

6146 N. Canyon Road
Benson, AZ 85602
December 13, 2016

Cochise County Board of Supervisors
1415 Melody Lane
Building G
Bisbee, AZ 85603

Dear Mr. Searle, Mr. Call, and Ms. English:

Recently Supervisor Pat Call has made allegations regarding the federal water right being claimed by the BLM for the SPRNCA without offering any understanding of the value of the water right that the federal government is claiming. His comments were very clearly intended to motivate the public to act against the BLM. I wish to address these assertions to bring a deeper and clearer understanding to this issue. Mr. Call's comments were first referenced in a November 23, 2016 article in the *Sierra Vista Herald* (SVH) entitled "Federal water rights threaten local wells" and were echoed in a follow-up SVH editorial on November 26, 2016 entitled "Water rights case has huge consequences." Mr. Call has since reiterated his claims in a message sent to his Constant Contact list on December 5, 2016.

Both Mr. Call and the *Sierra Vista Herald* have raised the specter with the public that when the Gila River Adjudication Court approves a specific number of acre-feet for the SPRNCA's federal water right that the BLM will act to block well use by landowners who drilled their wells after 1988, forcing them from their property. The *Sierra Vista Herald* made this claim directly in its headline of November 23 in reporting on Mr. Call's deposition before the adjudication court. The BLM has never used the term will, and Mr. Call's use of it is misleading and untruthful. The BLM may have stated that the law could allow them to challenge this use if necessary. The BLM would likely not have commented on the likelihood of that either, which appears remote given the small quantity of water that the 3,000 post-1988 users are using (600-700 acre-feet/year if domestic household use is considered).

The BLM is not "going to court" in the next year to establish their Federal Reserve water rights as Mr. Call says but has been called before the Gila River adjudication court (Maricopa Superior Court) as one of the first entities to have its water right considered in a proceeding that must eventually consider the rights of *all* users. As part of the adjudication process, the BLM must quantify the amount of water it believes it has a right to for the SPRNCA, and the Department of Justice must present the analyses and data to the court to support that. The court then must decide, based upon that evidence, whether the amount claimed is reasonable and acceptable.

In addition, anyone who has drilled a well in the upper San Pedro basin after 1988 should have been aware that the federal water right claimed for the SPRNCA supersedes their own right and that the BLM has a prior right to the water if necessary. In the 28 years since the SPRNCA was created, however, the BLM has not challenged the rights of others despite a very lengthy and severe drought that has significantly affected the river. Throughout this time the BLM has had the right to challenge this use. That right does not depend upon an adjudication decision. This

lack of action to shut down newer wells in a very difficult time casts further doubt on Supervisor Call's claim that the BLM *will* do so once the court approves a specific number of acre-feet of water for the SPRNCA.

A Review of the Arizona-Idaho Conservation Act of 1988

For reference, I first want to review the critical text regarding the BLM's water right from the Arizona-Idaho Conservation Act of 1988, which established the SPRNCA. The Act mandates the following:

(d) WATER RIGHTS.-Congress reserves for the purposes of this reservation, a quantity of water sufficient to fulfill the purposes of the San Pedro Riparian National Conservation Area created by this title. The priority date of such reserve rights shall be the date of enactment of this title. *The Secretary shall file a claim for the quantification of such rights in an appropriate stream adjudication* (emphasis added).

The emphasized statement is what the BLM is currently seeking to fulfill with the Maricopa Superior Court, which oversees the Gila River Adjudication.

The purposes of the SPRNCA may be defined as follows:

ESTABLISHMENT.-In order to protect the riparian 16 USC 460xx. area and the aquatic, wildlife, archeological, paleontological, scientific, cultural, educational, and recreational resources of the public lands surrounding the San Pedro River in Cochise County, Arizona, there is hereby established the San Pedro Riparian National Conservation Area (hereafter in this title referred to as the "conservation area").

The intent of Congress in establishing this federal water right is to preserve the biological resources and integrity of the riparian area for which the San Pedro Riparian National Conservation Area was established. Not tying a water right to the SPRNCA could lead to the loss of the biological values that are the basis of making such a designation. Both Senator McCain and Representative Kolbe strongly supported this legislation, and President Reagan signed it into law.

What the BLM's Acre-Foot Request Actually Means

What is absent in Supervisor Call's statements and those of the *Sierra Vista Herald* about this DOJ action is an understanding of what the 44,000 acre-foot figure means and how it was derived. This lack of understanding has led to alarmist and misleading statements about the BLM's intentions. The value that the BLM claims is not arbitrary but highly quantified through years of data gathering and analysis, including decades of stream flow data. I do not have access to the specific data that the BLM has presented to the court and must therefore utilize preexisting reports to explain this value. The following discussion is based upon ADWR's 2012 report, "Report concerning federal reserved water rights claims for the SPRNCA," available from <http://www.azwater.gov/AzDWR/SurfaceWater/Adjudications/>. This summarizes the BLM's Third Amended Statement of Claimant submitted to the adjudication court in April 2011.

The 44,000 acre-feet figure is divided into three parts: (1) stream-gage data to quantify both the yearly volume of San Pedro River base flow and storm runoff, (2) measurements of point water sources such as springs, seeps, ponds and preexisting wells, and (3) groundwater-use by vegetation.

Yearly in-stream water volume varies with location, and it is unclear which values the BLM is using in adjudication court proceedings. The values recorded for the Charleston gage, for example, break down the two components of flow into 11,150 acre-feet per year for base flow and 16,850 acre-feet per year for storm flow. The critical value here is base flow, which is derived from groundwater held in bank storage and is the critical amount of water needed to support vegetation and wildlife. Most of the 16,850 acre-feet of water from storm flow passes through the SPRNCA and is not effectively used. It remains a water resource for users and is not removed from upstream or downstream use. This water would not be stored or diverted except into the recharge basins established in the Sierra Vista area. Base flow itself falls into this category of non-consumptive use, as much of that water will remain to be utilized downstream by others or be recharged. This use is very different from that of a development or Fort Huachuca, and one must consider this difference in viewing the BLM's claim.

Category 2 measurements of point sources total 12,700 acre-feet per year. However, 11,150 acre-feet of this value is from 28 preexisting irrigation wells that the BLM inherited and has retired to invigorate flow along the river. This value is derived from prior production tests of these wells and represents a preexisting water right established by pre-SPRNCA landowners. While the total water right that the BLM has requested includes this amount, this water would not be used except in emergencies because its use would potentially lower the water table and damage riparian vegetation. Thus this water right does not represent a consumptive use of water either.

The last component of the water-rights claim is the amount of groundwater required to maintain the riparian vegetation of the SPRNCA, most importantly the cottonwood-gallery forest and the mesquite forest. This use is perhaps the most critical. This value comes to ~12,735 acre-feet/year and was determined through detailed and lengthy measurements by the Agricultural Research Service of the USDA and the U.S. Geological Survey. This water is essential to maintaining the biological integrity of the SPRNCA, as mandated by the Arizona-Idaho Conservation Act, and is a critical element of the BLM's request. This Act of Congress takes precedence over numerous elements of state water law.

The critical values to consider here in assessing the quantified SPRNCA water right are the 11,150 acre-feet/year required for base flow (this varies at different places along the river) and the 12,735 acre-feet/year needed to sustain riparian vegetation. The total of these values comes to approximately 24,000 acre-feet/year. This number represents the fundamental quantity of water needed to maintain the integrity of the SPRNCA as mandated by Congress. The total acre-feet of water derived by summing the above three categories is 53,475. This compares with the 44,000 acre-feet/year reported by Mr. Call. This lower value would indicate that the BLM has reduced its claim by up to 10,000 acre-feet/year before having the Department of Justice submit that claim to the adjudication court for consideration. One would need access to the determination presented to the court to know which categories of water use have been modified.

For comparison, the now-closed BHP Billiton San Manuel Mine in the Lower San Pedro River watershed maintains an annual groundwater consumptive right of 20,000 acre-feet/year and can use that at any time for development. ASARCO also has a similar-sized water right in the lower San Pedro basin. ASARCO pumps this water down the San Pedro and Gila Rivers to maintain its mining operations at Hayden. Prior to the reduction of mining activity in the lower San Pedro area, these two mines were using more than 50,000 acre-feet of groundwater per year for their operations. This represents a *consumptive* use of water, whereas the majority of the SPRNCA's claimed water right is *non-consumptive*. This is a key distinction.

The Relevance of Cochise County Water Conservation Efforts

Lastly I want to address the statements expressed by the *Sierra Vista Herald* in its November 26 opinion piece ("Water Rights case has huge consequences") that in presenting the BLM's claim the Department of Justice should honor the water-saving efforts undertaken by the city, county and others through recharge basins and low-water-use fixtures. This notion misunderstands the purpose of the ongoing proceedings and the value being quantified. The purpose of these proceedings is to determine the specific amount of water needed to fulfill the right granted by the Arizona-Idaho Conservation Act. That right was established to maintain the biological integrity of the SPRNCA at or near the levels existing when the SPRNCA was created.

The water-use value that the BLM and ADWR have determined is fundamentally the quantity of water needed to maintain the SPRNCA's annual water budget. The quantity of water that the DOJ is asking the court to approve for the SPRNCA has been established through years of data gathering and analysis by the BLM and ADWR. It is a fixed number independent of water scarcity or surplus, of human water conservation or overuse. The water that Sierra Vista and Cochise County may be saving through these other efforts has no bearing on this calculated number and is not relevant to what the court must consider in addressing the BLM's claim.

The largest of these conservation efforts, the recharge basins, is specifically meant to improve base flow along critical portions of the river, an essential SPRNCA objective. Increasing recharge helps meet the specific value that the BLM has calculated for base-flow component of its total water right, thereby diminishing the need to claim other water to meet this need. This relieves the water stress on SPRNCA and gives those individuals and enterprises who established their water use along the river after 1988 a greater margin of water security. These water-saving measures make it less likely that the BLM would ever call into question the water use of these other parties. It is important to view the purpose of these recharge basins in this complementary way. As stated above, these water-saving measures are unrelated to the water budget calculated for the SPRNCA and the value that the court approves.

Conclusions

Supervisor Call and the *Sierra Vista Herald* have made impassioned calls for the legal involvement of Cochise County and Sierra Vista in adjudication proceedings to oppose the BLM's request. Such a call for action is based upon a lack of an in-depth understanding of how the BLM's request is derived and the legal requirements that bound the BLM. "Drawing the line" on federal water rights, as the *Sierra Vista Herald* demands, fundamentally requires

overturning or modifying an Act of Congress and the mandates of that Act. This cannot readily be done by legally challenging the value of the water right that the BLM has calculated. That value was determined using well-constrained parameters agreed upon by ADWR and the BLM.

The proposed value of the SPRNCA's federal water right is based on years of scientific investigations and quantitative water measurements along the river. To overturn the amount of water that the BLM states it has a right to requires finding flaws in the methodology and data used to determine the SPRNCA's water budget. These methods and data were derived through consultation with ADWR, which has been very watchful regarding these procedures and has provided substantial guidance. The county and city are in a very weak position to question these fundamental data and procedures. The county would not only be questioning the BLM's integrity in determining this value but ADWR's.

The court's consideration of the value of the water right the BLM has determined does not establish that right. That right is already fully guaranteed by the Arizona-Idaho Conservation Act. The Act itself is the true source of Cochise County's long term difficulty, not the BLM's determination, which is conservative given SPRNCA's size and the parameters that must be considered. The volume of water required to fulfill the legal requirements of that Act will be very large no matter who measures it or how it is measured. The court's action cannot revoke this right – the only action that could genuinely satisfy the county and city – and any adjustment by the court of the amount of water the BLM is allowed to claim would likely be small if considered. The claims by Supervisor Call and the *Sierra Vista Herald* reflect a lack of understanding of what Congress has required the BLM to do and the clearly defined parameters that the BLM must consider to determine the value of the SPRNCA's water right.

Sincerely,



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cc: Mr. James Vlahovich, Cochise County Administrator
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