

TECHNICAL MEMORANDUM

City of Airway Heights – Water Rights Application

Mitigation Plan

General Description of Proposal:

As a result of groundwater contamination the City of Airway Heights water wells are no longer available to supply drinking water to the residents and businesses that the City serves. To address this problem the City is proposing to draw future drinking water from the Spokane Valley/Rathdrum Prairie Aquifer. To accomplish this new water rights will be required within this aquifer.

The Cities current water rights allow water withdrawals from the basalt and paleo-channel aquifers that underlie the City. These aquifers have been determined to be hydraulically connected to the Spokane River. The Spokane River is currently under a minimum flow rule. It is the City's intent to utilize its current water rights to mitigate impacts to flows in the River that result from withdrawals of the new well.

Section B.1 Source of Supply for Proposed Mitigation Water:

Water that has been historically withdrawn from the City of Airway Heights drinking water wells will be used as mitigation water.

Section B.2 Estimated Consumptive Quantity of Water Proposed / Methodology Used to Determine:

The final total annual consumptive use is estimated at 2,328 Acre Feet per Year (Ac. Ft./Yr.), or 758,529,446 gallons per year. This is based on the total available mitigation water. The City currently uses approximately 731,295,000 gallons per year to meet system demands. The most recent draft Comprehensive Water System Plan estimates demands to reach the proposed consumptive quantity of water in 2021.

Section B.3 Description of How Mitigation Offsets Impacts of Proposed Withdrawal:

The Groundwater transport paths associated with the points of withdrawal of the City's groundwater withdrawal points and water rights flowed within the Paleochannel, Wanapum and Grande Ronde Aquifers flow to the Spokane Valley/Rathdrum Prairie Aquifer as described in Section 9 of the attached "Alternative Groundwater Supply Assessment", GeoEngineers, March 1, 2021 (H-G Report). By discontinuing pumping of the City wells, the water that was previously put to consumptive use in the City's water system is and will be available as mitigation water for withdrawals from the SVRP Aquifer and groundwater recharge of the Spokane River.

Section B.4 Description of Measure to Insure Mitigation is Maintained:

This application is only for a portion of the total final available mitigation water available based on the timing that the mitigation water is available. New water rights applications will be submitted in 2025, and 2029 for additional withdrawals as the mitigation water becomes available. This is summarized in the H-G Report in Section 12 and Table 9. As the new water rights are granted the City will relinquish their existing water rights in the Paleochannel, Wanapum and Grande Ronde Aquifers in equal quantities of the new rights, insuring those water rights and associated withdrawals are no longer available.

Section B.5 Agreements between Parties Regarding Mitigation for Impacts:

There are and will not be mitigation agreements. Mitigation will be secured through relinquishment of existing water rights.

Section B.6 Description of Benefits and Costs, Environmental Effects of Water Impoundment or Resource Management Techniques:

Not Applicable.

Section B.7 Increase in Surface Water Supply from Impoundment or Technique:

There will be no increase in surface water supply.

Section B.8 Increase in Groundwater Supply from Impoundment or Technique:

There will be no increase in groundwater supply.

Section B.9 How Non-consumptive Water Returns to Groundwater or Surface Water:

As discussed in the H-G Report the groundwater flows from areas that the City discontinued withdrawals (Mitigation water) reach the areas of impact from the new withdrawal based on travel times in the paleochannel and Grande Ronde Aquifer. These are estimated in Section 12 and are outlined below:

Time Mitigation Water Available	Annual Volume of Mitigation Water Available Acre-Feet per Year
2021 to 2024	1,205.4
2025 to 2029	1,778.5
After 2029	2,328