the causation may be obvious. In other cases, causation may be an issue subject to litigation. The kind of action shown to create a need for mitigation also may affect the nature of the mitigation required. Groundwater pumping, for example, may reduce surface water recharge later in the year when there is no need for surface irrigation water. The showing of causation therefore contributes to the question of whether there is a need for mitigation.

One of the major issues in many water-related disputes is the combination of disputes over causation and the very short amount of time in which action can be taken in a given year. For instance, if temperatures in a stream are found to be higher than can be tolerated by an endangered fish, there is often little time to determine the reason for those higher temperatures in any scientific way. Should a regulatory agency or court act in the absence of such information (thereby probably forcing mitigation on a party not responsible) or should the court or regulatory agency require “good science?” Oftentimes parties will advocate for the “precautionary principle” (i.e., “do no harm”) but that begs the question. Do no harm to whom?

**Law and policy** also affect the determination as to need for mitigation. Some states provide specific rules for mitigation, while other states may require mitigation arising out of a lawsuit alleging unacceptable impacts. In some cases, the law may explicitly disclaim any need or limit the duty for mitigation. State laws, regulations and cases that provide for mitigation of water use include:

- **Colorado:** C.R.S. 37-92-305 requires an “augmentation plan” or temporary administrative approval under a “substitute water supply plan” to operate a prior appropriative junior groundwater right.
- **Idaho:** I.C. §§ 42-234 (recognizing aquifer recharge as a beneficial use), 42-223(10) (forfeiture protection for rights used in mitigation plan), 42-1416B (prohibiting use of “expanded” water rights in critical ground water areas absent a mitigation plan), Conjunctive Management Rules, IDAPA 37.03.11.000 to 37.03.11.050.
Most significantly, the Prior Appropriation Doctrine’s “no injury” rule mandates mitigation in the context of (1) the appropriation of new water rights, (2) a change (or exchange) of an existing right, and (3) a delivery call (i.e., conflict between senior and junior users). In each of these circumstances, mitigation sufficient to avoid material injury to other water rights is the only way that the water right causing the injury will be allowed to continue to divert.

It bears emphasizing, however, that the duty to avoid injury varies depending on the circumstance. Once a water right is obtained, the user owes a duty only to avoid injury to senior users. A water right holder is free to cause an adverse impact on juniors in times of shortage, but this is not legal injury. Indeed, that is the whole point of the Prior Appropriation Doctrine. In contrast, if a user seeks to change an element of an existing water right (for example, by moving the point of diversion), she owes a duty to all water users, senior and junior, not to cause injury. For this reason, an instream flow water right may impede the movement of water rights, even those senior to the right.

The general principles of water law also bear on the need for mitigation, including the Prior Appropriation Doctrine’s priority system, beneficial/reasonable use, domestic use preference, and water-use efficiency. These principles may allow for some effect on others in the watershed under some conditions. Given the variability in hydrology, water users necessarily work together to optimize use of water resources for all beneficial uses, applying these principles. Deciding whether mitigation is required of one or more parties may need to be resolved by a decision-maker of some sort, be it regulatory, administrative or judicial. There may also be situations where mitigation is not legally required, but nonetheless for the party causing injury it is preferable to some other outcome. For example, although the holder of a junior right may not injure a senior, there may be arrangements that involve other forms of redress to the senior other than curtailment of the junior.

Outside a water rights context, state and federal laws may require mitigation for impacts of water use. Such mitigation may affect the amount, timing, or method of diversion by the water right holder. The federal Endangered Species Act (ESA) offers an example of a law that allows for impacts on listed species, and defines, qualitatively, the duty for mitigation by those causing impact. ESA Section 7 allows federal agency actions to affect listed species provided the action does not put the species in jeopardy. While ESA Section 9 makes a “take” of a listed species illegal, Section 7 provides for federal agencies to obtain “incidental take statements” if the agency minimizes its impacts. Federal agencies therefore have a duty to mitigate, but they can negotiate with the ESA regulatory agency as to the scope of that mitigation, allowing “incidental take.” Likewise, nonfederal parties may obtain a permit to take listed species so long as the taking is incidental to an otherwise-lawful activity and the applicant reduces and mitigates take to the maximum extent practicable.

II. Second Question: How Is a Mitigation Proposal Developed and Structured?

Once the decision to require mitigation is made, the mitigating party has the duty to develop a proposal for how to mitigate its impacts. The factors that the mitigation plan addresses can be multiple and diverse:
• **Materiality.** The plan generally addresses only those impacts that reach a level of materiality as may be defined by law. The action may result in different kinds of impacts, and some may not reach a level of materiality requiring mitigation. For instance, in California, public agencies need not mitigate for adverse effects on the environment if those impacts are deemed to be “less than significant.”

• **Available Information.** Determining the extent of impact normally requires monitoring or qualitative assessment, preferably before and after the action that caused the impact. The monitoring measures both the extent of the action and the extent of the impact.

• **Standards.** The impacting party develops a plan to satisfy the standard of mitigation required by law. Different states impose different kinds of standards to determine the sufficiency of the mitigation plan. These standards may include: materiality, causation (with full or partial mitigation), reasonableness, and who bears burden of proof of impact.

• **Actual or Modeled Impacts.** If monitoring information is not sufficient, the mitigating party or other parties may use a model to determine the scope of impact and the effect of the mitigation. The determination as to the necessity and type of model may be negotiated between the parties. In developing a model, the party may consider: adequacy, independence of modelers, sufficiency of information necessary to develop a model, capability of model to assess existing conditions and impacts caused by action. The success of modeling may depend on the status of the monitoring and scientific understanding of the basin, factors such as the surface-groundwater connection, or the connection to fishery survival of the amount and timing of streamflow.

**Tools.** The tools for mitigation are similarly diverse. The underlying issue of the type and extent of mitigation required affects the tools selected. Examples of tools include:

• **Substitute Supply.** The mitigating party may acquire water either by purchasing and transferring water from third parties, moving water it has in another location, or expanding the basin’s supply with a physical solution like a reservoir.

• **Shortage Sharing.** In cases where the impacts arise only during droughts, the parties may agree to share the shortage during drought, with the mitigating party having a greater burden of shortage.

• **Cash.** Paying money to compensate for the impacts depends on negotiation among the parties, which may include an appraisal.

• **Water Conservation.** The mitigating party also may pay the costs to increase water-use efficiency, to allow the impacted party to achieve similar outcomes with less water. Efficient irrigation systems (sprinklers, drip) offer the best example.

• **Habitat Restoration.** The impacts of water diversions or use may not be on only water volume. Water diversions may affect fishery resources, by either reduced instream flow or altered hydrodynamics that affect fishery habitat. In addition, diversions may be only one of many factors affecting environmental resources. A mitigation plan may restore habitat features, such as spawning gravel or wetlands for rearing. It may also restore habitat and thus provide fishery benefit as compensating, out-of-kind mitigation for diversion that would otherwise be disallowed.
III. Third Question: How Is a Mitigation Plan Judged?

Judging a proposed mitigation plan may require more than an examination of its sufficiency in replacing water lost by an injured party. The law or challenges to the plan’s fairness may call for assessment of a number of factors in the determination of whether to approve the mitigation plan.

If prolonged drought or changing climate is to be considered, this is the most likely place for that assessment.

- **Adjudicator.** State law may deem a specific court, a water master, or an administrative agency as the adjudicator for a proposed mitigation plan. Or a lawsuit may lead to a different court becoming the adjudicator, where issues of the proper venue may arise. In some cases, the selection of the proper adjudicator may be the subject of litigation.
- **Meets the Standard.** Identifying and applying the standard for sufficiency can be simply quantitative, such as a “1-for-1” standard for replacement of water. But other standards, such as “reasonable” mitigation, may require more qualitative analysis and lead to a broader analysis of other factors.
- **Effect on 3rd Parties.** Transferring water from another source may affect 3rd parties from the area of origin, such as junior water right holders or adjacent communities. Or it may affect instream flow and the fish or downstream diverters that rely on that instream flow.
- **Out of Kind Mitigation.** If a plan proposes mitigation that is different than the impacted resource, judgments as to sufficiency or equivalence may be more challenging. Such issues may require judgment by other experts. Replacing instream flow with spawning gravel, for example, may require the judgment of fishery experts.
- **Party Acceptance.** A mitigation plan may be negotiated between the parties, but the parties’ acceptance does not end the analysis. There may be other factors that the adjudicator may need to consider, such as effects on third parties and environmental values (e.g. instream flow).
- **For-Profit Mitigation.** In some states, for-profit corporations arrange large-scale mitigation and sell mitigation credits to developers, through such instruments as mitigation banks. The most common form arises as mitigation for loss of habitat. (However, private, for-profit plans for mitigation to injury of water rights, often involving aquifer recharge, are beginning to emerge.) The adjudicator may need to consider issues such as community acceptance, acceptable or excessive profit, or statutory sanction of such mitigation programs.
- **State of the Science.** In judging the sufficiency of mitigation, the adjudicator may need to assess the underlying science of the proposal as well as the availability of scientific study in the watershed generally. A site visit, with scientists, may assist this assessment.
- **Judicial Review of Administrative Determinations.** While an administrative agency may make an initial assessment of the proposed mitigation plan, parties may appeal for judicial review. State law may set the terms for that judicial review, possibly limiting judicial review to a review of the administrative agency’s record or process. If the statute does not address third parties, then the court may wish to consider whether third parties may intervene.
IV. Fourth Question: How Will the Mitigation Plan Be Implemented?

Evaluating a proposed mitigation plan also requires some understanding of how the plan would be implemented, as that understanding would allow assessment of the plan’s feasibility. Gaining an understanding of implementation issues would consider basic questions about any proposal:

1) Who will implement the plan?
2) What kind of actions will be implemented (e.g. water transfers, habitat restoration, water infrastructure construction)?
3) Are any other regulatory agency approvals required?
4) How will the plan’s implementation be monitored and assessed? What defines success?
5) What are the consequences of deficiencies if implemented, both as a matter of process and substance?
6) Are additional considerations presented by prolonged drought or a changing climate?

That last question raises a significant issue for structuring implementation – whether the plan should provide for a “reopener” or reconsideration if success is not achieved. Structuring reopeners requires a balance of certainty/assurance of regulatory approval with the affected party’s need for sufficient mitigation even in light of changing conditions. The adjudicator may consider a range of triggers that allow for reopening the adjudication of the mitigation plan:

- changes in actual conditions.
- incomplete implementation of the plan.
- determination by a group of scientists.
- failure to achieve specified measures of success.

Central to any of these triggers is the structuring of the plan’s monitoring program to provide the information to establish that the trigger has occurred. Equally important is the clear definition of the process to be followed when one or more parties believes that a performance standard is not met. In some cases, this may be defined by law; in others, it may be negotiated or imposed by a decision-maker. One of the major unanswered questions is the extent to which state or federal regulatory agencies can be compelled to participate in mitigation and/or held responsible for the failure of mitigation. Oftentimes this is simply due to the fact that for many regulatory agencies, “the perfect is the enemy of the good.” Alternatively, and particularly where the science is unclear, there is often no incentive for a regulatory agency to approve a mitigation measure that may be more effective but which has not been tried or which does not follow the agency’s prior stance. Especially with the manifold effects of climate change, there is a need for flexibility and adaptability in evaluating mitigation measures. Many regulatory agencies are ill-suited and uncomfortable in such situations.
APPENDICES

1. “Mitigation” in New Mexico ................................................................. 8
   Maria O’Brien, Modrall Sperling, Albuquerque, New Mexico

2. Colorado Mitigation Obligations ......................................................... 10
   Sarah Klahn, White & Jankowski, Denver, Colorado

3. Mitigation Requirements in California’s Bay-Delta Estuary ..................... 12
   David Aladjem, Downey Brand LLP, Sacramento, California

4. Mitigation for Water Rights: Upper Klamath Basin Comprehensive Agreement and Habitat for Water Rights .................................................. 14
   Paul Simmons, Somach Simmons & Dunn, Sacramento, California

   Adam Gravley, Van Ness Foundation, Seattle, Washington

6. Law and Strategies for Mitigation of Injury to Water Rights in Idaho ........ 17
   Christopher H. Meyer, Givens Pursley, Boise, Idaho
"Mitigation” in New Mexico

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While meaning slightly different things in different contexts, mitigation in the water context very generally refers to offsetting the effects of a right to the use of water for purposes of benefitting other uses, most notably environmental (primarily ESA related) or senior users. In New Mexico, while there are some *ad hoc* examples of environmental mitigation, it is still not widespread and no ready regulatory or statutory mechanism exists. With respect to mitigation for offsetting effects on senior users, the focus has been on mitigation in times of shortage. To date, efforts have also been *ad hoc*, but that may change. In 2004, the New Mexico Office of the State Engineer (“OSE”) promulgated regulations termed “Active Water Resource Management” or “AWRM.” NMAC 19.25.13.1 through 19.25.13.50. The regulations were designed to address administration of water rights on a state-wide basis including basins where general stream adjudications were ongoing or not yet complete. The AWRM regulations allow a junior user to “mitigate” effects on senior users (or uses such as compact flows), through a “replacement plan” in times of shortage. If approved, such replacement plans will allow junior users to continue use “out-of-priority.”

The AWRM regulations were almost immediately challenged in a case that took several years to resolve. The main basis for the facial challenge was not directly related to the concept of replacement plans or their implementation. Rather, the challenge focused on whether the OSE could even administer a basin or stream system in the absence of a complete adjudication. In 2012, the New Mexico Supreme Court rejected the challenge finding in relevant part, that the OSE has broad supervisory authority to administer water rights and that the AWRM provisions relating to priority administration prior to final adjudication did not unconstitutionally expand the OSE’s authority. *Tri-State Generation and Transmission Association, Inc. v. John D’Antonio, Jr., New Mexico State Engineer*, 289 P.3d 1232 (N.M. 2012).

The AWRM regulations define replacement water and replacement plan as follows:

**Replacement water:** Water acquired temporarily by an out-of-priority administrable water right from an in-priority administrable water right pursuant to a replacement plan for the purpose of offsetting surface water depletions attributable to an out-of-priority administrable water right and preventing impairment of in-priority administrable rights.

**Replacement plan:** A plan submitted by the owner(s) of administrable water rights, and approved by the state engineer for no more than two consecutive years, subject to renewal, for the purpose of offsetting depletions attributable to out-of-priority administrable water rights.

NMAC 19.25.13.7(d), (e)

The OSE is in the process of working on basin specific regulations which will implement the AWRM regulations regarding plans of replacement in the various and diverse basins around the State. Questions which have or will inevitably arise in the context of implementation of the AWRM regulations and replacement plans include:

- What will constitute an adequate replacement plan?
- How will paper accounting be reconciled with physical water supply/shortages?
- What obstacles exist (institutionally, regulatory or otherwise) to implementation of replacement plans and movements or transfers of water?
• The current regulations provide for replacement plans to be temporary only. Is this the correct approach?

Other efforts at mitigation continue to be addressed on an *ad hoc* basis within the State. Notable efforts include the “Recommendations for San Juan River Operations and Administration” which have been in place since 2003. The “Recommendations” allow for shortage sharing on the San Juan River in times of drought among numerous large agricultural, Indian, municipal and industrial users. The mechanisms incorporated in the Recommendations include caps on diversions under certain shortage conditions, fallowing of agricultural land in exchange for monetary consideration, conservation measures, and leasing of decreed Indian water rights. The Recommendations provide the basis for the U.S. Bureau of Reclamation to operate the major reservoir on the stream system and for the OSE to administer the rights subject to the agreement.

In a different context, a major Indian water rights settlement in the State protects junior groundwater users from priority calls by Indian users if the junior users agree to either give up their domestic well and connect to a regional water system, or keep their well and reduce usage. That Settlement Agreement and Partial Final Decree implementing the Settlement Agreement are currently before the adjudication court for approval. *State of New Mexico, ex rel. State Engineer v. Aamodt, et al.*, Case No. 66-CV-6639 WJ/WPL (D.N.M.). Ironically, the Settlement Agreement is subject to over 700 objections from the very junior users it would protect.
1. History of Colorado’s mitigation requirements:
   
a. Early (mid-20th century) acknowledgement of the connection between ground and surface water:
   
i. Leading cases involved the finding that all ground water rights are presumptively connected to and potentially injurious of senior surface water rights. See, e.g., *Safranek v. Town of Limon*, 228 P.2d 975, 977 (Colo. 1951). This decision, without a system of comprehensive regulation and taken to its logical conclusion would have resulted in no future development of ground water in Colorado.
   
ii. Competing well users drawing water from the same tributary aquifer must effectuate reasonable means of diversion, but juniors may be required to bear the expense of improving seniors’ means of diversion whose historical diversions were reasonably efficient. *City of Colorado Springs v. Bender*, 366 P.2d 52, 555 (Colo. 1961).
   
b. In Justice Hobbs’ article for the University of Denver Water Law Review, “Colorado’s 1969 Adjudication and Administration Act: Settling In” (Volume 3, Fall 1999), he posits three events that led to the adoption of the 1969 Act:
   
i. The beginning of State Engineer Office regulation of tributary ground water on a case-by-case basis;
   
ii. The General Assembly directing the Department of Natural Resources to investigate the interrelationship of surface and ground water;
   
iii. A Supreme Court decision finding as unconstitutional case-by-case ground water regulation in the Arkansas River basin and encouraging the comprehensive regulation of ground water and surface water diversions. *Fellhauer v. People*, 447 P.2d 986 (Colo. 1968).
   
2. Specifics of regulating tributary ground water:
   
a. As a prerequisite to operating a prior appropriative junior ground right¹ the owner or her agent must obtain an “augmentation plan” or temporary administrative

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¹ There are at least two other kinds of ground water rights under Colorado law: designated ground water, created under the 1965 Ground Water Act which regulates designated ground water under a “modified” prior appropriation system based on qualitative degree of connection to surface water; and Denver Basin ground water, adopted under S.B. 5 in 1985 (and codified throughout the 1965 Ground Water Act and 1969 Act sections), establishing a statutory definition of “nontributary” (that the impact to surface water rights from pumping will be less than 1/10 of 1% of 100 years) that effectively excludes from augmentation plan requirements much of the ground water within the four aquifers that comprise the Denver Basin formation. The Denver Basin statutes were the result of both politics and
approval under a “substitute water supply plan” (“SWSP”). See generally, C.R.S. 37-92-305.

b. Must demonstrate that replacement water (typically senior water rights that have been changed for augmentation purposes) are available in time, location, and amount to replace depletions from out-of-priority pumping. C.R.S. 37-92-305(5).

c. That replacement water is of an appropriate quality of water to satisfy senior calling rights. C.R.S. 37-92-305(5).

physical reality: the Denver Basin coincidently overlays the portions of the Colorado Front Range with extremely limited access to sustainable water supplies for development.
Mitigation Requirements in California’s Bay-Delta Estuary

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The San Francisco Bay/Sacramento-San Joaquin River Delta Estuary (the “Bay-Delta Estuary”) is the largest estuary on the western coast of the Americas and the hub of California’s water management system. As a general rule, approximately 80% of the annual precipitation in California occurs in areas that are upstream of the Bay-Delta Estuary; approximately 80% of the annual water use in California occurs in areas that are served by “exports” from the Bay-Delta Estuary. The exports are delivered by California’s two major water projects, the federal Central Valley Project (the “CVP”), which primarily delivers water for agricultural use on the west side of the San Joaquin Valley, and the State Water Project (the “SWP”), which primarily delivers water for urban purposes in Southern California and water for agricultural purposes in Kern County (near Bakersfield) in the very southernmost portion of the San Joaquin Valley.

Mitigation requirements for the export of water have taken two forms in the history of the CVP and the SWP. For both projects, the first form of mitigation dealt with water rights. Both projects have agreed to provide “project water” to senior water rights holders as a settlement of the claims of those water right holders that the two projects would interfere with those vested rights. Thus, the Sacramento River Settlement Contractors, the Feather River Contractors, and the San Joaquin River Exchange Contractors have a right to water from the two projects. In addition, the water rights acquired by the two projects are subject to California law protecting so-called “areas of origin.” These statutes were intended to ensure that slower developing rural areas, primarily in Northern California, would have the water needed for their uses. These statutes are currently the subject of substantial controversy. See, e.g., Tehama-Colusa Canal Authority v. United States Dep’t of Interior, 721 F.3d 1086, 1096-97 (9th Cir. 2013).

Mitigation requirements have also been imposed on the two projects in order to preserve or enhance fishery resources that reside in or migrate through the Bay-Delta Estuary. The California State Water Resources Control Board (the “SWRCB”) has, since 1978, imposed minimum Delta outflow requirements on the two projects in order to maintain salinity in the Bay-Delta Estuary. More recently, in a pair of Biological Opinions, the U.S. Fish & Wildlife Service and the National Marine Fisheries Service have imposed similar, but more stringent, requirements on project operations in order to avoid jeopardizing the continued existence of listed species under the federal Endangered Species Act. To avoid the uncertainty associated with these requirements, the two projects have sought to develop a habitat conservation plan (the “Bay-Delta Conservation Plan”) that would provide incidental take protection to the two projects and greater water supply reliability pursuant to section 10 of the federal Endangered Species Act. The centerpiece of this plan is moving from the current surface diversion of water through the Delta to diverting water through two tunnels under the Delta.

Because of the difficulties associated in permitting such a habitat conservation plan, which were referred to in the White Paper as the need for regulatory agencies to be more flexible

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2 In plain English, this means that the two projects are required to release sufficient water into the Delta to maintain certain levels of net outflow from the Delta into San Francisco Bay at the westernmost portion of the Delta. Such outflows are intended to ensure that the Delta remains primarily a freshwater area that can support native species that are adapted to those levels of salinity.
and accountable in permitting projects, the U.S. Bureau of Reclamation and the California Department of Water Resources have recently revised the proposed project. The new project, which is called the California WaterFix, is proposed to be permitted under section 7 of the federal Endangered Species Act (not section 10 as before), which allows for the federal regulatory agencies to reopen the permits whenever they deem it necessary. This shift in permitting strategy means that there is less certainty about the mitigation that will be required for the project and the benefits of the project.
Mitigation for Water Rights:  
Upper Klamath Basin Comprehensive Agreement  
and Habitat for Water Rights

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On April 18, 2014, representatives of the Klamath Tribes, upper Klamath Basin irrigation interests, and the State of Oregon signed the “Upper Klamath Basin Comprehensive Settlement Agreement” (UBA). The United States will sign if federal authorizing legislation is enacted. Among other things, the UBA will allow diversions for consumptive use that would otherwise be precluded by senior tribal instream flow water rights for fisheries. Here, the relevant principle is that the UBA provides explicit, quantitative trade-offs between instream flow requirements and the development and maintenance of riparian habitat as an alternative means of fishery enhancement.

The Klamath Tribes have hunting and fishing rights, and water rights to protect those uses on their former reservation, an area generally upstream of Upper Klamath Lake. In the meantime, irrigation development has occurred on and above the former reservation that depletes the flow of streams. Also, since 1975, Oregon has been conducting a general stream adjudication for the Oregon portion of the Klamath River and its tributaries, determining and quantifying “pre-code” state water rights as well as federal reserved water rights such as the instream rights of the Klamath Tribes or United States as the Tribes’ trustee. The state adjudication involves an administrative phase that results in an “order of determination.” This order can be reviewed and modified in state court, but is effective as the basis for priority-based regulation until the court process has concluded. In early 2013, the state issued its order of determination, finding substantial instream water rights for the Klamath Tribes, with a priority of “time immemorial.” That summer, there were tribal water right calls, resulting in consumptive users being curtailed. In fact, full enforcement of the recognized tribal water rights would result in substantial curtailments in many future years, sometimes precluding any diversions at all.

Parties negotiated the UBA in time for the 2014 season. The UBA is quite complex. It provides for certain voluntary retirements of consumptive use, transition periods to phase programs in, and many other elements. Some of the UBA’s key terms, however, reflect an agreement that flow alone may not be sufficient or necessary for fisheries restoration. Thus, the UBA contemplates a program under which private owners of riparian lands would restore and protect habitat under management agreements. If a sufficient length of stream (generally, 80 percent) is covered by compliant riparian agreements, tribal water right calls would be limited in scope and generally would not be expected to curtail consumptive use except in very dry years. However, to the extent there are not compliant riparian agreements, tribal water right calls would require increasingly greater instream flows, up to as much as the full amounts determined in the adjudication. Equations driven by deviations from “sufficient participation length” determine the amount of increase in flow that could be required.

*See* Upper Klamath Basin Comprehensive Agreement, April 18, 2014:  

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3 Two other related settlements – the Klamath Basin Restoration Agreement and Klamath Hydroelectric Settlement Agreement – also await federal authorizing legislation.
Mitigating Water Use in Washington State

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Washington’s water code includes statutory provisions to protect instream water resources that are implemented through regulations adopted by the Department of Ecology (“Department”). The Department has adopted such instream flow rules for 26 of 64 administrative basin areas that set minimum flow levels for, or close to any further appropriation, specific streams and lakes. The Washington Supreme Court has held that minimum instream flows set by rule are water appropriations that cannot be impaired by later withdrawals. Postema v. Pollution Control Hearings Board (“PCHB”), 142 Wash.2d 68, 11 P.3d 726 (2000). In contrast, the water code is largely silent about mitigation. The Washington Supreme Court recently issued a decision that sets a strict standard for mitigation of depletions of protected flows.

For several years, the Department has generally followed a policy that requires a water right applicant to mitigate any instream flow depletions in-kind with “wet water,” such as retiring an existing senior water right. For certain applications, the Department would waive the “wet water” requirement where justified under a statutory exception for “overriding considerations of the public interest” (“OCPI”). RCWA 90.54.020(3)(a). The Washington Supreme Court, however, dealt the Department a major setback in Swinomish Indian Tribal Community v. Dep’t of Ecology, 178 Wash.2d 571, 311 P.3d 6 (2013), that invalidated an adopted instream flow rule that included an allocation of water for domestic wells. Swinomish concerned an agency rule and not an individual application.

Meanwhile, an appeal of a new water right permit in the Columbia River basin raised but did not resolve the question of the Department’s authority to accept out-of-kind mitigation without reliance on the OCPI exception. Okanogan Wilderness League v. Dep’t of Ecology and Kennewick General Hospital (PCHB No. 13-146) was an appeal of a new water right permit for irrigation purposes for withdrawal of groundwater in hydraulic continuity with the John Day-McNary reach of the Columbia River. A 1980 rule had set numerical minimum flows and required new permits to be conditioned on the flows. In response to Endangered Species Act listings and state legislation, the Department amended the rule in 1998 to i) remove the flow condition requirement and make the numeric flows inapplicable to permits issued after July 1997, and ii) instituted a case-by-case consultation process. As a result of the consultation as to the Kennewick General Hospital’s (“Hospital”) application, the Department identified a “mitigation package that includes specific and general projects that support fish habitat” and required the Hospital to enter a cost recovery agreement to pay $6 million over time. The challengers raise three key issues: 1) whether the Department erred by omitting an interruptible permit condition tied to instream flow attainment, 2) whether the agency has authority to accept payment for the habitat projects (out-of-kind mitigation), and 3) whether the out-of-kind mitigation fails to protect against impairment of existing rights. On the parties’ summary judgment motions, the PCHB denied all motions on the first and third issues and set them for evidentiary hearing. On the second issue, the PCHB held that “there is nothing in law that

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4 The lone statute calls on the Department to “consider … water resource management technique[s]” proposed in an application. See RCW 90.03.255 (surface water), 90.44.055 (groundwater).

5 Foster v. Dep’t of Ecology and City of Yelm, ___ Wn.2d ___ (No. 90386-7) (Oct. 8, 2015).
Mitigating Water Use

precludes mitigation with other than wet water” so long as there is no impairment of existing rights or base flows. The parties then reached a partial settlement in which the Hospital agreed to an interruptible permit condition based on the numerical instream flows and then filed further summary judgment motions. The PCHB denied these motions on grounds that issues of fact remained as to whether the numerical flow condition prevented impairment. Finding the matter moot, the Board dismissed the case and denied the appellant’s motion to vacate the earlier (July 31, 2014) order regarding out-of-kind mitigation.

Most recently in Foster, the Washington Supreme Court held that the Department exceeded its authority in issuing a new water right permit for the City of Yelm under the OCPI provision. The Department had approved and the PCHB had upheld a new municipal purpose water right supported by a mitigation plan. The mitigation plan included both in-kind mitigation (waters rights retirement and reintroduction of reclaimed water) and out-of-kind mitigation (land acquisition, stream restoration). Even with the mitigation plan, the parties agreed that Yelm’s new permit would impair minimum instream flows in the shoulder seasons in April and October that were not covered by the retired irrigation water rights. The Department and Yelm argued and the PCHB found as a matter of fact that the mitigation plan would provide a net ecological benefit. The majority, however, found that the “mitigation plan is largely irrelevant to the analysis” and ruled as a matter of law that appropriative rights may not be issued under the OCPI provision.

The Court majority’s analysis in Foster reaches a new statutory interpretation of the OCPI provision and the Water Code. First, the majority invokes Postema in reaffirming that state water law “does not permit any impairment, even a de minimis impairment, of a senior water right.” Second, the OCPI provision that authorizes “withdrawals of water which would conflict” with protected flows is construed narrowly, requires “extraordinary circumstances”, and cannot make an “end-run around the normal appropriation process” as in Swinomish. The majority then interprets the term “withdrawal” to mean only a temporary use of water, as contrasted with “appropriation” which means a “permanent legal water right.” The majority finds that the statutory scheme supports this conclusion and cites the Department’s emergency powers to authorize “withdrawals” of public waters during a drought “on a temporary basis.” Even under the emergency drought provision, the majority stresses, the Department cannot reduce flows below “essential minimums”. The dissent contests the “novel and unprecedented definition” of “withdrawal” and cites several statutes that use the term “withdrawal” in relation to permanent rights. Finally, the majority rules that a mitigation plan cannot be the “extraordinary circumstances” that justifies an exercise of the OCPI authority. Instead, the Court majority concludes that municipal water needs are not extraordinary and are “common and likely to occur frequently as strains on limited resources.”

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7 Id. Order Denying Summary Judgment, Vacatur, and Final Judgment Under CR 54(b) (April 24, 2015).
8 Foster, slip op. at 11 (majority).
9 Id. at 5, 12.
10 Id. at 7.
11 Id. at 8.
12 Id. at 1, 3-4 (dissent).
13 Id. at 11 (majority).
Law and Strategies for
Mitigation of Injury to Water Rights in Idaho

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1. Different Meanings of Mitigation

Before launching into a discussion of mitigation, it is worth pondering that mitigation means different things in different contexts. In the dictionary sense, it means to reduce the extent or intensity of a harm, not to avoid or eliminate it altogether. It is used in that sense in the law of contracts, which calls on the non-breaching party to mitigate (i.e., minimize) the damages caused by the breaching party. In this context, the injured party is called upon to mitigate the damages.

In contrast, in environmental and water law it is the party causing the harm who undertakes the mitigation. For example, federal environmental laws might require a party to mitigate adverse impacts to wetlands or endangered species by taking offsetting actions to restore habitat. Though not usually termed mitigation, the same concept applies in the context of air and water pollution credit trading programs.

In water law, mitigation describes an action by one water user to offset injury that his or her diversion causes to another water user. A water right holder may divert under a water right only to the extent that doing so does not cause material injury to senior water right holders. That duty to avoid injury expands to include juniors as well as seniors when a water right is changed (aka transferred) in some way. In other words, the change cannot be approved if there will be injury to any other water right (junior or senior). In order to avoid injury, the right holder may seek to “mitigate” that injury. This allows an existing use to continue or a new or changed use to be made. Where water rights are concerned, the idea is not just to reduce the harm, but to avoid or eliminate material injury altogether, thus making the other water user whole.

In the water rights context, mitigation may come in various forms. On occasion, notably in the context of settlement of tribal reserved rights claims, mitigation may consist of an array of government funded or facilitated measures addressing environmental and instream flow concerns that may or may not be directly related to the alleged injury to the reserved rights. In other contexts, state or other governmental entities may undertake aquifer recharge or other water replacement programs on a regional scale in response to or in anticipation of delivery calls that could cause economic dislocation.

These are examples of large-scale government-sponsored approaches to mitigation. More often, water right mitigation is undertaken by private parties for the benefit of specifically identified water users as a means of preventing injury to other specifically identified water rights.

Elsewhere in the West, water right mitigation is often undertaken in response to extraordinary strains on water supplies that are complicated by federal environmental laws (e.g., the Endangered Species Act), tribal reserved water rights, and/or federal decrees or compacts apportioning water supplies between states. Idaho, in contrast, enjoys a comparatively abundant water supply. Moreover, most water right mitigation in Idaho is undertaken without the
Mitigating Water Use

complication of a federal law overlay. Accordingly, Idahoans enjoy ample opportunities for win-win solutions that allow the State’s water to be put to optimum use while protecting environmental values.

2. California’s “Physical Solutions Doctrine

It is not necessary that the injured water right holder agree to the mitigation proposed by the party causing the injury. If the Idaho Department of Water Resources (“IDWR” or “Department”) or a court finds that a mitigation plan proposed by the party causing the injury is sufficient to avoid material injury, that plan may be approved over the objection of the injured parties.

California has taken this a step further, allowing mitigation to be designed and imposed by the court. Thus, under what is known in California as the “physical solutions doctrine,” California has gone much further than Idaho in imposing mitigation solutions. Although this doctrine has no applicability in Idaho, we discuss it here because, by way of contrast, it sheds light on how mitigation is viewed in Idaho.

Under California’s doctrine, a court may craft its own mitigation solution and impose it on both parties. The seminal case dates to 1936: “[I]t is not only within the power, but it is also the duty, of the trial court to admit evidence relating to possible physical solutions, and, if none is satisfactory to it, to suggest on its own motion such physical solution. The court possesses the power to enforce such solution regardless of whether the parties agree.” City of Lodi v. East Bay Municipal Utility Dist., 60 P.2d 439, 341 (Cal. 1936) (citations omitted).

More recently, the California Court of Appeals summarized the physical solution doctrine this way: “As noted, a physical solution is an equitable decree designed to implement the constitutional mandate and to maximize the beneficial use of water. The court has power to enforce a physical solution regardless of whether the parties agree to it.” Central Basin Municipal Water Dist. v. Water Replenishment Dist. of S. California, 211 Cal.App.4th 943, 950, 150 Cal. Rptr. 3d 354, 360, (2012).

The breadth of the doctrine is captured in this commentary:

In working out a physical solution to water shortages where more efficient means of diversion and conveyance may be desirable, a court of equity is not limited by physical properties as they stand at the time of trial, or by suggestions and offers made by the parties. If it feels that substantial savings can be effected at reasonable cost by changing some of the works, it has the power, by injunctive order, to cause the change to be accomplished and to apportion the cost as justice may require. The court must, however, keep in mind that prior appropriators have prior rights and cannot be required lawfully to incur any material expense in order to accommodate a later appropriator. In working out a physical solution and determining whether an injunction should be granted, the fact that there is no immediate danger to a water right is an element to be considered. If the trial court

14 Even when no federal environmental laws are applicable, the environmental effects of a mitigation plan are appropriately considered under Idaho law. This is called out in the Conjunctive Management Rules themselves (IDAPA 37.03.11.043.03.j). It is reflected in the Idaho Water Code’s local public interest provisions (I.C. §§ 42-202B(3), 42-203A(5)(e), 42-222(1), 42-1763). Finally, the mitigation plan must work within the constraint of any existing instream flow water rights (I.C. §§ 42-1501 to 42-1507). On the other hand, it is not the obligation of the mitigating party to enhance environmental conditions. See discussion of instream flows in section 0 at page 28.
needs or desires expert assistance or evidence to determine a physical solution in the problem of putting water resources to beneficial use to the fullest extent possible, it possesses the statutory power either to refer the matter to the division of water rights, or to appoint it as an expert.


Indeed, commentators have gone so far as to describe as mitigation what amounts to condemnation of the senior water right that is suffering the injury:

A physical solution is not incompatible with a finding that it will not provide full compensation, and if the facts justify it, an award of damages may be made in addition to the physical solution. Further, a physical solution need not be applied when the remedy in damages is adequate.


If this commentary is correct, it means that California’s physical solutions doctrine embraces not only the imposition of physical solutions, but financial ones, on the parties to a water conflict. It would allow a court to say, in essence: “I am not impressed with the mitigation strategy urged by the juniors. It is costly and likely to be ineffective in the long run. But it is not in the public interest simply to curtail the juniors. Given the enormous economic benefits of allowing the juniors to continue to divert (in comparison to the economic benefits generated by the senior), the sensible thing is for the senior to stop diverting and the junior to fully compensate the senior for its resulting losses.”

3. Three Types of Aquifer Recharge in Idaho

Water right mitigation strategies run the gamut—drying up farms, piping water to new places, building dams—you name it. An increasingly common and important mitigation strategy involves aquifer recharge. Indeed, aquifer recharge may be used either as a basis to mitigate other water rights or for storage of water to create new water rights (which is not mitigation at all).

Because aquifer recharge is so important (and complicated), I include here a background discussion that draws distinctions among three very different approaches to aquifer recharge:

- Aquifer Storage and Recovery (“ASR”)
- Public Betterment Aquifer Recharge (“PBAR”)
- Aquifer Recharge for Mitigation (“ARM”)

They have different goals and operate in different ways. Each has value, but sets out a distinct approach that should not be confused with the others.

ASR, PBAR, and ARM are all commonly accepted approaches to mitigation in Idaho (though these labels are not routinely employed).
A. Aquifer Storage and Recovery (“ASR”)

The first category of aquifer recharge is known in Idaho as aquifer storage and recovery (“ASR”). In an ASR project, water is stored underground so that it may later be recovered (i.e., diverted) for the project owner’s own use.

ASR is not a mitigation strategy, but rather is a water supply strategy in support of new water rights. It is conceptually no different than storing water in an above-ground reservoir. Water put in the ground does not stay put quite as well as water held behind a dam. Accordingly, a major part of any ASR project is the technical challenge of quantifying how much will remain for subsequent diversion over time.

ASR is typically undertaken by private parties to create a stored underground supply for later diversion to beneficial use by the entity undertaking the recharge. For example, Micron Technologies diverts water from the Boise River, stores in it an aquifer, and later pumps and uses a calculated volume based on the amount recharged. In this sense, ASR works conceptually like a surface reservoir (while also providing water purification benefits).15

In theory, an ASR project could be undertaken by a governmental agency, just as the Bureau of Reclamation built irrigation dams across the West for the ultimate benefit of individual irrigators. But there is no precedent for this in Idaho.

B. Public Betterment Aquifer Recharge (“PBAR”)

Aquifer recharge may be undertaken by the State or other entities for the general benefit of all water users. I call this “Public Betterment Aquifer Recharge” (or “PBAR”).16 This typically involves large scale, regional efforts to recharge aquifers through infiltration ponds and/or by water in running leaky irrigation canals during the non-irrigation season.

The practice often is undertaken with minimal hydrologic analysis. None is required, because the water put in the ground does not result in any specific new or enhanced water right to divert that water. Nor does it serve as a basis for releasing particular water uses from a delivery call.

Thus, a PBAR plan may be quite seat of the pants: “Let’s put some water in the aquifer. It will probably do some good. Anyway, it can’t hurt.” There is no need to monitor or quantify how much good a PBAR project does, because it is not undertaken as a basis for subsequent diversion under right or as mitigation for particular water right users. Rather, PBAR is simply an effort to create a better supply for all. This firms up the rights of all water users connected to the aquifer and reduces the likelihood of conflict among users. It is as if Mother Nature added the water for everyone’s benefit.

PBAR may be undertaken as a precautionary measure before delivery calls are made, or it may be undertaken in direct response to a call by holders of senior water rights. The thing that

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15 Aquifers are not tightly confined storage vessels like surface reservoirs. Accordingly, it is typically necessary for the proponent of an ASR project to develop a computer model that predicts how much of the water placed in the aquifer will still be there, over time, for subsequent diversion.

16 There are several statutory references to “public betterment” in the context of aquifer recharge. For example: “In view of the public betterment to be achieved by the completion of aquifer recharge projects, the legislature hereby declares that the appropriation and underground storage of water by an aquifer recharge district hereinafter created for purposes of groundwater recharge shall constitute a beneficial use . . . .” 1982 Idaho Sess Laws ch. 204 (previously codified at Idaho Code § 42-4202(2)) (repealed in 2009).
distinguishes “public betterment” aquifer recharge from other aquifer recharge is that PBAR is not undertaken for the specific benefit of particular water users. Thus, in a call situation, a PBAR project might be of sufficient size to completely eliminate the call, or it might only partially satisfy the call thereby reducing the number of juniors called out. In either case, water continues to be allocated in order of priority just as before. No one has a special claim to the water recharged through PBAR.

C. Aquifer Recharge for Mitigation (“ARM”)

A third form of aquifer recharge involves recharging an aquifer for the purpose of providing a replacement supply to senior users who, but for the recharge, would call out juniors. I call this “Aquifer Recharge for Mitigation” or “ARM.” This may occur, for instance, where steps are taken to add water to an aquifer which then discharges the additional water to a stream serving senior surface users.

By providing this mitigation, other users may secure new appropriations or avoid having existing rights called out. This sort of mitigation may be undertaken by individual water users for their own benefit, by quasi-governmental ground water districts for the benefit of their members, or by a mitigation project developer who, in turn, sells mitigation plans or credits to junior water users.

Unlike PBAR, ARM is undertaken for the specific benefit of specific junior water users (or a class of them, such as members of a ground water district). An ARM recharge plan is calculated to provide a replacement supply sufficient only to compensate for the impact of the specific diversions providing the mitigation. Thus, other diverters who have not provided mitigation may continue to be called out.

In contrast to PBAR, an ARM plan invariably requires strict attention to hydrogeology, pumping effects, ground water movement, and similar variables; often, a ground water model is involved.

Implementing an ARM allows its sponsor to take credit for providing the replacement supply, thereby allowing it or its members to continue diverting. Meanwhile, other juniors who fail to offer mitigation may face curtailment. In PBAR, by contrast, curtailments continue to occur in strict order of priority, but, one hopes, there will be fewer of them because of the increased water supply.

D. Should ARM be Undertaken for Profit?

No one seems to struggle with the idea of ARM undertaken by the junior water users to avoid a call or by governmental entities to help resolve a call. Indeed, one of the stated legislative purposes of ground water districts is to develop and implement ARM.17 In contrast, ARM undertaken for profit by third-party mitigation project developers is a new concept in Idaho, and it has encountered some resistance.

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17 In response to growing attention and concern among water users about conjunctive management issues, particularly within the Eastern Snake River Plain, the Idaho legislature enacted legislation authorizing the creation of ground water districts. 1995 Idaho Sess. Laws ch. 290; Idaho Code § 42-5200 et seq. The primary purposes of these special districts were to provide a mechanism for ground water users within a given area to organize and assess themselves for the costs of measuring and reporting annual ground water withdrawals from wells, and as necessary, responding collectively to delivery calls, curtailment orders, or other forms of administration. Thus, ground water districts, unlike water districts, are not water delivery entities.
This discomfort with the idea of for-profit aquifer recharge is reflected, for instance, in unsuccessful legislative efforts over the last few years. Specifically, there have been efforts to modify Idaho Code § 42-234 (authorizing water rights for aquifer recharge). Some of the legislative proposals appear to reflect a measure of uncertainty or mixed feelings with respect to efforts by private parties to undertake for-profit aquifer recharge programs (particularly those involving new appropriations) in support of mitigation plans that will be sold to other water users. Also involved may be concerns that successful ARM projects, using stream flood flows, will reduce amounts flowing through hydropower projects on the Snake River that cannot demand, but benefit from, these flows.

Some people sense something wrong in someone profiting by selling an interest in a mitigation plan that utilizes a public resource like water. This concern may derive from the prior appropriation doctrine’s hostility to speculation and the insistence that only those putting water to beneficial use may obtain rights therein. Others dismiss this concern, pointing out that there is no incompatibility between individual profit and maximum use of the resource. After all, the biggest canal in the Treasure Valley—the New York Canal—is so named because it was conceived and funded by entrepreneurs two thousand miles away in New York City. Likewise, no one doubts the right of a farmer to sell his or her water rights at great profit. Similarly, no one doubts that for-profit water brokers may lawfully make a living matching buyers and sellers of water rights, thereby ensuring that this public resource finds its way to its highest and best use. The fact is, water rights mitigation is increasingly complicated and challenging. Not every water user has the wherewithal to undertake a successful mitigation project. The author sees nothing in the prior appropriation doctrine that should prevent people from putting together such projects and selling credits in them to others. I don’t know how to build a car, either. Nor do I care to rely on my government to build all the cars. I am glad that someone does build them, and is willing to sell one to me. For this analogy to work, however, it is essential that the developer of the mitigation project add something of value, rather than just appropriate water and sell it to others. That value may come in the form of engineering, infrastructure (diversion, storage, or delivery), computer modeling, administrative services, and the like.

The concern centering on the for-profit aspect of these efforts is particularly acute in the Big Wood River Valley where plans are being explored by private mitigation project developers to use otherwise unclaimed spring flood flows to recharge the aquifer in the Sun Valley area to support mitigation plans that may be sold to holders of junior surface and ground water rights (or those diverting without any water right) who face all but certain curtailment in the coming years. It conceivably could support some new appropriations as well, a fact that seems hard to swallow for people who have been confronted with the typical seasonal water scarcity in the area.

4. Statutes Addressing Mitigation

At its core, mitigation is a common law principle growing out of a water right owner’s entitlement to provide a substitute supply to a senior, thereby allowing both parties to enjoy their constitutional right to divert. Idaho statutes provide scant guidance on water rights mitigation.

One of the few statutes speaking to the subject is the aquifer recharge statute mentioned above, Idaho Code § 42-234, which dates to 1978.\(^\text{18}\) It is a sweeping statement of public policy extolling the virtues and value of aquifer recharge coupled with maddeningly ambiguous regulatory authority over recharge projects. The statute may have been written with PBAR in

mind, but its language is certainly not so limited. For instance, it includes the broad and unambiguous declaration that “the appropriation of water for purposes of ground water recharge shall constitute a beneficial use of water.” Idaho Code § 42-234(2).

Another statute touching on the subject is a recent amendment to Idaho Code § 42-223(10) which expressly protects from forfeiture a water right that is not being diverted because of its use as part of a mitigation plan.

See also Idaho Code § 42-1416B dealing with expanded (i.e., enlarged) ground water rights within a critical ground water area. It provides: “Water shall be deemed unavailable to fill the rights for expanded use, even if decreed in the adjudication, unless the director finds that a management program exists which will, within a time period acceptable to the director, limit the average annual water withdrawals from the aquifer designated in the critical ground water area to no more than the average annual recharge to the aquifer.”

Idaho Code § 42-1779 provides for “a statewide comprehensive aquifer planning and management effort over a ten (10) year period of time beginning in fiscal year 2009.”

Since 1978, the Idaho Legislature has provided for the establishment of aquifer recharge districts, which have taxing authority to raise money for and undertake ground water recharge projects. Idaho Code §§42-4202 to 42-4231.

5. Three Types of Mitigation

In Idaho, private water rights mitigation comes in various forms. One may place them into three broad categories, as follows:

- “Capital-M mitigation” (undertaken pursuant to Idaho’s Conjunctive Management Rules in response to an active delivery call)
- “small-m mitigation” (developed outside of the Conjunctive Management Rules (a) in support of an appropriation, transfer, or exchange, (b) in anticipation of a delivery call, or (c) in response to an active delivery call against a surface right (which is not covered by the Conjunctive Management Rules))
- “ESPA mitigation” (a sub-species of “small-m mitigation”) involving changes in points of diversion of ground water rights hydrologically connected to surface rights


The only formal administrative rules dealing with mitigation are contained within the Conjunctive Management Rules, IDAPA 37.03.11.000 to 37.03.11.050. The Conjunctive
Management Rules were promulgated in 1994 (and approved by the Legislature in 1995) in response to calls for the administration (i.e., curtailment) of ground water rights by a trout farm. See, Musser v. Higginson, 125 Idaho 392, 871 P.2d 809 (1994). They set out a carefully crafted set of legal principles governing the difficult subject of delivery calls directed to junior ground water rights. However, the applicability of these rules is limited.

The conjunctive management rules come into play only in response to “a delivery call made by the holder of a senior-priority surface or ground water right against the holder of a junior-priority ground water right in an area having a common ground water supply.” IDAPA 37.03.11.001. Notably, they do not come into play until a delivery call is made. Even then, they do not apply to calls against surface water users, and they apply only if an area of common ground water supply has been established.

The Conjunctive Management Rules address a host of issues. One of them is mitigation plans developed in response to a delivery call against ground water users. This is known as “Rule 43” of the Conjunctive Management Rules. IDAPA 37.03.11.043 (“Rule 43”) (copy attached.)

Arguably, another prerequisite of conjunctive administration is the development of a reliable computer model to evaluate the effect of ground water diversions and recharge on surface rights and other ground water rights. This is not stated in so many words in the Conjunctive Management Rules, but it is difficult to imagine how the Department would fulfill its obligation to evaluate material injury and the futile call defense in the absence of such a model. The whole premise of the Conjunctive Management Rules is that rights should not be curtailed by rote application of the priority system (as is done, more or less, for surface water calls); instead curtailment should be limited to the extent necessary to effectively prevent material injury. See, IDAPA 37.03.11.020.04 (application of futile call principle), IDAPA 37.03.11.010.08 (definition of futile call); IDAPA 37.03.11.042 (determining material injury).

The Conjunctive Management Rules do not apply to delivery calls against junior surface rights. The thought was that surface water is easy enough to administer. (When surface rights are involved, a diversion upstream has a clearly quantifiable impact on downstream rights. There is no need to develop a computer model to figure out who is causing the injury, and how and when it radiates from the point of diversion.) This means, however, that junior surface users—who do not fall within the Conjunctive Management Rules—may not develop Capital-M mitigation plans in response to a delivery call. However, they may still craft small-m mitigation plans outside the rules, which may be just as effective.

In addition, “Rule 42” expressly provides: “The holder of a senior-priority surface or ground water right will be prevented from making a delivery call for curtailment of pumping of any well used by the holder of a junior-priority ground water right where use of water under the junior-priority right is covered by an approved and effectively operating mitigation plan.” IDAPA 37.03.11.042.02 (copy attached).
Rule 43 borrows heavily from the Colorado concept of “plans for augmentation.” This was the first time the concept of private mitigation for the benefit of specific water rights was codified in Idaho. Here are some of the key points about Rule 43:

As noted, the Conjunctive Management Rules operate in the context of an active (as opposed to anticipated) delivery call. Accordingly, a water user may not obtain advance approval of a Capital-M mitigation plan under Rule 43 in anticipation of a call. A water user may develop a mitigation plan and keep it on the shelf, but the Department will not determine the plan’s adequacy until the delivery call is made and everyone’s hair is on fire. This may seem odd, but the Department takes the position it does not know what the delivery call will look like until it sees it and cannot approve a plan in the abstract. Likewise, the Department says that senior users should not be required to review and object to every mitigation plan (or forever hold their peace) in advance of an actual delivery call. Furthermore, until the delivery call is made, it is not clear which seniors have an interest in, and must be entitled to respond to, the Capital-M mitigation plan.

Rule 43 recognizes that no two mitigation plans are alike. The rule encourages creative solutions tailor-made to the specific circumstances of the call. Specifically, it notes that mitigation may come in the form of “other appropriate compensation.” IDAPA 37.03.11.043.03.c. For instance, a water user might pay for efficiency improvements in the senior’s use of water, thereby enabling the junior to provide less wet water as a replacement supply. Likewise, it is conceivable that a junior user depleting an instream flow might provide offsetting habitat improvements to compensate for the flow reduction. This is known as out-of-kind mitigation (as opposed to in-kind mitigation, which is replacement water). Tradeoffs like these are common in negotiated settlements, but compelling the senior water user to accept out-of-kind mitigation is new territory in Idaho.23

Rule 43 established a detailed list of “factors” the IDWR Director must consider in determining whether to approve a plan. The factors control the Director’s otherwise broad discretion.

One of the factors is agreement between the junior and senior users. But this is only a factor. In other words, even a stipulation of the parties that the mitigation is adequate may be rejected by the Director. In the absence of a stipulation, a mitigation plan proposed by the junior user may be imposed on the senior making the call. On the other hand, the rules do not appear to go so far as California has under its physical solutions doctrine, which would allow the Department to devise its own mitigation solution and impose it on both parties (see discussion in Section Error! Reference source not found. at page 18).

The plan must address only “material injury,” not insignificant or fanciful injury. Rule 42 of the Conjunctive Management Rules sets out various factors (including the efficiency of the senior’s use and the reasonableness of the senior’s means of diversion) to consider in determining whether an allegation of injury constitutes “material injury.” IDAPA 37.03.11.042.

23 California—which faces much more severe water challenges than does Idaho—has embraced out-of-kind mitigation under its “physical solutions” doctrine. See discussion in Section Error! Reference source not found. at page 18. Although out-of-kind mitigation is embraced to some extent in Rule 43 of the Conjunctive Management Rules, it does not appear that Idaho has not gone quite so far in that direction as has California, particularly with respect to allowing the Department or a court to fashion and impose a mitigation plan not embraced at least by the junior water right holders. Likewise, there is no suggestion, to date, in Idaho that damages would be a sufficient remedy for injury to a water right.
7. When There Is No Conjunctive Management Delivery Call: “Small-m” Mitigation

A. Mitigation Plans in Support of Applications for Appropriation, Transfer, or Exchange

As noted above, Capital-M mitigation plans are available only in the context of responding to an active conjunctive management delivery call against a ground water right. However, the Department will evaluate and recognize on a case-by-case basis what I call “small-m mitigation” plans that fall outside the Conjunctive Management Rules. For instance, the Department will consider a plan to mitigate the impact of new appropriations, transfers, or exchanges.

Suppose a homeowner or real estate development requires a new water right, but water in the area is either fully appropriated or new appropriations are subject to frequent curtailment due to their junior priority. (Alternatively, suppose that a domestic well has been illegally diverting water for irrigation or aesthetic purposes in excess of the authorized amount, and the owner wishes to obtain a lawful appropriation.) In such a case, the applicant will need a plan to mitigate the effects of new appropriation by providing a replacement supply for senior water users. The result is to allow water under the new appropriation to be diverted “out-of-priority” so long as the mitigation plan is in effect.24 For all practical purposes, the junior priority of the new right becomes irrelevant, and the new right takes on the priority date of whatever water right is offered as mitigation. Or, if the mitigation plan is premised on storage (including aquifer recharge), then its ability to divert out-of-priority is effective so long as stored water is physically available to offset any material injury that would otherwise be caused by the diversion.

B. Mitigation of Existing Water Rights

The owner of a junior water right may be concerned that his or her right will be called out in the future. This is a real threat in the Big Wood River Valley today, where trophy homes and hobby ranches in the Sun Valley area face imminent curtailment of ground water rights in conjunctive administration.25 Even today, surface water rights as senior as the early 1880s are subject to late-season curtailment in the Big Wood because they are junior to even more senior downstream surface rights.

The difficulty is that a Capital-M mitigation plan under the Conjunctive Management Rules cannot be approved in advance of the delivery call. And, under current policy, the Department will not evaluate a small-m mitigation plan outside the context of an application for appropriation, transfer, or exchange.

24 Diversion “out-of-priority” is a commonly employed shorthand reflecting that the right is not subject to curtailment despite its junior priority. Meanwhile, other junior rights that have not provided mitigation are subject to curtailment in order of priority.

25 On February 23, 2015, two delivery calls were placed by groups of senior surface water users on the Big and Little Wood Rivers south of Sun Valley. Arguably, these calls are premature, given that the Department has not yet designated the valley’s aquifer as a “common source of supply,” as is required under the Conjunctive Management Rules. IDAPA 37.03.11.050 (“Rule 50”). In 2014, the Department repealed Rule 50, which would have allowed it to informally declare or adjust the boundaries of common sources of supply (including the Big Wood River Valley aquifer) without formal rulemaking. In 2015, however, the Idaho Legislature overruled the repeal. House Concurrent Resolution 10 (signed Mar. 16, 2015). Thus, arguably, the Department is required to go through formal rulemaking (subject to further legislative veto) before it can conjunctively administer ground and surface water in the Big Wood River Valley. This issue is now being litigated.
A water user wishing to secure approval of a mitigation plan for an existing right prior to a delivery call may get the plan before the Department by subjecting the existing right to some sort of water right application, such as a transfer application to add an alternative point of diversion. Kluges like this are not always available, however.

Even if they cannot obtain advance review and approval of the plan, junior water users are nonetheless well advised to put together a mitigation plan and have it available in the event of a delivery call. At that point, it may be offered as a Capital-M plan, and the user will find out if the Department deems it good enough. However, if it is developed by competent engineers, hydrogeologists, and water attorneys, the likelihood of it being effective is maximized.

C. **“Small-m” Mitigation Must Be “Like Kind”**

As noted above, Rule 43 of the Conjunctive Management Rules contemplates the possibility of out-of-kind mitigation (i.e., something other than a replacement supply of water). In contrast, small-m mitigation plans, which operate outside of Rule 43, ordinarily provide like-kind mitigation. In other words, a water user relying on a small-m mitigation plan will probably be required to provide a water supply to the senior of sufficient quantity, quality, and timing to meet the senior’s needs to the same extent as those needs would have been met by curtailing the junior.

D. **“Small-m” Mitigation Is Subject to Re-evaluation at Time of Delivery Call**

As noted above, Capital-M mitigation plans, once approved, cannot be re-opened during the course of the call. Small-m mitigation plans that are approved in the context of an application for appropriation, transfer, or exchange do not enjoy that certainty. The Department may approve the mitigation plan for purposes of the pending application, thus allowing the permit, transfer, or exchange to be approved.

However, if and when a delivery call is made in the future, the effectiveness of the previously approved mitigation plan may be reevaluated in light of new circumstances and information, including impacts on parties not anticipated at the time the original plan was approved. In other words, approval of a small-m mitigation plan in anticipation of future conjunctive management provides no guarantee that the mitigation plan will be found adequate when the delivery call comes.

Obviously, this uncertainty is a drag on marketplace and financial transactions involving property that requires reliable water rights.

E. **It Is No Longer Required To Change the Nature of Use to Mitigation**

Until recently, the Department required that if the acquired right is left idle for mitigation purposes, its nature of use element must be changed to “mitigation,” “aquifer recharge,” or the like in order to protect the undiverted right from forfeiture.

This requirement to change the nature of use was of no great consequence, so long as the right was fully under the control of the person creating the mitigation plan. In other words, it was just another “t” that needed to be crossed. However, it presented a problem if, for instance, the plan relied on deliveries by a separate irrigation entity whose right cannot easily be changed to some other nature of use. In other words, even if the irrigation district wanted to cooperate, it could not if it perceived that its water rights could not lawfully be changed to a use other than irrigation.
In response, the Legislature amended the forfeiture statute, Idaho Code § 42-223(10), to exempt from forfeiture a water right that is not diverted because of its use in a mitigation plan. Consequently, a mitigation plan may now safely rely on an undiverted water right, without putting that right through its own transfer proceeding to change its nature of use to mitigation.

F. Example Involving Mitigation of Ponds

In Idaho, a water right is required for every artificial pond (to cover the evaporative loss), even if the pond fills naturally with ground water. The Department has determined that the consumptive use associated with irrigation is virtually identical to the annualized evaporative loss of ponds on an acre-for-acre basis. In other words, if you dry up an acre of irrigated land to create a one-acre pond, there is no gain or loss of water to the system. Thus, it would seem to be a trivial exercise to convert previously irrigated land to aesthetic ponds. Alas, it can be tricky, and a mitigation plan may be required.

In one example, a developer sought to convert farm land irrigated with surface water to a commercial development with ponds that would fill naturally from ground water with a high water table.

If the farm land had been irrigated with ground water, a portion of those rights readily could have been changed from irrigation use to aesthetic pond use. This would be a straight transfer with no mitigation required. Of course, the aesthetic right would have the same priority date as the ground water right and would thus be vulnerable to being called out in a future conjunctive administration call. The problem is that this is not a risk the pond-owner is allowed to take. If a ground-water-fed pond is found to be not in priority, the water cannot simply be shut off. Water will continue to fill that pond no matter what (unless the pond is filled in). Thus, the owner would be obligated to scramble to develop a new mitigation plan under crisis conditions.

Here, the problem was different. The farm was irrigated with surface water, while the pond was fed by ground water. Surface and ground water are considered to be different “sources” of water, and transfers from one source to another are not allowed. Nor could the developer obtain a new appropriation of shallow ground water to feed the pond, because the shallow ground water is hydrologically related to the fully appropriated Boise River.

Consequently, it was necessary to develop a mitigation plan. The surface water right previously used for irrigation of the land where the ponds were located was left undiverted and dedicated to mitigation of the evaporative loss of the ponds. The additional water left in the Boise River thus would offset any claim of injury by downstream seniors. (No one raised an issue about impacts to other ground water users; the “pressure point” was the over-appropriated Boise River.)

G. Mitigation and Instream Flow

Where a junior water right is subject to curtailment (or where there is no unappropriated water available to cover an illegal or new use), one approach is for the user to acquire a senior right and transfer it to his or her use. This, of course, is not mitigation; it is a simple transfer. This can be tricky, however, where a point of diversion of a surface right must be moved upstream—which must be done in a manner that protects all other water rights on the river, even juniors. It is all the more challenging where the other water right is an instream flow right.
Such is the case in the Big Wood River Valley where two instream flow waters rights (Nos. 37-7919 and 37-8307) have been imposed on the Big Wood River from Ketchum to Bellevue. As a practical matter, this makes it impossible to move a senior water right upstream within or above the protected reach. Water diverted at a farm below the protected reach has no impact on the protected reach. But if the point of diversion is moved upstream, the depletion will diminish flows in the protected instream flow reach.

This is a big problem on the Big Wood because most of the properties in need of water are within or above the protected reach and nearly all of the senior rights available for purchase are downstream.

The Department has adopted the practice of imposing a condition on such upstream transfers subordinating them to the minimum stream flow rights. The effect is that the transferred right cannot be exercised any time the minimum stream flow right is not being met. Because the minimum stream flow rights on the Big Wood River are quite junior (1981 and 1987), they are often out of priority. As a practical matter, such a condition defeats the entire purpose of the transfer, because the right may only be used in the wettest years despite its early priority.

The good news is that there is a work-around for the minimum stream flow problem—at least for some users. You guessed it, it involves a mitigation plan. The idea is to acquire a senior surface right capable of providing a replacement supply to the seniors downstream. (To be effective, the replacement water right must be upstream of every downstream senior who could place a call on the junior. It would be pointless to eliminate one call and still be subject to another.)

Instead of transferring the acquired right up the river, it is used to provide mitigation to downstream seniors (thereby allowing the out-of-priority upstream diversion to continue). Conceptually, it works like this. One does not change any of the elements of the acquired right. Instead, it is simply not diverted (drying up whatever land it was used to irrigate). In the event of a call (or as part of another water application), the user seeks approval of a mitigation plan under which the un-diverted replacement water compensates for any injury caused to the senior user(s).

One might ask why calling it “mitigation” works when simply transferring the same right up river is not viewed as injury to the instream flow. The impact on the minimum stream flow is identical under either scenario. In either case, the continued diversion by the junior will diminish flows that would otherwise be available to the instream right.

The answer is this works if and only if the upstream junior holds a water right that is senior to the instream flow right. Like all water rights, the instream flow right “took the river as it found it,” which included the upstream user’s right to divert. Thus, the upstream user is entitled to continue to divert to the detriment of the even more junior instream flow right. Moreover, the upstream user is entitled to respond to a call by a downstream senior in any way that satisfies the senior.26 The instream flow right may “hope” that the upstream right is called out. But, if that happens, it would be only an incidental result of the call. The purpose of the call was to satisfy the downstream senior, not to incidentally benefit the instream flow. The holder of

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26 For example, the junior could go to the senior and offer enough money to simply buy the senior out. Doing so would allow the junior to divert more (in priority with other rights), and the instream flow right would have no basis to complain. A mitigation plan based on a substitute supply closer to the senior is no different. Yes, every user (including the instream flow) “takes the river as he or she finds it.” But one of the things they “take” is the potential that a downstream senior will no longer need or desire to call for as much water.
the instream flow right may not complain if the upstream diverter manages somehow to satisfy the call and continue its diversion. Thus, the upstream user may continue to divert, under the mitigation plan, even when the minimum stream flow is not being met.

In contrast, if he or she had sought simply to transfer the replacement right upstream to serve his or her use, the transfer would have been denied. This is because transfers must avoid injury to all other water rights, even the junior minimum stream flow right. In contrast, the mitigation plan essentially amounts to a transfer of the acquired right downstream to the senior, which has no injury effect on the instream flow.

Again, however, this mitigation approach will not be effective if the upstream user does not hold a water right that is at least senior to the instream flow. In other words, it is a shallow accomplishment for the mitigation plan to resolve the call by the downstream diverter if the junior upstream right is still subject to curtailment by a more senior instream flow right. The upshot is that a seemingly worthless upstream junior water right is quite valuable indeed so long as it is senior to the instream flow rights and is coupled with a mitigation plan that addresses injury to senior diverters further downstream.

There is one possible glitch. Because the mitigation cannot be approved as a Capital-M mitigation plan until there is a delivery call (nor as a small-m mitigation plan outside of water right application), the non-diverted replacement water is subject to forfeiture. (Idaho Code § 42-223(1) protects from forfeiture Capital-M and small-m mitigation plans, but only if they have been approved by the Department.) Accordingly, steps should be taken to either keep the replacement water in use until needed for mitigation or to get it into the water supply bank.

This concept of mitigating a downstream senior to benefit a diversion upstream of (or within) a reach protected by an instream flow right is conceptually tricky. The simplified schematics on the pages that follow may assist the reader in seeing how this works. Scenarios A1, A2, and A3 show how much easier it is to move water rights around in the absence of an instream flow right. These scenarios illustrate how an upstream junior may respond to a delivery call by a downstream senior by buying another right and moving it upstream. Scenarios B1, B2, and B3 show how this does not work if there is an intervening instream flow. Scenario B4 illustrates how a mitigation plan may work where moving the right upstream does not.

\[27\] If the mitigation plan involved idling a senior right upstream of both the instream flow right and the senior downstream diverter, then it could effectively respond to both calls. The problem in the Big Wood River Valley is that nearly all of the senior rights available for purchase are located within or downstream of the instream flow reach. To be effective in a call by the instream flow right, the mitigation would need to benefit the entire reach.
**Scenario A1: Shortage before call.**
In this scenario, 25 units of water is insufficient water to satisfy all three users. The downstream 1880 right is short 10 units and is entitled to call for water.

**Scenario A2: Result after call.**
The 1880 right will initiate a delivery call resulting in the complete curtailment of the 1970 right and a partial curtailment of the 1890 right. The 1880 right is made whole.

**Scenario A3: Result after transfer of 1890 right.**
Faced with being called out, the owner of the junior 1970 right may acquire the 10-unit portion of the 1890 right that survives the call and move its point of diversion up to her property.
**Scenario B1:** Shortage before call. 
This is same as Scenario A1, except for the addition of an instream flow right of 30 units with an 1981 priority date. Again, 25 units of water are insufficient to satisfy all water rights. The downstream 1880 right and the instream right are each short 10 units. The 1880 right is entitled to call for water. In contrast, the 1981 instream flow right may not, because it is junior to the upstream user. It must suffer the 10 unit shortage.

**Scenario B2:** Result after call. 
The 1880 right will initiate a delivery call resulting in the complete curtailment of the 1970 right and a partial curtailment of the 1890 right. The 1880 right is made whole. The 1880 right will not call out the junior instream flow, because doing so would not add any new water. This result is identical to Scenario A2 (without the instream flow).
**Scenario B3: Result after attempted transfer of 1890 right.**

As in Scenario A3, the owner of the junior 1970 right may acquire the 10-unit portion of the 1890 right that survives the call and attempt to move its point of diversion up to her property. Doing so would not be allowed, however, because a change in the point of diversion will only be allowed if no injury occurs. Moving the 1890 right upstream would reduce the instream flow to 20 units (compared to 25 units before the transfer as shown in Scenario B2). Accordingly, this transfer would be denied.

**Scenario B4: Result after mitigation plan using 1890 right.**

Alternatively, the owner of the junior 1970 right may acquire the 10-unit portion of the 1890 right that survives the call and use it in a mitigation plan that dries up the farm. The additional 10 units now flows to the 1880 right, making it whole and allowing the 1970 right to continue to divert. The other 10 units under the 1890 right would continue to be called out by the 1880 right, but that is of no concern to the holder of the 1970 right, whose only duty is to mitigate for the injury her diversion causes. Meanwhile the instream flow continues to suffer a 10-unit shortage, but, it can do nothing about it. The instream flow cannot call out the 1970 right, because it is junior to that right. Nor can it complain of the mitigation plan, which involves no change in point of diversion and, in any event, does not affect water rights above it on the stream.
H. Why Not Simply Transfer an Acquired Senior Water Right to the Acquiring Junior User?

The basic premise of many mitigation plans is to acquire a senior right and make it available to the senior to offset the adverse effects of the junior’s diversion. One might ask, having gone to the trouble of acquiring the senior right, why not simply transfer it to serve the junior’s use? The effect is identical. Either way, the junior user gets to operate under the priority of the newly acquired water right.

That is a good question—one that sometimes people skip over. The answer is that, if the acquired right can be transferred to the acquiring party’s place of use and point of diversion, that is probably the way to go. In short, one should keep the solution as simple as possible. There are times, however, when a direct transfer of the replacement supply to the junior will not work.

For example, there may be times (particularly where the replacement supply results from aquifer recharge or other storage) when it is not physically possible to get the new water to the place where the junior needs it. In other words, the only option may be to deliver the water to the senior under a mitigation plan. This might entail, for example, dry up of land irrigated by ground water where the land is located down-gradient from the junior but above-gradient from the senior, thus allowing the undiverted water to flow downward to the satisfy the call.

The mitigation water right may be owned by a water district or other entity that is unwilling or unable to allow a portion of its water right to be split off and transferred to a new use. But the district may be willing to let a portion of its water right go “idle” to serve as mitigation.

In some cases, the senior surface right acquired as a replacement supply cannot be moved upstream without injury to other rights—notably where the stream is subject to an instream flow right. (See discussion in section 0 at page 28.)

8. Mitigation of Groundwater Transfers within the ESPA

A special type of mitigation can arise in the context of transfers of ground water rights that are hydrologically connected to senior surface rights. This is a special sub-category of small-m mitigation. It arises due to the special hydraulic connections between ground and surface water in the Magic Valley of Idaho.

Ordinarily it is fairly simple to move ground water points of diversion from one place to another within the same aquifer. There may be individual well interference issues (cone of depression issues). But, other than that, one may “move a straw from one end of the bathtub to the other” without any greater impact on the water resource or other users.

A different situation presents, however, where there is a hydraulic connection with surface water. In Idaho, this occurs most notably in the interaction of the Snake River and the Eastern Snake River Plain Aquifer (typically shortened to “ESPA”). The Snake River runs for hundreds of miles along or near the southern boundary of the ESPA, a massive aquifer covering 10,800 square miles and holding as much water as Lake Erie.

Water within the ESPA flows underground toward the Snake River. Thus, every consumptive diversion of ground water from the ESPA results in a corresponding reduction in flows somewhere in the Snake River. Each well affects the river in a different way, however. To put it simply, wells in the upper (eastern) part of the aquifer reduce flows most significantly.
in the upper part of the Snake and have gradually less impact on each succeeding lower reach of the river. And vice versa.

As a result, moving a point of ground water diversion from “point A” to “point B” will increase flows in one part of the Snake while reducing flows in another. The net depletion effect (once steady state is achieved) will be zero, but the effect on specific reaches of the river may be substantial as the impact is redistributed up and down the river. This change benefits some users and injures others.

Because the ESPA is administered as being fully appropriated, new users (notably dairies, industries, and cities) must buy water rights from farms, dry them up, and transfer the water right to the new location.

For a while during the 1990s, the Department refused to approve any ground water transfers due to the then-unquantifiable injury to surface users. Ultimately a computer program (known as the Eastern Snake Plain Aquifer Model or “ESPAM”) was developed to model the effect of every possible change location on every reach of the river.

This methodology, and the Department’s implementation of it to date, is focused solely on mitigating the adverse effects of a transfer on the affected reaches of the Snake (and tributaries thereto). The same methodology also quantifies the corresponding and offsetting positive impacts on other reaches of the river. A major piece of unfinished business is the establishment of a “credit” system to reflect these positive benefits. So far, the Department has approved water right transfers recognizing those benefits and securing the right of water right holders to claim them in the future once a system is put in place to quantify and trade those credits.

The result is that a person seeking to transfer a point of diversion to a new location in the ESPA may be required to leave some of the water behind. For instance, if the right authorized diversion of 5 cfs at the original location, the Department might approve a transfer of only 4 cfs, if the computer model showed that pumping that amount in the new location would leave no surface user of the Snake River worse off. The greater the distance the water is moved up and down the aquifer, the more water must be left behind to prevent injury.

Of course, in such a transfer, some water users will be made better off. There are two ways in which the transferring party may capture this benefit. First, the Department has recognized a “credit” for the improvement to other reaches of the Snake River. That credit (in theory at least) may be used to offset some future transfer in the other direction. Alternatively, the water user (or water broker) may arrange various simultaneous transfers in opposing directions whose impacts on various reaches of the river cancel each other out, thus allowing the rights to be transferred at full face value (or close to it).

The reduction in transferred quantity based on the ESPAM is different from other mitigation plans in several ways. First, it is not undertaken in response to or anticipation of a conjunctive administration delivery call. Second, there is no new, alternate supply of water provided to the other potentially injured rights. Instead, injury is avoided by cutting back the quantity of an existing right (the transferred right) or by using credits or offsets from other transfers. (That quantity may be defined to change over time, reflecting the gradual impact of the transfer until steady state is achieved.) Third, once the transfer is approved, there is no ongoing mitigation plan to implement. Fourth, the effect of the mitigation is only to allow approval of the transfer. It has no effect in protecting the ground water user from a future
delivery call. However, when that delivery call comes, it will be evaluated on the basis of the impacts of new quantity being diverted from the new place of diversion.

An illustrative example of a ground water transfer within the Eastern Snake Plain is set out in the illustration on the following page. This is, of course, grossly simplified. It communicates, however, the idea that a change in the point of diversion may be accomplished without injury to any of the river reaches if the diversion quantity is reduced at the new point of diversion. This amounts to “leaving money on the table,” because other reaches are benefited and the overall impact of the diversion is reduced. To some extent, this “money on the table” effect may be avoided by combining two or more transfers that to some extent cancel out each other’s impact. This may be done simultaneously, or at different times through retention of credits after the first transfer.
**Eastern Snake Plain Aquifer Ground Water Transfer Scenario.**

In this scenario, 100 units of water are initially pumped from location A and consumptively used. The computer model calculates that this will diminish flows in each of six reaches of the Snake River as shown in blue.

If the point of diversion is moved to location B, the computer model predicts that the steady-state impact on each river reach will be as shown in red. The effect of the move from A to B is to improve flows in reaches #1, #2, and #3, but to reduce flows in reaches #4, #5, and #6. This equates to injury, and the transfer will not be approved for the full 100 units.

By restricting the diversion at point B to 50 units, the steady-state impact on each reach is reduced by half (as shown in green). The result is that reaches #1, #2, #3, #4, and #5 all experience a decline in impact compared to pumping 100 units at point A (meaning more flow and no injury), while reach #6 is neutral.
01. Submission Of Mitigation Plans. A proposed mitigation plan shall be submitted to the Director in writing and shall contain the following information: (10-7-94)
   a. The name and mailing address of the person or persons submitting the plan. (10-7-94)
   b. Identification of the water rights for which benefit the mitigation plan is proposed. (10-7-94)
   c. A description of the plan setting forth the water supplies proposed to be used for mitigation and any circumstances or limitations on the availability of such supplies. (10-7-94)
   d. Such information as shall allow the Director to evaluate the factors set forth in Rule Subsection 043.03. (10-7-94)

02. Notice And Hearing. Upon receipt of a proposed mitigation plan the Director will provide notice, hold a hearing as determined necessary, and consider the plan under the procedural provisions of Section 42-222, Idaho Code, in the same manner as applications to transfer water rights. (10-7-94)

03. Factors To Be Considered. Factors that may be considered by the Director in determining whether a proposed mitigation plan will prevent injury to senior rights include, but are not limited to, the following: (10-7-94)
   a. Whether delivery, storage and use of water pursuant to the mitigation plan is in compliance with Idaho law. (10-7-94)
   b. Whether the mitigation plan will provide replacement water, at the time and place required by the senior-priority water right, sufficient to offset the depletive effect of ground water withdrawal on the water available in the surface or ground water source at such time and place as necessary to satisfy the rights of diversion from the surface or ground water source. Consideration will be given to the history and seasonal availability of water for diversion so as not to require replacement water at times when the surface right historically has not received a full supply, such as during annual low-flow periods and extended drought periods. (10-7-94)
   c. Whether the mitigation plan provides replacement water supplies or other appropriate compensation to the senior-priority water right when needed during a time of shortage even if the effect of pumping is spread over many years and will continue for years after pumping is curtailed. A mitigation plan may allow for multiseason accounting of ground water withdrawals and provide for replacement water to take advantage of variability in seasonal water supply. The mitigation plan must include contingency provisions to assure protection of the senior-priority right in the event the mitigation water source becomes unavailable. (10-7-94)
   d. Whether the mitigation plan proposes artificial recharge of an area of common ground water supply as a means of protecting ground water pumping levels, compensating senior-priority water rights, or providing aquifer storage for exchange or other purposes related to the mitigation plan. (10-7-94)
e. Where a mitigation plan is based upon computer simulations and calculations, whether such plan uses generally accepted and appropriate engineering and hydrogeologic formulae for calculating the depletive effect of the ground water withdrawal. (10-7-94)

f. Whether the mitigation plan uses generally accepted and appropriate values for aquifer characteristics such as transmissivity, specific yield, and other relevant factors. (10-7-94)

g. Whether the mitigation plan reasonably calculates the consumptive use component of ground water diversion and use. (10-7-94)

h. The reliability of the source of replacement water over the term in which it is proposed to be used under the mitigation plan. (10-7-94)

i. Whether the mitigation plan proposes enlargement of the rate of diversion, seasonal quantity or time of diversion under any water right being proposed for use in the mitigation plan. (10-7-94)

j. Whether the mitigation plan is consistent with the conservation of water resources, the public interest or injures other water rights, or would result in the diversion and use of ground water at a rate beyond the reasonably anticipated average rate of future natural recharge. (10-7-94)

k. Whether the mitigation plan provides for monitoring and adjustment as necessary to protect senior-priority water rights from material injury. (10-7-94)

l. Whether the plan provides for mitigation of the effects of pumping of existing wells and the effects of pumping of any new wells which may be proposed to take water from the areas of common ground water supply. (10-7-94)

m. Whether the mitigation plan provides for future participation on an equitable basis by ground water pumpers who divert water under junior-priority rights but who do not initially participate in such mitigation plan. (10-7-94)

n. A mitigation plan may propose division of the area of common ground water supply into zones or segments for the purpose of consideration of local impacts, timing of depletions, and replacement supplies. (10-7-94)

o. Whether the petitioners and respondents have entered into an agreement on an acceptable mitigation plan even though such plan may not otherwise be fully in compliance with these provisions. (10-7-94)

Current through September 2, 2015

IDAPA 37.03.11.043, ID ADC 37.03.11.043
01. **Factors.** Factors the Director may consider in determining whether the holders of water rights are suffering material injury and using water efficiently and without waste include, but are not limited to, the following: (10-7-94)

a. The amount of water available in the source from which the water right is diverted. (10-7-94)

b. The effort or expense of the holder of the water right to divert water from the source. (10-7-94)

c. Whether the exercise of junior-priority ground water rights individually or collectively affects the quantity and timing of when water is available to, and the cost of exercising, a senior-priority surface or ground water right. This may include the seasonal as well as the multi-year and cumulative impacts of all ground water withdrawals from the area having a common ground water supply. (10-7-94)

d. If for irrigation, the rate of diversion compared to the acreage of land served, the annual volume of water diverted, the system diversion and conveyance efficiency, and the method of irrigation water application. (10-7-94)

e. The amount of water being diverted and used compared to the water rights. (10-7-94)

f. The existence of water measuring and recording devices. (10-7-94)

g. The extent to which the requirements of the holder of a senior-priority water right could be met with the user's existing facilities and water supplies by employing reasonable diversion and conveyance efficiency and conservation practices; provided, however, the holder of a surface water storage right shall be entitled to maintain a reasonable amount of carry-over storage to assure water supplies for future dry years. In determining a reasonable amount of carry-over storage water, the Director shall consider the average annual rate of fill of storage reservoirs and the average annual carry-over for prior comparable water conditions and the projected water supply for the system. (10-7-94)

h. The extent to which the requirements of the senior-priority surface water right could be met using alternate reasonable means of diversion or alternate points of diversion, including the construction of wells or the use of existing wells to divert and use water from the area having a common ground water supply under the petitioner's surface water right priority. (10-7-94)

02. **Delivery Call For Curtailment Of Pumping.** The holder of a senior-priority surface or ground water right will be prevented from making a delivery call for curtailment of pumping of any well used by the holder of a junior-priority ground water right where use of water under the junior-priority right is covered by an approved and effectively operating mitigation plan. (10-7-94)