

CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701

Public Works Department **Water Division**

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MEMO

To: Mayor Kooiker

From: John Wagner, Water Superintendent

Date: December 2, 2011

Re: Water Right Explanation for 12/5/2011 Council Meeting

The water right listed on the Council agenda item #11 has a priority date of May 3, 1880. This water right is #33 in priority on a list of 102 water rights for Rapid Creek. The most senior water right on Rapid Creek has a priority date of January 1, 1877.

In the next few months, we will be going through the process with the State Water Rights office to move the diversion point for this water right from the Water Reclamation Facility upstream to our water intake points (Jackson Springs, Meadowbrook, Water Plant, etc.). This water right is for 1.73 cubic feet per second (cfs). One cfs equals 646,272 gallons per day. 1.73 cfs would then be equal to 1,118,050 gallons of water per day. The water, which is considered "natural flow water", would not have to be ordered out of Pactola for the City's use during the irrigation season. In other words, utilizing natural flow water eases the demand for water out of the Pactola/Deerfield reservoir system.

This transfer permits 274 acre feet of water or roughly 12% of the City's natural flow water rights.

