

Water Resources Department

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March 2, 2023

## **MEMORANDUM**

TO:	Representative Helm, Chair
	House Committee on Agriculture, Land Use, Natural Resources and Water
C:	Anna Glueder, Legislative Policy and Research Office
FROM:	Bryn Hudson, Legislative Coordinator
SUBJECT:	Response to House Bill 3164

After the March 2, 2023, House Committee on Agriculture, Land Use, Natural Resources and Water public hearing the Water Resources Department committed to following up on requests for further information on House Bill 3164.

## Additional background on the process for split season leasing and how it interplays with Junior water right holders

When processing any instream lease/split season instream lease the Department considers the amount of water available to be put to beneficial use, return flows, streamflow losses, and injury and enlargement.

Injury refers to an existing junior user not receiving water that they were previously legally entitled to before the change. One form of enlargement is using more water than was authorized under the existing right. Leases are reviewed to prevent injury and enlargement. Since irrigation rights are the most common type of right used, our example discusses irrigation rights. A water user changing their water right to another purpose only has a right to transfer the maximum amount that could have been used under their water right with some adjustments to protect other existing users. Senior users generally cannot be injured by a junior user's change in use because their priority date is senior. As such, it is junior users that must be protected from injury.

Return Flows and Streamflows: To prevent injury, the Department determines what portion of the water diverted would have returned to the stream, and thus contribute to streamflows that are relied on by other water users. The Department subtracts the amount of return flows from the volume of water that can be leased. In addition, prior to approval of a lease, instream flows are calculated for the period of consumptive use, which include any returns that may be occurring. This ensures that return flows are not included as water available for lease instream.

From there, flow loss is calculated from the authorized POD to the mouth of the source stream (or to the mouth of the receiving stream, if determined to be measurable) and subtracted from the total volume that can be leased instream. Flow loss is calculated by measuring the stream at the

location of the authorized point of diversion and again at the mouth of the source stream. If flows measure less at the downstream location than at the POD, the instream reach, or the water protected by the instream lease, would be reduced to prevent injury to other existing water right holders downstream and enlargement of the water right under lease.

In calculating return flows and flow loss, the Department relies heavily on gages above and below the protected reach and metering at the POD, as well as modeling software and tools, such as AgriMet, when available. In some cases, the Department does not have access to all required measurements and must rely on watermaster knowledge of the system. Typically, the watermaster considers factors such as soil type, hydrogeology, and conditions in nearby areas to estimate return flow volumes and reach loss. If a watermaster has significant concerns that injury may occur, then they will note that in the required watermaster review and the water may only be protected at the POD.

Split season leases are regulated in the same manner as every other water right. If a junior water right is leased instream under a split season lease and a senior user makes a call, the senior water user has a right to that water. Split season leases have the same priority date as the original water right.