



## MEMORANDUM

To: Colorado Water Community  
 From: Tracy Kosloff, Deputy State Engineer  
 Date: June 10, 2022  
 Subject: Water Exchange Projects in Plans for Augmentation

This memo describes how staff of the Colorado Division of Water Resources (DWR) understand the distinction between a traditional appropriative right of exchange and a Water Exchange Project included in a plan for augmentation. It details how DWR proposes to (1) proceed regarding this issue in the water court, (2) administer existing decrees without disturbance, and (3) administer future decrees with operations relevant to Water Exchange Projects.

This memo was released as a draft for discussion and input in August 2021. In response to input from the water community, section 5 was added to clarify operations under substitute water supply plans and other written plan approvals. In addition, Figures 1 and 2 and corresponding descriptions were added. The substance of DWR’s understanding of and planned approaches to dealing with Water Exchange Projects was not modified.

### Contents:

<b>1. Development of DWR’s current understanding of Water Exchange Projects</b>	<b>2</b>
a. Terminology - Water Exchange Projects and Exchange Project Rights	6
b. Water right priorities for Water Exchange Projects and Exchange Project Rights	6
c. Making conditional Exchange Project Rights absolute	7
d. The “character of exchange” practice for upstream diversions of surface water	7
<b>2. DWR’s plans for summaries of consultations, negotiations, and litigation in for applications to the water court filed in 2021 or earlier</b>	<b>7</b>
a. Applications filed through 2021 including a plan for augmentation claim	7
b. Applications filed through 2021 without a plan for augmentation claim	8
<b>3. DWR’s plans for summaries of consultations, negotiations, and litigation for applications to the water court filed in 2022 or later</b>	<b>9</b>
<b>4. Administration of existing and future decrees of various types</b>	<b>9</b>
a. Prior plans for augmentation with downstream replacement and no water right priority decreed for an exchange or Water Exchange Project	9
b. 2022 cases and later applications for plans for augmentation with downstream replacement and no water right priority decreed for an exchange or Water Exchange Project	10
c. Existing decreed groundwater exchanges not included in a plan for augmentation	10



d. Use of previously-decreed accretions for non-decreed uses 10

**5. Substitute Water Supply Plans and Temporary Written Plan Approvals by DWR 11**

**1. Development of DWR’s current understanding of Water Exchange Projects**

Traditional exchanges involve upstream out-of-priority diversions of surface water with downstream replacement with surface water that qualify for near real-time administrative approval by DWR. Other upstream out-of-priority diversions or depletions with downstream replacement water that can only be approved through the water court are properly considered Water Exchange Projects to be included in a plan for augmentation under the statutory scheme.

DWR’s statutory authority to approve traditional exchanges exists in sections 37-83-104 and 37-80-120, C.R.S. Section 37-83-104 was enacted in 1897, long before Colorado integrated the administration of surface and groundwater under the 1969 Act. Therefore, reservoir and ditch exchanges were originally contemplated to involve only surface water both for upstream diversion and downstream replacement. Section 37-83-104 describes that water is to be delivered “into the public stream” and taken in exchange “from the public stream higher up”. Under Senate Bill 105 of 1969, the General Assembly broadened the State Engineer’s traditional exchange authority for certain out-of-priority diversions of surface water under subsections 37-80-120(1) to (4). Simultaneously, under Senate Bill 81 of 1969, the General Assembly vested the water courts with authority to approve out-of-priority diversions and depletions to the stream from the use of surface and groundwater through plans for augmentation. DWR believes, therefore, that the operations the State Engineer may allow through on-the-ground water administration of traditional exchanges under 37-83-104 and 37-80-120(1)-(4) must be limited to “real-time” direct diversions from and direct replacement to a live public stream, and such operations must not include accretions (from recharge or lawn irrigation return flows) or withdrawals through wells or other structures located away from the stream that have a lagged or non-instantaneous effect on the stream.

Such traditional exchanges that can be approved administratively by DWR involve only the diversions of surface water from the public stream and the one-for-one replacement with a like amount of surface water to the public stream at a location with a live stream connection to the point of diversion. DWR staff can give near real-time approval for measured diversions and replacement, with the appropriate assessment of any transit losses, to prevent injury.

Traditional exchanges are appropriative rights, which can be exercised in accordance with the constitution and statute without water court approval. As described in 37-80-120(4), C.R.S., “A practice of substitution or exchange pursuant to law may constitute an appropriative right and may be adjudicated or otherwise evidenced as any other right of appropriation.”

If the exchange right is adjudicated, it is administered in priority along with other water rights in the dewatered reach that may operate despite a call by a downstream senior water right being recognized and administered by DWR. It is the relative priorities of water rights in the reach that make a priority date useful for the exchange operator. The downstream senior water right is made whole with a downstream replacement source. When there are multiple uses of water in the dewatered reach that total more than what is available, only the most

senior uses, up to the total available, may operate. Adjudicating a priority date for the exchange preserves its seniority compared to other uses in the dewatered reach. In Figure 1, a calling instream flow water right in the reach or a more senior exchange for 65 cfs would limit the operation of the junior exchange.

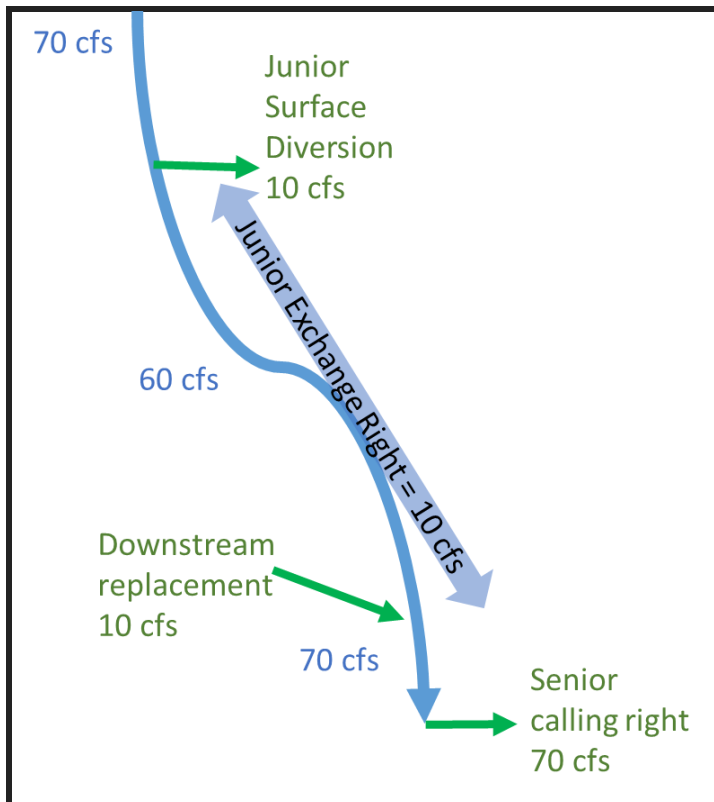


Figure 1. Example Appropriative Right of Exchange - may be administratively approved

In contrast to a traditional exchange, out-of-priority diversions involving modeled inflows and outflows, or other operations involving out-of-priority diversions that do not immediately impact the stream, cannot be administratively approved by DWR staff in near real-time, and must be part of a plan for augmentation or written temporary plan approval that describes timing considerations and makes a finding of no injury (see Section 5). Figure 2 is a schematic example where the out-of-priority diversion is taken from the aquifer, resulting in delayed depletions to the stream. This operation may be adjudicated as part of a plan for augmentation.

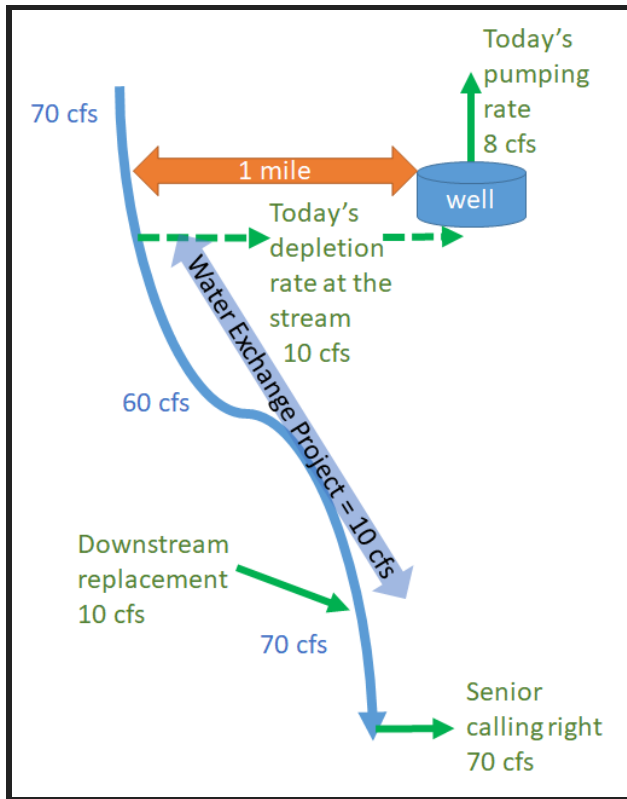


Figure 2. Example Water Exchange Project - water court approval required

Some aspects of this issue were litigated by water users in Division 1 water court case no. 15CW3178, where Tri-State applied for a traditional exchange to replace upstream lagged well depletions without a plan for augmentation. The judge found in his March 7, 2018 ORDER DETERMINING QUESTIONS OF LAW that “the exchange plan simply cannot account for delayed depletions to the river. Therefore, to ensure that injury does not occur..., Applicant must utilize an augmentation plan ... taking into account the amount and timing of delayed river depletions from operation of the ... wells.”

The water court’s conclusion is consistent with the separate and different standards for approving plans for augmentation as contemplated in sections 37-92-103(9), 305(3), 305(5), and 305(8)(a), C.R.S.

*37-92-103(9), C.R.S. “Plan for augmentation” means a detailed program, which may be either temporary or perpetual in duration, to increase the supply of water available for beneficial use in a division or portion thereof by the development of new or alternate means or points of diversion, by a pooling of water resources, by water exchange projects, by providing substitute supplies of water, by the development of new sources of water, or by any other appropriate means. (emphasis added)*

*37-92-305(3)(a), C.R.S. A change of water right, implementation of a rotational crop management contract, or plan for augmentation, including water exchange project, shall be approved if such change, contract, or plan*

*will not injuriously affect the owner of or persons entitled to use water under a vested water right or a decreed conditional water right. (emphasis added)*

*37-92-305(5), C.R.S. In the case of plans for augmentation including exchange, the supplier may take an equivalent amount of water at his point of diversion or storage if such water is available without impairing the rights of others.*

*37-92-305(8)(a), C.R.S. Except as specified in paragraph (b) of this subsection (8), in reviewing a proposed plan for augmentation and in considering terms and conditions that may be necessary to avoid injury, the referee or the water judge shall consider the depletions from an applicant's use or proposed use of water, in quantity and in time, the amount and timing of augmentation water that would be provided by the applicant, and the existence, if any, of injury to any owner of or persons entitled to use water under a vested water right or a decreed conditional water right.*

In 2020, DWR worked with the Attorney General's office to consider whether conditional water rights can be made absolute when diverted out-of-priority by exchange or under a plan for augmentation. The outcome of that investigation was DWR's [Written Instruction 2020-01](#), which concluded that, when water rights are diverted out-of-priority in accordance with procedures prescribed by law, those water rights can be made absolute per a decree of the court. Procedures prescribed by law include plans for augmentation, appropriative rights of exchange, and Water Exchange Projects in plans for augmentation. This differentiation in DWR's Written Instruction, combined with DWR's comments in water court proceedings, brought this issue to the attention of some in Colorado's water community. In May 2021, Water Exchange Projects were a topic in the Colorado Bar Association Water Law Continuing Legal Education course.

We are aware of a number of plans for augmentation, in various stages in the court process, that include Water Exchange Projects. A search of DWR's water court files in July 2021 revealed the following cases and the stage of the case<sup>1</sup>:

- Mountain Mutual Reservoir Company, Div 1 case no. 19CW3154 - DWR stipulation to draft decree
- Mountain Mutual Reservoir Company and RANDK, LLC, Div 1 case no. 20CW3202 - application
- Mountain Mutual Reservoir Company and Aumiller, Div 1 case no. 20CW3163 - application
- Mountain Mutual Reservoir Company and Elk Creek Estates, Div 1 case no. 20CW3144 - application
- Mountain Mutual Reservoir Company and Medved, Div 1 case no. 20CW3107 - draft decree
- Mountain Mutual Reservoir Company and MP Group, Div 1 case no. 20CW3083 - draft decree
- Mountain Mutual Reservoir Company and Martin, Div 1 case no. 21CW3034 - application
- Mountain Mutual Reservoir Company and Boyne, Div 1 case no. 21CW3050 - application

---

<sup>1</sup> There may be other cases that include Water Exchange Projects that were not in the results of the query of DWR's Laserfiche database.

- Mountain Mutual Reservoir Company and Ritchie & Sodon, Div 1 case no. 21CW3053 - application
- Mountain Mutual Reservoir Company and Leondorf, Div 1 case no. 21CW3060 - application
- Mountain Mutual Reservoir Company and 6860 High Drive LLC, Div 1 case no. 21CW3074 - application
- Mountain Mutual Reservoir Company and Antenucci Ranch and NKR, Div 1 case no. 21CW3082 - application
- Eldora Enterprises, LLC, Div 1 case no. 19CW3250 - DWR stipulation to draft decree
- Broomfield, Div 1 case no. 20CW3216 - application
- Blue Wing Farm, Div 1 case no. 17CW3218 - DWR stipulation to draft decree
- Deer Mountain Ranch Conservation Association, Div 2 case no. 21CW3027 - application
- Douglas Zook, Div 5 case no. 18CW3027 - final decree
- James Peak Ranch, LLC, Div 5 case no. 20CW3174 - application
- Kevin Mize, Div 5 case no. 20CW3173- application
- Hill Industries, Div 5 case no. 21CW3009 - response to summary of consultation
- Eldridge, Div 5 case no. 21CW3059 - application

**a. Terminology - Water Exchange Projects and Exchange Project Rights**

The statutory language uses the term “water exchange project” [see underlining above in 37-92-103(9) and 37-92-305(3)(a), C.R.S.]. Through comments in water court cases, DWR has suggested that the tabulated water rights that are part of a Water Exchange Project included in a plan for augmentation should be differentiated from traditional exchanges through use of the term, “Exchange Project Right.” However, the longer term, “water exchange project right,” is also acceptable to the State and Division Engineers. There may be multiple Exchange Project Rights within a Water Exchange Project included in a plan for augmentation.

**b. Water right priorities for Water Exchange Projects and Exchange Project Rights**

Because Water Exchange Projects allow water to be placed to beneficial use in accordance with procedures prescribed by law, they involve lawful appropriations, including the appropriation of exchange potential in the reach of any stream de-watered by the operation of the Water Exchange Project. Such lawful appropriations are entitled to a water right, which means “a right to use in accordance with its priority a certain portion of the waters of the state by reason of the appropriation of the same.” 37-92-103(12), C.R.S. Priorities for Water Exchange Projects allow for their integration with the administration of appropriative rights of exchange, facilitate the proper administration of plans for augmentation, and may provide for priority use of water structures involved in Water Exchange Projects. Exchange Project Rights must be decreed conditionally until they have operated in accordance with a plan for augmentation. When there is a call within the exchange reach that is senior to an Exchange Project Right, such that it is out-of-priority due to the lack of exchange potential, a plan for augmentation should provide for use of a different replacement source providing replacement water upstream of the call.

**c. Making conditional Exchange Project Rights absolute**

Because Exchange Project Rights require a plan for augmentation, they can only be made absolute by operating pursuant to the terms and conditions of a decreed plan for augmentation. They may not be made absolute pursuant to operation under a substitute water supply plan approved by the State Engineer because the terms and conditions of the State Engineer's approval may not conform to those of the water court when decreeing an Exchange Project Right.

**d. The "character of exchange" practice for upstream diversions of surface water**

For traditional exchanges, surface water diverted at the upstream exchange-to point may take on the character of the downstream replacement supply in terms of its rights of use, reuse, successive use, and place of use, and other applicable characteristics of the replacement supply. Whether an upstream diversion can take on the character of the replacement supply typically depends on the intent of the appropriator and any applicable decrees. The same is true for the diversions of surface water from the stream at the upstream exchange-to points under Water Exchange Projects because at the time of the upstream diversion the sources and characteristics of the replacement supply are known. The same is not true for Water Exchange Projects with wells or other diversions with lagged depletions at the upstream exchange-to point. For delayed depletions, at the time water is diverted for beneficial use, although the source of replacement water may be planned, its delivery cannot be confirmed nor does that delivery take place at the same time as the diversions causing lagged depletions. Thus, diversions causing lagged impacts cannot take on the character of a future replacement source. For instance, the water diverted from a well cannot take on the character of the planned transmountain replacement source, but must take on characteristics related to the upstream well's diversion, such as the well's existing junior water right.

**2. DWR's plans for summaries of consultations, negotiations, and litigation in for applications to the water court filed in 2021 or earlier**

DWR understands that the approach of adjudicating Water Exchange Projects within a plan for augmentation versus adjudicating traditional exchanges is relatively new in the water community. Water users may not have been aware of this distinction when applications were filed with the water court prior to the release of this memo as a draft in 2021. Therefore, DWR's approach for all applications filed with the court through the end of 2021 was as described below.

**a. Applications filed through 2021 including a plan for augmentation claim**

Applications that include a plan for augmentation need not be amended and can be decreed to include a Water Exchange Project. DWR will provide comments, either under consultation with the referee or as a party to the case, that this category of water right should be termed a Water Exchange Project in the requested plan for

augmentation. If a Water Exchange Project was, in DWR's view, incorrectly claimed as an appropriative right of exchange, DWR's position is that water users were effectively put on inquiry notice of the impact to the stream and the final decree may describe this as a Water Exchange Project within the plan for augmentation. DWR will not litigate this position in cases filed through the end of 2021 but may participate in any briefing initiated by other parties.

If there is a plan for augmentation with downstream replacement and no claim for either an appropriative right of exchange or an Exchange Project Right, DWR will comment that the applicant must either claim such a water right priority for the operation or the decree must confirm that the operation will be administered as the most junior right on the stream until a priority is adjudicated. This may mean the water court cannot make a finding of no material injury or the decree may provide for curtailment of diversions as necessary to prevent injury or the use of alternative replacement sources that can deliver replacement water upstream of all calling water rights.

**b. Applications filed through 2021 without a plan for augmentation claim**

DWR will provide comments, either under consultation with the referee or as a party to the case, that the application should include a plan for augmentation including a Water Exchange Project. Such comments will have the intent of communicating and memorializing DWR's position on this issue.

Decrees with Exchange Project Right operations in cases where a plan for augmentation was not noticed in the resume have the potential for two problems:

- If the decree is entered with a plan for augmentation including a Water Exchange Project, the decree includes the correct operation under the statutory scheme but the water court may not have had jurisdiction to enter such a decree due to a lack of proper notice of an augmentation plan claim; and
- If the decree is entered with an appropriative right of exchange and no plan for augmentation, the exchange is the incorrect operation under the statutory scheme and will lack the water court's retained jurisdiction over the operation.

DWR will not now or in the future seek correction of such decrees.

For pending applications and those filed through the end of 2021:

- If the application is a request for an exchange to the point of well depletion without a plan for augmentation (the type of operation subject to the aforementioned Tri-State case), DWR will seek entry of a decree that includes the operation within a plan for augmentation through litigation if necessary.
- For other types of Water Exchange Project operations, unless the Applicant is amending their application for another reason, DWR will not seek to require amending the application to include a plan for augmentation. However, the Engineers may participate in any briefing on these issues initiated by other parties.



### **3. DWR's plans for summaries of consultation, negotiations, and litigation for applications to the water court filed in 2022 or later**

Unless there is a court ruling to the contrary, DWR anticipates that future applications are likely to include claims for plans for augmentation including Water Exchange Projects. For applications filed in 2022 and later that seek to approve a Water Exchange Project without a plan for augmentation, DWR will either notify the water court of the deficiency through the consultation process or will oppose the application as a formal party.

### **4. Administration of existing and future decrees of various types**

Water users may have questions about how DWR will administer existing decrees with differing exchange language and plans for augmentation with downstream replacement sources with no exchange or Water Exchange Project priorities. DWR's understanding of Water Exchange Projects does not result in changes to administration of existing decrees or subsequent diligence, changes of water rights, or amendment proceedings involving previously decreed rights. DWR will not seek to have previously decreed rights or plans for augmentation conform to DWR's current understanding of Water Exchange Projects.

#### **a. Prior plans for augmentation with downstream replacement and no water right priority decreed for an exchange or Water Exchange Project**

Decrees for augmentation plans commonly include a finding of no injury pursuant to section 37-92-305(3)(a), C.R.S. This finding of no injury applies to the owner of or persons entitled to use water under a vested water right or a decreed conditional water right. Some plans for augmentation have been decreed with operations that only provide replacement water downstream of depletions, without an option or requirement for upstream replacement or a water right priority decreed for an appropriative right of exchange or Water Exchange Project. Some of these decrees explicitly describe a depleted reach<sup>2</sup> and some do not. These plans for augmentation may have been decreed with downstream replacement because an exchange to upstream well depletions could not be decreed but there was not yet a clear understanding of Water Exchange Projects.

For such plans for augmentation filed in 2021 or before, DWR's position is that if new water rights adjudicated after the plan for augmentation was filed begin operating in the depleted reach, water uses covered by the plan for augmentation need not provide upstream replacement to those new uses regardless of whether the decree explicitly recognizes the depleted reach, explicitly references section 37-92-305(3)(a),

---

<sup>2</sup> The decree in Division 1 case no. 16CW3060, Boulder County Kenosha Ponds, is an example of where the depleted reach approach was described. Paragraph 30.8: "Although no appropriative rights of substitution and exchange are decreed herein, no augmentation of depletive effects or replacement of historical return flows is or shall be owed to water rights (including exchanges) junior to April 29, 2016 located within the depleted reaches."

or whether the augmented uses are junior to the new water rights operating in the depleted reach.<sup>3</sup>

**b. 2022 cases and later applications for plans for augmentation with downstream replacement and no water right priority decreed for an exchange or Water Exchange Project**

DWR will comment in its water court activities that future plans for augmentation with downstream replacement should conform to the following:

- either claim an exchange or a Water Exchange Project to obtain a decreed priority to exchange potential, or
- the decree should confirm that no priority was claimed or decreed and the operation shall be administered as with any right lacking an adjudicated priority. This may mean the water court cannot make a finding of no material injury or the decree may provide for curtailment of diversions as necessary to prevent injury or the use of alternative replacement sources that can deliver replacement water upstream of all calling water rights.

**c. Existing decreed groundwater exchanges not included in a plan for augmentation**

DWR will not seek to disturb and will continue to administer existing decrees approving exchanges involving the use of groundwater, such as decreed exchanges of accretions that may or may not be included in a plan for augmentation. Such administration requires compliance with all terms and conditions for the decreed “exchange” to operate. Water rights junior to the exchange are not entitled to demand that water physically be replaced upstream of the exchange from point.

**d. Use of previously-decreed accretions for non-decreed uses**

As already described, the diversion of groundwater accretions at an upstream location by exchange cannot be approved by DWR staff under a traditional exchange. If such upstream use is not already decreed or otherwise approved by the water court, the appropriate method to gain such approval is pursuant to a Water Exchange Project included in a plan for augmentation.

New uses of decreed accretions (such as when excess accretions are available and a water user seeks to lease those accretions) may be approved in accordance with procedures prescribed by law, including under new or existing plans for augmentation. For instance, section 37-92-305(8)(c), C.R.S. describes that plans for augmentation may include procedures to allow additional or alternative replacement sources to be used after the initial decree is entered. Those procedures may allow the addition of

---

<sup>3</sup> There are two possibilities where the latter occurs: (a) Diversions operating pursuant to the augmentation plan do not have decreed priority dates. This commonly occurs in subdivisions with individual residential wells. (b) New diversions may join an existing decreed blanket augmentation plan and may or may not adjudicate water rights at that time. In either case, the new augmented uses are covered by a plan for augmentation that contemplated such appropriations that would deplete the stream above the replacement supply.

leased accretions as a replacement source under a plan for augmentation. However, leased accretions cannot provide replacement for an upstream out-of-priority diversion or depletion without a decreed Water Exchange Project or a written plan approval as described in Section 5.

## **5. Substitute Water Supply Plans and Temporary Written Plan Approvals by DWR**

The State Engineer may approve the one year operation of a plan for augmentation pending in the water court under a substitute water supply plan per section 37-92-308(4), C.R.S. If an exchange or Water Exchange Project is claimed in the plan for augmentation application, the substitute water supply plan may allow temporary operation of a Water Exchange Project with conditions of approval to prevent injury including consideration of real-time conditions, but such plan approval does not rely on a priority date for the operation. A priority date for the exchange or Water Exchange Project may only be adjudicated by the water court.

DWR provides written approvals for other temporary water use plans pursuant to law, in response to applications, and those written approvals may involve temporary operation of a Water Exchange Project without a priority date.<sup>4</sup> Such plans may be approved after thorough consideration of the timing of lagged depletions and accretions and are approved if the State Engineer finds that the operation and administration will replace all out-of-priority depletions and will prevent injury to other water rights. DWR's written plan approvals describe the timing of any relevant depletion or accretion and typically include conditions requiring additional near real-time approval based on current conditions to ensure no injury occurs due to a dewatered reach. Such plan approvals may allow the use of downstream replacement to prevent injury with certain conditions of approval without terming such an operation a Water Exchange Project. Commonly, such approvals also include upstream sources of replacement water for use when downstream replacement is insufficient to prevent injury to vested water rights operating in the dewatered reach.

---

<sup>4</sup> This includes but is not limited to plans approved in accordance with the Amended Rules Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin and other types of Substitute Water Supply Plans, such as those approved pursuant to Section 37-92-308(5).