Martin P. Clare
Campbell, Yost, Clare & Norell, PC
3101 N. Central Avenue, Suite 1200
Phoenix, AZ 85012
(602) 322-1600, mclare@cycn-phx.com

Joe Mentor, Jr.
Mentor Law Group, PLLC
315 Fifth Avenue S., Suite 1000
Seattle, WA 98104
(206) 838-7650, mentor@mentorlaw.com

Counsel for the Hopi Tribe

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LEGAL
DEPT OF WATER RESOURCES

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	CIVIL NO. 6417 **THE HOPI TRIBE'S SUPPLEMENT TO ITS THIRD AMENDED STATEMENT OF CLAIMANT**

Descriptive Summary:	The Hopi Tribe Files a Supplement to its Third Amended Statement of Claimant.
Number of Pages:	13
Date of Filing:	Original transmitted to Arizona Department of Water Resources by overnight delivery on September 17, 2015.

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I. INTRODUCTION

The Hopi Tribe submits this supplement to its Third Amended Statement of Claimant supplementing its original Statement of Claimant, filed November 3, 1986, its Amended Statement of Claimant, filed January 29, 2004, its Second Amended Statement of Claimant, filed November 12, 2009, and its Third Amended Statement of Claimant, filed June 2, 2015. The Hopi Tribe reserves the right to further amend or supplement its Statement of Claimant.

On June 29, 2015, the Arizona Department of Water Resources ("ADWR") emailed the Hopi Tribe and the United States on behalf of the Hopi Tribe to clarify questions ADWR had in relation to the Third Amended Statements of Claimant filed by the Hopi Tribe and United States Claim on behalf of the Hopi Tribe. On August 24, 2015, the Hopi Tribe received ADWR's Second 120-day Notice of Intent to File Final Hydrographic Survey Report for the Hopi Indian Reservation. ADWR provided notice pursuant to Pretrial Order No. 6 and A.R.S. § 45-254 that it planned to file the final hydrographic survey report on December 18, 2015. Pursuant to A.R.S. §45-254(E)(1), the Hopi Tribe now submits this supplement to the Hopi Tribe's Third Amended Statement of Claimant. This supplement incorporates all claims made in the Hopi Tribe's Third Amended Statement of Claimant and only revises those claims specifically discussed below.

In submitting this supplement to its Third Amended Statement of Claimant ("3rd Amended SOC"), the Hopi Tribe does not waive its sovereign rights to the land and resources of the Hopi Reservation or to other lands and resources owned by the Tribe. The Hopi Tribe does not waive its right to change the use of its water rights or to seek confirmation of additional water rights if the need for more water arises in the future. The Hopi Tribe reserves right to administer its

own water code, and in filing this statement in no way submits to the jurisdiction of the State of Arizona as to the control and administration of water decreed to the Hopi Tribe.

II. Hopi Water Rights Claim

A. Hopi Tribe Claim Summary[1]

Table 1 -- Quantification

Use	Quantity (Acre-Feet per Year)
Domestic, Commercial, Municipal and Industrial Use	9,348
Agriculture	
- Past and Present Irrigation	102,303[2]
- Livestock	1,000
- Ceremonial and Subsistence Irrigation	7,385
- Water Storage	6,184
Present Mining Use	1,255
Energy Resources Development	27,600
Tourism	1,022
Recreation	41
Other Claims	
- Subsurface Mineral Rights	40,295

[1] The table is a summary for convenience and does not limit the broader claims made in the text above, *e.g.*, relating to the ownership of water resources as a whole; nor does the table limit the more precise description of each category that follows. This table does not include claims for water off the "main reservation" per ADWR.

[2] The Hopi Tribe also claims 333 acre-feet for irrigation storage plus evaporation and seepage losses.

- Aesthetic, Cultural and Ecological Flows - A) Pasture Canyon - B) White Ruin Canyon - C) Lower Little Colorado River (instream flows)	>310[3]
- Cultural, Religious and Ceremonial Uses	
Total	196,743

B. **Domestic, Commercial, Municipal and Industrial Use (DCMI)**

1. **Future DCMI Uses**

The Hopi Tribe is not supplementing its claim for Future DCMI uses. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

2. **Existing and Future Wells**

The Hopi Tribe is not supplementing its claim for Existing and Future Wells. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

3. **Springs**

The Hopi Tribe is not supplementing its claim for Springs. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

C. **Agricultural**

1. **Past and Present Irrigation**

The Hopi Tribe supplements its Past and Present Irrigation claim and now claims the right to irrigate an additional 311 acres requiring a diversion of an additional 1,182 acre feet per year to irrigate this land. With the addition of the acreage and water diversion, the Hopi Tribe now claims the right to irrigate 26,922 acres of land that has been irrigated in past or is irrigated presently. This

[3] The 310 acre-feet per year represents the quantification to protect the flows at Pasture Canyon and White Ruin Canyon Wash.

acreage requires a total diversion of 102,303 acre-feet of water on an average annual basis to irrigate the lands shown in Appendix 1.

The Hopi Tribe's newly claimed acreage arose from the Tribe's examination of new aerial imagery to respond to ADWR's June 29th email.[4] The new aerial imagery[5] provides the basis for the addition of a new category to the past and present irrigation (HIA) previously identified in the Hopi Tribe's 3rd Amended SOC.[6] The Hopi Tribe's newly claimed acreage is that portion of the acreage identified in the new aerial imagery that does not overlap with the 3 HIA categories the Hopi Tribe previously claimed in its 3rd Amended SOC. The Hopi Tribe divided the newly claimed acreage into two subcategories (recent and present irrigation), with totals of 138.3 acres recent and 172.7 acres present. The Tribe claims these acres as well as the additional 1,182 acre-feet per year necessary to irrigate this land. These changes are reflected in Table 2 below and in Appendix 1. The sources of water for this claimed irrigation remains unchanged from the 3rd Amended SOC.

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[4] This additional irrigated acreage is limited to irrigated areas discovered while attempting to resolve ADWR questions on impoundments and is not based on a complete search for all additional acreage across the entire Reservation.

[5] The Tribe digitized this new acreage from 2010 Bing aerial imagery obtained via GIS.

[6] In the attached Appendices, the Tribe renamed the 3rd category of Historic Irrigated Acreage "HIA Project DW 10." This renaming allows the exhibit text to be more consistent with the irrigation claim text and to differentiate it from the newly added 4th category described herein. The acreage amount in the 3rd category did not change.

Table 2 -- Past and Present Irrigation Acreage and Average Annual Diversion Volume

Category	Acres	NIR (ft)t	Overall Irrigation Efficiency	Water Duty, ac.-feet/ac (rounded)	Avg. Ann Div. Vol, acre-feet (rounded)
U.S. Third Amended Claim	13,031.6	2.09	55%	3.80	49,520
ADWR Complete Evidence not within the U.S. Claim	1,853.3	2.09	55%	3.80	7,043
ADWR Partial Evidence not within the U.S. Claim	11,658.5	2.09	55%	3.80	44,302
Historic project DW 10	67.5	2.09	55%	3.80	256
Additional HIA from New Aerial Imagery, Current irrigation	172.7	2.09	55%	3.80	656
Additional HIA from New Aerial Imagery, Recent irrigation	138.3	2.09	55%	3.80	526
Total	**26,921.9**				**102,303**

2. **Livestock**

The Hopi Tribe is not supplementing its claim for Livestock. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

3. **Ceremonial and Subsistence Irrigation**

The Hopi Tribe is not supplementing its claim for Ceremonial and Subsistence Irrigation. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

4. **Water Storage**

The Hopi Tribe re-asserts its claim for 4,883 acre feet for stockponds and supplements its claim with an additional 1,301 acre-feet per year for additional impoundments, including those previously claimed by the United States on

behalf of the Hopi Tribe and previously unclaimed impoundments.[7] The addition of the above-identified impoundments increases the Hopi Tribe's claim for impoundments to a total quantity of 6,184 acre-feet per year for water storage.

The Hopi Tribe's supplemental claim arose out of ADWR's June 29th impoundment questions regarding the discrepancy between the impoundments claimed by the Hopi Tribe and the United States for the benefit of the Hopi Tribe. The Tribe previously claimed 608 impoundments in its 3rd Amended SOC and the United States claimed 1,001 impoundments. The Hopi Tribe and the United States determined that they each relied on different definitions of the word "impoundment", and that difference lead to the discrepancy between the two claims. For example, the Hopi Tribe only claimed impoundments used for stockwater in the Tribe's 3rd Amended SOC, whereas U.S. experts claimed any impoundment verified, even if the use was for purposes other than stockwater. The Hopi claim for stockwater impoundments from its 3rd Amended SOC, therefore, is generally a subset of the United States' claim as approximately 600 of the Hopi impoundments claimed are also part of the United States' Claim for impoundments for stockwater use.

After evaluating the additional impoundments claimed by the United States, the Hopi Tribe now supplements and corrects its previous impoundment claim as follows: A) addition of impoundments included in the United States' Third Amended Statement of Claimant that were not included in the Tribe's 3rd Amended SOC; B) addition of impoundments that were not previously claimed by either the Hopi Tribe or the United States on behalf of the Hopi Tribe; and C)

[7] The Hopi Tribe is not supplementing its claim for irrigation reservoir storage or its claim for evaporative losses as previously claimed in the Hopi Tribe's 3rd Amended SOC.

corrections to location information for impoundments included in the Hopi Tribe's 3rd Amended SOC.

a. **Impoundments Claimed by the United States on Behalf of the Hopi Tribe**

The Hopi Tribe supplements and corrects its claim for impoundments from its 3rd Amended SOC to include all impoundments claimed by the United States on behalf of the Hopi Tribe. The Hopi Tribe now adopts the United States' broader definition of impoundment. The Hopi Tribe claims the additional 396 impoundments claimed by the United States and submits Appendix 2 with the location of all claimed impoundments and Appendix 3 mapping all claimed impoundments. These appendices replace exhibits previously submitted with the Tribe's 3rd Amended SOC. The 396 impoundments added from the federal claim are listed separately in Appendix 2 and differentiated in Appendix 3 by including "FC" in front of the identifier from the federal claim (FC). The addition of these impoundments claimed by the United States adds 1,289 acre-feet per year to the Tribe's water storage claim.[8]

b. **Addition of Previously Unclaimed Impoundments**

The Hopi Tribe relied on more recent digital aerial photography to respond to ADWR's June 29th impoundment questions. During the Hopi Tribe's review of the more recent digital aerial photograph, the Hopi Tribe identified 8 impoundments previously unclaimed by either the Hopi Tribe or the United States. The 8 previously unclaimed impoundments are listed separately in Appendix 2 and differentiated in Appendix 3 by including "PUI" in the label. The

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[8] FC I0411, an impoundment claimed in the Pasture Canyon area, appears to duplicate amounts previously claimed by the Tribe in its 3rd Amended SOC.

Hopi Tribe claims these 8 previously unclaimed impoundments and the additional 12 acre-feet per year as a part of the Hopi Tribe's water storage claim.

c. **Corrections to Locations of Certain Impoundments**

The Hopi Tribe supplements and corrects the location for 91 impoundments included in its 3rd Amended SOC because those impoundments had incorrect locations. This error resulted from the Hopi Tribe's use of both the North American Datum (NAD) of 1927 (NAD 27) and the North American Datum of 1983 (NAD 83) in the geographic information system (GIS) used for preparing exhibits for the claim. Appendix 2 provides a table with the correct location for the 91 impoundments and Appendix 3 is a map of all impoundments with the corrected locations incorporated. The revised locations rely on NAD 83 and the Hopi Tribe now projects these impoundments to Universal Transverse Mercator (UTM) Zone 12 North.

Subject to the total quantity of rights asserted herein, the Hopi Tribe claims a right to repair, to maintain, and to replace existing impoundments. The Hopi Tribe also claims a right to construct new impoundments in the future for livestock water and soil and water conservation benefits as needed to satisfy the livestock demand of 1,000 acre-feet of water per year.

D. **Energy Resources Development**

The Hopi Tribe is not supplementing its claim for Energy Resources Development. Please see the Hopi Tribe's 3rd Amended SOC for this claim, including present mining, future mining, and future energy resource development.

E. **Tourism**

The Hopi Tribe is not supplementing its claim for Tourism. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

F. **Recreation**

The Hopi Tribe is not supplementing its claim for Recreation. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

G. **Other Claims**

1. **Subsurface Mineral Rights**

The Hopi Tribe re-asserts its right to its proportional share of the water in and feeding Blue Springs under 25 U.S.C. §640d-6 (Navajo Hopi Land Dispute Settlement Act of 1974 or the "1974 Settlement Act"). The Tribe re-asserts its claim of 40,295 acre-feet of water annually for the Tribe's proportional share of the Blue Springs complex.

On June 29, 2015, ADWR requested clarification as to whether the Tribe's claim to Blue Springs is a consumptive use claim or for instream flow maintenance. The Hopi Tribe's claim to Blue Springs is both for instream flows and consumptive use. The Tribe asserts the right to transfer its Blue Springs' water rights for consumptive or non-consumptive purposes.

2. **Aesthetic, Cultural and Ecological Flows**

The Hopi Tribe re-asserts a non-diversionary claim to protect the aesthetic, cultural, and ecological flows of the waters of Pasture Canyon and White Ruin Canyon Wash. The Hopi Tribe also re-asserts its claim for a non-diversionary water right for instream flows in the lower Little Colorado River.[9] The Hopi Tribe

[9] The quantity of water needed to protect the aquatic, cultural and religious resources of the lower Little Colorado River are unknown at the present time.

supplements its claim for 294 acre-feet per year for riparian and wetland habitat in Pasture Canyon with an additional 16 acre-feet per year for White Ruin Canyon Wash (rounded). Please see Appendix 4 for a further explanation of the quantification of the White Ruin Canyon Wash claim.

3. **Cultural, Religious and Ceremonial Uses**

The Hopi Tribe is not supplementing its claim for Cultural, Religious and Ceremonial Uses. Please see the Hopi Tribe's Third Amended Statement of Claimant for this claim.

H. **Reservation of Rights for Lands Not Included in HSR**

The Hopi Tribe is not supplementing its reservation of right for lands not included in the HSR. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

I. **Hopi Claims to Off-Reservation Water Supplies**

The Hopi Tribe is not supplementing its claim for off-reservation water supplies. Please see the Hopi Tribe's 3rd Amended SOC for this claim.

Respectfully submitted this 17th day of September, 2015.

Martin P. Clare
Campbell, Yost, Clare & Norell, PC
3101 N. Central Avenue, Suite 1200
Phoenix, AZ 85012
(602) 322-1600, mclare@cycn-phx.com

Joe Mentor, Jr., *Pro Hac Vice*
Mentor Law Group, PLLC
315 Fifth Avenue S., Suite 1000
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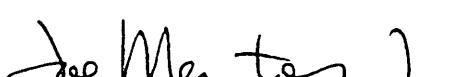
(206) 838-7650, mentor@mentorlaw.com

By: 
Joe Mentor, Jr.

Counsel for the Hopi Tribe

CERTIFICATE OF SERVICE

I hereby declare under penalty of perjury, that on September 17th, 2015, I served a true and correct copy of *The Hopi Tribe's Supplement to Its Third Amended Statement of Claimant*, by Federal Express overnight delivery, to the Arizona Department of Water Resources at the following address:

Thomas Buschatzke
Director
Arizona Department of Water Resources
3550 North Central Avenue
Phoenix, AZ 85012

And a courtesy copy of *The Hopi Tribe's Supplement to Its Third Amended Statement of Claimant*, via Federal Express overnight delivery, on the following addresses:

Clerk of the Superior Court
Apache County
Attn: Water Case
70 West Third South
St. John's, AZ 85936

Hon. Mark H. Brain
Judge of the Superior Court, Maricopa County
East Court Building, Suite 413
101 West Jefferson
Phoenix, AZ 85003

Lia Maria Fulgaro

VERIFICATION OF HOPI TRIBE

Pursuant to A.R.S. § 45-183(B), I verify under penalty of perjury under the laws of the United States of America that to the best of my knowledge and belief, the statements made in this document and the claims asserted by the Hopi Tribe are true and correct. By making this verification, neither I, the Hopi Tribe, nor any of its agencies or personnel, waive any immunities, rights, privileges, or presumptions, whether based on federal, state or other statutory and/or common law, except as clearly and unambiguously required by Congress.

Herman G. Honanie, Chairman
Hopi Tribe
P.O. Box 123
Kykotsmovi, AZ 86039

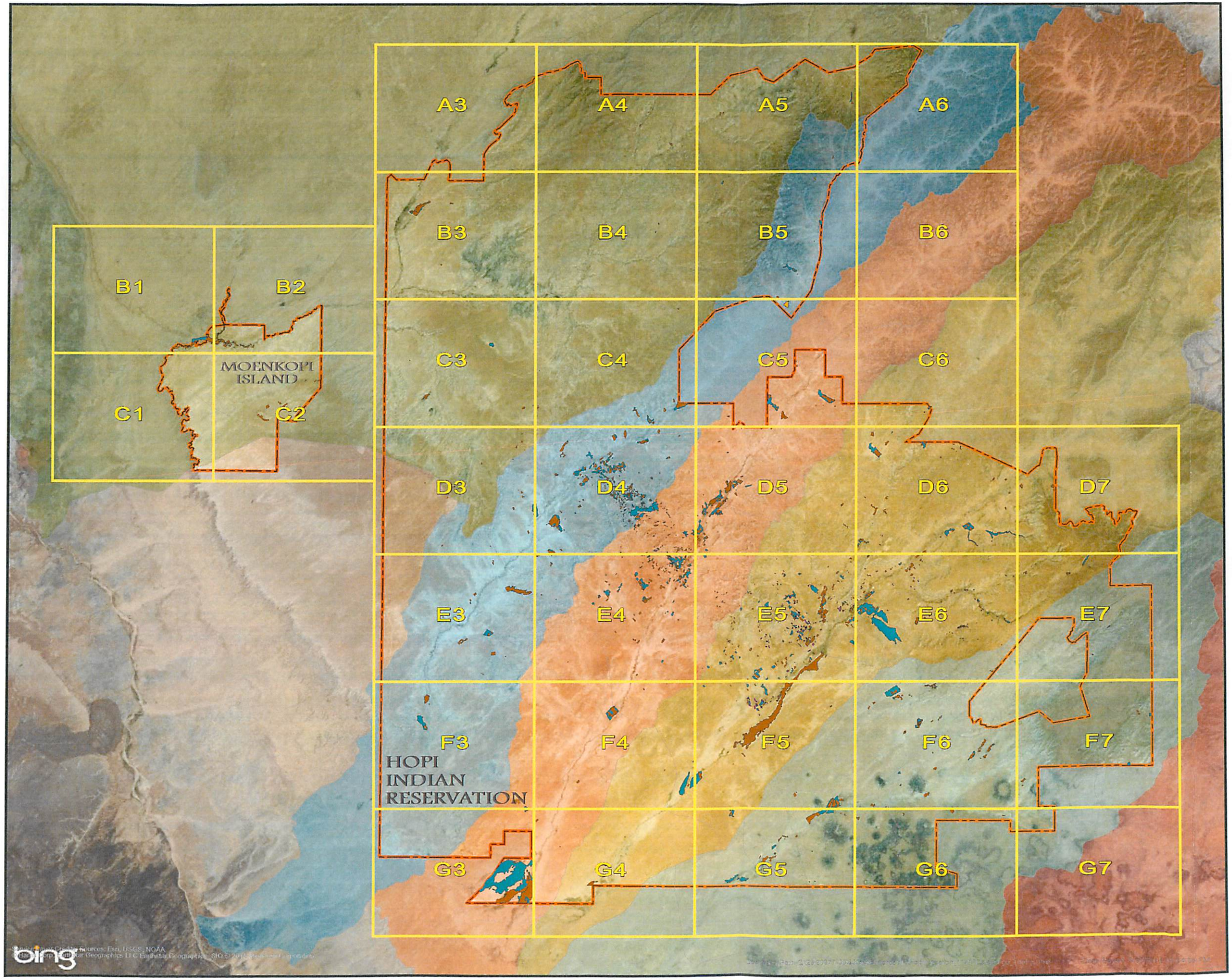
Executed on: Sept 16, 2015
State of: Arizona
County of: Navajo

Subscribed and sworn (or affirmed) before me this 16th day of Sept., 2015.

(Seal)

PAMELA S. ANDERSON
Notary Public - State of Arizona
MARICOPA COUNTY
My Commission Expires
April 15, 2017

Notary Public
Residing at Polacca, Az
Commission Expires 4/15/2017



HOPI INDIAN RESERVATION

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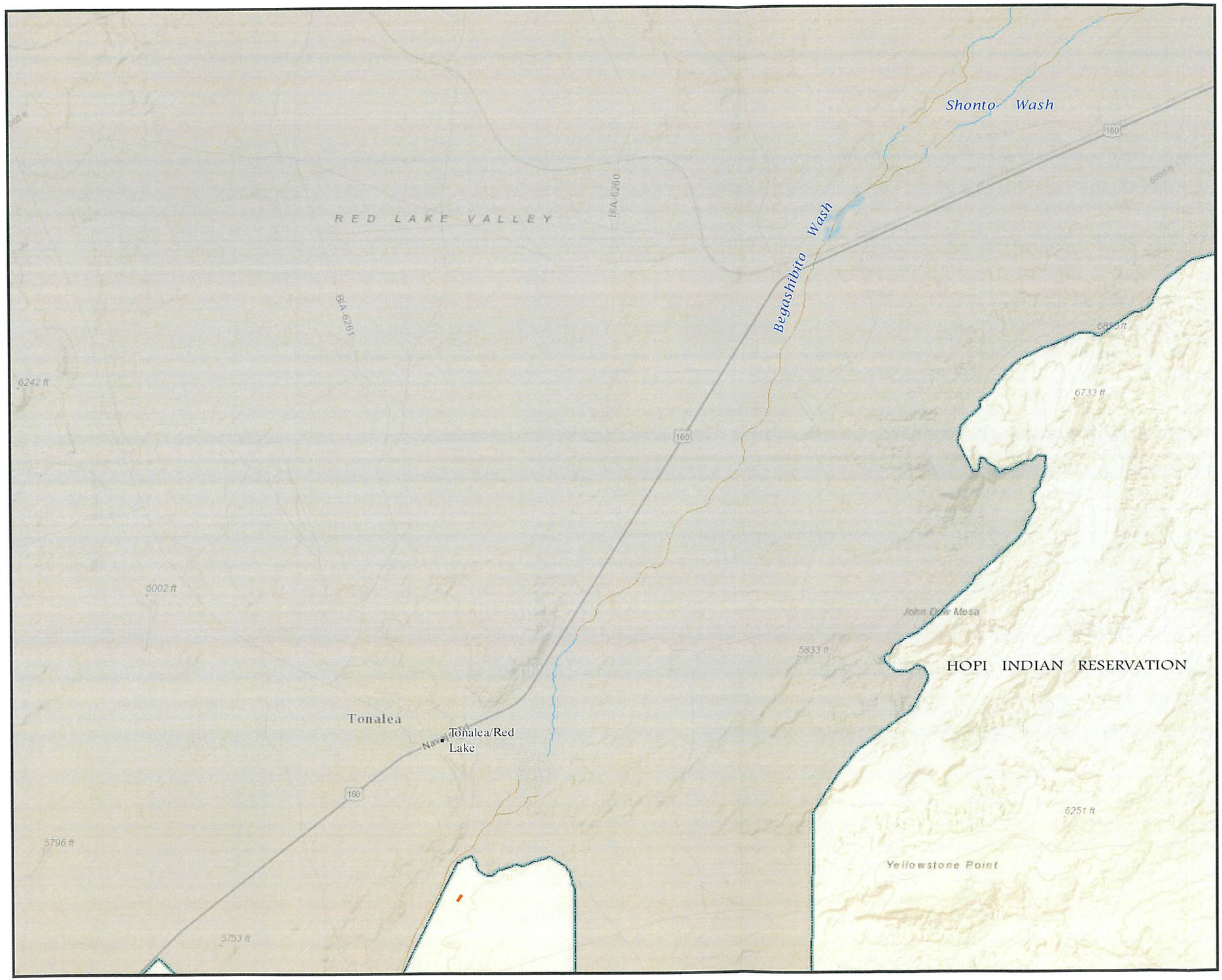

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
- HIA Project DW10
- Additional HIA Found on 2010 Bing Imagery

Northern Wash Subbasins

- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

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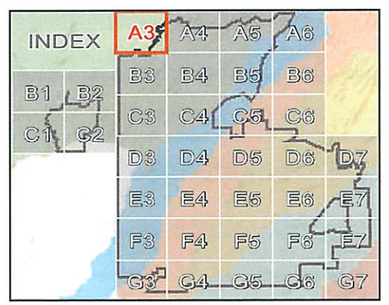

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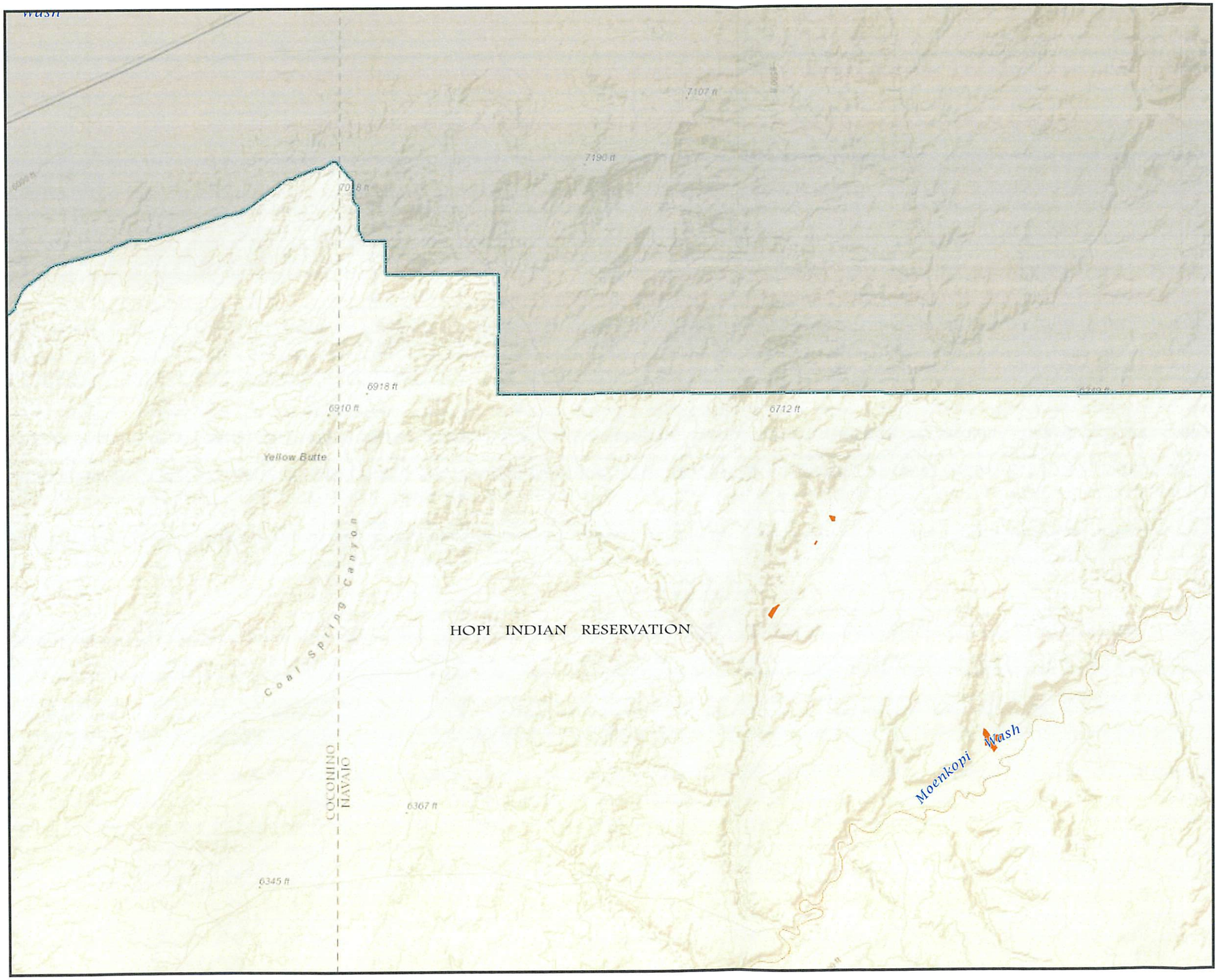

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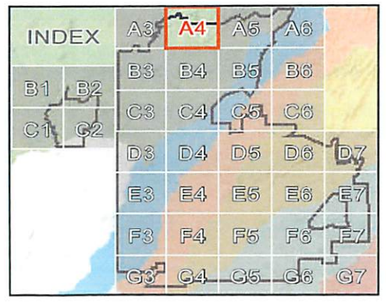

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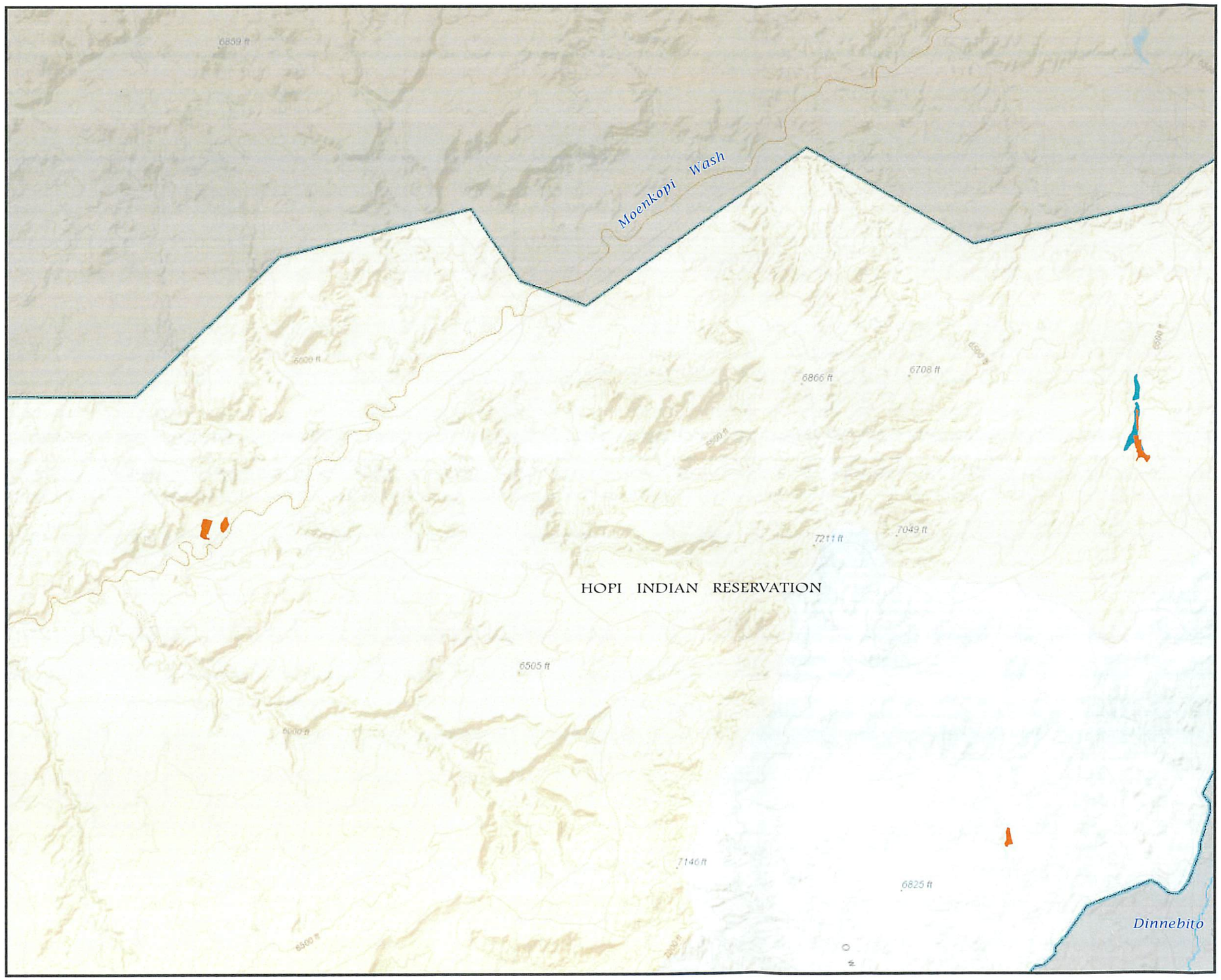

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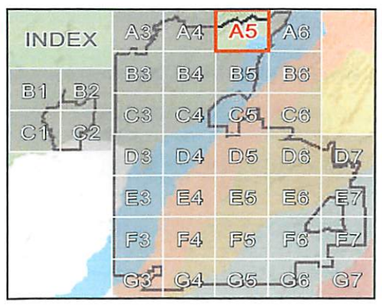

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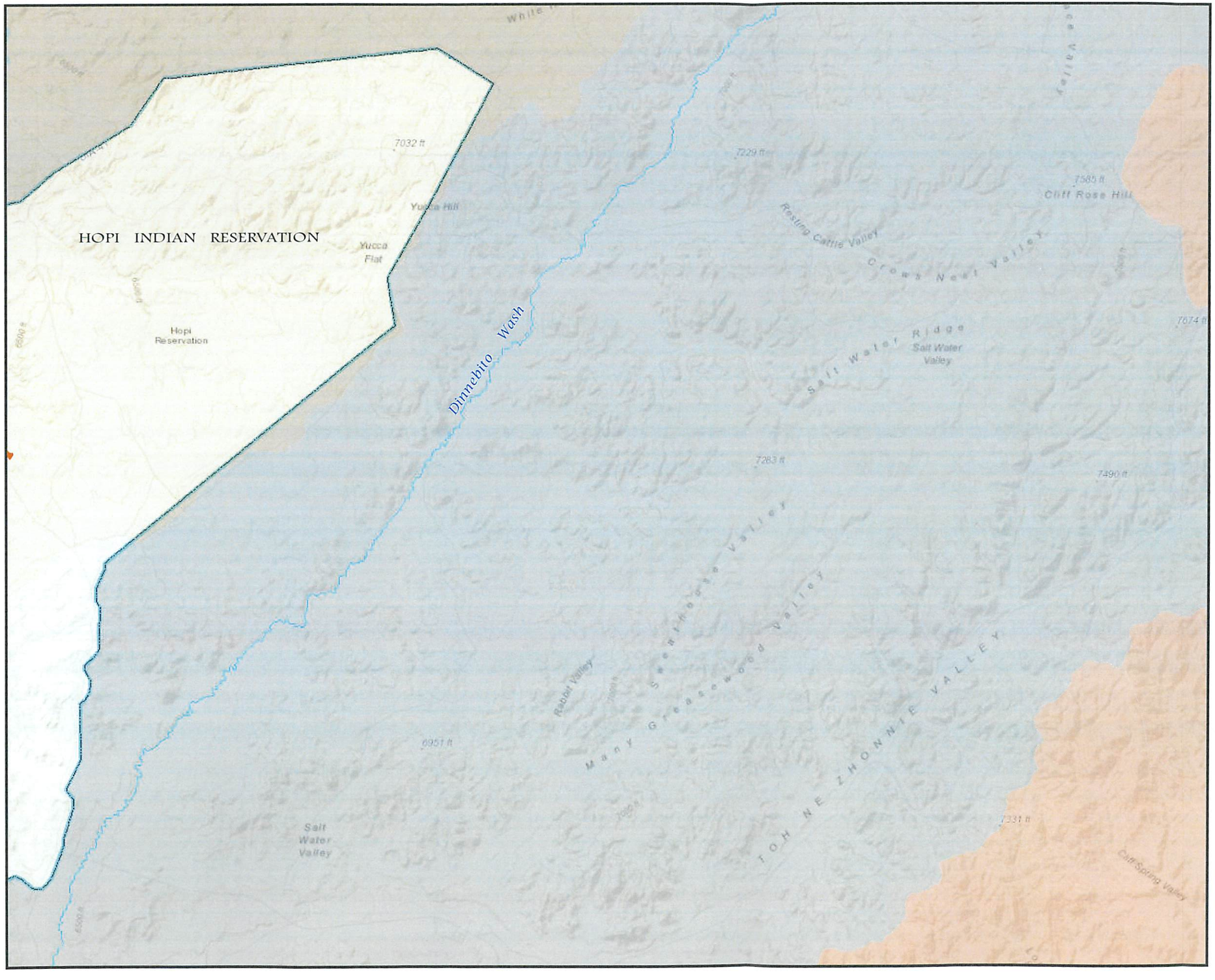

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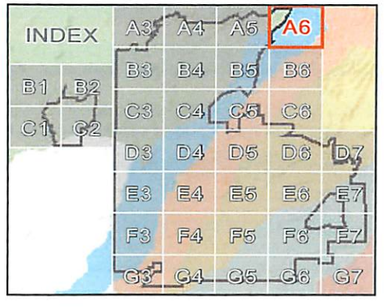

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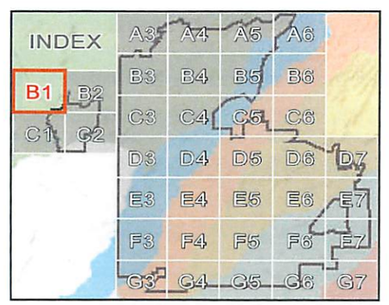

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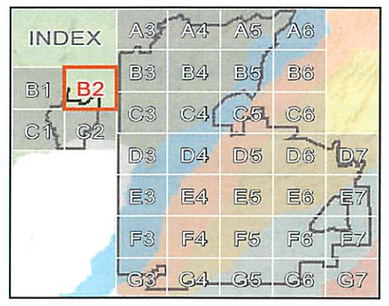

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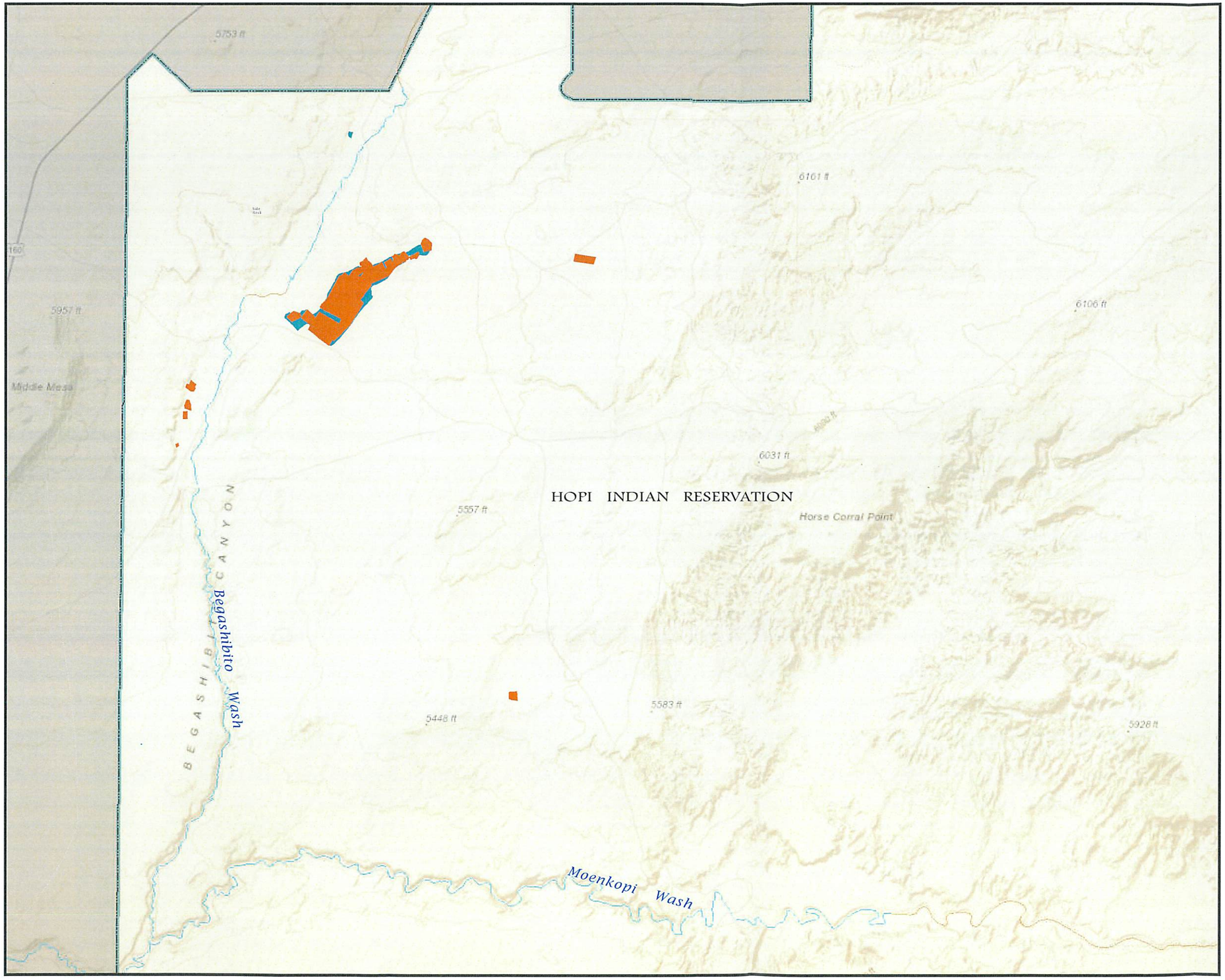


HOPI
INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
- HIA Project DW10
- Additional HIA Found on 2010 Bing Imagery

Northern Wash Subbasins

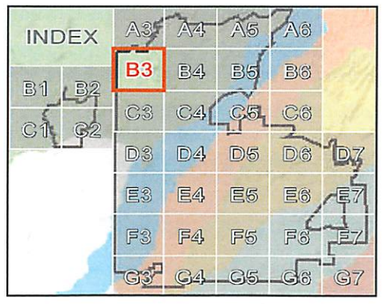
- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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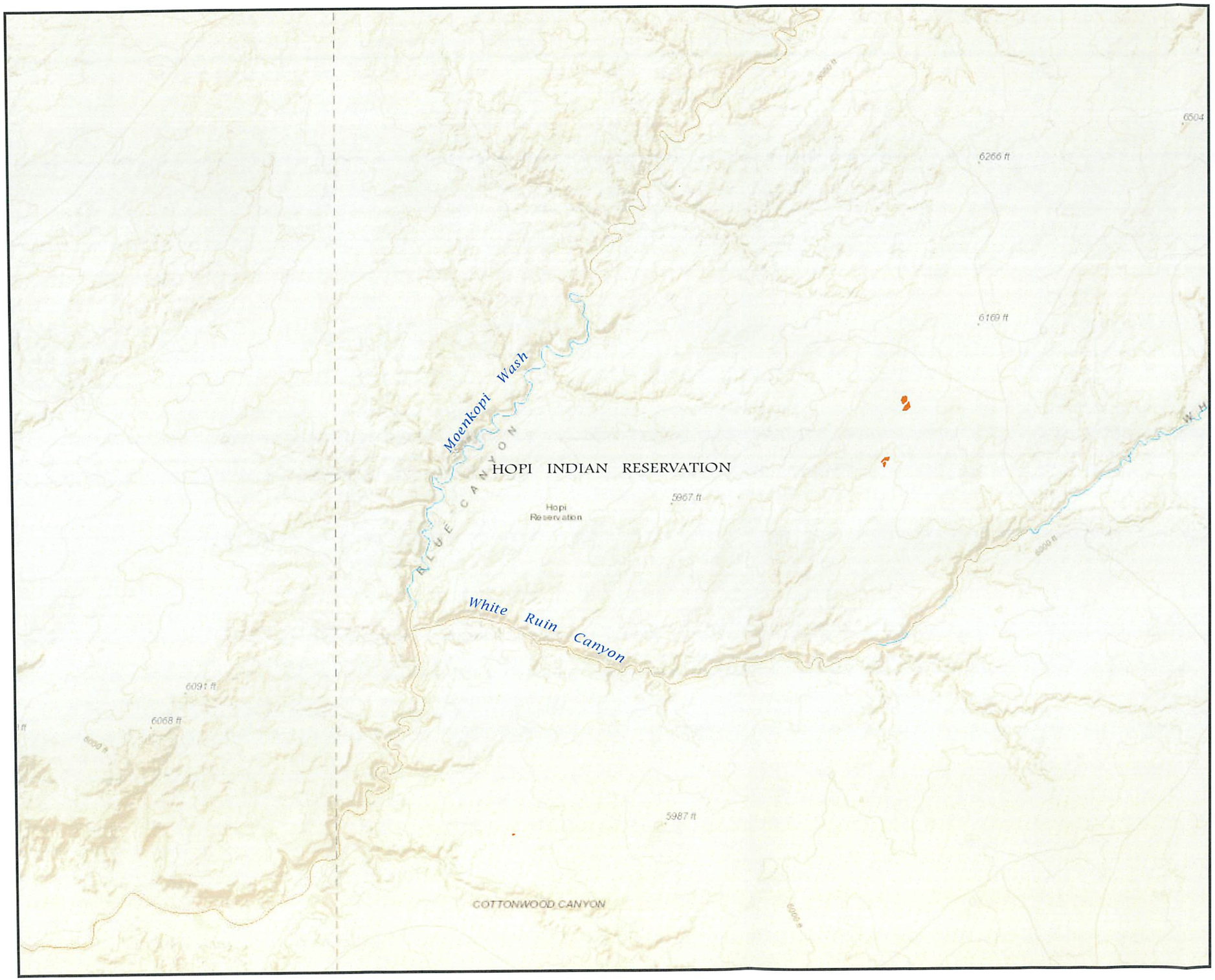

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

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Northern Wash Subbasins

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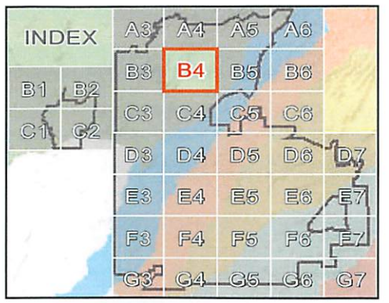
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1
Miles



B4

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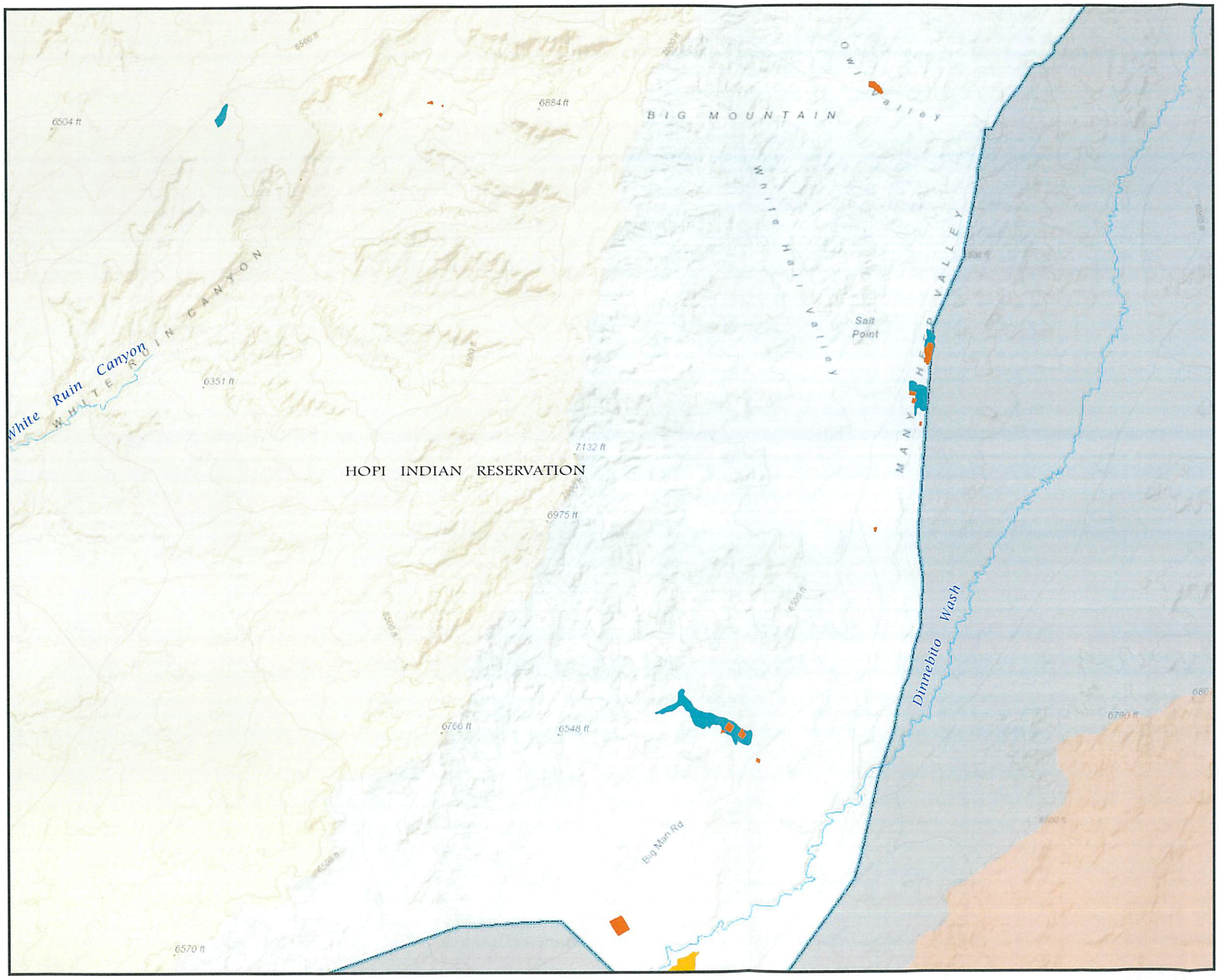

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

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Northern Wash Subbasins

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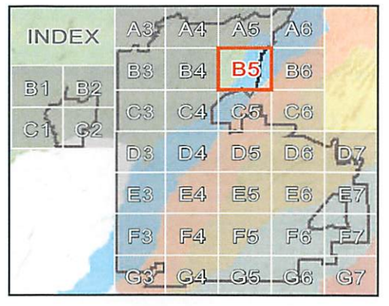
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1
Miles



B5

DOWL

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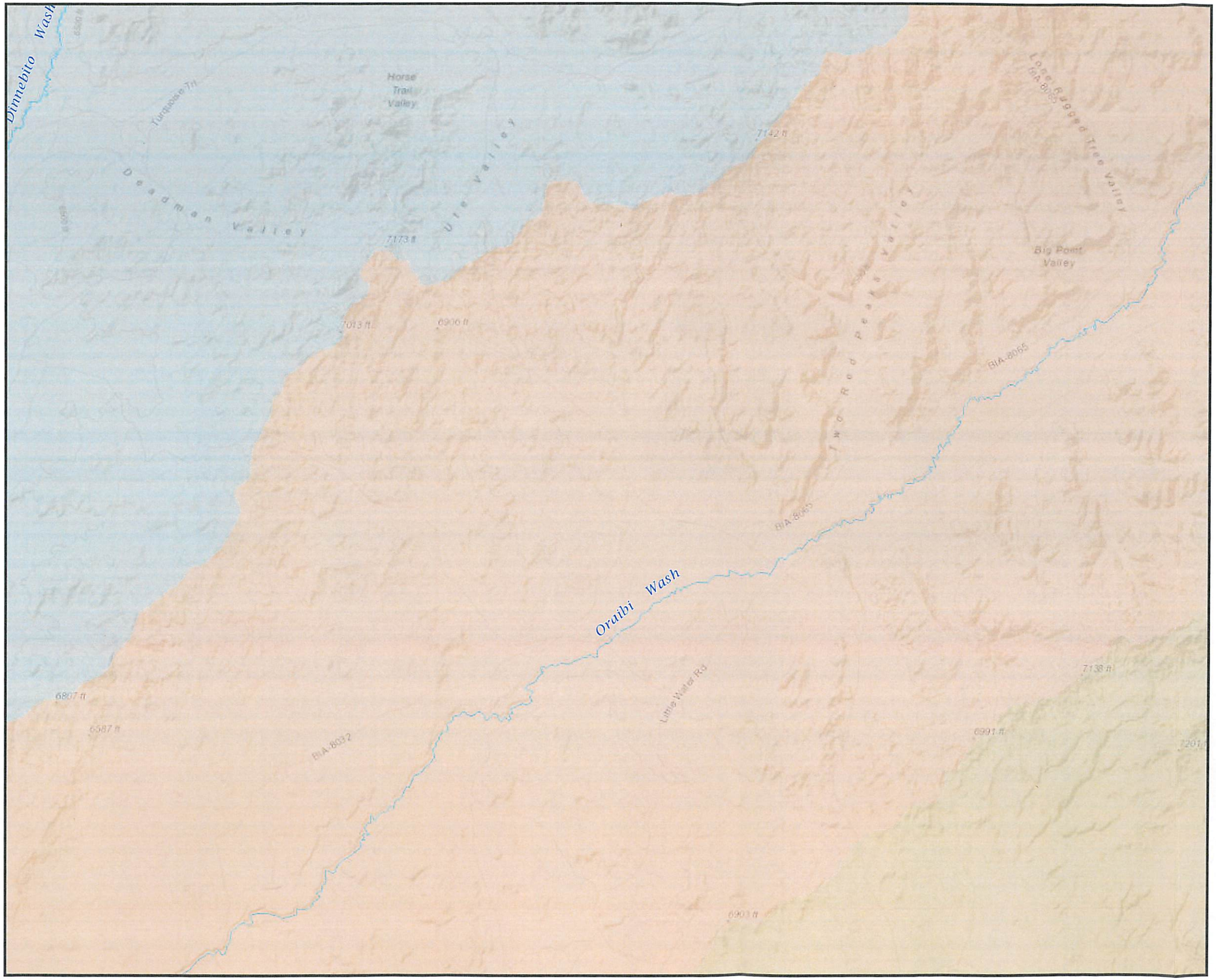

HOPI INDIAN RESERVATION

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Northern Wash Subbasins

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- Oraibi
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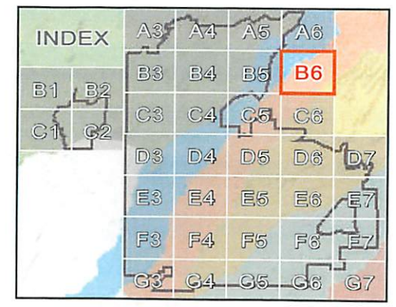
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



B6

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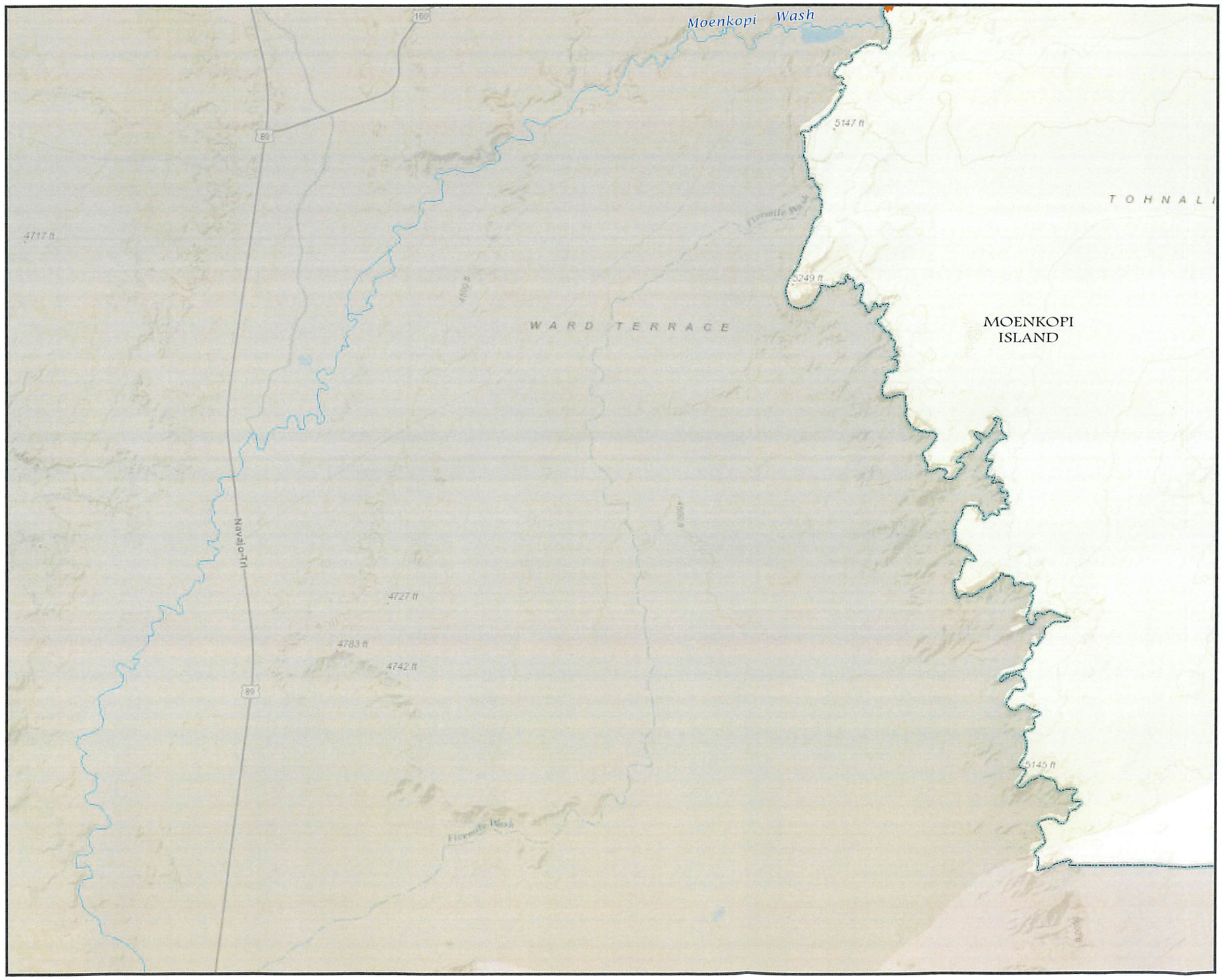

HOPI INDIAN RESERVATION

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Northern Wash Subbasins

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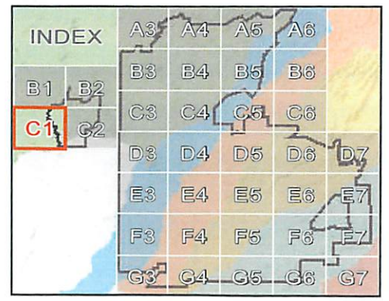
- Polacca
- Jeddito
- Cottonwood

- Hopi Reservation Boundary

N

1 0.5 0 1
Miles



C1

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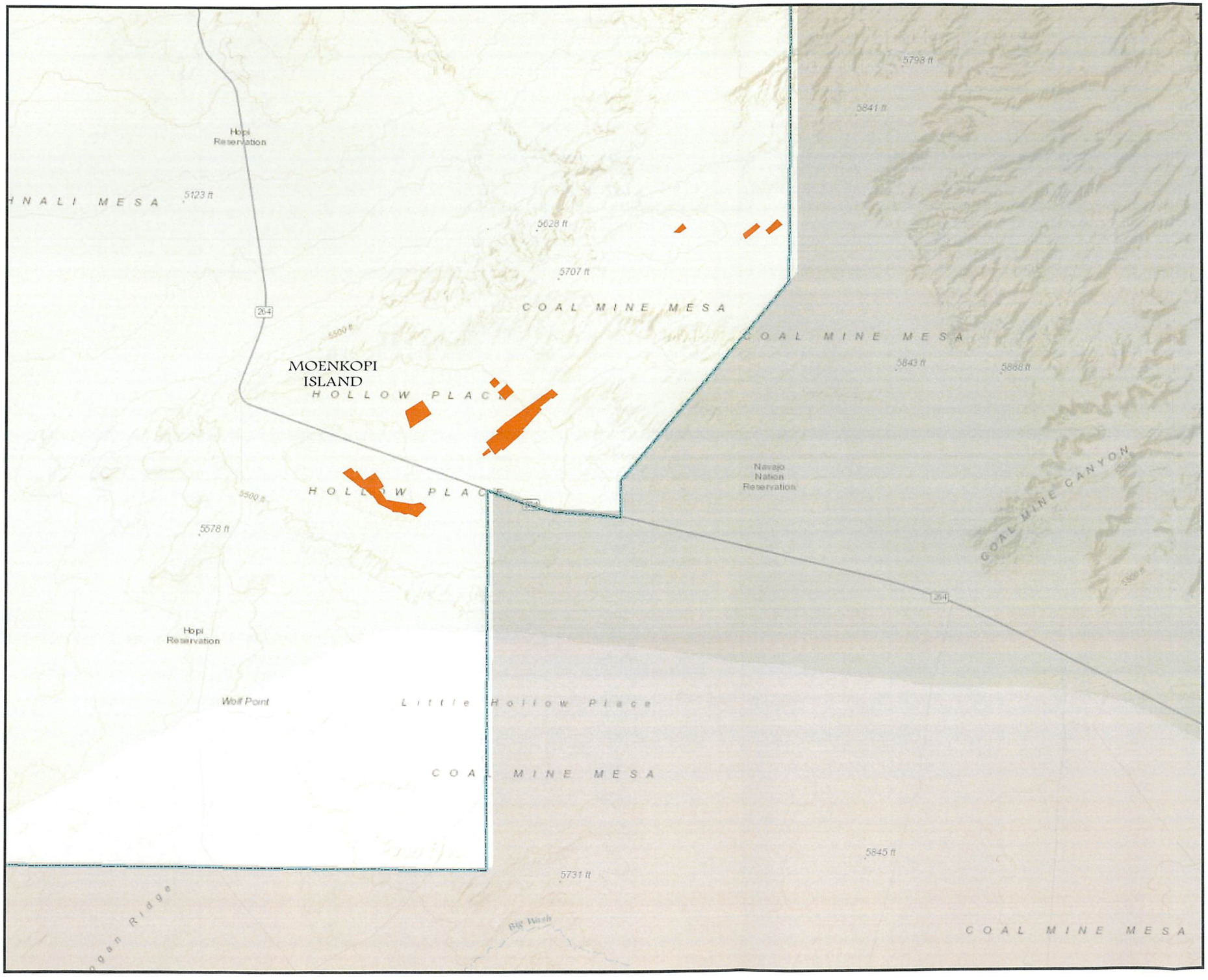

HOPI INDIAN RESERVATION

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- Oraibi
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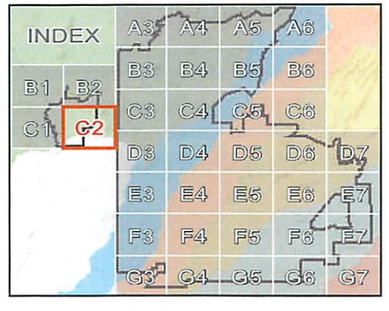
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



C2

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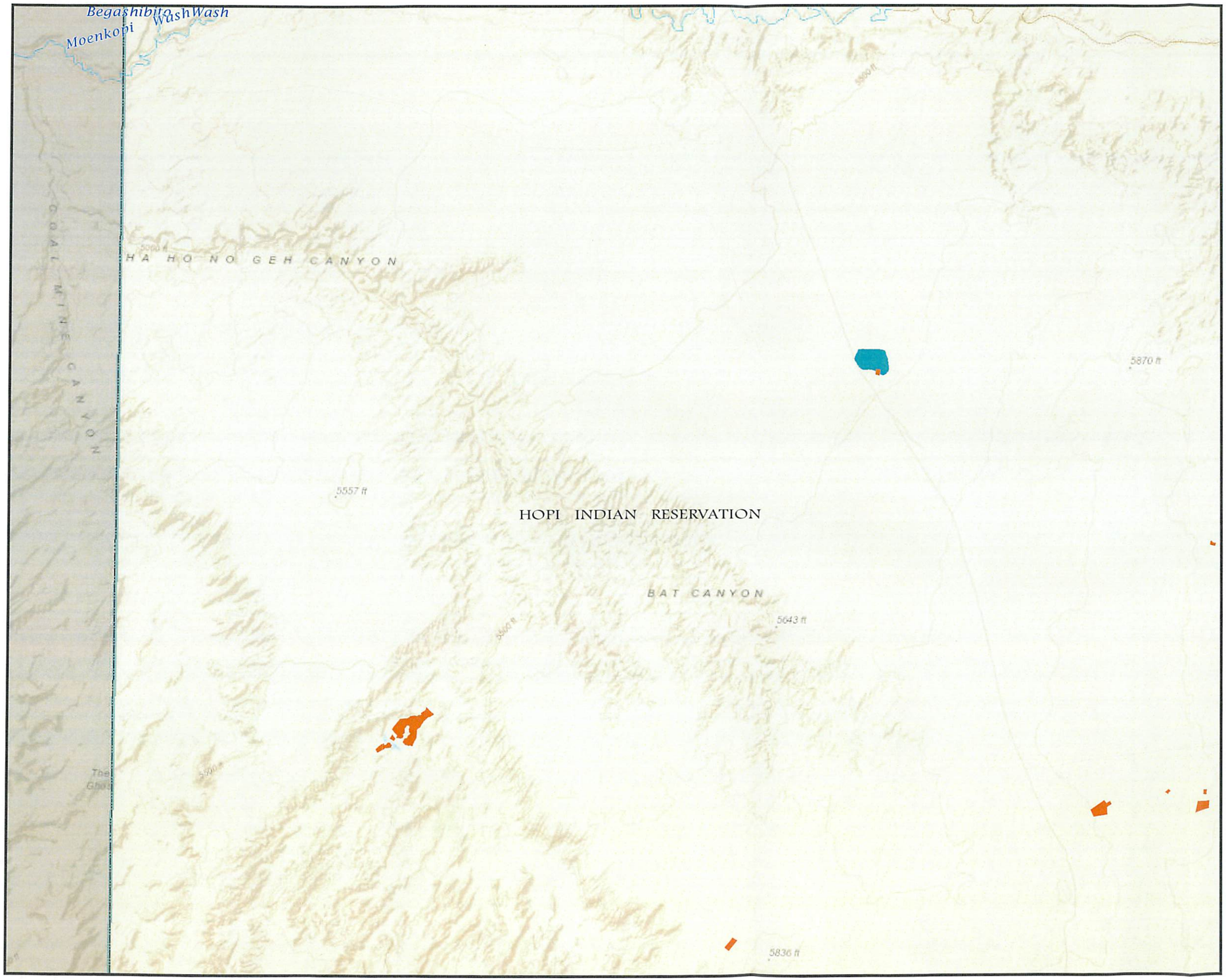

HOPI INDIAN RESERVATION

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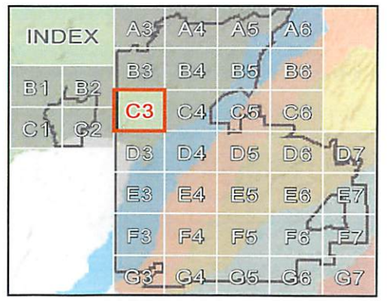
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1
Miles



C3

DOWL

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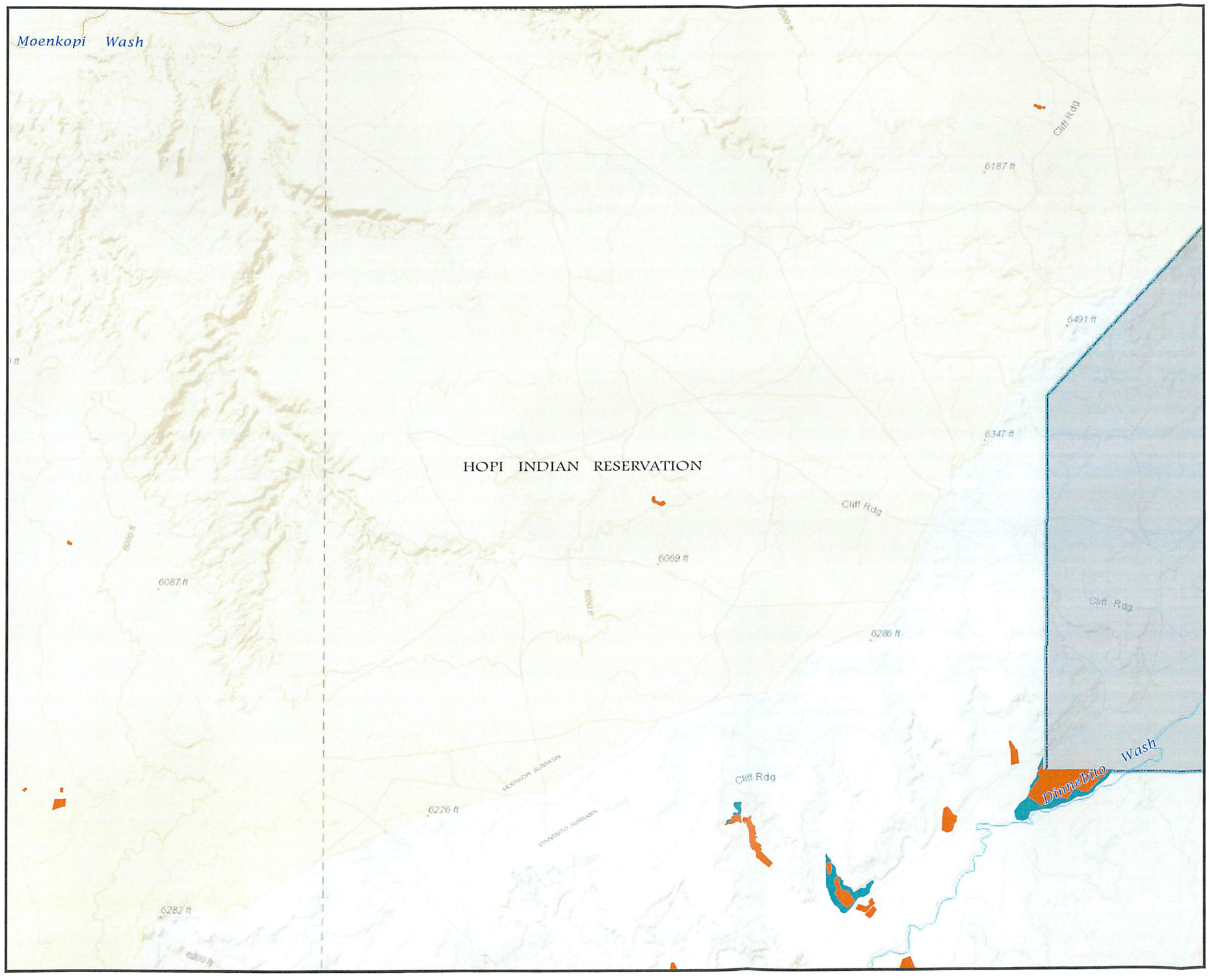

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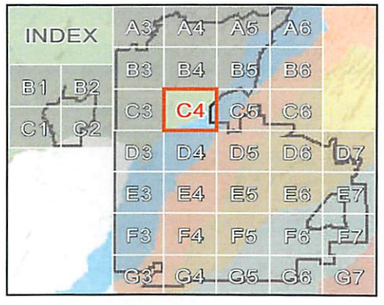
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1
Miles



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HOPI
INDIAN RESERVATION

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Northern Wash Subbasins

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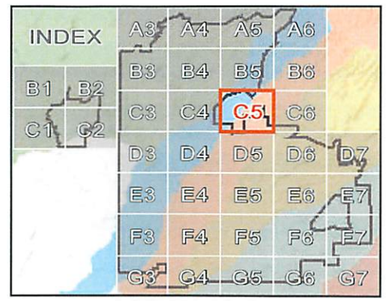
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1
Miles



C5

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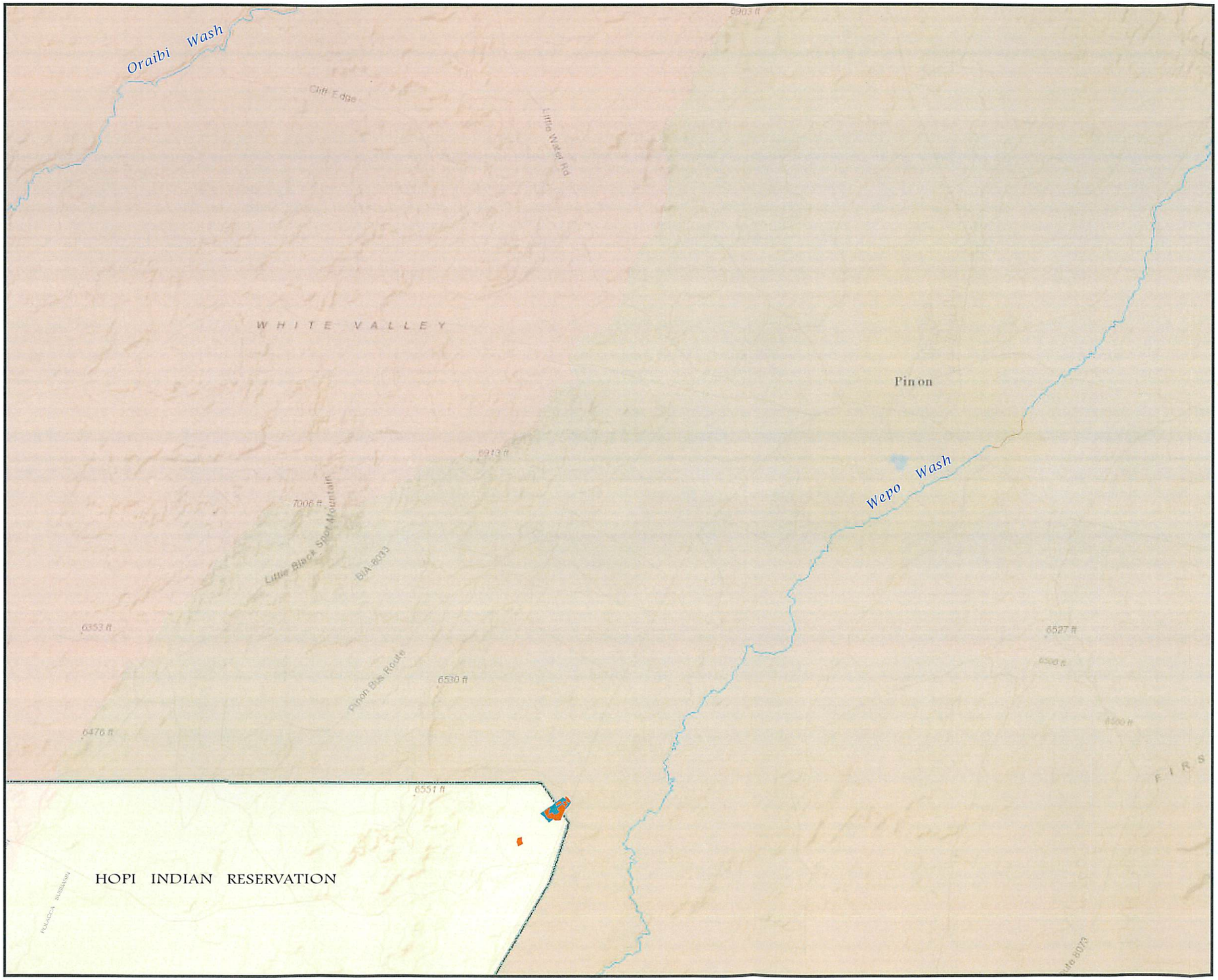

HOPI INDIAN RESERVATION

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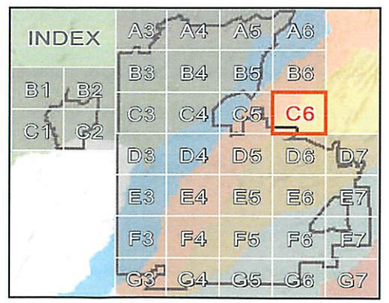
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1
Miles



C6

DOWL

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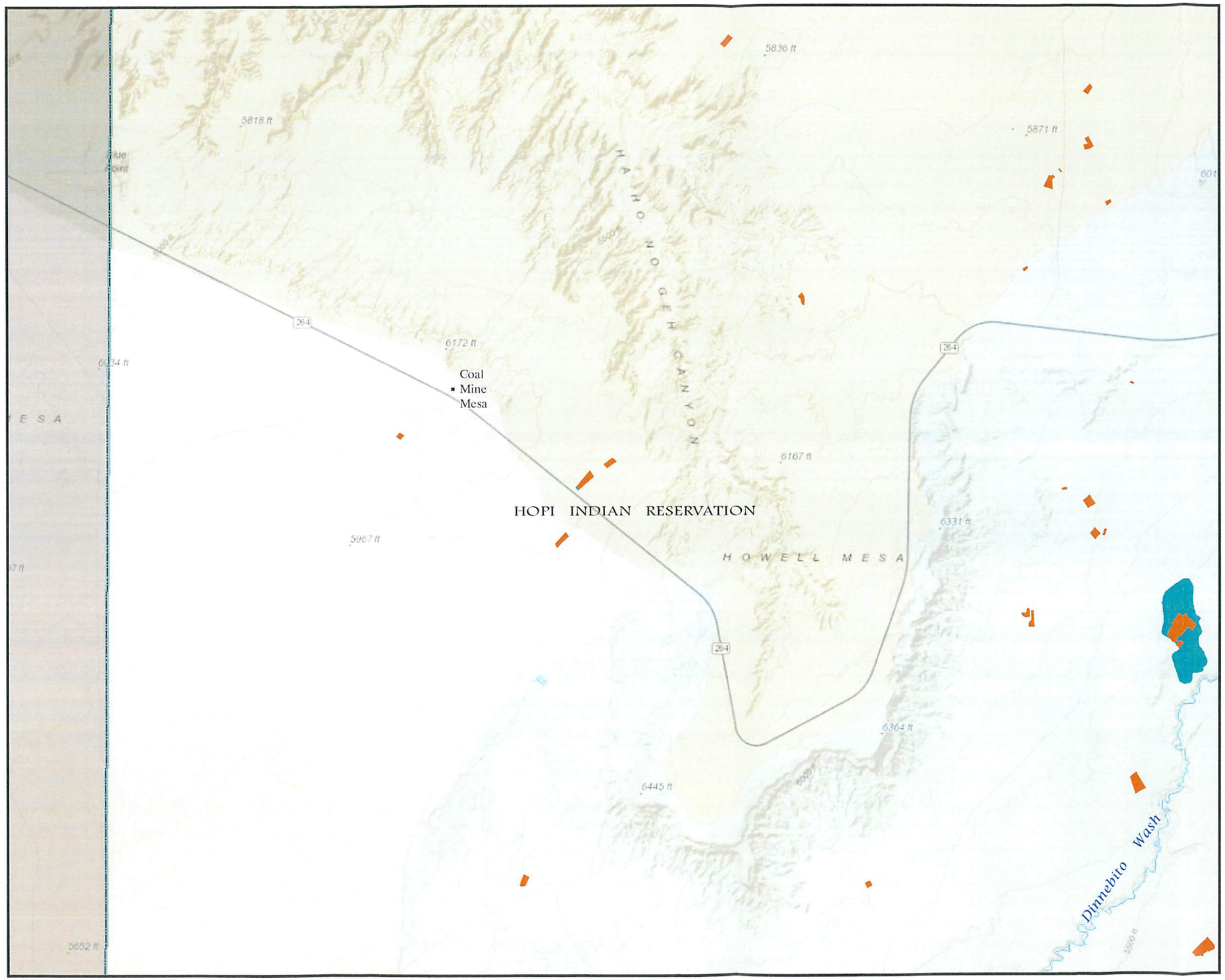

HOPI INDIAN RESERVATION

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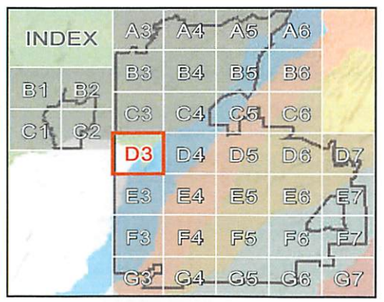
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



D3

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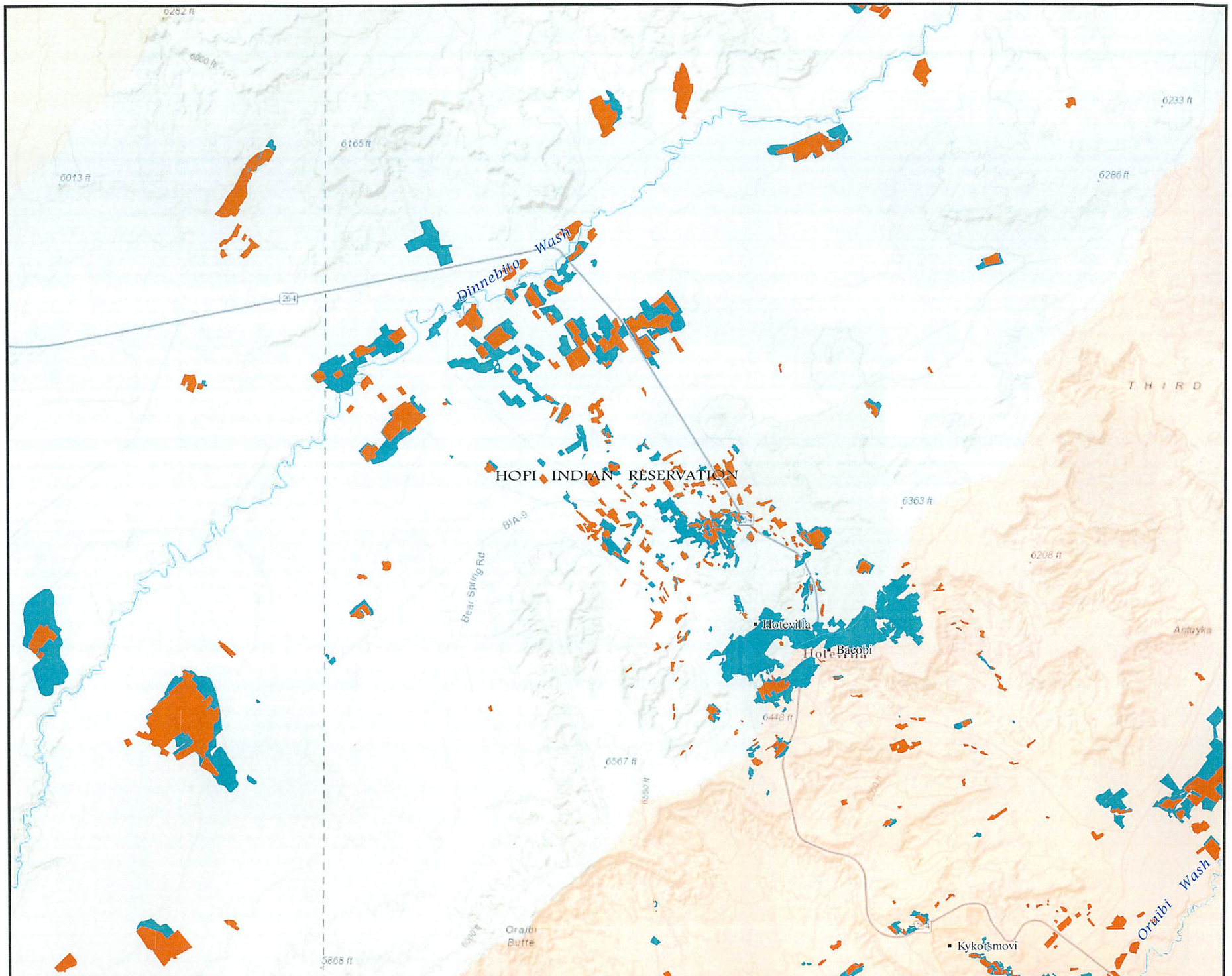

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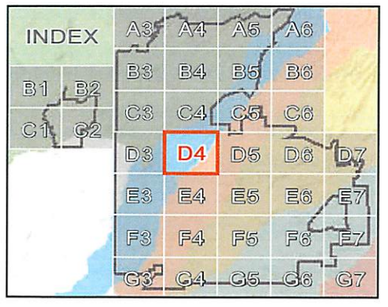
N

1 0.5 0 1
Miles



D4

DOWL

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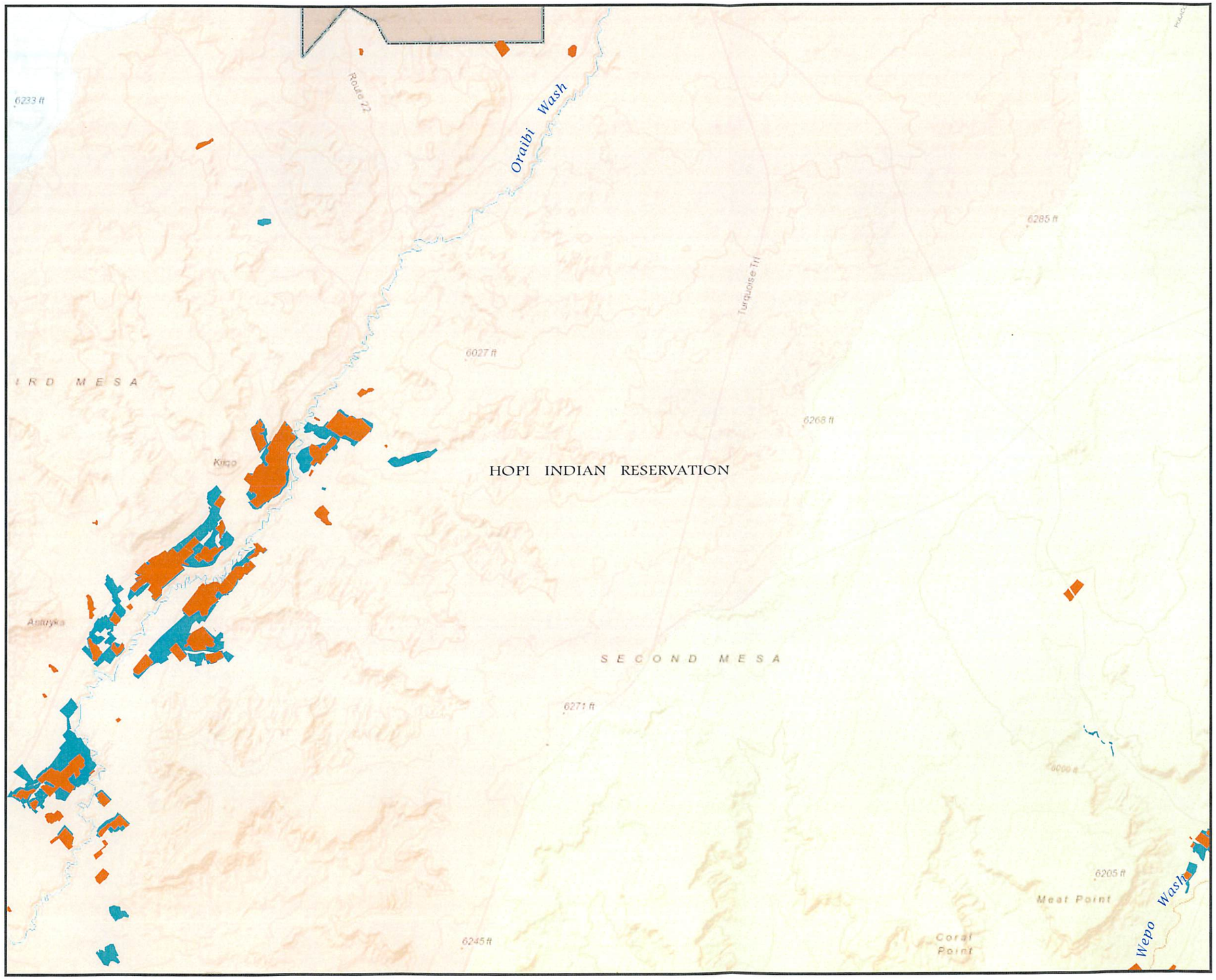

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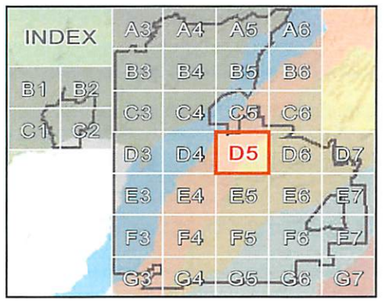
N

1 0.5 0 1
Miles



D5

DOWL

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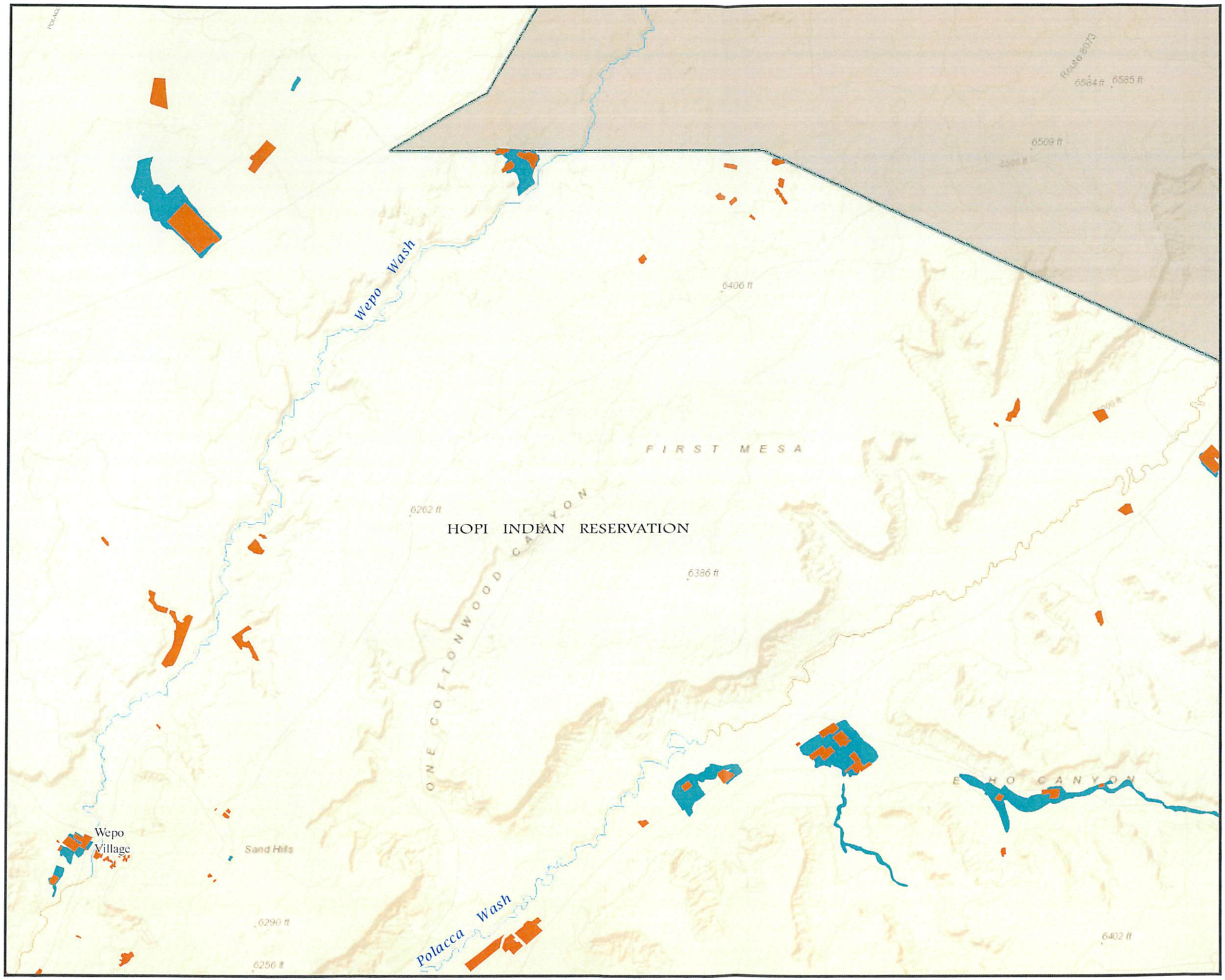

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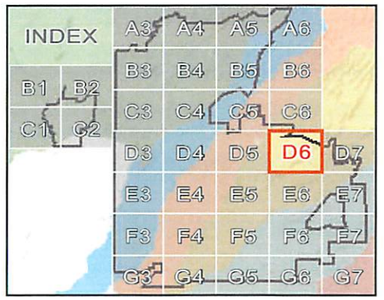
1 0.5 0 1

Miles



D6

DOWL

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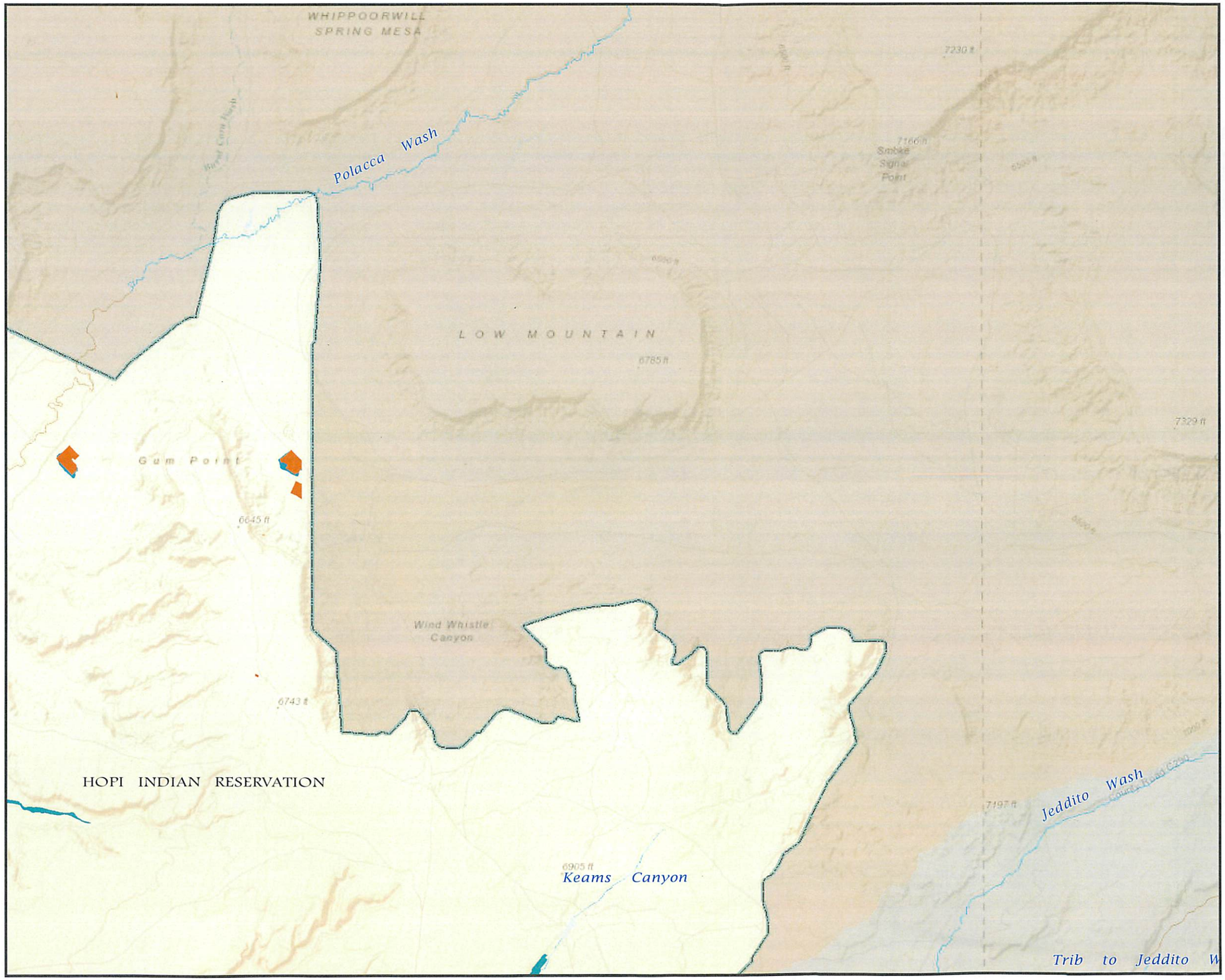

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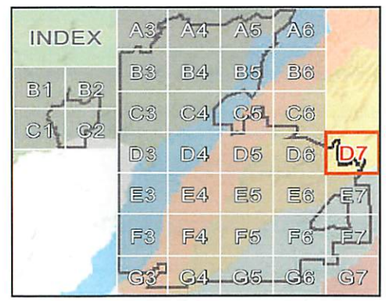
1 0.5 0 1
Miles



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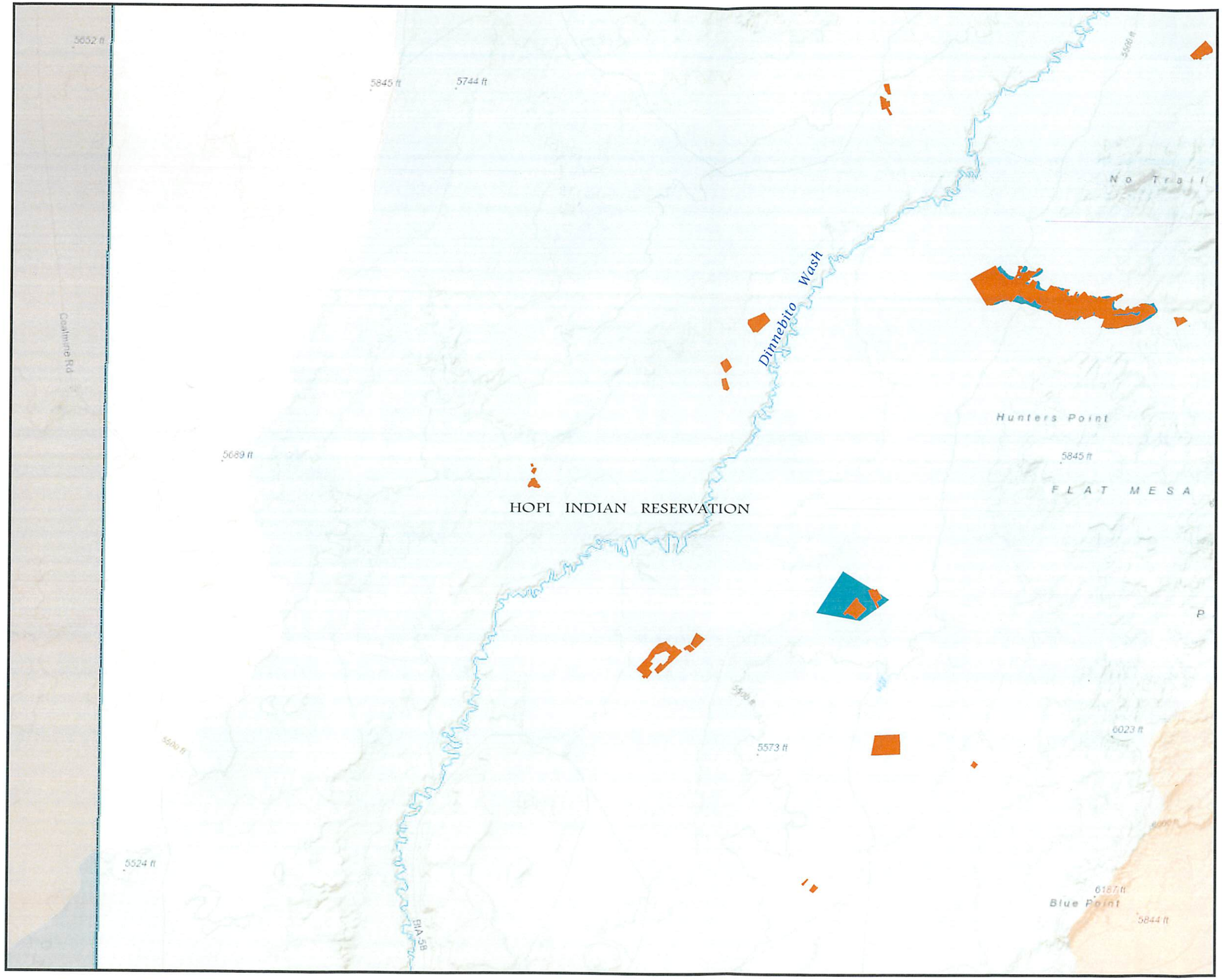


HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
- HIA Project DW10
- Additional HIA Found on 2010 Bing Imagery

Northern Wash Subbasins

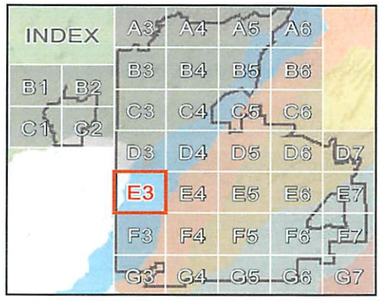
- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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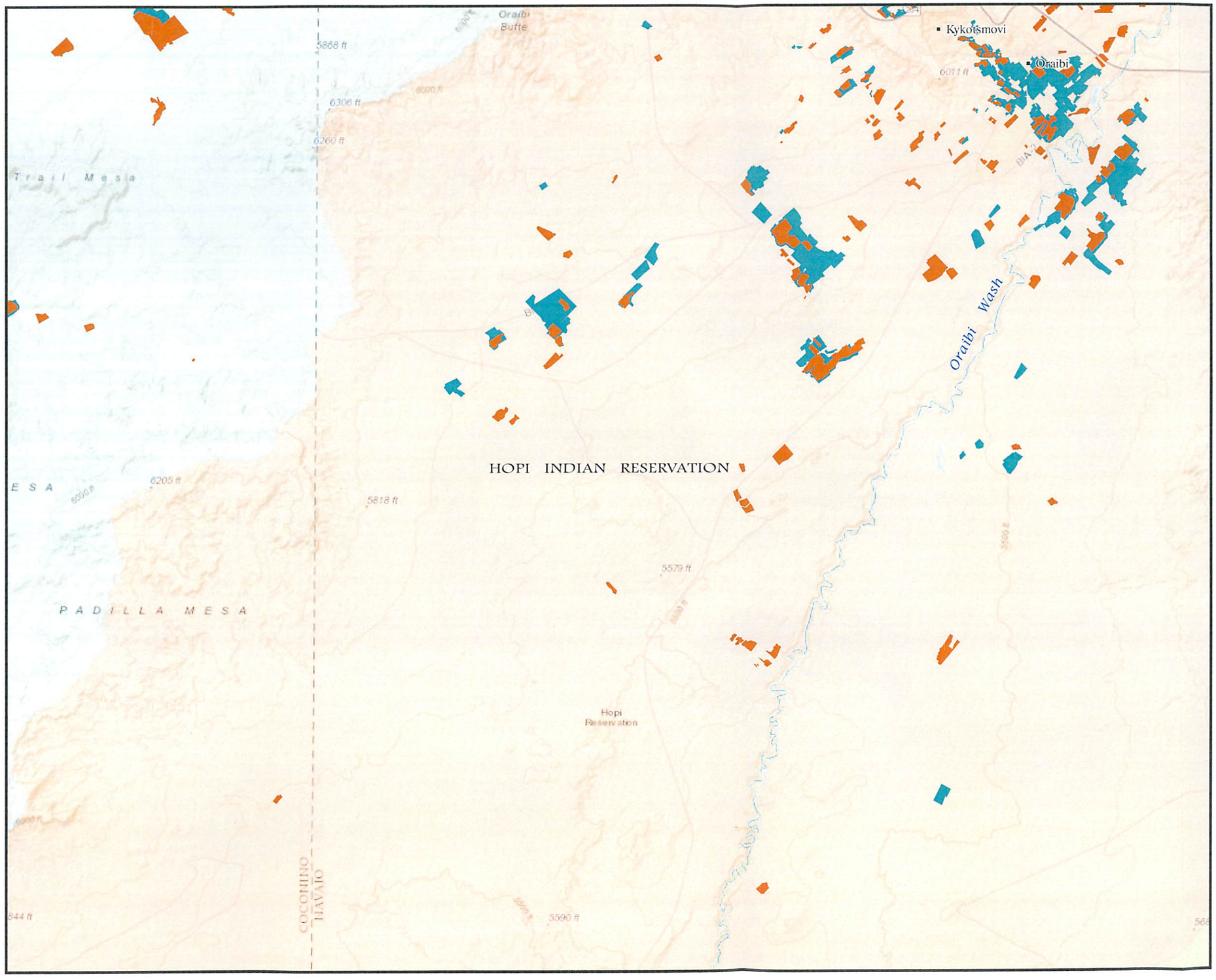

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
- HIA Project DW10
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Northern Wash Subbasins

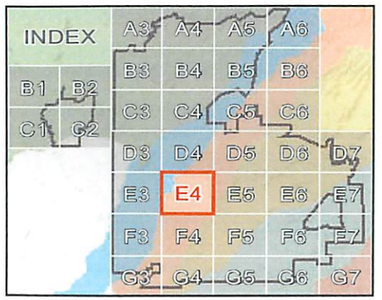
- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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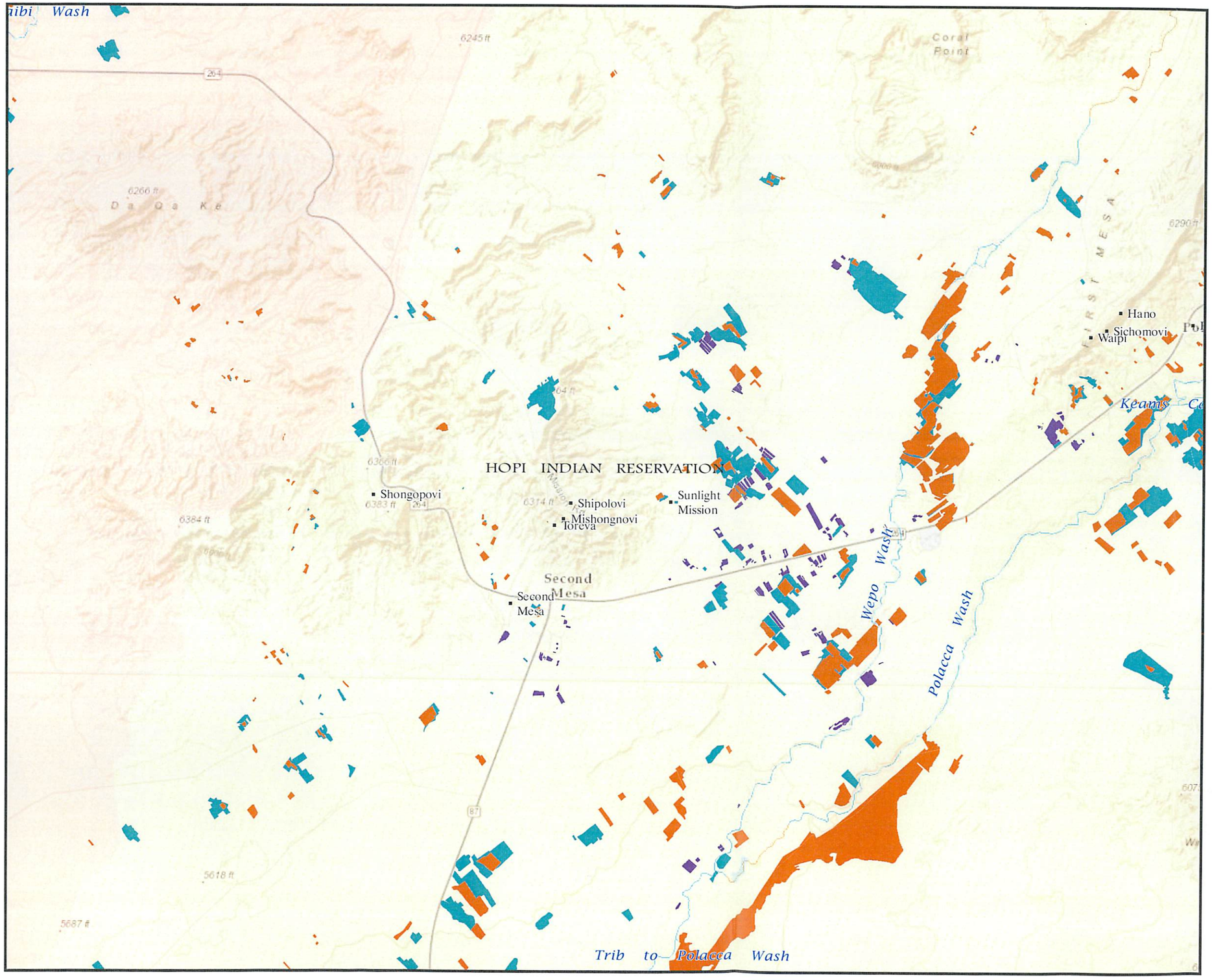

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
- HIA Project DW10
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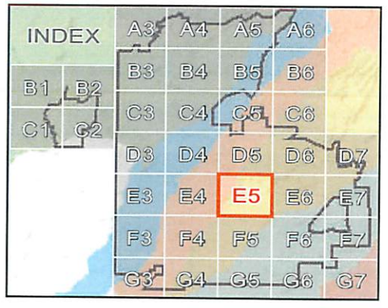
Northern Wash Subbasins

- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

- Hopi Reservation Boundary

N

1 0.5 0 1
Miles



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HOPI
INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

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- Additional ADWR Verfied HIA
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Northern Wash Subbasins

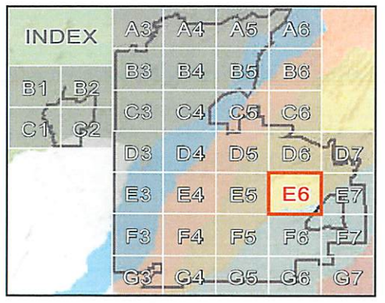
- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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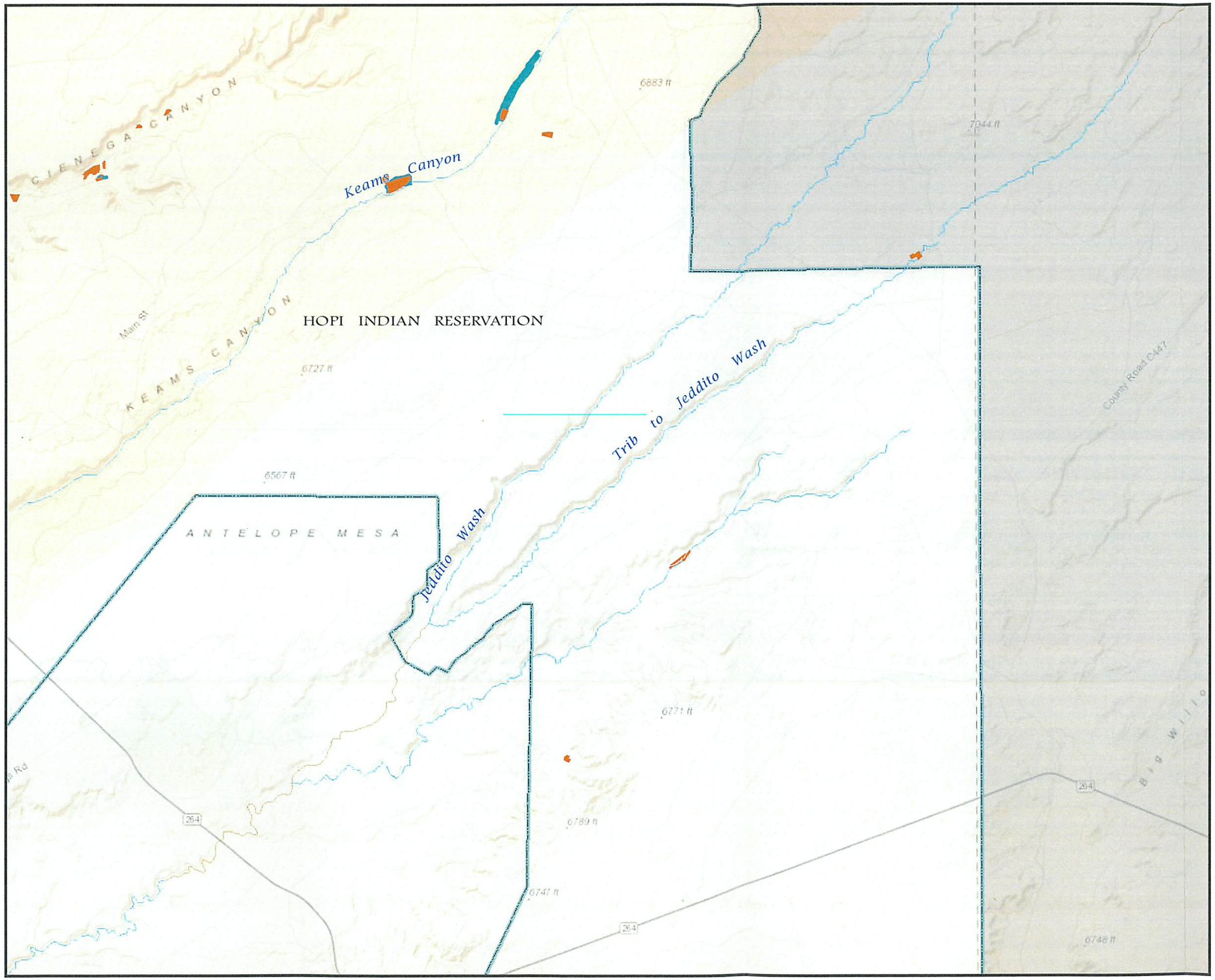
Vepo Wash
6290 ft
6256 ft
6402 ft
Owl Box Canyon
Polacca Wash
6290 ft
Mots'Ovi
6385 ft
264
Keams Canyon
Polacca
HOPI INDIAN RESERVATION
6485 ft
Five Houses
Keams Canyon
Sun Canyon
Sun Altar
Bia 23 Railroad
Bluebird Canyon
6627 ft
Hopi Reservation
ANTELOPE MESA
MOENKOPI SUBBASIN
DINNEBITO SUBBASIN
GRAY RIDGE
Skunk Springs Rd
6075 ft
6630 ft
6347 ft
Windswept Terrace
6568 ft
6530 ft
6500 ft
Canyon
6009 ft
Jeddito Wash



HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

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Northern Wash Subbasins

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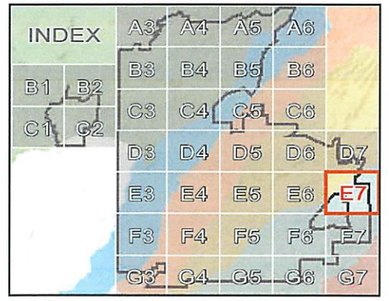
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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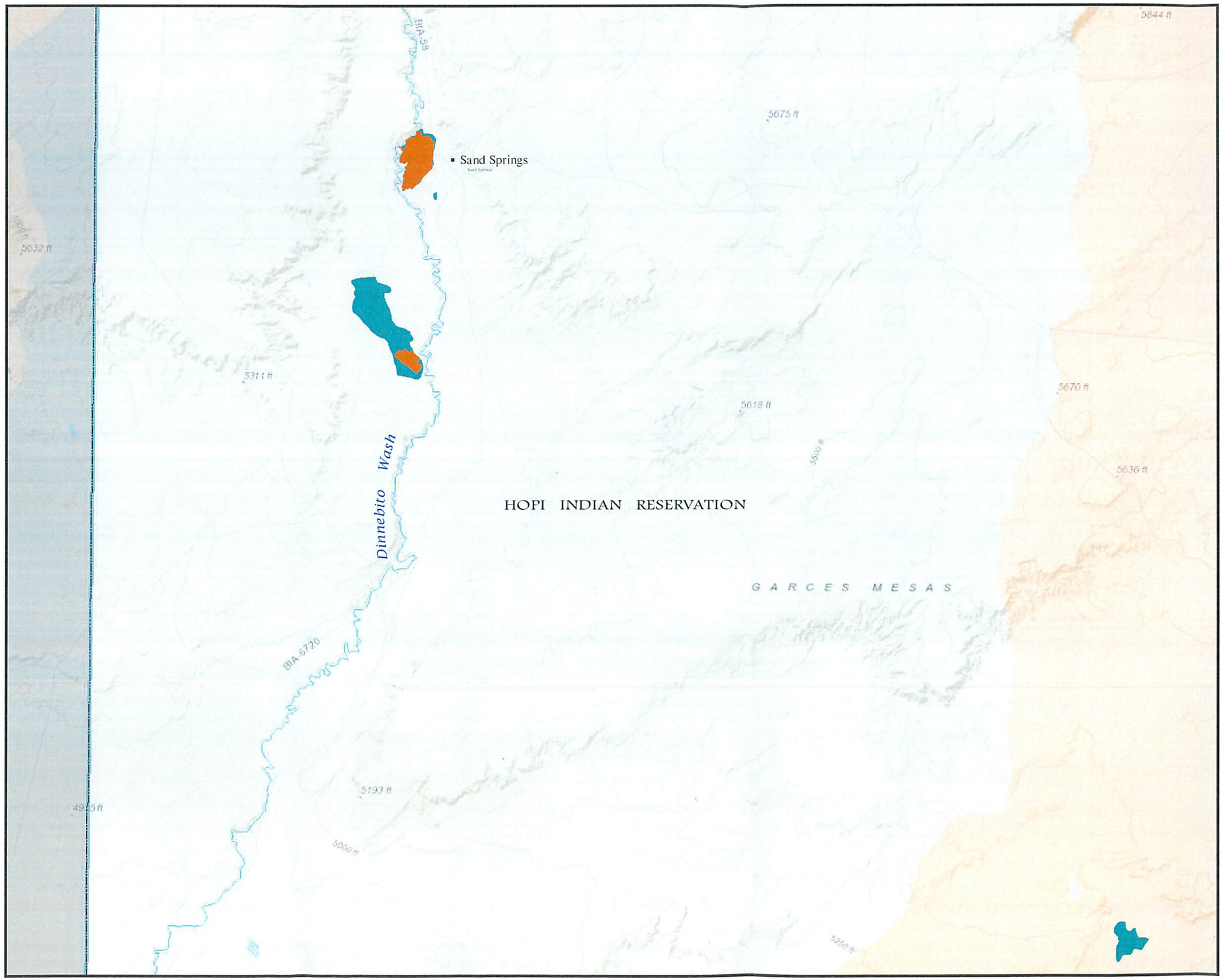

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
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Northern Wash Subbasins

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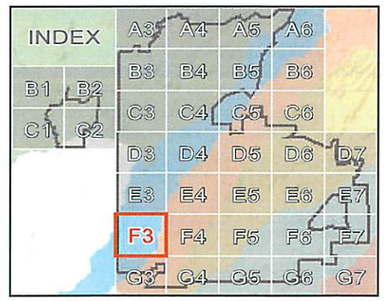
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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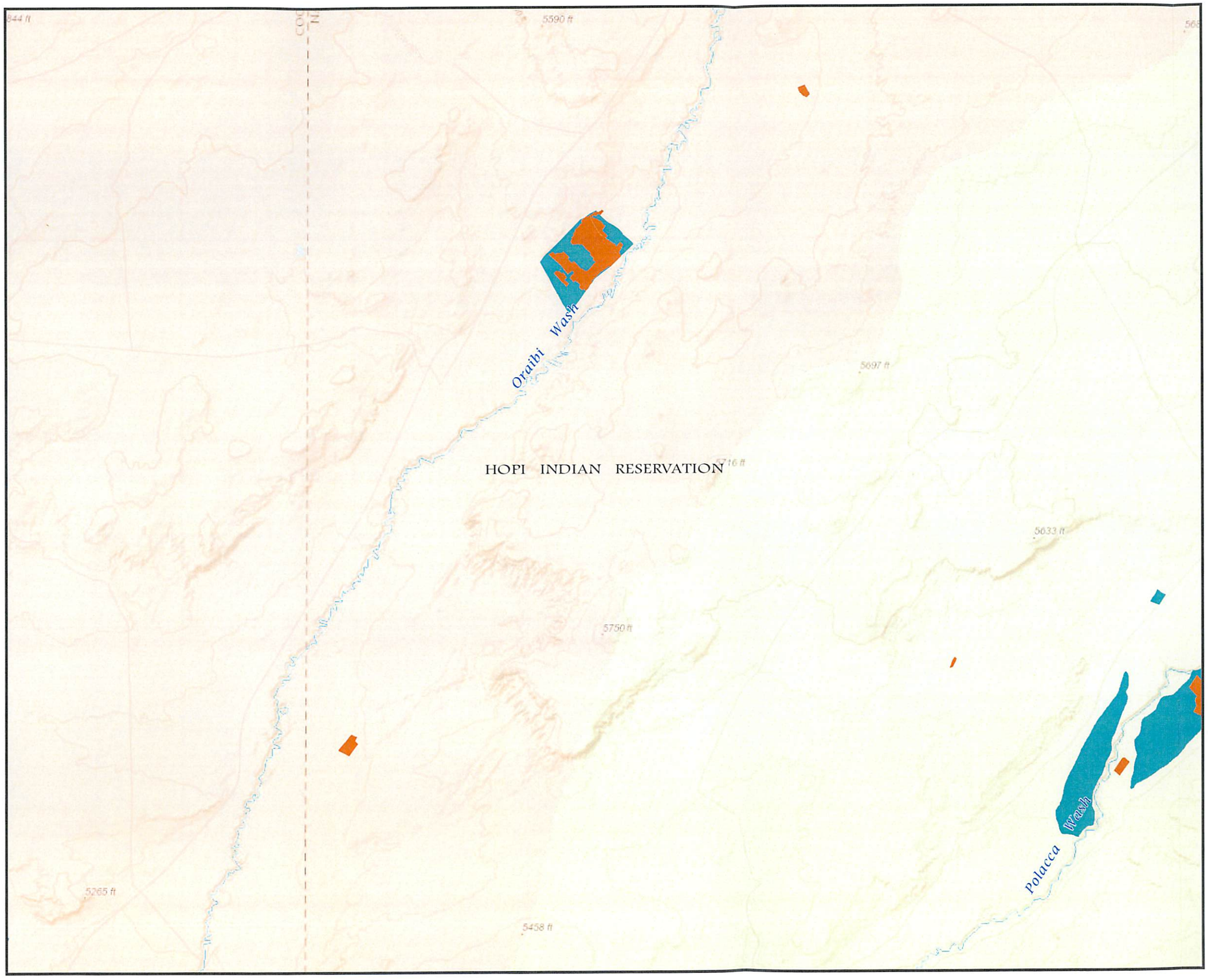

HOPI
INDIAN RESERVATION

HISTORIC IRRIGATION

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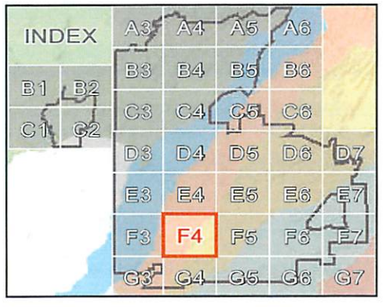
- Jeddito
- Cottonwood

- Hopi Reservation Boundary

N

1 0.5 0 1
Miles



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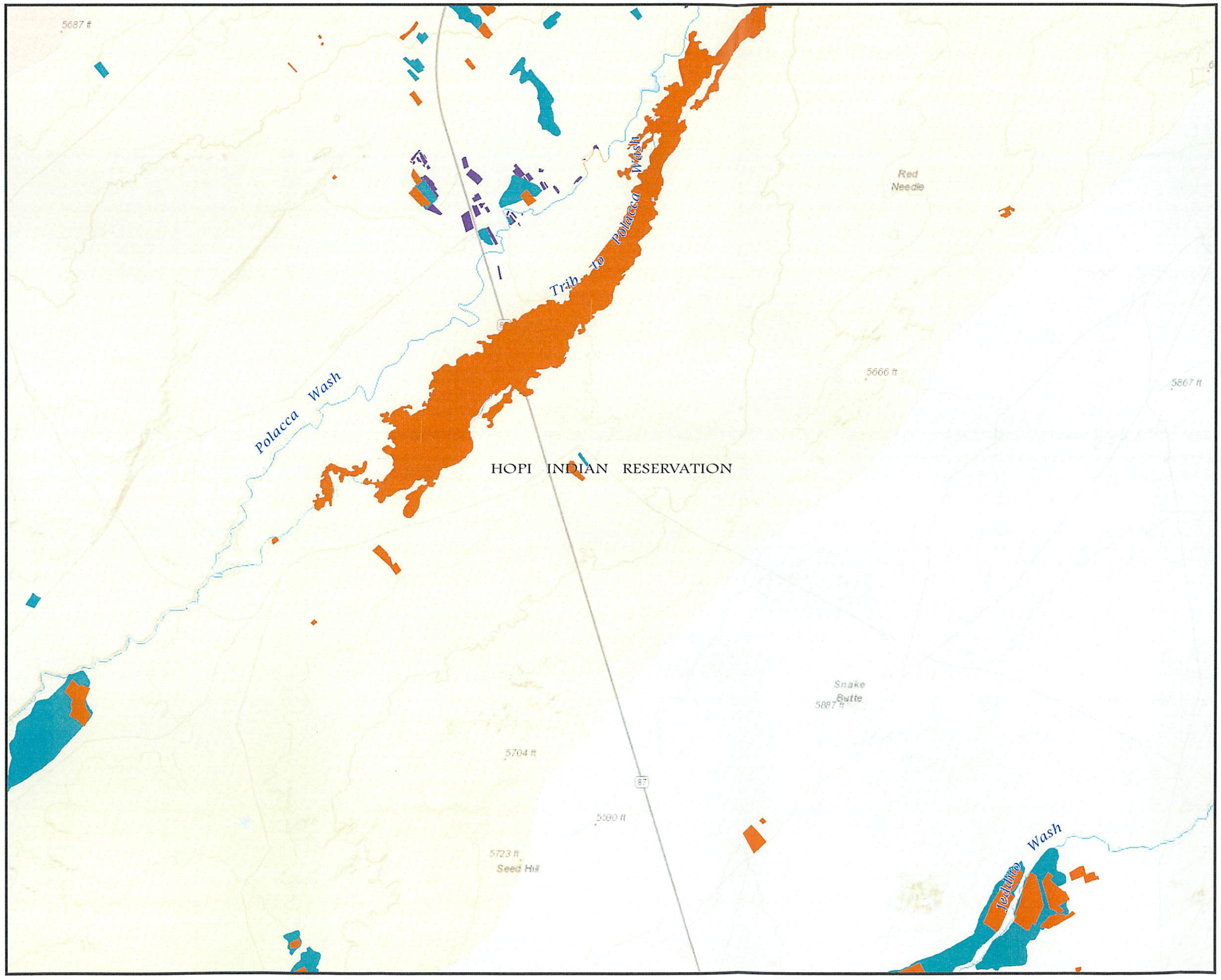

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

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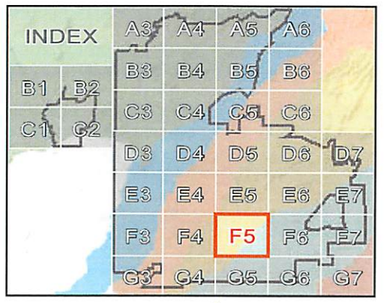
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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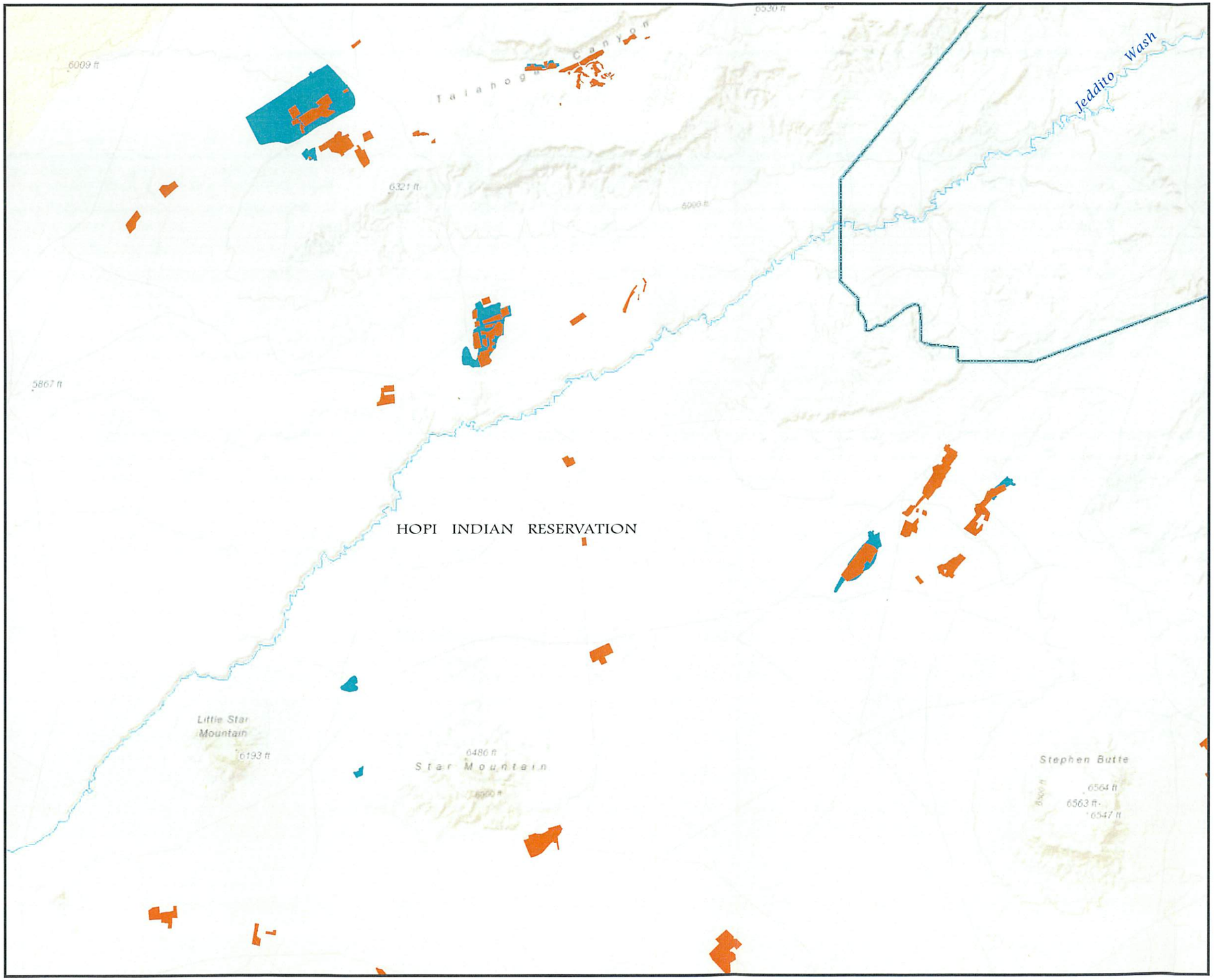

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
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Northern Wash Subbasins

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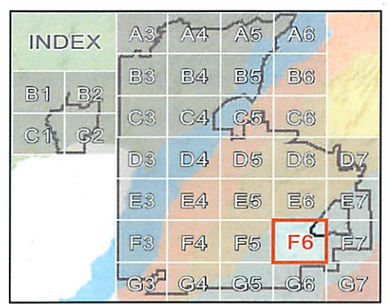
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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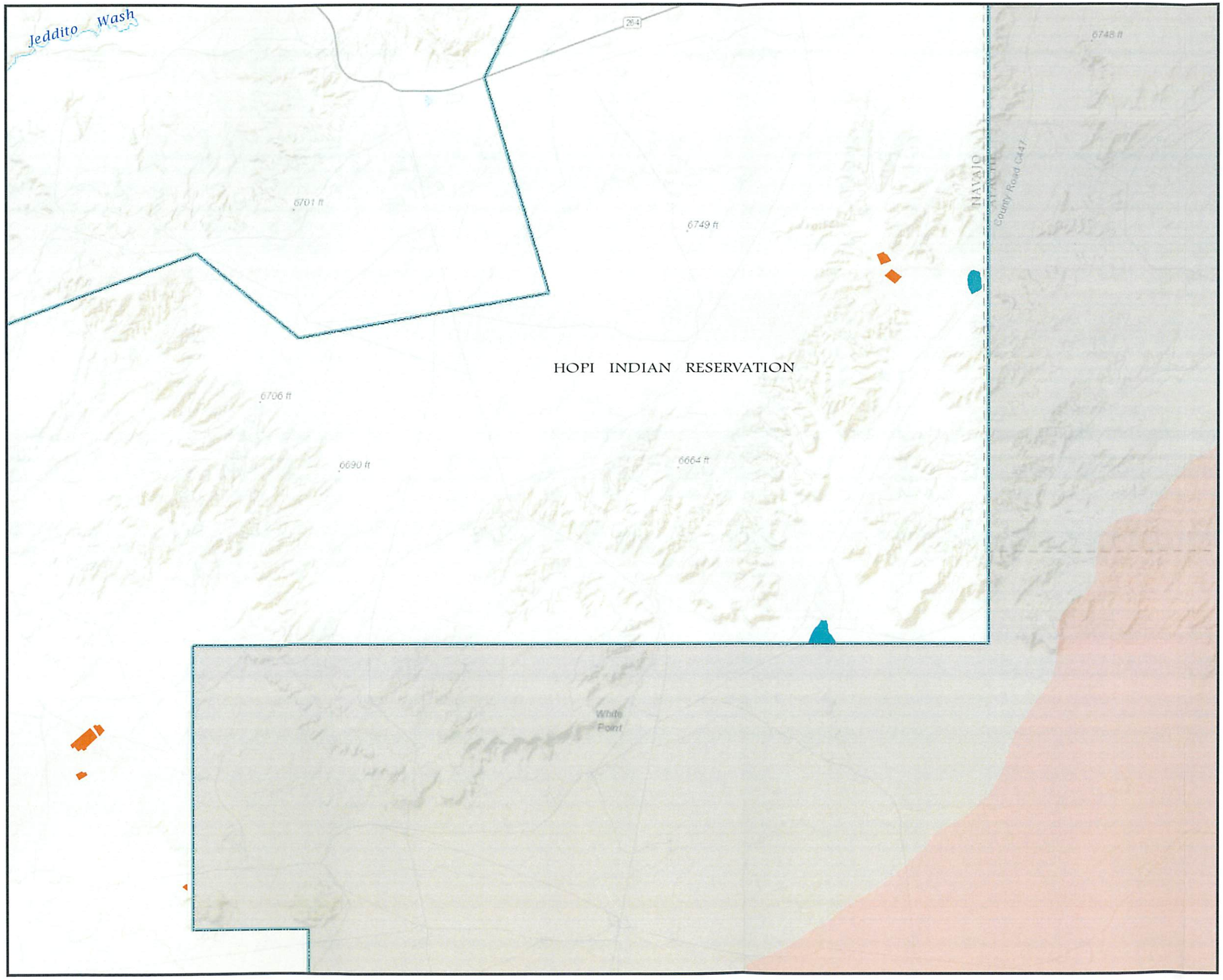

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

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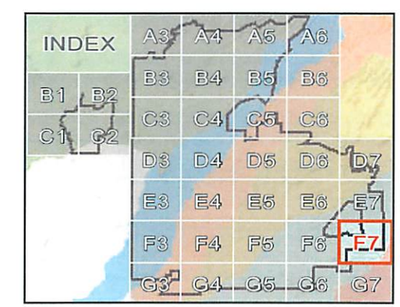
- Oraibi
- Polacca
- Jeddito
- Cottonwood

- Hopi Reservation Boundary

N

1 0.5 0 1
Miles



F7

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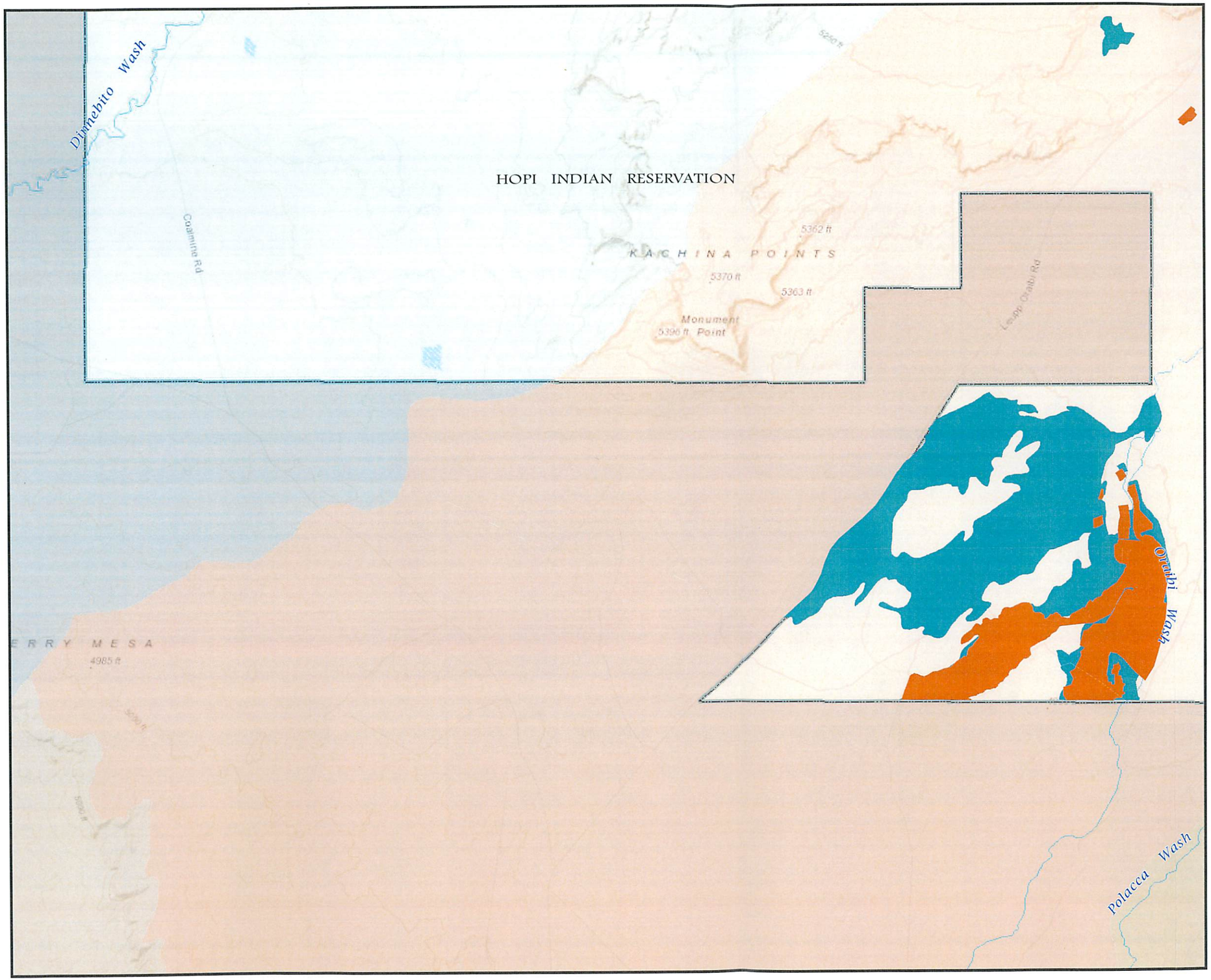

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

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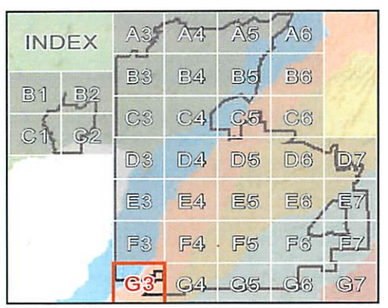
- Polacca
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



G3

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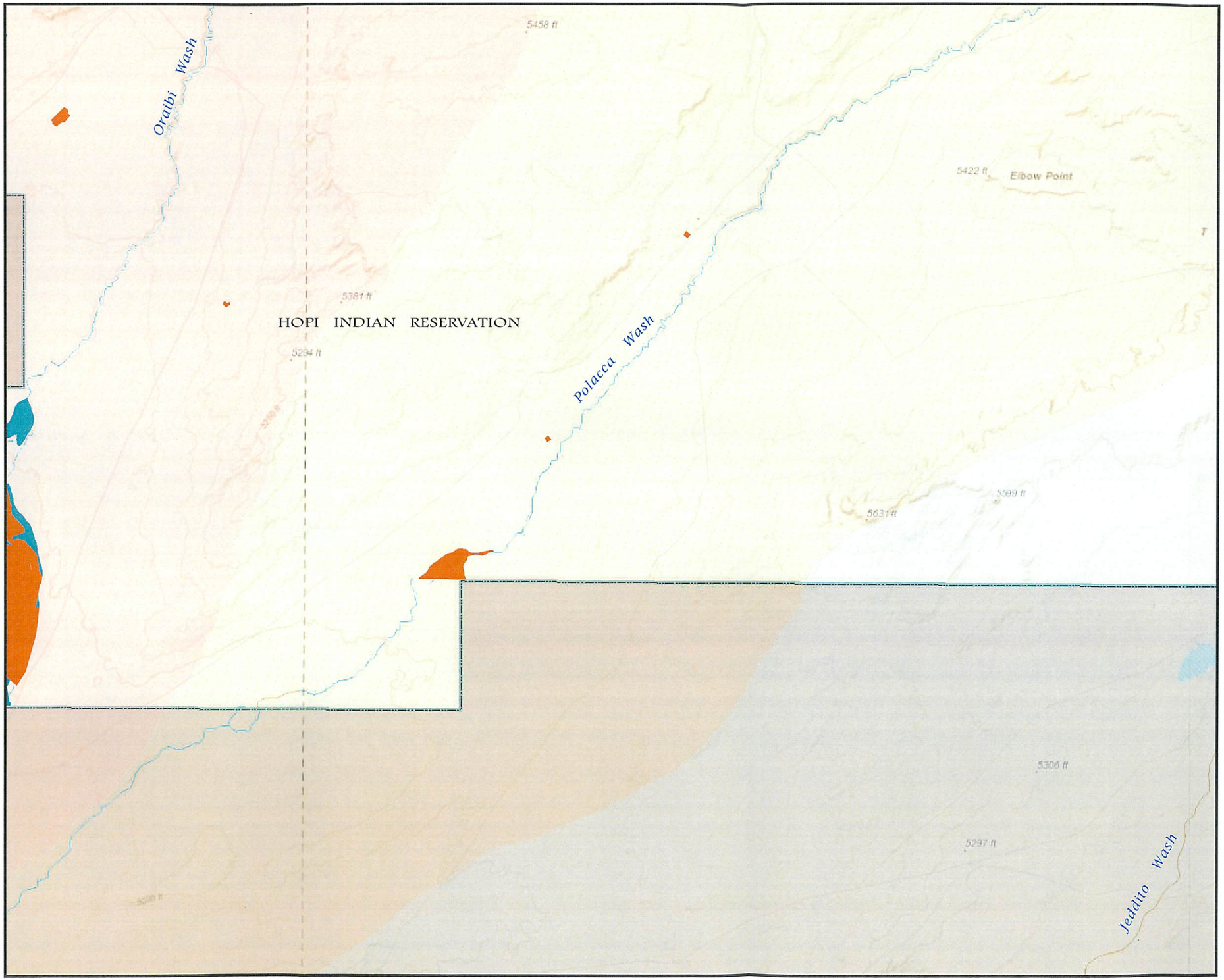

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

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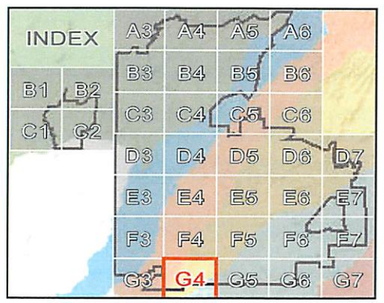
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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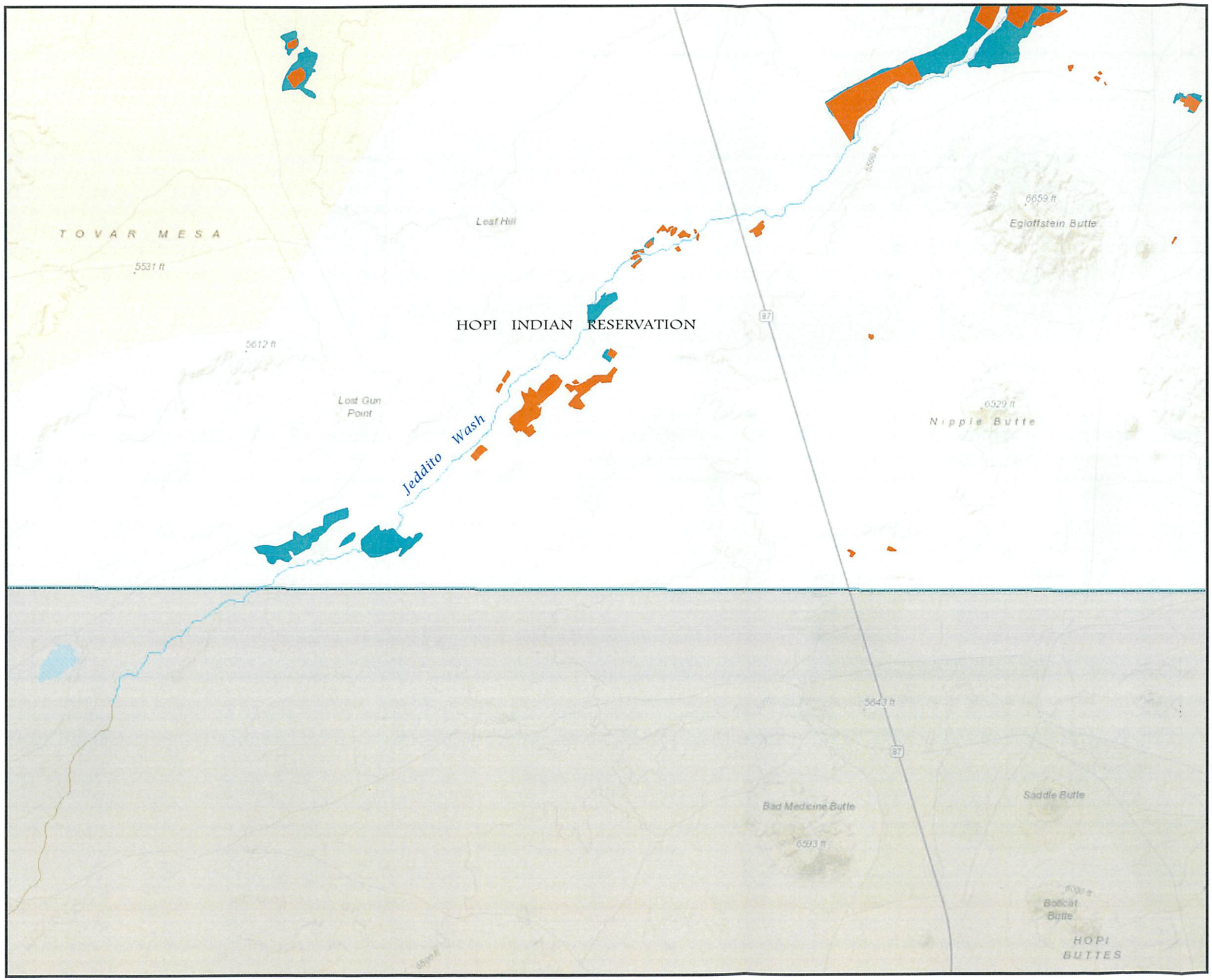

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

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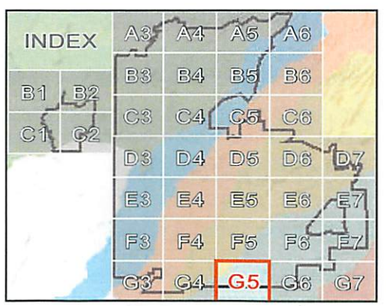
Hopi Reservation Boundary

N

1 0.5 0 1

Miles



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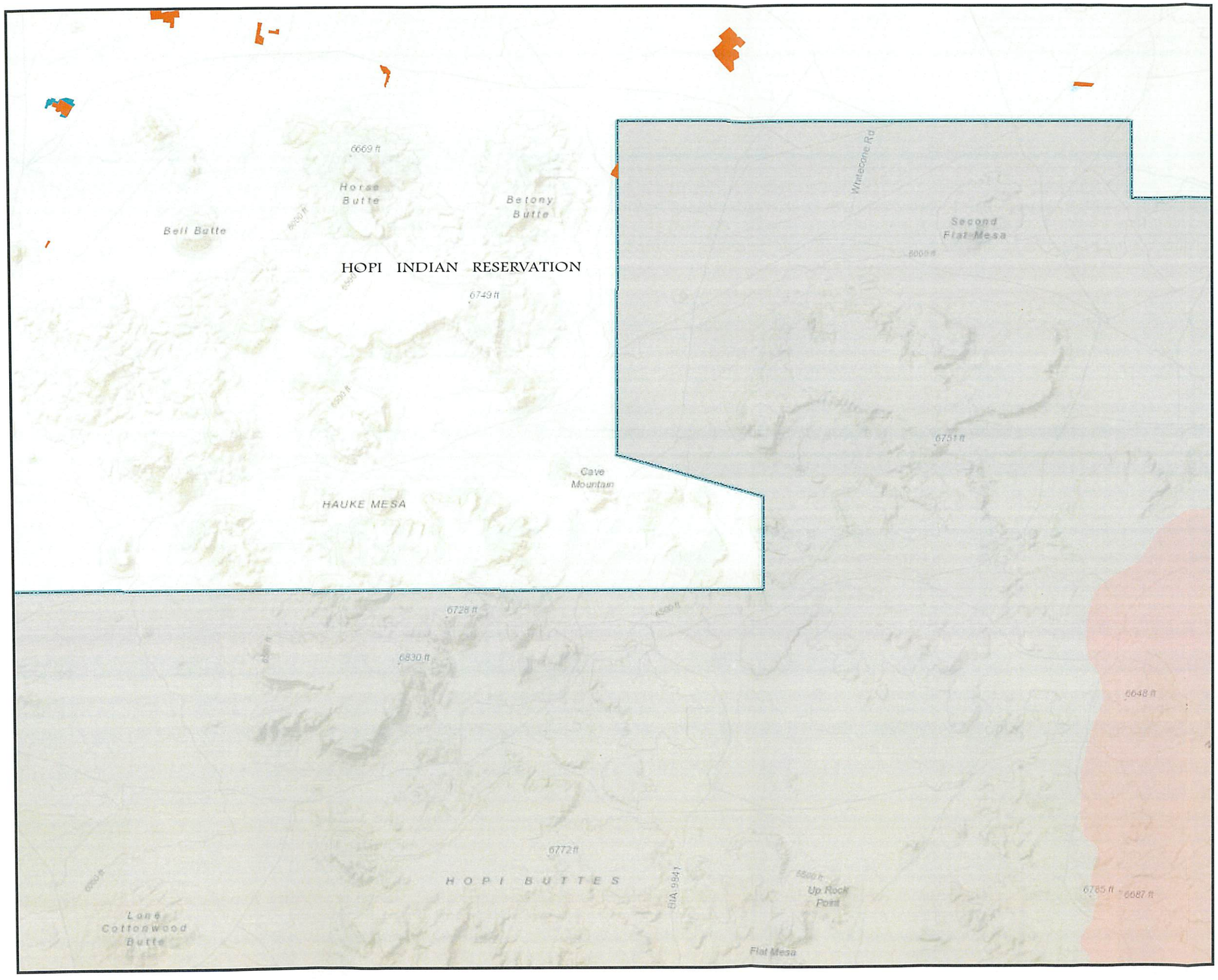

HOPI INDIAN RESERVATION

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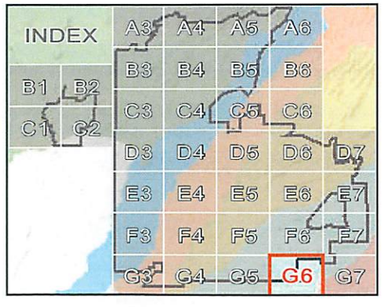
- Jeddito
- Cottonwood

Hopi Reservation Boundary

N

1 0.5 0 1

Miles



G6

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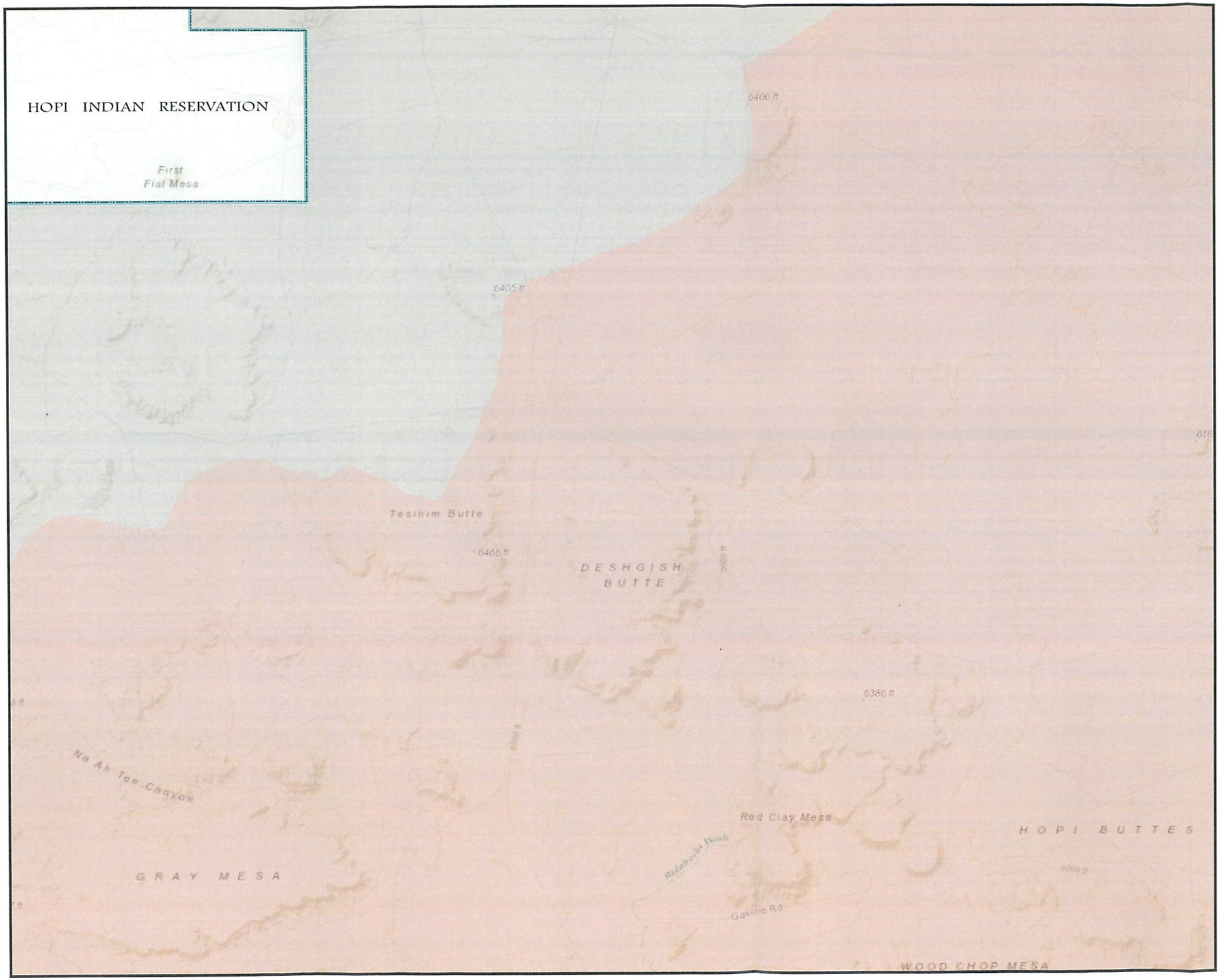

HOPI INDIAN RESERVATION

HISTORIC IRRIGATION

LEGEND

- Federal - Historically Irrigated Acreage (HIA)
- Additional ADWR Verfied HIA
- HIA Project DW10
- Additional HIA Found on 2010 Bing Imagery

Northern Wash Subbasins

- Moenkopi
- Dinnebito
- Oraibi
- Polacca
- Jeddito
- Cottonwood

- Hopi Reservation Boundary

N

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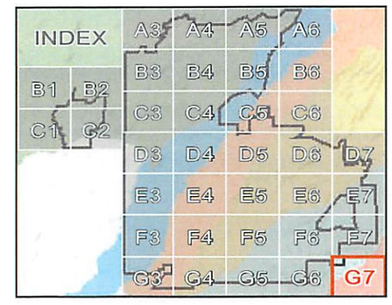
Miles



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Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
Impoundments from Hopi Tribe Third Amended Claim, Locations Corrected:			
I-1-14	7.230	508,192	4,013,433
I-1-15	2.750	505,325	4,016,703
I-1-17	4.960	520,398	4,025,633
I-1-18	3.400	503,781	4,013,896
I-1-2	9.300	514,507	4,013,596
I-1-20	5.460	521,531	4,020,666
I-1-21	5.170	517,583	4,024,518
I-1-22	1.650	512,630	4,018,963
I-1-24	3.100	519,039	4,019,396
I-1-26	4.960	521,955	4,020,024
I-1-27	2.750	522,085	4,018,239
I-1-28	9.300	521,597	4,023,318
I-1-280	4.410	521,769	4,015,187
I-1-287	2.890	519,698	4,013,640
I-1-29	4.500	519,967	4,017,768
I-1-30	2.090	511,676	4,015,507
I-1-31	7.350	520,637	4,019,311
I-1-32	7.320	520,530	4,018,878
I-1-33	5.170	517,121	4,017,861
I-1-35	0.730	521,650	4,012,779
I-1-36	2.750	514,337	4,013,008
I-1-37	1.950	516,145	4,021,209
I-1-5	1.840	504,805	4,015,216
I-1-548	0.830	502,768	4,012,037
I-1-6	2.300	519,291	4,027,194
I-1-601	0.030	522,334	4,017,620
I-1-7	7.440	520,940	4,027,476
I-1-9	11.710	517,426	4,013,513
I-2-291	3.310	525,531	4,024,903
I-2-292	3.160	524,917	4,013,620
I-2-293	9.760	522,807	4,016,765
I-2-295	4.180	543,655	4,022,635
I-2-296	1.100	523,225	4,018,242
I-2-297	0.830	523,432	4,018,154
I-2-298	3.370	525,855	4,024,316
I-2-300	1.320	522,580	4,017,774
I-2-301	6.430	525,630	4,024,870
I-2-304	1.650	538,696	4,017,898
I-2-305	4.110	524,388	4,013,375
I-2-306	3.220	524,102	4,019,353
I-2-307	2.510	524,075	4,019,265
I-2-308	2.480	525,681	4,016,740
I-2-309	4.410	523,133	4,015,657
I-3-209	1.100	552,425	4,028,075
I-3-210	1.450	556,073	4,029,762
I-3-211	2.070	555,695	4,029,437
I-3-212	3.310	555,360	4,029,246
I-3-214	21.210	552,453	4,027,953
I-3-215	3.860	556,270	4,029,852

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-3-243	3.580	552,397	4,028,230
I-3-262	1.450	555,144	4,023,566
I-3-302	4.780	560,519	4,031,267
I-3-50	8.950	554,803	4,017,862
I-3-54	2.300	551,620	4,012,629
I-3-55	1.210	551,591	4,012,973
I-3-602	2.250	554,350	4,025,052
I-3-603	0.140	560,785	4,028,359
I-3-604	0.800	552,236	4,027,763
I-3-605	0.310	553,270	4,026,732
I-3-606	1.920	553,577	4,028,750
I-3-607	3.370	553,688	4,028,606
I-3-608	1.780	553,944	4,028,570
I-3-609	2.790	554,217	4,028,564
I-3-610	0.600	554,497	4,028,651
I-3-611	2.650	554,673	4,028,735
I-3-87	4.130	550,125	4,021,062
I-3-88	9.400	552,119	4,020,774
I-3-89	1.110	552,117	4,021,052
I-4-559	0.100	476,586	3,989,205
I-4-561	0.530	484,963	3,987,063
I-4-612	0.210	485,891	3,987,430
I-5-1	0.100	508,869	4,010,206
I-5-10	0.150	502,158	4,003,170
I-5-11	1.720	501,932	4,010,412
I-5-12	0.920	514,036	4,010,490
I-5-13	10.120	512,867	4,010,666
I-5-16	218.180	501,312	4,008,471
I-5-19	2.750	508,270	4,011,622
I-5-213	4.410	500,063	3,984,103
I-5-216	5.140	500,639	3,992,022
I-5-217	44.080	504,626	3,988,916
I-5-218	18.370	505,395	3,989,739
I-5-223	6.060	516,255	3,986,181
I-5-23	6.170	502,758	4,011,244
I-5-231	4.130	507,554	4,003,328
I-5-234	2.200	515,082	3,997,515
I-5-238	0.460	519,079	3,988,749
I-5-239	3.310	516,383	3,985,416
I-5-240	6.430	515,859	3,985,903
I-5-241	4.410	519,856	3,987,919
I-5-242	3.310	520,108	3,987,975
I-5-245	8.950	516,410	3,985,627
I-5-246	5.300	512,427	3,985,654
I-5-247	12.490	521,081	3,988,044
I-5-248	2.610	502,532	3,988,682
I-5-249	2.890	511,692	3,995,812
I-5-25	7.700	507,969	4,011,614
I-5-250	5.790	513,143	3,994,739
I-5-251	3.790	517,168	3,993,858

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-5-252	1.790	513,894	3,992,278
I-5-254	1.650	518,954	3,988,438
I-5-255	9.640	518,883	3,987,817
I-5-256	5.110	518,533	3,987,362
I-5-257	2.390	517,831	3,986,706
I-5-259	45.910	516,191	3,987,070
I-5-261	2.020	520,533	3,987,455
I-5-271	6.200	518,409	4,006,489
I-5-272	2.890	519,435	4,006,829
I-5-273	7.230	521,411	4,007,754
I-5-274	12.500	518,658	4,008,558
I-5-276	9.500	511,473	4,004,685
I-5-278	1.930	518,488	4,006,527
I-5-279	16.410	517,792	4,005,994
I-5-281	1.160	508,998	4,007,278
I-5-282	4.130	506,132	4,004,935
I-5-283	6.610	506,778	4,006,222
I-5-284	8.950	507,604	4,008,075
I-5-285	1.030	508,648	4,006,412
I-5-286	4.410	508,774	4,006,690
I-5-288	5.970	509,183	4,001,910
I-5-289	2.750	508,507	4,003,451
I-5-290	5.510	511,276	4,004,408
I-5-299	3.360	516,712	4,010,950
I-5-3	6.610	508,436	4,011,570
I-5-34	6.430	506,804	4,008,108
I-5-4	0.770	501,806	4,010,845
I-5-549	0.700	509,465	4,002,159
I-5-550	0.700	509,682	4,001,731
I-5-551	4.000	510,460	4,001,942
I-5-557	1.500	520,702	4,011,015
I-5-613	4.960	508,644	3,988,861
I-5-614	6.500	514,445	3,985,669
I-5-615	1.380	514,567	3,987,880
I-5-616	0.280	515,227	3,985,965
I-5-617	9.000	512,716	4,001,827
I-5-8	0.280	502,084	4,011,366
I-6-113	1.010	541,816	4,001,883
I-6-115	4.410	522,564	3,985,763
I-6-224	6.890	537,964	4,002,420
I-6-225	6.240	536,799	4,005,654
I-6-226	2.390	535,775	3,998,873
I-6-227	3.580	541,524	4,007,951
I-6-228	8.820	539,405	4,003,968
I-6-229	11.020	535,664	4,001,800
I-6-230	1.380	525,367	4,004,315
I-6-232	4.780	530,434	4,010,654
I-6-235	14.460	525,778	3,989,842
I-6-236	13.500	530,068	3,994,293
I-6-237	4.500	524,450	3,991,380

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-6-258	8.820	532,895	4,001,390
I-6-260	4.500	522,903	4,011,086
I-6-265	4.680	527,039	4,004,509
I-6-267	8.080	536,346	3,999,951
I-6-316	4.410	543,967	3,985,633
I-6-322	0.730	543,641	3,985,909
I-6-323	15.430	539,293	3,984,868
I-6-324	4.850	544,495	3,984,527
I-6-618	0.220	530,378	4,000,152
I-6-82	12.900	536,772	3,988,551
I-6-83	13.490	530,647	3,985,821
I-6-98	0.410	529,337	3,989,632
I-7-103	1.100	548,403	4,002,136
I-7-105	2.200	546,842	4,000,589
I-7-112	37.190	547,447	4,000,315
I-7-117	1.100	549,305	4,001,856
I-7-120	1.630	546,838	4,001,454
I-7-123	22.380	549,346	4,003,309
I-7-130	1.190	550,521	4,003,848
I-7-134	1.380	548,870	4,004,848
I-7-135	3.940	548,816	4,004,848
I-7-136	1.490	548,369	4,004,324
I-7-311	5.170	554,045	3,988,030
I-7-314	8.260	550,996	3,990,230
I-7-315	6.430	552,509	3,988,853
I-7-317	0.960	551,112	3,989,818
I-7-319	8.950	549,425	3,989,389
I-7-320	2.890	546,936	3,988,078
I-7-321	13.770	551,748	3,986,508
I-7-325	5.140	547,451	3,984,476
I-7-326	3.660	546,162	3,987,952
I-7-327	4.500	547,624	3,985,930
I-7-329	12.120	549,877	3,985,909
I-7-330	0.800	550,220	3,990,470
I-7-331	3.940	547,603	3,989,778
I-7-536	3.310	556,165	3,984,805
I-7-556	6.400	548,460	3,985,762
I-7-619	0.770	545,276	3,989,313
I-7-94	1.100	548,651	4,001,592
I-7-95	1.100	545,760	4,001,138
I-8-104	9.850	513,266	3,960,545
I-8-106	48.480	513,114	3,959,524
I-8-107	4.130	515,432	3,957,188
I-8-108	8.820	510,928	3,965,965
I-8-109	6.890	509,268	3,964,078
I-8-110	6.890	507,617	3,961,614
I-8-111	1.720	507,565	3,959,185
I-8-116	2.870	520,548	3,969,121
I-8-118	4.410	517,289	3,969,391
I-8-119	4.500	521,685	3,965,741

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-8-121	5.800	512,153	3,968,240
I-8-124	1.860	512,637	3,964,393
I-8-125	0.250	513,019	3,959,389
I-8-126	8.300	511,483	3,963,315
I-8-129	3.440	517,081	3,959,997
I-8-131	12.880	515,580	3,960,793
I-8-132	4.700	514,875	3,960,548
I-8-137	7.900	511,979	3,963,405
I-8-207	9.640	501,489	3,975,630
I-8-208	2.750	506,196	3,978,405
I-8-220	15.610	512,057	3,979,553
I-8-221	3.310	514,897	3,982,197
I-8-222	6.200	511,460	3,980,473
I-8-233	9.920	512,635	3,978,622
I-8-244	1.380	511,957	3,979,708
I-8-253	13.220	512,108	3,981,527
I-8-263	21.850	509,859	3,976,866
I-8-264	8.930	507,375	3,981,267
I-8-266	6.100	505,995	3,982,808
I-8-268	48.210	505,066	3,983,118
I-8-269	7.710	503,430	3,982,919
I-8-270	4.410	501,190	3,983,116
I-8-275	4.960	511,132	3,983,279
I-8-277	11.360	506,627	3,981,056
I-8-294	17.050	505,499	3,982,530
I-8-303	0.920	515,301	3,975,432
I-8-391	3.310	521,107	3,958,187
I-8-392	9.640	521,074	3,960,715
I-8-395	2.750	520,179	3,956,798
I-8-48	44.000	520,165	3,982,829
I-8-49	2.480	519,621	3,971,925
I-8-51	5.140	517,471	3,977,655
I-8-52	3.310	519,846	3,980,155
I-8-53	2.480	518,853	3,976,571
I-8-558	5.140	516,096	3,978,850
I-8-56	5.500	518,672	3,981,106
I-8-57	0.550	518,945	3,971,424
I-8-58	1.930	517,967	3,982,236
I-8-59	8.030	515,602	3,973,459
I-8-60	5.510	520,822	3,983,230
I-8-61	4.480	520,722	3,983,485
I-8-62	29.400	520,091	3,983,483
I-8-620	1.380	507,225	3,979,637
I-8-621	3.200	518,151	3,978,197
I-8-622	2.900	522,497	3,970,731
I-8-623	3.600	511,658	3,957,091
I-8-63	11.200	521,536	3,983,842
I-8-64	27.550	514,622	3,960,481
I-8-65	0.920	515,969	3,980,811
I-8-66	6.890	517,181	3,973,794

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-8-67	0.180	519,018	3,971,247
I-8-68	2.890	517,743	3,981,559
I-8-79	8.500	518,285	3,972,133
I-8-81	3.860	517,691	3,971,145
I-8-84	22.000	501,537	3,976,200
I-8-85	123.970	507,029	3,974,712
I-8-86	5.140	514,452	3,970,373
I-8-90	3.940	515,418	3,971,461
I-8-91	0.460	512,018	3,971,040
I-9-127	2.200	524,351	3,981,364
I-9-128	2.890	524,446	3,983,062
I-9-310	1.820	537,345	3,982,985
I-9-312	7.580	538,354	3,975,037
I-9-313	15.430	537,833	3,974,358
I-9-318	4.410	540,876	3,977,910
I-9-328	5.140	541,708	3,977,426
I-9-332	0.990	533,549	3,959,767
I-9-338	8.360	535,740	3,958,700
I-9-339	4.480	523,180	3,960,654
I-9-340	3.410	526,143	3,960,884
I-9-342	2.980	522,952	3,961,363
I-9-343	5.060	530,094	3,965,821
I-9-344	19.830	532,939	3,963,214
I-9-345	2.650	533,507	3,965,956
I-9-346	23.420	531,324	3,957,541
I-9-347	11.020	530,896	3,958,371
I-9-349	2.690	535,130	3,956,791
I-9-367	3.900	529,443	3,957,811
I-9-369	0.460	543,749	3,978,722
I-9-370	1.840	524,088	3,959,026
I-9-378	5.510	537,955	3,975,346
I-9-380	0.460	543,351	3,978,909
I-9-381	160.000	542,778	3,982,575
I-9-382	17.910	542,682	3,983,009
I-9-383	2.300	544,132	3,972,446
I-9-384	6.750	544,131	3,972,602
I-9-385	2.750	540,498	3,983,398
I-9-386	9.640	540,926	3,982,657
I-9-389	21.360	523,197	3,964,292
I-9-390	8.900	529,419	3,956,857
I-9-398	12.000	541,559	3,982,106
I-9-511	1.840	538,656	3,957,481
I-9-512	1.470	538,430	3,957,480
I-9-530	0.210	544,727	3,972,486
I-9-554	4.400	538,094	3,973,868
I-9-624	4.400	542,515	3,983,955
I-9-625	7.400	542,620	3,983,267
I-9-626	0.640	543,739	3,971,317
I-9-627	1.600	534,538	3,968,347
I-9-628	0.550	539,126	3,958,274

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-9-96	3.940	522,800	3,971,223
I-10-140	5.970	561,962	3,957,580
I-10-185	2.070	563,479	3,956,604
I-10-371	9.030	550,987	3,983,974
I-10-372	16.530	548,514	3,982,973
I-10-373	8.400	545,861	3,981,761
I-10-374	6.430	548,568	3,981,343
I-10-375	1.550	547,485	3,978,320
I-10-376	7.580	547,411	3,977,948
I-10-387	10.280	545,295	3,976,146
I-10-396	1.260	545,144	3,975,779
I-10-414	3.860	561,489	3,968,324
I-10-426	1.650	563,585	3,969,548
I-10-427	6.430	563,936	3,969,606
I-10-428	8.260	564,434	3,969,367
I-10-429	1.860	567,407	3,964,330
I-10-430	1.380	567,611	3,967,260
I-10-432	1.650	567,251	3,969,476
I-10-441	1.030	567,044	3,969,419
I-10-461	0.830	566,952	3,962,452
I-10-490	2.200	557,641	3,966,979
I-10-491	3.440	563,993	3,979,157
I-10-492	6.270	566,438	3,980,229
I-10-493	4.960	561,451	3,976,466
I-10-494	10.330	565,176	3,975,283
I-10-495	0.830	566,137	3,973,471
I-10-496	1.860	563,449	3,970,834
I-10-498	2.210	551,531	3,958,833
I-10-499	5.140	562,424	3,970,217
I-10-500	2.200	563,599	3,963,847
I-10-501	2.690	558,582	3,960,086
I-10-502	7.230	560,366	3,959,632
I-10-503	14.460	560,775	3,961,942
I-10-506	3.740	560,517	3,960,066
I-10-507	1.100	559,412	3,967,079
I-10-508	4.050	558,279	3,963,533
I-10-509	7.160	553,510	3,960,353
I-10-510	45.910	553,471	3,957,857
I-10-517	0.920	551,304	3,980,704
I-10-518	10.450	553,720	3,974,840
I-10-519	22.000	555,246	3,979,064
I-10-520	10.120	546,383	3,973,534
I-10-521	172.260	553,817	3,975,273
I-10-522	5.680	552,111	3,979,944
I-10-523	11.360	550,923	3,978,029
I-10-524	13.300	552,602	3,977,728
I-10-525	34.700	549,489	3,974,782
I-10-526	2.820	563,613	3,983,070
I-10-527	2.750	548,311	3,974,010
I-10-528	3.580	548,848	3,971,606

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-10-529	4.130	546,128	3,970,482
I-10-531	8.950	551,355	3,976,612
I-10-532	0.920	566,044	3,982,322
I-10-533	10.930	552,891	3,962,690
I-10-534	1.030	553,631	3,964,059
I-10-535	3.860	553,017	3,967,227
I-10-538	3.310	558,990	3,977,425
I-10-539	6.610	557,726	3,976,285
I-10-540	1.860	545,437	3,973,163
I-10-541	3.310	565,465	3,982,595
I-10-542	3.270	563,814	3,982,705
I-10-543	31.500	558,365	3,981,990
I-10-544	5.510	558,757	3,975,948
I-10-545	1.700	557,834	3,974,955
I-10-546	1.670	557,044	3,972,953
I-10-629	2.900	566,815	3,983,982
I-10-630	0.700	565,446	3,972,788
I-10-631	5.050	566,948	3,965,211
I-10-632	2.300	546,197	3,959,760
I-10-633	2.860	546,637	3,960,100
I-11-138	12.880	588,285	3,965,379
I-11-141	3.370	584,894	3,957,182
I-11-142	0.830	588,312	3,964,426
I-11-143	59.680	589,582	3,967,565
I-11-144	18.400	586,518	3,963,110
I-11-145	13.770	586,292	3,963,108
I-11-146	102.210	585,031	3,961,831
I-11-147	51.420	587,018	3,968,038
I-11-38	0.320	589,848	3,961,790
I-11-39	5.420	588,183	3,960,198
I-11-406	0.150	577,756	3,972,091
I-11-407	92.560	577,294	3,965,066
I-11-408	7.440	574,825	3,963,159
I-11-409	1.290	574,345	3,963,310
I-11-410	1.930	573,339	3,963,767
I-11-411	2.750	572,233	3,964,124
I-11-412	0.930	573,195	3,962,535
I-11-413	11.570	575,989	3,964,400
I-11-415	22.000	577,040	3,965,119
I-11-416	1.650	571,330	3,967,533
I-11-417	11.020	577,114	3,964,964
I-11-418	8.300	577,463	3,968,417
I-11-419	2.630	576,967	3,970,387
I-11-420	5.170	569,599	3,960,188
I-11-421	7.710	575,624	3,967,014
I-11-422	1.150	577,047	3,967,404
I-11-423	2.020	573,991	3,970,029
I-11-424	6.200	567,989	3,963,935
I-11-425	8.260	572,952	3,976,675
I-11-433	2.750	569,199	3,969,801

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-11-434	2.570	568,135	3,964,890
I-11-435	2.200	571,114	3,959,468
I-11-436	1.100	570,683	3,960,352
I-11-437	6.610	569,336	3,962,593
I-11-438	1.380	569,906	3,962,884
I-11-439	1.890	570,031	3,962,687
I-11-440	6.200	579,060	3,969,518
I-11-443	1.100	573,404	3,962,382
I-11-462	4.780	584,001	3,969,309
I-11-468	2.200	582,086	3,967,449
I-11-477	5.100	575,261	3,973,578
I-11-478	3.670	569,526	3,979,787
I-11-479	2.640	569,042	3,973,616
I-11-480	6.200	571,427	3,973,357
I-11-481	0.310	577,008	3,971,896
I-11-482	0.220	577,405	3,971,933
I-11-483	8.680	577,912	3,982,941
I-11-484	1.650	578,783	3,972,311
I-11-485	0.180	578,882	3,972,290
I-11-486	15.700	580,731	3,970,521
I-11-487	1.000	575,029	3,974,286
I-11-488	4.480	574,681	3,971,632
I-11-489	4.600	570,949	3,976,659
I-11-497	0.440	574,836	3,973,641
I-11-504	7.900	583,040	3,970,753
I-11-505	8.260	571,306	3,975,985
I-11-513	15.640	583,955	3,974,156
I-11-514	4.600	581,852	3,974,225
I-11-515	4.140	580,743	3,972,118
I-11-516	61.730	583,236	3,971,032
I-11-537	3.030	567,692	3,983,743
I-11-547	6.630	567,867	3,983,190
I-11-552	0.260	576,034	3,965,341
I-11-634	0.600	575,384	3,973,350
I-11-635	0.960	570,779	3,968,315
I-12-100	5.140	505,427	3,938,045
I-12-101	11.900	507,031	3,938,290
I-12-102	5.400	510,832	3,941,066
I-12-114	0.460	513,458	3,935,869
I-12-122	56.400	505,629	3,934,163
I-12-350	27.550	522,399	3,951,469
I-12-351	4.960	519,526	3,945,518
I-12-352	2.480	519,752	3,945,618
I-12-353	5.140	519,306	3,952,349
I-12-354	3.730	519,669	3,950,420
I-12-355	6.510	520,041	3,949,933
I-12-356	3.370	519,335	3,952,408
I-12-357	5.140	519,960	3,954,025
I-12-359	2.750	517,518	3,953,931
I-12-361	0.920	521,213	3,955,725

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-12-362	8.400	516,856	3,945,545
I-12-368	7.710	518,773	3,954,976
I-12-388	1.840	516,394	3,940,864
I-12-393	5.790	510,756	3,936,974
I-12-394	5.400	517,676	3,928,945
I-12-397	9.500	520,677	3,937,269
I-12-399	16.100	516,638	3,941,075
I-12-400	6.610	521,207	3,935,362
I-12-401	0.590	518,533	3,938,429
I-12-402	0.730	520,825	3,939,764
I-12-403	2.480	511,798	3,938,362
I-12-404	3.130	521,387	3,943,404
I-12-405	5.200	520,777	3,937,202
I-12-636	2.200	522,126	3,945,826
I-12-69	10.280	513,855	3,954,324
I-12-70	3.580	510,789	3,954,320
I-12-71	10.330	504,965	3,954,680
I-12-72	8.360	504,387	3,952,617
I-12-73	8.100	500,869	3,948,668
I-12-74	32.160	504,008	3,950,432
I-12-75	67.490	506,670	3,947,750
I-12-76	8.820	507,105	3,947,196
I-12-77	34.710	506,101	3,946,607
I-12-78	6.610	500,462	3,946,306
I-12-80	45.500	511,455	3,943,075
I-12-92	6.890	513,927	3,954,413
I-12-93	18.800	513,084	3,931,243
I-12-97	8.800	500,617	3,934,250
I-12-99	13.200	502,600	3,939,552
I-13-174	4.800	542,302	3,935,926
I-13-175	25.710	544,244	3,935,381
I-13-176	3.570	544,969	3,935,417
I-13-177	7.350	544,344	3,935,503
I-13-178	1.150	542,041	3,936,327
I-13-198	2.940	542,526	3,936,444
I-13-333	1.100	526,176	3,949,915
I-13-334	2.320	530,125	3,948,630
I-13-335	12.400	528,352	3,953,926
I-13-336	1.790	526,981	3,949,818
I-13-337	6.060	529,556	3,953,619
I-13-341	27.520	524,633	3,954,747
I-13-348	4.680	525,001	3,941,796
I-13-358	3.860	524,564	3,950,188
I-13-360	6.610	524,524	3,948,280
I-13-363	5.790	533,239	3,943,495
I-13-364	57.820	523,778	3,943,033
I-13-365	4.400	524,304	3,944,967
I-13-366	5.510	524,475	3,946,672
I-13-377	17.350	524,832	3,941,910
I-13-379	7.440	522,746	3,935,821

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-13-442	3.660	523,910	3,931,055
I-13-445	2.690	531,368	3,932,309
I-13-446	5.510	532,339	3,934,464
I-13-447	6.400	531,496	3,937,112
I-13-448	9.500	529,899	3,940,556
I-13-450	2.890	527,751	3,934,948
I-13-452	1.400	525,475	3,936,895
I-13-453	0.920	536,938	3,935,902
I-13-454	2.480	541,087	3,938,138
I-13-455	9.640	541,216	3,937,551
I-13-456	23.100	534,224	3,941,525
I-13-457	12.100	540,276	3,941,993
I-13-458	8.680	541,083	3,939,003
I-13-459	4.340	525,723	3,936,952
I-13-460	10.400	536,656	3,944,840
I-13-463	2.980	544,861	3,942,593
I-13-464	11.570	536,735	3,944,826
I-13-465	9.640	537,049	3,946,250
I-13-467	1.650	544,573	3,949,401
I-13-469	3.670	541,323	3,945,747
I-13-470	1.190	540,785	3,954,562
I-13-471	5.140	535,892	3,945,635
I-13-476	5.140	540,026	3,950,455
I-13-553	6.900	543,300	3,947,961
I-13-637	2.580	524,277	3,944,886
I-13-638	0.290	522,828	3,943,203
I-13-639	1.100	529,844	3,940,894
I-13-640	0.070	544,832	3,949,578
I-13-641	0.500	533,902	3,939,794
I-14-148	3.310	560,674	3,955,597
I-14-149	3.860	558,486	3,940,398
I-14-150	3.580	559,884	3,941,261
I-14-156	1.470	559,684	3,954,132
I-14-157	8.000	561,452	3,941,117
I-14-158	1.100	563,134	3,941,472
I-14-159	5.170	561,956	3,940,322
I-14-160	6.970	563,261	3,933,676
I-14-162	4.480	561,685	3,954,583
I-14-163	4.410	562,035	3,953,836
I-14-164	5.220	564,729	3,950,046
I-14-165	4.500	559,827	3,949,735
I-14-166	5.140	558,797	3,950,937
I-14-167	1.100	557,367	3,949,630
I-14-168	5.510	558,878	3,953,710
I-14-169	6.400	556,621	3,944,567
I-14-170	1.650	553,517	3,942,829
I-14-171	0.410	555,686	3,949,153
I-14-172	2.400	565,175	3,941,055
I-14-173	2.270	554,035	3,934,847
I-14-179	9.640	547,022	3,932,689

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-14-180	0.400	546,369	3,938,197
I-14-181	1.910	546,539	3,938,475
I-14-182	1.980	548,179	3,938,517
I-14-183	7.580	554,063	3,934,669
I-14-187	5.300	555,749	3,939,138
I-14-188	7.400	553,355	3,939,623
I-14-189	9.180	553,470	3,941,598
I-14-190	9.180	553,580	3,941,704
I-14-191	1.380	552,659	3,942,303
I-14-192	12.400	556,920	3,933,504
I-14-193	8.820	564,452	3,935,748
I-14-194	9.500	566,409	3,940,853
I-14-195	3.730	565,110	3,942,563
I-14-197	2.940	563,560	3,945,291
I-14-199	1.980	550,802	3,946,556
I-14-200	0.960	554,390	3,950,997
I-14-203	8.030	552,268	3,948,822
I-14-204	3.440	565,533	3,942,965
I-14-205	0.930	555,747	3,948,200
I-14-444	2.070	556,828	3,956,004
I-14-449	5.370	554,937	3,956,203
I-14-451	5.140	553,228	3,953,264
I-14-466	2.690	556,621	3,955,847
I-14-472	6.430	548,452	3,948,246
I-14-473	6.430	545,950	3,950,761
I-14-474	5.140	550,042	3,951,926
I-14-475	1.100	551,194	3,952,919
I-14-555	1.250	553,881	3,941,779
I-14-642	0.170	561,104	3,955,997
I-14-643	0.640	560,995	3,954,015
I-14-644	0.660	559,750	3,953,995
I-14-645	0.180	565,641	3,944,566
I-14-646	3.670	562,389	3,941,403
I-14-647	0.690	552,600	3,940,166
I-15-139	5.140	569,212	3,942,560
I-15-151	1.380	574,304	3,944,454
I-15-152	1.100	571,077	3,948,398
I-15-153	1.790	568,105	3,946,434
I-15-154	3.100	568,178	3,946,307
I-15-155	1.380	570,867	3,942,884
I-15-161	1.790	582,702	3,955,686
I-15-184	10.330	572,675	3,946,603
I-15-186	9.000	583,729	3,950,361
I-15-196	2.890	584,683	3,952,832
I-15-201	10.500	573,177	3,939,417
I-15-202	73.860	578,094	3,939,357
I-15-206	5.900	576,968	3,942,225
I-15-40	0.920	589,347	3,949,583
I-15-41	4.590	589,585	3,945,737
I-15-42	2.480	589,367	3,954,764

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
I-15-43	5.740	589,659	3,950,973
I-15-44	42.300	587,819	3,945,841
I-15-45	8.680	581,905	3,946,983
I-15-46	1.970	589,409	3,950,605
I-15-47	1.100	588,558	3,952,471
I-15-648	0.680	575,421	3,945,692
I-15-649	5.140	571,657	3,945,200
I-15-650	5.100	590,104	3,951,331
I-15-651	10.100	590,144	3,951,455
Subtotal	4883.300		
Additional Impoundments Adopted from Third Amended Federal Claim:			
FC-I0128	0.500	503,159	4,012,660
FC-I0129	0.508	503,239	4,012,892
FC-I0130	2.025	505,105	4,012,664
FC-I0131	1.866	504,954	4,012,549
FC-I0132	3.040	504,135	4,012,034
FC-I0133	0.436	508,207	4,012,029
FC-I0216	0.038	534,516	4,025,077
FC-I0217	5.369	524,512	4,017,811
FC-I0218	0.123	539,150	4,016,441
FC-I0317	0.700	552,237	4,022,308
FC-I0318	0.072	554,300	4,019,484
FC-I0319	0.189	549,796	4,015,822
FC-I0321	5.434	560,909	4,030,830
FC-I0324	1.294	560,242	4,027,043
FC-I0326	1.702	552,787	4,028,890
FC-I0410	0.178	486,042	3,987,971
FC-I0411	212.000	480,761	3,999,554
FC-I0413	2.872	475,822	3,994,851
FC-I042	0.198	491,469	3,991,800
FC-I044	1.162	479,323	3,996,907
FC-I045	1.182	480,211	3,996,603
FC-I046	3.632	481,205	3,997,383
FC-I047	0.666	480,862	3,996,668
FC-I048	12.748	480,978	3,997,874
FC-I049	1.623	481,086	3,998,223
FC-I0561	1.746	501,379	4,010,128
FC-I0562	0.360	501,289	4,009,972
FC-I0563	1.251	501,196	4,009,780
FC-I0564	2.565	502,403	4,003,006
FC-I0566	6.727	504,582	3,988,136
FC-I0567	0.653	500,525	3,987,952
FC-I0568	1.419	512,603	4,006,025
FC-I0569	0.725	505,208	3,989,533
FC-I0570	1.251	500,883	3,988,656
FC-I0571	0.691	500,618	3,988,403
FC-I0572	0.761	501,096	3,990,642
FC-I0573	1.209	501,256	3,990,653
FC-I0574	1.214	501,262	3,990,881
FC-I0575	1.296	500,840	3,987,016

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I0576	1.130	500,875	3,990,216
FC-I0577	0.566	500,923	3,991,255
FC-I0578	0.457	501,051	3,991,229
FC-I0579	0.316	499,944	3,987,830
FC-I0580	2.855	512,576	4,005,424
FC-I0581	1.680	511,644	4,005,170
FC-I0582	3.323	511,919	3,989,073
FC-I0583	2.519	513,440	4,006,677
FC-I0584	0.239	520,702	3,990,203
FC-I0585	1.660	504,620	3,988,278
FC-I0586	0.842	504,585	3,988,251
FC-I0587	3.648	501,569	4,010,238
FC-I0589	6.892	503,271	4,011,010
FC-I0590	0.142	506,796	4,007,312
FC-I0591	0.291	514,871	3,997,267
FC-I0592	0.087	508,410	3,997,190
FC-I0593	0.022	508,430	3,997,153
FC-I0594	0.195	511,902	3,993,993
FC-I0595	0.063	503,713	3,992,573
FC-I0596	0.221	517,727	3,992,492
FC-I0598	2.552	514,640	3,985,757
FC-I0625	12.993	544,382	3,985,638
FC-I0626	0.536	539,600	3,984,549
FC-I0627	1.147	534,160	3,989,483
FC-I0628	0.129	537,119	3,986,787
FC-I0629	0.127	527,689	4,001,593
FC-I0630	0.068	523,719	4,001,325
FC-I0631	0.044	523,741	4,001,306
FC-I0633	0.121	526,186	3,999,961
FC-I0634	0.148	528,639	3,994,890
FC-I0635	0.259	528,973	3,991,023
FC-I0636	0.033	525,858	3,989,574
FC-I0728	1.437	547,002	3,987,929
FC-I0729	2.122	546,964	3,987,658
FC-I0732	0.269	547,049	3,987,174
FC-I0733	0.080	547,007	3,987,107
FC-I0734	1.259	547,084	3,986,975
FC-I0735	0.314	547,463	3,987,019
FC-I0736	1.059	548,910	3,985,452
FC-I0737	1.341	549,712	3,984,665
FC-I0738	1.216	546,859	4,000,434
FC-I0739	5.497	546,621	3,986,488
FC-I0740	1.664	547,127	3,986,843
FC-I0741	1.898	548,103	3,985,456
FC-I0742	0.630	550,428	3,984,647
FC-I0743	1.218	550,786	4,008,820
FC-I0744	3.707	547,264	3,989,044
FC-I0745	0.177	551,630	4,006,484
FC-I0746	0.399	550,488	3,992,816
FC-I0748	0.135	548,705	3,987,546

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I0749	0.209	557,354	3,986,500
FC-I08100	0.354	520,315	3,980,497
FC-I08101	0.398	518,117	3,978,131
FC-I08102	0.081	518,135	3,978,082
FC-I08103	8.865	510,507	3,968,485
FC-I08104	0.173	521,071	3,967,344
FC-I08105	0.066	505,953	3,965,828
FC-I08106	0.426	511,665	3,961,342
FC-I08107	0.148	514,922	3,957,739
FC-I08109	0.411	515,058	3,957,009
FC-I08111	0.047	502,306	3,979,432
FC-I08114	0.546	517,148	3,977,091
FC-I08115	0.123	516,750	3,982,893
FC-I08116	0.153	507,687	3,976,723
FC-I08117	0.155	507,703	3,976,695
FC-I0821	0.586	507,320	3,976,107
FC-I0867	0.838	515,874	3,978,665
FC-I0868	0.888	512,527	3,978,196
FC-I0869	0.371	512,458	3,977,703
FC-I0870	0.577	512,750	3,977,689
FC-I0871	0.166	515,395	3,981,798
FC-I0872	0.080	519,518	3,981,296
FC-I0873	1.168	517,677	3,977,572
FC-I0874	2.070	518,630	3,976,785
FC-I0875	1.815	518,369	3,972,060
FC-I0876	0.592	507,268	3,979,820
FC-I0878	0.578	507,116	3,979,544
FC-I0879	0.866	521,546	3,956,683
FC-I0880	1.226	521,561	3,956,581
FC-I0881	0.359	506,230	3,982,360
FC-I0882	0.863	506,367	3,981,226
FC-I0883	0.863	504,105	3,983,510
FC-I0884	0.520	503,819	3,982,836
FC-I0885	1.364	503,627	3,982,665
FC-I0886	1.135	503,519	3,982,389
FC-I0889	2.253	515,345	3,957,335
FC-I0890	0.286	515,709	3,981,252
FC-I0891	1.496	518,075	3,976,908
FC-I0892	1.033	521,174	3,983,516
FC-I0893	0.560	515,839	3,980,756
FC-I0897	0.209	513,925	3,966,173
FC-I0898	0.057	507,928	3,964,308
FC-I0899	0.061	502,383	3,969,383
FC-I0938	3.511	526,251	3,961,017
FC-I0939	4.803	537,258	3,974,413
FC-I0940	1.631	533,615	3,970,453
FC-I0941	3.314	533,550	3,970,649
FC-I0945	1.282	527,514	3,982,837
FC-I0946	5.177	532,480	3,969,050
FC-I0947	1.935	529,664	3,962,665

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I0948	6.485	529,975	3,962,638
FC-I0949	4.621	529,849	3,962,722
FC-I0950	0.542	530,276	3,959,871
FC-I0952	0.605	529,495	3,958,098
FC-I0953	0.619	529,573	3,958,062
FC-I0954	1.199	529,711	3,958,214
FC-I0955	0.763	529,308	3,956,945
FC-I0956	5.200	524,385	3,959,980
FC-I0960	3.524	536,000	3,964,288
FC-I0962	5.161	541,802	3,962,431
FC-I0964	10.262	526,591	3,965,033
FC-I0965	0.616	530,108	3,956,494
FC-I0966	0.833	533,329	3,960,303
FC-I0968	3.281	541,702	3,962,341
FC-I0969	1.214	542,678	3,982,774
FC-I0971	11.565	541,097	3,969,533
FC-I0972	0.644	527,097	3,964,586
FC-I0975	0.130	525,325	3,963,630
FC-I0976	0.192	528,895	3,959,155
FC-I0978	0.365	536,626	3,982,309
FC-I0979	0.095	542,900	3,978,560
FC-I0980	0.224	527,600	3,958,203
FC-I0981	0.005 *	529,422	3,976,056
FC-I0982	0.000 *	530,665	3,975,398
FC-I10100	6.511	558,790	3,961,922
FC-I10101	5.501	559,465	3,961,771
FC-I10102	2.810	559,816	3,961,486
FC-I10103	2.557	560,082	3,961,471
FC-I10104	0.849	560,305	3,961,424
FC-I10105	0.791	560,323	3,961,290
FC-I10106	1.476	559,864	3,961,808
FC-I10107	4.227	560,292	3,960,746
FC-I10108	1.063	560,565	3,960,004
FC-I10109	1.265	560,605	3,959,875
FC-I10110	1.599	561,816	3,960,517
FC-I10111	9.535	558,118	3,982,373
FC-I10113	2.108	558,139	3,981,773
FC-I10114	0.991	566,874	3,973,656
FC-I10117	3.780	557,952	3,975,927
FC-I10118	0.514	556,737	3,972,155
FC-I10119	0.800	556,577	3,972,164
FC-I10120	1.212	545,210	3,962,345
FC-I10121	3.687	551,021	3,957,635
FC-I10122	3.577	551,295	3,957,912
FC-I10123	0.971	551,484	3,958,081
FC-I10124	1.376	551,542	3,958,390
FC-I10125	0.877	551,700	3,958,486
FC-I10126	0.883	551,937	3,958,420
FC-I10127	0.510	558,205	3,967,305
FC-I10128	0.143	561,727	3,976,997

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I10129	0.671	563,268	3,970,999
FC-I10131	6.225	554,536	3,962,880
FC-I10132	0.274	547,297	3,959,619
FC-I10133	0.152	549,721	3,956,584
FC-I10135	0.309	546,920	3,980,030
FC-I10136	0.020	548,146	3,979,348
FC-I10137	0.311	559,964	3,980,152
FC-I10138	0.204	564,977	3,978,298
FC-I10139	0.050	556,577	3,977,912
FC-I10140	0.169	547,151	3,973,769
FC-I10141	0.172	547,222	3,973,751
FC-I10142	4.986	554,176	3,966,789
FC-I10143	0.157	560,118	3,961,999
FC-I10146	0.006 *	557,178	3,970,370
FC-I10147	0.002 *	557,144	3,972,096
FC-I10148	0.002 *	556,945	3,972,009
FC-I1065	2.591	547,993	3,983,533
FC-I1066	1.046	557,277	3,983,125
FC-I1067	1.230	557,483	3,982,884
FC-I1068	0.959	552,924	3,980,713
FC-I1069	1.395	548,705	3,971,529
FC-I1070	1.833	547,696	3,965,478
FC-I1071	1.849	547,920	3,965,598
FC-I1072	1.710	548,010	3,963,258
FC-I1075	0.573	546,970	3,958,464
FC-I1076	2.228	545,256	3,959,419
FC-I1077	0.407	550,500	3,966,584
FC-I1078	2.608	550,642	3,966,587
FC-I1079	0.829	550,761	3,966,490
FC-I1080	1.298	552,165	3,963,346
FC-I1081	2.978	552,501	3,963,744
FC-I1082	0.570	555,059	3,963,714
FC-I1084	0.965	557,079	3,967,226
FC-I1085	0.974	558,139	3,967,854
FC-I1086	0.669	557,234	3,968,128
FC-I1087	0.667	562,792	3,969,499
FC-I1088	1.302	557,334	3,963,936
FC-I1090	1.645	558,146	3,962,669
FC-I1091	2.095	559,158	3,963,731
FC-I1092	0.861	559,853	3,964,882
FC-I1093	5.274	561,342	3,964,317
FC-I1096	0.954	563,440	3,963,510
FC-I1097	2.234	564,858	3,964,037
FC-I1098	1.328	560,347	3,963,597
FC-I1099	1.207	560,019	3,963,958
FC-I1130	6.065	574,104	3,962,798
FC-I1165	0.155	569,585	3,968,674
FC-I1166	0.237	569,422	3,968,349
FC-I1168	0.324	569,468	3,966,324
FC-I1172	0.296	569,752	3,962,871

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I1173	0.274	568,383	3,956,898
FC-I1174	2.031	578,205	3,982,441
FC-I1175	1.653	568,410	3,974,514
FC-I1176	1.839	571,358	3,976,268
FC-I1177	1.243	571,387	3,976,159
FC-I1179	1.116	578,830	3,978,356
FC-I1180	0.280	587,140	3,957,241
FC-I1181	0.702	589,547	3,967,622
FC-I1182	0.929	589,650	3,967,494
FC-I1183	0.116	589,400	3,965,395
FC-I1184	0.402	576,347	3,962,499
FC-I1185	0.235	574,679	3,979,316
FC-I1186	0.114	575,438	3,975,101
FC-I1187	0.389	567,934	3,974,642
FC-I1188	0.228	571,227	3,969,276
FC-I1189	0.370	570,019	3,968,341
FC-I1190	0.450	575,432	3,963,723
FC-I1191	0.004 *	568,414	3,960,735
FC-I1192	0.001 *	569,986	3,962,589
FC-I1245	3.244	513,284	3,955,376
FC-I1246	4.043	511,417	3,934,216
FC-I1247	1.619	516,222	3,929,607
FC-I1248	2.672	516,466	3,929,647
FC-I1249	1.696	506,873	3,938,585
FC-I1250	4.034	508,920	3,937,141
FC-I1251	0.596	509,525	3,937,728
FC-I1252	0.133	507,092	3,954,809
FC-I1253	0.732	522,110	3,954,600
FC-I1254	0.136	522,454	3,954,370
FC-I1256	6.844	521,373	3,944,179
FC-I1257	0.118	518,173	3,950,028
FC-I1346	1.468	524,385	3,944,985
FC-I1347	5.307	524,673	3,955,737
FC-I1348	5.583	523,542	3,953,616
FC-I1349	0.644	523,819	3,953,805
FC-I1350	0.349	528,033	3,953,153
FC-I1351	0.561	527,628	3,950,753
FC-I1353	0.711	524,754	3,949,278
FC-I1354	10.817	527,226	3,950,949
FC-I1355	3.493	528,026	3,952,946
FC-I1356	2.265	533,741	3,949,152
FC-I1357	1.734	530,750	3,948,441
FC-I1358	2.629	532,048	3,946,658
FC-I1359	12.473	531,957	3,942,400
FC-I1360	0.707	536,014	3,950,564
FC-I1361	0.568	536,059	3,950,617
FC-I1362	1.540	539,175	3,951,066
FC-I1363	2.568	539,298	3,950,953
FC-I1364	2.120	536,846	3,944,795
FC-I1365	0.632	538,050	3,944,561

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I1367	2.900	543,812	3,948,370
FC-I1368	0.355	541,065	3,946,929
FC-I1369	0.181	540,761	3,944,109
FC-I1370	0.428	540,657	3,944,194
FC-I1371	1.968	536,207	3,942,317
FC-I1372	4.192	541,803	3,936,440
FC-I1373	0.111	542,039	3,936,489
FC-I1374	226.751	537,444	3,929,425
FC-I1376	0.792	543,179	3,953,651
FC-I1377	0.617	535,501	3,951,558
FC-I1379	0.409	532,187	3,938,449
FC-I1380	1.288	541,289	3,931,672
FC-I1381	0.309	522,728	3,955,757
FC-I1382	0.354	531,448	3,953,323
FC-I1383	0.389	523,129	3,947,915
FC-I1385	0.332	539,616	3,955,907
FC-I1386	0.389	543,187	3,948,048
FC-I1387	0.224	543,207	3,948,009
FC-I1389	0.116	524,288	3,944,909
FC-I14100	3.174	564,587	3,947,795
FC-I14101	1.358	564,554	3,947,927
FC-I14102	3.956	558,325	3,946,096
FC-I14103	6.013	558,380	3,945,943
FC-I14104	12.296	558,737	3,946,559
FC-I14105	1.189	558,712	3,946,784
FC-I14106	7.949	559,183	3,946,360
FC-I14108	1.766	557,983	3,940,624
FC-I14109	1.388	557,779	3,940,650
FC-I14110	3.135	558,135	3,940,457
FC-I14112	3.496	566,468	3,940,842
FC-I14113	2.064	547,328	3,944,054
FC-I14114	6.178	557,578	3,956,167
FC-I14115	1.449	557,514	3,955,915
FC-I14116	0.505	556,616	3,953,643
FC-I14117	0.725	556,677	3,953,517
FC-I14118	0.522	556,721	3,953,771
FC-I14119	0.630	556,731	3,950,598
FC-I14120	0.916	557,129	3,950,556
FC-I14121	7.489	556,425	3,940,620
FC-I14122	3.745	559,456	3,940,965
FC-I14123	42.507	558,969	3,945,782
FC-I14124	0.542	559,953	3,955,214
FC-I14125	0.691	560,278	3,948,282
FC-I14126	1.782	560,350	3,948,250
FC-I14127	0.172	565,004	3,946,923
FC-I14128	3.990	548,711	3,955,405
FC-I14129	0.267	556,377	3,951,737
FC-I14130	1.413	563,540	3,950,487
FC-I14131	0.148	562,652	3,949,044
FC-I14132	0.114	566,433	3,947,761

See notes at end of table

Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I14133	0.143	559,365	3,947,152
FC-I14134	0.163	555,556	3,943,079
FC-I14135	1.302	557,167	3,940,192
FC-I14137	0.332	554,584	3,956,282
FC-I14139	0.011 *	565,417	3,954,815
FC-I1451	0.261	553,417	3,941,465
FC-I1452	3.467	546,247	3,938,425
FC-I1453	2.213	546,069	3,938,080
FC-I1454	1.263	549,416	3,938,962
FC-I1455	1.530	555,331	3,940,294
FC-I1456	1.164	548,274	3,955,318
FC-I1457	0.689	547,691	3,954,910
FC-I1458	1.597	547,437	3,954,106
FC-I1459	5.973	547,142	3,953,631
FC-I1460	1.984	547,430	3,952,893
FC-I1461	3.414	547,607	3,952,943
FC-I1462	1.664	547,603	3,952,844
FC-I1463	1.941	549,063	3,956,173
FC-I1464	2.134	551,835	3,955,269
FC-I1465	4.778	552,930	3,955,875
FC-I1466	3.996	555,729	3,951,518
FC-I1467	1.788	555,219	3,951,313
FC-I1468	1.341	555,249	3,951,159
FC-I1469	0.436	554,901	3,947,097
FC-I1470	4.603	552,024	3,946,832
FC-I1471	4.304	552,213	3,946,943
FC-I1472	5.634	552,291	3,946,870
FC-I1473	5.055	554,984	3,945,321
FC-I1474	2.338	555,157	3,945,448
FC-I1475	3.478	555,259	3,945,293
FC-I1476	1.397	555,132	3,945,199
FC-I1477	0.796	554,994	3,945,188
FC-I1478	2.909	554,984	3,944,817
FC-I1479	1.768	555,068	3,944,755
FC-I1480	2.593	555,325	3,944,596
FC-I1481	3.718	555,451	3,944,573
FC-I1482	0.508	555,645	3,944,849
FC-I1483	1.514	555,798	3,944,797
FC-I1484	0.635	552,707	3,943,144
FC-I1485	0.861	552,868	3,943,106
FC-I1486	2.868	552,996	3,943,052
FC-I1488	0.337	561,352	3,955,755
FC-I1489	1.582	560,969	3,955,193
FC-I1490	0.450	560,456	3,955,401
FC-I1491	0.347	559,258	3,954,852
FC-I1492	1.284	559,201	3,954,662
FC-I1493	1.752	559,404	3,954,080
FC-I1494	0.740	559,236	3,953,876
FC-I1496	1.664	560,363	3,954,290
FC-I1497	0.481	559,549	3,948,687

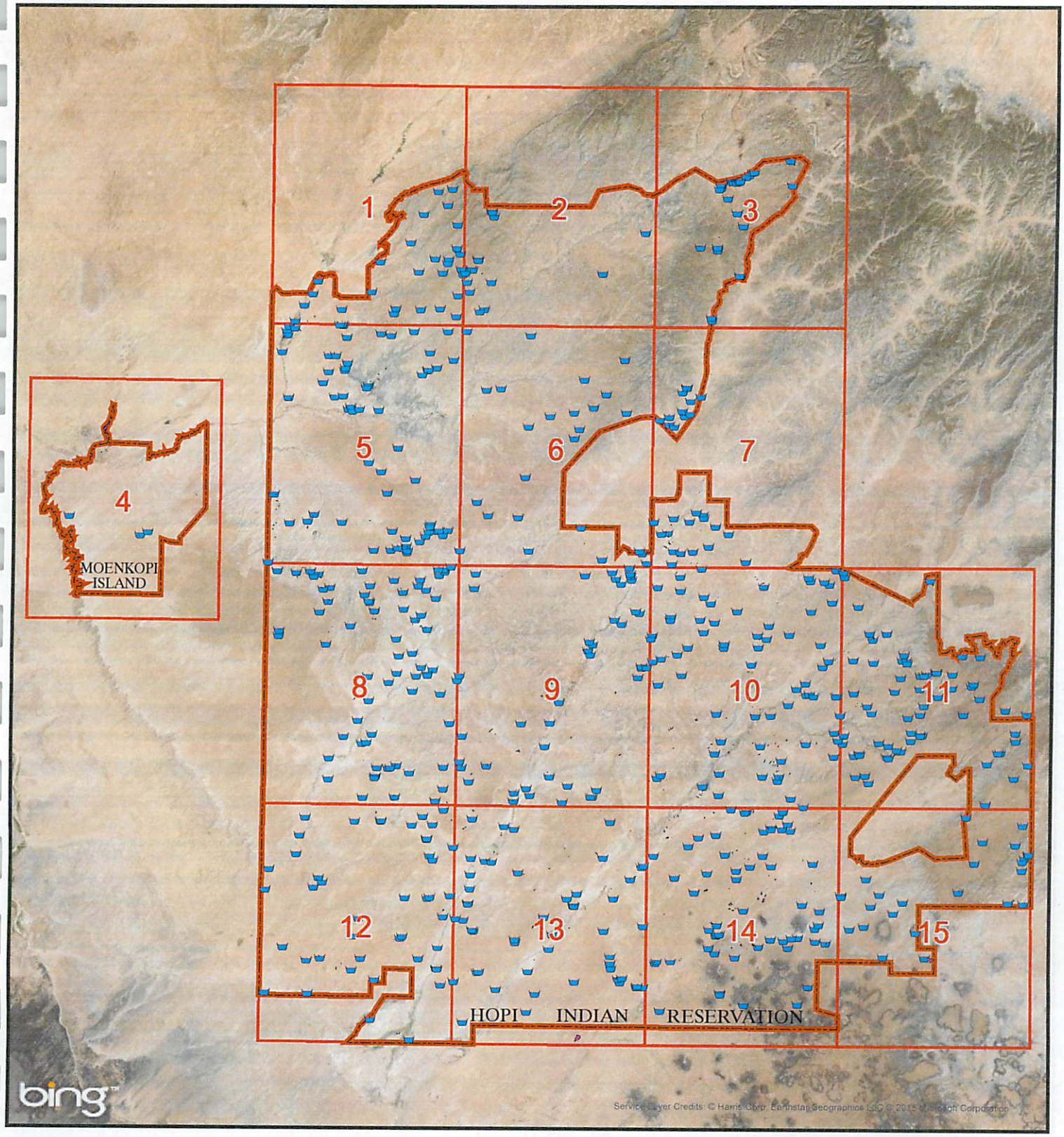
See notes at end of table

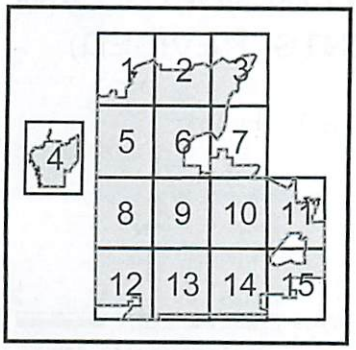
Revised Hopi Tribe Third Amended Claim Impoundments

Impoundment	Capacity (AF)	X	Y
FC-I1498	0.409	559,617	3,948,663
FC-I1499	0.564	559,342	3,954,111
FC-I1522	138.894	578,709	3,939,217
FC-I1523	0.568	588,487	3,946,178
FC-I1526	2.363	572,112	3,945,102
FC-I1527	0.057	587,288	3,955,737
FC-I1529	0.207	569,587	3,943,709
Subtotal	1289.013		
Previously unclaimed impoundments:			
PUI-4	3.871	549,241	3,938,737
PUI-5	5.193	547,497	3,965,322
PUI-6	0.012	574,688	3,979,267
PUI-7	0.043	536,219	3,942,197
PUI-8	1.339	500,829	3,991,937
PUI-9	0.100	500,824	3,991,253
PUI-11	0.193	537,141	3,986,590
PUI-12	0.994	546,812	4,001,791
Subtotal	11.746		
TOTAL	6184.058		

Notes:

1. UTM X & Y coordinates are NAD83 UTM Zone 12 North meters
2. FC impoundments with an * after the capacity had 0 af capacity listed in the database obtained from the Federal consultant, and the capacity was replaced herein this Tribal claim by a capacity based on the Federal regression equation Capacity = 1.7743 (Area in Acres)$^{1.397}$





HOPI TRIBE 3rd AMENDED CLAIM IMPOUNDMENTS (REVISED)

Legend

- Additional Impoundments from 3rd Amended Federal SOC (FC)
- Previously Unclaimed Impoundments (PUI)
- Hopi 3rd Amended SOC* Impoundments
- Hopi Indian Reservation

*SOC - Statement of Claim

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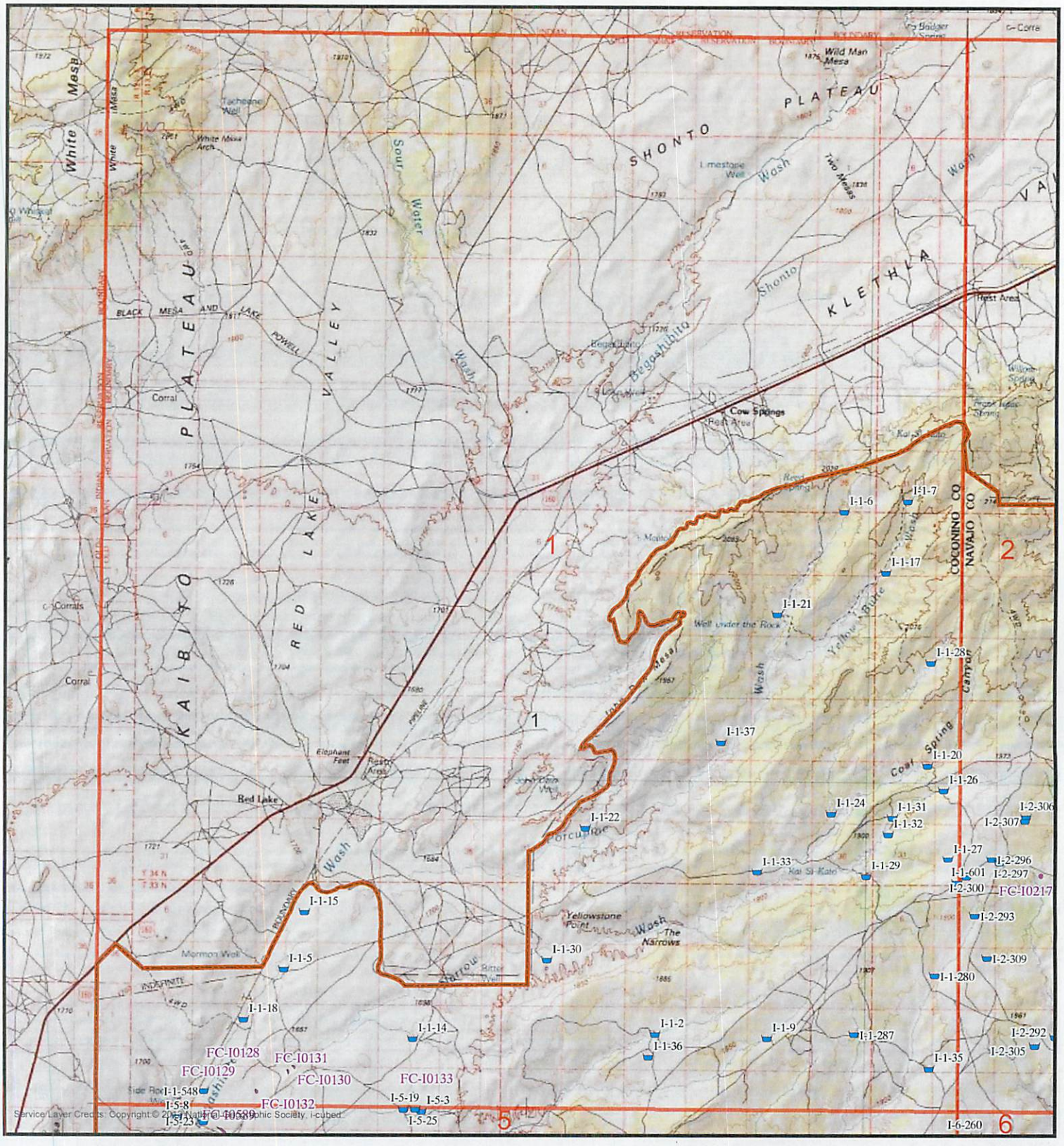

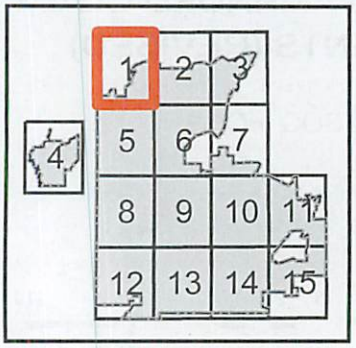

HOPI TRIBE 3rd AMENDED CLAIM IMPOUNDMENTS (REVISED)

Legend

- Additional Impoundments from 3rd Amended Federal SOC (FC)
- Previously Unclaimed Impoundments (PUI)
- Hopi 3rd Amended SOC* Impoundments
- Hopi Indian Reservation

*SOC - Statement of Claim

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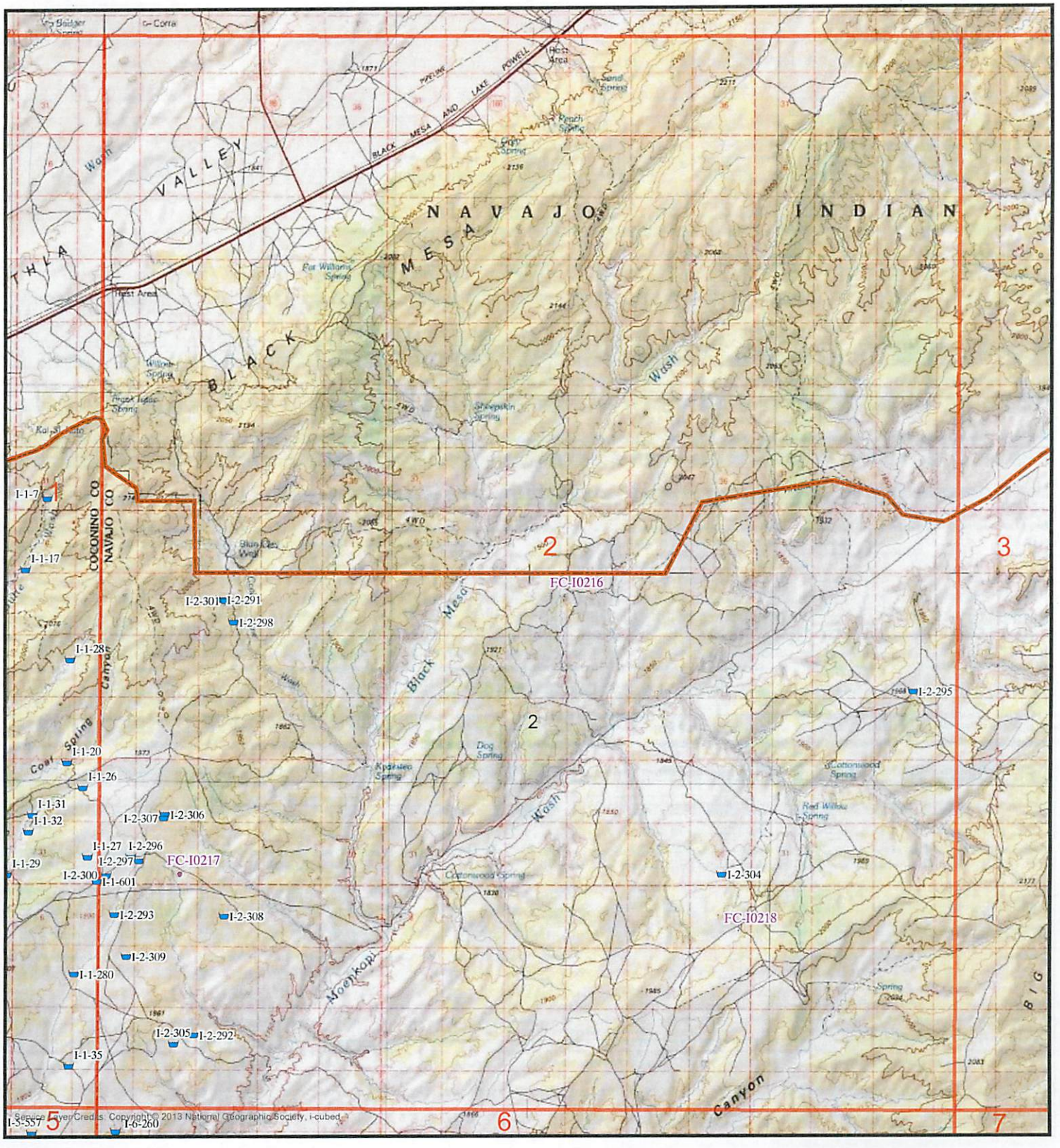

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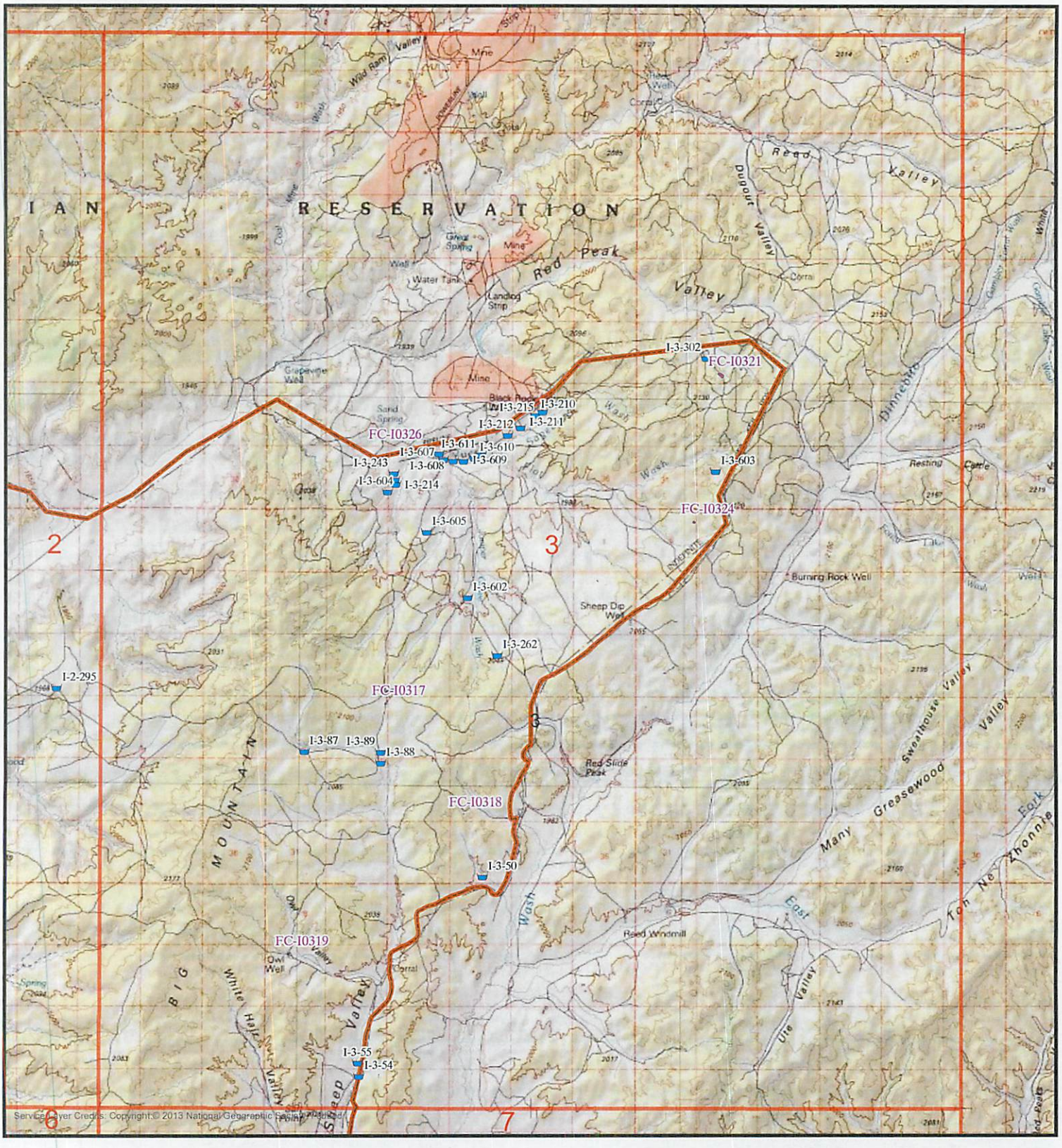

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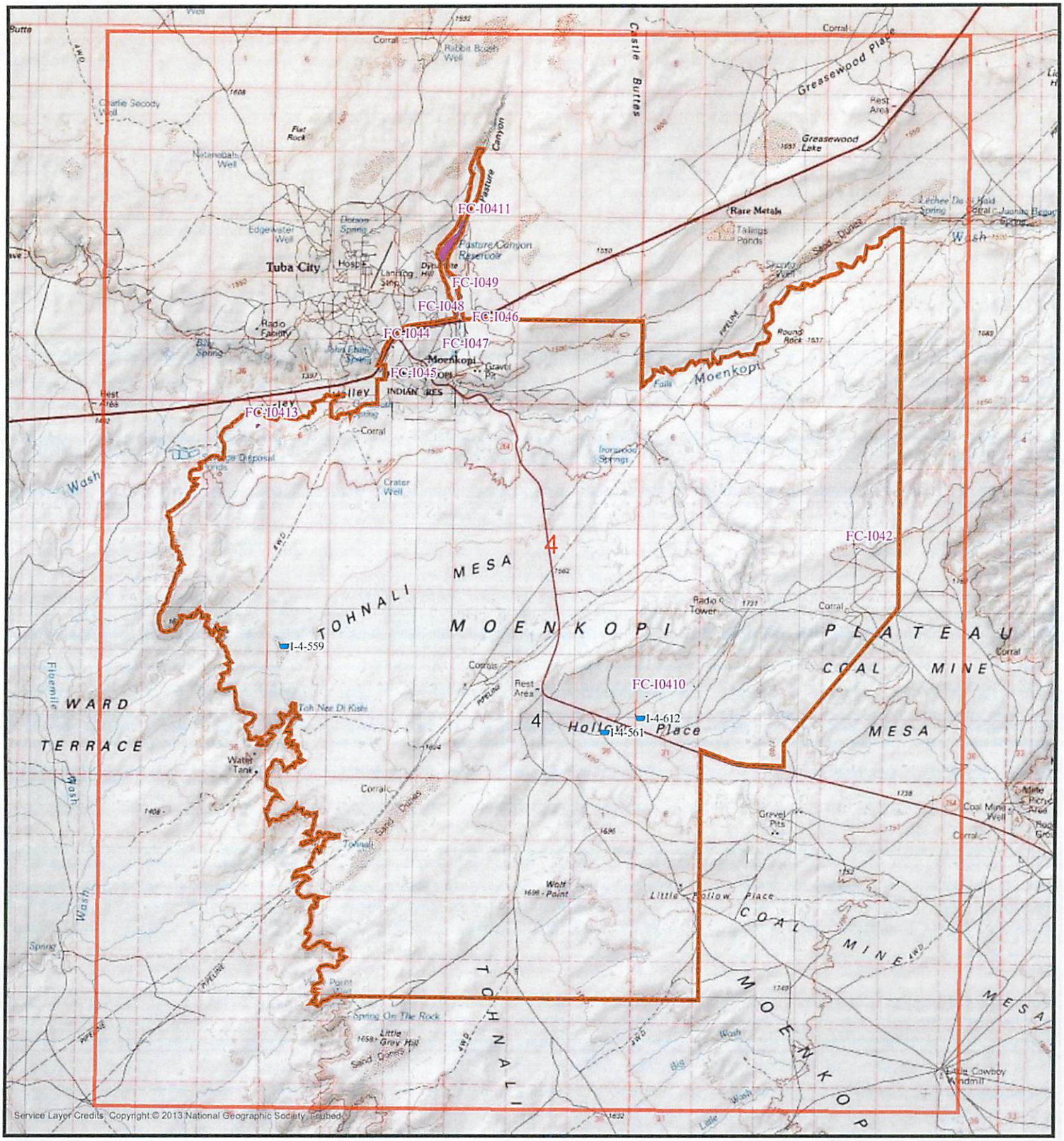

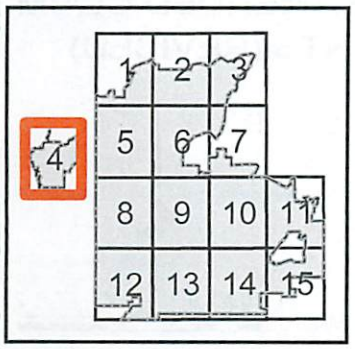

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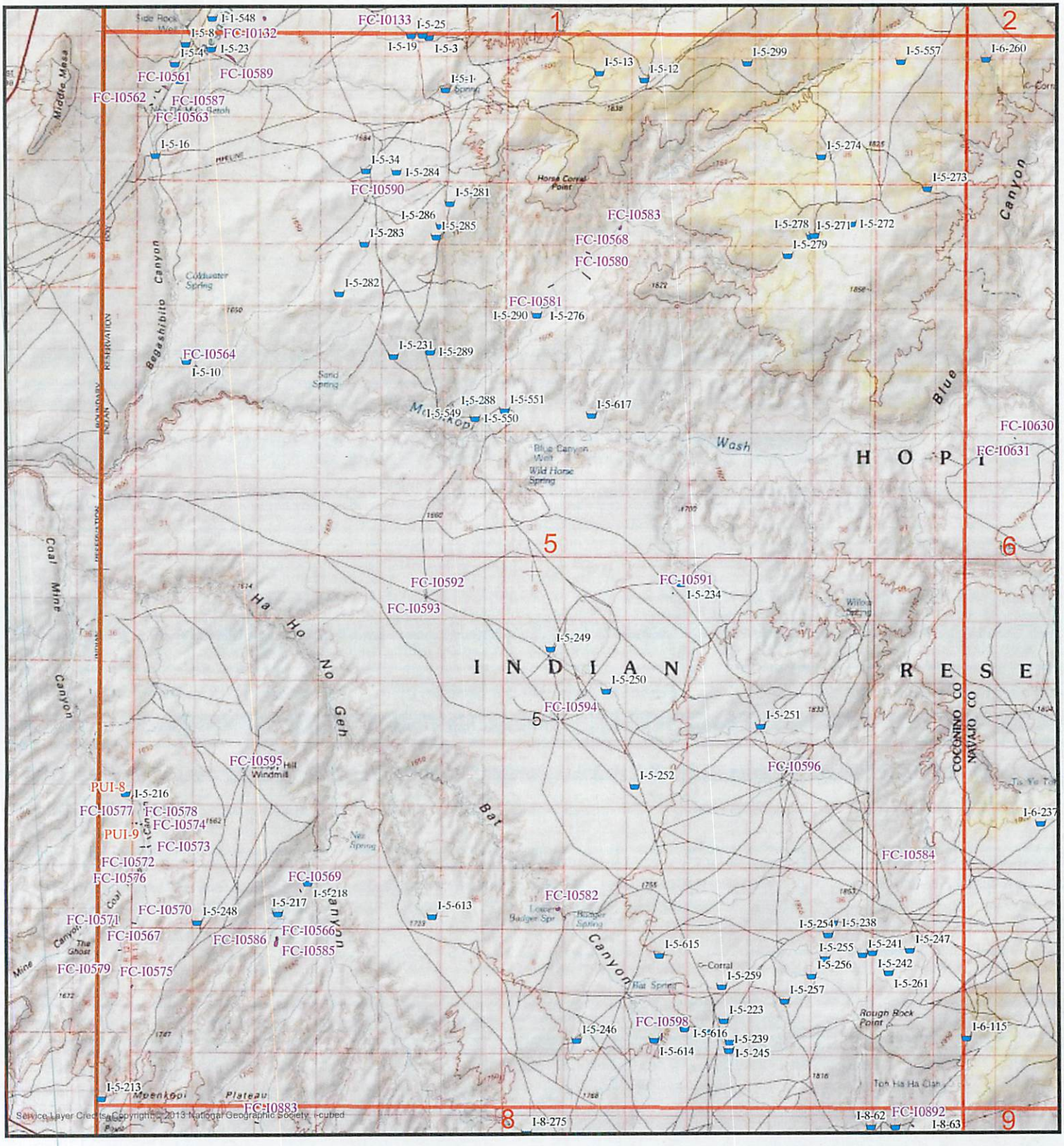

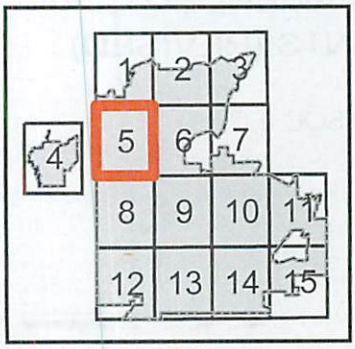

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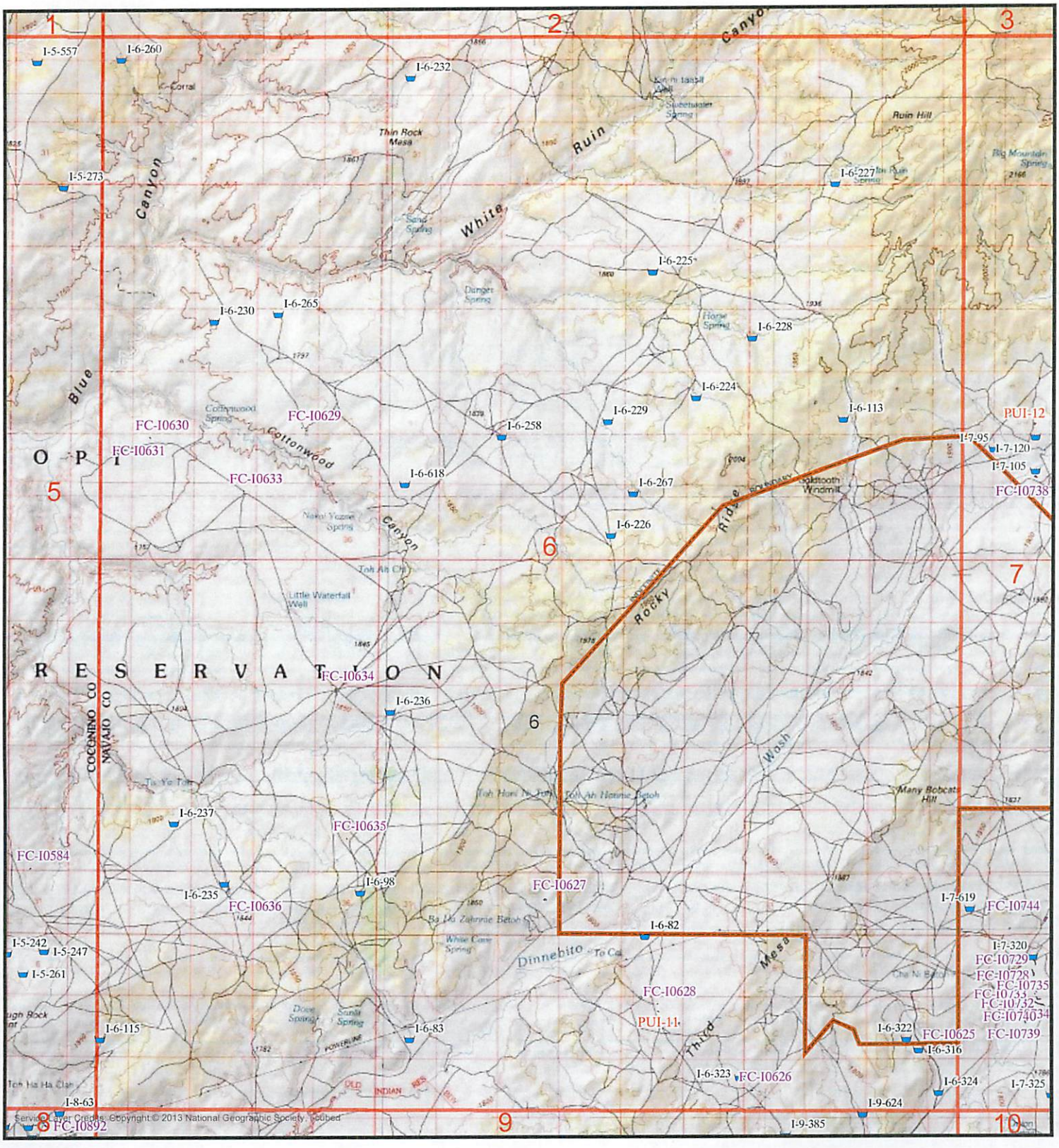

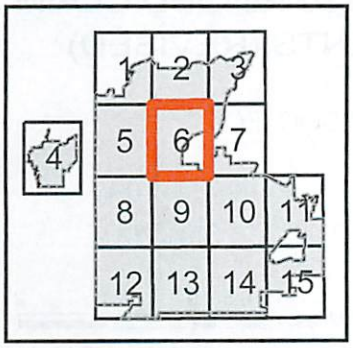

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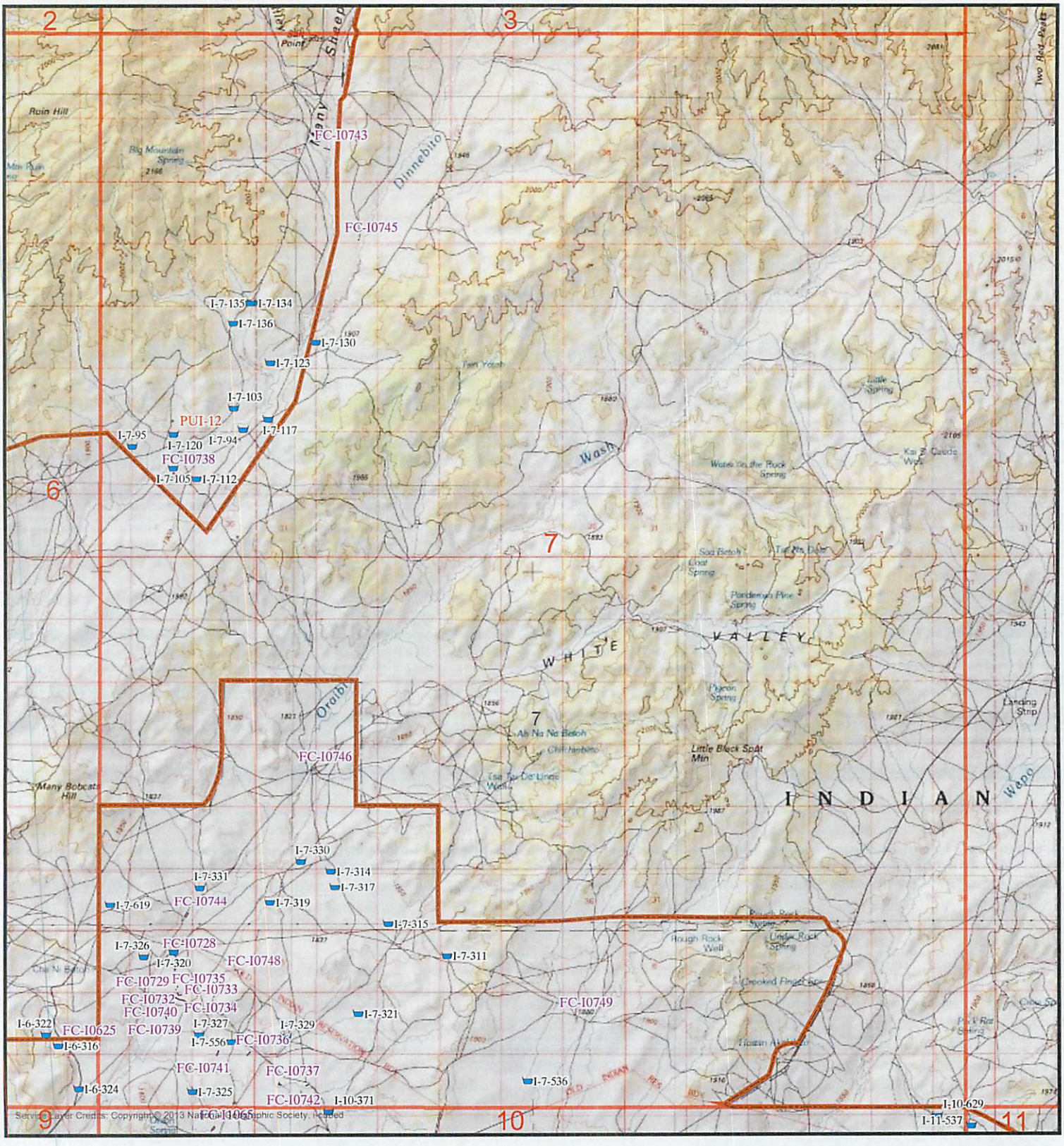

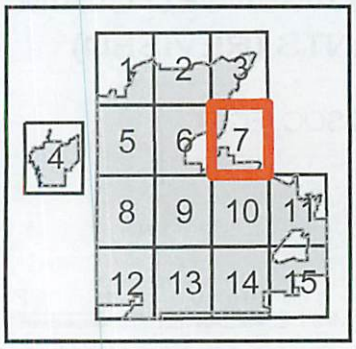

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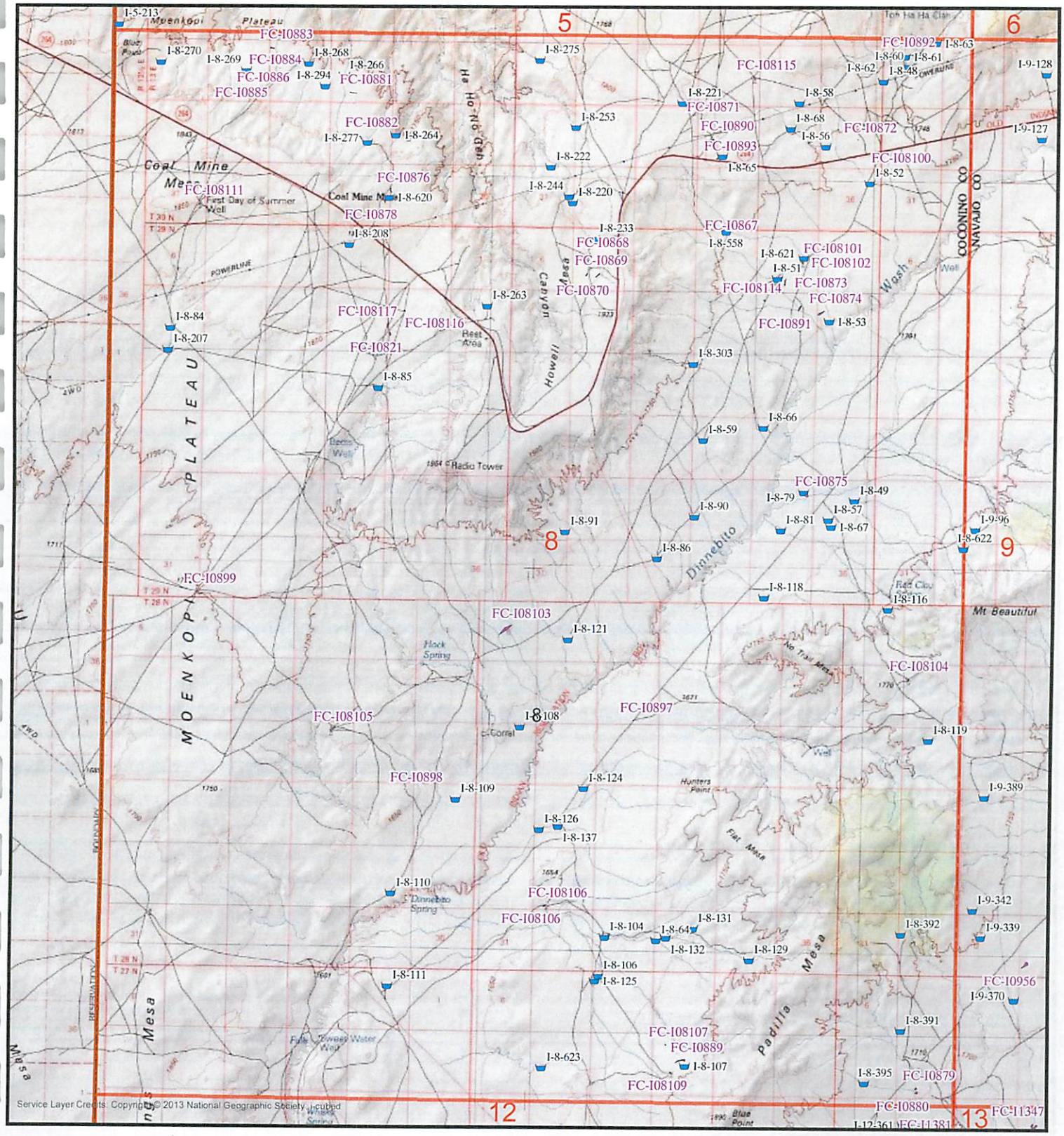

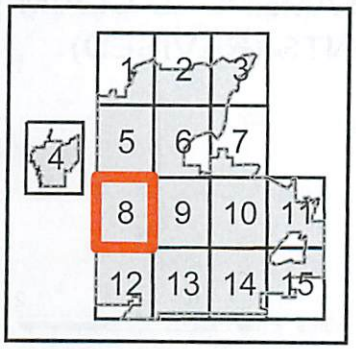

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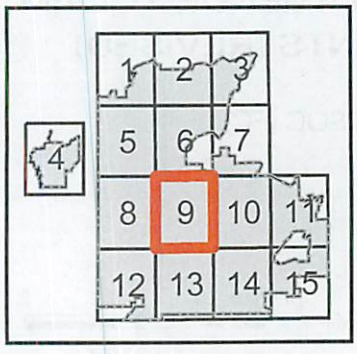

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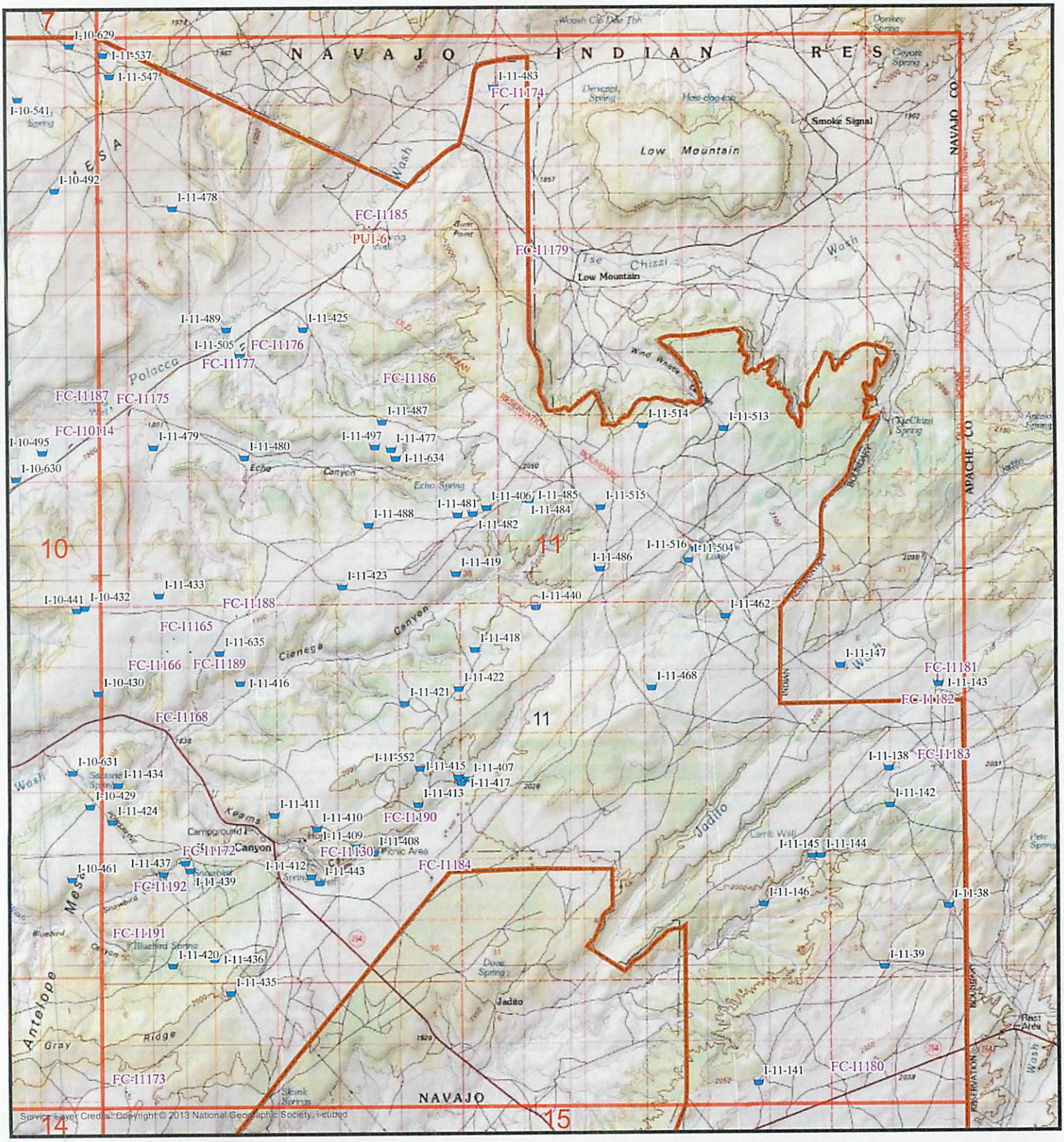

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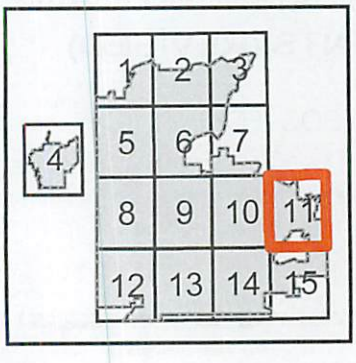

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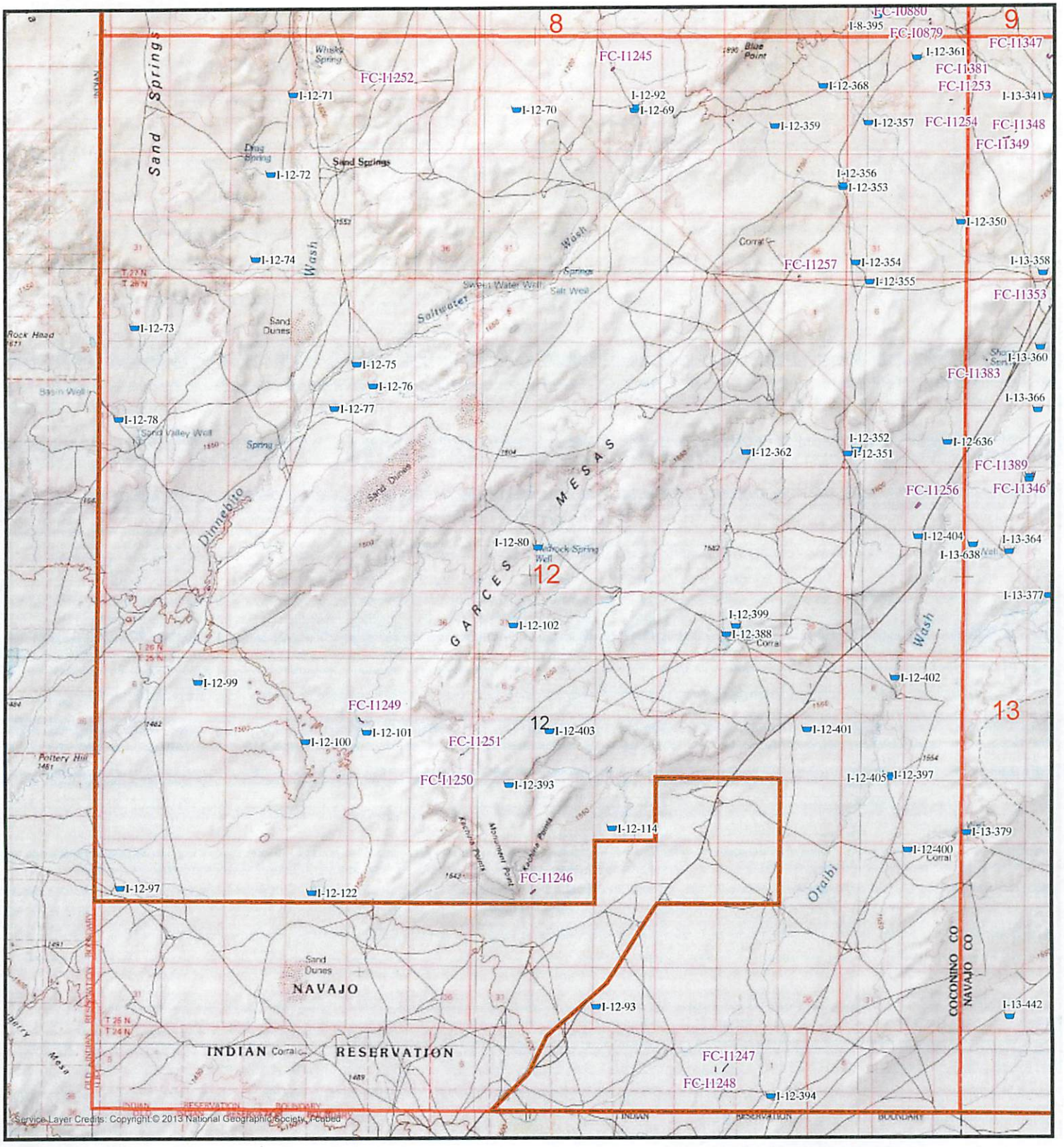

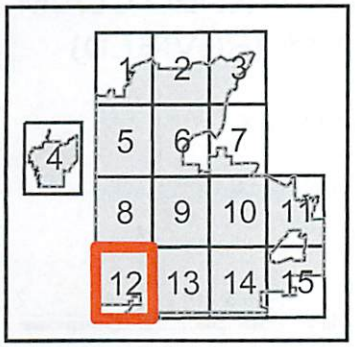

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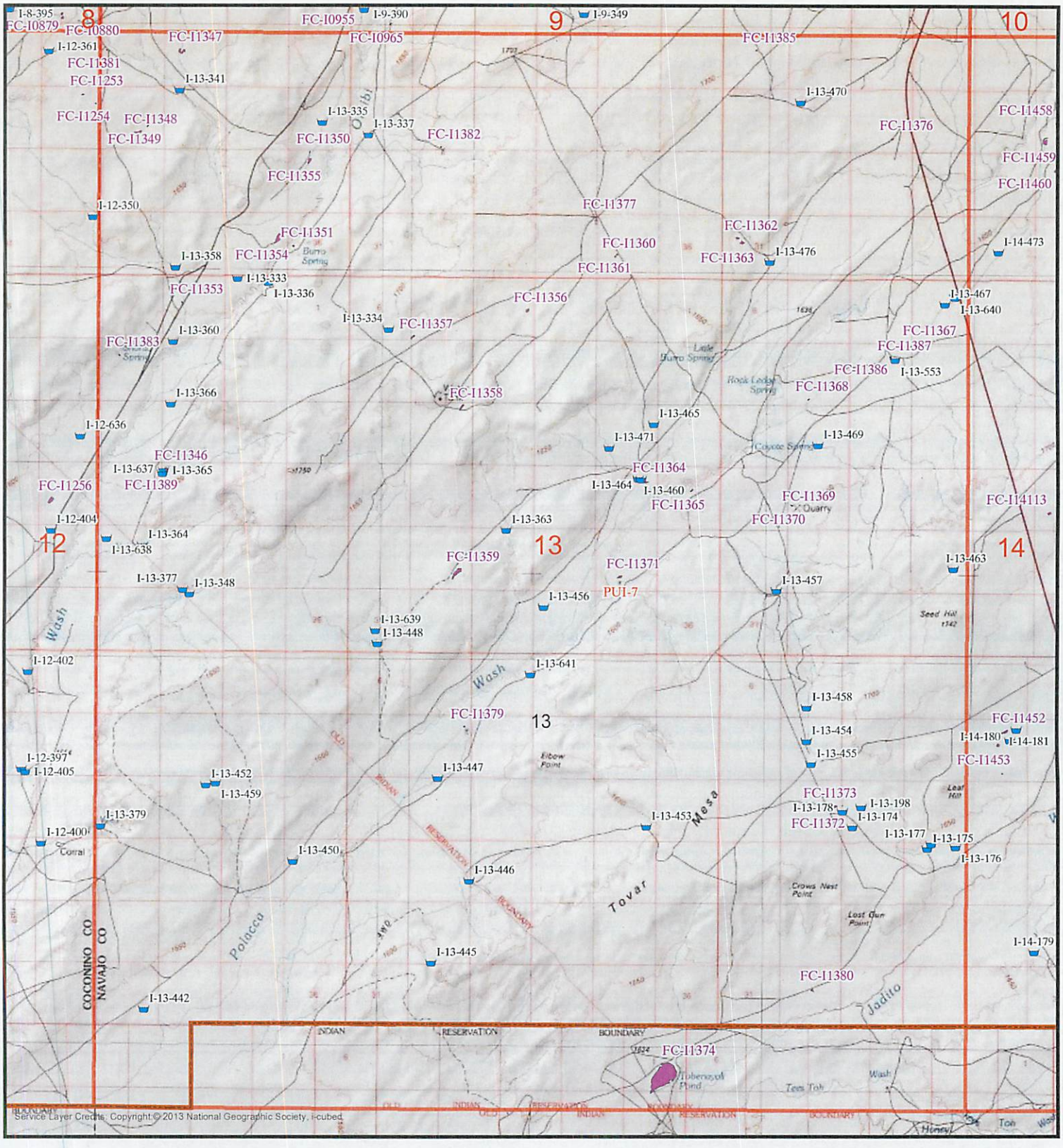

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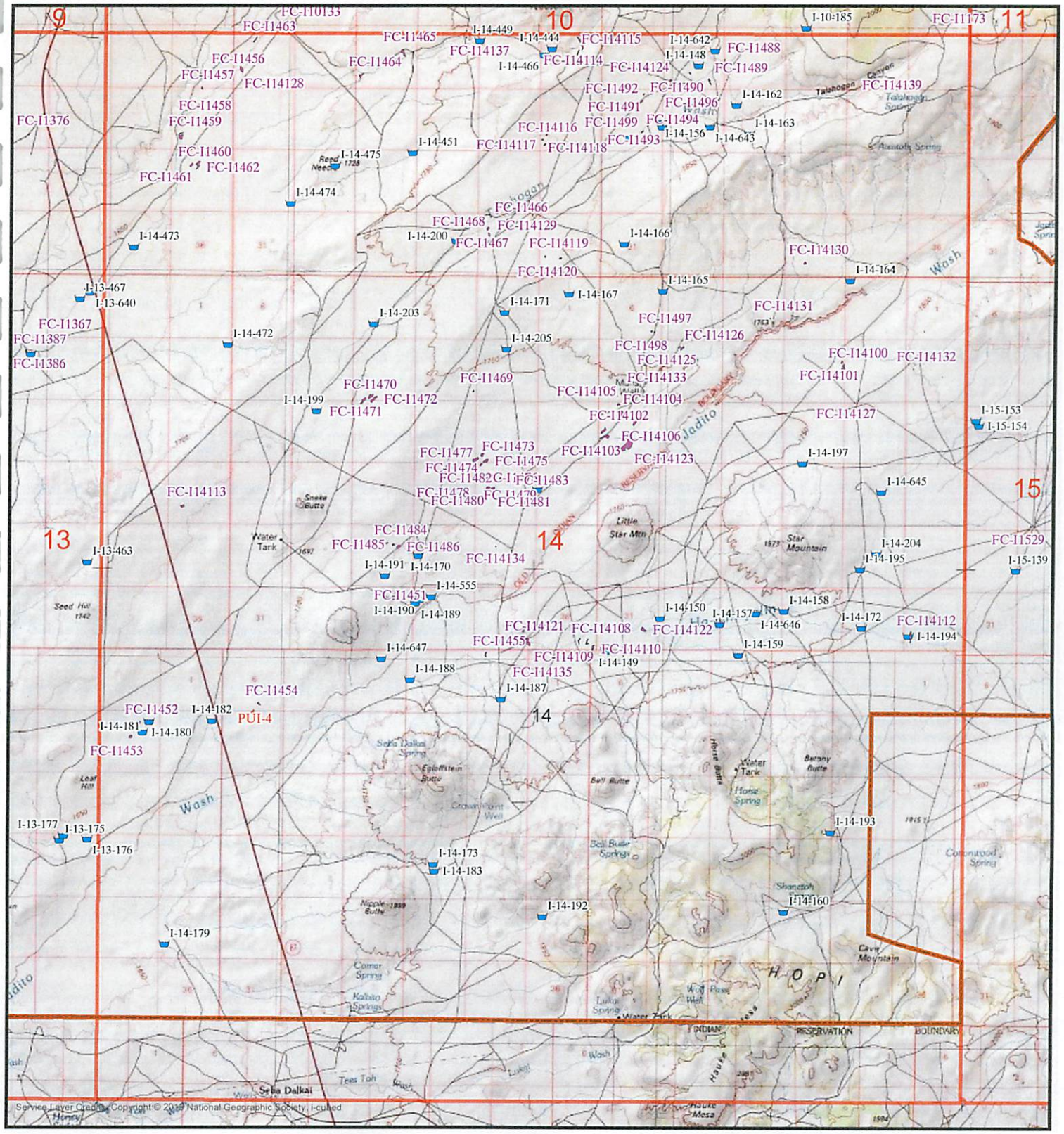

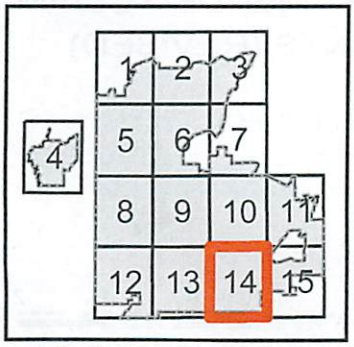

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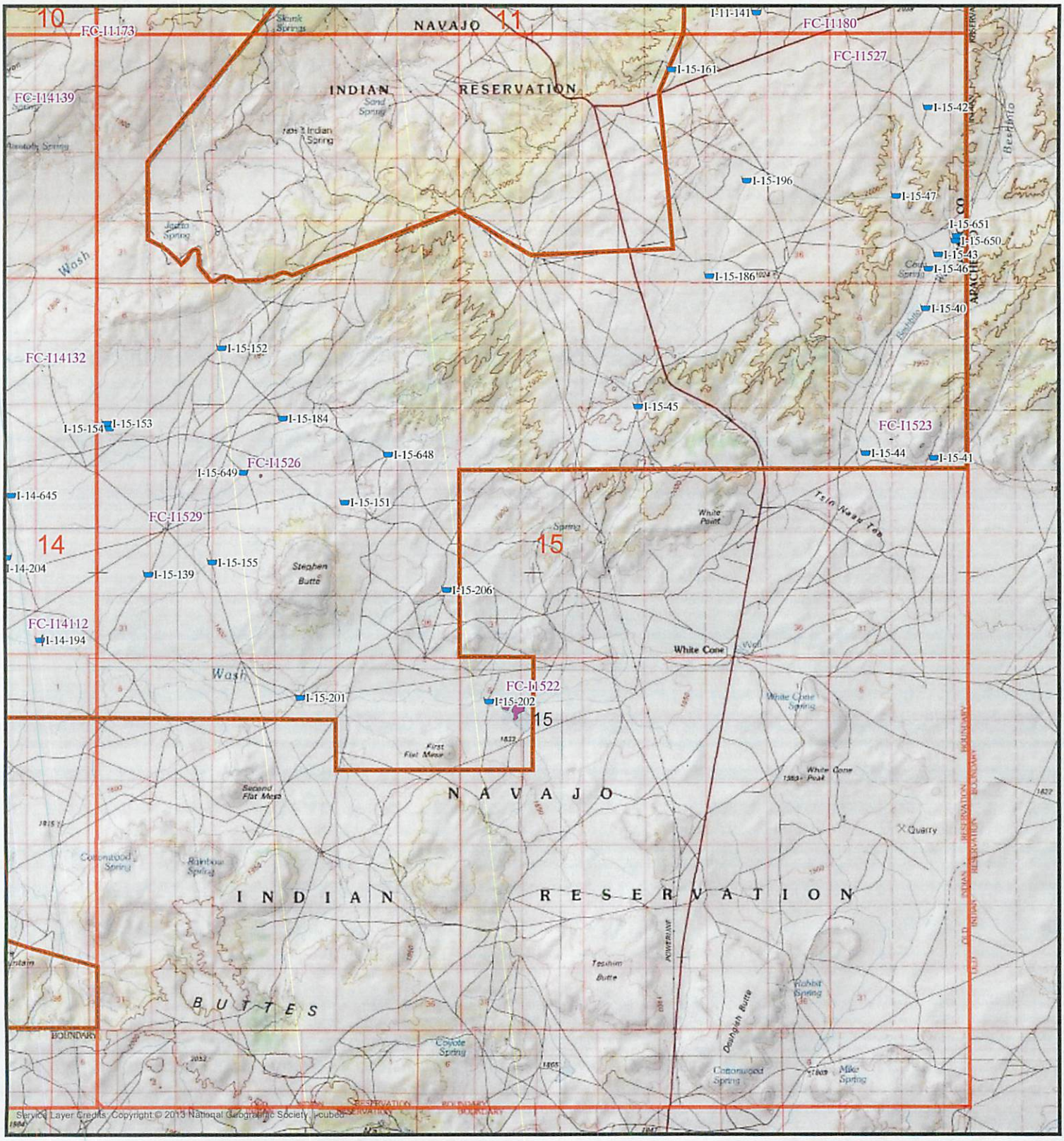

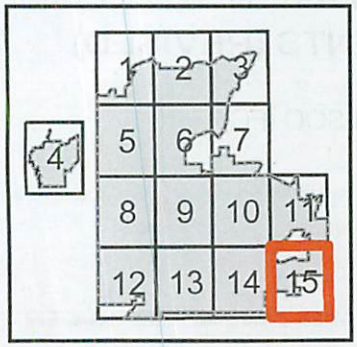

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Stevens Ecological Consulting LLC * P.O. Box 1315 * Flagstaff, AZ 86002

White Ruin Canyon Discharge Reconnaissance 14 August 2015: Preliminary Draft Report

Submitted by Lawrence E. Stevens, PhD
Stevens Ecological Consulting, LLC

Introduction

Larry Stevens, Principal of Stevens Ecological Consulting, LLC, and Abraham E. Springer, PhD, Geohydrologist at Northern Arizona University's School of Earth Sciences and Environmental Sustainability visited White Ruin Canyon with a Hopi Water Resources crew on 14 August 2015 to measure flow. Prior consultation with the Hopi Water Resources Department resulted in selection of a flow measurement site at the uppermost road into the canyon, where geologic structure was likely to release the maximum amount of groundwater. This location is at N 36.23692° W -110.58181°, at an elevation of approximately 1840 m.

We proceeded to that point, and measured flow at 10:55 a.m. (Fig. 1). Discharge was measured on a bedrock ledge near the downstream end of the wash adjacent to the springs emerging from several ciénegas on creek right. Discharge was measured with a leveled 1" Baski portable cut throat flume. Discharge from the creek was 7.7 gallons per minute (0.49 L/s). There is a possibility that 10 to 20 % more discharge may be passing this site, flow that was not measured by the flume. Thus, the total discharge at this site was likely up to 9.6 gallons per minute (0.59 L/s). The total annual discharge based on the measured and possible discharge discussed above would likely fall somewhere between 12.43 acre feet/ year and 15.54 ac-ft/ yr. Additional discharge measurements closer to the road crossing measured only about 60 % of the discharge measured at the first site, thus our assumption that the site selected represented the near-maximum discharge for the wash was supported.

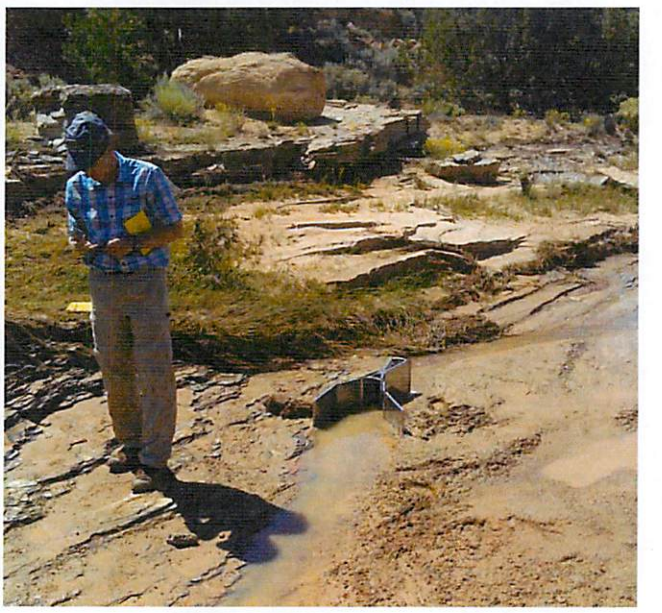

Fig. 1: The discharge measurement site in White Ruin Canyon, Hopi Indian Reservation.

The stream had undergone a recent, large flood about 4 feet in depth, related to the region's summer monsoon climate pattern; however, the stream had returned to its normal, low flow levels at the time of our visit. Such floods briefly transmit much (>3 orders of magnitude) instantaneous flow as compared to the near-baseflow measured here.

Other springs may exist downstream from the site where we measured flow. However, examination of Sweetwater Spring, ¼ mi downstream from the measurement site, revealed that it did not have sufficient flow to discharge into White Ruin Creek. The Hopi Water Resources staff indicated that additional flow downstream from Sweetwater Springs was not substantial, but further mapping and flow measurement of springs in this drainage are recommended.

The measurement point we used lies in the wash about 100 yd upstream from the road crossing. The channel nearby the measurement site is dominated by alluvium lying on top of bedrock, and away from bedrock exposures, the alluvium can transmit a significant amount of discharge through subsurface deposits. Therefore, flow measurements in the future should continue to be made in reaches of the channel where the subsurface alluvial flow is minimized by exposure of bedrock on the channel bed.