

MEMORANDUM

DATE: March 11, 2004

TO: Water Right Files 29-2137A and 29-13648

FROM: Shelley W. Keen *SWK*

RE: Configuration of the rights

Transfer Application 70720 proposes to change Right 29-2137A from 12 acres of irrigation to wildlife and wildlife storage purposes for an off-stream reservoir that will hold about 4.0 af of water. Because annual volume typically authorized for irrigation in the area is 4.0 af/acre, the applicant should be given credit for 48.0 af that can be used for wildlife and/or wildlife storage purposes on the transfer. The volume over and above the 4.0 af to fill the reservoir can cover evaporation and seepage losses and flow-through. I recommend that Transfer 70720 be crafted to depict Right 29-2137A as follows:

Wildlife Storage	1/1 to 12/31		48.0 af
Wildlife	4/1 to 10/31	0.24 cfs	48.0 af
Diversion to Storage	4/1 to 10/31	0.24 cfs	
Total		0.24 cfs	48.0 af

Right 29-2137A should also carry the following conditions:

This right authorizes the diversion of an annual total of 48.0 af to be used for the initial filling of the reservoir, for the replacement of losses caused by seepage and evaporation from the reservoir and the artificial stream, for replacement of losses caused by transpiration from riparian vegetation, and for the flow of water through the reservoir.

The reservoir established by the storage of water under this right shall not exceed a total capacity of 4.0 acre-feet or a total surface area of 0.4 acres.

The prior use of water under Right 29-2137A shall be abandoned and the right holder shall accomplish the change authorized by Transfer 70720 within one (1) year of the date of this approval.

Application for Permit 29-13648 proposes the diversion of 2.00 cfs from the Portneuf River for wildlife purposes. The water is to be directed through the reservoir created under Right 29-2137A in accordance with Transfer 70720. Permit 29-13648 will not include wildlife storage for three reasons. First, Right 29-2137A will authorize the diversion and storage of water in the reservoir. Second, even without Right 29-2137A, the diversion rate of 2.0 cfs is sufficient to fill the reservoir in less than 24 hours. Third, in the remote chance that Right 29-2137A is

MICROFILMED

Memo RE: Configuration of Rights 29-2137A and 29-13648

March 11, 2004

Page 2

insufficient to cover the seepage losses associated with the reservoir as well as the initial fill and the evaporation losses and water diverted under 29-13648 is lost to seepage, the reservoir is so close to the Portneuf River that seepage water will return to the river almost immediately, thus having the same effect as if the water flowed straight through the reservoir and back into the river on the surface.

Permit 29-13648 should carry the following condition:

Use of water under this right shall be non-consumptive. Evaporation losses from the reservoir and artificial stream and transpiration losses from the surrounding riparian vegetation shall be attributed to Right 29-2137A.

Comment Report

29-13648

1. kwalker 10/16/2003 Use of Water

Comment: In review of this application I noticed that the uses had been changed when advertising occurred. The applicant filed for wildlife storage and diversion to storage. The pond under this application would fill in 9.7 hours with the rate applied for so a storage parameter is probably not necessary. Recommend permitting for wildlife use as regional office determined.

2. kwalker 10/27/2003 Permit Review

Comment: I obtained a copy of transfer 70720 which has been filed by IDF&G and appears to mitigate the use under this application. That transfer proposes to dry up 12 acres of irrigation for use in the wildlife pond. Drying up 12 acres at 4.0 afa would allow 48 acre feet to be applied to mitigation if needed for this permit.

MICROFILMED
JUN 02 2004