## IN THE SUPERIOR COURT OF THE STATE OF ARIZONA COURT IN AND FOR THE COUNTY OF APACHE NO. DOCKETED

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

#### RECOMMENDED FORM FOR OBJECTIONS TO THE

Hydrographic Survey Report for the Silver Creek Watershed

	MAY	28	199	1	
No. AT.	6417	C'CLOC	<b>K</b> _	A	11.
	RICHARD	D. LUI	KE,	, DE	Y

Please file a separate objection for each watershed file report. Objections to information contained in Volumes 1 & 2 can be stated on one objection form. Objections must be written. Use of this form is suggested. Objections must be received on or before May 29, 1991.

This Objection is directed to Watershed File Report No.

033- 56 - ACC - 001 (please insert no.)

#### **OBJECTOR INFORMATION**

Objector's Name:

United States of America

Objector's Address:

P.O. Box 607, Albuquerque, New Mexico 87103

Objector's Telephone No.:

(505) 766 - 1060

Objector's Watershed File Report No. (if the Objector's claimed water rights are located within the Silver

Creek Watershed):

033- 42 - 088

Or Objector's Statement of Claimant No. (if the Objector's claimed water rights are located outside the Silver Creek Watershed):

39-

#### STATEMENT OF THE OBJECTION

The following are the main categories of the typical watershed file report (not all watershed file reports have all these categories). Please check the category(ies) of the watershed file report to which you object, and state the reason for the objection on the following page.

#### Please check appropriate box(es

- [] 1. I object to the description of Land Ownership [xx] 2. I object to the description of Applicable Filings and Decrees
- [xx] 3. I object to the description of DWR's Analysis of Filings and Decrees
- I object to the description of the Diversions for the claimed water right(s) [xx] 4.
- [xx] 5. I object to the description of the Uses for the claimed water right(s)
- [xx] 6. I object to the description of Reservoirs used for the claimed water right(s)
- [] 7. I object to the description of Shared Uses & Diversions for the claimed water right(s)
- I object to the PWR (Potential Water Right) Summary of the claimed water right(s) [xx] 8.
- [xx] 9. I object to the description of Quantities of Use for the claimed water right(s)
- [ ] 10. I object to the Explanation provided for the claimed water right(s)
- [] 11. Other Objections (please state volume number, page number and line number for each objection)

The reason for my objection is as follows (please number your objections to correspond to the boxes checked and please attach supporting information and additional pages as necessary):

CATEGORY

SEE ATTACHED SHEET(S)

I hereby make this Objection on this 28 day of	May , 199 1		
	FOR: United States of America (If in a representative capacity)		
I declare under penalty of perjury that I am a claimant in this	eted by Objector)		
SUBSCRIBED AND SWORN to before me this 28 day of May, 1991.			
{SEAL}	Notary Public for the State of New Mexico  Residing at Albuquerque  My commission expires /0/3/93		
	ATE OF MAILING other Claimant's watershed file report. Does not		

(Must be completed if you object to another Claimant's watershed file report. Does not need to be completed if you file an Objection to your own watershed file report or to information contained in Volumes 1 or 2 of the Hydrographic Survey Report.)

I hereby certify that a copy of the foregoing Objection was served upon the following Claimant(s) by mailing true and correct copies thereof on the 28th day of May, 1991, postage prepaid and addressed as follows:

03356ACC 001

ELLIOT, NORMA LARSON P.O. BOX 551 LAKESIDE AZ 85929

(Signature of Objector or person mailing in Objector's behalf)

Objections must be filed with the Clerk of the Superior Court in and for Apache County, Apache County Courthouse, P.O. Box 365, St. Johns, AZ 85936, on or before May 29, 1991. This means that the Objection must be received at the Clerk's office no later than 5:00 p.m. on Wednesday, May 29, 1991.

#### WFR #:

#### 033-56-ACC-001

2. The Statement of Claimant 39-80638 is based on an unprocessed water right application. Accordingly, there is no legal basis for this claim.

There is no distinct breakout between storage rights and direct flow rights relative to priority date, place of use and quantity of use.

The claimant has an adjudication filing for only 0.5 AFA, which should be the limit of any water right.

- Storage rights must be separated out from direct flow rights.
- 4. The claimed source of supply, is not supported by historic use.
- 5. This irrigation use was developed without a valid water right of record.
- 6. The storage facility was built without a valid water right of record.
- 8. Claim based on only a water right application (33-87274). Claim is invalid on this basis.

Priority dates should be no earlier than the date of application for a water right or historic use, whichever is later.

9. The average efficient water duty of 5.5 acre-ft/acre estimated by ADWR is unreasonable. The maximum annual water duty estimated for individual landowner by ADWR is too high. Water duty should be 2.9 acre-ft/acre.

6417-033-0518

## IN THE SUPERIOR COURT OF THE STATE OF ARIZONA IN AND FOR THE COUNTY OF APACHE

IN RE THE GENERAL ADJUDICATION OF ALL RIGHT TO USE WATER IN THE LITTLE COLORADO RIVER SYSTEM AND SOURCE

No. 6417

APACHE CO. SUPERIOR COURT FILED NO. \_\_\_\_\_\_\_ DOCKETED Z

MAY 28 1991

# RECOMMENDED FORM FOR OBJECTIONS TO THE

Hydrographic Survey Report for the Silver Creek Watershed

RICHARD D. LUPKE, CLERK
DEPUTY

Please file a separate objection for each watershed file report. Objections to information contained in Volumes 1 & 2 can be stated on one objection form. Objections must be written. Use of this form is suggested. Objections must be received on or before May 29, 1991.

This objection is directed to Watershed File Re	eport No. 033- <u>56-ACC -001</u> (Please insert no.)					
OBJECTOR INFORMATION						
Objector's Name: Objector's Address:	Salt River Project Post Office Box 52025 Phoenix Arizona 85072-2025					
Objector's Telephone No: Objector's Watershed File Report No. (If the Objected):  033	(602) 236-2210 ector's claimed water rights are located within the Silver Creek Water-					
Objector's Telephone No: Objector's Watershed File Report No. (If the Obje	Phoenix, Arizona 85072-2025 (602) 236-2210					

Or Objector's Statement of Claimant No. (if the Objector's claimed water rights are located outside the Silver Creek Watershed):

39-<u>82193 - 82206</u> 39-<u>87343</u>

#### STATEMENT OF THE OBJECTION

The following are the main categories of the typical watershed file report (not all watershed file reports have all these categories). Please check the category(ies) of the watershed file report to which you object, and state the reason for the objection on the following page.

- 1. I object to the description of LAND OWNERSHIP
- 2. I object to the description of APPLICABLE FILINGS AND DECREES
- 3. I object to the description of DWR's ANALYSIS OF FILINGS AND DECREES
- 4. I object to the description of the DIVERSIONS for the claimed water right(s)
- 5. I object to the description of the USES for the claimed water right(s)
- 6. I object to the description of RESERVOIRS used for the claimed water right(s)
- 7. I object to the description of SHARED USES & DIVERSIONS for the claimed water right(s)
- 8. I object to the PWR (POTENTIAL WATER RIGHT) SUMMARY of the claimed water right(s)
- X 9. I object to the description of the QUANTITIES OF USE for the claimed water right(s)
  - 10. I object to the EXPLANATION provided for the claimed water right(s)
  - 11. Other Objections (please state volume number, page number and line number for each objection)

# Watershed File Report: 033-56-ACC -001 ELLIOT, NORMA LARSON

PAGE: 2

My reason for my objection is as follows (please number please attach supporting information and additional page	r your objections to correspond to the lines listed above; ges as necessary).			
SEE ATTACHMENT 1				
I hereby make this objection on this <u>14th</u> day of <u>May</u> , 1	David C. Roberts			
	Signature of Objector			
	FOR: Salt River Project (if in a representative capacity)			
COUNTY OF <u>Maricopa</u> (Must be I declare under penalty of perjury that I am a claimant Objection and know the contents thereof; and that the in	completed by Objector) in this proceeding; that I have read the contents of the foregoing information contained in the foregoing Objection is true based on the Objection which are indicated as being known to me on information be true.			
	Signature of Objector			
SUBSCRIBED AND SWORN	to before me this 14th day of May, 1991.			
OFFICIAL SEAL MARGOLET A. SULLIVAN	Margaret a Sullivan			
MORRIODPA COUNTY	Notary Public for the State of <u>Arizona</u> Residing at <u>Maricopa County</u>			
My Comm. Expires Sept. 17, 1993	My commission expires			
CERTIFICATE OF MAILING				
Does not need to be comple	object to another Claimant's watershed file report.  ted if you file an Objection to your own watershed ion contained in Volumes 1 or 2 of the Hydrographic Survey			
I hereby certify that a copy of the foregoing Objection was served upon the following Claimant(s) by mailing true and correct copies thereof on the 28th day of May, 1991 postage prepaid and addressed as follows:  Name: ELLIOT, NORMA LARSON  Address: P.O. BOX 551				
LAKESIDE, AZ 85929				
	David C. Rlota			

Objections must be filed with the Clerk of the Superior Court in and for Apache County, Apache County Courthouse, P.O. Box 365, St. Johns, AZ 85936, on or before May 29, 1991. This means that the Objection must be received at the Clerk's office no later than 5:00 p.m. on Wednesday, May 29, 1991.

\_\_\_\_\_\_

(Signature of Objector or person mailing in Objector's behalf)

#### ATTACHMENT 1

#### WFR CATEGORY 9 - QUANTITIES OF USE

The Salt River Project objects to the lack of specificity of the quantity of use assigned to this storage Potential Water Right (PWR). The Watershed File Report fails to indicate whether the volumetric quantity assigned to this PWR implies a continuous fill, one fill per year, or one fill only. Unless evidence from previous filings, or other sufficient historic evidence, indicates a clear intention to the contrary, the quantity of use assigned to a storage PWR should be sufficient to permit continuous filling of the storage reservoir. (This objection applies to: SR001.)

\* \* \* \*

The Salt River Project objects to the quantities of use assigned to this Potential Water Right (PWR). The methods used by DWR for determining quantities of use for agricultural, recreational and other irrigation PWRs are inconsistent with the Arizona doctrine of prior appropriation; these methods are also technically inaccurate. For an additional discussion of the problems associated with DWR's methods of quantification for these types of PWRs, see the Salt River Project's Volume 1 objections to these methods, a copy of which is attached to this objection and incorporated herein by reference. (This objection applies to: OT001.)

\* \* \* \*

The Salt River Project objects to the failure of DWR to calculate a diversion rate for this Potential Water Right (PWR). All PWRs assigned a point or points of diversion should be assigned a separate diversion rate for each point of diversion. Diversion rates should be calculated at the point of diversion and should include transportation losses from the point of diversion to the place of use. (This objection applies to: OT001.)

## EXCERPT FROM SALT RIVER PROJECT OBJECTIONS TO VOLUME 1 OF THE SILVER CREEK HSR

#### **IRRIGATION QUANTITY ESTIMATES**

(page numbers refer to Volume 1)

#### Introduction

The Salt River Project objects to DWR's estimation methods and results for irrigation water quantities for the following reasons:

First, there are several technical errors in DWR's calculation of crop consumptive use including estimates of relative humidity, wind, evapotranspiration (ET) for pine trees, pasture peak use and effective precipitation. Although these problems are relatively small, the effect of these errors is magnified since consumptive use is divided by irrigation efficiency to calculate the water duty for irrigated land.

Second, the efficiency estimates used by DWR are inappropriate for the reasons set forth below in that section of the objections. Again, the effect of even a small error in efficiency estimates can result in a larger error in the resulting water duty.

Third, the irrigation water duties computed by DWR are inaccurate as a result of the technical errors in consumptive use and efficiency estimates discussed above and, further, are inconsistent with Arizona water law. The "maximum annual" and "average efficient" quantification methods employed by DWR do not properly estimate actual historic beneficial use as required by statute.

These objections are more fully set forth in the following sections.

## Relative Humidity

### p. A-4, lines 23-25

The Salt River Project objects to DWR's failure to specify whether it used minimum relative humidity as specified in Food and Agricultural Organization (FAO) Paper 24. The Salt River Project also objects to DWR's use of relative humidity from Winslow when data for the Show Low, Snowflake and Snowflake 15W weather stations can be converted to mean minimum relative humidity through the use of the 6AM and 6PM estimates adjusted with the assistance of "Useful Arizona Climatic Graphs and Data, Series #7."

#### Wind

#### p. A-4, lines 26-32

The Salt River Project object's to DWR's use of wind travel data at a height of 2 feet (Snowflake #15) and windspeed data at a height of 10 meters (Winslow) without converting to a 2 meter height as required by FAO Paper 24.1

$$WT_2 = WR_{.61}(2/0.61)^{.2} = 1.27 WT_{.61}$$

The windspeed data for Winslow can be adjusted by use of the formula:

$$\hat{W}_2 = W_{10}(2/10)^2 = 0.72 W_{10}$$

<sup>&</sup>lt;sup>1</sup>The wind travel data for Snowflake can be adjusted by use of the formula:

#### **Evapotranspiration for Pine Trees**

### p. A-6, Table A-2; p. A-10, Table A-4

The Salt River Project objects to DWR's reporting of inexplicably high evapotranspiration (consumptive use) values for pine trees as compared to all other crops. DWR has reported Christmas tree or pine tree consumptive use in its various management plans for Active Management Areas at about one-half of the value shown in Table A-2.

#### Pasture Peak Use

### p. A-5, lines 30-31; p. A-7, Fig. A-1; p. A-8, Fig. A-2

The Salt River Project objects to DWR's reporting of pasture peak use that exceeds corn peak use. Corn peak use should be higher than pasture since it is taller and has a crop coefficient (kc) that is higher than that of pasture at peak use.

## **Effective Precipitation**

#### p. A-9, lines 1-31

The Salt River Project objects to DWR's failure to report how it estimates effective precipitation during the non-growing season. The Salt River Project also objects to the use of a 3-inch rather than 4-inch depth of irrigation water application in its estimation of growing season effective precipitation for alfalfa. Furthermore, the Salt River Project objects to DWR's use of a 50 percent probability of precipitation, which results in an inadequate supply in one-half of the years. A 50 percent probability indicates that average effective precipitation is subtracted from crop consumptive use when DWR calculates the irrigation requirement. This means that in years of below-average precipitation, irrigation users would be unable to replace the lack of precipitation with additional irrigation water. The amount of precipitation that is available 80 percent of the time for field crops and 90 percent of the time for orchards and vegetables is appropriate.

#### **Efficiency Estimates**

## pp. A-10 through A-13; pp. A-31 through A-65

The Salt River Project objects to DWR's estimates of efficiencies for water uses served by irrigation districts and major surface water diverters where average rates of diversion from a few measurements are used to calculate total deliveries and no consideration is given to supplemental supplies obtained by individual users. The Salt River Project also objects to the failure of DWR to include conveyance losses where appropriate in efficiency estimates in the "second procedure," which employs categories of systems.

## **Irrigation Water Duties**

## pp. 101 through 125; pp. A-3 through A-65

The Salt River Project objects to DWR's estimation of water duty under both the "maximum annual" and "average efficient" methods. In the absence of decreed rights, which must be accepted by the court in the absence of abandonment, Arizona law requires that the extent of an appropriative right be measured according to the quantity of water that the appropriator diverted for beneficial use since the time of the appropriation. A.R.S. § 45-141.(B) ("Beneficial use shall be the basis, measure and limit to the use of water"). Neither the "maximum annual" or "average efficient" quantification methods employed by DWR properly estimate actual historic beneficial use as required by law.

**Maximum Annual Quantification** 

The Salt River Project objects to DWR's estimates of maximum annual water duty since inaccurate crop irrigation requirements, low consumptive use crops or overly high efficiency estimates are used to calculate maximum annual water duty. An accurate estimate of maximum annual water duty is essential since that value will closely approximate the quantity of actual historic beneficial use. This objection applies to all irrigation (IR) and most recreation (RC) PWRs.

In addition, the Salt River Project objects to DWR's failure to report maximum annual water duties at all for other (OT) and some recreation-related (RC) irrigation uses. The maximum annual water duties for these uses must be reported by DWR for consideration by the Master in determining entitlements.

**Average Efficient Quantification** 

The Salt River Project objects to DWR's reporting of average efficient water duties in WFRs for irrigation uses since the methodology and results are inconsistent with Arizona law. In determining average efficient water duties, DWR uses the Arizona Groundwater Code Method of "areas of similar farming conditions" (ASFC). The ASFC method assigns a weighted average consumptive use requirement to the water duty equation based upon the types of crops recently grown by appropriators in a designated area. Historic information or records evincing an individual claimant's actual cropping patterns and the quantities of water actually used to cultivate such crops since the time of appropriation are not considered. The use of the ASFC method to calculate water entitlements is objectionable for the following reasons.

First, the ASFC concept is entirely inconsistent with Arizona's doctrine of prior appropriation, which requires that the extent of an appropriator's water right be measured according to actual, rather than average, water use. Under the prior appropriation doctrine, an appropriator who has grown alfalfa on his property historically is entitled to a water duty that will support alfalfa, regardless of the crops that he or his neighbors are currently growing. Under DWR's "averaging" approach, an appropriator in this situation would be assigned an apparent entitlement inadequate to meet his needs.

Additionally, under the ASFC concept, the efficiency of various irrigation methods is averaged between appropriators, thus further exacerbating the inadequate water duty for the appropriator who does not have a system with above-average efficiency.

Stanley M. Pollack (S.B. No. 011046) Navajo Nation Department of Justice P.O. Drawer 2010 Window Rock, AZ 86515 Attorneys for THE NAVAJO NATION Reid Peyton Chambers Sonosky, Chambers, Sachse & Endreson 5 | 1250 Eye Street, N.W., Suite 1000 Washington, D.C. 20005 Attorneys for THE HOPI TRIBE Jeanne S. Whiteing Whiteing & Thompson 1136 Pearl Street, Suite 203 Boulder, CO 80302 Attorneys for THE SAN JUAN SOUTHERN PAIUTE TRIBE

NO. 4 SUPERIOR COURT DOCKETED ET MAY 2 8 1991

AT O'CLOCK 4.509 M.
RICHARD D. LUPKE, CLERK

FOR THE SILVER CREEK

WATERSHED

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA

#### IN AND FOR THE COUNTY OF APACHE

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

THE NAVAJO NATION, THE
HOPI, TRIBE, THE SAN JUAN
SOUTHERN PAIUTE TRIBE WITH
ALL OBJECTIONS SUBMITTED
BY THE UNITED STATES TO THE
HYDROGRAPHIC SURVEY REPORT

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<u>Descriptive Summary</u>: The Navajo Nation, the Hopi Tribe, and the San Juan Southern Paiute Tribe (Tribes) join in, concur with, and adopt the Statements of Objection for all Watershed File Reports submitted by the United States.

Statement of Claimant Numbers: Not Applicable.

Date of Filing: May 29, 1991.

Number of Pages: 2 (Excluding Exhibit).

THE NAVAJO NATION, THE HOPI TRIBE, and THE SAN JUAN SOUTHERN PAIUTE TRIBE join in, concur with, and adopt the

1 Statements of Objection for all Watershed File Reports submitted 2 by the United States, as though each Tribe had submitted said bbjection on its own behalf. Respectfully submitted this 28th day of 4 5 6 Stanley M./ Follack, Attorney for THE NAVAJO NATION Navajo Nation Department of Justice 7 P.O. Drawer 2010 8 Window Rock, AZ 86515 (602) 871-6931 9 10 Reid Peyton Chambers, Attorney for 11 THE HOPI TRIBE Sonosky, Chambers, Sachse & Endreson 12 1250 Eye Street, N.W., Suite 1000 Washington, D.C. 20005 13 (202) 682-0240 14 15 Jeanne S. Whiteing, Attorney for THE SAN JUAN SOUTHERN PAIUTE TRIBE 16 Whiteing & Thompson 1136 Pearl Street, Suite 203 17 Boulder, CO 80302 (303) 444-2549 18 Copies of the foregoing were served upon each claimant to 20 which an objection was filed by the United States. Service was made by attaching a copy of this pleading to the objections served on each claimant by the United State

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