

## Part D – Continuous Availability and Legal Availability of Source Water Attachment D1

Application question nos. 1 and 2 do not apply to the City of Prescott as it has an existing service area right and is not a private water company.

Application question no. 3 seeks a summary, Table D1 below, for how the demands in Part B, Table B will be met with the various supply types.

Table D1

| Source of Supply  | 100 Year Volume<br>(in acre-feet)   |
|---|---|
| Groundwater <sup>1</sup> :  | 994,734   |
| Groundwater Allowance   | 937,153   |
| Additional Groundwater Allowance Requested  | 46,384  |
| Groundwater Extinguishment Credits  | 9,947   |
| Exempt Wells  | 1,250   |
| Central Arizona Project Water:<br>Direct treatment and delivery   | This is not a supply type available to the City   |
| Stored and Recovered CAP water  | This is not a supply type available to the City   |
| Surface Water <sup>2</sup> :  |   |
| Direct treatment and delivery   | This supply is not available for direct treatment and delivery  |
| Stored and Recovered water (CVID)   | 155,000   |
| Effluent <sup>3</sup> :   |   |
| Direct treatment and delivery (AWS Budget tab, Column AF)   | 209,300   |
| Stored and Recovered water AWS Budget tab, Column AI)   | 306,600   |
| Existing Long-term Storage Account:   | 25,593  |
| Other:  |   |
| 1. Imported Groundwater (Big Chino Water Ranch) - Currently available in the City's 2009 D&O, seeking continuation with new conditions. | 806,740   |
| 2. Surface water (Statement of Claim No. 36-65554) - Will be available subject to completion of Sever and Transfer process              | 37,500  |
| Total 100-yr Volume   | <b>1,691,227</b> without supplies from Other sources<br><b>2,535,467</b> with supplies from Other sources |

<sup>1</sup>For additional information see Part G – Consistency with Management Goal

<sup>2</sup>See **Attachment D1.1** for Reservoir Operations Study

<sup>3</sup>This supply will be partially recovered within the AOI (AP Wellfield) and the remainder from the Chino Wellfield subject to groundwater modeling

Application question no. 4 requests evidence for each supply type for continuous and legal availability in accordance with A.A.C. R12-15-717 and 718.

## Groundwater

**Continuous Availability** – For this supply type, rules state the applicant shall demonstrate that wells of sufficient capacity will be constructed in a timely manner to serve the proposed uses. The City maintains two groundwater pumping locations: Chino Wellfield and Airport Wellfield. Chino Valley Wells 1-5 and Airport Wells 2 and 3 have been identified in previous applications and resulting Decision and Orders of Assured Water Supply. Airport Well 5 commenced pumping and delivery of supplies into the City's potable system in 2021. One additional well in the airport area is planned for construction during the proposed 20-year projection period, which will be identified as Airport Well 6. All wells have their capacity information included in the Physical Availability section of the application (Part C).

For Airport Well 6, adequate delivery, storage, and treatment works are currently available, and will be utilized when this well is drilled and connected to the system. City budgets indicate the well will be designed in FY23 and constructed in FY24. City infrastructure modeling identifies this well to serve existing and future development in Pressure Zone 12 by providing additional water supplies. (Carollo Engineers, 2018 Water and Wastewater Model, February 2020)

**Legal Availability** – For this supply type, rules state applicants within an AMA shall submit evidence of a service area right. The City's Service Area Right No. is 56-003017.0000. The right has remained in good standing with consistent annual reporting since it was assigned.

## Surface Water – CVID IGA

**Continuous Availability** – Adequate storage facilities are available to the City to impound Granite Creek surface water in Watson Lake and Willow Lake Reservoirs, and at the City's Underground Storage Facility to meet the surface water supply and demand of this application, even when it's not available at the point of diversion (Watson Dam). See Facility Permit No. 71-519567.0002; Facility Storage Permit Nos. 73-519567.0002 and 73-528737.0002; and Facility Recovery Well Permit Nos, 74-5615000.0000 and 74-569302.0003. Both the CVID supply and water from Statement of Claim No. 36-65554 (described below) will benefit from these storage facilities. Included with this application is the City's Reservoir Operations Study prepared by Mr. Herb Dishlip to support surface water volumes, **Attachment D1.1**.

**Legal Availability** – This supply is legally available to the City pursuant to the March 27, 1998, Chino Valley Irrigation District (CVID) Intergovernmental Agreement (IGA), identified as City Contract No. 1998-040. This supply has also been included in earlier D&Os and corresponds to ADWR No. ST-98-001 (Director's Supplemental Findings of Fact, Conclusions of Law, Decision and Order). It is represented by Statement of Claim Nos. 36-40234 and 36-102689, and Certificate of Water Rights Nos. 593, 594, and 1674.

## Effluent – Direct treatment and Delivery, and Stored and Recovered

Background – The City’s effluent supplies have been examined closely with the use of the WRMM. This analysis is described in **Attachment D1.2**.

### Direct treatment and delivery

Continuous Availability – The City directly delivers treated effluent to several contract holders as well as to the City-owned public golf course. The overall committed amount is 2,093 AF. The outflow of the City’s wastewater treatment plant is in excess of the daily demand of all these facilities so that seasonal fluctuation in effluent does not interfere with the City’s ability to meet these demands. The City also holds water storage Permit No. 73-528737.0002 which is used to store all excess effluent supply. The City’s Recovery Wells, Permit Nos. 74-5615000.0000 and 74-569302.0003, can be used to recover stored effluent as needed to prevent issues with fluctuation of supply. The City anticipates that additional direct delivery effluent will be used for construction purposes. This is also within the daily output of the City’s wastewater treatment plant. (A.A.C. R12-15-717(E)) None of the above effluent customers use the supplies that are permanently recharged (Prop 400 supplies) and directed to the City’s non-recoverable water storage permit no. 73-519567.0002.

Legal Availability – The City owns and operates all of the wastewater treatment facilities that produce the effluent. The City has the exclusive legal right to use the effluent produced at the City’s wastewater treatment plant and retains dominion and control over all effluent produced. *See Arizona Public Service Co. v. Long*, 160 Ariz. 429, 435, 773 P.2d 988, 995 (1989)

### Effluent – stored and recovered

Continuous Availability – Based on A.A.C. R12-15-717(F), the City holds the following permits for the storage and recovery of this supply:

Facility Permit No. 71-519567.0002;

Facility Storage Permit Nos. 73-519567.0002 and 73-528737.0002;

Facility Recovery Permit Nos, 74-5615000.0000 and 74-569302.0003.

Legal Availability – This effluent is return flow from the City’s Service Area Right and is controlled by the City from the treatment plant to the storage facilities. All annual and long-term storage credits accrue to the City. (A.A.C. R12-15-718(K) and (L))

## Existing Long-term Storage Account

Background – This supply type was examined by the City within the WRMM. The City’s Long-Term Storage Account (LTSA) 70-421123.0000 has been under review by ADWR; a draft balance was provided of 37,447 credits in September 2021. The City has an obligation to the Chino Valley Irrigation District (CVID) and each year usage by the District is

transferred out of the City's LTSA into CVID's LTSA. Of the original 33,000 AF block of effluent credits to CVID, 11,889 credits remain available. Although the City's LTSA account will increase over the 20- year projection period, the City seeking a volume of 255.93 AF (or 25,593 for 100-year volume), 37,447 – 11,889.

Since the LTSA is solely an accounting process, this supply is supported by the continuously and legally available information in the above Effluent stored and recovered section.

## **Other Water – Big Chino Water Ranch and Statement of Claim 36-65554**

### Imported Groundwater -Big Chino Water Ranch

Background - The City received its share of Colorado River supply; however, infrastructure necessary to obtain this water source was not viable. With funds from the sale of the Colorado River supply to the City of Scottsdale, Prescott was able to purchase and invest in the Big Chino Water Ranch (BCWR). Arizona Revised Statute 45-555 (E) allows the City to use this water supply in closer proximity to the community. In 2004, Prescott, in partnership with Prescott Valley, purchased a portion of the JWK Ranch located about 18 miles northwest of Paulden. **Attachment D1.3** The City and Town entered into an intergovernmental agreement, City Contract No. 2004-255, **Attachment D1.4** to work cooperatively to develop a water transmission project. The purpose of the BCWR is to transport groundwater from the BCWR to Prescott's storage facilities in Chino Valley. From there, each community will arrange to bring the water into its separate water distribution system. After the previously mentioned IGA, the engineering plans to develop this water supply commenced, and the delivery infrastructure was to include:

- The BCWR well field and storage reservoirs.
- Pipelines between the BCWR and the City's Chino Valley water production facility (WPF).
- A booster pump station located east of Highway 89 about 7 miles north of the Town of Chino Valley and 23 miles southeast of the BCWR.
- A 5 million gallon (MG) reservoir and pump station at the City's Chino Valley WPF.
- A 24-inch pipeline between the City's Chino Valley WPF and the Town of Prescott Valley's water storage reservoirs located near Glassford Hill.
- A pump station and storage reservoirs located at the City's intermediate pump station site west of the Prescott Airport.

As of 2018, a 5 MG tank has been installed at the City's Water Production Facility. The tank provides additional storage capacity closer to Prescott. The 12,200 gallons per minute (gpm) pump will be installed within 12 months. It will provide reduced transmission pipeline pressures, system redundancy, and enable well water from Zone 12 to be delivered to the remainder of the Prescott distribution system.

In October 2021, a 16-inch diameter, 5,050-foot-long water main from Zone 12 was installed to provide storage to an intermediate pump station west of the Prescott Airport. The two (2) 6 MG storage reservoirs (tanks) and pumps will be installed within 18 months.  
**Attachment D1.5**

After the D&O No. 86-401501.0001 was executed, discussion among Salt River Project, the City, and the Town of Prescott Valley commenced and resulted in the three entities entering what is known as Comprehensive Agreement No. 1, City Contract No. 2013-058. For each of the last eight years, an annual report on the status of the Big Chino Monitoring and Modeling project is presented on the City's website. The most recent publication, dated September 2021, is Comprehensive Agreement No. 1, Eighth Annual Report, FY21 (June 1, 2020 – June 30, 2021), Big Chino Sub-Basin Water Monitoring Project. The reports document the progress of the Monitoring and Modeling Committees and includes data collection to develop an improved groundwater flow model of the sub-basin, installation of monitoring equipment (stream gauges) to establish long-term hydrologic records, and to provide information for future adaptive management approaches.

Currently, Golder Associates is under contract (City Contract No. 2017-246 and amendments) to provide a hydrologic study of the basin in the form of a Modflow model. It is expected to be finished in July 2022.

For these reasons, the City believes that the continued incorporation of this water right into the City's designation portfolio is appropriate. The City acknowledges updated conditions will be necessary in the final Decision & Order.

Continuous Availability – This category of source water is groundwater withdrawn from the Big Chino Subbasin of the Verde River Basin. It will be imported into the Prescott AMA by the City of Prescott. This application seeks to retain the 8,067.4 acre-feet per year of groundwater from the Big Chino subbasin as a future source of supply. The City continues to make progress under its Comprehensive Agreement No. 1, and in its infrastructure planning for this supply.

Legal Availability – This was documented in the December 30, 2009, Modification of a Decision of Assured Water Supply. (A.R.S. §45-555. E)

#### Surface Water – Statement of Claim No. 36-65554

Background - An additional surface water supply being requested for inclusion in the City's Assured Water Supply portfolio for the first time is related to Statement of Claim No. 36-6554. The water right to be included in the current application concerns a portion of the water rights claimed by Granite Dells Ranch under Statement of Claim No. 36-65554, which claim is in the name of Granite Dells Ranch of Yavapai County Arizona, Inc. (herein referred to as Granite Dells Ranch), predecessor in interest to Arizona Eco Development, LLC (Arizona Eco). On September 14, 2021, the City submitted materials associated with this right per an ADWR request at its first Pre-Application meeting. **Attachment D1.6**

ADWR has since advised the City that the Department believes that the request for inclusion of this water is premature. City requests reconsideration of this aspect of the application for the reasons set forth here.

Continuous Availability – This particular quantity of water is being used on the Granite Dells ranch today for irrigation of pasture land. It is currently being and has been for more than the last five years, released by the City of Prescott from Watson Lake and allowed to flow to the ranch under the historic terms and agreements between Arizona Eco's predecessors and CVID. Because the Arizona Eco water right is senior in time to the City's rights, and has been delivered as such by City, the full volume of the right is continuously available today, as it is effectively first priority on the entire Granite Creek stream system. Further, deductions from the supply of Granite Creek available to City under the Department's assured water supply determination of system losses, evaporation and seasonal variations in flow do not affect the volume of water delivered to Granite Dells Ranch, as those losses

have already been accounted for in, and deducted from, the volume of surface water available to the City. Adequate storage facilities, as noted above, are available to the City to store the water for use. Thus, the annual volume of 375 acre-feet should be deemed continuously available to the City. A.A.C. R12-15-717(C)(2).

Legal Availability - Arizona Eco and City entered into a Pre-Annexation and Development Agreement dated July 13, 2021 (Recorded in Yavapai County No. 20210-058844 AG) wherein Arizona Eco agreed, subject to certain conditions precedent, to sever and transfer to City 375 acre-feet of this water right claim for use in the City's municipal water service area and the City, in turn, has agreed to provide water service to the Arizona Eco land.

City Contract No. 2022-011 partially satisfies A.A.C. R21-15-718(E)(1) because it demonstrates that the City will receive the water pursuant to a water right that is appurtenant to the Arizona Eco land and Arizona Eco has no ability to withhold the right or to legally or sever and transfer the water right to anyone other than the City, as long as the conditions precedent in the DA are satisfied. Additionally, the City proposed to obtain this water through a written contract between Arizona Eco and the City pursuant to A.A.C. R12-15-718(I). Pursuant to A.A.C. R12-15-718(E)(3), the 375 acre-feet per year face value of the claim is legally available.

The City believes that conditional incorporation of this water right into the City's designation portfolio at this time is appropriate, because many of the assured water supply elements can be proven today. The City acknowledges that the actual severance and transfer of the right must be accomplished before the right is fully legally available to the City and the volume of water included can actually be used by the City in its service area system. The City is prepared to accept such a condition precedent within the final Decision & Order. But inclusion today would result in less duplicative effort by the City and ADWR, while protecting the value of the water pending the severance and transfer process. Six of the seven assured water supply criteria (physical and continuous availability, consistency with the management plan and goal, financial capability and water quality considerations) can

all be addressed today based on the information contained in this application. While the City's overall water supply is under consideration by the Department, it would be expedient to consider these elements of the Granite Dells Ranch today, leaving only the legal availability under the severance and transfer as a condition, which condition would be under the regulatory approval of the Department in the next few years.