

Certificate of Water Right

STATE OF ARIZONA

County of Pinal

Certificate No. 95488.0000

**Arizona Department of Water Resources
500 North Third Street
Phoenix, Arizona 85004**

This is to Certify, that the Arizona Chapter of the Nature Conservancy, Tucson, Arizona, has made proof to the satisfaction of the Arizona Department of Water Resources of a right to the use of the waters flowing in Aravaipa Creek, a tributary of the San Pedro River, for recreation and wildlife, including fish, under Application and Permit Nos. 33-95488.0000. The right to the use of these waters has been perfected in accordance with the laws of Arizona, and made and entered of record in the Records of the Department of Water Resources, Phoenix, Arizona, under Certificate No. 33-95488.0000; that the priority of the right confirmed is October 31, 1990; that the amount of water to which such right is entitled and confirmed, for the purposes previously stated, is limited to an amount actually beneficially used for these purposes, and shall not exceed an amount, as listed below, expressed as specific monthly flow rates and cumulative annual total as measured in the Southeast quarter (SE¼), Section 13, Township 6 South, Range 17 East near the Bureau of Land Management's West End Wilderness Gage, Aravaipa Wilderness Area, Arizona. The specified flow rates (cubic-feet/second) measured at the gage site, expressed as a continuous monthly flow, are as follows:

<u>Month</u>	<u>Flow Rate (cfs)</u>	<u>Monthly Volume acre-feet/month</u>
January	20.4	1,254.6
February	21.9	1,215.4
March	19.7	1,211.6
April	13.1	779.4
May	18.0	1,107.0
June	15.2	904.4
July	18.0	1,107.0
August	19.0	1,168.5
September	18.0	1,071.0
October	13.4	824.1
November	15.7	934.1
December	17.2	<u>1,057.8</u>
Total Annual Volume		12,634.9 Acre-Feet

A description of the lands for this right, and to which the water is confirmed appurtenant to and put to beneficial use, is as follows: The beneficial use will occur instream along the meandering course of Aravaipa Creek, beginning in the Southwest quarter (SW¼), Section 13, Township 6 South, Range 17 East, continuing downstream to where it leaves the Northeast quarter of the Southwest quarter (NE¼SW¼), Section 26, Township 6 South, Range 17 East, Gila and Salt River Base and Meridian, Pinal County, Arizona.

The right to the use of water confirmed is restricted to the places of use previously described. Water will not be diverted from the natural channel. There shall be no impoundments of public water, nor interference with the natural flow of Aravaipa Creek. There shall be no consumptive use of public waters or degradation of water quality, other than is caused by natural habitat (flora and fauna). There shall be no interference with nor detrimental effect upon prior vested water rights.

Witness, the seal and signature of the Director,
Department of Water Resources,
affixed this 29th day of May, 1996.



Donald J. Gross, P.E. (Attest)
Manager, Surface Water Section



Rita P. Pearson
Director

The Department of Water Resources shall be notified of any change of address for the above named person(s), or if ownership of the water right or of the land at the location of the water right is conveyed to another person(s), pursuant to Arizona Revised Statute § 45-164, (B).

INSTREAM FLOW CHECKLIST

NAME NATURE CONSERVANCY

NO. 33-95488

APPLICANT	DATE	INIT.	ADWR - SURFACE WATER	DATE	INIT.
Preapplication Meeting			Preapplication Meeting		
Submit Application			Receive Application <input checked="" type="checkbox"/> Acpt'd <input type="checkbox"/> Complete <input type="checkbox"/> Rej'd	10/31/90	TKW
Post Public Notice	1/12/91	TKW	GIS Mapping		
Submit Affidavit of Posting			Prepare Notice of Intent	12/28/90	TKW
Protest (if any) Resolved			Receive Affidavit of Posting	2/26/91	TKW
Collect Data (Min. 1 Year)			Protest Received *		
Submit Study <input type="checkbox"/> Outline <input type="checkbox"/> Draft <input type="checkbox"/> Final			Protest Withdrawn **		
Review/Comment Draft Permit			Draft Permit		
Submit Permit Fees			Sent to Applicant For Review		
Submit Proof & Affidavit			Sent to Hydro For Review		
Submit Minimum of 4 Years Streamflow Data			Permit Fees Requested		
Submit Analysis of Streamflow Data & Documentation			Permit Fees Received		
Review/Comment Draft CWR			Final Permit Approved & Signed by Asst. Director	5/29/92	TKW
Submit CWR Fees			Permit Issued	6/11/92	TKW
Continue Streamflow Measurement			Proof & Affidavit Received	6/24/95	TKW
			Draft CWR		
Preapplication Meeting			Sent to Applicant For Review		
Site Visit			Sent to Hydro For Review		
Flow Measurement			CWR Fee Requested	3/13/96	TKW
Review Study <input type="checkbox"/> Outline <input type="checkbox"/> Draft <input type="checkbox"/> Final			CWR Fee Received	5/11/96	TKW
Review Data			Final CWR Approved & Signed by Asst. Director	5/29/96	TKW
Review Protests (if any)			CWR Issued	6/28/96	TKW
Approve for Permit			AZ GAME & FISH	DATE	INIT.
Review Draft Permit			Permit Approved		
Review Data for CWR					
Approve for CWR					
Review Draft CWR					

* date uncertain

** see letter dated 6/28/91 to Wifford clarifying

**ARIZONA DEPARTMENT OF WATER RESOURCES
SURFACE WATER RIGHTS UNIT**

500 North Third Street, Phoenix, Arizona 85004
Telephone (602) 417-2470
Fax (602) 417-2422



FIFE SYMINGTON
Governor

RITA P. PEARSON
Director

June 28, 1996

The Nature Conservancy
Attn: Andy Laurenzi
300 East University Blvd., Ste. 230
Tucson, Arizona 85705

RE: Certificate No. 95488.0000, 95489.0000, 95490.0000, 95771.0000

Certificate Holder:

The Director of the Department of Water Resources is pleased to forward the enclosed Certificates of Water Right for your records. A certificate is evidence of your right to use a given amount of public waters of the State for a certain beneficial use at the specified location. You may wish to record the certificates with your County Recorder for the county in which the water rights are located. A copy of each water right certificate is maintained in the official records of the Department.

Please note that the right to the use of water as evidenced by a certificate is not absolute; the basis, measure, and limit of any water right granted under provisions of the Public Water Code is the amount actually put to the stated beneficial use, but never more than the amount stated in the certificate. In addition, your water right is given a date of priority, the filing date of the original application, as a means of ranking the water right in relation to all other water rights within a specific watershed. Your water right is subject to prior-vested water rights. For purposes of management of the available water resource in times of scarcity, water rights senior in time to your water right could have "first call" on the available supply of public water; senior water rights could prohibit your use of the water resource until their water rights are satisfied.

The watershed in which your water right is located is undergoing a Superior Court judicial proceeding. This proceeding, called a "water rights adjudication," is a quantification and ranking of all water rights located within the watershed. To participate in the adjudication, you must file a claim with the superior court. If you have not yet taken action to join the court proceedings, you may wish to do so to protect your water right.

Questions concerning the nature of your water rights may be addressed to the Surface Water Sub-unit. Questions concerning the water rights adjudication proceedings may be addressed to the Department's Adjudication Division. The Department cannot give legal advice. If you are concerned about how the adjudication will affect your rights, you may wish to consult an attorney experienced in water rights matters.

Sincerely,

Don Gross, P.E.
Chief, Surface Water Section

Enclosure

DG:mg

FM00318

DEPARTMENT OF WATER RESOURCES
HYDROLOGY DIVISION

MEMORANDUM

TO: File

FROM: Kim Mitchell ^{KM}

DATE: April 1, 1996

RE: Permit to Appropriate Public Water - No. 33-95488
Aravaipa Creek - The Nature Conservancy

The above-referenced Permit, issued May 29, 1992, listed a distribution of monthly flow rates in cfs and a total annual volume of 13,336 acre-feet. The monthly flows listed are correct; however, the total annual volume is incorrect, resulting from an error in the conversion. The correct total annual volume is 12,634.8 acre-feet. This will be reflected on the forthcoming Draft Certificate of Water Right.

The Notice of Application to Appropriate Public Water listed 14,901.28 acre-feet per annum.

**ARIZONA DEPARTMENT OF WATER RESOURCES
SURFACE WATER RIGHTS UNIT**

500 North 3rd Street, Phoenix, Arizona 85004
Telephone (602) 417-2470
Fax (602) 417-2422



FIFE SYMINGTON
Governor

RITA P. PEARSON
Director

March 13, 1996

The Nature Conservancy
Attn: Andy Laurenzi
300 East University Blvd., Ste. 230
Tucson, Arizona 85705

Re: Issuance of Certificate of Water Right No. 33-95488.0000

Mr. Laurenzi:

The Department of Water Resources is prepared to issue a Certificate of Water Right for the referenced Permit. The certification fee for each issued Certificate is \$50.00.

Please remit your check to my attention in the amount of \$50.00 to the Department of Water Resources for the certification fee of the certificate.

If you have any questions, please call me at (602) 417-2470.

Yours truly,

A handwritten signature in cursive script that reads "Miros Gutierrez".

Miros Gutierrez
Surface Water Rights Specialist

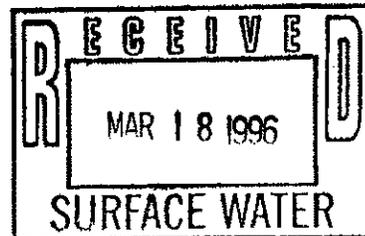
MG:hs

FM00320

STATE OFFICE:
300 East University Blvd., Suite 230
Tucson, Arizona 85705
(520) 622-3861 Fax (520) 620-1799



PHOENIX OFFICE:
2255 North 44th Street, Suite 100
Phoenix, Arizona 85008
(602) 220-0490 Fax (602) 225-0541



March 11, 1996

Ms. Miros Gutierrez
Arizona Department of Water Resources
500 N. 3rd Street
Phoenix, AZ 85004

Dear Ms. Gutierrez:

Please note the enclosed check for \$200.00 for the certification fees for Water Rights Nos: 95771.0000, 95488.0000, 95489.0000, 95490.0000 per your letter of January 31, 1996 and our subsequent phone conversation. You indicated that reference to Water Right No. 95488.0000 was inadvertently left off your letter.

If you have any questions please call me at 520-622-3861. Please send the certificates to my attention at the Tucson Office address above..

Sincerely,

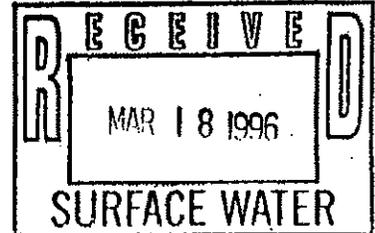
A handwritten signature in cursive script that reads "Andy Laurenzi".
Andy Laurenzi

cc: Ed Brunson

STATE OFFICE:
300 East University Blvd., Suite 230
Tucson, Arizona 85705
(520) 622-3861 Fax (520) 620-1799



PHOENIX OFFICE:
2255 North 44th Street, Suite 100
Phoenix, Arizona 85008
(602) 220-0490 Fax (602) 225-0541



March 11, 1996

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Arizona Department of Water Resources
500 N. 3rd Street
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Dear Ms. Gutierrez:

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If you have any questions please call me at 520-622-3861. Please send the certificates to my attention at the Tucson Office address above..

Sincerely,

Andy Laurenzi
Andy Laurenzi



1815 NORTH LYNN STREET
ARLINGTON, VIRGINIA 22209

FLEET BANK OF NEW YORK
ALBANY, N.Y.

No: 433971

29-1
213

CHECK DATE	CHECK NUMBER	CHECK AMOUNT
05-MAR-96	433971	200.00

PAY Two Hundred Dollars and No Cents*****

TO THE
ORDER OF ARIZONA DEPT. OF WATER RESOURCES
500 N. 3RD STREET
ATTN: LOUISE HUTCHINSON
PHOENIX, AZ 85004

BY _____

BY _____

ARIZONA DEPARTMENT OF WATER RESOURCES

HYDROLOGY DIVISION

M E M O R A N D U M

TO: Joe Stuart, Surface Water-Community Services
THRU: Drew Swieczkowski, Supervisory Hydrologist
FROM: Andy Kurtz, Hydrologist
DATE: January 10, 1996
RE: Issuance of CWRs for Aravaipa Creek

On January 9, 1996, Herb Dishlip has approved the four Nature Conservancy's and the one BLM instream flow permit to proceed to certificate status. Attached is a brief summary of the Aravaipa applications and justification. You may wish to have copies made for each of the applications.

Recently, Darlene and Miros prepared a draft CWR for each of the applications. They should be finalized and delivered for Herb's signature. I have not checked the drafts for correctness, except for the flow amounts.

I know there are other steps that must be completed in the "ISF process" before the CWRs will be issued. Upon completion of all tasks, Hydrology would appreciate a copy of the signed CWRs for our files.

APPROVAL FOR CWR ISSUANCE

YES

NO

Herb Dishlip

HD 4/8/96

.....
Greg Wallace

HW 4/2/96

.....
Andy Kurtz

*yes
all five of them*

Comments:

Please return upon review

MEMORANDUM

Date: December 29, 1995
To: Herb Dishlip
Thru: Greg Wallace
From: Andy Kurtz
Re: Aravaipa Creek Instream Flow Claims
33-95771, 33-97488, 33-95489, 33-95490, 33-87114

Aravaipa Creek
Review for Issuance of Certificates of Water Right

Aravaipa Creek The Arizona Nature Conservancy (TANC) & Bureau of Land Management (BLM)		
Permit #	Date of Application (Priority Date)	Date of Permit Issuance
33-95488, Reach B B	October 31, 1990	May 29, 1992
33-95489, Reach C	October 31, 1990	May 29, 1992
33-95490, Reach B D	October 31, 1990	May 29, 1992
33-95771, Reach A	October 30, 1990	March 9, 1992
33-87114	June 1, 1981	March 17, 1989

Introduction

Found in southeast Arizona is Aravaipa Creek, a perennial stream, tributary to the San Pedro River. For 17 miles the waters flow freely through a remote and scenic environment. The Aravaipa watershed extends over 541 square miles and crosses the boundaries of two counties, Pinal and Graham. Precipitation averages 16 inches annually.

The BLM and the TANC, among other environmental groups, have sought to preserve the Aravaipa Canyon and its environment. Numerous studies have been conducted and extensive data has been collected. Each study has provided a better understanding of the canyon's ecosystem.

The BLM began collecting stream flow data in the 1970s, continuing the effort to present. This

information has helped in the preparation of technical reports and support the BLM's claim of instream flows. Initially, the BLM installed and operated their permanent gage stations, collecting instreamflow data on a continuous basis. Due to numerous floods and the subsequent damage to the gages these streamflow monitor efforts were abandoned. Instead of maintaining and repairing gage stations, the BLM and TANC teamed efforts around 1989 to collect bi-monthly instantaneous streamflow data.

TANC has been collecting instantaneous streamflow data since the early 1980s at four monitor locations along the creek. Two monitor locations are located at the boundaries of the BLM's Aravaipa Wilderness area, one at the upstream end and the other at the downstream end. An additional monitor site is located upstream of the canyon proper, at the "old school house site." The fourth site incorporates the extensive streamflow measurements collected at the USGS stream gage station (#09473000) found on lower Aravaipa Creek, below the BLM wilderness. Interpretation of this data has proven very useful in establishing the current and historic streamflow characterization of Aravaipa Creek.

TANC has determined the median flows for each of the four measurement locations and has presented the results in support of the request for issuance of a CWR for each location. Attached is a flow summary sheet prepared by ADWR that compares requested, permitted, and median flows. All flows requested are less than the median flows available and fall within the optimal range of flows needed to support the existing fisheries.

Water Dependent Resources

Wildlife including Fish:

The applicants have previously provided information on Aravaipa Creek that identifies seven different species of fish, this includes the spokedace, Loach minnow, Sonoran sucker, roundtail chub, mountain sucker, longfin dace, and the speckled dace. Additional wildlife found along the creeks reaches account for 8 species of amphibian, 47 reptiles, 237 birds, and 46 different mammals.

Information has been provided by the applicants that defined the surface water needs of wildlife (specifically fish). An IFIM model was developed to evaluate the flow needs of Aravaipa's native fisheries, and in turn support the application for an instream flow appropriation. Stream transects were established at points along the reaches.

Data collected, interpreted, and evaluated at the transects included: determination of discharge; development of the streambed profile; areal distribution of depth, velocity, and substrate; water surface elevation; determination of river gradient; and the documentation (such as species variability) of other microhabitat features. Suitability Index (SI) Curves and the Weighted Useable Areas (WUA) versus Discharge relationships were evaluated. Attached are some of the optimum flow curves for specific species of fish found within the creek.

Recreation:

The presence of a perennial stream in a desert setting attracts people from all over Arizona, as well as the world (BLM, 1980). Heavy visitor activities include backpacking, photography, birding, swimming, among other interests according to a use survey conducted over a 12 month period in 1987-88, by the BLM. The survey also revealed that 51% of those that had visited the creek before have returned.

The applicants state that the presence of visibly flowing surface water is the dominant driving force for visitor attendance. Any diminishment in the surface flow would in turn reduce the amount of recreational usage.

Surface Water Flow

The waters of Aravaipa Creek, within the canyon, as well as near its entrance and exit are perennial. Farther upstream and downstream of the canyon proper, the creek trends from intermittent to ephemeral. Gage data recorded by the USGS since 1966 illustrate the dependability and availability of flow associated with the canyon. The median flows calculated range from 10 to 40 cfs, averaging 20 to 25 cfs.

Discussion and Miscellaneous Notes:

1. Recreation throughout the Aravaipa canyon and creek area continues to be a dominant use to date.
2. Optimum flows for fish appear to be consistently near about 10 to 20 cfs.
3. Instream flows available are consistently higher than those flows permitted or requested for certification.
4. Flows requested by the BLM differs from that of the TANC at the same monitor points, upstream and downstream boundaries of the wilderness area. This happened because the ISF permit of the BLM was issued before those of the TANC by three years. The methods of measurements and monitor locations between the BLM and the TANC were initially different, until around 1989 when the stream monitoring became a collaborative effort between both parties. It is suggested that the BLM certificated annual total should not exceed the value permitted: 10,840 AFA.
5. Three of TANC's permitted ISF annual totals, not monthly values, were issued in error. This appears to be due to simple math errors. The annual values to be Certificated should be as follows:

	annual permitted	corrected annual total for CWR
#33-95488	13,336 AFA	12,635 AFA
#33-95489	13,578 AFA	13,567 AFA
#33-95490	11,224 AFA	11,213 AFA

6. The special conditions of each of TANC's ISF permits have been adequately met.
7. The special conditions of the BLM's permit have not been completely met. This is due to the abandonment of the east and west gage sites as they were prone to extensive damage from floods. However, flow data was consistently being collected via use of a flow meter every two weeks or so.

Recommendations:

1. Issue CWRs for the four Nature Conservancy ISF applications.
2. Issue CWR for the BLM ISF application.

Review of the Evidence Presented in Support of Request for CWR

Reach A: Monitor Point: USGS Gage (#09473000)

Received: Proof of Appropriation
 Affidavit of Appropriator
 Analysis of gage data

The Arizona Chapter of the Nature Conservancy filed an instream flow claim October 30, 1991, on Aravaipa Creek. March 9, 1992, the Department issued an ISF permit for the specified instream flow claim. General and specific conditions to be complied with were incorporated within the permit. Eligibility for a Certificate of Water Right required that at a minimum TANC adhere to the specified conditions as shown below:

General Conditions of Each Issued ISF Permit:

1. There shall be no impoundments of the water of Aravaipa Creek nor interference within the natural flow of Aravaipa Creek.
2. There shall be no consumptive use of public waters other than is caused by natural habitat (flora and fauna).
3. There shall be no interference with nor detrimental effect upon vested water rights.
4. Water shall not be diverted from the natural channel.

Special Conditions of each Issued ISF Permit:

In order for each of the permits to be eligible for a CWR the following must have been completed on or before May 29, 1996:

1. Maintain or continue to maintain a record of flow at the stream gaging site.
2. Must submit a minimum of four years of streamflow data
3. Must submit an analysis of the data
4. Must submit a completed Proof of Appropriation
5. Must submit a completed Affidavit of Appropriation.

Reach B: West End BLM Wilderness Area
Reach C: East End BLM Wilderness Area
Reach D: Schoolhouse Area

Received:

Proof of Appropriation
Affidavit of Appropriator
Analysis of and copies of field data

The Arizona Chapter of the Nature Conservancy filed an instream flow claim October 31, 1991, on Aravaipa Creek. May 29, 1992, the Department issued an ISF permit for the specified instream flow claim. General and specific conditions to be complied with were incorporated within the permit. Eligibility for a Certificate of Water Right required that at a minimum TANC adhere to the specified conditions as shown below:

General Conditions of Each Issued ISF Permit:

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2. There shall be no consumptive use of public waters other than is caused by natural habitat (flora and fauna).
3. There shall be no interference with nor detrimental effect upon vested water rights.
4. Water shall not be diverted from the natural channel.

Special Conditions of each Issued ISF Permit:

In order for each of the permits to be eligible for a CWR the following must have been completed on or before May 29, 1996:

1. Maintain or continue to maintain a record of flow at the stream monitor site.
2. Must submit a minimum of four years of streamflow data
3. Must submit an analysis of the data
4. Must submit a completed Proof of Appropriation
5. Must submit a completed Affidavit of Appropriation.

Bureau of Land Management, Aravaipa Canyon Wilderness Area

Received:

Proof of Appropriation
Affidavit of appropriation
Summary of flow data

*** Copies of flow data were previously supplied from the ANC

The Bureau of Land Management applied for an ISF permit on the reach of Aravaipa Creek that run through the wilderness area June 1, 1981. In 1989 an ISF permit was issued to the BLM. Associated with the permit were specific conditions that were to be complied with before the permit could proceed to a certificate. They are as follows:

General conditions of ISF permit:

1. There shall be no impoundments of the water of Aravaipa Creek nor interference within the natural flow of Aravaipa Creek.
2. There shall be no consumptive use of public waters other than is caused by natural habitat (flora and fauna).
3. There shall be no interference with nor detrimental effect upon vested water rights.
4. Water shall not be diverted from the natural channel.

Specific conditions of ISF permit:

The following must be completed not earlier than July 1, 1994 nor later than July 1, 1995.

- commencing immediately the Permittee shall:

1. maintain a record of instream use
2. measure the flow at the East Aravaipa gauging station where Aravaipa Creek enters the Aravaipa Wilderness Area
3. a minimum of two flow measurements shall be taken each month
4. routine gauging station maintenance shall be performed weekly.
5. a record of the instream flows shall be submitted to the Department.

Aravaipa Creek Requested Flows for Issuance of Certificate of Water Right (cfs)					
Month	#33-95490 TANC-D	#33-95489 TANC-C	#33-95488 TANC-B	#33-95771 TANC-A	#33-87114 BLM
October	15.0	18.0	13.4	12.0	15.0
November	15.0	18.0	15.7	14.0	10.0
December	17.0	20.0	17.2	15.0	20.0
January	16.0	19.0	20.4	15.0	20.0
February	18.0	21.0	21.9	16.0	25.0
March	18.0	22.0	19.7	19.0	20.0
April	16.0	19.0	13.1	16.0	10.0
May	14.0	18.0	18.0	13.0	10.0
June	14.0	17.0	15.2	9.3	9.0
July	14.0	17.0	18.0	14.0	10.0
August	15.0	18.0	19.0	14.0	20.0
September	14.0	18.0	18.0	13.0	11.0

Aravaipa Canyon Annual Totals Requested for Certificate (acre-feet per year)					
Annual Totals	#33-95488	#33-95489	#33-95490	#33-95771	#33-87114
	11,213	13,567	12,635	10,273	10,840

ISF Application 33-95490 (segment D)
 TANC - Aravaipa Creek (Old School House)
 1980-1995

Streamflow data (cfs) in numeric order for median flow determination

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
	28.00	28.50	45.00	47.90	61.00	37.50	35.00	30.00	30.00	27.00	28.00	32.00
	28.00	25.00	24.50	30.60	43.50	28.00	35.00	23.80	29.00	27.00	26.00	26.00
	25.00	24.50	24.00	25.00	27.20	27.30	24.30	23.00	29.00	25.80	22.80	26.00
	22.10	24.00	24.00	22.90	26.40	23.90	24.00	22.30	24.00	21.00	22.60	23.00
	21.00	23.00	23.70	22.40	22.00	23.60	24.00	21.00	22.80	21.00	21.10	20.00
	20.30	21.00	23.00	22.00	22.00	23.00	24.00	20.20	22.00	20.10	21.00	20.00
	18.00	21.00	21.40	22.00	21.70	23.00	22.00	19.80	21.20	19.10	20.00	19.90
	18.00	19.90	21.00	21.00	21.30	22.40	20.50	19.30	21.00	19.00	19.00	19.00
	17.30	19.00	19.70	21.00	21.00	21.60	20.30	19.00	21.00	19.00	19.00	19.00
	17.20	18.00	19.00	20.90	21.00	21.00	20.30	18.00	20.30	18.20	18.30	18.90
	15.70	17.50	19.00	20.00	19.50	21.00	20.00	18.60	20.20	18.20	18.20	18.90
	15.20	17.30	18.40	19.00	18.50	20.70	19.30	16.20	20.00	15.50	18.00	18.50
	19.00	17.20	18.40	17.00	18.00	19.90	19.00	15.00	19.00	15.10	17.20	17.70
		16.00	18.30	11.00	17.00	10.00	18.70	14.00	18.00	13.00	17.00	16.60
		12.00	18.00		17.00		18.30	14.00	17.50			15.90
		12.00			12.00		15.00	9.30	17.30			11.00
		12.00					15.00		13.00			
		12.00							11.00			
							9.80		8.60			
									8.10			

Flow (cfs)	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
Average	18.77	17.78	21.09	21.51	22.89	21.53	19.76	17.71	18.80	17.43	19.21	18.96
Median (1980-95)	18.00	18.50	21.00	21.50	21.15	22.70	20.30	19.15	20.25	19.05	19.50	19.00
Median (1991-95)	17.30	18.30	19.40	22.90	24.00	23.10	20.30	18.60	20.30	18.60	18.30	18.70
ISF Permitted	15.00	15.00	17.00	16.00	18.00	18.00	16.00	14.00	14.00	14.00	15.00	14.00
Requested	15.00	15.00	17.00	16.00	18.00	18.00	16.00	14.00	14.00	14.00	15.00	14.00

Amount Public Noticed: 11,212.17 AFA

Amount ISF Permitted: 11,224.0 AFA

Amount CWR Requested: 11,224.0 AFA

*due to
 amount of 11,213*

*** AMOUNT PERMITTED SHOULD HAVE BEEN: 11,213.0 AFA

*** DRAFT CERTIFICATE WILL REFLECT CORRECTED AMOUNT

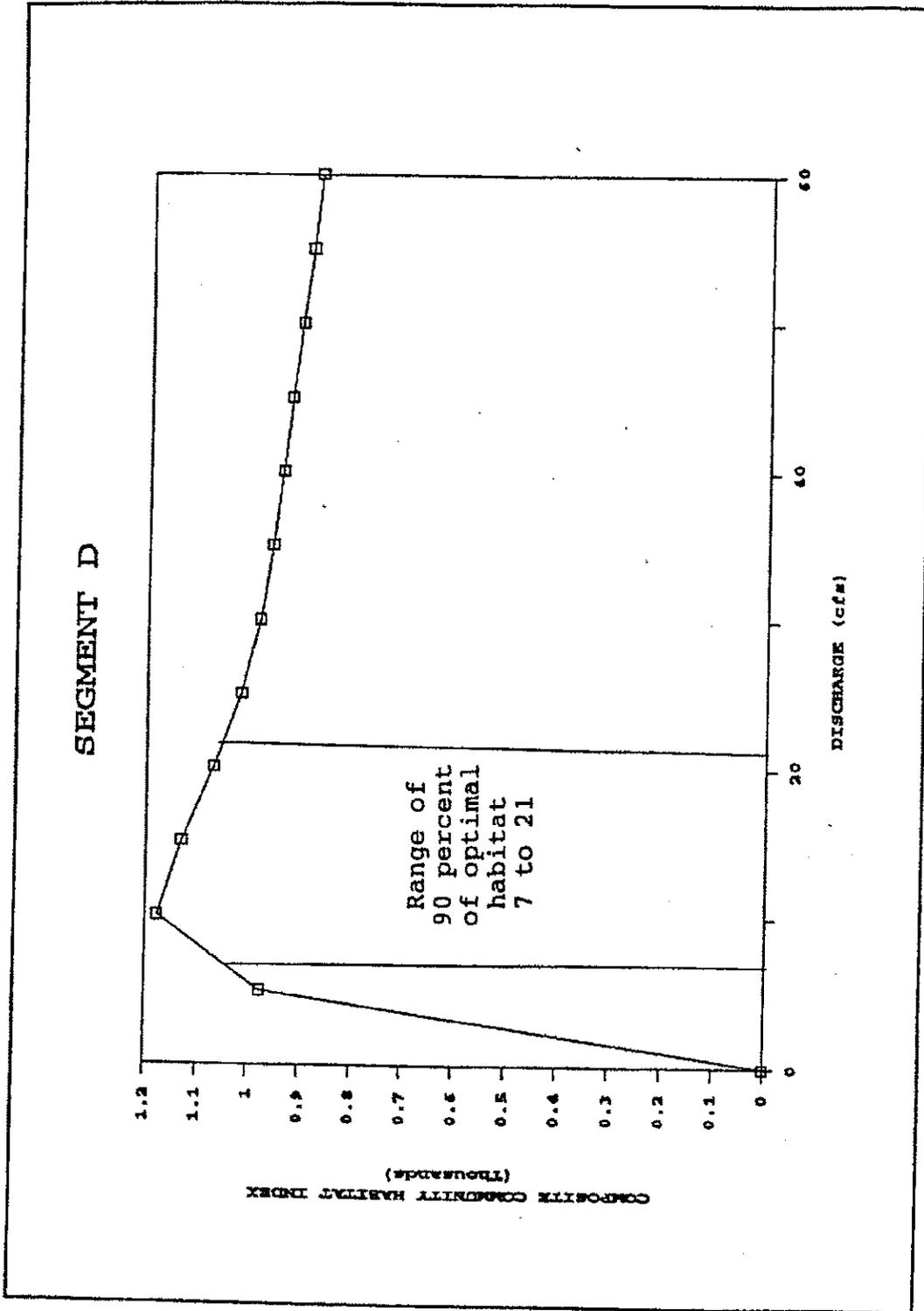


Figure 21. Composite community habitat index as a function of discharge for segment D.

ISF Application 33-95489 (segment C)
 TANC - Aravaipa Creek (East End)
 1980-1995

Streamflow data (cfs) in numeric order for median flow determination

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
40.00	33.00	48.00	135.00	100.40	48.80	40.00	38.00	35.00	52.00	67.00	37.00	
36.00	31.00	47.00	51.90	82.30	42.00	38.00	36.00	33.00	31.00	36.00	36.00	
31.00	30.80	44.00	34.90	82.00	42.00	37.00	33.00	31.00	30.00	34.00	31.00	
29.00	30.00	35.00	33.00	53.00	35.90	36.00	29.00	30.00	28.90	32.00	29.00	
29.00	30.00	32.00	31.00	38.00	33.00	34.00	28.00	30.00	28.00	30.00	28.80	
28.00	30.00	29.20	28.00	35.00	31.00	32.00	27.40	29.30	27.00	29.80	28.00	
27.40	28.00	29.10	27.70	34.00	31.00	31.00	28.00	29.00	27.00	29.00	24.00	
25.00	29.00	29.00	27.60	29.00	31.00	30.00	28.00	28.50	24.60	26.70	24.00	
23.00	28.50	29.00	27.00	28.00	29.50	28.20	25.00	26.00	23.00	26.00	22.80	
22.40	28.00	28.70	27.00	26.90	28.70	28.00	24.40	25.00	23.00	25.00	22.50	
22.00	28.00	27.00	27.00	26.00	27.50	28.00	24.00	25.00	22.90	25.00	22.00	
21.80	28.20	27.00	26.00	26.00	26.70	27.80	22.00	23.00	22.00	24.40	22.00	
20.90	26.00	26.00	25.90	26.00	26.10	27.00	22.00	23.00	21.00	24.00	21.80	
18.40	23.30	26.00	25.00	25.30	24.00	26.90	21.00	22.90	21.00	23.80	21.00	
18.20	23.00	24.80	23.00	25.10	24.00	26.00	20.90	22.00	20.00	23.00	19.80	
17.70	22.80	24.30	21.00	22.00	23.00	25.10	20.10	21.00	18.80	23.00	18.00	
15.00	22.50	24.30	17.00	21.00	23.00	24.80	19.40	20.90	18.00	22.00	18.00	
15.00	22.00	24.00	17.00	21.00	21.00	24.00	19.00	19.00	18.00	22.00	17.00	
14.00	21.00	24.00	17.00	21.00	18.00	23.00	18.00	19.00	16.90	22.00	17.00	
13.00	20.80	23.00	16.00	20.00	17.00	22.00	17.00	18.00	16.70	21.90	14.00	
10.00	18.90	22.00	16.00	19.00	15.00	20.00	16.00	17.70	15.70	20.00	13.00	
	17.00	21.20	10.00	17.00	14.00	20.00	16.00	17.00	15.00	17.00	7.80	
	16.00	21.00		16.00		20.00	15.00	17.00	14.00	14.00		
	15.00	16.00		9.40		19.40	15.00	17.00	13.00			
	15.00	16.00				19.00	11.00	16.00	12.00			
	14.00	15.00				17.00	10.00	15.00	11.00			
	9.20	11.00				16.00		13.00	6.80			
		9.90				13.00		12.00				
						12.00		10.00				
								8.20				
								8.90				
								8.00				
								6.20				

Flow	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
Average (cfs)	22.70	23.70	26.20	30.15	31.81	27.83	25.67	22.28	20.47	21.38	26.84	22.49
Median (1980-95)	22.00	23.30	25.40	26.50	26.00	26.10	26.00	21.50	20.90	21.00	24.40	22.00
Median (1991-95)	20.90	23.00	24.60	27.70	34.00	28.10	24.90	24.40	22.00	18.80	23.60	22.40
ISF Permitted	18.00	18.00	20.00	19.00	21.00	22.00	19.00	18.00	17.00	17.00	18.00	18.00
Requested	18.00	18.00	20.00	19.00	21.00	22.00	19.00	18.00	17.00	17.00	18.00	18.00

Amount Public Noticed: 13,566.47 AFA

Amount ISF Permitted: 13,578.0 AFA

Amount CWR Requested: 13,578.0 AFA

*** AMOUNT PERMITTED SHOULD HAVE BEEN: 13,567.5 AFA

*** DRAFT CERTIFICATE (CWR) WILL REFLECT CORRECTED AMOUNT

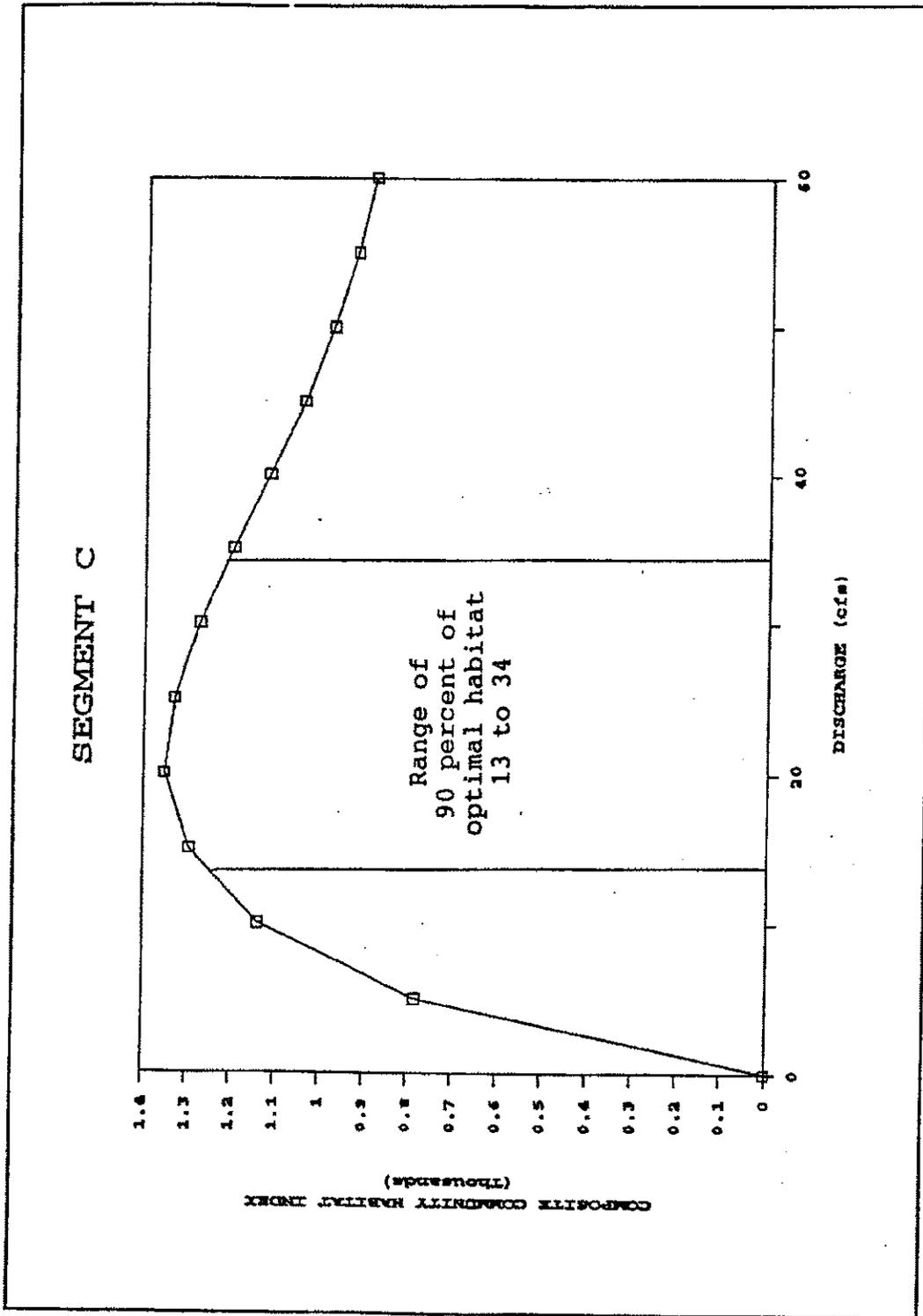


Figure 20. Composite community habitat index as a function of discharge for segment C.

ISF Application 33-95488 (segment B)
 TANC - Aravaipa Creek (West End)
 1980-1995

Streamflow data (cfs) in numeric order for median flow determination

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
	44.30	44.10	55.50	45.60	93.70	94.80	44.40	39.40	49.00	72.10	47.80	47.80
	42.20	35.00	48.30	44.00	85.70	71.10	44.40	37.80	41.10	43.30	46.20	48.80
	40.80	32.50	44.30	39.80	81.00	82.20	44.00	37.10	33.10	42.20	43.40	44.80
	38.90	31.40	40.40	38.20	58.50	58.20	39.80	30.00	31.70	41.50	38.50	43.50
	35.20	30.10	39.00	36.00	38.80	55.30	38.70	28.00	28.80	34.30	28.80	34.30
	31.20	29.80	38.80	32.80	34.30	45.30	35.30	27.40	23.40	32.50	27.90	28.80
	30.70	27.80	34.40	27.90	34.30	44.50	33.50	27.40	23.10	29.90	27.80	28.20
	26.80	26.80	31.50	27.40	27.00	42.40	30.80	27.40	22.90	25.30	25.70	26.80
	24.60	25.70	30.40	26.40	26.90	41.80	28.20	27.20	22.80	25.20	23.90	25.80
	24.10	24.20	28.00	25.90	23.00	40.80	26.50	26.30	22.20	21.30	23.80	24.70
	23.40	17.90	25.10	25.80	22.80	38.40	24.80	24.70	22.00	21.00	23.00	24.00
	22.40	18.80	23.70	25.10	22.50	37.50	23.80	23.30	21.90	20.00	22.30	24.00
	22.00	16.40	18.30	24.50	21.40	35.30	23.30	23.20	21.50	20.00	21.90	24.00
	20.40	15.70	17.20	24.30	20.50	32.90	23.20	22.40	20.70	19.80	19.90	23.70
	20.10	15.70	15.80	23.10	12.70	28.70	21.50	21.10	20.80	19.10	18.80	22.00
	16.70	15.20	15.50	20.40		27.00	21.00	20.00	18.90	18.90	17.90	19.80
	14.30	15.10	15.20	19.30		27.00	14.80	17.30	15.80	15.70	16.40	17.70
	14.30	11.20	14.10	15.50		23.80	11.40	10.90	14.90	12.30	15.90	17.40
	13.70			15.50		22.30	10.00	9.80	12.90	11.00	15.10	17.20
	13.70					22.20	9.70		12.20	8.00		16.80
	13.10					19.80	9.50		11.10			16.10
	12.40					19.40			10.30			11.80
	8.80					17.70			6.60			
	8.30					15.40						

Flow	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
Average (cfs)	23.43	23.92	29.63	28.34	37.41	38.50	26.58	24.03	21.05	26.67	25.14	26.59
Median (1980-84)	22.20	24.95	29.20	25.90	27.00	36.40	24.80	26.30	21.90	21.15	23.80	24.00
Median (1990-94)	22.40	24.20	20.45	32.80	47.60	35.30	23.10	24.80	22.20	25.30	26.80	24.30
ISF Permitted	13.40	15.70	17.20	20.40	21.90	19.70	13.10	18.00	15.20	18.00	19.00	18.00
Requested	13.40	15.70	17.20	20.40	21.90	19.70	13.10	18.00	15.20	18.00	19.00	18.00

Amount Public Noticed: 14,901.28 AFA

Amount ISF Permitted: 13,336.0 AFA

Amount CWR Requested: 13,336.0 AFA

*** AMOUNT PERMITTED SHOULD HAVE BEEN: 12,835 AFA

*** DRAFT CERTIFICATE (CWR) WILL REFLECT CORRECTED AMOUNT

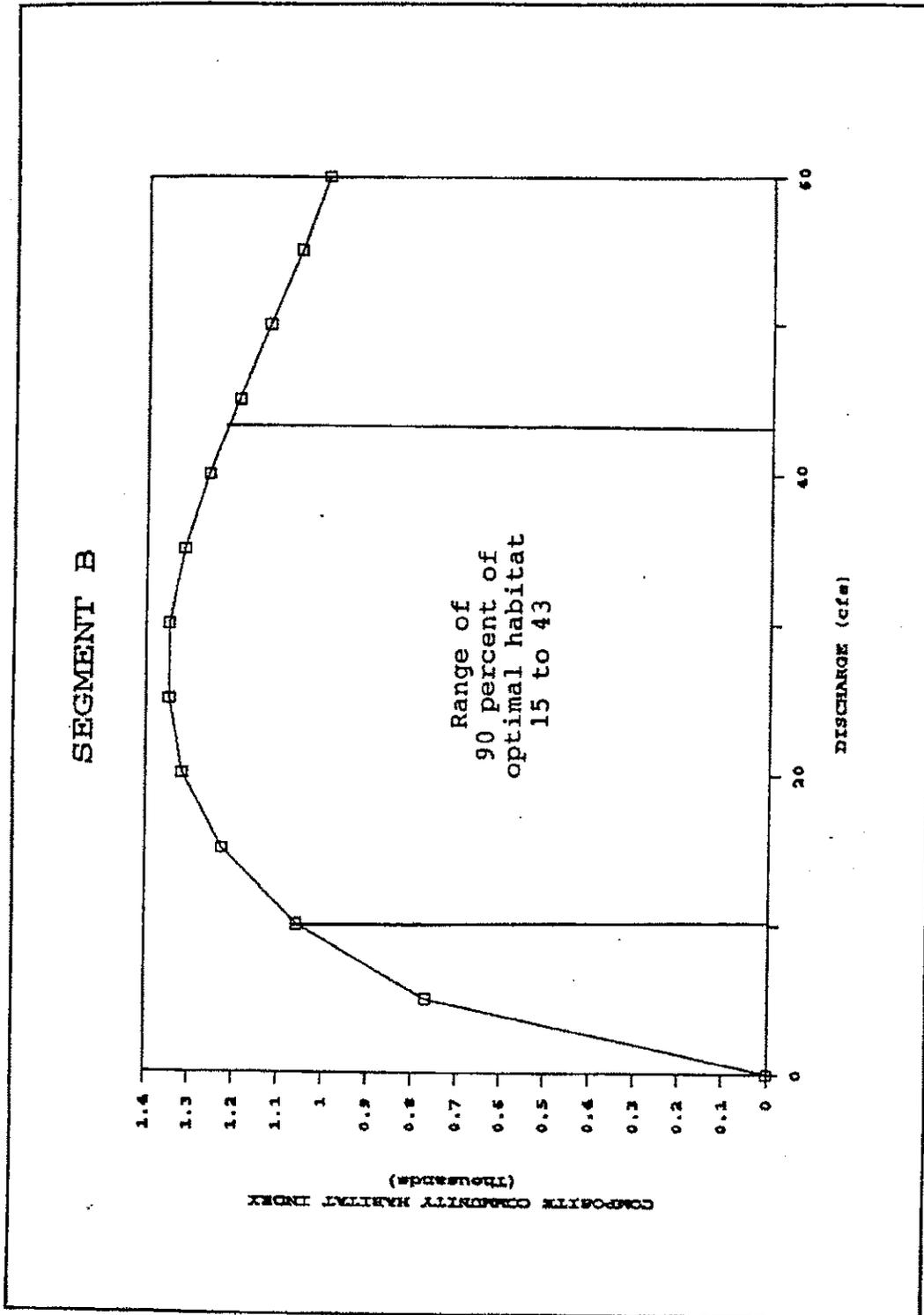


Figure 19. Composite community habitat index as a function of discharge for segment B.

ISF Application 33-95771 (segment A)
 TANC - Aravaipa Creek (USGS Gage #9473000)
 1988-1994
 Streamflow Data (cfs)

MEDIAN MONTHLY FLOWS

Water Years	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
1988-89	15.00	13.00	20.00	31.00	11.00	13.00	15.00	7.00	5.00	9.80	18.00	9.80
1989-90	9.90	16.00	17.00	17.00	20.00	18.00	15.00	12.00	9.45	28.00	31.00	14.00
1990-91	12.00	12.00	20.00	28.00	19.00	70.00	27.00	18.00	15.00	15.00	21.00	21.00
1991-92	20.00	24.00	29.00	32.00	45.00	37.00	29.00	28.00	22.00	19.00	29.00	22.00
1992-93	22.00	28.00	45.00	434.00	47.00	72.00	51.50	40.00	38.00	33.00	33.00	37.50
1993-94	31.00	33.00	32.00	30.00	42.00	31.00	24.50	19.00	13.00	13.00	23.00	19.00

Median Flow	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.
Ave. Monthly (1989-94)	17.50	19.75	24.50	30.50	31.00	34.00	25.75	18.50	14.00	17.00	26.00	20.00
Ave. Monthly (1988-93)	15.97	18.69	24.37	43.11	31.18	33.75	21.23	16.70	12.49	15.80	21.00	17.65
ISF Permitted	12.00	14.00	15.00	15.00	16.00	19.00	16.00	13.00	9.30	14.00	14.00	13.00
Requested	12.00	14.00	15.00	15.00	16.00	19.00	18.00	13.00	9.30	14.00	14.00	13.00

Amount Public Noticed: 10,432.88 AFA

Amount ISF Permitted: 10,277.0 AFA

Amount CWR Requested: 10,277.0 AFA

*** AMOUNT PERMITTED SHOULD HAVE BEEN: 10,272.85 AFA
 *** DRAFT CERTIFICATE (CWR) WILL REFLECT CORRECTED AMOUNT

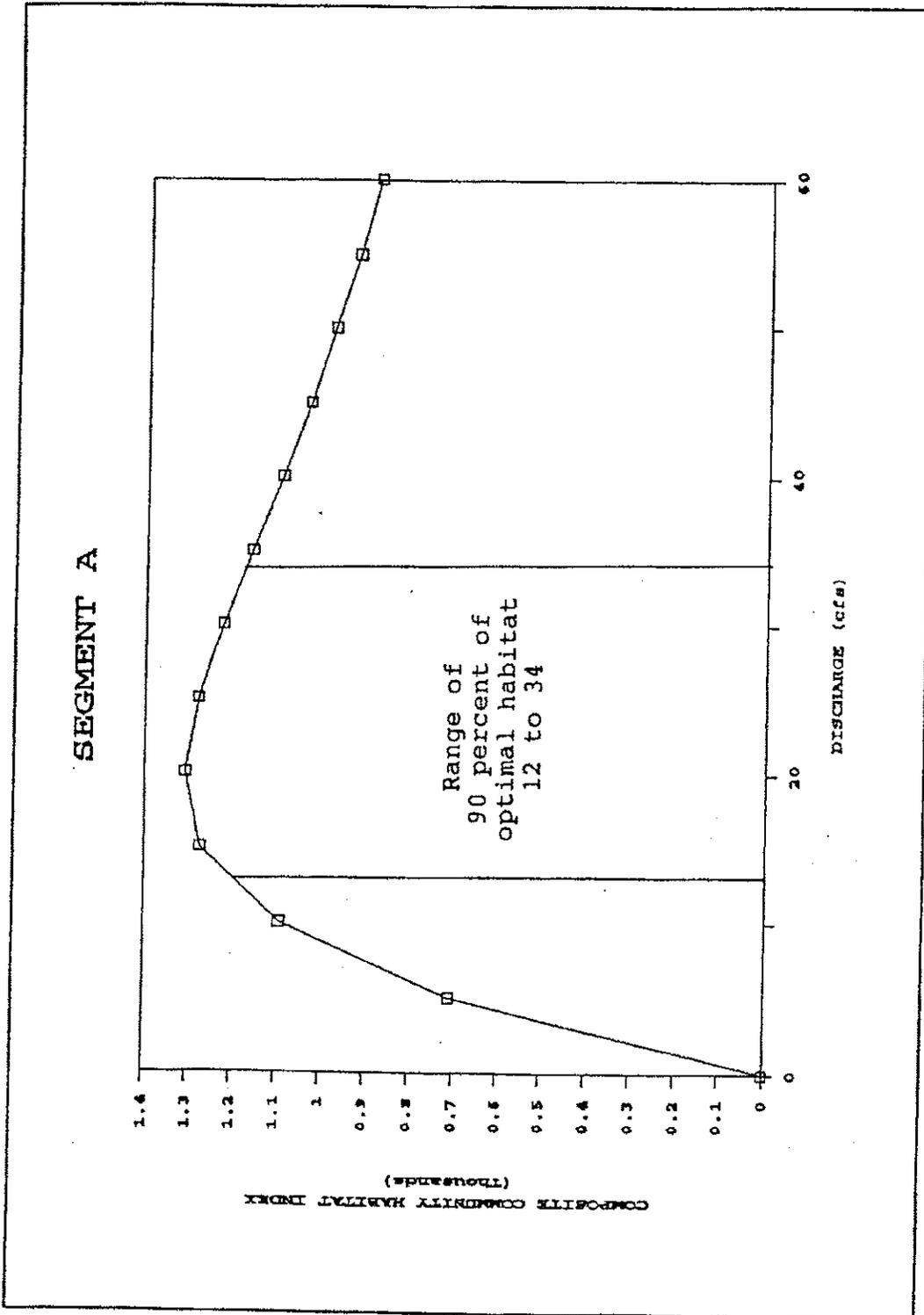


Figure 18. Composite community habitat index as a function of discharge for segment A.

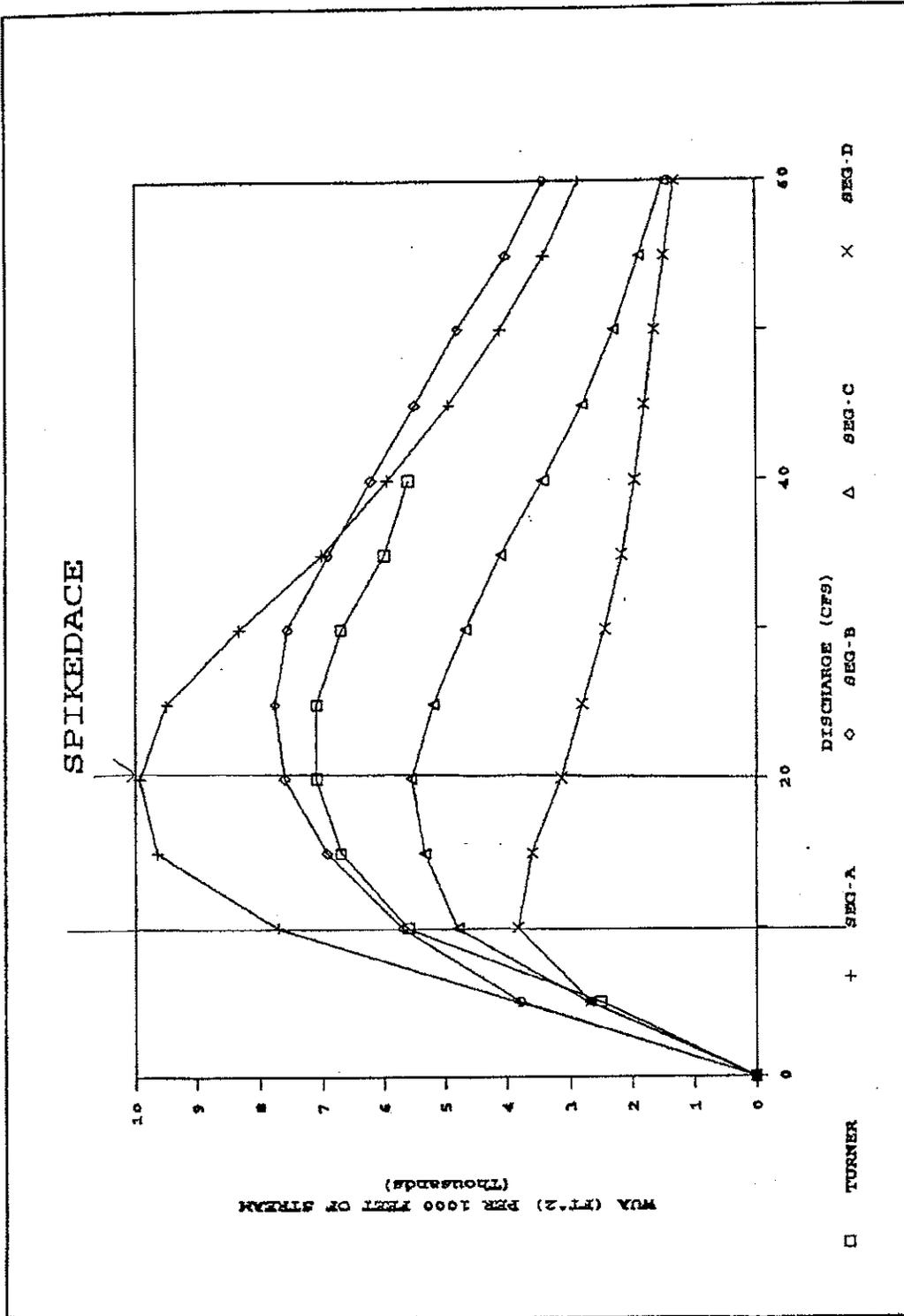


Figure 4. Comparison of WUA for Spikedace from Turner and Tafanelli (1983) and the present PHABSIM model results.

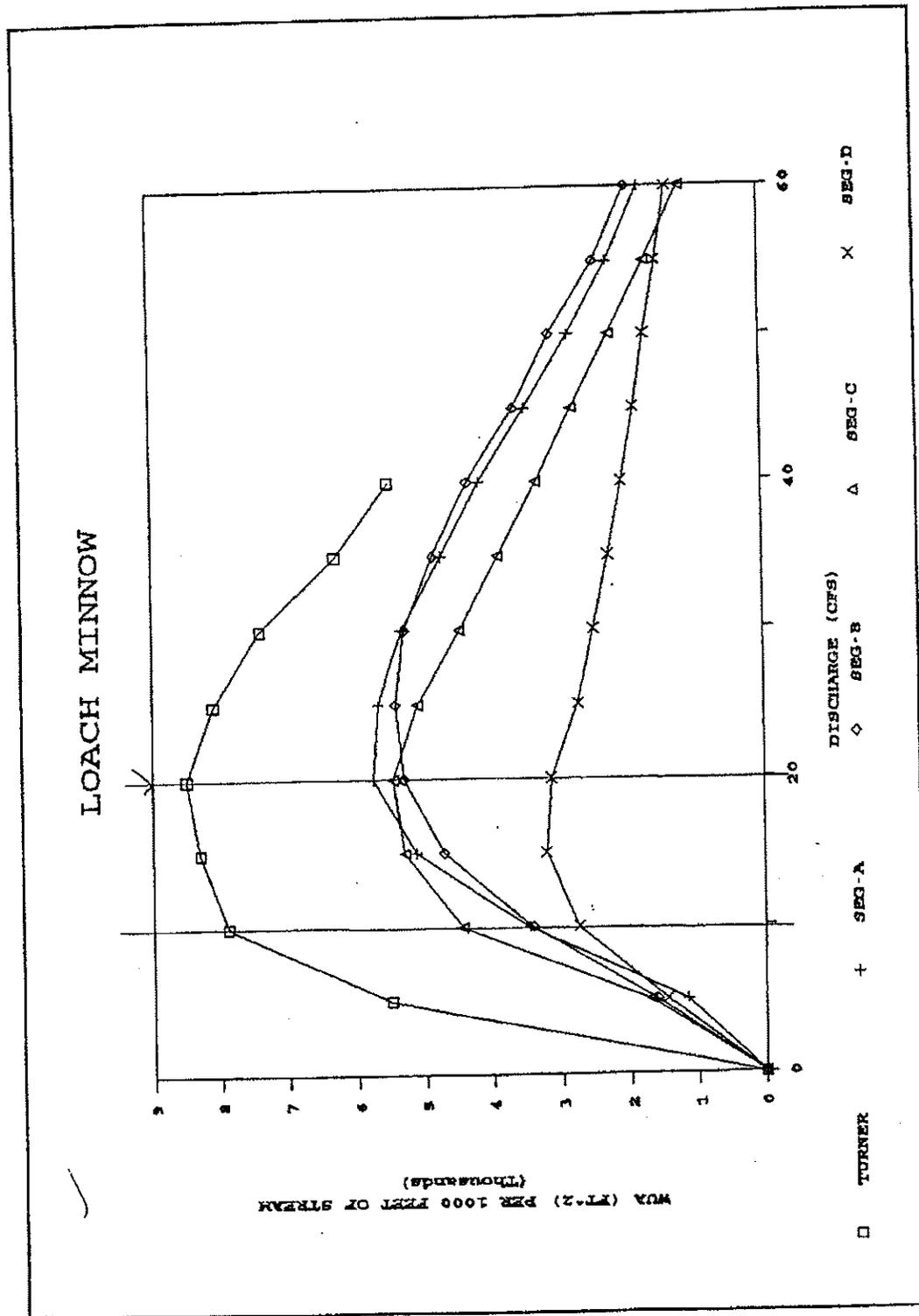


Figure 5. Comparison of WUA for Loach Minnow from Turner and Tafanelli (1983) and the present PHABSIM model results.

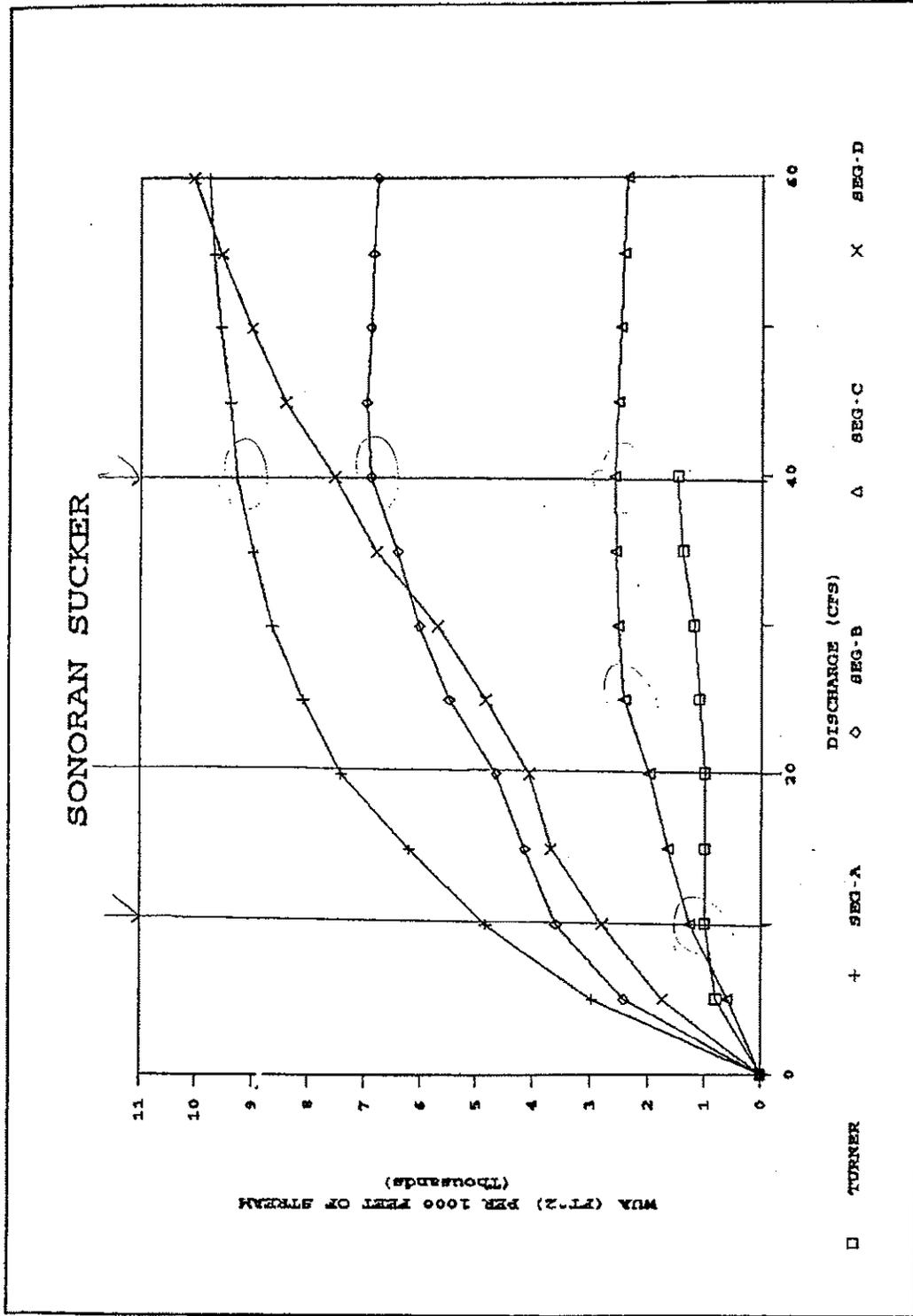


Figure 6. Comparison of WUA for Sonoran Sucker from Turner and Tafanelli (1983) and the present PHABSIM model results.

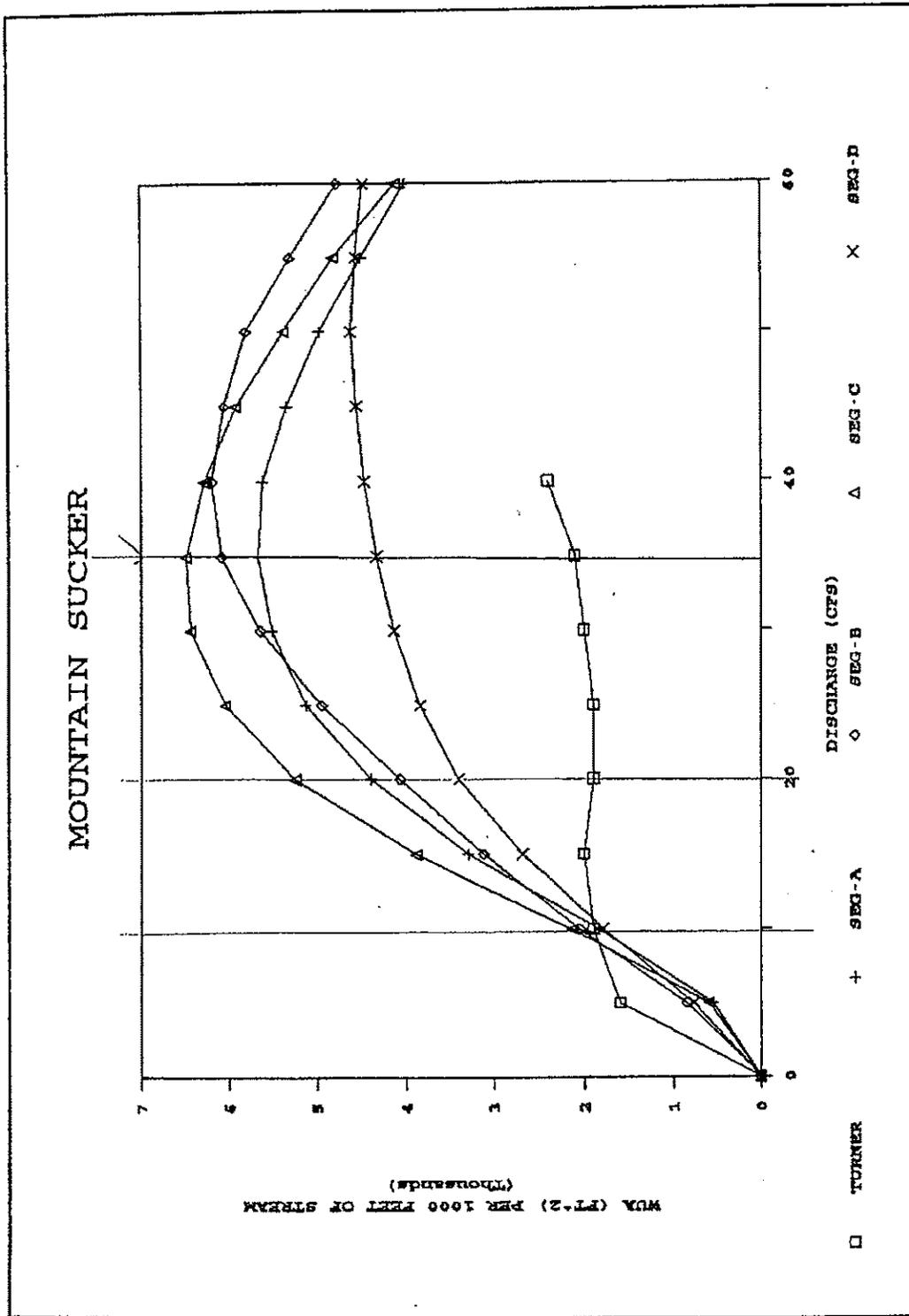


Figure 7. Comparison of WUA for Mountain Sucker from Turner and Tafanelli (1983) and the present PHABSIM model results.

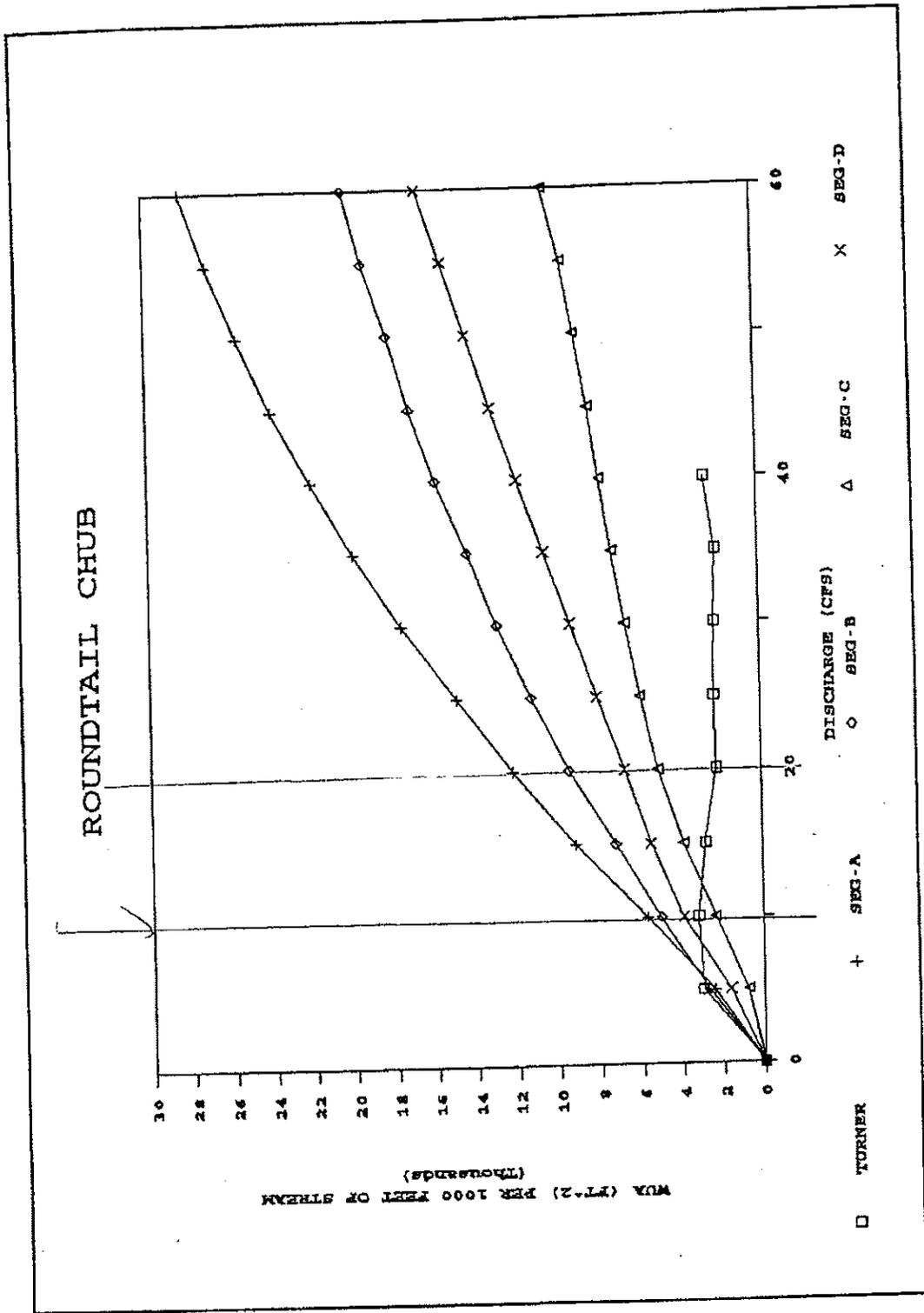


Figure 8. Comparison of WUA for Roundtail Chub from Turner and Tafanelli (1983) and the present PHABSIM model results.

FINAL REPORT

**Instream Flow Recommendations for the Fishes
of
Aravaipa Creek, Arizona**

Submitted to
The Nature Conservancy
Arizona Field Office
300 E. University Blvd.
Tucson, AZ 85705

By

Dr. Thomas B. Hardy
Brent Bartz
Wendy Carter

Twelve-Nine, Inc.
P.O. Box 3464
Logan, UT 84321

October 16, 1990

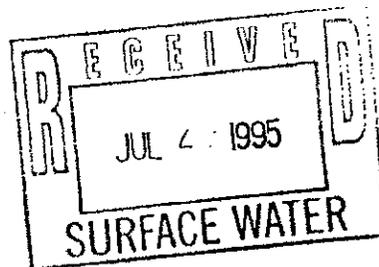
STATE OFFICE:
300 East University Blvd., Suite 230
Tucson, Arizona 85705
(602) 622-3861 Fax (602) 620-1799



PHOENIX OFFICE:
2255 North 44th Street, Suite 100
Phoenix, Arizona 85008
(602) 220-0490 Fax (602) 225-0541

July 21, 1995

Mr. Joe Stuart
Arizona Department of Water Resources
500 N. 3rd Street
Phoenix, AZ 85004



Re: Certification of Permit Nos. 33-95488, 33-95489, 33-95490 and 33-95771, Aravaipa Creek.

Dear Mr. Stuart:

Please note the enclosed the Proof of Appropriation and Affidavit of Appropriator forms associated with the Arizona Chapter of The Nature Conservancy Permit Nos: 33-95488,33-95489,33-95490 and 33-95771. Data submitted in accord with Permit Nos. 33-95488,33-95489 and 33-95490 include instantaneous streamflow data collected monthly for the last five years at the locations specified in the permits. Summary data presentation and field data sheets are included for each of the three measurement sites for a five year period beginning with the end of the streamflow data collection period presented in the Dr. Hardy justification report submitted to you on October 29, 1990. Permit No. 95771 includes a summary data presentation along with a diskfile of average daily mean streamflow data provided by the USGS for stream gage #9473000 for water years 1989-1994. These data clearly demonstrate the availability of water sufficient to meet our permitted amounts which are distributed monthly over the entire year.

The field data sheets and diskfile data were sent directly to Mr. Tom Harbour along with the summary presentations. Please call or write me at the Tucson Office address listed above.

Sincerely,

Handwritten signature of Andy Laurenzi in cursive.
Andy Laurenzi
Director of Protection

cc: Tom Harbour
Ed Brunson, Aravaipa Canyon Preserve manager
Robert Wigington, Western Regional Water Rights Attorney
Meg Jensen, Gila Resource Area manager, BLM

Date Filed: 31-Oct-90

Application No. 33-95488-0000 Permit No. 33-95488-0000 County Pinal

SURFACE WATER

PROOF OF APPROPRIATION OF WATER

1. Name and address of permit holder: Arizona Chapter of The Nature Conservancy

2. Source of appropriable (surface) water supply: Aravaipa Creek
 tributary of the San Pedro River

3. Location of point of diversion: N/A
 GLO Lot # _____, or _____ 1/4 _____ 1/4, Section _____, Township _____ N/S Range _____ E/W

4. Construction of works began on _____ and was completed on _____

5. Date water was completely applied to stated beneficial use incl. fish has taken place at this location since pre-1700
Instream use for recreation & wildlife,

6. Name, if any, and capacity of reservoir _____

7. Specify quantity of water that has been applied to each beneficial use: 13,336 af
 (acre-feet or gallons)

8. During what months is the water beneficially used? January-December

9. Describe the location where the water is used. If for irrigation, in the column headed "Acres actually irrigated" fill in only the number of acres that have actually been irrigated in that location in the smallest units that will identify them:

GLO Lot #	1/4	1/4	1/4	Section(s)	Township (N/S)	Range (E/W)	Acres Actually Irrigated
			SW	13	65	17E	N/A
Downstream to a point on the stream located at:							
		NE	SW	26	65	17E	N/A

10. (a). If a dam has been constructed, give description: Height, at downstream face _____ ft;
length on top _____ ft.; length on bottom _____ ft.; material used and character of
construction _____
- (b). Give description of canal headgate: Width _____ ft.; depth _____ ft.; material used and
character of construction, _____
- (c). Size of canal: Width on top (at waterline) _____ ft.; width on bottom, _____ ft.;
depth of water _____ ft.; length _____ ft.; grade, _____ ft. fall per 1,000 ft.
Actual capacity, _____ sec.-ft. Give general description:

- (d). Pipe line: Description of intake, _____

Length of pipe, _____ ft.; diameter at intake, _____ in.; Difference in elevation between
intake and place of use, _____ ft. Actual capacity of pipe line, _____ cubic-feet/second
Give general description: _____
(material: steel, wrought, cast iron, wood stave, etc.)
- (e). Pumping plant: Give size and type of pump, _____
Type of motor used _____ Horse power rating, _____ H.P. Actual capacity
of pump, _____
- (f). Distribution works: _____ Material _____
(no.) (tanks or troughs)

(dimensions and capacity of each)

11. Domestic Use. State number of families and persons actually served, and describe other domestic uses of water

12. Stockwatering Use. State kind of stock served _____
minimum and average number served per day during the months of the year water is used.
Maximum _____ Minimum _____ Average _____

13. If for any purpose other than irrigation, stockwater or domestic, state the extent and nature of such use _____
*Instream use for recreation and wildlife including fish of
Arroyo Creek of the aforementioned segment described in #9
above.*

AFFIDAVIT OF APPROPRIATOR

STATE OF ARIZONA)
County of Pima)ss.

I, Andy Laurenzi, being first duly sworn, depose and say that I have read the above and foregoing proof of appropriation of water; that I know the contents thereof, and that the facts therein stated are true.

IN WITNESS WHEREOF, I have hereunto set my hand this 21st day of July, 1995.

Andy Laurenzi

Subscribed and sworn to me this 21st day of July, 1995
OFFICIAL SEAL
ELIZABETH A. KOLBE
Notary Public
My Commission Expires 1-1-96
Elizabeth A. Kolbe

My commission expires January 1, 1996

AFFIDAVIT OF WITNESS

STATE OF ARIZONA)
County of PIMA)ss.

We, Ed Brunson, and Tom Collazo

of The Nature Conservancy, being first duly sworn, and depose and say that we are well acquainted with the facts and conditions set forth in the foregoing statement relative to proof of appropriation of water under Permit No. 33-95488-0000, that we and each of us have been over and upon each tract described in said proof, and from such personal inspection have knowledge that all necessary ditches, dams and other diversion and distributing works have been constructed, and water used as stated therein; that we have carefully read such proof of appropriation, and that each and every statement contained therein is true to the best of our knowledge and belief.

Ed Brunson
Tom Collazo

Subscribed and sworn to me before this 16th day of August, 1995.

OFFICIAL SEAL
ELIZABETH A. KOLBE
Notary Public
My Commission Expires 1-1-96

Elizabeth A. Kolbe
Notary Public

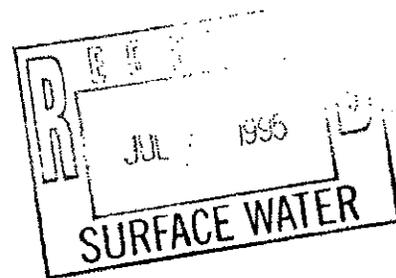
My Commission Expires January 1, 1996

Completing the Proof of Appropriation of Water Form

This is the final report required of a holder of a permit allowing appropriation of public waters. Upon arrival of this report and the receipt of the proper fee the Department shall be ready to issue a Certificate of Water Right.

The Proof of Appropriation of Water is a series of statements of the appropriator, under oath, which are corroborated by the affidavits of two witnesses. This form should be filled in carefully, in a manner that will describe completely the project as actually constructed, giving the number of stock being watered and the quantity of water used under stockwatering permits; giving, in case of irrigation, the number of acres of land actually irrigated and the quantity of water used; and giving the full extent of use under appropriations for whatever other purposes. The practice of merely copying this information from the permit is not proper and should not be followed.

The accompanying affidavits of appropriator and witness must be made before a Notary Public or other officer qualified to administer oaths.



Department of Water Resources
Hydrology Division

M E M O R A N D U M

TO: Dennis Kimberlin, Chief, Operations Division
Joe Stuart, Operations Division

THRU: Greg Bushner, ^{MB} Section Manager, Surface Water/Recharge

FROM: Tom Harbour, Hydrology Division ~~TH~~

DATE: May 7, 1992

SUBJ: Hydrologic review of instream flow applications 33-95488,
95489, and 95490 filed by The Nature Conservancy for
segments of Aravaipa Creek, Pinal County, Arizona.

Background

The Arizona Chapter of the Nature Conservancy filed the referenced applications on October 31, 1991 for segments of Aravaipa Creek located adjacent to the BLM Aravaipa Canyon Wilderness Area. The stated beneficial uses are for recreation, wildlife, and fish. An Instream Flow Incremental Methodology (IFIM) model was submitted to quantify the streamflow requirements for the native fishes and to justify the requested flow amount.

Requested monthly flow volumes were based on 80 % of the median daily flow provided this was within the range of 90 % of the optimum flow requirements for the fishes. Quantification of streamflow availability was accomplished using daily mean discharge data from two BLM continuous recording streamgaging stations on the east and west ends of the Wilderness Area supplemented with instantaneous flow measurements.

Recommendation

The Hydrology Division recommends approval of the referenced instream flow applications. The applicant has satisfied the minimum technical requirements, adequately assessed the availability of historic streamflow, and quantified the water requirements for fish, wildlife and recreation uses. Permit issued to the applicant should be subject to the following limits and terms:

Uses: Wildlife, including fish
Recreation

Uses: Wildlife, including fish
Recreation

Amounts:

Maximum annual volume measured in acre-feet-

<u>95488</u>	<u>95489</u>	<u>95490</u>
13,336	13,578	11,224

Monthly flow rates-

Monthly flow rates in cubic-feet per second measured within each respective stream segment are distributed as follows:

MONTH	FLOW RATE (cubic-feet / second)		
	95488	95489	95490
October	13.4	18	15
November	15.7	18	15
December	17.2	20	17
January	20.4	19	16
February	21.9	21	18
March	19.7	22	18
April	13.1	19	16
May	18	18	14
June	15.2	17	14
July	18	17	14
August	19	18	15
September	18	18	14

Note: A companion application to these (33-95771) was permitted March 9, 1992.

cc: Greg Wallace, Hydrology Division
Herb Dishlip, Water Management

ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue, Phoenix, Arizona 85007
Telephone (602) 542-1553
Fax (602) 256-0506



June 11, 1992

FIFE SYMINGTON
Governor

ELIZABETH ANN RIEKE
Director

The Nature Conservancy
Attention: Mr. Thomas P. Collazo
A. C. Star Route Box 4318
Winkelman, Arizona 85292

Re: Permit to Appropriate Public Waters Nos. ~~33-95488~~, 33-95489, 33-95490

Dear Mr. Collazo:

Your applications for appropriative permits have been approved. Enclosed please find the approved Permits To Appropriate Public Water.

Also enclosed are Proof of Appropriation of Water and Affidavit of Appropriator forms. These two forms must be completed and filed with the Department of Water Resources for each Permit after the means of diversion or storage have been constructed and after the appropriated water has been applied to the permitted beneficial use. The Affidavit of Appropriator must be notarized and supported by the affidavit of two witnesses.

The Proof of Appropriation of Water is an important document which should show the amount of water beneficially used. Please answer each applicable question completely, carefully and correctly, after reviewing the terms of your permit, the application and any information which you have compiled regarding this water use. You may submit attachments with the Proof.

The information set forth in the Proof will be reviewed prior to the issuance of a Certificate of Water Right. This review may include a field examination of the appropriation.

Yours truly,

Ann S. Motlok
Supervisor, Surface Water Rights Unit
Operations Division
Telephone (602) 542-1581

ASM:hs

Enclosures

FM00355

Arizona Department of Water Resources
15 South 15th Avenue
Phoenix, Arizona 85007

**PERMIT TO APPROPRIATE PUBLIC
WATER OF THE STATE OF ARIZONA**

Application No. 33-95488.0000
Permit No. 33-95488.0000

This is to certify that pursuant to the provisions of Arizona Revised Statute 45-153, the Arizona Chapter of the Nature Conservancy, 300 East University Boulevard, Suite 230, Tucson Arizona, is granted an appropriative permit subject to the following terms:

1. **Source:** The public waters flowing in Aravaipa Creek, a tributary to the San Pedro River.
2. **Types of use, and amounts:** Recreation and wildlife, including fish. The cumulative amount of use for both types of uses is expressed as an annual volume of flow of Aravaipa Creek as gaged at the beginning of the specific reach as described in item 3. The appropriated flow is further described as a monthly median of mean daily flow as measured at the Bureau of Land Management West End Wilderness Gage, located at the beginning of the described stream segment. Monthly flow rates in cubic-feet per second measured at the beginning of the stream segment are distributed as follows:

<u>Month</u>	<u>Flow Rate (cubic-feet/second)</u>
October	13.4
November	15.7
December	17.2
January	20.4
February	21.9
March	19.7
April	13.1
May	18
June	15.2
July	18
August	19
September	18
Volume (acre-feet/year)	<u>13,336</u>

3. **Point of diversion and place of use:** Water will not be diverted from the natural channel. The beneficial use will occur instream along the meandering course of Aravaipa Creek. The instream use will begin at a point where Aravaipa Creek enters the Southwest quarter (SW $\frac{1}{4}$) of Section 13, Township 6 South, Range 17 East downstream to where it leaves the Northeast quarter of the Southwest quarter (NE $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 26, Township 6 South, Range 17 East, Gila and Salt River Base and Meridian, Pinal County, Arizona. (Approx. 2.5 stream miles.)

4. There shall be no impoundments of public waters nor interference within the natural flow of Aravaipa Creek.
5. There shall be no consumptive use of public waters other than is caused by natural habitat (flora and fauna).
6. There shall be no interference with nor detrimental effect upon prior vested water rights as a result of the permitted beneficial use of public water.
7. The date of priority of the appropriation is October 31, 1990.
8. The Permittee shall, commencing immediately, maintain or continue to maintain a record of the flow of Aravaipa Creek at the aforesaid streamflow gaging location. In order to become a candidate for certification, the Permittee must submit a minimum of 4 years of streamflow data, an analysis of the data, a completed Proof of Appropriation, and a completed Affidavit of Appropriator to the Department of Water Resources on or before May 29, 1996.

Dated this 29th day of May, 1992.

ARIZONA DEPARTMENT OF WATER RESOURCES



**Herb Dishlip
Deputy Director
Water Management**

ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue, Phoenix, Arizona 85007
Telephone (602) 542-1553
Fax (602) 256-0506



June 28, 1991

FIFE SYMINGTON
Governor

ELIZABETH ANN RIEKE
Director

Mr. Wilford Claridge
P.O. Box 183
Thatcher, AZ 85552

Re: Submitted protests, Applications for Permit to Appropriate Public Water,
No.s 33-95488, -95489, -95490, and -95771, Nature Conservancy, In-situ use,
Aravaipa Ck.

Dear Mr. Claridge:

Upon the request of Mr. Tom Collazo of the Arizona Chapter of the Nature Conservancy, I have reviewed your protests against the referenced applications. Included in the record is a letter from Mr. Collazo to you, dated April 12, 1991. In this letter, Mr. Collazo reiterates that the applications do not involve any impoundments of water nor any interference with the natural flow of Aravaipa Creek. He also states that there will be no consumptive use of the water other than that which is used by the natural habitat, that there will be no degradation of water quality caused by this appropriation, and most importantly to you, that there shall be no interference with vested water rights.

The Department of Water Resources feels that the referenced applications appear to present no threat or hindrance to your own use of water out of Aravaipa Creek, and that any vested water right you possess is protected under provisions of statute.

Unless I receive correspondence from you within 15 days of receipt of this letter stating some other objection to the Department permitting the referenced applications, I will consider the protest against the applications resolved.

Yours truly,

Joe B. Stuart
Manager, Surface Water Rights Systems
Operations Division
Telephone (602) 542-1581

JBS:d1

cc: Mr. Tom Collazo

Certified Mail No. P-441-665-537

FM00358



Aravaipa Canyon Preserve

A.C. Star Route Box 4318, Winkelman, AZ 85292
(602) 357-6349

February 22, 1991

FFR 26 1991

Joe B. Stuart
Manager, Surface Water Rights Systems
Operations Division
Arizona Department of Water Resources
15 South 15th Avenue
Phoenix, AZ 85007

RE: Application for Permit to Appropriate Public Water
Nos. 33-95488, 33-95489, 33-95490 and 33-95771

Dear Mr. Stuart:

Enclosed are the signed and notarized Affidavits of Posting Notice and copies of the Notice of Application to Appropriate Public Water for the four above-referenced applications. In addition to each notice being posted along the road adjacent to its respective stream segment, all four notices were posted at both the Klondyke and Winkelman post offices. The enclosed photographs show each posting location.

Please advise if any additional information is necessary for processing these applications.

Sincerely,

A handwritten signature in cursive script that reads "Thomas P. Collazo".

Thomas P. Collazo
Preserve Director

Enclosures

cc: Mark Heitlinger, Robert Wigington

FM00359



ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007

AFFIDAVIT OF POSTING NOTICE

STATE OF ARIZONA

APPLICATION TO APPROPRIATE

County of Pinal

)
) ss.
)

NO. 33-95488

Thomas P. Collazo, being first duly sworn, states that two copies of the Notice of Application for a Permit to appropriate Public Water of the State of Arizona No. 33-95488, a copy of which is hereto attached, were posted on the 12th day of January, 19 91, at:

1. U.S. Post Office, Winkelman, AZ

2. Along Aravaipa Canyon Road in the Northeast Quarter of the Southeast Quarter of Section 23, Township 6 South, Range 17 East, G.S.R.B.M., Pinal County, Arizona

Each of the notices was posted in a conspicuous place in the locality to be affected by the proposed appropriation of water and remained posted for thirty consecutive days ending on the 15th day of February, 19 91.

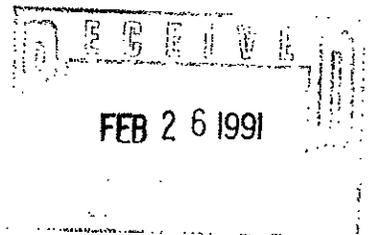
Thomas P. Collazo
Affiant

Subscribed and sworn to before me this 22 day of February, 19 91.

Theodore Chy
Notary Public

My commission expires:

Nov 09, 1993



NOTICE OF APPLICATION TO APPROPRIATE PUBLIC WATER

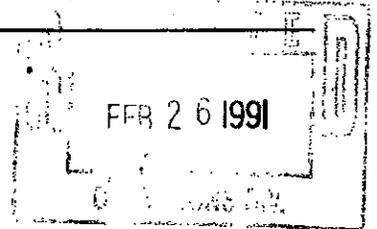
On the 31st day of October, 1990, Arizona Chapter of The Nature Conservancy,
300 East University Boulevard, Suite 230, Tucson, Arizona 85705

filed an Application for a Permit to Appropriate Public Water, No. 33-95488.

The application states:

1. Source of water: Aravaipa Creek, a tributary of the San Pedro River.
2. Purposed use and amount: 14,901.28 acre-feet per annum for recreation and wildlife.
Insitu use based on a cubic feet per second monthly flow.
3. Point of diversion: See reverse side.
4. Place(s) of use: See reverse side.
5. Description of dam and reservoir: N/A.

Other: ***SEE MAP ON REVERSE SIDE***



Any person whose prior vested appropriable water rights may be affected by this proposed appropriation, may, within sixty (60) days of the issuance of the Notice, file a Statement of Protest against this application. The protest form may be obtained from the Arizona Department of Water Resources, Operations Division, 15 South 15th Avenue, Phoenix, Arizona 85007.

The Statement of Protest must be completed according to instructions found on the form and filed with the Department. The protestant must also send a copy of the completed Statement to the applicant.

Inquiries concerning the proposed appropriation may be directed to the Operations Division at (602) 542-1581.

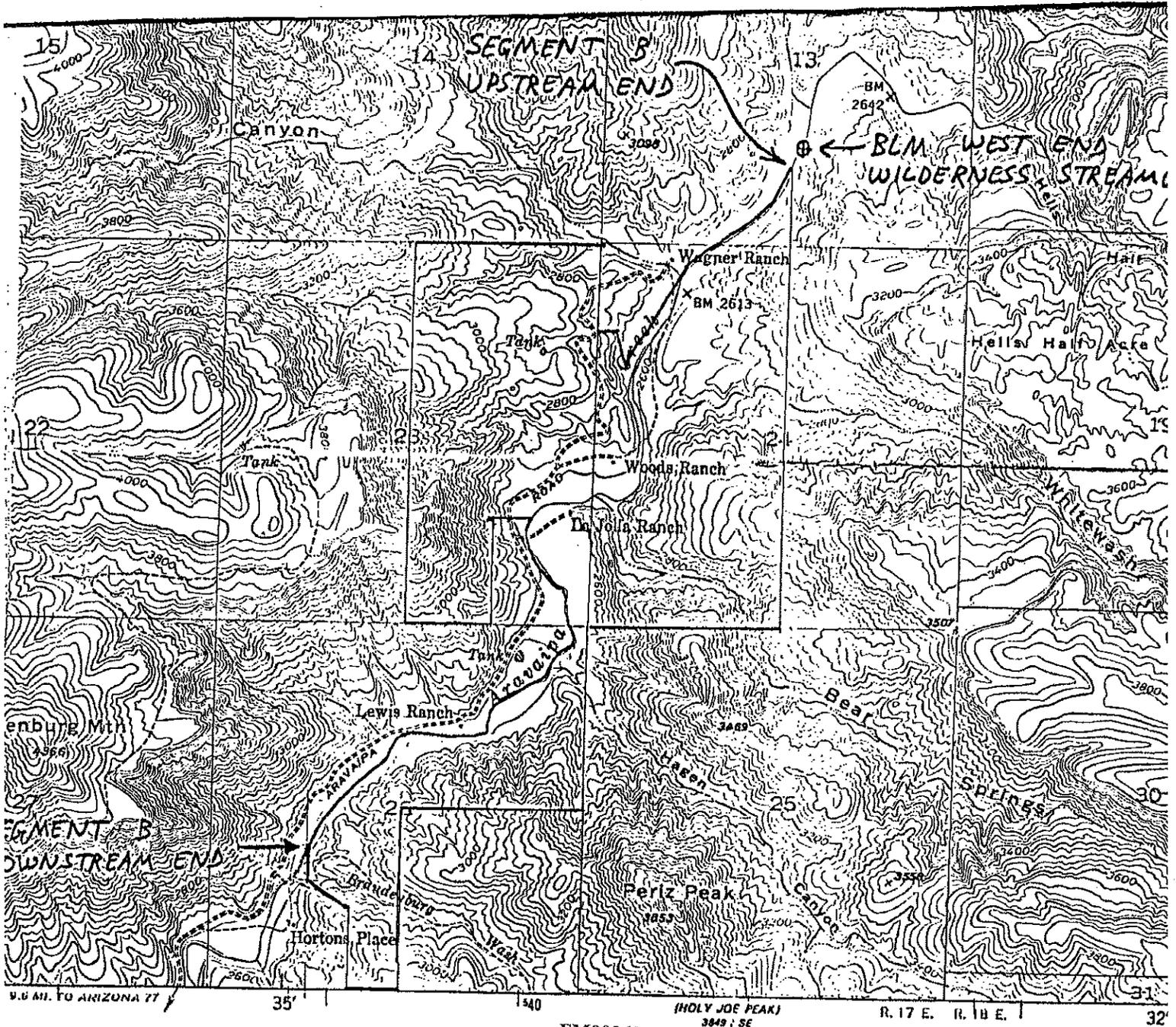
Issued this 28 day of December, 1990

Arizona Department of Water Resources

as

3. Point of diversion and:
4. Place(s) of use:

Water will not be diverted out of the natural channel; use will occur instream along the meandering channel of Aravaipa Creek at a point beginning in the Southeast quarter (SE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$) of Section 13 and continuing through the Northeast quarter (NE $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), the Northwest quarter (NW $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), the Southwest quarter (SW $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), Section 24; the Northeast quarter (NE $\frac{1}{4}$) of the Southeast quarter (SE $\frac{1}{4}$), the Southeast quarter (SE $\frac{1}{4}$) of the Southeast quarter (SE $\frac{1}{4}$), Section 23; the Northeast quarter (NE $\frac{1}{4}$) of the Northeast quarter (NE $\frac{1}{4}$), the Southwest quarter (SW $\frac{1}{4}$) of the Northeast quarter (NE $\frac{1}{4}$), the Southeast quarter (SE $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), Section 26, and ending at a point within the the Northeast quarter (NE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$) Section 26, all within Township 6 South, Range 17 East, Gila and Salt River Base and Meridian, Pinal County, Arizona.



JAN 4 1991

OPERATIONS DIV

NOTICE OF APPLICATION TO APPROPRIATE PUBLIC WATER

On the 31st day of October, 19 90, Arizona Chapter of The Nature Conservancy,
300 East University Boulevard, Suite 230, Tucson, Arizona 85705

filed an Application for a Permit to Appropriate Public Water, No. 33-95488.

The application states:

1. Source of water: Aravaipa Creek, a tributary of the San Pedro River.
2. Purposed use and amount: 14,901.28 acre-feet per annum for recreation and wildlife.
Insitu use based on a cubic feet per second monthly flow.
3. Point of diversion: See reverse side.
4. Place(s) of use: See reverse side.
5. Description of dam and reservoir: N/A.

Other: *****SEE MAP ON REVERSE SIDE*****

Any person whose prior vested appropriable water rights may be affected by this proposed appropriation, may, within sixty (60) days of the issuance of the Notice, file a Statement of Protest against this application. The protest form may be obtained from the Arizona Department of Water Resources, Operations Division, 15 South 15th Avenue, Phoenix, Arizona 85007.

The Statement of Protest must be completed according to instructions found on the form and filed with the Department. The protestant must also send a copy of the completed Statement to the applicant.

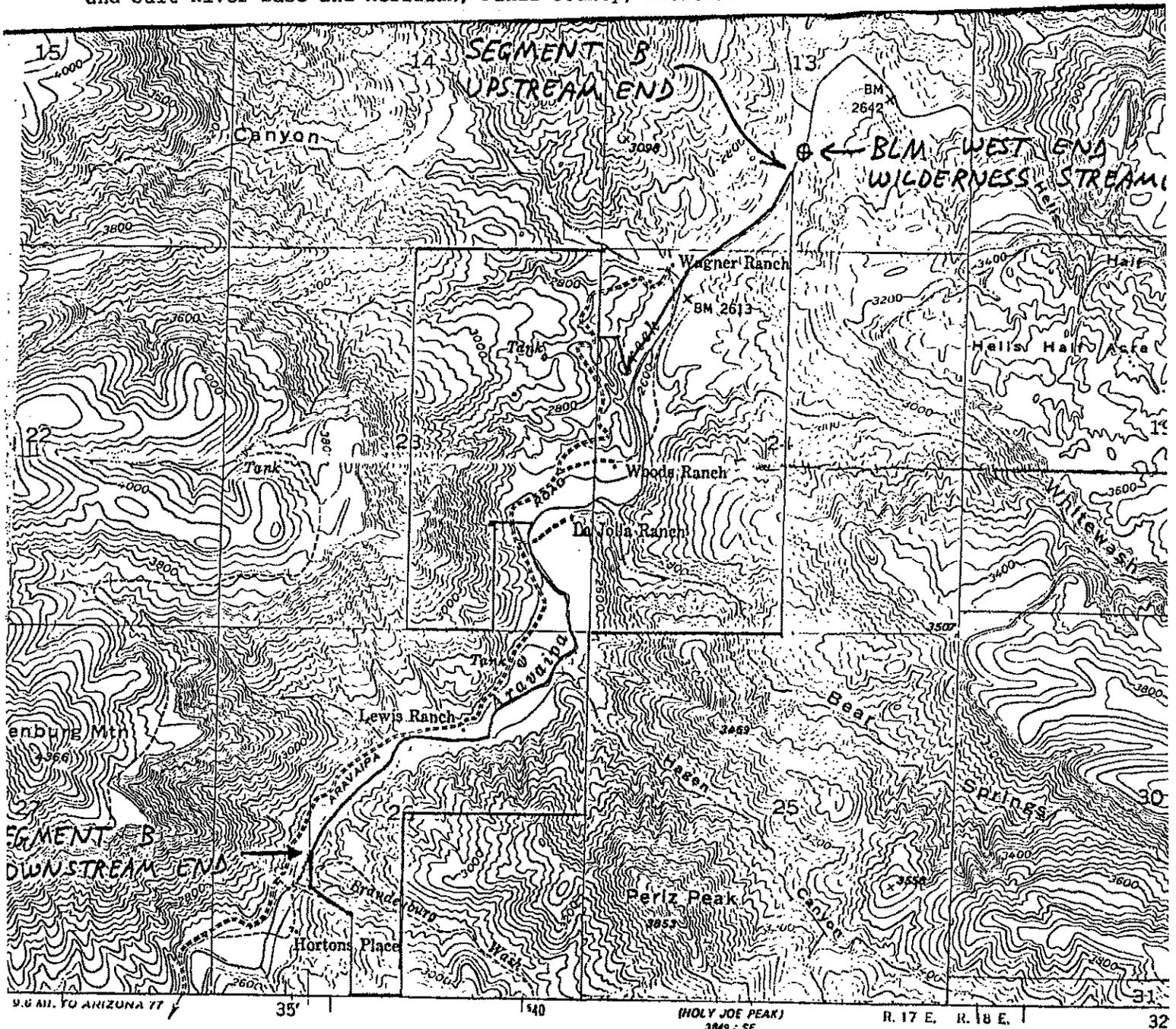
Inquiries concerning the proposed appropriation may be directed to the Operations Division at (602) 542-1581.

Issued this 28 day of December, 19 90

Arizona Department of Water Resources

3. Point of diversion and:
4. Place(s) of use:

Water will not be diverted out of the natural channel; use will occur instream along the meandering channel of Aravaipa Creek at a point beginning in the Southeast quarter (SE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$) of Section 13 and continuing through the Northeast quarter (NE $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), the Northwest quarter (NW $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), the Southwest quarter (SW $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), Section 24; the Northeast quarter (NE $\frac{1}{4}$) of the Southeast quarter (SE $\frac{1}{4}$), the Southeast quarter (SE $\frac{1}{4}$) of the Southeast quarter (SE $\frac{1}{4}$), Section 23; the Northeast quarter (NE $\frac{1}{4}$) of the Northeast quarter (NE $\frac{1}{4}$), the Southwest quarter (SW $\frac{1}{4}$) of the Northeast quarter (NE $\frac{1}{4}$), the Southeast quarter (SE $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), Section 26, and ending at a point within the the Northeast quarter (NE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$) Section 26, all within Township 6 South, Range 17 East, Gila and Salt River Base and Meridian, Pinal County, Arizona.





ARIZONA
DEPARTMENT
OF WATER
RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007



W
FORWARDING ORDER EXPIRED

- FORWARDING ORDER EXPIRED
- INSUFFICIENT ADDRESS
- NO SUCH NUMBER
- ATTEMPTED, NOT KNOWN
- NO RECEIPTABLE
- REFUSED
- VACANT

1601

Defenders of Wildlife
30 N. Tucson Blvd.
Tucson, AZ. 85716

JAN 4 1986



NOT DELIVERABLE
AS ADDRESSED
UNABLE TO FORWARD
RETURN TO SENDER

Date filed: _____

STATEMENT OF PROTESTANT

In the matter of the application of _____) APPLICATION _____
(Applicant name) _____)
(Source) _____) CLAIM _____



This statement must be completed and filed with the Arizona Department of Water Resources, Operations Division, within 60 days from the date of issuance of the official notice.



1. State quantity of water now used by you for each and every purpose:
Domestic _____ gallons per annum.
Irrigation _____ acre-feet per annum.
Stockwatering _____ gallons per annum.
_____ per annum.
(other uses)
2. Do you own the lands for which water is claimed by you? _____
If not, explain the nature of your occupancy _____
3. Give the legal description of lands upon which or where the water is used _____
4. State the name and type of your water source _____
5. State the date the water right or claim herein referred to was initiated and the registry number of the water right or claim _____
6. If water is produced by means of wells, state the number of wells, the registry number of each well, and the location of each well by describing the ten-acre legal subdivision or lot within which each well is located _____
7. If water is obtained by means of surface diversion, state the location and nature of the diversion works _____

8. If the water is used for irrigation, state the number of acres you irrigated _____

9. State the quantity of water you actually used each year for the past five years. If for irrigation, in acre-feet, and if for any other purpose, in gallons _____

10. If the water is used for stockwatering, state the kind of stock served and the average number served per day _____

11. If water is used for any other purpose, state the use made and describe the manner of using the water _____

.....

GROUNDS FOR PROTEST

Date signed _____

Signature of Protestant,
or representative



December 28, 1990

ARIZONA
DEPARTMENT
OF WATER
RESOURCES

Rose Mofford, Governor
N. W. Plummer
Director

15 South 15th Avenue
Phoenix, Arizona 85007

San Manuel Miner
P. O. Box 465
San Manuel, Arizona 85631

Re: Application for Permit to Appropriate Public Water
Nos. 33-95488 and 33-95771

Dear Editor:

The Department of Water Resources submits the following material which you may find of interest.

Enclosed are one or more copies of the notices required to be posted by the applicant, seeking a permit to appropriate public waters of the State of Arizona.

Yours truly,

A handwritten signature in cursive script, appearing to read "Joe B. Stuart".

Joe B. Stuart
Manager, Surface Water Rights Systems
Operations Division
Telephone (602) 542-1581

JBS:as

Enclosures

FM00368



December 28, 1990

ARIZONA
DEPARTMENT
OF WATER
RESOURCES

Rose Mofford, Governor
N. W. Plummer
Director

15 South 15th Avenue
Phoenix, Arizona 85007

Mark Heitlinger, Director of Stewardship
The Arizona Nature Conservancy
300 East University Blvd., Suite 230
Tucson, Arizona 85705

Re: Application for Permit to Appropriate Public Water
Nos. 33-95488, 33-95489, 33-95490 and 33-95771

Dear Mr. Heitlinger:

Enclosed are two copies of the Notice of Application to Appropriate Public Water and an Affidavit of Posting Notice for the referenced applications.

The Notices must be posted within twenty days (20) from the date of issuance appearing at the bottom thereof. The Notices must be posted in two conspicuous public places, and must remain posted continuously for thirty (30) days. The Department suggests one Notice be posted at the post office nearest the locality of the proposed appropriation and the other Notice be posted at the site of the proposed appropriation.

At the conclusion of the thirty-day posting period, the Affidavits of Posting Notice, with one copy of the Notice attached, must be completed, notarized and filed with the Department of Water Resources.

Yours truly,

A handwritten signature in cursive script, appearing to read "Joe B. Stuart".

Joe B. Stuart
Manager, Surface Water Rights Systems
Operations Division
Telephone (602) 542-1581

JBS:as

Enclosures

FM00369

NOTICE OF APPLICATION TO APPROPRIATE PUBLIC WATER

On the 31st day of October, 19 90, Arizona Chapter of The Nature Conservancy,
300 East University Boulevard, Suite 230, Tucson, Arizona 85705

filed an Application for a Permit to Appropriate Public Water, No. 33-95488.

The application states:

1. Source of water: Aravaipa Creek, a tributary of the San Pedro River.

2. Purposed use and amount: 14,901.28 acre-feet per annum for recreation and wildlife.
In situ use based on a cubic feet per second monthly flow.

3. Point of diversion: See reverse side.

4. Place(s) of use: See reverse side.

5. Description of dam and reservoir: N/A.

Other: ***SEE MAP ON REVERSE SIDE***

Any person whose prior vested appropriable water rights may be affected by this proposed appropriation, may, within sixty (60) days of the issuance of the Notice, file a Statement of Protest against this application. The protest form may be obtained from the Arizona Department of Water Resources, Operations Division, 15 South 15th Avenue, Phoenix, Arizona 85007.

The Statement of Protest must be completed according to instructions found on the form and filed with the Department. The protestant must also send a copy of the completed Statement to the applicant.

Inquiries concerning the proposed appropriation may be directed to the Operations Division at (602) 542-1581.

Issued this 28 day of December, 19 90

Arizona Department of Water Resources

as

3. Point of diversion and:

4. Place(s) of use:

Water will not be diverted out of the natural channel; use will occur instream along the meandering channel of Aravaipa Creek at a point beginning in the Southeast quarter (SE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$) of Section 13 and continuing through the Northeast quarter (NE $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), the Northwest quarter (NW $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), the Southwest quarter (SW $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), Section 24; the Northeast quarter (NE $\frac{1}{4}$) of the Southeast quarter (SE $\frac{1}{4}$), the Southeast quarter (SE $\frac{1}{4}$) of the Southeast quarter (SE $\frac{1}{4}$), Section 23; the Northeast quarter (NE $\frac{1}{4}$) of the Northeast quarter (NE $\frac{1}{4}$), the Southwest quarter (SW $\frac{1}{4}$) of the Northeast quarter (NE $\frac{1}{4}$), the Southeast quarter (SE $\frac{1}{4}$) of the Northwest quarter (NW $\frac{1}{4}$), Section 26, and ending at a point within the the Northeast quarter (NE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$) Section 26, all within Township 6 South, Range 17 East, Gila and Salt River Base and Meridian, Pinal County, Arizona.

Two copies to applicant and to:

City of Tucson, P.O. Box 27210, Tucson, AZ. 85726
San Carlos Irrig. Project, P.O. Box 250, Coolidge, AZ. 85228
San Carlos Irrig. & Drainage Dist., P.O. Box 218, Coolidge, AZ. 85228
Defenders of Wildlife, 30 N. Tucson Blvd., Tucson, AZ. 85716
Tony Leubbermann, 6154 N. Zorrela Segundo, Tucson, AZ. 85718
Dr. Geldmacher, AC Star Route 4262, Winkelman, AZ. 85292



Aravaipa Canyon Preserve

A.C. Star Route Box 4318, Winkelman, AZ 85292
(602) 357-6349

December 3, 1990

Joe B. Stuart
Manager, Surface Water Rights Systems
Operations Division
Arizona Department of Water Resources
15 South 15th Avenue
Phoenix, AZ 85007

DEC 5 1990

RE: Application for Permit to Appropriate Public Water
Nos. 33-95488 and 33-95771

Dear Mr. Stuart:

The above referenced applications are enclosed for resubmittal with the corrections discussed in your letter of November 9, 1990, to Mark Heitlinger.

On application No. 33-95488, the map has been redrawn to better conform to the legal land description provided in the application. At the present time, there exist differing versions of the exact boundaries near our downstream property terminus. However, all appear to agree that Conservancy ownership extends at least to where Aravaipa Creek leaves the Northeast quarter of the Southwest quarter of Section 26, Township 6 South, Range 17 East. The lines indicating property ownership in this vicinity are approximate. Please let us know if any additional information is needed.

On the returned application for the Holy Joe Segment (A), the file number at the top of the first page has a "38" prefix. I assume that "33" is the correct filing prefix.

Thank you for your careful consideration of these applications.

Sincerely,

A handwritten signature in cursive script, appearing to read "Tom Collazo".

Tom Collazo
Preserve Director
Aravaipa Canyon Preserve

cc: Mark Heitlinger, Robert Wigington

FM00372



ARIZONA DEPARTMENT OF WATER RESOURCES
15 South 15th Avenue
Phoenix, Arizona 85007

APPLICATION FOR PERMIT TO APPROPRIATE
PUBLIC WATER OF THE STATE OF ARIZONA

NO. 33-95488

FILED 10-31-90

1. Name Arizona Chapter of The Nature Conservancy Telephone (602) 622-3861
Address 300 E. University Blvd., #230 Tucson, Arizona 85705

2. Type of source and name, if any, Aravaipa Creek
a tributary of San Pedro River on the San Pedro watershed.
do not complete

3. Use of Water

A. Domestic

1. No. of Persons _____ 2. No. of Families _____

B. Municipal

1. Population to be served _____
2. Estimate of future population and water requirements _____

C. Irrigation

1. Location of the irrigated acreage

_____ 1/4 _____ 1/4 _____ 1/4 Section _____ Township _____ N/S Range _____ EW
_____ 1/4 _____ 1/4 _____ 1/4 Section _____ Township _____ N/S Range _____ EW

2. Number of acres to be irrigated _____

3. Describe type of crop to be irrigated _____

D. Stockwatering

1. Kind of stock _____ 2. No of stock _____

E. Power - Describe the nature of the works by which power is to be developed, pressure head, points of release of water and the uses to which the power will be applied. Attach documents as necessary.

F. Mining

1. Kind of mining claims _____
2. Methods of supplying and using water _____

G. Recreation

1. Character of area to be used Base flow a desert stream through or along a nature preserve for rare wildlife, native fish, and plants.

H. Wildlife

7 native fish, 8 amphibian, 47 reptile, 237 bird and 46 mammal species,
1. Kind of wildlife 20 of which are federally or state protected.
2. Character of area to be served Same as recreation.

I. Groundwater Recharge _____

J. Storage & Recovery _____

4. Amount of water

Use	Amount	Measure	Months of Use
See Attachment 1.			

ARAVAIPA -- WEST END (B): ATTACHMENT 1

1) Legal Description of Reach and Place of Use.

Begin at point where Aravaipa Creek enters the SW 1/4 of Sec. 13, T6S R17E downstream to where it leaves the NE 1/4 of the SW 1/4 of Sec. 26, T6S R17E, G.S.R.B.M., Pinal County, Arizona. (Approx. 2.5 stream miles.)

2) Amount of water at BLM West End Wilderness Gage.

a. Monthly Rate of Base Flow (cfs)

October	19	February	23	June	17
November	19	March	32	July	18
December	22	April	21	August	19
January	21	May	18	September	18

b. Maximum Annual Volume (af): 14,901.28

3) Conditions on Application

a. There shall be no impoundments of public waters nor interference with the natural flow of Aravaipa Creek.

b. There shall be no consumptive use of public waters other than caused by the natural habitat (flora and fauna).

c. There shall be no degradation of water quality by reason of applicant's use of these public waters other than as caused by the natural habitat.

d. There shall be no interference with nor detrimental effect upon prior vested rights as a result of the requested instream use.

DEC - 5 1990

FM00375



November 9, 1990

Mark Heitlinger, Director of Stewardship
The Arizona Nature Conservancy
300 East University Boulevard, Suite 230
Tucson, Arizona 85705

ARIZONA
DEPARTMENT
OF WATER
RESOURCES

Rose Mofford, Governor
N. W. Plummer
Director

15 South 15th Avenue
Phoenix, Arizona 85007

RE: Application for Permit to Appropriate Public Water
Nos. 33-95488 and 33-95771

Dear Mr. Heitlinger:

The referenced applications are being returned to you. The following information must be provided before the applications can be considered for final review:

Application No. 33-95488

The legal land description marked on your map for the ending point of Arivaipa Creek (west end, segment B), appears to be the Northwest quarter (NW $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$), Section 26, Township 6 South, Range 17 East. The location stated on attachment 1 of your application for the ending point of the referenced segment of Arivaipa Creek is the Northeast quarter (NE $\frac{1}{4}$) of the Southwest quarter (SW $\frac{1}{4}$), Section 26, Township 6 South, Range 17 East. The locations marked on your map must agree with the legal descriptions provided in your application.

Application No. 33-95771

The legal land descriptions marked on your map for Arivaipa Creek (segment A), appear to be Sections 3 and 4 of Township 7 South, Range 17 East. The locations stated on attachment 1 of your application for the referenced segment of Arivaipa Creek are Sections 3 and 4 of Township 6 South, Range 17 East. The locations marked on your map agree with the legal descriptions provided in your application.

An application shall not lose priority of filing because of defects if the application is corrected, completed and refiled with the Department of Water Resources within sixty days after its return to the applicant, or within such further time as the Director of Water Resources may, by an order of record, allow. If the application is not refiled within sixty days from the date of this letter, a new date of priority will be established.

Yours truly,

A handwritten signature in black ink that reads "Joe B. Stuart".

Joe B. Stuart
Manager, Surface Water Rights Systems
Operations Division
Telephone (602) 542-1581

JBS:as

Enclosures

FM00376



ARIZONA DEPARTMENT OF WATER RESOURCES

15 South 15th Avenue
Phoenix, Arizona 85007

APPLICATION FOR PERMIT TO APPROPRIATE
PUBLIC WATER OF THE STATE OF ARIZONA

NO. 33-95488

FILED 10-31-90

1. Name Arizona Chapter of The Nature Conservancy Telephone (602) 622-3861
Address 300 E. University Blvd., #230 Tucson, Arizona 85705

2. Type of source and name, if any, Aravaipa Creek
a tributary of San Pedro River on the San Pedro watershed.
do not complete

3. Use of Water

A. Domestic

1. No. of Persons _____ 2. No. of Families _____

B. Municipal

1. Population to be served _____
2. Estimate of future population and water requirements _____

C. Irrigation

1. Location of the irrigated acreage

_____ 1/4 _____ 1/4 _____ 1/4 Section _____ Township _____ N/S Range _____ E/W
_____ 1/4 _____ 1/4 _____ 1/4 Section _____ Township _____ N/S Range _____ E/W

2. Number of acres to be irrigated _____

3. Describe type of crop to be irrigated _____

D. Stockwatering

1. Kind of stock _____ 2. No of stock _____

E. Power - Describe the nature of the works by which power is to be developed, pressure head, points of release of water and the uses to which the power will be applied. Attach documents as necessary.

F. Mining

1. Kind of mining claims _____
2. Methods of supplying and using water _____

G. Recreation

Base flow a desert stream through or along a nature preserve
1. Character of area to be used for rare wildlife, native fish, and plants.

H. Wildlife

7 native fish, 8 amphibian, 47 reptile, 237 bird and 46 mammal species,
1. Kind of wildlife 20 of which are federally or state protected.
2. Character of area to be served Same as recreation.

I. Groundwater Recharge _____

J. Storage & Recovery _____

4. Amount of water

Use	Amount	Measure	Months of Use
See Attachment 1.			

5. Legal description of point of diversion: County N/A
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section Township N/S Range EW-G&SRB&M

6. Legal description of place of use: County See Attachment 1.
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section Township N/S Range EW-G&SRB&M
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section Township N/S Range EW-G&SRB&M

7. Description of method(s) by which water will be put to beneficial use: Water will be used instream without artificial diversion or impoundment.

8. Storage of water

A. Name of reservoir N/A

B. Dam specifications: Height feet

C. Reservoir behind dam

1. Maximum storage volume at spillway crest acre feet

2. Capacity for each foot in depth in cubic feet

9. Construction of works will begin within N/A after approval of this application, will be completed within thereafter, and the water will be applied to the proposed use(s) no later than .

10. Name of owner of the land Arizona Chapter of the Nature Conservancy

Does the applicant have legal access to the point of diversion and place(s) of use? Yes XX No

If no, explain

11. Is the water to be used supplementally with other water(s)? Yes No XX

If "Yes" identify other waters or water rights, and explain below:

12. Additional comments See Hardy, T.B.; Bartz, B.; and Carter, W.: Report on Instream Flow Recommendations for the Fishes of Aravaipa Creek, Arizona. For The Nature Conservancy, October, 1990.

13. Attach filing fee of \$25.00

14. Attach a United States Geological Survey quad map with point of diversion and place(s) of use clearly marked on map.

DATED this 29 day of October, 1990

Applicant

ARAVAIPA -- WEST END (B): ATTACHMENT 1

1) Legal Description of Reach and Place of Use.

Begin at point where Aravaipa Creek enters the SW 1/4 of Sec. 13, T6S R17E downstream to where it leaves the NE 1/4 of the SW 1/4 of Sec. 26, T6S R17E, G.S.R.B.M., Pinal County, Arizona. (Approx. 2.5 stream miles.)

2) Amount of water at BLM West End Wilderness Gage.

a. Monthly Rate of Base Flow (cfs)

October	19	February	23	June	17
November	19	March	32	July	18
December	22	April	21	August	19
January	21	May	18	September	18

b. Maximum Annual Volume (af): 14,901.28

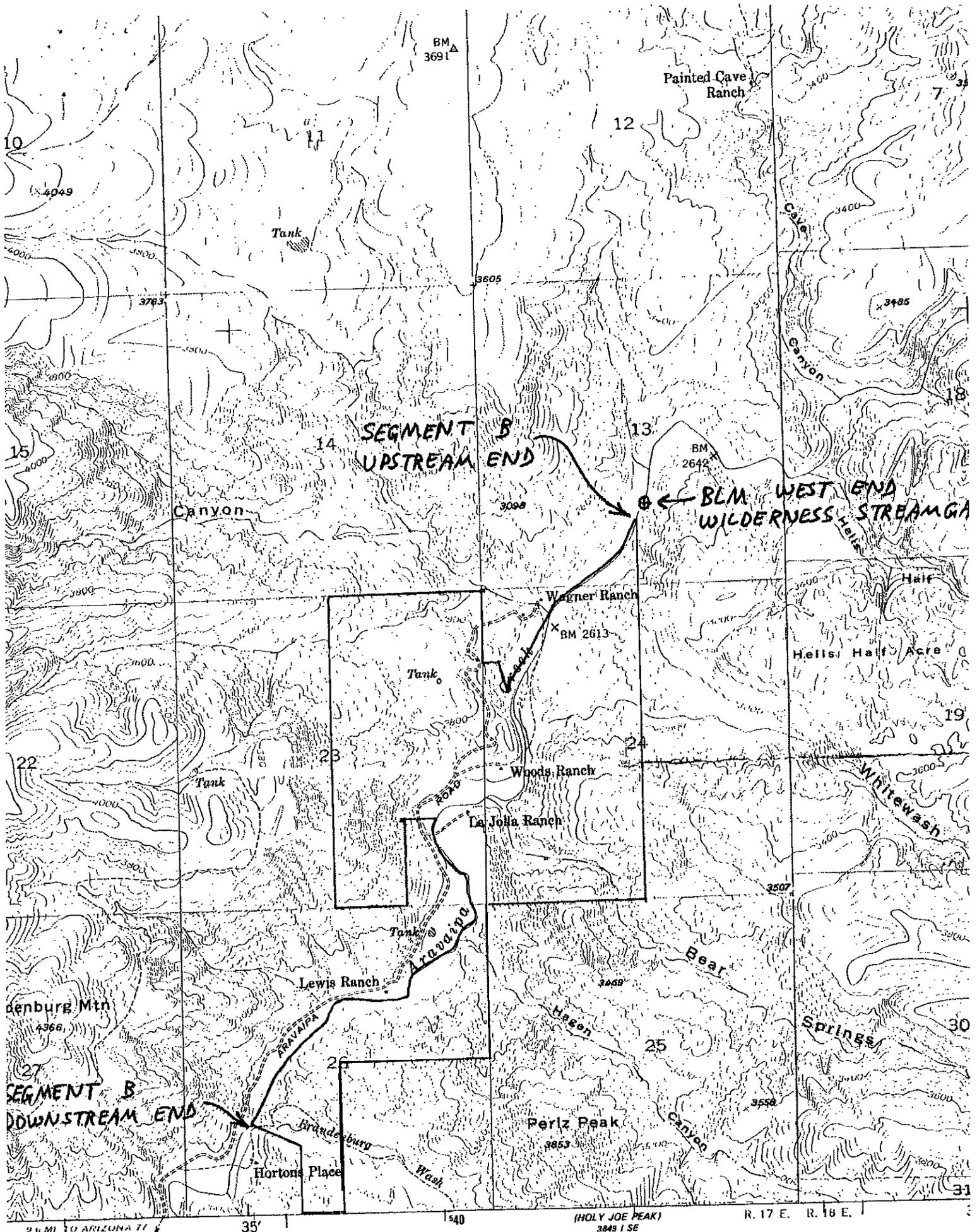
3) Conditions on Application

a. There shall be no impoundments of public waters nor interference with the natural flow of Aravaipa Creek.

b. There shall be no consumptive use of public waters other than caused by the natural habitat (flora and fauna).

c. There shall be no degradation of water quality by reason of applicant's use of these public waters other than as caused by the natural habitat.

d. There shall be no interference with nor detrimental effect upon prior vested rights as a result of the requested instream use.



FM00380



The Arizona Nature Conservancy

300 East University Boulevard, Suite 230, Tucson, Arizona 85705
(602) 622-3861 FAX (602) 620-1799

October 29, 1990

Mr. Joe B. Stuart, Section Manager
Surface Water/Adjudication
15 South 15th Avenue
Phoenix, Arizona 85007

RE: Applications for Instream Water Rights on Aravaipa Creek

Dear Mr. Stuart,

Please accept for posting the enclosed applications for instream base flow water rights on four segments of Aravaipa Creek that run through or abut property that is part of The Nature Conservancy's Aravaipa Creek Preserve. Two of the segments are upstream from the stream segment in the BLM Wilderness Area, for which instream permit #33-87114 was issued on March 19, 1989, and two are downstream.

The enclosed applications are largely based on the instream habitat needs of the native fish which occupy each of the segments as detailed in the enclosed report by Dr. Thomas B. Hardy. The instream base flows will also be beneficially used for recreation, not only for hikers bound for the BLM Wilderness Area who traverse Conservancy-owned property adjacent to some of the segments or who traverse the stream segments themselves, but also for participants in Conservancy-sponsored field trips on property adjacent to or within each segment. The beneficial use for native fish and recreation within the Conservancy segments as well as the requested base flow amounts, are similar to those permitted to the BLM for the wilderness reach. The base flow will also be beneficial to the riparian vegetation along the Conservancy segments and to a great variety of large and small wildlife.

As indicated in the Hardy report, the amounts sought to be permitted as base flow do not exceed the medians of daily measurements taken during each month of the year, or of correlations from such measurements. The requested amounts therefore necessarily exclude some higher, less frequent flows that may be used beneficially to provide more optimum instream fish habitat, to more fully sustain riparian vegetation, to provide natural flood, scouring or channel maintenance flows, or to provide greater levels of aesthetic appreciation or recreation. The Nature Conservancy may seek water rights for such other instream beneficial uses in subsequent and separate applications with more junior priority dates.

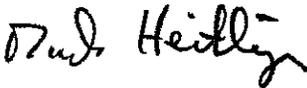
FM00381

Mr. Joe B. Stuart
page 2
October 24, 1990

The applications for the Upper East End and Upper West End segments seek to permit flow amounts measured at points upstream from the downstream termini of these reaches. The requested flow amounts therefore exclude any gain from the point of measurement to the downstream termini. If The Nature Conservancy is able to measure or other wise determine the magnitude of the gain, it may seek to increase the base flow water right at the downstream termini of these segments by the amount of such gain, but again in separate and junior applications.

We have attached a check for \$25.00 to each of the applications for the filing fees and USGS quad maps showing each segment and point of measurement. We would very much appreciate your prompt posting of these applications so that any protests can be resolved and the permits considered in the adjudication of the San Pedro River Basin.

Very truly yours,



Mark Heitlinger
Director of Stewardship

THIS IS NOT A BILL

STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
OPERATIONS DIVISION
15 SOUTH 15TH AVENUE
PHOENIX, ARIZONA 85007

The Nature Conservancy
A.C. Star Route, Box 4318
Winkelman, AZ. 85292

R E C E I P T

KIND ENTRY 33
FILE REFERENCE NO. 95488 THRU _____

ITEM DESCRIPTION	RATE	AMOUNT
Examination Fee: (1) Application for a Permit to	25.00	25.00
Appropriate Public Water No. 33-95488		

P A I D

CHECK NO 593 RECEIVED BY _____ as DATE 11-5-90 TOTAL \$ 25.00

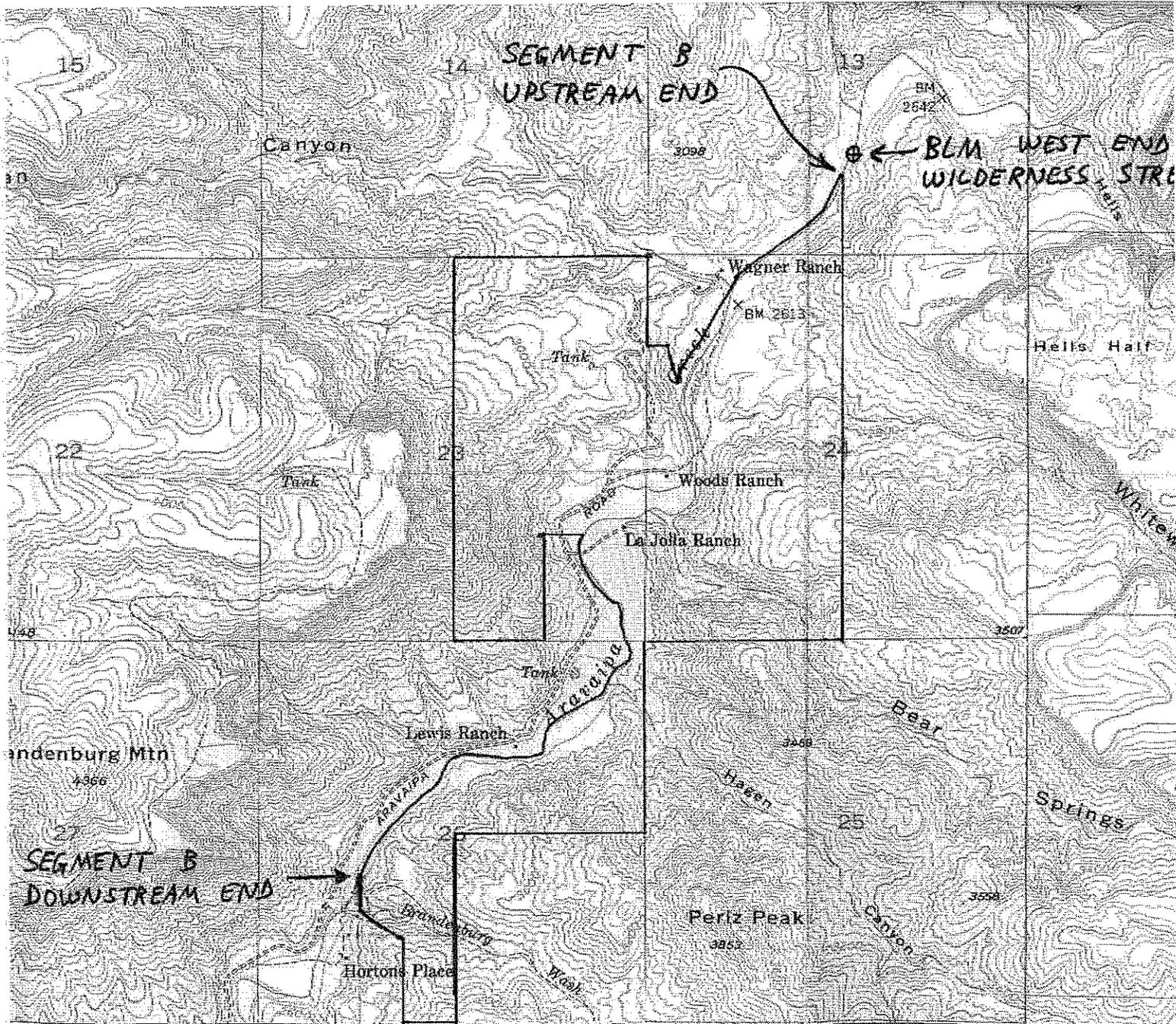
11 SAN PEDRO WATERSHED

City of Tucson, P.O. Box 27210,
Tucson, AZ 85726
San Carlos Irrigation Project,
P.O. Box 250, Coolidge, AZ 85228
San Carlos Irrig. & Drainage Dist.,
P.O. Box 218, Coolidge, AZ 85228

36-37272.1 } Nature Conservancy
36-37271.1 } 300 E. University Blvd.
36-37273.1 } #230
Tucson, AZ 85705

36-37274 - Defenders Wildlife
30 N Tucson Blvd
Tucson, AZ 85710

36-65434.1 Tony Leubbermann
6154 N Zorrera Segunda
Dr. Geldmacher Tucson, AZ 85718



3.8 MI. TO ARIZONA 77 35 540 (HOLY JOE PEAK) 3849 SE R. 17 E. R. 18 E.

SCALE 1:24000

