IN THE SUPERIOR COURT OF THE STATE OF ARIZONA IN AND FOR THE COUNTY OF MARICOPA

IN RE THE GENERAL
ADJUDICATION
OF ALL RIGHTS TO USE WATER IN
THE
GILA RIVER SYSTEM AND SOURCE

W-1 (Salt)
W-2 (Verde)
W-3 (Upper Gila)
W-4 (San Pedro)
Consolidated

Contested Case No. W1-11-2664

ORDER

CONTESTED CASE NAME: In re Redfield Canyon Wilderness Area.

HSR INVOLVED: San Pedro River Watershed Hydrographic Survey Report.

DESCRIPTIVE SUMMARY: Due to lack of sufficient evidence on which to base a decree, no federal reserved water rights adjudicated for the Redfield Canyon Wilderness Area.

NUMBER OF PAGES: 15

DATE OF FILING: August 10, 2022

The United States filed claims under state and federal law for water rights in the Redfield Canyon Wilderness Area ("RCWA"). A separate contested case, *In re Redfield Canyon Wilderness Area State Claims*, W1-11- 2665, was initiated to adjudicate the claims based on state

law. This case adjudicates the claims for federal reserved water rights for the RCWA that include claims to instream flow and to water from springs, stockponds, storage tanks, and water pumped from a well.

A. Redfield Canyon Wilderness Area

Congress enacted the Wilderness Act of 1964 ("Act") to establish the National Wilderness Preservation System to be "composed of federally owned areas to be designated by the Congress as wilderness areas". Pub. L. No. 88-577, 78 Stat. 890, codified as amended at 16 USCS §§ 1131 et seq. As defined by the Act, a wilderness area is "[a]n area of undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation." *Id.* at 2(c). Congress passed the Act to protect wilderness areas on federal land and gather and disseminate information regarding their use and enjoyment as a wilderness. *Id.* at 2(a).

On November 28, 1990, Congress passed the Arizona Desert Wilderness Act to designate approximately 6,600 acres of public lands in the Graham and Cochise counties as a wilderness area and a part of the National Wilderness Preservation System.² Pub. L. No. 101-628, §101(a)(24), 104 Stat. 4471 codified as amended at 16 U.S.C. §§1132. All of the land is located in the Redington subwatershed of the San Pedro River. As part of the legislation, Congress expressly reserved an amount of unappropriated water equal to "a quantity sufficient to fulfill the purposes of" the RCWA with a priority date tied to the date of the enactment of the Arizona Desert Wilderness Act. *Id.* at §101(g)(1).

¹ Proposed abstracts of water rights under state law for instream flow and wildlife watering approved by the special master in contested case W1-11-2665 are shown on Attachment A.

² The boundaries of the RCWA shown on the February 1990 Wilderness Area Map include land owned by the State of Arizona. This case is limited to claims for federal reserved water rights for use on land owned by the federal government. May 30, 2015 Minute Entry at p. 2.

On March 28, 1991, the United States, through the Bureau of Land Management ("BLM") filed Statement of Claimant 39-14413 (the "SOC") to claim federal reserved water rights for 3,909.44 acre feet of water per year for instream flow through Redfield Canyon and Swamp Springs Canyon. Trial Exhibit ("Ex.") 8. It also claimed water in thirty-seven springs but did not provide either the location or the quantity claimed for twenty-one of those springs. With respect to other springs, BLM provided a location but did not quantify the amount claimed. The listed water sources also included four stock ponds or storage areas, and one well. Finally, BLM broadly asserted a claim for "all water from sources not inventoried" in the Redfield Canyon Wilderness Area.

The Arizona Department of Water Resources ("ADWR") investigated the United States' claims and prepared Watershed File Report 113-12-009 ("WFR"). Ex. 533 at 28. The only discussion in the WFR that pertains to the SOC addresses the United States' claims for instream flow. The WFR does not cite the SOC as an applicable filing for any potential water right for a stockpond, stock watering, or wildlife watering use. *Id.* In 1995, the United States filed a Notification of Federal Reserved Water Rights with ADWR. Ex. 9. Although this filing lacked information about the quantities claimed for a number of springs, the United States represented:

⁴ One of the storage areas, Redfield Tank, is located on state trust land in section 36 T11S R19E of the Gila and Salt River Base Line and Meridian. *Id.*

³ Two of those springs, Cedar Spring and "Unnamed Spring" are located on state trust land in section 32 T11S R20E of the Gila and Salt River Base Line and Meridian. *See* Order Granting Motion for Partial Summary Judgment in Part and Denying in Part at 3 (March 2, 2017).

The Bureau of Land Management claims water rights for this wilderness area sufficient to maintain all streams, springs, washes, seeps, ponds, lakes and all groundwater at natural flows, levels and conditions, subject only to valid existing water rights having priority dates earlier than the date the wilderness area was established. To the extent quantities of water claimed are known, such quantities will be provided. However, if the amounts are not known, quantities cannot be provided at this time but will be supplied when that information becomes available.

Ex. 9 at 2.

B. Procedural History

More than a decade after the United States filed its Notification of Federal Reserved Water Rights, Special Master Schade directed the United States to file an amended SOC. The United States requested and was granted two years for BLM to conduct a field inventory and quantify the amounts of water from sources within the RCWA. Trial Transcript at 138:9-17 (May 16, 2017) ("Tr,"); Ex. 190 at 2. In 2012, this case was formally initiated. Ex. 681. The first phase of the proceedings involved briefing a set of legal issues. On July 9, 2014, the Special Master began the second, or evidentiary, phase of the case to quantify the claimed water rights.

On January 5, 2015, the United States submitted an expert report prepared by James Fogg, a hydrologist. The report described Mr. Fogg's recommended methodologies for estimating the long-term streamflow in the RCWA. March 12, 2018 Transcript at 15, 23-24. After Mr. Fogg withdrew as a testifying expert witness on October 22, 2015, the United States named Steven Swanson, a hydrologist employed by the BLM, as its expert witness. It did not file any supplemental expert material prepared by Mr. Swanson. In September 2016, approximately nine months after Mr. Swanson became the designated expert, the parties deposed Mr. Swanson. He testified at that deposition that he could not recommend either the flows claimed in the SOC or those identified in Mr. Fogg's expert report as reliable estimates of long term flows in the RCWA. The United States' Statement of Facts and Proposed Conclusions of Law at 4, ¶12 (May 14, 2018).

In 2017, after the expiration of the amended expert disclosure and discovery deadlines, the United States produced quantification documents and spreadsheets from Mr. Swanson that used a methodology to estimate streamflow known as the Moosburner method. Arizona State Land Department's Motion *In Limine* to Exclude Untimely Disclosed Expert Evidence, Exhibit 9 (March 27, 2017).

Prior to trial, the parties filed three motions focused on United States' evidentiary burden to quantify its claim for a federal reserved water right and its efforts to meet that burden. In its motion, the United States argued that the location and the purpose of the RCWA relieved the United States of the evidentiary burden to produce an exact quantity or even an examination of the quantity of water needed for specific natural resources. United States' Motion for Summary Judgment (December 16, 2016). Taking the opposite position, Freeport Minerals Corporation ("Freeport") moved for a partial summary judgment that the United States' failure to produce evidence that numerically quantified flow in any spring precluded a decreed federal reserved water right to those sources. The Arizona State Land Department moved to preclude the untimely evidence produced by the United States to support its claims.

The Court denied the United States' motion for summary judgment because the United States did not meet its evidentiary burden to show that the sustainability of the RCWA depended upon a reservation of all of the water. Again, due an absence of evidence, the Court granted Freeport's motion with respect to twenty-nine of the thirty-seven water sources identified in the SOC that included water sources not on federal land and those water sources constructed or drilled to support livestock. At that point, the claims to be adjudicated were narrowed to water from eight springs and instream flow through Redfield Canyon and Swamp Springs Canyon.

Subsequently, the Court granted ASLD's motion to preclude the newly disclosed expert evidence produced approximately five weeks before the April 24, 2017 trial date. April 12, 2017 Minute Entry at 2. Once trial is set and imminent, prejudice to the objecting parties increases as their ability to prepare for trial decreases. It is unrealistic and unfair to expect the opposing parties to be able to timely respond to the untimely changes of experts and changes in methodologies within weeks of the trial date. Jones v. Buchanan, 177 Ariz. 410, 413 (App. 1993) ("the rules are primarily designed to promote the prompt, thorough investigation and preparation of a case"). After the ruling on ASLD's motion, the United States moved to vacate the trial dates and stay the proceedings "for two years to allow the United States to develop a new proposed quantification consistent with Congress' instructions for the RCWA." The United States Motion to Vacate Trial and Stay Case at 2 (April 24, 2017). The Court had allowed an earlier two-year data collection window some eight years earlier and the case had been in litigation for five years. Given that ample time had been provided to develop the needed evidence and the prejudice that would accrue to the objecting parties by further delay, the Court denied the United States' motion. April 28, 2017 Minute Entry at 2.

On May 16, 2017, the Court held an evidentiary hearing to quantify water rights for one seep and seven remaining springs ("collectively the "Remaining Springs") listed in the SOC that the United States could locate in the RCWA:

Source of Water	Legal Description of Locations							
Deer Seep	Sec	36	T	11	S	R	20	Е
Haseanno Spring	Sec	1	T	12	S	R	20	Е
Lost Trail Spring	Sec	34	T	11	S	R	20	Е
Lower Tio Cruz Spring	Sec	35	T	11	S	R	20	Е
Rim Slope Spring	Sec	36	T	11	S	R	20	E
Swamp Springs Canyon Spring	Sec	34	Т	11	S	R	20	Е
Tio Cruz Spring	Sec	1	T	12	S	R	20	E
Whiskey Spring	Sec	36	T	11	S	R	20	Ε

The United States presented no witnesses at trial; instead, it relied on exhibits to support its claims that the springs exist at the reported locations and that there was water flowing, at least periodically from those springs and seep. Tr. at 4-5. The Arizona State Land Department called John Bodenchuk, the former manager of the water rights section at the Arizona State Land Department, as an expert witness and Freeport called Rich Burtell, a hydrologist, to testify, among other issues, about the accessibility of the Remaining Springs for purposes of data collection. Tr. 17:7-16.

C. Federal Reserved Water Rights

The process to decree a federal reserved water right can begin, but does not end, with a congressional action to reserve a right to appropriable water on federal land. Thereafter, the United States must file, in the words of the controlling statute in this case, "a claim for the quantification of such rights in any present or future appropriate stream adjudication in the courts of the state of Arizona in which the United States is or may be joined and which is conducted in accordance with the McCarran Amendment. (43 U.S. S. 666)." Arizona Wilderness Act at §101(g)(2). In this adjudication, the United States, as the claimant, bears the burden of demonstrating the specific quantity of water sufficient to fulfill the purposes of the reservation of the RCWA. Arizona v. California, 460 U.S. 605, 620 (1983).

A court cannot properly decree a federal reserved water right based on insignificant evidence. *United States v. Alpine Land & Reservoir Co.*, 697 F.2d 851, 859 (9th Cir. 1983). A proper evidentiary record must be created to allow the Court to precisely define the water rights to which the United States is entitled and to alleviate the danger of unfairly prejudicing other water users by decreeing ill-defined or excessive rights to water. Many competing demands vie for the

existing water in Arizona. As recognized by the Court, water in the southwestern United States is scarce and federal reserved water rights can result in reductions in the amount of water available to state and private appropriators. *U. S. v. New Mexico*, 438 U.S. 696, 704 (1978). Remedies that attach to federal reserved water rights can broadly impact other water users. *See Cappaert v. United States*, 426 U.S. 128 (1976). Accordingly, the United States must present evidence that allows the Court to base its decision on a solid factual record and craft a decree with sufficient precision so that when the United States acts to protect or enforce those rights, an appropriately tailored remedy can issue.

To meet its burden, the United States must establish that the source of water for which it asserts a federal reserved water right exists. The United States must prove that the source produces or delivers water. At this juncture, the legal requirements for a federal reserved water right differ markedly from the requirements necessary to establish a water right under state law. A federal reserved water right is a needs-based right, which means that the United States must demonstrate the water demand of those aspects of the RCWA that Congress intended to preserve by its reservation of the land. Finally, the United States must quantify the amount of water from the known source sufficient to meet the demands from that source. In the absence of the requisite proof of each element, a federal reserved water right cannot be properly decreed.

1. Instream Flow in Redfield Canyon and Swamp Spring Canyon

Due to untimely disclosure of experts and methodologies, no expert witness provided testimony at trial upon which to base a decree of federal reserved water rights for instream flow through Redfield Canyon and Swamp Springs Canyon. The United States argues that a federal reserved water right should be decreed with a quantity based on the evidence introduced about the flow in the streams. No decision need be made in this case about the adequacy of the flow data

because evidence of flow alone is not sufficient to support a federal reserved water right. The United States must produce a complete evidentiary record that demonstrates the quantity of water that is sufficient to accomplish the purpose for which the reservation was made. See U. S. v. New Mexico, 438 U.S. 696, 718 (1978).

The United States proposes, in the alternative, that the decree should be issued with the quantity of water listed as "unquantified". The approach urged by the United States to eliminate a quantity from a federal reserved water right would eviscerate the purpose and nature of a water right. A federal reserved water right protects the federal government's use of water. The protection of a legal right requires an effective remedy to enforce the right. The Court created the federal reserved water right doctrine as the basis on which it could provide the United States with a remedy, i.e., an injunction, to protect the use of water for its land. *U. S. v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 703 (1899); *Winters v. U. S.*, 207 U.S. 564 (1908). Given that the remedy is inextricably intertwined with the right, a water right must be defined completely and without ambiguity so that potential remedy can be fashioned to protect the right. The absence of any quantity in a decree would so ill-define the right that no remedy could issue, thereby rendering any federal reserved water right meaningless. *See Wood & Selick v. Compagnie Generale Transatlantique*, 43 F.2d 941, 943 (2d Cir. 1930) ("[A] right without any remedy is a meaningless scholasticism.").

The controlling decisions on federal reserved water rights do not support the creation of a federal reserved water right without a quantity of water to which the right attaches. In *Cappaert v. United States*, 426 U.S. 128 (1976), the United States Supreme Court approved a very specific measurement to quantify the minimal amount of water subject to the right. In *United States v. Walker River Irr. Dist.*, 104 F.2d 334 (9th Cir. 1939) the court considered the United States'

suggested decree setting "the quantity of water for reservation purposes to the amount, not exceeding 150 second feet, which the Government may demand from year to year at the commencement of the season." The Court rejected the proposal that would have allowed the United States to set the quantity of water each year subject only to a maximum amount, and reasoned, in part, that such a decree would "make impossible any intelligent program of farming." Id. at 340. The Court decreed a quantity more precisely defined as "the continuous flow of 26.25 cubic feet of water per second". Id. In its application of federal law, the Arizona Supreme Court found that a precise quantity of water must be determined as part of the adjudication of a federal reserved water right. In re the General Adjudication of All Rights to Use Water in Gila River System and Source, 195 Ariz. 411, 422 (1999). No federal reserved water right can be decreed for the streams in the absence of evidence to support a quantity of water reserved.

2. Remaining Springs

The parties do not dispute that the United States presented sufficient evidence to establish the *existence* of most but not all of the Remaining Springs. Mr. Bodenchuck testified that he observed a pool of stagnant water at the Lower Tio Cruz location rather than stream flow and that at the Rim Slope Spring site he found no water, but found a nearby bedrock exposure with depression in the rock that contained water. Tr. 23:6-24:20, 24:21-26:11, and 42:10-43:5. Freeport submitted a field data sheet for Haseanno Spring that reported pools downstream of the spring but no flow. Ex. 342. The pools of water may indicate, however, the presence of a spring or seep that is not currently flowing. Tr. 157.

The parties did dispute whether the data presented allowed for a proper measurement and characterization of the flow from the Remaining Springs. The United States offered two

measurements separated by sixteen years for the Lost Trial Spring. One data sheet reports flow of 4.0 gallons per minute ("gpm") in 1986 and flow of 2.68 gpm in 2002 based on a single eight-second test. Ex. 303. Data sheets submitted in support of flow for Swamp Springs Canyon Spring reported a 1984 visual estimate of "10+" gpm and a 2002 collection consisting of a single attempt that captured an estimated five percent of the flow from which the contractor recorded a spring discharge of 2.5 gpm. Ex. 305. The United States offered no data collected during the 2009-2011 time period carved out of this case for the purpose of allowing BLM to conduct additional fieldwork to prove its claims.

The United States also offered into evidence Statements of Claim filed by previous owners or lessees of the land included in the RCWA as well as the Statements of Claim amended by BLM. The original Statements of Claim only assert claims to water for livestock watering. Ex. 317, 318, 320, 322, and 324. Amounts claimed for livestock watering are not relevant in this case because the RCWA was reserved as a wilderness area. No part of the purpose of the RCWA included the preservation of grazing sites for cattle. Moreover, leases for livestock grazing were suspended at the time of the reservation. Tr. 104:15-105:13.

The United States offered BLM's Notice of Application to Appropriate Water filed in 1990 for the Tio Cruz Spring claiming water for stock and wildlife watering. Ex. 328. It also submitted the 1996 amendments to the Statements of Claim prepared by BLM that claim annual water use for wildlife as well as for livestock. While these claims may provide evidence that the springs produce flow, they do not contain flow measurements or establish the amount of the natural flow from the spring. None of the documents provides information about the water demands of the riparian vegetation, wildlife or aquatic species in the RWCA, or the amount of water needed from

each of the Remaining Springs that would be sufficient to accomplish the wilderness purposes of the RCWA. Tr. 148:10-149:15.

Based on the limited evidence presented, including the sparse data points and lack of testimony about the springs over time, the Court does not believe that it can reliably characterize the springs. That said, it is not necessary in this case to make a decision about the quality or sufficiency of the data offered. Even assuming the sparse field data presented by the United States for the springs were accurate and adequate to determine spring flow, the United States did not carry its burden of proof that also requires a showing that the claimed amounts are sufficient to fulfill the purposes of the RCWA.

In its Closing Statement, the United States does not argue that the evidence supports any specific quantity of water in the Remaining Springs. Instead, it argues that the federal reserved water rights should be decreed for the Remaining Springs with a quantity of "de minimis". It asserts that the evidence of some flow or at least pooling of water in the springs and the absence of any dispute that wildlife consumes water should suffice for a decreed right because the amounts of water involved do not warrant the cost of the litigation. As support for its position, it references the procedures adopted for claims based on state law that have been adopted in the subwatershed to quantify stock and wildlife watering.

Unlike the state law process, the *de minimis* approach advanced by the United States does not quantify water by a reference to any amount or by any standard. Essentially, its position is a continuation of the argument that the United States is entitled to federal reserved water rights to all of the water in the Remaining Springs to support the purposes of the RCWA. The United States offered no evidence to support its claims that all of the water was required to satisfy the purposes of the RCWA. In fact, the evidence offered could suggest a contrary answer. When

the BLM amended the Statements of Claim for six of the Remaining Springs, not only did it claim water for wildlife, it allocated a majority of the amounts claimed water to livestock. Table 1 lists the amounts and purposes claimed for six of the Remaining Springs. These exhibits demonstrate that historically spring flows primarily supported livestock with less than a third of the streamflow required for wildlife.

Name of Spring	Amount Claimed for Livestock Watering (gallons per annum)	Amount Claimed for Wildlife Watering (gallons per annum)	Percentage of Flow Claimed for Wildlife Use		
Deer Seep	21,900	9,380	29%		
Haseanno Spring	21,900	9,380	29%		
Lower Tio Cruz Spring	21,900	12,000	35%		
Rim Slope Spring	21,900	9,380	29%		
Tio Cruz Spring	29,394	4,888	14%		
Whiskey Spring 21,900		9,380	29%		

Table 1.

Source of Information: Ex. 317, 318, 320, 322, 324, 328, and 324.

The United States has not satisfied its burden of proof to establish a quantity of water sufficient to accomplish the purposes for which the RCWA was reserved. Accordingly, no federal reserved water rights are decreed for the RCWA.

The Honorable Mark H. Brain

Judge of the Superior Court

Attachment A

Abstracts approved by the special master based on state law claims in Contested Case No. W1-11-2665

Type	Abstract Number	Quantity of Use	
Wildlife/Instream	113-13-007-WI.001	1805.7 acre feet annually	
Wildlife/Instream	113-13-007-WI.002	1159.5 acre feet annually	
Wildlife/Instream	113-13-007-WI.003	47.6 acre feet annually	
Stock Pond	113-09-016-SP001	Not to exceed (<) 4 acre feet annually with continuous fill.	
Stock Pond	113-09-016-SP002	Not to exceed (<) 4 acre feet annually with continuous fill.	
Stock Watering	113-09-016-SW021	Not to exceed (<) 4 acre feet annually with continuous fill.	
Stock Watering	113-09-016-SW001	Reasonable Use	
Stock Watering	113-09-016-SW002	Reasonable Use	
Stock Watering	113-09-016-SW003	Reasonable Use	
Stock Watering	113-09-016-SW004	Reasonable Use	
Stock Watering	113-09-016-SW005	Reasonable Use	
Stock Watering	113-09-016-SW006	Reasonable Use	
Stock Watering	113-09-016-SW007	Reasonable Use	
Stock Watering	113-09-016-SW008	Reasonable Use	
Stock Watering	113-09-016-SW009	Reasonable Use	
Stock Watering	113-09-016-SW011	Reasonable Use	
Stock Watering	113-09-016-SW012	Reasonable Use	
Stock Watering	113-09-016-SW014	Reasonable Use	
Stock Watering	113-09-016-SW015	Reasonable Use	
Stock Watering	113-09-016-SW016	Reasonable Use	
Stock Watering	113-09-016-SW017	Reasonable Use	
Stock Watering	113-09-016-SW018	Reasonable Use	
Stock Watering	113-09-016-SW019	Reasonable Use	
Stock Watering	113-09-016-SW20	Reasonable Use	
Stock Pond	113-12-005-SP001	Not to exceed (≤) 4 acre feet annually with continuous fill.	
Stock Watering	113-12-005-SW001	Reasonable Use	
Stock Watering	113-12-005-SW002	Reasonable Use	
Stock Watering	113-12-005-SW003	Reasonable Use	
Stock Watering	113-12-008-SW001	Reasonable Use	
Stock Watering	113-12-005-SW023	Reasonable Use	
Stock Watering	113-12-005-SW035	Reasonable Use	
Stock Watering	113-13-007-SW001	Reasonable Use	
Stock Watering	113-13-007-SW002	Reasonable Use	
Stock Watering	113-13-007-SW003	Reasonable Use	
Stock Watering	113-13-007-SW004	Reasonable Use	
Stock Watering	113-13-007-SW005	Reasonable Use	
Stock Watering	113-13-007-SW006	Reasonable Use	
Stock Watering	113-13-007-SW009	Reasonable Use	
Stock Watering	113-13-007-SW012	Reasonable Use	
Stock Watering	113-13-007-SW017	Reasonable Use	
Stock Watering	113-13-007-SW017	Reasonable Use	
Stock Watering	113-13-007-SW019	Reasonable Use	