

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

UNITED STATES' THIRD AMENDED
STATEMENT OF CLAIMANT ON BEHALF OF
THE HOPI TRIBE

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1 JOHN C. CRUDEN
2 Assistant Attorney General
3 Environment and Natural Resources Division
4 United States Department of Justice

4 VANESSA BOYD WILLARD
5 Trial Attorney, CO #30278
6 ANDREW "GUSS" GUARINO
7 Trial Attorney, CO #21864
8 Indian Resources Section
9 Environment and Natural Resources Division
10 United States Department of Justice
11 999 18th Street, South Terrace, Suite 370
12 Denver, CO 80202
13 (303) 844-1353

14 Attorneys for the United States of America

15 **IN THE SUPERIOR COURT OF THE STATE OF ARIZONA**
16 **IN AND FOR THE COUNTY OF APACHE**

17 IN RE: THE GENERAL
18 ADJUDICATION OF ALL RIGHTS TO
19 USE WATER IN THE LITTLE
20 COLORADO RIVER SYSTEM AND
21 SOURCE

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1
2 **TABLE OF CONTENTS**

3 INTRODUCTION - 4 -
4 HOPI LANDS - 4 -
5 A. 1882 Executive Order Reservation - 5 -
6 B. Moenkopi Island - 5 -
7 C. Hopi Industrial Park - 6 -
8 D. Hopi Ranches, a.k.a, Hopi newly acquired lands - 6 -
9 SCOPE OF THIRD AMENDED SOC - 6 -
10 LEGAL BASIS FOR CLAIMS - 8 -
11 PRIORITY DATE - 8 -
12 CATEGORIES OF WATER USES - 10 -
13 CLAIMS ON BEHALF OF THE HOPI TRIBE - 11 -
14 A. Domestic, Commercial, Municipal and Industrial (“DCMI”) - 11 -
15 1. Per Capita Water Usage - 11 -
16 2. Hopi Population Projections..... - 11 -
17 3. Existing and Future Wells - 12 -
18 4. Springs - 12 -
19 5. Comparison to 2009 Second Amended SOC - 13 -
20 B. Heavy Industrial / Mining Related Industry - 13 -
21 C. Livestock - 14 -
22 1. Livestock Consumption - 15 -
23 2. Stockpond Storage Capacity - 16 -
24 D. Past and Present Irrigation - 16 -
25 1. Technical Basis for Past and Present Irrigated Acreage Claim - 17 -
26 2. Outline of the Past and Present Irrigation Claim - 19 -

1	E. <u>Riparian and Wetlands Habitat (Pasture Canyon)</u>	- 20 -
2	F. <u>Future Irrigation for Subsistence and Cultural Purposes</u>	- 21 -
3	CLAIM SUMMARY	- 22 -
4	VERIFICATION OF UNITED STATES DEPARTMENT OF INTERIOR	- 23 -
5		
6		
7	APPENDIX 1 - Map of Hopi Lands	
8	APPENDIX 2 – Table of Water Right Attributes	
9	APPENDIX 3 – Table of Hopi Population / Distribution	
10	APPENDIX 4 – Table of Existing Wells	
11	APPENDIX 5 – Table of Existing Springs	
12	APPENDIX 6 – Table of Existing Impoundments	
13	APPENDIX 7 – Maps of Existing Wells, Springs, and Impoundments	
14	APPENDIX 8 – Map of Irrigated Acreage	
15	APPENDIX 9 – General Map of Pasture Canyon	
16	APPENDIX 10 – Map of Pasture Canyon with delineated Riparian and Wetlands	
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		

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4
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INTRODUCTION

The United States of America (“United States”), as trustee for the benefit of the Hopi Tribe, hereby submits its Third Amended Statement of Claimant (“SOC”) for water rights on behalf of the Hopi Tribe. This SOC amends and updates the United States’ Second Amended SOC (“Second Amended SOC”) on behalf of the Hopi Tribe, dated November 13, 2009.

This Third Amended SOC is submitted pursuant to the guidance provided by A.R.S. §§ 45-183 and 45-254 as interpreted by the Arizona Supreme Court to apply to federal reserved water right claims on Indian reservations. *San Carlos Apache v. Superior Court*, 144 Ariz. 265, 278, 697 P.2d 658, 671 (1985) (“Since federal law is supreme, it follows that claims based on rights granted by federal law, including the *Winters* doctrine, will be sufficient under the statute even though the information provided does not include that required to support claims based on state law. Also, see A.R.S. § 45-254(C), requiring only such information as is ‘appropriate.’”).

The United States submits this Third Amended SOC to inform the Court, the Arizona Department of Water Resources (“ADWR”), and the parties of the nature and extent of the water rights which the United States owns in trust for the Hopi Tribe. These amended claims are based on the best information available to the United States at this time. The United States continues to investigate the Hopi water rights and, accordingly, reserves the right to further amend or update its claims on behalf of the Hopi Tribe as necessary. Contemporaneously, the Hopi Tribe is updating and filing claims on its own behalf.

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HOPI LANDS

A summary of Hopi Lands is necessary to understand the scope of this Third Amended SOC as well as the location of the water right claims outlined below. The Hopi people have lived in the Little Colorado River (“LCR”) Basin since time immemorial and were well-established as an agricultural community in the Basin prior to the time of European contact. See Preliminary Hydrographic Survey Report (“HSR”) for the Hopi Indian Reservation, dated

1 December 2008 (“Preliminary Hopi HSR”), ¶ 3.1 Pre-Reservation Lands, pp. 3-1 through 3-3.
2 Appendix 1 attached hereto provides a map of the land parcels described below.

3 **A. 1882 Executive Order Reservation**

4 The 1882 Reservation was established by the President of the United States by Executive
5 Order on December 16, 1882, for the use of the Hopi Indians “and such other Indians as the
6 Secretary of the Interior may see fit to settle thereon.” See I Charles J. Kappler, *Indian Affairs:
7 Laws and Treaties* 805 (1904). Based on historic and legal events after 1882, current Hopi lands
8 within the 1882 Reservation can be divided into two categories: 1) District 6; and 2) Hopi
9 Partitioned Lands.

10 **B. Moenkopi Island**

11 The Moenkopi Island is a tract of land historically occupied and farmed by Hopi tribal
12 members that lies west of the 1882 Reservation and is referred to as an island because it is a
13 portion of Hopi land located apart from the 1882 Reservation. The lands within the Moenkopi
14 Island were withdrawn from “sale or settlement” for Indian purposes by the January 8, 1900
15 Executive Order. See I Charles J. Kappler, *Indian Affairs: Laws and Treaties* 877 (1904). On
16 June 14, 1934, Congress passed an Act confirming the Moenkopi Island as a portion of lands
17 reserved for Indian purposes. Act of June 14, 1934, 48 Stat. 960 (codified at 25 U.S.C. § 640d-
18 7). The Congressionally authorized litigation subsequent to the 1934 Act and following
19 settlement of it recognized the Hopi historic occupancy of Moenkopi and confirmed those lands
20 as part of the Hopi Reservation. See *Sekaquaptewa v. MacDonald*, 448 F. Supp. 1183, 1185 (D.
21 Ariz. 1978), *aff’d in part, rev’d in part*, 619 F.2d 801, 808-09 (9th Cir. 1980), *cert. denied*, 449
22 U.S. 1010 (1980); see also *Masayesva v. Zah*, 816 F. Supp. 1387, 1415-37 (D. Ariz. 1992), *aff’d*
23 *in part, rev’d in part*, 65 F.3d 1445, 1460 (9th Cir. 1995), *cert. denied*, *Secakuku v. Hale*, 517
24 U.S. 1168 (1996).

25 The Moenkopi Island lands are of two types: 1) Tribal lands held in trust by the United
26 States; and 2) 220 acres within 11 allotments that were allotted to individual Hopi Indians in

1 approximately 1900. The allotments are located within the exterior boundaries of the Moenkopi
2 Island.

3 **C. Hopi Industrial Park**

4 The Hopi Industrial Park consists of approximately 200 acres located in Sections 21 and
5 22 of T19N, R15E of the Gila and Salt River Base and Meridian, in Navajo and Coconino
6 Counties near Winslow, Arizona. These lands were acquired by the United States on behalf of
7 the Hopi Tribe on August 4, 1966. Special authority regarding these lands was provided to the
8 Hopi Tribe by the Act of May 22, 1970, Pub. L. No. 91-264, 84 Stat. 260 (codified at 25 U.S.C.
9 § 641-646).

10 **D. Hopi Ranches, a.k.a, Hopi newly acquired lands**

11 Pursuant to the Navajo-Hopi Land Dispute Settlement Act of 1996, Pub. L. No. 104-301,
12 110 Stat. 3549 (codified at 25 U.S.C. § 640d), the Hopi Tribe acquired five ranch properties
13 including the Aja, Clear Creek, 26 Bar, Hart and Drye Ranches. The United States holds all of
14 these properties in trust except 26 Bar Ranch which is not eligible for trust status under the 1996
15 Act based on its location.

16 **SCOPE OF THIRD AMENDED SOC**

17 In 1985, the United States, for the benefit of the Hopi Tribe, and the Hopi Tribe filed their
18 first SOCs in the LCR Adjudication. *See* Preliminary Hopi HSR, History of Proceedings, ¶ 1.2.
19 ADWR issued a preliminary HSR for all Indian Lands in the LCR Adjudication in 1994, which
20 was followed by the United States' Amended SOC on behalf of all tribes therein. *Id.* In 2002,
21 the Court adopted ADWR's recommendation to proceed with separate HSRs for each Tribe and
22 ordered ADWR to prepare the HSR for Hopi lands. *Id.* Pursuant to subsequent orders, the
23 United States, for the benefit of the Hopi Tribe, and Hopi Tribe filed their amended SOCs on
24 January 30, 2004. *Id.*

25 On November 4, 2004, the Court issued a Minute Entry ("2004 Minute Entry") directing
26 ADWR to limit the scope of the Preliminary Hopi HSR to claims for water on "main reservation

1 lands.” Minute Entry, dated November 4, 2004, p. 2, *see also* Preliminary Hopi HSR, ¶ 1.3
2 Scope, p. 1-4. ADWR conducted its investigation of the water claims to these Hopi lands and
3 issued the Preliminary Hopi HSR in 2008. Consistent with the 2004 Minute Entry, the 2008
4 Preliminary Hopi HSR was limited in scope to Hopi Lands within the 1882 Executive Order
5 Reservation and the 1934 Act Reservation, a.k.a. Moenkopi Island. *Id.* Accordingly, water
6 claims for the Hopi Industrial Park and Hopi Ranches, a.k.a. Hopi newly acquired lands, were
7 excluded from the 2008 Hopi Preliminary HSR. *Id.*

8 On June 10, 2013, ADWR filed its Status Report Concerning Final Hydrographic Survey
9 Report for the Hopi Indian Reservation (“2013 Status Report”). In the 2013 Status Report,
10 ADWR specifically stated that it will not include analysis of the Hopi Industrial Park or Hopi
11 Ranches in its Final HSR. *Id.* at 6-7. ADWR reasoned that these lands should not be included
12 because they were not part of the “main reservation lands” and were not addressed by ADWR in
13 the Preliminary HSR. *Id.* In response to ADWR’s statements, the Court issued a Minute Entry
14 on July 2, 2013, stating that “[t]here appears to be a broad consensus, and the Court agrees that
15 the Hydrographic Survey Reports (HSRs) should be cut back to the minimum requirements of
16 the existing statutes.” Therefore, the scope of the Final Hopi HSR is limited to the “main
17 reservation lands” as interpreted by ADWR to include the 1882 Executive Order Reservation
18 and Moenkopi Island.

19 Consistent with the limited scope of the Final Hopi HSR, the United States’ Third
20 Amended SOC provides amended and updated claims for Hopi Lands in the 1882 Executive
21 Order Reservation and Moenkopi Island. The United States expressly reserves its rights to
22 amend and update its water right claims for Hopi Lands outside the “main reservation lands” at
23 the appropriate time in the future when the Court indicates that water rights for such lands are
24 subject to the HSR process. Specifically, the United States reserves its rights to amend and
25 update its water right claims for the Hopi Industrial Park and Hopi Ranches as well as any
26 additional trust lands located outside the “main reservation lands” that it may hold or acquire in

1 trust on behalf of the Hopi Tribe in the future. Moreover, the United States reiterates its claims
2 to water rights on the Hopi Industrial Park and Hopi Ranches as set forth in its 2009 Second
3 Amended SOC.

4 LEGAL BASIS FOR CLAIMS

5 The legal basis for these claims is both the Hopi Tribe's aboriginal use and occupancy of
6 the lands and the federal reserved water rights doctrine. See *United States v. Ahtanum Irrigation*
7 *Dist.*, 236 F.2d 321 (9th Cir. 1956), *cert. denied*, 352 U.S. 988 (1957) (recognizing Indians' right
8 to use water based on their right of use and occupancy); *Winters v. United States*, 207 U.S. 564
9 (1908) (establishing the federal reserved water rights doctrine); and *Arizona v. California*, 373
10 U.S. 546 (1963) (applying the federal reserved water right doctrine to Indian reservations).

11 The United States Supreme Court has consistently interpreted the federal reserved water
12 rights doctrine to mean that when the Federal Government reserves land, it reserves not only the
13 land but also the amount of water necessary to accomplish the purpose of the reservation. See
14 *Winters*, 207 U.S. at 577; *Ariz. v. Cal.*, 373 U.S. at 596. The Arizona Supreme Court has followed
15 the United States Supreme Court in recognizing that "the essential purpose of Indian reservations
16 is to provide Native American people with a 'permanent home and abiding place.'" *In re the*
17 *General Adjudication of All Rights to Use Water in the Gila River System and Source*, 201 Ariz.
18 307, 313, 35 P.3d 68, 74 (quoting *Winters*, 207 U.S. at 565) (2001). Accordingly, the United
19 States claims sufficient water to provide for the present and future needs necessary to fulfill the
20 purpose of the Hopi Reservation as a permanent home and abiding place for the Hopi people.

21 PRIORITY DATE

22 The Hopi Tribe currently occupies its aboriginal territory where, according to historical
23 and archaeological evidence, the Hopi people have lived since time immemorial. As an agrarian
24 people, the Hopi are recognized as ancient farmers with unique abilities to capture and apply
25 water for agricultural purposes in an arid climate. Likewise, the Hopi historically maintained
26 and grazed livestock throughout their lands. In addition to farming and livestock, the Hopi have

1 utilized water for domestic, cultural, ceremonial, and economic activities for many centuries.
2 Based on aboriginal occupation and use, the United States claims a priority date of time
3 immemorial for all claims on the 1882 Executive Order Reservation and Moenkopi Island.
4 *United States v. Winans*, 198 U.S. 371, 381 (1905); *Winters*, 207 U.S. at 576-77.

5 In the alternative and based on the United States' actions in reserving lands for the Hopi
6 Tribe, the United States claims a date of reservation priority date for all claims on the 1882
7 Reservation and Moenkopi Island. *Winters*, 207 U.S. at 567-77.

8 Beginning in 2008, the parties to the LCR Adjudication participated in a contested case
9 entitled *In re Hopi Tribe Priority*. See Case Initiation Order and Designation of Issues for
10 Briefing, dated September 8, 2008. This contested case examined a number of designated issues
11 regarding the priority date of Hopi water rights through written discovery, depositions and
12 briefing to the Special Master. The Report of the Special Master; Motion for Adoption of Report;
13 and Notice for Filing Objections to the Report was issued on April 24, 2013 ("Special Master's
14 Priority Date Report"). With respect to the water rights included in this Third Amended SOC,
15 the Special Master's Priority Date Report recommended the following priority dates:

- 16 1) Time immemorial - District 6 within the 1882 Executive Order Reservation (Special
17 Master's Priority Date Report, Conclusion of Law No. 5, p. 19);
- 18 2) December 16, 1882 - Hopi Partitioned Lands within the 1882 Executive Order
19 Reservation (Special Master's Priority Date Report, Conclusion of Law No. 15, p.
20 43); and
- 21 3) June 14, 1934 - Moenkopi Island (Special Master's Priority Date Report, Conclusion
22 of Law No. 23, p. 51).

23 In the United States' Objections to Special Master's Report, dated July 1, 2013, the
24 United States agreed with the Special Master's Priority Date Report regarding time immemorial
25 priority dates for water rights within District 6. In contrast, the United States outlined the reasons
26 why the Court should reject the Special Master's Priority Date Report for Hopi Partitioned Lands

1 and Moenkopi Island which should also have priority dates of time immemorial based on
2 aboriginal use of water on those lands. As an alternative, the United States proposes that the
3 priority date for Moenkopi Island water rights should be the January 8, 1900 Executive Order,
4 at the latest, based on the date that the United States withdrew those lands from sale or settlement
5 for Indian purposes. On January 17, 2014, the parties presented oral argument to the Court
6 regarding various objections to the Special Master's Priority Date Report. The matter is still
7 pending as the Court has yet to enter an order.

8 **CATEGORIES OF WATER USES**

9 The water right claims outlined below are based on the following categories of water
10 uses:

- 11 1) Domestic, commercial, municipal and industrial;
- 12 2) Heavy industrial / mining related industry;
- 13 3) Livestock;
- 14 4) Past and present irrigation; and
- 15 5) Future irrigation for subsistence and cultural purposes.

16 In addition to the categories of water use listed above, the United States claims, for the
17 benefit of the Hopi Tribe, the right to use all sources and quantities of water otherwise claimed
18 herein for religious, cultural and ceremonial purposes. The Hopi Tribe's religious and
19 ceremonial practices are private and sacred to the Tribe. Out of deference to the Tribe's desire
20 to continue to preserve the confidentiality of its members' religious and ceremonial practices,
21 the United States is not asserting specific claims for quantities of water used in such practices.

22 Within each category of use, amounts may be claimed for the past and/or present uses of
23 the Hopi Tribe, as well as for the future needs of the Hopi people. *See Ariz. v. Cal.*, 373 U.S. at
24 600. Appendix 2 provides a summary of the water rights attributes for each claim outlined
25 below.

1 **CLAIMS ON BEHALF OF THE HOPI TRIBE AT ISSUE IN THE FINAL HOPI HSR**

2 **A. Domestic, Commercial, Municipal and Industrial (“DCMI”)**

3 The United States, on behalf of the Hopi Tribe, claims 8,746 acre-feet per year, or a rate
4 of approximately 7.80 million gallons per day, for present and future DCMI water uses on the
5 1882 Executive Order Reservation and Moenkopi Island. This claim is based on the current
6 Hopi population, future Hopi population projections, and estimated rates of water consumption
7 per capita. The water sources for the claim are the available groundwater aquifers, including the
8 N and C Aquifers as well as other smaller aquifers.

9 **1. Per Capita Water Usage**

10 In terms of total quantity, the DCMI water demand in a community or region can be
11 estimated on the basis of a per capita demand in gallons per day (“gpcpd”). Based on
12 comparisons with local area water use and state averages, the Hopi Tribe’s per capita demand in
13 gallons per day is 150 gpcpd. This water use represents several components including:
14 residential indoor use; residential outdoor use including irrigation for landscape and gardens;
15 commercial use; light industrial use; public uses and system losses.

16 **2. Hopi Population Projections**

17 According to United States’ consultants, the Hopi main reservation population is
18 predicted to achieve a stable population of approximately 52,016 shortly after the year 2175.
19 The population forecast is based on 2010 Census data, demographic methodology and data,
20 information collected from Hopi tribal reports, interviews with Hopi tribal members and
21 employees, and other sources. The population projection is based on current and future
22 geographic distribution of villages and other population centers on the Reservation. A table
23 outlining the estimate of future Hopi population and geographic distribution is attached as
24 Appendix 3:

1 **3. Existing and Future Wells**

2 In support of this DCMI claim, the United States claims the right to divert and deplete
3 groundwater from both existing and future wells. Appendix 4 provides a list of existing wells,
4 including beneficial uses of the water for each well.¹ A specific pumping quantity is not claimed
5 for individual existing wells because, as is the case throughout much of the LCR Basin, metering
6 data or other evidence concerning the quantities of past or present diversions from specific wells
7 is often unavailable.

8 With respect to future wells, the United States asserts that the federal reserved water
9 rights of the Hopi Tribe necessarily incorporate the right to establish new points of diversion as
10 needed to meet the needs of the Hopi Tribe. The location of future wells, including quantities
11 and points of diversion, for rights reserved by the United States for the Hopi Tribe, but not yet
12 exercised, is inherently impossible to obtain.

13 **4. Springs**

14 Springs also provide water for DCMI purposes, as well as livestock and agricultural
15 purposes. The United States, on behalf of the Hopi Tribe, claims the right to utilize all flows of
16 springs on the Hopi Reservation, including existing springs identified in Appendix 5, springs not
17 identified due to drought or other conditions, and springs that may occur in the future and be
18 utilized to meet the needs of the Hopi Tribe.

19 Appendix 5 provides a list of existing springs that the Hopi Tribe has in the past used, or
20 is at present using, for the indicated purpose. The United States, for the benefit of the Hopi
21 Tribe, claims the right to utilize the flow of each spring at its described location, to make
22 improvements, such as constructing spring boxes or pipe collection systems, as may be necessary
23 to preserve each spring's utility, and to use water diverted from such springs for the indicated
24 purposes or any other purposes chosen within the description of uses described in this claim,

25 ¹ Appendix 7 includes a series of maps that reflect the locations of existing wells, springs and stockponds
26 throughout the Hopi Reservation. Review of the springs and stockponds tabulated in Appendices 5 and 6 should
similarly refer to the set of maps included as Appendix 7.

1 including ceremonial, religious and cultural uses. A specific quantity is not claimed for each
2 individual spring because, as is the case throughout much of the LCR Basin, metering data or
3 other evidence concerning the quantities of past or present flow at specific springs on Hopi Lands
4 is generally unavailable.

5 **5. Comparison to 2009 Second Amended SOC**

6 The 2009 Second Amended SOC claimed a total of 9,110 acre-feet per year for DCMI
7 water use on the 1882 Executive Order Reservation and Moenkopi Island. *See* 2009 Second
8 Amended SOC at 8. In comparison, the current claim is 8,746 acre-feet per year. The 2009
9 Second Amended SOC also included an additional 380 acre-feet for DCMI on the Hopi
10 Industrial Park near Winslow, Arizona. *Id.* Since the Hopi Industrial Park is now outside the
11 scope of the HSR and, therefore, this Third Amended SOC, the United States is not updating the
12 DCMI claim for the Hopi Industrial Park here.

13 The 2009 Second Amended SOC claimed a total of 251 wells, 386 springs, and 983
14 impoundments. In comparison, this Third Amended SOC claims 242 wells, 379 springs, and
15 1001 impoundments. Following the submission of the Second Amended SOC in 2009, ADWR
16 submitted several questions and issues to the United States regarding the wells, springs and
17 impoundments. In response, the consultants for the United States and the consultants for the
18 Hopi Tribe performed an extensive review of the claimed wells, springs and impoundments,
19 including field work, resulting in the changes noted.

20 **B. Heavy Industrial / Mining Related Industry**

21 The United States, on behalf of the Hopi Tribe, claims 1,255 acre-feet per year, which
22 represents the entire water use for current mining operations at the Black Mesa Complex. In
23 light of the joint nature of the coal resource between Hopi and Navajo, this current use is claimed
24 for Hopi acknowledging that a portion of this water right may ultimately be assigned to the
25 Navajo Nation.

26

1 In addition, the United States, on behalf of the Hopi Tribe, claims 6,500 acre-feet per
2 year to support a future coal mine and mine mouth power plant located at that future coal mine.
3 The water source for this claim is groundwater from primarily the N Aquifer in the northern
4 portion of the Hopi Reservation, although other local aquifers are claimed as needed.

5 The current use portion of this Heavy Industrial / Mining Related Industry claim seeks
6 1,255 acre-feet per year, which is slightly higher than the 1,236 acre-feet per year identified in
7 the 2009 Second Amended SOC. The change is based on the latest records available for current
8 use. The future use claim for the coal mine and power plant is identical to the claim filed in the
9 2009 Second Amended SOC.

10 **C. Livestock**

11 The United States, on behalf of the Hopi Tribe, claims sufficient water to support the
12 maximum carrying capacity of livestock on the Hopi lands within the 1882 Reservation and
13 Moenkopi Island. This livestock claim is outlined below in two parts.

14 First, the livestock consumption claim is an overall amount of water necessary to support
15 livestock. The total livestock consumption claim is identical to the livestock claim in the 2009
16 Second Amended SOC. The primary water source for the livestock demand is groundwater as
17 provided by existing and future wells. *See* Existing wells listed on Appendix 4. Groundwater
18 is claimed as the primary source because of the importance of reliable water sources for livestock
19 in an arid climate. In addition to wells, springs and stockponds provide livestock water.
20 Appendix 5 identifies the existing springs with livestock purposes. Appendix 6 identifies
21 impoundments with livestock purposes.

22 Second, the stockpond storage capacity claim supports an amount of water necessary to
23 fill existing stockponds. The stockpond (or impoundment) storage capacity claim has changed
24 slightly from the 2009 Second Amended SOC as a result of the review performed by the United
25 States' consultants and the Hopi Tribe's consultants in response to the ADWR request discussed
26 above. Capacities for each stockpond are listed in Appendix 6. Most stockponds are filled via

1 surface water from washes and tributaries to washes. As such, stockponds can be unreliable in
2 drought years and are claimed here as complementary sources to wells for livestock support.
3 Despite the fact that stockponds are not as reliable as groundwater, they play a vital role in
4 allowing livestock full access to the range for grazing purposes and represent an important aspect
5 of the livestock claim.

6 **1. Livestock Consumption**

7 The United States, on behalf of the Hopi Tribe, claims 997 acre-feet per year for
8 livestock. This claim is based on the maximum carrying capacity of the rangeland within the
9 1882 Reservation and Moenkopi Island. This rangeland is approximately 1,622,455 acres with
10 a maximum livestock carrying capacity of 44,486 animal units. The water consumption for cattle
11 is 12 gallons per animal unit per day based on Arizona Department of Water Resource's
12 "Standard Water Use Quantities," dated January 2006. A diversion of 20 gallons per animal unit
13 per day is used for the claim based on a water use efficiency of 60 percent to account for
14 evaporation, spills, and other losses.

15 As explained above, the United States, on behalf of the Hopi Tribe, claims the right to
16 divert and deplete the total 997 acre-feet per year for livestock purposes from existing wells with
17 a claimed livestock use and/or future wells that will be drilled on the Hopi Reservation.
18 Appendix 4 provides a list of all existing wells claimed, including the wells that specify livestock
19 uses. The Hopi Tribe has the right to allocate this right among wells as it deems necessary to
20 meet the needs of the Hopi Tribe.

21 As a complementary source to the wells, the United States, on behalf of the Hopi Tribe,
22 claims the right to utilize stockponds for livestock water use. Appendix 6 provides a list of all
23 stockponds claimed. Springs also provide a source of water for livestock. See Appendix 5 for
24 list of spring with stock use. These various sources – wells, stockponds and springs – are claimed
25 to serve the same overall 997 acre-feet per year claim for livestock and are not additive.
26

1 **2. Stockpond Storage Capacity**

2 The Hopi Tribe has in the past used, or is at present using, for the indicated purposes, the
3 impoundments identified in Appendix 6. The United States claims, on behalf of the Hopi Tribe,
4 the right to divert and store 3,388 acre-feet to fill each impoundment to its full capacity whenever
5 the stated source of supply is available, to maintain each impoundment at its described location
6 and dimensions, and to use the impounded water for the identified purposes.² In addition, subject
7 to the total quantity of rights asserted herein, the United States claims, on behalf of the Hopi
8 Tribe, a right to repair, maintain, and replace existing impoundments. The water claim is not
9 intended to prevent the construction of new impoundments in the future within the claimed
10 quantity of water for livestock, as well as soil and water conservation benefits.

11 **D. Past and Present Irrigation**

12 The United States, on behalf of the Hopi Tribe, claims the right to divert 28,417 acre-feet
13 per year from the watersheds of five washes that flow through the Hopi reservation.³ The five
14 washes are Moenkopi, Dinnebito, Oraibi, Polacca, and Jadito. On average, the irrigation
15 diversion is 19,440 acre-feet per year. However, the United States claims the maximum 28,417
16 acre-feet per year in order to provide a water supply for the maximum irrigated acreage in years
17 that the water is available. Six classes of irrigation were identified. The nature of the “native”
18 irrigation class of lands diverting seasonal flows is such that the field and diversion locations
19 change over time. For the other irrigation classes, this is not the case. For the native class, a
20 single time period was used to establish use, this period being the decade of 1950-1959. For the
21 other five irrigated land classes, a longer time period was examined. A map of irrigated lands is
22 provided as Appendix 8. The United States does not claim that these rights, appurtenant to lands
23 at which native irrigation was found, are eligible for transfer to points of diversion or places of
24

25 ² The majority of impoundments are utilized for livestock. It should be noted, however, that a few
impoundments have additional uses such as recreation and irrigation, *see e.g.*, I0411 and I048.

26 ³ Approximately 8 acres of irrigated lands are located near minor tributaries to the Little Colorado River
rather than tributaries to the five washes.

1 use outside the boundaries of Hopi Lands. In comparison, the 2009 Second Amended SOC
2 claimed the right to divert 21,199 acre-feet.

3 **1. Technical Basis for Past and Present Irrigated Acreage Claim.**

4 The Hopi Tribe has historically irrigated and continues to irrigate crops on the Hopi
5 Reservation. The past and present irrigated acreage was identified based on interpretation of
6 aerial photos and field assessment. Use of aerial photos from 1952, 1954 and 1955 provided for
7 delineation of the native irrigation fields, while use of photos from 1934, 1952, 1954, 1955,
8 1974, 1980, 2010 and 2013 allowed delineation of fields in the five other irrigation classes.
9 These identified lands fall into the six irrigation types, based on water source and crop as follows:

10
11 Perennial Irrigation – Cultivated acreage irrigated with perennial spring water
12 conveyed and stored in permanent structures.

13 Seasonal Irrigation – Cultivated acreage irrigated with seasonal surface water conveyed
14 by permanent or temporary structures or by pumping. Water is conveyed by structures
15 ranging from temporary and/or permanent spreader dikes to diversions with ditches, or
16 by pumping from a surface water source.

17 Range Pasture Irrigation – Seasonal surface water available to the parcel and used to
18 improve range for pasture; water is conveyed by structures ranging from temporary
19 and/or permanent spreader dikes to diversions with ditches.

20 Native Irrigation – Seasonal surface water available to the parcel with minimal water
21 control structures; water arrives at the parcels by strategic placement of the parcel to the
22 water source with minimal or no conveyance structures.

23 Well Irrigation – Water conveyed to parcel from a well, through a system of pipes and/or
24 open ditches.

1 Spring Irrigation – Perennial groundwater available to the parcels obtained and
2 distributed from a spring.⁴

3
4 The Hopi Tribe also grows crops on land that is not irrigated and relies upon precipitation.
5 These precipitation farmed lands were identified, but are not associated with a water right claim.

6 The seasonal water supplies in the five northern washes for 1948 through 2014 were
7 estimated using the Precipitation Runoff Modeling System (PRMS) created by the United States
8 Geological Survey. The PRMS model estimates daily runoff based on precipitation,
9 temperature, solar radiation, and physical characteristics of the area being modeled. Crop water
10 requirements were estimated using the Modified Jensen-Haise method to determine
11 evapotranspiration (ET) adjusted by crop coefficients based on crop type, typical planting dates,
12 and cultural cropping practices. The irrigation diversions and irrigation depletions were
13 estimated using a deficit irrigation simulation model that considers the available flows (from
14 PRMS) for irrigation and potential crop ET. The model tracks soil moisture and adjusts crop ET
15 based on soil moisture. A deficit irrigation model was used because full water supplies for the
16 crops are seldom available. The seasonal water supply limits irrigation diversions and depletion.
17 The past and present irrigation claim is for the maximum estimated diversion for irrigation
18 during the period of analysis.

19 The water supply for perennial and spring irrigation is usually available throughout the
20 irrigation season (April through September). However, because of the nature of springs and the
21 fact that the perennial flows occur only in sections of the washes, a full irrigation supply is not
22 always available. The irrigation supply for these lands was therefore estimated to be 90 percent
23 of the irrigation requirement.

24
25
26 ⁴ The existing springs that are utilized for irrigation are identified with an irrigation purpose in Appendix
5. Note that certain springs used for irrigation do not have fields associated with them because they serve small
fields that do not appear on aerial photography but can be verified on the ground.

1 **2. Outline of the Past and Present Irrigation Claim**

2 The following two tables outline the past and present irrigation claim. Table 1,
3 Historically Irrigated Acreage by Classification in the Five Wash Basins through the Hopi
4 Reservation, designates the past and present irrigated acreage divided by wash. Table 2,
5 Estimated Irrigation Depletion and Diversion for Historically Irrigated Lands on the Hopi
6 Reservation, outlines the irrigation depletion and diversion in both average and maximum years.

7 In addition, a map of Irrigated Lands is attached as Appendix 8 in order to provide an
8 overview of the irrigated acreage based on the GIS coverages created from interpretation of
9 historical photos. The GIS coverages themselves are available for review if ADWR determines
10 such coverages would be helpful.

11
12 **Table 1: Historically Irrigated Acreage by Classification in the Five Washes through Hopi
Reservation.**

13

14 Wash	Perennial (acres)	Seasonal (acres)	Range Pasture (acres)	Native (acres)	Well (acres)	Spring (acres)	Total (acres)
15 Dinnebito	1	985	0	1,291	0	94	2,372
16 Jadito	2	742	168	393	0	1	1,305
17 Moenkopi	239	450	0	453	2	36	1,179
18 Oraibi	1	1,206	991	1,123	16	0	3,336
19 Polacca	21	911	2,325	1,524	0	52	4,832
20 Minor Tributaries	0	0	0	8	0	0	8
21 Total	264	4,294	3,483	4,791	17	183	13,032

22 Note: Columns may not sum to total due to rounding.

Table 2: Estimated Irrigation Depletion and Diversion for Historically Irrigated Lands on the Hopi Reservation.

Wash	Irrigation Depletion		Irrigation Diversion	
	Average (af/yr)	Maximum (af/yr)	Average (af/yr)	Maximum (af/yr)
Dinnebito	2,317	3,733	3,178	5,140
Jadito	1,569	2,414	2,179	3,352
Moenkopi	1,816	2,195	2,395	2,909
Oraibi	3,422	5,470	4,745	7,589
Polacca	5,016	7,627	6,933	10,555
Minor Tribs.	8	12	11	17
Total	14,148	20,626	19,440	28,417

Note: Columns may not sum to total due to rounding. Maximum total seasonal depletion/diversion is less than the sum of each wash as it considers maximum depletion/diversion during a single year, whereas maximum depletion/diversion in each wash does not occur in the same year.

E. Riparian and Wetland Habitat (Pasture Canyon)

The United States, on behalf of the Hopi Tribe, claims 294 acre-feet per year for riparian and wetland habitat in Pasture Canyon, a unique ecosystem within the Moenkopi Island that is of great historic and present significance to the Hopi Tribe. A map of Pasture Canyon is attached as Appendix 9. This claim seeks sufficient water to sustain the areas within Pasture Canyon consisting of wetlands, willows, cottonwoods and other riparian vegetation. On average, the depletion is 267 acre-feet per year. However, the United States claims the maximum 294 acre-feet per year in order to utilize the water supply for the riparian vegetation when such water is available.

These wetland and riparian areas of Pasture Canyon exist near agricultural fields subject to irrigation, but are separate and apart from those fields. A second map of Pasture Canyon is attached at Appendix 10, and delineates the areas that form the basis of this Riparian and Wetland Habitat Claim as compared to the Irrigated Lands which are subject to the Past and Present Irrigation Claim outlined above. While this claim was not included in the Second Amended

1 SOC filed in 2009, these areas were in existence and are of continuing ecological significance
2 to the Tribe.

3 As the maps illustrate, Pasture Canyon is a long canyon area with numerous springs
4 located throughout as well as one large impoundment, Pasture Canyon Reservoir (I0411), and a
5 smaller impoundment (I048) near the south end. All of the springs are claimed for agricultural
6 purposes, are listed in Appendix 5, and are part of the overall water supply calculated for the
7 Past and Present Irrigation Claim reflected in Table 2. The United States is not claiming those
8 springs again here, but simply explaining the unique setting of those springs within Pasture
9 Canyon. In a similar manner, Pasture Canyon Reservoir (I0411) and the smaller impoundment
10 (I048) below it are listed with the other impoundments in Appendix 6. The United States is not
11 claiming these impoundments twice but simply stating the setting of these two unique water
12 bodies within Pasture Canyon, though the agricultural purpose (not simply livestock) of Pasture
13 Canyon Reservoir in Appendix 6 should be noted.

14 **F. Future Irrigation for Subsistence and Cultural Purposes**

15 The United States, on behalf of the Hopi Tribe, claims 4,977 acre-feet per year for future
16 irrigation of small family garden plots near the villages for subsistence and cultural purposes.
17 Agricultural practices and farming products play a central role in Hopi subsistence and culture.
18 The future ability to continue such practices adequately may be limited by a larger population
19 and potentially limited surface water sources. This claim assures the Hopi Tribe's ability to
20 continue those practices into the future based on a reliable water source, the N Aquifer, in
21 contrast to the less reliable surface water supplies in the washes and is identical to the Second
22 Amended SOC submitted in 2009.

1 **CLAIM SUMMARY**

2 The following table provides an overview of the United States' amended water right
3 claims on behalf of the Hopi Tribe. Appendix 2 provides a more detailed summary of the claims
4 with each water right attribute identified.

5 **Table 3: Claim Summary Table**

6

Type of Claim	Acre-feet per year
DCMI	8,746
Current Mining	1,255
Future Mining /Power Plant	6,500
Livestock	997
Stockpond Storage Capacity	3,388
Past and Present Irrigation	28,417
Riparian and Wetlands Habitat (Pasture Canyon)	294
Future Irrigation / Subsistence & Culture	4,977

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17 Respectfully submitted this 2nd day of June 2015.

18
19 

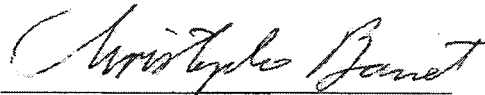
20 VANESSA BOYD WILLARD
21 Trial Attorney, CO #30278
22 Indian Resources Section
23 Environment and Natural Resources Division
24 United States Department of Justice
25 999 18th Street, South Terrace, Suite 370
26 Denver, CO 80202
(303) 844-1353

Attorney for the United States

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VERIFICATION OF UNITED STATES DEPARTMENT OF INTERIOR

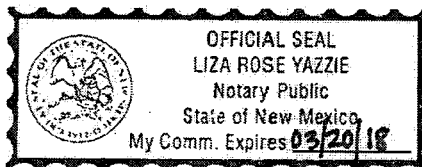
Pursuant to A.R.S. §45-183(B), I verify under penalty of perjury under the laws of the United States of America that to the best of my knowledge and belief, the statements made in this document and the claims asserted by the United States on behalf of the Hopi Tribe are true and correct. By making this verification, neither I, the United States, 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.



Christopher Banet
Trust Resources and Protection Manager
Branch of Water Resources
Southwest Regional Office
Bureau of Indian Affairs
1001 Indian School Road, NW
Albuquerque, NM 87104

State of New Mexico
County of Bernalillo

Subscribed and sworn before me this 1st day of June, 2015 by Christopher Banet.





Notary Public
My Commission Expires: March 20, 2018

1 **CERTIFICATE OF SERVICE**

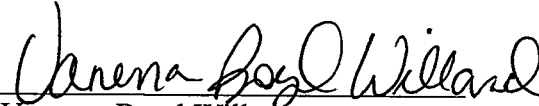
2 I hereby declare under penalty of perjury, that on June 2nd, 2015, I served a true and
3 correct copy of the UNITED STATES' THIRD AMENDED STATEMENT OF
4 CLAIMANT ON BEHALF OF THE HOPI TRIBE, by Federal Express overnight delivery to
5 the Arizona Department of Water Resources at the following address:
6

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

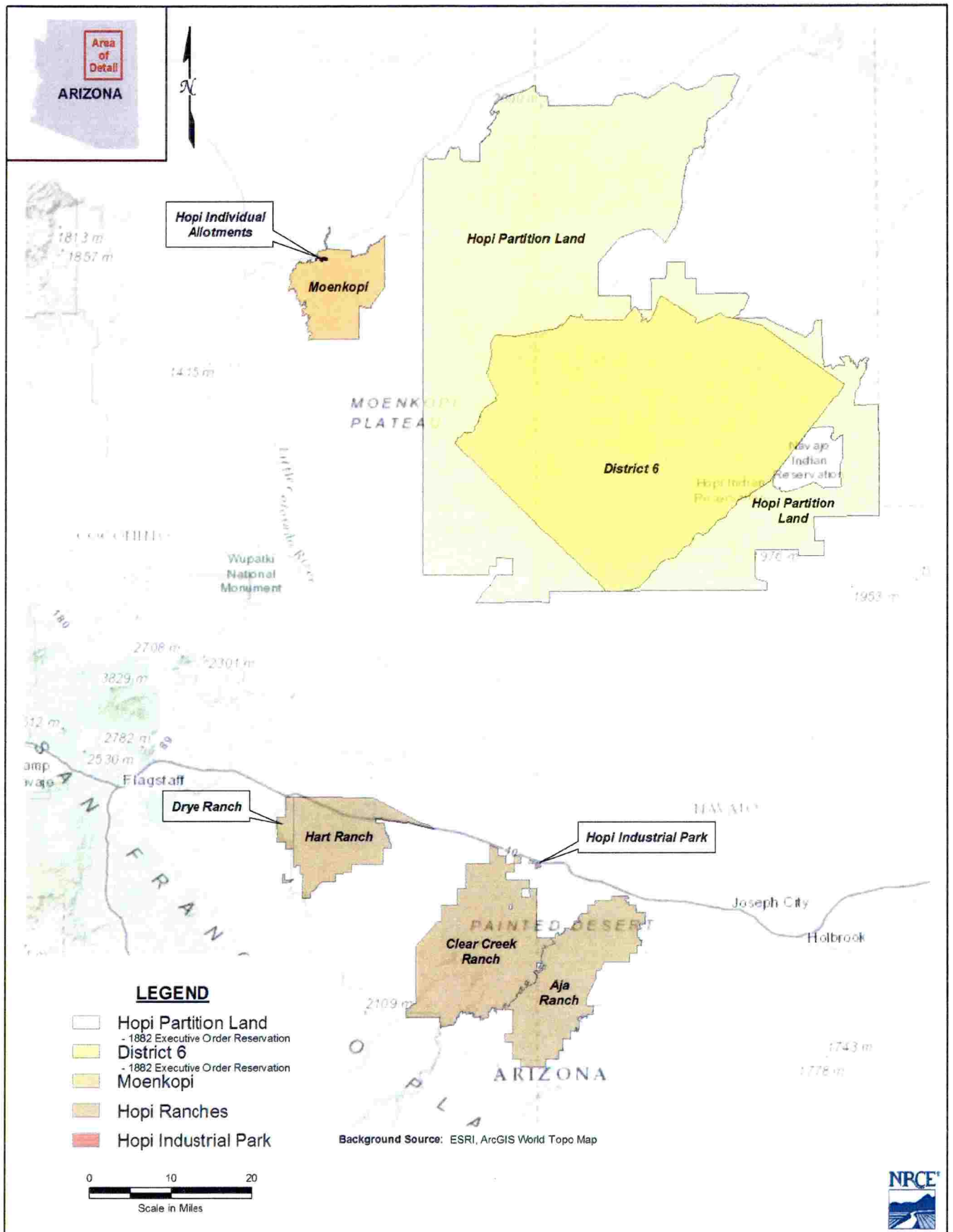
11 In addition, on June 2nd, 2015, I served a courtesy copy of the UNITED STATES'
12 THIRD AMENDED STATEMENT OF CLAIMANT ON BEHALF OF THE HOPI TRIBE,
13 via Federal Express overnight delivery on the following addresses:
14

15 Clerk of the Superior Court
Apache County
16 Attn: Water Case
70 West Third South
17 St. John's, AZ 85936
(928) 337-7550

18 Hon. Mark H. Brain
19 Judge of the Superior Court, Maricopa County
East Court Building, Suite 413
20 101 West Jefferson
Phoenix, AZ 85003
21 (602) 372-1141

22
23 
24 Vanessa Boyd Willard
25
26

Appendix 1



Map of Hopi Lands

Appendix 2

**APPENDIX 2 – Summary of Water Right Attributes
 United States' Third Amended Statement of Claimant on Behalf of the Hopi Tribe
 June 2, 2015**

	Water Sources	Quantity of Use	Location	Priority Date
Domestic, Commercial, Municipal, and Light Industrial (DCMI)	Available aquifers, including the N and C Aquifers as well as other minor aquifers	8,746 af/yr	1882 Reservation and Moenkopi Island	Time Immemorial
Current Mining	Primarily the N Aquifer, although other local aquifers claimed as needed	1,255 af/yr	1882 Reservation	Time Immemorial
Future Mining / Power Plant	Primarily the N Aquifer, although other local aquifers claimed as needed	6,500 af/yr	1882 Reservation	Time Immemorial
Livestock Consumption	Primary source is groundwater via existing and future wells in various aquifers; Complementary sources include stockpounds filled by surface water, groundwater and springs	997 af/yr	1882 Reservation and Moenkopi Island	Time Immemorial
Stockpond Storage Capacity	Primary source is water from the Washes; Complementary source is groundwater (overflow from stock troughs at wells)	3,388 af	1882 Reservation and Moenkopi Island	Time Immemorial
Past and Present Irrigation	Washes, local runoff, springs and groundwater	28,417 af/yr	1882 Reservation and Moenkopi Island	Time Immemorial
Riparian and Wetlands Habitat (Pasture Canyon)	Surface water, groundwater and spring flow	294 af/yr	Moenkopi Island	Time Immemorial
Future Irrigation and Subsistence Agriculture	Primarily the N Aquifer, although other local aquifers claimed as needed	4,977 af/yr	1882 Reservation and Moenkopi Island	Time Immemorial

Appendix 3

Appendix 3 - Distribution of Hopi Reservation Population Projection

Village Groupings	2010	2015	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	Stable	100 Year Rate*
First Mesa Villages	1,689	1,985	2,318	3,055	3,812	4,602	5,431	6,112	6,568	6,758	6,669	6,444	6,569	6,799	1.3%
Second Mesa Villages	1,727	2,034	2,381	3,156	3,961	4,813	5,720	6,489	7,037	7,313	7,299	7,146	6,331	6,553	1.4%
Along Highway	133	156	182	240	300	362	426	480	516	531	524	507	516	534	1.3%
Keams Canyon	424	497	581	765	955	1,153	1,360	1,531	1,646	1,693	1,671	1,615	1,646	1,704	1.3%
Bacavi/Hotevilla	790	955	1,148	1,604	2,124	2,726	3,425	4,112	4,727	5,218	5,544	5,793	5,905	6,112	2.0%
Kykotsmovi	867	1,046	1,253	1,740	2,286	2,906	3,612	4,283	4,856	5,277	5,511	5,648	5,758	5,959	1.9%
Tawaovi (or Turquoise)	0	26	63	183	374	656	1,059	1,567	2,159	2,798	3,436	4,100	4,178	4,325	4.3%
Moenkopi	1,004	1,221	1,475	2,078	2,765	3,557	4,469	5,354	6,123	6,710	7,061	7,287	7,428	7,689	2.0%
Lower Moenkopi (on Hopi Island)	0	114	157	280	455	699	1,032	1,437	1,892	2,370	2,835	3,313	3,377	3,494	3.1%
Howell Mesa East (on Moenkopi Plateau)	0	5	13	38	78	140	228	342	476	623	772	927	945	978	4.4%
Side Rock Well (on Kaibito Plateau)	0	4	11	33	68	121	196	293	408	534	661	795	811	839	4.4%
Total Village Populations	6,632	8,043	9,583	13,175	17,177	21,736	26,957	32,000	36,407	39,825	41,982	43,573	43,464	44,986	1.9%
Total Rural Population	744	810	984	1,402	1,889	2,466	3,149	3,841	4,481	5,019	5,408	5,728	6,791	7,030	2.1%
Total Population	7,376	8,853	10,567	14,576	19,066	24,202	30,106	35,842	40,888	44,844	47,390	49,301	50,255	52,016	1.9%

* The 100-year growth rate is the average annual growth rate calculated between 2010 and 2110. In cases where there was no recorded population in 2000, the value is calculated between 2015 and 2100.

Appendix 4

Hopi Reservation Water Use Claim from Existing Wells by United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example W011, W for well, 01 for plate number 1, and 1 for number

Uses nomenclature - D for domestic, S for livestock, and M for Municipal

US Label	Name	Plate	Easting	Northing	Use
W011		1	518500	4025870	D/S
W012	1-A70	1	506765	4015570	S
W013	01A-72	1	502183	4011923	D
W014	SIDE ROCK WELL	1	501983	4011800	D/S
W015	01 058-15.75X10.07	1	505984	4013862	S
W021	04K-387	2	539248	4016419	D/S
W022	04-380	2	542209	4022085	D/S
W023	02T-503	2	534499	4025026	D/S
W024		2	522821	4019656	D/S
W031	SAGE BRUSH WELL	3	554960	4028644	D/S
W032	OWL WELL	3	549776	4015802	D/S
W033	ANGRY MAN WELL	3	549720	4016470	D/S
W034	04T-406	3	554271	4019432	D/S
W035	04T-405	3	552369	4025610	D/S
W036		3	549600	4021308	S
W037	4K-380, 362152110204801	3	558550	4024570	D/S
W03HW9	Hopi Well 9	3	552191	4027646	D/M
W041		4	482733	3981130	D/S
W0410	Moenkopi Well #3	4	480325	3997445	M
W0411	Moenkopi "C" Well	4	481349	3995828	M
W0412	Moenkopi Well #2	4	480403	3997465	M
W042		4	486893	3982941	D/S
W043		4	481270	3988189	D/S
W044		4	492482	3990175	D/S
W045		4	479928	3996972	D/S
W046	Moenkopi Well #1	4	480515	3997464	D/S
W047	CRATER WELL	4	478990	3993318	D/S
W048	No name 1	4	483638	3995026	S
W0510		5	520906	3988841	S
W0511	JUA2-8-844B	5	521500	3991245	D/S
W0512	03K-344	5	517695	3992500	D/S
W0513	03M-156	5	511941	3994000	D/S
W0514		5	514848	3997227	D/S
W052	NEW WELL	5	508250	4011309	D/S
W053	NADSAT IT-239	5	506754	4007304	D
W054	JUA2-7-345	5	509682	4001053	D/S
W055	BLUE CYN WELL	5	511081	4001023	D/S
W056	2/7/01	5	504989	3998432	S
W057	03K-345	5	508461	3997138	D/S
W058	03K-330	5	503739	3992606	D/S
W059	TOH HA HA CLAH	5	521967	3984530	D/S
W061	04K-391	6	526202	3999977	D/S
W0610	04M-138	6	527304	3996923	D/S
W0611		6	536656	3986243	D/S
W062	4T-515	6	527711	4001600	D/S
W063	2/11/01	6	535750	3999518	D/S
W064	04K-384	6	535637	4002691	D/S
W065	BENALLY WELL	6	543514	4006394	D/S
W066	JUA2-5-1	6	541999	4009683	D/S
W067	H-3-NO-3	6	533674	3987094	D/S
W068		6	525858	3989624	D/S
W069	HK-383	6	528643	3994901	D/S

Hopi Reservation Water Use Claim from Existing Wells by United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example W011, W for well, 01 for plate number 1, and 1 for number

Uses nomenclature - D for domestic, S for livestock, and M for Municipal

US Label	Name	Plate	Easting	Northing	Use
W071	4T-395	7	551579	4006530	D/S
W073	04M-89A	7	550485	3992751	D/S
W074	04M-87	7	557380	3986447	D/S
W075	ROUGH NECK WELL	7	561297	3988229	D/S
W076	4M-89	7	550052	3992728	D/S
W077	TURQUOISE TRAIL	7	546174	3989773	D/S
W078	06-1H4	7	548457	3984144	D/S
W081	03M-176A	8	502324	3979356	D/S
W0810	06H-55	8	518105	3978076	D/S
W0811		8	511736	3978534	S
W0812	03K-311	8	516713	3982855	D/S
W0813	SWEET WATER WELL	8	505788	3957640	D/S
W0814	03A-153	8	501318	3960965	D/S
W0815	MOENKOPI MONUMEN	8	503224	3965001	D/S
W0816	3K-320	8	505958	3965865	D/S
W0817	3M-175	8	502370	3969438	D/S
W0818	06M-44	8	516502	3961781	D/S
W0819	6-11A	8	517554	3967497	D/S
W082	DRY WELL	8	509360	3978514	D/S
W0821	6-3BP3	8	513030	3957157	S
W0822	06K-321	8	515058	3956970	D/S
W0823	06-3BP1	8	511708	3961321	S
W0824	06M-50	8	518568	3965562	D/S
W0825	06K-322	8	521096	3967335	D/S
W0826	06M-174	8	515662	3969734	D/S
W0827	3M-176	8	502242	3979419	D/S
W0829	HOTVL COMMUNITY/PM3	8	522123	3982189	M
W083	03K-332	8	507780	3976681	D/S
W084	BEETSO WELL	8	506536	3973195	D/S
W085	03T-500	8	505448	3979575	S
W086	N HOCK SPRING WE	8	507476	3971144	S
W087		8	521644	3978195	D/S
W088	H-3WD2	8	512072	3971479	S
W089	06M-183A	8	514045	3975826	D/S
W091	06M70	9	525397	3976036	D/S
W0910	06M-52A	9	532874	3965080	D/S
W0911	06-3-503	9	529384	3967576	S
W0912	FLUTE WELL	9	532033	3969870	D/S
W0913	06M-302B	9	534545	3969228	D/S
W0914	06M-302A, Kykotsmovi PM2/Hopi Tribal Well	9	533289	3969682	S
W0915	6K-305-95	9	538129	3957817	D/S
W0916	6K-309A	9	529810	3975111	D/S
W0918		9	532517	3971545	D
W0919		9	532523	3971521	D
W092		9	530506	3976823	D/S
W0920		9	532620	3971369	D
W0921		9	523527	3971547	D
W0922	6M-61	9	540263	3977758	D/S
W0923	6-NO1	9	537353	3976964	D/S
W0924	6H-32, Toreva P. S.	9	544490	3961416	M
W0926	6K-302, Oraibi D. S.	9	534465	3970306	M
W0927	6M-35, 354647110390201	9	531520	3959573	S

Hopi Reservation Water Use Claim from Existing Wells by United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example W011, W for well, 01 for plate number 1, and 1 for number

Uses nomenclature - D for domestic, S for livestock, and M for Municipal

US Label	Name	Plate	Easting	Northing	Use
W0928	USPHS ORAI	9	534591	3970152	D
W0929	Shongopovi	9	542433	3962665	M
W093	06M-60	9	537435	3973768	D/S
W0930	Kykotsmovi PM1/Yoyokie Well	9	534654	3970152	M
W0931	Kykotsmovi PM3/ Hopi Day School Well	9	534979	3970338	M
W0932	Hopi Cultural Center	9	542719	3966829	M
W0933	Hotevilla PM1/Hotevilla School Well 1	9	530092	3975521	M
W0934	Hotevilla PDC2/School Well 2	9	529947	3975403	M
W0935	Hotevilla Village Well	9	530172	3975558	M
W0936	Hotevilla 2004-1	9	529350	3974166	M
W0937	Bacavi/Bacabi	9	530177	3974993	M
W0938	Hopi Civic Center/Vet Center	9	538946	3969246	M
W094	06M-64	9	536591	3982270	D/S
W095	06M-46	9	524042	3958102	D/S
W096		9	526126	3959257	D/S
W097	06K-261	9	531269	3959418	D/S
W098		9	522980	3961087	S
W099	06K-310	9	527111	3964519	D/S
W1010	06PW5	10	545233	3958555	D/S
W1011	6H-15	10	550284	3962279	D/S
W1012	06-1F7	10	553992	3962796	D/S
W1013	6-1H1	10	551946	3965554	D/S
W1014	SUNLIGHT MISSION	10	546994	3962723	D
W1015	06K-306	10	560100	3961970	D/S
W1016	06M-07	10	556625	3963765	D/S
W1017	FLOWING WELL	10	558727	3964673	D/S
W1018	06K-301	10	556811	3966016	D/S
W1019	06-1F3	10	566188	3965680	D/S
W102	06-1HS	10	547211	3973754	D/S
W1020	06M-03	10	566527	3965639	D/S
W1021		10	562370	3967470	D
W1022	6K-304	10	547851	3983524	D/S
W1023	6M-10A	10	556616	3965985	D/S
W1025	6M-40	10	547196	3973781	D/S
W1026	6H-2-1	10	553833	3974871	D/S
W1027	6-1-H7/RUIN WELL, 355727110275601	10	548157	3979366	D/S
W1028	6K-303	10	550683	3962805	M
W1029	6M-10, 6-1F6/6M-10, 355013110221301	10	556811	3966046	D/S
W1033	No name 3	10	554219	3968445	S
W1034	No name 4	10	559414	3967090	D/S
W1035	No name 5	10	552414	3964899	D/S
W1036	Polacca Day School Well	10	555322	3965328	M
W1037	Polacca #6	10	553351	3963405	M
W1038	Keams Canyon #2	10	562478	3966393	M
W1039	Hopi High School #1	10	562434	3963711	M
W104		10	552188	3980267	D/S
W1040	Hopi High School #3	10	563005	3964547	M
W1041	Lower Sipaulovi #1	10	545507	3961328	M
W1042	Second Mesa Day School 1/Toreva Well	10	545154	3961573	M
W1043	Sipaulovi-Mishongnovi Well #1	10	545751	3962716	M
W1044	Polacca #5	10	553251	3963312	M
W1045	W1027, A-28-18 11AAD, Polacca #8	10	557089	3967234	M

Hopi Reservation Water Use Claim from Existing Wells by United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example W011, W for well, 01 for plate number 1, and 1 for number

Uses nomenclature - D for domestic, S for livestock, and M for Municipal

US Label	Name	Plate	Easting	Northing	Use
W1046	Keams Canyon #3	10	562401	3966731	M
W1047	Hopi High School #2	10	562682	3964145	M
W1048	Second Mesa Day School 2	10	545155	3961542	M
W1049	06 094 10.78 11.20	10	548848	3961868	D/S
W105	06M-66	10	563249	3970927	D/S
W106	06-1H6	10	556574	3977903	D/S
W107	06K-311	10	565075	3978274	D/S
W108	6H-8	10	559951	3980178	D/S
W109	6K-305-94	10	549739	3956576	D/S
W1111	NO. 19	11	587542	3961429	D/S
W1112	07H-26	11	584606	3963866	D/S
W1113	07K-364	11	580788	3964292	D/S
W1114	07K-371	11	589434	3965454	D/S
W1115	#18 (A8)	11	585048	3967537	D/S
W1116	#20	11	585247	3970342	D/S
W1117	07H-37	11	587203	3957214	D/S
W1118		11	573820	3962654	D/S
W112	06M-80	11	567974	3974627	D/S
W1120	4T-385	11	571651	3976476	D/S
W1121	7P-387	11	578422	3978752	D/S
W1122	4M-79	11	574713	3979213	D/S
W1123	6K-85	11	573019	3962930	D/S
W1124	6M-1	11	571933	3963784	D/S
W1125	6P-400	11	572082	3963970	D/M
W1126	KEAMS PDC 1	11	570905	3963653	D
W1127	KEAMS PDC 2	11	573219	3963025	D/M
W113		11	578467	3981100	S
W115	61F9	11	568348	3956854	D/S
W116	61F8	11	576261	3962526	D
W117	6-1F10	11	576097	3965879	D/S
W118	06M-02	11	569352	3966238	D/S
W119	06K-320	11	571311	3969252	S
W121	06M-45	12	521033	3956246	D/S
W1210		12	514123	3946488	D/S
W1211	5T-500	12	513039	3949399	D/S
W1212	No name 6	12	516328	3943102	S
W122	SAND VALLEY WELL	12	501018	3945898	S
W123	RED ROCK SP/WELL	12	511303	3943029	D/S
W124	WIDE DAM #5-11	12	508811	3943099	D/S
W125	SALT	12	511635	3949834	D/S
W126	SWEET WTR WELL	12	511644	3949836	D/S
W127	06K-310(N)	12	515395	3949395	D/S
W128	06H-79	12	518183	3949985	D/S
W129	3A-154	12	501636	3954557	D/S
W1310	06M-29	13	543248	3953738	D/S
W1312	05K-330	13	528988	3935165	D/S
W1313	5K-300	13	526295	3935095	D/S
W1314		13	522710	3935794	D/S
W1315	06-2B5	13	532184	3938409	D/S
W1316	06M-25	13	536187	3942134	D/S
W1317	6K-307	13	522703	3955757	D/S
W1318		13	539646	3955881	D/S

Hopi Reservation Water Use Claim from Existing Wells by United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example W011, W for well, 01 for plate number 1, and 1 for number

Uses nomenclature - D for domestic, S for livestock, and M for Municipal

US Label	Name	Plate	Easting	Northing	Use
W132		13	523581	3942882	D/S
W133	06-2B6	13	531442	3953257	S
W134	6K-307	13	522715	3956125	D/S
W135	06M-27	13	538725	3948144	S
W138	06M-26	13	543226	3948007	D/S
W139	06K-304	13	535443	3951578	D/S
W141	06M-17A	14	556436	3951737	D/S
W1410	07K-315	14	552881	3932070	D/S
W1411	07K-302	14	550972	3935090	D/S
W1412	CROWN POINT WELL	14	555944	3936341	D/S
W1413	6-GS-113-1	14	553769	3949908	D/S
W1414	6-GS-113-2	14	549216	3947077	D/S
W1415	7T-503	14	553640	3941448	D/S
W1416	7T-502	14	555410	3940587	D/S
W1417	7T-501	14	557578	3940511	D/S
W142	06-2BB1	14	554620	3956354	D/S
W143	07T-504	14	560310	3945889	D/S
W144		14	566594	3942853	D/S
W145	06H-13	14	559341	3947135	D/S
W146	06H-12	14	562677	3948987	D/S
W147	07H-5A2	14	566506	3947844	D/S
W148	06-1T4	14	559984	3955192	D/S
W149		14	551951	3930913	D/S
W151	7K-355	15	569621	3943745	D/S
W1510	7K-363	15	575445	3945703	D/S
W1511	Spider Mound #1	15	581790	3950043	M
W1512	Spider Mound #2	15	584089	3950454	M
W152	07H-55	15	572833	3949453	D/S
W153		15	574286	3949538	D/S
W154	07H-5A7A1	15	588148	3948553	S
W155	NEW WELL	15	579952	3949117	D/S
W156	07T-519	15	585437	3950508	D/S
W157	GLORIA LABAN	15	587285	3955754	D/S
W158	7T-520	15	576349	3940528	D/S

Number of Wells

242

Use	Count
D/S	172
S	24
D	11
D/M	3
M	32
TOTAL	242

Appendix 5

Hopi Reservation Water Use Claim from Springs by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example S011, S for spring, 01 for plate number 1, and 1 for number

Uses nomenclature - C for cultural, D for domestic, S for livestock, IRR for irrigation, PS for Public Supply

US Label	Name	Plate	Easting	Northing	Use
S011	Smoke Hole Tank	1	513336	4013566	C/D/S
S012	Kai Si Kato	1	517767	4017773	C/D/S
S014	Well Under the Rock	1	517681	4024266	C/D/S
S016	Unnamed	1	501098	4013616	C/D/S
S018	1A-67	1	514682	4016824	C/S
S021	Wet Hole	2	543834	4026978	C/S
S0210	Marked Trail	2	528130	4021798	C/D/S
S0211	Cottonwood	2	526405	4023489	C/S
S0212	Twin Corral	2	531885	4025477	C/S
S0213	Walk A Mile	2	542700	4014854	C/D/S
S0214	Unnamed	2	540649	4020800	C/D/S
S0215	Two Headed Snare	2	536466	4019487	C/D/S
S0216	Cottonwood	2	541364	4020732	C/D/S
S0217	Looking Woman	2	543366	4020906	C/D/S
S0218	Black Horse	2	543072	4021090	C/D/S
S0219	Side Wash	2	537567	4022483	C/D/S
S022	Unnamed	2	524954	4014567	C/D/S
S0220	Narrow Neck	2	538670	4022978	C/D/S
S0221	Gravel Hole	2	541874	4025243	C/D/S
S0222	2A-59	2	540371	4024234	C/D/S
S0224	Red Willow	2	540580	4019378	C/D/S
S023	Unnamed	2	524235	4015439	C/D/S
S024	Blue Moenkopi	2	527170	4012936	C/D/S
S025	Coal Slurry	2	529523	4016543	C/S
S026	Cottonwood	2	531399	4017624	C/D/S
S027	White Sandstone	2	531037	4017961	C/D/S
S028	Dog	2	532148	4020765	C/D/S
S029	Kydestea	2	529432	4020566	C/D/S
S032	Many Sheep	3	552454	4016532	C/D/S
S033	Flat Top Slide	3	548251	4025185	C/D/S
S034	Post	3	552505	4017906	C/D/S
S035	Owl	3	550968	4025205	C/D/S
S036	4M-190A	3	554795	4029046	C/D/S
S037	4M-207	3	551415	4018344	C/D/S
S038	4M-58	3	549403	4016735	C/D/S
S039	S032A	3	552483	4016579	C/D
S-OR-1	Cliff	3	575829	4016733	-
S041	3A-15	4	484408	3994456	C/D/S
S0410	Toh Nee Di Kishi	4	477016	3987308	C/D/S
S0411	Unnamed	4	475617	3993918	C/D/S
S0412	Unnamed	4	477056	3994784	C/D/S/IRR
S0413	Unnamed	4	477143	3994801	C/D/S/IRR
S0414	Unnamed	4	477251	3994804	C/D/S/IRR
S0415	Unnamed	4	480125	3996134	C/D/S/IRR
S0416	Moenkopi School, Susungva	4	480126	3996029	C/D/S/PS/IRR
S0417	Unnamed	4	480163	3996111	C/D/S/PS/IRR
S0418	Unnamed	4	480158	3996037	C/D/S/IRR

Hopi Reservation Water Use Claim from Springs by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example S011, S for spring, 01 for plate number 1, and 1 for number

Uses nomenclature - C for cultural, D for domestic, S for livestock, IRR for irrigation, PS for Public Supply

US Label	Name	Plate	Easting	Northing	Use
S0419	Unnamed	4	480461	3995848	C/D/S/IRR
S042	Seller, Piisave, Piisava	4	477729	3982820	C/D/S
S0420	Unnamed	4	480866	3996826	C/D/S/IRR
S0421	Unnamed	4	480855	3995848	C/D/S/IRR
S0422	Unnamed	4	480935	3995794	C/D/S/IRR
S0423	Unnamed	4	480953	3995779	C/D/S/IRR
S0424	Unnamed	4	481131	3995588	C/D/S/IRR
S0425	Unnamed	4	481450	3995733	C/D/S/IRR
S0426	Unnamed	4	481636	3995757	C/D/S
S0427	Unnamed	4	482116	3995682	C/D/S/IRR
S0428	Unnamed	4	482336	3995624	C/D/S/IRR
S0429	Unnamed	4	482537	3995434	C/D/S
S043	3A-25	4	477971	3980889	C/D/S
S0430	Unnamed	4	482543	3995442	C/D/S
S0431	Unnamed	4	482572	3995422	C/D/S
S0432	Unnamed	4	482697	3995382	C/D/S
S0433	Unnamed	4	482755	3995382	C/D/S
S0434	Unnamed	4	482447	3994780	C/D/S/IRR
S0435	Unnamed	4	482821	3995339	C/D/S
S0436	Unnamed	4	482944	3995386	C/D/S
S0437	Unnamed	4	483309	3995305	C/D/S
S0438	Unnamed	4	483373	3995312	C/D/S
S0439	Unnamed	4	483408	3995305	C/D/S
S0440	Unnamed	4	483467	3995245	C/D/S
S0441	Unnamed	4	483565	3995206	C/D/S
S0442	Unnamed	4	484089	3995334	C/D/S
S0443	Unnamed	4	484636	3995628	C/D/S
S0444	Unnamed	4	484768	3995658	C/D/S
S0445	Unnamed	4	484757	3995599	C/D/S
S0446	Unnamed	4	485537	3996095	C/D/S
S0447	Unnamed	4	485067	3995929	C/D/S
S0448	Unnamed	4	485100	3995941	C/D/S
S0449	Ironwood, Otopsapva	4	484590	3993988	C/D/S
S0450	Unnamed	4.1	481677	4002233	C/D/S/IRR
S0451	Unnamed	4.1	481577	4002151	C/D/S/IRR
S0452	Unnamed	4.1	481641	4002366	C/D/S/IRR
S0453	Unnamed	4.1	481755	4002482	C/D/S/IRR
S0454	Unnamed	4.1	481800	4002544	C/D/S/IRR
S0455	Unnamed	4.1	481852	4002584	C/D/S/IRR
S0456	Unnamed	4.1	481807	4002713	C/D/S/IRR
S0457	Unnamed	4.1	481879	4002858	C/D/S/IRR
S0458	Unnamed	4.1	481876	4002930	C/D/S/IRR
S0459	Unnamed	4.1	482020	4003316	C/D/S/IRR
S046	3-GS-77-6	4	480162	3996047	C/D/S
S0460	Unnamed	4.1	482048	4003207	C/D/S/IRR
S0461	Unnamed	4.1	482055	4003261	C/D/S/IRR
S0462	Unnamed	4.1	482060	4003305	C/D/S/IRR

Hopi Reservation Water Use Claim from Springs by the United States

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US Label	Name	Plate	Easting	Northing	Use
S0463	Unnamed	4.1	482048	4003357	C/D/S/IRR
S0464	Unnamed	4.1	482074	4003426	C/D/S/IRR
S0465	Unnamed	4.1	482138	4003409	C/D/S/IRR
S0466	Unnamed	4.1	482226	4003668	C/D/S/IRR
S0467	Eagle Nest, Talakwava	4.1	482278	4004373	C/D/S
S0468	Unnamed 01	4.1	482017	4003318	C/S/IRR
S0468A	Spring 1	4.1	482013	4003182	C/S/IRR
S0469	Unnamed 02	4.1	481850	4002921	C/S/IRR
S047	Unnamed	4	475648	3993697	C/D/S
S0470	Unnamed 03	4.1	481815	4002898	C/S/IRR
S0471	Unnamed 04	4.1	481565	4001112	C/S/IRR
S0472	Unnamed 05	4.1	481578	4000972	C/S/IRR
S0473	Unnamed 06	4.1	481433	4000744	C/S/IRR
S0474	Unnamed 07	4	478882	3996601	C/S
S0475	Unnamed 08	4	478817	3996490	C/S
S0476	Unnamed 09	4	478288	3996400	C/S
S0477	Unnamed 10	4	481274	3994905	C/S/IRR
S0478	Unnamed 11	4	478205	3995048	C/S
S0479	Unnamed 12	4	475585	3993946	C/S
S048	Unnamed	4	476342	3994386	C/D/S
S0480	Unnamed 13	4	475580	3993926	C/S
S0481	Unnamed 14	4	486714	3993647	C/S
S0482	Culvert Sping	4	480889	3998327	-
S049	Tonali	4	478048	3984250	C/D/S
S051	Nee De Miso Bito	5	500855	4010110	C/S/IRR
S0510	Muddy Water	5	504987	3996211	C/D/S
S0511	Nez	5	506366	3990821	C/D/S
S0512	Badger, Honanva, Upper Badger	5	512077	3988840	C/D/S
S0513	Lower Badger	5	511997	3989101	C/D/S
S0515		5	521421	3992847	C/D/S
S0516	Log Crib	5	522122	3993432	C/D/S
S0517	Shale	5	520715	3995495	C/D/S
S0518	Willow	5	519362	3996663	C/D/S
S0519	1A-70	5	505339	4011544	C/D/S
S052	Nee De Miso Bito	5	500861	4009736	C/D/S/IRR
S0520	1A-79	5	517811	4010659	C/D/S
S0521	1A-82	5	509684	4001888	C/D/S
S0522	Muddy Water	5	504212	3996819	C/D/S
S0523	Bat	5	513690	3986979	C/D/S
S0524	Unnamed A (4 Sheep)	5	514524	4002672	C/S
S0525	Unnamed B (4 Sheep)	5	514497	4002624	C/S
S053	Bitter	5	508922	4010294	C/D/S
S054	Cold Water	5	501979	4005258	C/D/S
S055	Sand	5	506283	4002775	C/D/S
S056	Wildhorse	5	511039	3999949	C/D/S
S057	4 Sheep	5	514552	4002415	C/D/S
S058	Base of Cottonwood	5	517440	4007596	C/D/S

Hopi Reservation Water Use Claim from Springs by the United States

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ID nomenclature example S011, S for spring, 01 for plate number 1, and 1 for number

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US Label	Name	Plate	Easting	Northing	Use
S059	Round Rock	5	506312	3996983	C/D/S
S061	Unnamed	6	523836	3997874	C/D/S
S0610	Horse Thief	6	524600	4009616	C/D/S
S0611	Cliff Dwelling	6	533707	4004471	C/D/S
S0612	Horse	6	537977	4004766	C/D/S
S0613	Narrow Ledge	6	533817	4008199	C/D/S
S0614	Big Mountain, Big Mountain Ruin	6	541906	4008419	C/D/S
S0615	Sweet Water	6	536881	4009999	C/D/S
S0616	Kinni Taah Well	6	536693	4010265	C/D/S
S0617	Ba Ha Zohnnie Bito	6	533641	3989004	C/D/S
S0618	Bobcat	6	525069	3985401	C/D/S
S0619	Salt Seep	6	527929	3985691	C/D/S
S062	Hand Built	6	524758	3997940	C/D/S
S0620	Dove	6	528269	3986452	C/D/S/IRR
S0621	Sunlight	6	528570	3986459	C/D/S
S0622	Wash Ruins	6	529042	3987601	C/D/S/IRR
S0623	Cottonwood, White Cave	6	531411	3988388	C/D/S
S0624	Ba Ha Zohnnie Bito	6	533692	3988973	C/D/S
S0625	Tis-Ya-Toh	6	524875	3992209	C/D/S
S0626	Tochai	6	535296	3988178	C/D/S
S0627	Toh Ah Honnie Betoh	6	534505	3992150	C/D/S
S0628	1A-80A	6	523294	4008895	C/D/S
S0630	4M-142	6	533513	3992078	C/D/S
S0631	4M-145	6	534157	4004228	C/D/S
S0632	4M-146	6	533352	4005194	C/D/S
S0633	4M-66	6	534157	4008493	C/D/S
S0634	4T-519/BM OBS 5	6	543992	3985753	C/D/S
S0635	Toh-Ah-Chi	6	530587	3997966	C/D/S
S0636	Toh Honi Ni Toh, Honie	6	534351	3992217	C/D/S
S0637	4M-138	6	527139	3997188	C/D
S064	Nakai Yazzie	6	529278	3999463	C/D/S
S065	Cottonwood	6	525072	4001669	C/D/S
S066	Danger	6	531831	4005080	C/D/S
S067	Sand	6	530226	4007046	C/D/S
S068	2 Sheep	6	524534	4006504	C/D/S
S069	Many Fast Drip	6	523786	4005978	C/D/S
S071	Big Mountain	7	547074	4008446	C/D/S
S0710	4M-105A	7	561286	3985705	C/D/S
S0711	6K-314	7	553642	3985866	C/D/S
S0712	6K-315	7	553320	3984659	C/D/S
S0713	6M-130	7	554124	3987475	C/D/S
S0714	4M-130	7	547670	3986229	C/D/S
S072	Hastiin Akahibito	7	561465	3985796	C/D/S
S073	Crooked Finger	7	561478	3987399	C/D/S
S074	Unnamed	7	561453	3987522	C/D/S
S075	Under Rock	7	562271	3988513	C/D/S

Hopi Reservation Water Use Claim from Springs by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example S011, S for spring, 01 for plate number 1, and 1 for number

Uses nomenclature - C for cultural, D for domestic, S for livestock, IRR for irrigation, PS for Public Supply

US Label	Name	Plate	Easting	Northing	Use
S077	Rough Rock	7	561667	3989002	C/D/S
S078	4GS-74-1	7	546239	4001154	C/D/S
S079	4M-103	7	562493	3988280	C/D/S
S081	JUA-5B-1-332	8	510392	3970922	C/D/S
S0810	Sweetwater	8	505151	3957383	C/D/S
S082	Unnamed	8	510160	3976498	C/D/S
S083	Perhoobah	8	502817	3981422	C/S
S084	Unnamed	8	521697	3978218	C/D/S
S085	Dinnebito	8	508034	3961417	C/D/S
S086	Hock	8	508365	3967593	C/D/S
S088	6M-45	8	521021	3957583	C/D/S
S089	Red Clay	8	520615	3969497	C/D/S/IRR
S091	Mumurva, Monusva	9	528057	3971172	C/D/S/IRR
S0910	Stinkbug, Hohoyawva	9	542152	3962236	C/D/S
S0911	Grooming, Naftakinva	9	542974	3962524	C/D/S
S0912	Brown Rock	9	542176	3962575	C/D/S
S0913	White Hall (1 of 2), Qotsatspelvi, Tuyqava, W	9	542543	3963089	C/D/S/IRR
S0914	White Hall (2 of 2), Qotsatspelvi, Tuyqava, W	9	542553	3963128	C/D/S/IRR
S0915	Unnamed	9	543202	3963135	C/D/S
S0916	Corner, Popsova	9	542614	3963475	C/D/S/IRR
S0917	Sueiva	9	542525	3963474	C/D/S/IRR
S0918	Bluebird, Tsorva	9	541694	3963651	C/D/S
S0919	Shaded	9	543022	3963904	C/D/S
S092	Hooui-Pa , Dove	9	530942	3973959	C/D/S
S0920	6H-24	9	544476	3965437	C/D/S
S0921	Dove, Howiipa	9	541924	3965265	C/D/S
S0922	Cave	9	539844	3967463	C/D/S
S0924	Ruins	9	542851	3967999	C/D/S
S0925	Kucha'va, White, Ruins	9	542909	3968193	C/D/S
S0927	Ho'onawpa, Bear	9	525734	3975941	C/D/S
S0928	Unnamed	9	528315	3972346	C/D/S
S0929	Siwukva	9	528761	3973260	C/D/S
S093	Bacavi, Paaqavi	9	530656	3975401	C/D/S/IRR
S0930	Unnamed	9	532441	3976489	C/D/S
S0931	Unnamed	9	529973	3976340	C/D/S/IRR
S0932	Unnamed	9	533821	3971412	C/D/S
S0933	Unnamed	9	540352	3980905	C/D/S
S0934	Gray, Masiipa	9	543196	3961887	C/D/S/IRR
S0935	Lomova	9	543196	3961886	C/D/S/IRR
S0936	Songoopa, Sand Grass	9	543090	3962365	C/S
S0937	Reservoir	9	532315	3970188	C/D/S
S0938	Iskasokpu, Burping Coyote	9	542557	3965030	C/D/S
S094	Unnamed	9	532412	3976398	C/D/S
S0940	6M-59 or Siwukva	9	529374	3972839	C/S
S0941	6M-72A	9	530759	3975373	C/S

Hopi Reservation Water Use Claim from Springs by the United States

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US Label	Name	Plate	Easting	Northing	Use
S0942	S01056A	9	545039	3963608	C/S
S0943	Unnamed 15	9	530696	3975362	C/S/IRR
S0944	06 095 - 06.62 X 08.52	9	534460	3970214	C/S
S0945		9	544894	3964091	C/D/S/IRR
S095	Hotevilla	9	529406	3976057	C/D/S/IRR
S096	Unnamed	9	542716	3975364	C/D/S
S098	06M-63	9	532821	3980867	C/D/S
S101	Goat	10	545266	3976547	C/D/S
S1010	Sand, Pisava	10	558258	3974868	C/D/S
S1012	Donkey	10	559395	3977186	C/D/S
S1013	Manure	10	563206	3979757	C/D/S
S1014	06H-12	10	561004	3980093	C/D/S
S1015	Cat	10	566663	3982178	C/D/S
S1016	Lemova	10	546611	3962413	C/D/S/IRR
S1017	Toreva, TwistedCurve	10	545284	3962452	C/D/S
S1019	Aqwda	10	545580	3964254	C/D/S
S102	Ceremonial Flute, Leenagwva	10	556154	3974958	C/D/S
S1020	Aqiva, Asuva, Ausuivi, Asayva	10	545576	3964862	C/D/S
S1021	Twapa, Sun	10	555161	3965339	C/D/S
S1022	South, Sour, Teveckya	10	554543	3966229	C/D/S
S1023	Spider, Kohkyangwva	10	554573	3966439	C/D/S
S1024	Coyote, Isva	10	555589	3966155	C/D/S/IRR
S1025	Flower, Wuko'kwantukwi, Siipa	10	556265	3966828	C/D/S/IRR
S1026	Bean, Morvia	10	556149	3969907	C/D/S/IRR
S1027	Chief, Monwisva	10	565277	3957663	C/D/S
S1028	Buhu Va	10	563145	3960944	C/D/S
S1029	06M-04	10	566180	3961213	C/S
S103	Onion	10	546295	3983831	C/D/S
S1030	Sacatone, Weekebe	10	567248	3964931	C/D/S
S1031	Weni Bah, Wingva, Wiinpa, Standing Water	10	560998	3970080	C/D/S/IRR
S1032	Skull	10	561259	3975751	C/D/S
S1033	6H-1	10	554419	3966344	C/D/S
S1034	6H-17	10	546616	3962643	C/D/S
S1035	6H-20	10	545326	3962643	C/D/S
S1036	6H-6	10	556672	3970207	C/D/S/IRR
S1037	6H-7	10	558120	3974954	C/D/S/IRR
S1038	6K-310S	10	545384	3982559	C/D/S
S1039	6M-12	10	565285	3959503	C/D/S
S104	Sheep, Kanelva	10	557184	3970362	C/D/S/IRR
S1040	6M-302A	10	556833	3970287	C/D/S
S1044	6M-9	10	554660	3962965	C/D/S
S1045	6-F-1	10	561073	3966414	C/D/S
S1046	6K-305-94	10	554132	3957181	C/D/S
S1047	Harry K.	10	545949	3978073	C/D/S
S1048	Unnamed	10	553850	3970619	C/D/S
S1049	Sand	10	558237	3977172	C/D/S

Hopi Reservation Water Use Claim from Springs by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example S011, S for spring, 01 for plate number 1, and 1 for number

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US Label	Name	Plate	Easting	Northing	Use
S105	Sand Hill, Parveckpah	10	558853	3971975	C/D/S/IRR
S1050	Monowopsa,Owl Corner	10	566692	3968995	C/D/S
S1051	New Water	10	551737	3968296	C/S
S1052	Big Water, Wokokova	10	550765	3968334	C/S/IRR
S1053	Sand Water	10	556071	3968590	C/S/IRR
S1054	Anapolva	10	553991	3964905	C/D/S/IRR
S1055	Many Wind Water, Hucatwebah	10	553576	3957947	C/D/S
S1056	Jucqa-va,Motsifyahoyvi	10	545190	3963396	C/D/S
S1057	Driftwood,Talauva,	10	545260	3963737	C/D/S
S1058	Hoecevi	10	545470	3965098	C/S
S1059	Unnamed	10	567035	3965662	C/S
S106	WepoSouth, Cottonwood, Cohoivaka	10	556938	3971976	C/D/S/IRR
S1060	6H-26, Suvebi	10	567357	3964213	C/S
S1061	6H-26A	10	567437	3963891	C/S
S1062	Unnamed	10	564621	3962523	C/S
S1063	Unnamed	10	565345	3963167	C/S
S1064	6M-5	10	563575	3961719	C/D/S
S107	Wepo, Wipho, Cattail, Reed	10	557189	3972104	C/D/S/IRR
S108	Unnamed	10	557732	3972631	C/D/S/IRR
S109	Fly	10	560480	3972418	C/D/S
S111	06M-82	11	574887	3972780	C/D/S
S1110	Unnamed	11	569830	3962865	C/D/S/IRR
S1111	Baptist Church	11	572462	3963542	C/D/S
S1112	Chili	11	573223	3962729	C/D/IRR
S1113	06K-01S	11	574080	3962638	C/D/PS
S1114	Unnamed	11	574975	3963061	C/D/S
S1115	06K-02S	11	575211	3963357	C/D/S
S1116	06K-03S	11	575313	3963415	C/D
S1117	06K-14S	11	575725	3963623	C/D
S1118	06K-13S	11	575835	3963713	C/D
S1119	06K-07S	11	576937	3964741	C/D/S
S112	Unnamed	11	571528	3971833	C/D/S
S1120	Unnamed	11	574045	3966359	C/D/S
S1121	06K-308S	11	574890	3967321	C/S
S1122	Byron Adams, Fadairs	11	577013	3968356	C/D/S
S1123	06A-21A	11	576456	3969117	C/D/S
S1124	06A-24	11	570622	3967656	C/S
S1126	07H-27	11	587280	3963130	C/D/S
S1127	07H-27A	11	587195	3963552	C/D/S
S1128	Keams Canyon	11	575143	3963510	C/D/S
S1129	Echo	11	575729	3972872	C/D/S
S1130	Unnamed	11	570439	3967750	C/D/S
S1131	Unnamed	11	570533	3965040	C/D/IRR
S1132	Unnamed	11	571845	3963817	C/D
S1134	Unnamed	11	575659	3975196	C/S
S1135	D.Lalo	11	576934	3969565	C/D/S

Hopi Reservation Water Use Claim from Springs by the United States

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US Label	Name	Plate	Easting	Northing	Use
S1136	6H-11	11	568083	3983325	C/D/S
S1137	6K-11S	11	575888	3964013	C/D
S1138	6K-12S	11	575808	3963932	C/D
S1139	6K-4S	11	574699	3963569	C/S
S114	Unnamed	11	575241	3973124	C/D/S
S1140	6K-8S	11	572267	3962886	C/D
S115	07H-06	11	586835	3973698	C/D/S
S116	Unnamed	11	568751	3959938	C/D/S
S117	Unnamed	11	569023	3960464	C/D/S
S118	Bluebird, Tsorva	11	568464	3960821	C/D/S/IRR
S119	Nu'vatotshba, Snowbird	11	569991	3962591	C/D/S/IRR
S121	Salt Water	12	511591	3949811	C/D/S
S1210	5M-73	12	510470	3949651	C/D/S
S1211	Tishepi	12	504446	3949760	C/D/S
S1212	Unnamed	12	504669	3945670	C/D/S
S1213	Unnamed	12	511960	3950216	C/D/S
S1214	S0124A, Ram Well Project #5-4-1	12	506198	3953129	C/S
S1215	S0125A	12	506221	3953132	C/S
S122	Sand	12	506364	3952663	C/D/S/IRR
S123	Sand (multiple)	12	506349	3952682	C/D/S/IRR
S126	Dvas, Drag	12	503606	3953176	C/D/S
S127	Whiskey	12	505437	3955791	C/D/S/IRR
S128	05M-04	12	505639	3955421	C/S/IRR
S129	Unnamed	12	511822	3950059	C/D/S
S131	Shonto	13	523078	3948047	C/D/S
S1310	6M-54	13	523084	3947988	C/D/S
S1311	Rock Ledge, Phillips Farm	13	540287	3947409	C/D/S/IRR
S1312	Pautsvi, Burro2	13	527501	3950572	C/S
S132	06M-33	13	525882	3947711	C/D/S
S133	06M-32	13	527145	3949709	C/D/S
S134	Burro, Honani, New Pa'utsv	13	527740	3950571	C/S
S135	Unnamed	13	528024	3950866	C/D/S
S136	Coyote	13	539432	3945576	C/D/S/IRR
S137	Unnamed	13	540993	3946827	C/D/S/IRR
S138	Little Burro	13	538834	3948185	C/S
S139	6-2B-4-8	13	529988	3944688	C/D/S
S141	Ponsi Adams	14	561353	3952830	C/D/S
S1410	Ram	14	563666	3931985	C/D/S
S1411	Shontah	14	564087	3934176	C/D/S
S1412	Bell Butte #2	14	559259	3935616	C/D/S
S1413	Horse	14	561745	3936749	C/D/S
S1414	BelleButte	14	559227	3935616	C/D/S
S1415	6M-38	14	549988	3943453	C/D/S
S1416	Trickle, Yatacaka	14	564920	3954397	C/D/S/IRR
S1417	Hail, Lemova	14	565997	3955454	C/D/S/IRR
S1418	BelleButte#3	14	559213	3935638	C/D/S
S142	Awat ovi	14	565259	3953511	C/D/S

Hopi Reservation Water Use Claim from Springs by the United States

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US Label	Name	Plate	Easting	Northing	Use
S143	Talahogan	14	565423	3954783	C/D/S/IRR
S144	Kalbito #2	14	551875	3930899	C/D/S
S145	Kalbito #1	14	551863	3931146	C/D/S
S146	Comar	14	552922	3932018	C/D/S
S147	Seba Delkai	14	553941	3937898	C/D/S
S148	Lukai	14	559127	3931137	C/D/S
S149	Wolf Pass	14	560570	3931514	C/D/S
S151	Cow	15	589422	3950572	C/D/S

Number of Springs

379

Uses	Count
C/D/S	241
C/D/S/IRR	72
C/S	37
C/D	9
C/S/IRR	13
C/D/PS	1
C/D/S/PS/IRR	2
C/D/IRR	2
Not Specified	2
TOTAL	379

Appendix 6

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I011	1	514529	4013605	1.623	3.081	STOCK
I0110	1	521546	4020647	1.039	1.853	STOCK
I0111	1	517543	4024519	1.057	1.890	STOCK
I0112	1	512691	4018951	0.449	0.712	STOCK
I0113	1	518982	4019335	0.669	1.122	STOCK
I0114	1	521942	4020003	1.107	1.992	STOCK
I0115	1	522106	4018268	0.903	1.580	STOCK
I0116	1	521596	4023304	1.336	2.468	STOCK
I0117	1	519990	4017748	0.831	1.437	STOCK
I0118	1	511620	4015500	0.713	1.207	STOCK
I0119	1	520661	4019326	1.051	1.878	STOCK
I012	1	504775	4015241	0.554	0.905	STOCK
I0120	1	520533	4018906	1.151	2.083	STOCK
I0121	1	517115	4017899	0.679	1.141	STOCK
I0122	1	521695	4012797	0.983	1.740	STOCK
I0123	1	514343	4013013	1.084	1.945	STOCK
I0124	1	516156	4021236	0.395	0.616	STOCK
I0125	1	521766	4015194	1.077	1.931	STOCK
I0126	1	519721	4013692	0.752	1.282	STOCK
I0127	1	502780	4012053	0.354	0.543	STOCK
I0128	1	503159	4012660	0.329	0.500	STOCK
I0129	1	503239	4012892	0.334	0.508	STOCK
I013	1	519308	4027264	0.584	0.961	STOCK
I0130	1	505105	4012664	1.123	2.025	STOCK
I0131	1	504954	4012549	1.045	1.866	STOCK
I0132	1	504135	4012034	1.604	3.040	STOCK
I0133	1	508207	4012029	0.292	0.436	STOCK
I0134	1	522326	4017614	0.434	0.686	STOCK
I0135	1	503786	4013969	0.327	0.496	STOCK
I014	1	520950	4027500	0.777	1.331	STOCK
I015	1	517380	4013540	1.793	3.452	STOCK
I016	1	508255	4013416	1.230	2.246	STOCK
I017	1	505317	4016768	0.695	1.172	STOCK
I018	1	520459	4025634	0.779	1.335	STOCK
I019	1	503773	4013907	0.322	0.488	STOCK
I0210	2	538714	4017863	0.525	0.851	STOCK
I0211	2	524378	4013403	0.758	1.294	STOCK
I0212	2	524060	4019393	0.848	1.470	STOCK
I0213	2	524038	4019304	0.635	1.057	STOCK
I0214	2	525663	4016707	0.545	0.888	STOCK
I0215	2	523106	4015645	1.028	1.831	STOCK
I0216	2	534516	4025077	0.034	0.038	STOCK
I0217	2	524512	4017811	2.642	5.369	STOCK
I0218	2	539150	4016441	0.096	0.123	STOCK
I0219	2	525563	4024896	0.413	0.648	STOCK
I022	2	524892	4013603	0.677	1.137	STOCK
I023	2	522807	4016795	1.458	2.727	STOCK
I024	2	543630	4022654	1.010	1.795	STOCK
I025	2	523242	4018245	0.522	0.846	STOCK
I026	2	523437	4018138	0.459	0.730	STOCK
I027	2	525805	4024323	0.721	1.222	STOCK
I028	2	522573	4017787	0.496	0.798	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I029	2	525660	4024897	0.120	0.158	STOCK
I031	3	554785	4017852	0.493	0.792	STOCK
I0311	3	552383	4027872	1.275	5.610	STOCK
I0312	3	556319	4029849	1.033	2.479	STOCK
I0314	3	552417	4028211	0.783	1.879	STOCK
I0315	3	555162	4023546	0.562	0.920	STOCK
I0316	3	560522	4031242	0.941	1.655	STOCK
I0317	3	552237	4022308	0.442	0.700	STOCK
I0318	3	554300	4019484	0.060	0.072	STOCK
I0319	3	549796	4015822	0.140	0.189	STOCK
I032	3	551594	4012610	0.683	1.149	STOCK
I0320	3	554329	4024986	3.830	8.198	STOCK
I0321	3	560909	4030830	2.670	5.434	STOCK
I0322	3	560791	4028362	0.141	0.190	STOCK
I0323	3	552212	4027752	0.336	1.075	STOCK
I0324	3	560242	4027043	0.758	1.294	STOCK
I0325	3	553250	4026706	0.766	1.309	STOCK
I0326	3	552787	4028890	0.709	1.702	STOCK
I0327	3	553576	4028751	0.277	1.994	STOCK
I0328	3	553691	4028616	1.099	7.913	STOCK
I0329	3	553960	4028580	1.110	1.332	STOCK
I033	3	551543	4012985	0.441	0.698	STOCK
I0330	3	554222	4028573	1.016	4.470	STOCK
I0331	3	554491	4028653	0.677	1.137	STOCK
I0332	3	554687	4028734	0.782	1.341	STOCK
I0333	3	556059	4029700	0.249	0.363	STOCK
I034	3	550063	4021049	0.968	1.710	STOCK
I035	3	552078	4020798	2.027	3.970	STOCK
I036	3	552085	4021037	0.455	0.723	STOCK
I037	3	552426	4028082	0.360	2.160	STOCK
I038	3	556053	4029744	0.205	0.492	STOCK
I039	3	555755	4029470	0.625	2.000	STOCK
I041	4	476589	3989205	0.159	0.218	STOCK
I0410	4	486042	3987971	0.133	0.178	STOCK
I0411	4	480761	3999554	36.399	212.000	IRRIGATION/STOCK
I0413	4	475822	3994851	1.526	2.872	STOCK
I0414	4	485902	3987431	0.532	0.864	STOCK
I042	4	491469	3991800	0.146	0.198	STOCK
I043	4	484966	3987063	0.886	1.546	STOCK
I044	4	479323	3996907	0.690	1.162	STOCK
I045	4	480211	3996603	0.700	1.182	STOCK
I046	4	481205	3997383	1.875	3.632	STOCK
I047	4	480862	3996668	0.423	0.666	STOCK
I048	4	480978	3997874	5.642	12.748	IRRIGATION/STOCK
I049	4	481086	3998223	0.925	1.623	STOCK
I051	5	508891	4010261	0.073	0.090	STOCK
I0510	5	508301	4011654	0.678	1.139	STOCK
I0511	5	502785	4011222	1.287	2.365	STOCK
I0512	5	508021	4011602	1.439	2.686	STOCK
I0513	5	506823	4008161	1.387	2.576	STOCK
I0514	5	500630	3991979	1.278	2.347	STOCK
I0515	5	504617	3988866	8.548	20.468	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0516	5	505409	3989705	2.126	4.191	STOCK
I0517	5	516245	3986218	1.747	2.096	STOCK
I0518	5	507573	4003345	1.436	2.680	STOCK
I0519	5	515085	3997476	0.348	0.533	STOCK
I052	5	508463	4011554	1.298	2.389	STOCK
I0520	5	519083	3988780	0.269	0.430	STOCK
I0521	5	516333	3985357	1.373	2.197	STOCK
I0522	5	515851	3985898	1.577	2.523	STOCK
I0523	5	519930	3987925	0.847	2.372	STOCK
I0524	5	520139	3987980	0.974	1.948	STOCK
I0525	5	516410	3985623	2.527	5.054	STOCK
I0526	5	512419	3985605	0.849	1.472	STOCK
I0527	5	521096	3988050	2.176	11.315	STOCK
I0528	5	502517	3988667	0.334	0.668	STOCK
I0529	5	511684	3995810	0.717	1.214	STOCK
I053	5	501780	4010828	0.329	0.500	STOCK
I0530	5	513143	3994729	1.239	2.265	STOCK
I0531	5	517194	3993859	0.819	1.413	STOCK
I0532	5	513973	3992279	0.688	1.159	STOCK
I0533	5	518971	3988451	0.395	0.474	STOCK
I0534	5	518914	3987759	2.050	2.460	STOCK
I0535	5	518553	3987348	1.265	1.518	STOCK
I0536	5	517837	3986667	0.511	0.715	STOCK
I0537	5	516232	3987069	2.544	6.106	STOCK
I0538	5	520556	3987427	0.550	0.660	STOCK
I0539	5	518422	4006511	0.926	1.625	STOCK
I054	5	502045	4011410	0.356	0.547	STOCK
I0540	5	519488	4006878	0.686	1.155	STOCK
I0541	5	521340	4007733	0.890	1.554	STOCK
I0542	5	518695	4008576	2.413	4.842	STOCK
I0543	5	511474	4004733	0.292	0.436	STOCK
I0544	5	518519	4006542	0.581	0.956	STOCK
I0545	5	517807	4005986	2.051	4.023	STOCK
I0546	5	509012	4007250	0.488	0.783	STOCK
I0547	5	506182	4005000	1.150	2.081	STOCK
I0548	5	506833	4006228	1.066	1.908	STOCK
I0549	5	507666	4008061	1.782	3.428	STOCK
I055	5	502171	4003181	0.197	0.279	STOCK
I0550	5	508694	4006409	0.308	0.464	STOCK
I0551	5	508825	4006693	1.034	1.843	STOCK
I0552	5	509163	4001989	1.385	2.572	STOCK
I0553	5	508500	4003456	0.814	1.403	STOCK
I0554	5	511321	4004428	0.576	0.946	STOCK
I0555	5	516671	4010959	1.085	1.947	STOCK
I0556	5	509452	4002168	0.882	1.538	STOCK
I0557	5	509684	4001735	0.517	0.837	STOCK
I0558	5	510474	4001930	2.354	4.707	STOCK
I0559	5	520709	4011014	0.815	1.405	STOCK
I056	5	501922	4010440	0.756	1.290	STOCK
I0560	5	500062	3984080	1.052	1.052	STOCK
I0561	5	501379	4010128	0.986	1.746	STOCK
I0562	5	501289	4009972	0.247	0.360	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0563	5	501196	4009780	0.736	1.251	STOCK
I0564	5	502403	4003006	1.382	2.565	STOCK
I0565	5	512757	4001915	5.934	13.502	STOCK
I0566	5	504582	3988136	3.220	6.727	STOCK
I0567	5	500525	3987952	0.416	0.653	STOCK
I0568	5	512603	4006025	0.822	1.419	STOCK
I0569	5	505208	3989533	0.456	0.725	STOCK
I057	5	514111	4010481	0.383	0.594	STOCK
I0570	5	500883	3988656	0.736	1.251	STOCK
I0571	5	500618	3988403	0.437	0.691	STOCK
I0572	5	501096	3990642	0.476	0.761	STOCK
I0573	5	501256	3990653	0.714	1.209	STOCK
I0574	5	501262	3990881	0.717	1.214	STOCK
I0575	5	500840	3987016	0.759	1.296	STOCK
I0576	5	500875	3990216	0.673	1.130	STOCK
I0577	5	500923	3991255	0.367	0.566	STOCK
I0578	5	501051	3991229	0.304	0.457	STOCK
I0579	5	499944	3987830	0.220	0.316	STOCK
I058	5	512946	4010687	3.030	6.277	STOCK
I0580	5	512576	4005424	1.518	2.855	STOCK
I0581	5	511644	4005170	0.953	1.680	STOCK
I0582	5	511919	3989073	1.734	3.323	STOCK
I0583	5	513440	4006677	1.360	2.519	STOCK
I0584	5	520702	3990203	0.172	0.239	STOCK
I0585	5	504620	3988278	0.943	1.660	STOCK
I0586	5	504585	3988251	0.520	0.842	STOCK
I0587	5	501569	4010238	1.882	3.648	STOCK
I0588	5	508681	3988857	0.109	0.142	STOCK
I0589	5	503271	4011010	3.289	6.892	STOCK
I059	5	501035	4008639	24.887	69.186	STOCK
I0590	5	506796	4007312	0.109	0.142	STOCK
I0591	5	514871	3997267	0.205	0.291	STOCK
I0592	5	508410	3997190	0.071	0.087	STOCK
I0593	5	508430	3997153	0.021	0.022	STOCK
I0594	5	511902	3993993	0.144	0.195	STOCK
I0595	5	503713	3992573	0.063	0.063	STOCK
I0596	5	517727	3992492	0.161	0.221	STOCK
I0597	5	514460	3985655	1.907	3.703	STOCK
I0598	5	514640	3985757	1.376	2.552	STOCK
I0599	5	515225	3985962	0.405	0.634	STOCK
I061	6	536780	3988548	1.398	2.599	STOCK
I0610	6	539451	4003958	1.488	2.791	STOCK
I0611	6	535690	4001819	1.576	2.980	STOCK
I0612	6	525355	4004332	0.297	0.445	STOCK
I0613	6	530427	4010631	1.054	1.884	STOCK
I0614	6	525791	3989837	2.726	5.564	STOCK
I0615	6	530151	3994302	3.098	6.437	STOCK
I0616	6	524462	3991341	0.966	1.706	STOCK
I0617	6	532920	4001385	1.786	3.436	STOCK
I0618	6	522897	4011133	0.741	1.261	STOCK
I0619	6	527038	4004467	1.068	1.912	STOCK
I062	6	530699	3985876	2.772	5.671	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0620	6	536370	3999892	1.149	2.079	STOCK
I0621	6	543981	3985650	1.481	1.481	STOCK
I0622	6	543646	3985889	0.285	0.342	STOCK
I0623	6	539243	3984966	6.586	21.075	STOCK
I0624	6	544527	3984553	0.672	0.806	STOCK
I0625	6	544382	3985638	5.737	12.993	STOCK
I0626	6	539600	3984549	0.350	0.536	STOCK
I0627	6	534160	3989483	0.682	1.147	STOCK
I0628	6	537119	3986787	0.100	0.129	STOCK
I0629	6	527689	4001593	0.099	0.127	STOCK
I063	6	529341	3989642	0.421	0.662	STOCK
I0630	6	523719	4001325	0.057	0.068	STOCK
I0631	6	523741	4001306	0.039	0.044	STOCK
I0632	6	530382	4000150	0.101	0.130	STOCK
I0633	6	526186	3999961	0.095	0.121	STOCK
I0634	6	528639	3994890	0.113	0.148	STOCK
I0635	6	528973	3991023	0.185	0.259	STOCK
I0636	6	525858	3989574	0.030	0.033	STOCK
I064	6	541835	4001938	0.305	0.458	STOCK
I065	6	522565	3985784	0.936	1.645	STOCK
I066	6	538023	4002470	1.142	2.064	STOCK
I067	6	536809	4005698	0.814	1.403	STOCK
I068	6	535809	3998865	0.618	1.025	STOCK
I069	6	541560	4007979	0.599	0.989	STOCK
I071	7	548672	4001597	0.452	0.452	STOCK
I0710	7	548893	4004904	0.384	0.596	STOCK
I0711	7	548811	4004918	0.640	1.067	STOCK
I0712	7	548370	4004355	0.531	0.862	STOCK
I0713	7	554072	3988022	0.831	1.994	STOCK
I0714	7	551005	3990221	1.382	2.565	STOCK
I0715	7	552555	3988842	0.629	1.258	STOCK
I0716	7	551053	3989825	0.251	0.367	STOCK
I0717	7	549445	3989388	1.737	3.329	STOCK
I0718	7	547009	3988121	0.893	1.560	STOCK
I0719	7	551784	3986456	1.860	9.672	STOCK
I072	7	545772	4001172	0.317	0.479	STOCK
I0720	7	547441	3984428	1.808	2.170	STOCK
I0721	7	546172	3987964	0.622	0.995	STOCK
I0722	7	547658	3985907	1.208	2.201	STOCK
I0723	7	549921	3985932	2.318	4.625	STOCK
I0724	7	550222	3990472	0.409	0.640	STOCK
I0725	7	547567	3989792	0.800	1.376	STOCK
I0726	7	556172	3984821	1.373	2.546	STOCK
I0727	7	548454	3985780	1.571	2.969	STOCK
I0728	7	547002	3987929	0.831	1.437	STOCK
I0729	7	546964	3987658	1.170	2.122	STOCK
I073	7	548409	4002158	0.531	0.862	STOCK
I0732	7	547049	3987174	0.191	0.269	STOCK
I0733	7	547007	3987107	0.066	0.080	STOCK
I0734	7	547084	3986975	0.740	1.259	STOCK
I0735	7	547463	3987019	0.219	0.314	STOCK
I0736	7	548910	3985452	0.636	1.059	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0737	7	549712	3984665	0.782	1.341	STOCK
I0738	7	546859	4000434	0.718	1.216	STOCK
I0739	7	546621	3986488	2.697	5.497	STOCK
I074	7	546863	4000582	0.597	0.955	STOCK
I0740	7	547127	3986843	1.664	1.664	STOCK
I0741	7	548103	3985456	1.061	1.898	STOCK
I0742	7	550428	3984647	0.403	0.630	STOCK
I0743	7	550786	4008820	0.719	1.218	STOCK
I0744	7	547264	3989044	1.909	3.707	STOCK
I0745	7	551630	4006484	0.132	0.177	STOCK
I0746	7	550488	3992816	0.270	0.399	STOCK
I0747	7	545276	3989316	0.575	0.944	STOCK
I0748	7	548705	3987546	0.104	0.135	STOCK
I0749	7	557354	3986500	0.087	0.209	STOCK
I075	7	547459	4000395	5.853	14.047	STOCK
I077	7	546831	4001493	0.476	0.476	STOCK
I078	7	549349	4003410	4.068	8.781	STOCK
I079	7	550546	4003842	0.744	1.267	STOCK
I081	8	520132	3982850	0.974	3.506	STOCK
I0810	8	520765	3983268	0.852	1.363	STOCK
I08100	8	520315	3980497	0.243	0.354	STOCK
I08101	8	518117	3978131	0.199	0.398	STOCK
I08102	8	518135	3978082	0.081	0.081	STOCK
I08103	8	510507	3968485	4.102	8.865	STOCK
I08104	8	521071	3967344	0.130	0.173	STOCK
I08105	8	505953	3965828	0.056	0.066	STOCK
I08106	8	511665	3961342	0.286	0.426	STOCK
I08107	8	514922	3957739	0.113	0.148	STOCK
I08108	8	511695	3957148	0.983	1.740	STOCK
I08109	8	515058	3957009	0.277	0.411	STOCK
I0811	8	520694	3983499	1.190	4.998	STOCK
I08111	8	502306	3979432	0.041	0.047	STOCK
I08112	8	501543	3976204	0.349	0.535	STOCK
I08113	8	512078	3971044	0.246	0.359	STOCK
I08114	8	517148	3977091	0.355	0.546	STOCK
I08115	8	516750	3982893	0.096	0.123	STOCK
I08116	8	507687	3976723	0.117	0.153	STOCK
I08117	8	507703	3976695	0.118	0.155	STOCK
I0812	8	520113	3983494	1.843	2.949	STOCK
I0813	8	521527	3983805	0.611	2.933	STOCK
I0814	8	514631	3960497	1.457	2.725	STOCK
I0815	8	515948	3980807	0.704	0.704	STOCK
I0816	8	517116	3973834	3.516	7.436	STOCK
I0817	8	518994	3971235	0.318	0.481	STOCK
I0818	8	517698	3981584	0.901	1.576	STOCK
I0819	8	518293	3972123	1.077	1.931	STOCK
I082	8	519661	3971923	0.652	1.090	STOCK
I0820	8	517712	3971145	0.767	1.311	STOCK
I0821	8	507320	3976107	0.586	0.586	STOCK
I0822	8	507197	3974681	7.376	14.752	STOCK
I0823	8	514430	3970413	1.108	1.994	STOCK
I0824	8	515406	3971508	0.987	1.748	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

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US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0826	8	513194	3960588	3.190	6.656	STOCK
I0827	8	513084	3959520	1.272	2.334	STOCK
I0828	8	515417	3957160	0.953	1.680	STOCK
I0829	8	510903	3965991	2.295	4.573	STOCK
I083	8	517451	3977637	0.943	0.943	STOCK
I0830	8	509285	3964137	1.500	2.817	STOCK
I0831	8	507657	3961606	1.552	2.928	STOCK
I0832	8	507598	3959180	0.440	0.696	STOCK
I0833	8	520594	3969055	0.736	1.251	STOCK
I0834	8	517325	3969372	1.283	2.357	STOCK
I0835	8	521717	3965737	0.877	1.528	STOCK
I0836	8	512141	3968286	1.137	2.054	STOCK
I0837	8	512672	3964410	0.738	1.255	STOCK
I0838	8	512997	3959362	0.171	0.237	STOCK
I0839	8	511494	3963318	0.911	1.595	STOCK
I084	8	519835	3980194	0.713	0.998	STOCK
I0840	8	517107	3960006	0.811	1.397	STOCK
I0841	8	515596	3960833	0.847	1.468	STOCK
I0842	8	514882	3960564	0.410	0.642	STOCK
I0843	8	512003	3963428	0.863	1.500	STOCK
I0844	8	501495	3975632	0.632	1.052	STOCK
I0847	8	512060	3979522	2.027	4.865	STOCK
I0849	8	511439	3980453	1.425	2.657	STOCK
I085	8	518862	3976622	0.991	1.756	STOCK
I0850	8	512664	3978590	0.318	0.636	STOCK
I0851	8	511955	3979662	0.184	0.368	STOCK
I0852	8	512085	3981476	2.000	3.909	STOCK
I0853	8	509935	3976865	3.461	7.304	STOCK
I0854	8	507385	3981221	2.088	4.176	STOCK
I0855	8	505989	3982783	0.640	0.768	STOCK
I0856	8	505030	3983140	5.842	21.031	STOCK
I0858	8	501180	3983109	0.934	0.934	STOCK
I0859	8	511220	3983290	1.401	2.606	STOCK
I086	8	518641	3981116	4.170	9.032	STOCK
I0860	8	506599	3981016	2.288	5.491	STOCK
I0861	8	505491	3982506	4.170	4.170	STOCK
I0862	8	515279	3975494	0.288	0.429	STOCK
I0863	8	521129	3958198	0.386	0.600	STOCK
I0864	8	521061	3960764	0.821	1.417	STOCK
I0865	8	520177	3956743	0.520	0.842	STOCK
I0866	8	516098	3978867	1.628	8.683	STOCK
I0867	8	515874	3978665	0.518	0.838	STOCK
I0868	8	512527	3978196	0.555	0.888	STOCK
I0869	8	512458	3977703	0.309	0.371	STOCK
I087	8	518913	3971437	0.593	0.978	STOCK
I0870	8	512750	3977689	0.577	0.577	STOCK
I0871	8	515395	3981798	0.125	0.166	STOCK
I0872	8	519518	3981296	0.066	0.080	STOCK
I0873	8	517677	3977572	0.693	1.168	STOCK
I0874	8	518630	3976785	1.145	2.070	STOCK
I0875	8	518369	3972060	1.020	1.815	STOCK
I0876	8	507268	3979820	0.592	0.592	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

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US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0877	8	507219	3979637	0.558	0.670	STOCK
I0878	8	507116	3979544	0.482	0.578	STOCK
I0879	8	521546	3956683	0.533	0.866	STOCK
I088	8	517936	3982281	0.533	0.640	STOCK
I0880	8	521561	3956581	0.723	1.226	STOCK
I0881	8	506230	3982360	0.359	0.359	STOCK
I0882	8	506367	3981226	0.863	0.863	STOCK
I0883	8	504105	3983510	0.719	0.863	STOCK
I0884	8	503819	3982836	0.520	0.520	STOCK
I0885	8	503627	3982665	1.364	1.364	STOCK
I0886	8	503519	3982389	0.946	1.135	STOCK
I0889	8	515345	3957335	1.233	2.253	STOCK
I089	8	515582	3973488	1.251	2.290	STOCK
I0890	8	515709	3981252	0.286	0.286	STOCK
I0891	8	518075	3976908	0.861	1.496	STOCK
I0892	8	521174	3983516	0.622	1.033	STOCK
I0893	8	515839	3980756	0.560	0.560	STOCK
I0895	8	518156	3978216	0.571	0.571	STOCK
I0896	8	522502	3970719	0.944	1.662	STOCK
I0897	8	513925	3966173	0.153	0.209	STOCK
I0898	8	507928	3964308	0.049	0.057	STOCK
I0899	8	502383	3969383	0.052	0.061	STOCK
I091	9	522804	3971206	0.671	1.126	STOCK
I0910	9	535781	3958727	2.414	4.844	STOCK
I0911	9	523178	3960647	0.717	1.214	STOCK
I0912	9	526124	3960833	5.042	11.215	STOCK
I0913	9	522948	3961355	0.562	0.920	STOCK
I0914	9	530117	3965919	5.031	11.187	STOCK
I0915	9	532953	3963231	5.375	12.063	STOCK
I0916	9	533512	3965999	1.055	1.886	STOCK
I0917	9	531359	3957556	4.064	8.771	STOCK
I0918	9	530928	3958490	2.431	4.883	STOCK
I0919	9	535153	3956768	0.364	0.561	STOCK
I092	9	524364	3981415	0.851	1.476	STOCK
I0920	9	529451	3957831	0.600	0.991	STOCK
I0921	9	543762	3978716	0.173	0.240	STOCK
I0922	9	524095	3959052	0.852	1.478	STOCK
I0923	9	537953	3975346	1.581	2.991	STOCK
I0924	9	543392	3978887	0.195	0.275	STOCK
I0925	9	542782	3982622	8.363	33.452	STOCK
I0926	9	542654	3983017	1.868	5.978	STOCK
I0927	9	544132	3972447	1.045	2.508	STOCK
I0928	9	544132	3972609	1.257	3.520	STOCK
I0929	9	540491	3983421	1.451	1.741	STOCK
I093	9	524449	3983095	1.207	2.199	STOCK
I0930	9	540932	3982666	1.777	3.554	STOCK
I0931	9	523182	3964292	2.042	4.003	STOCK
I0932	9	529444	3956851	1.500	2.817	STOCK
I0933	9	541515	3982181	3.235	7.764	STOCK
I0934	9	538685	3957475	0.849	1.472	STOCK
I0935	9	538412	3957472	0.589	0.971	STOCK
I0937	9	538079	3973933	1.039	1.853	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I0938	9	526251	3961017	1.820	3.511	STOCK
I0939	9	537258	3974413	2.396	4.803	STOCK
I094	9	537361	3982985	0.448	0.711	STOCK
I0940	9	533615	3970453	0.929	1.631	STOCK
I0941	9	533550	3970649	1.730	3.314	STOCK
I0945	9	527514	3982837	0.752	1.282	STOCK
I0946	9	532480	3969050	2.559	5.177	STOCK
I0947	9	529664	3962665	1.079	1.935	STOCK
I0948	9	529975	3962638	3.118	6.485	STOCK
I0949	9	529849	3962722	2.316	4.621	STOCK
I095	9	538364	3975075	2.381	4.769	STOCK
I0950	9	530276	3959871	0.353	0.542	STOCK
I0951	9	529478	3957905	0.716	1.212	STOCK
I0952	9	529495	3958098	0.389	0.605	STOCK
I0953	9	529573	3958062	0.397	0.619	STOCK
I0954	9	529711	3958214	0.709	1.199	STOCK
I0955	9	529308	3956945	0.477	0.763	STOCK
I0956	9	524385	3959980	2.569	5.200	STOCK
I096	9	537901	3974495	13.531	34.546	STOCK
I0960	9	536000	3964288	1.826	3.524	STOCK
I0962	9	541802	3962431	2.552	5.161	STOCK
I0963	9	543750	3971302	0.333	0.533	STOCK
I0964	9	526591	3965033	4.664	10.262	STOCK
I0965	9	530108	3956494	0.395	0.616	STOCK
I0966	9	533329	3960303	0.515	0.833	STOCK
I0967	9	534527	3968330	1.983	3.872	STOCK
I0968	9	541702	3962341	1.715	3.281	STOCK
I0969	9	542678	3982774	0.717	1.214	STOCK
I097	9	540908	3977904	0.861	1.496	STOCK
I0971	9	541097	3969533	5.180	11.565	STOCK
I0972	9	527097	3964586	0.411	0.644	STOCK
I0973	9	542576	3983849	7.412	35.578	STOCK
I0974	9	542627	3983289	2.256	9.024	STOCK
I0975	9	525325	3963630	0.101	0.130	STOCK
I0976	9	528895	3959155	0.142	0.192	STOCK
I0977	9	539125	3958283	0.392	0.610	STOCK
I0978	9	536626	3982309	0.250	0.365	STOCK
I0979	9	542900	3978560	0.077	0.095	STOCK
I098	9	541710	3977473	0.975	1.724	STOCK
I0980	9	527600	3958203	0.163	0.224	STOCK
I0981	9	529422	3976056	0.016	0.032	IRRIGATION/STOCK
I0982	9	530665	3975398	0.001	0.002	IRRIGATION/STOCK
I099	9	533548	3959775	0.357	0.549	STOCK
I101	10	561971	3957603	1.195	2.174	STOCK
I1010	10	561523	3968306	5.293	11.853	STOCK
I10100	10	558790	3961922	3.129	6.511	STOCK
I10101	10	559465	3961771	2.699	5.501	STOCK
I10102	10	559816	3961486	1.497	2.810	STOCK
I10103	10	560082	3961471	1.378	2.557	STOCK
I10104	10	560305	3961424	0.524	0.849	STOCK
I10105	10	560323	3961290	0.492	0.791	STOCK
I10106	10	559864	3961808	0.851	1.476	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I10107	10	560292	3960746	2.142	4.227	STOCK
I10108	10	560565	3960004	0.638	1.063	STOCK
I10109	10	560605	3959875	0.743	1.265	STOCK
I1011	10	563589	3969555	0.445	1.068	STOCK
I10110	10	561816	3960517	0.913	1.599	STOCK
I10111	10	558118	3982373	4.373	9.535	STOCK
I10112	10	566840	3984028	3.531	7.473	STOCK
I10113	10	558139	3981773	1.163	2.108	STOCK
I10114	10	566874	3973656	0.991	0.991	STOCK
I10115	10	565465	3972797	0.607	0.728	STOCK
I10116	10	563410	3970800	2.224	4.412	STOCK
I10117	10	557952	3975927	1.942	3.780	STOCK
I10118	10	556737	3972155	0.337	0.514	STOCK
I10119	10	556577	3972164	0.497	0.800	STOCK
I1012	10	563948	3969640	1.675	2.010	STOCK
I10120	10	545210	3962345	0.716	1.212	STOCK
I10121	10	551021	3957635	1.900	3.687	STOCK
I10122	10	551295	3957912	1.850	3.577	STOCK
I10123	10	551484	3958081	0.589	0.971	STOCK
I10124	10	551542	3958390	0.800	1.376	STOCK
I10125	10	551700	3958486	0.539	0.877	STOCK
I10126	10	551937	3958420	0.542	0.883	STOCK
I10127	10	558205	3967305	0.335	0.510	STOCK
I10128	10	561727	3976997	0.110	0.143	STOCK
I10129	10	563268	3970999	0.426	0.671	STOCK
I10130	10	566958	3965176	1.377	2.555	STOCK
I10131	10	554536	3962880	3.008	6.225	STOCK
I10132	10	547297	3959619	0.194	0.274	STOCK
I10133	10	549721	3956584	0.116	0.152	STOCK
I10135	10	546920	3980030	0.216	0.309	STOCK
I10136	10	548146	3979348	0.020	0.020	STOCK
I10137	10	559964	3980152	0.311	0.311	STOCK
I10138	10	564977	3978298	0.150	0.204	STOCK
I10139	10	556577	3977912	0.050	0.050	STOCK
I1014	10	567374	3964396	0.729	1.238	STOCK
I10140	10	547151	3973769	0.169	0.169	STOCK
I10141	10	547222	3973751	0.143	0.172	STOCK
I10142	10	554176	3966789	2.476	4.986	STOCK
I10143	10	560118	3961999	0.119	0.157	STOCK
I10144	10	546204	3959747	1.767	3.394	STOCK
I10145	10	546661	3960103	1.475	2.763	STOCK
I10146	10	557178	3970370	0.017	0.034	IRRIGATION/STOCK
I10147	10	557144	3972096	0.007	0.067	IRRIGATION/STOCK
I10148	10	556945	3972009	0.006	0.064	IRRIGATION/STOCK
I1015	10	567625	3967282	0.454	0.721	STOCK
I1016	10	567248	3969452	0.619	1.027	STOCK
I1017	10	567061	3969373	0.186	0.261	STOCK
I1018	10	566922	3962472	0.428	0.675	STOCK
I1019	10	557695	3967017	3.846	8.237	STOCK
I102	10	550981	3983930	1.064	1.904	STOCK
I1020	10	563975	3979179	0.883	1.540	STOCK
I1021	10	566429	3980248	1.896	3.679	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1022	10	561456	3976505	1.743	3.342	STOCK
I1023	10	565204	3975330	2.530	5.111	STOCK
I1024	10	566173	3973457	0.363	0.559	STOCK
I1025	10	563516	3970830	0.493	0.789	STOCK
I1026	10	551567	3958763	1.342	2.481	STOCK
I1027	10	562423	3970211	0.996	1.766	STOCK
I1028	10	563532	3963803	1.792	3.450	STOCK
I1029	10	558594	3960065	0.778	1.333	STOCK
I103	10	548508	3982905	3.383	4.060	STOCK
I1030	10	560372	3959605	1.722	3.296	STOCK
I1031	10	560729	3961955	1.780	3.423	STOCK
I1032	10	560524	3960065	0.624	1.037	STOCK
I1033	10	559414	3967098	0.614	1.018	STOCK
I1034	10	558285	3963506	1.179	2.358	STOCK
I1035	10	553561	3960388	1.573	2.973	STOCK
I1036	10	553555	3957882	4.276	9.294	STOCK
I1037	10	551324	3980726	0.272	0.402	STOCK
I1038	10	553675	3974804	3.318	6.961	STOCK
I1039	10	555247	3979075	1.498	2.812	STOCK
I104	10	545888	3981769	1.234	2.255	STOCK
I1040	10	546388	3973535	2.876	4.602	STOCK
I1041	10	553887	3975301	15.145	39.281	STOCK
I1042	10	552063	3979933	2.036	3.990	STOCK
I1043	10	550896	3978043	2.625	5.330	STOCK
I1044	10	552629	3977744	1.263	2.315	STOCK
I1045	10	549482	3974776	2.686	5.471	STOCK
I1046	10	563610	3983039	1.117	2.013	STOCK
I1047	10	548361	3974013	0.827	1.429	STOCK
I1048	10	548847	3971607	0.753	1.284	STOCK
I1049	10	546104	3970500	1.251	2.290	STOCK
I105	10	548520	3981333	1.741	3.338	STOCK
I1050	10	551314	3976579	2.553	5.163	STOCK
I1051	10	566036	3982311	0.245	0.357	STOCK
I1052	10	552981	3962761	1.997	3.903	STOCK
I1053	10	553611	3964057	0.388	0.603	STOCK
I1054	10	553016	3967256	1.438	2.684	STOCK
I1055	10	559026	3977462	1.078	1.933	STOCK
I1056	10	557709	3976286	1.249	1.998	STOCK
I1057	10	545435	3973173	0.710	1.704	STOCK
I1058	10	565499	3982606	1.354	2.506	STOCK
I1059	10	563808	3982680	0.841	1.457	STOCK
I106	10	547464	3978311	0.367	0.566	STOCK
I1060	10	558232	3982029	7.517	12.027	STOCK
I1061	10	558793	3975918	1.990	3.887	STOCK
I1062	10	557848	3974986	0.699	1.180	STOCK
I1063	10	557080	3972984	0.470	0.750	STOCK
I1064	10	563496	3956641	0.811	1.397	STOCK
I1065	10	547993	3983533	1.394	2.591	STOCK
I1066	10	557277	3983125	0.629	1.046	STOCK
I1067	10	557483	3982884	0.725	1.230	STOCK
I1068	10	552924	3980713	0.583	0.959	STOCK
I1069	10	548705	3971529	0.810	1.395	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1070	10	547696	3965478	1.029	1.833	STOCK
I1071	10	547920	3965598	1.037	1.849	STOCK
I1072	10	548010	3963258	0.968	1.710	STOCK
I1075	10	546970	3958464	0.371	0.573	STOCK
I1076	10	545256	3959419	1.221	2.228	STOCK
I1077	10	550500	3966584	0.275	0.407	STOCK
I1078	10	550642	3966587	1.402	2.608	STOCK
I1079	10	550761	3966490	0.513	0.829	STOCK
I108	10	545307	3976118	1.601	3.034	STOCK
I1080	10	552165	3963346	0.760	1.298	STOCK
I1081	10	552501	3963744	1.575	2.978	STOCK
I1082	10	555059	3963714	0.369	0.570	STOCK
I1084	10	557079	3967226	0.586	0.965	STOCK
I1085	10	558139	3967854	0.591	0.974	STOCK
I1086	10	557234	3968128	0.425	0.669	STOCK
I1087	10	562792	3969499	0.424	0.667	STOCK
I1088	10	557334	3963936	0.762	1.302	STOCK
I1089	10	558264	3963424	1.960	3.820	STOCK
I109	10	545129	3975805	0.502	0.809	STOCK
I1090	10	558146	3962669	0.936	1.645	STOCK
I1091	10	559158	3963731	1.157	2.095	STOCK
I1092	10	559853	3964882	0.530	0.861	STOCK
I1093	10	561342	3964317	2.601	5.274	STOCK
I1096	10	563440	3963510	0.580	0.954	STOCK
I1097	10	564858	3964037	1.224	2.234	STOCK
I1098	10	560347	3963597	1.107	1.328	STOCK
I1099	10	560019	3963958	0.713	1.207	STOCK
I111	11	589789	3961841	0.263	0.387	STOCK
I1110	11	587125	3968132	14.588	37.639	STOCK
I1111	11	577795	3972084	0.113	0.148	STOCK
I1112	11	577342	3965139	10.392	25.572	STOCK
I1113	11	574822	3963155	1.217	2.219	STOCK
I1114	11	574312	3963331	0.566	0.927	STOCK
I1115	11	573328	3963785	0.806	1.388	STOCK
I1116	11	572220	3964144	0.315	0.476	STOCK
I1117	11	573216	3962543	0.440	0.696	STOCK
I1118	11	575975	3964397	1.501	2.819	STOCK
I1119	11	577056	3965117	1.162	2.105	STOCK
I112	11	588117	3960170	2.584	5.235	STOCK
I1120	11	571305	3967552	0.651	1.088	STOCK
I1121	11	577173	3965006	2.030	3.976	STOCK
I1122	11	577509	3968424	2.243	4.455	STOCK
I1123	11	576959	3970431	0.389	0.605	STOCK
I1124	11	569598	3960160	0.949	1.672	STOCK
I1125	11	575629	3967004	1.533	2.887	STOCK
I1126	11	577045	3967409	0.244	0.355	STOCK
I1127	11	574010	3970035	0.498	0.802	STOCK
I1128	11	568014	3963944	0.830	1.435	STOCK
I1129	11	572925	3976671	1.595	3.021	STOCK
I113	11	588326	3965339	3.653	7.767	STOCK
I1130	11	574104	3962798	2.940	6.065	STOCK
I1131	11	569214	3969787	0.928	1.629	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1132	11	568137	3964890	0.674	1.132	STOCK
I1133	11	571122	3959479	0.537	0.874	STOCK
I1134	11	570691	3960370	0.452	0.718	STOCK
I1135	11	569423	3962609	2.054	4.030	STOCK
I1136	11	569930	3962883	0.634	1.056	STOCK
I1137	11	570056	3962698	0.663	1.111	STOCK
I1138	11	579064	3969483	1.608	3.049	STOCK
I1139	11	573392	3962424	0.405	0.633	STOCK
I114	11	584951	3957179	1.905	3.698	STOCK
I1140	11	584026	3969282	1.266	2.322	STOCK
I1141	11	582083	3967404	0.638	1.063	STOCK
I1142	11	575301	3973549	0.525	0.851	STOCK
I1143	11	569528	3979791	0.727	1.234	STOCK
I1144	11	569083	3973621	1.013	1.621	STOCK
I1145	11	571457	3973330	1.983	3.872	STOCK
I1146	11	577026	3971884	0.149	0.203	STOCK
I1147	11	577450	3971938	0.130	0.173	STOCK
I1148	11	577929	3983021	2.111	4.158	STOCK
I1149	11	578793	3972330	0.386	0.600	STOCK
I115	11	588360	3964485	0.716	1.212	STOCK
I1150	11	578911	3972292	0.217	0.311	STOCK
I1151	11	580748	3970512	1.153	2.087	STOCK
I1152	11	575034	3974257	0.266	0.392	STOCK
I1153	11	574720	3971603	1.602	3.036	STOCK
I1154	11	570994	3976637	0.716	3.150	STOCK
I1155	11	574835	3973639	0.151	0.206	STOCK
I1156	11	583048	3970757	0.485	0.778	STOCK
I1157	11	571359	3975937	1.658	3.316	STOCK
I1158	11	583962	3974107	4.132	8.939	STOCK
I1159	11	581886	3974179	2.112	4.160	STOCK
I116	11	589617	3967616	2.419	4.856	STOCK
I1160	11	580762	3972112	1.265	2.319	STOCK
I1161	11	583350	3971225	9.721	23.699	STOCK
I1162	11	567718	3983727	0.467	0.745	STOCK
I1163	11	567918	3983230	1.321	2.437	STOCK
I1164	11	576032	3965336	0.220	0.316	STOCK
I1165	11	569585	3968674	0.118	0.155	STOCK
I1166	11	569422	3968349	0.171	0.237	STOCK
I1167	11	570774	3968326	0.475	0.760	STOCK
I1168	11	569468	3966324	0.225	0.324	STOCK
I117	11	586598	3963127	4.492	9.831	STOCK
I1172	11	569752	3962871	0.208	0.296	STOCK
I1173	11	568383	3956898	0.194	0.274	STOCK
I1174	11	578205	3982441	1.126	2.031	STOCK
I1175	11	568410	3974514	0.940	1.653	STOCK
I1176	11	571358	3976268	1.032	1.839	STOCK
I1177	11	571387	3976159	0.732	1.243	STOCK
I1178	11	575407	3973379	0.778	1.333	STOCK
I1179	11	578830	3978356	0.666	1.116	STOCK
I118	11	586380	3963214	4.403	9.610	STOCK
I1180	11	587140	3957241	0.198	0.280	STOCK
I1181	11	589547	3967622	0.443	0.702	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1182	11	589650	3967494	0.567	0.929	STOCK
I1183	11	589400	3965395	0.091	0.116	STOCK
I1184	11	576347	3962499	0.272	0.402	STOCK
I1185	11	574679	3979316	0.170	0.235	STOCK
I1186	11	575438	3975101	0.090	0.114	STOCK
I1187	11	567934	3974642	0.243	0.389	STOCK
I1188	11	571227	3969276	0.165	0.228	STOCK
I1189	11	570019	3968341	0.253	0.370	STOCK
I119	11	585103	3961864	5.061	11.263	STOCK
I1190	11	575432	3963723	0.300	0.450	STOCK
I1191	11	568414	3960735	0.012	0.025	IRRIGATION/STOCK
I1192	11	569986	3962589	0.001	0.002	IRRIGATION/STOCK
I121	12	513825	3954317	1.938	3.772	STOCK
I1210	12	500373	3946334	1.471	2.755	STOCK
I1211	12	511526	3943066	5.134	11.448	STOCK
I1212	12	513929	3954465	2.298	4.580	STOCK
I1213	12	513151	3931280	4.721	10.405	STOCK
I1214	12	500633	3934219	0.968	1.710	STOCK
I1215	12	502627	3939543	1.127	2.033	STOCK
I1216	12	505459	3938034	1.505	2.827	STOCK
I1217	12	507028	3938284	1.652	3.144	STOCK
I1218	12	510869	3941165	1.249	2.286	STOCK
I1219	12	513432	3935867	0.359	0.552	STOCK
I122	12	510782	3954295	0.854	1.482	STOCK
I1220	12	505638	3934160	1.258	2.305	STOCK
I1222	12	522414	3951489	4.235	9.193	STOCK
I1223	12	519542	3945565	1.354	2.506	STOCK
I1224	12	519744	3945619	0.529	0.859	STOCK
I1225	12	519282	3952369	1.470	2.752	STOCK
I1226	12	519688	3950479	2.717	5.543	STOCK
I1227	12	520018	3949970	1.987	3.880	STOCK
I1228	12	519326	3952421	0.420	0.660	STOCK
I1229	12	519955	3954038	0.929	1.631	STOCK
I123	12	504923	3954732	1.851	3.579	STOCK
I1230	12	517486	3953988	1.068	1.912	STOCK
I1231	12	521197	3955707	0.241	0.351	STOCK
I1232	12	516884	3945602	0.870	1.514	STOCK
I1233	12	518759	3954961	2.118	4.173	STOCK
I1234	12	516114	3940749	79.261	259.051	STOCK
I1235	12	510758	3936953	1.185	2.153	STOCK
I1236	12	517667	3928955	0.539	0.877	STOCK
I1237	12	520668	3937272	1.533	2.887	STOCK
I1238	12	516599	3941009	1.422	2.650	STOCK
I1239	12	521258	3935363	1.570	2.970	STOCK
I124	12	504336	3952617	1.991	3.889	STOCK
I1240	12	518523	3938428	0.310	0.467	STOCK
I1241	12	520803	3939753	0.232	0.336	STOCK
I1242	12	511763	3938371	1.361	2.521	STOCK
I1243	12	521370	3943412	0.766	1.309	STOCK
I1244	12	520749	3937192	0.936	1.645	STOCK
I1245	12	513284	3955376	1.698	3.244	STOCK
I1246	12	511417	3934216	2.060	4.043	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1247	12	516222	3929607	0.923	1.619	STOCK
I1248	12	516466	3929647	1.432	2.672	STOCK
I1249	12	506873	3938585	0.961	1.696	STOCK
I125	12	500868	3948702	1.146	2.072	STOCK
I1250	12	508920	3937141	2.056	4.034	STOCK
I1251	12	509525	3937728	0.384	0.596	STOCK
I1252	12	507092	3954809	0.103	0.133	STOCK
I1253	12	522110	3954600	0.460	0.732	STOCK
I1254	12	522454	3954370	0.105	0.136	STOCK
I1255	12	522095	3945851	1.387	2.576	STOCK
I1256	12	521373	3944179	3.269	6.844	STOCK
I1257	12	518173	3950028	0.093	0.118	STOCK
I126	12	503987	3950410	3.668	7.804	STOCK
I127	12	506735	3947781	6.370	14.639	STOCK
I128	12	507124	3947150	1.470	2.752	STOCK
I129	12	506155	3946624	4.922	10.911	STOCK
I131	13	542303	3935969	0.633	1.054	STOCK
I1310	13	526996	3949764	0.384	0.596	STOCK
I1311	13	529626	3953652	2.425	4.869	STOCK
I1312	13	524644	3954747	4.741	10.455	STOCK
I1313	13	525024	3941795	1.290	2.360	STOCK
I1314	13	524576	3950160	0.824	1.423	STOCK
I1315	13	524568	3948317	1.508	2.834	STOCK
I1316	13	533228	3943492	1.430	2.667	STOCK
I1317	13	523863	3943072	8.340	19.901	STOCK
I1318	13	524316	3944968	0.437	0.691	STOCK
I1319	13	524515	3946721	1.266	2.322	STOCK
I132	13	544171	3935324	6.160	14.090	STOCK
I1320	13	524870	3941917	2.534	5.120	STOCK
I1321	13	522781	3935814	1.350	2.498	STOCK
I1322	13	523955	3931064	1.330	2.456	STOCK
I1323	13	531401	3932285	0.690	1.162	STOCK
I1324	13	532365	3934468	1.437	2.682	STOCK
I1325	13	531495	3937084	1.192	2.167	STOCK
I1326	13	529882	3940570	0.715	1.211	STOCK
I1327	13	527783	3934961	0.854	1.482	STOCK
I1328	13	525492	3936878	2.062	4.048	STOCK
I1329	13	536996	3935917	0.342	0.522	STOCK
I133	13	544961	3935445	0.489	0.785	STOCK
I1330	13	541124	3938116	0.755	1.288	STOCK
I1331	13	541258	3937525	1.430	2.667	STOCK
I1332	13	534195	3941567	3.213	6.710	STOCK
I1333	13	540335	3941997	2.794	5.723	STOCK
I1334	13	541100	3938937	3.431	7.232	STOCK
I1335	13	525735	3936959	0.945	1.664	STOCK
I1336	13	536664	3944863	0.952	1.678	STOCK
I1337	13	544840	3942594	1.232	2.251	STOCK
I1338	13	536817	3944882	3.187	6.649	STOCK
I1339	13	537059	3946243	2.467	4.966	STOCK
I134	13	544326	3935493	1.297	2.386	STOCK
I1340	13	544621	3949397	0.625	1.038	STOCK
I1341	13	541363	3945691	1.121	2.021	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1342	13	540790	3954582	0.270	0.399	STOCK
I1343	13	535903	3945647	1.457	2.725	STOCK
I1344	13	540003	3950438	1.824	3.520	STOCK
I1345	13	543280	3947931	1.919	3.729	STOCK
I1346	13	524385	3944985	0.847	1.468	STOCK
I1347	13	524673	3955737	2.615	5.307	STOCK
I1348	13	523542	3953616	2.734	5.583	STOCK
I1349	13	523819	3953805	0.411	0.644	STOCK
I135	13	541989	3936364	2.234	4.435	STOCK
I1350	13	528033	3953153	0.240	0.349	STOCK
I1351	13	527628	3950753	0.364	0.561	STOCK
I1352	13	524498	3950118	1.768	3.397	STOCK
I1353	13	524754	3949278	0.448	0.711	STOCK
I1354	13	527226	3950949	4.885	10.817	STOCK
I1355	13	528026	3952946	1.812	3.493	STOCK
I1356	13	533741	3949152	1.239	2.265	STOCK
I1357	13	530750	3948441	0.980	1.734	STOCK
I1358	13	532048	3946658	1.412	2.629	STOCK
I1359	13	531957	3942400	5.535	12.473	STOCK
I136	13	542559	3936457	0.814	1.403	STOCK
I1360	13	536014	3950564	0.446	0.707	STOCK
I1361	13	536059	3950617	0.368	0.568	STOCK
I1362	13	539175	3951066	0.883	1.540	STOCK
I1363	13	539298	3950953	1.383	2.568	STOCK
I1364	13	536846	3944795	1.169	2.120	STOCK
I1365	13	538050	3944561	0.404	0.632	STOCK
I1366	13	544837	3949586	0.445	0.705	STOCK
I1367	13	543812	3948370	1.539	2.900	STOCK
I1368	13	541065	3946929	0.244	0.355	STOCK
I1369	13	540761	3944109	0.135	0.181	STOCK
I137	13	526188	3949897	0.423	0.666	STOCK
I1370	13	540657	3944194	0.287	0.428	STOCK
I1371	13	536207	3942317	1.095	1.968	STOCK
I1372	13	541803	3936440	2.126	4.192	STOCK
I1373	13	542039	3936489	0.088	0.111	STOCK
I1374	13	537444	3929425	70.520	226.751	STOCK
I1375	13	533934	3939840	1.688	3.222	STOCK
I1376	13	543179	3953651	0.493	0.792	STOCK
I1377	13	535501	3951558	0.396	0.617	STOCK
I1378	13	529854	3940909	0.448	0.711	STOCK
I1379	13	532187	3938449	0.276	0.409	STOCK
I138	13	530116	3948607	2.353	4.705	STOCK
I1380	13	541289	3931672	0.755	1.288	STOCK
I1381	13	522728	3955757	0.216	0.309	STOCK
I1382	13	531448	3953323	0.243	0.354	STOCK
I1383	13	523129	3947915	0.264	0.389	STOCK
I1384	13	522848	3943202	1.100	1.978	STOCK
I1385	13	539616	3955907	0.230	0.332	STOCK
I1386	13	543187	3948048	0.264	0.389	STOCK
I1387	13	543207	3948009	0.163	0.224	STOCK
I1388	13	524281	3944885	0.057	0.067	STOCK
I1389	13	524288	3944909	0.091	0.116	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I139	13	528338	3953912	2.745	5.608	STOCK
I141	14	560677	3955617	0.692	1.384	STOCK
I1410	14	562048	3953832	1.058	1.892	STOCK
I14100	14	564587	3947795	1.666	3.174	STOCK
I14101	14	564554	3947927	0.791	1.358	STOCK
I14102	14	558325	3946096	2.021	3.956	STOCK
I14103	14	558380	3945943	2.918	6.013	STOCK
I14104	14	558737	3946559	5.466	12.296	STOCK
I14105	14	558712	3946784	0.704	1.189	STOCK
I14106	14	559183	3946360	3.728	7.949	STOCK
I14107	14	565650	3944575	1.022	1.819	STOCK
I14108	14	557983	3940624	0.996	1.766	STOCK
I14109	14	557779	3940650	0.806	1.388	STOCK
I1411	14	564747	3950062	0.783	1.343	STOCK
I14110	14	558135	3940457	1.648	3.135	STOCK
I14111	14	562388	3941401	1.641	3.120	STOCK
I14112	14	566468	3940842	1.813	3.496	STOCK
I14113	14	547328	3944054	1.142	2.064	STOCK
I14114	14	557578	3956167	2.988	6.178	STOCK
I14115	14	557514	3955915	0.837	1.449	STOCK
I14116	14	556616	3953643	0.332	0.505	STOCK
I14117	14	556677	3953517	0.456	0.725	STOCK
I14118	14	556721	3953771	0.342	0.522	STOCK
I14119	14	556731	3950598	0.403	0.630	STOCK
I1412	14	559808	3949751	1.435	2.678	STOCK
I14120	14	557129	3950556	0.560	0.916	STOCK
I14121	14	556425	3940620	3.538	7.489	STOCK
I14122	14	559456	3940965	1.926	3.745	STOCK
I14123	14	558969	3945782	16.231	42.507	STOCK
I14124	14	559953	3955214	0.542	0.542	STOCK
I14125	14	560278	3948282	0.437	0.691	STOCK
I14126	14	560350	3948250	1.004	1.782	STOCK
I14127	14	565004	3946923	0.129	0.172	STOCK
I14128	14	548711	3955405	2.036	3.990	STOCK
I14129	14	556377	3951737	0.190	0.267	STOCK
I1413	14	558799	3950937	1.587	3.003	STOCK
I14130	14	563540	3950487	0.819	1.413	STOCK
I14131	14	562652	3949044	0.113	0.148	STOCK
I14132	14	566433	3947761	0.090	0.114	STOCK
I14133	14	559365	3947152	0.110	0.143	STOCK
I14134	14	555556	3943079	0.123	0.163	STOCK
I14135	14	557167	3940192	0.762	1.302	STOCK
I14136	14	552594	3940177	0.471	0.752	STOCK
I14137	14	554584	3956282	0.230	0.332	STOCK
I14138	14	559684	3954149	0.352	0.539	STOCK
I14139	14	565417	3954815	0.026	0.053	IRRIGATION/STOCK
I1414	14	557362	3949636	0.491	0.789	STOCK
I1415	14	558886	3953715	1.367	2.534	STOCK
I1416	14	556658	3944580	0.940	1.128	STOCK
I1417	14	553489	3942824	0.576	0.946	STOCK
I1418	14	555690	3949183	0.134	0.180	STOCK
I1419	14	565212	3941044	1.023	1.821	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I142	14	558529	3940355	0.363	0.559	STOCK
I1420	14	554095	3934841	0.560	0.916	STOCK
I1421	14	547063	3932655	2.474	4.982	STOCK
I1422	14	546389	3938149	0.196	0.277	STOCK
I1423	14	546567	3938506	1.215	2.215	STOCK
I1424	14	548188	3938536	0.746	1.271	STOCK
I1425	14	554084	3934631	2.096	4.124	STOCK
I1427	14	555757	3939106	0.407	0.637	STOCK
I1428	14	553376	3939619	0.457	0.727	STOCK
I1429	14	553490	3941621	1.416	2.638	STOCK
I143	14	559890	3941288	0.499	0.803	STOCK
I1430	14	553576	3941706	1.251	2.290	STOCK
I1431	14	552676	3942295	0.462	0.736	STOCK
I1432	14	556935	3933508	1.080	1.937	STOCK
I1433	14	564422	3935812	2.098	4.128	STOCK
I1434	14	566413	3940851	0.720	1.221	STOCK
I1435	14	565115	3942580	0.704	1.189	STOCK
I1436	14	563595	3945268	1.084	1.945	STOCK
I1437	14	550769	3946670	0.459	0.730	STOCK
I1438	14	554440	3950998	0.434	0.685	STOCK
I1439	14	552286	3948857	2.284	4.548	STOCK
I144	14	559754	3954004	0.944	1.133	STOCK
I1440	14	565556	3942951	1.582	2.993	STOCK
I1441	14	555744	3948237	0.420	0.660	STOCK
I1442	14	556829	3956026	0.272	0.402	STOCK
I1443	14	554954	3956192	1.447	2.703	STOCK
I1444	14	553175	3953246	1.767	3.395	STOCK
I1445	14	556640	3955817	0.763	1.304	STOCK
I1446	14	548505	3948223	1.477	2.767	STOCK
I1447	14	545967	3950786	2.192	4.340	STOCK
I1448	14	550075	3951905	1.178	2.139	STOCK
I1449	14	551223	3952935	0.542	0.883	STOCK
I145	14	561506	3941100	3.356	7.052	STOCK
I1450	14	553886	3941753	0.405	0.633	STOCK
I1451	14	553417	3941465	0.186	0.261	STOCK
I1452	14	546247	3938425	1.800	3.467	STOCK
I1453	14	546069	3938080	1.214	2.213	STOCK
I1454	14	549416	3938962	0.742	1.263	STOCK
I1455	14	555331	3940294	0.878	1.530	STOCK
I1456	14	548274	3955318	0.691	1.164	STOCK
I1457	14	547691	3954910	0.436	0.689	STOCK
I1458	14	547437	3954106	0.912	1.597	STOCK
I1459	14	547142	3953631	2.901	5.973	STOCK
I146	14	563148	3941466	0.413	0.648	STOCK
I1460	14	547430	3952893	1.103	1.984	STOCK
I1461	14	547607	3952943	1.776	3.414	STOCK
I1462	14	547603	3952844	0.945	1.664	STOCK
I1463	14	549063	3956173	1.082	1.941	STOCK
I1464	14	551835	3955269	1.176	2.134	STOCK
I1465	14	552930	3955875	2.385	4.778	STOCK
I1466	14	555729	3951518	2.039	3.996	STOCK
I1467	14	555219	3951313	1.007	1.788	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

Coordinate System - UTM NAD 83 Zone 12 (meters)

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US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1468	14	555249	3951159	0.782	1.341	STOCK
I1469	14	554901	3947097	0.292	0.436	STOCK
I147	14	561941	3940377	1.777	3.417	STOCK
I1470	14	552024	3946832	2.308	4.603	STOCK
I1471	14	552213	3946943	2.176	4.304	STOCK
I1472	14	552291	3946870	2.756	5.634	STOCK
I1473	14	554984	3945321	2.506	5.055	STOCK
I1474	14	555157	3945448	1.274	2.338	STOCK
I1475	14	555259	3945293	1.805	3.478	STOCK
I1476	14	555132	3945199	0.811	1.397	STOCK
I1477	14	554994	3945188	0.495	0.796	STOCK
I1478	14	554984	3944817	1.543	2.909	STOCK
I1479	14	555068	3944755	0.997	1.768	STOCK
I148	14	563257	3933712	1.093	1.964	STOCK
I1480	14	555325	3944596	1.395	2.593	STOCK
I1481	14	555451	3944573	1.914	3.718	STOCK
I1482	14	555645	3944849	0.334	0.508	STOCK
I1483	14	555798	3944797	0.870	1.514	STOCK
I1484	14	552707	3943144	0.406	0.635	STOCK
I1485	14	552868	3943106	0.530	0.861	STOCK
I1486	14	552996	3943052	1.524	2.868	STOCK
I1487	14	561115	3955995	0.483	0.774	STOCK
I1488	14	561352	3955755	0.233	0.337	STOCK
I1489	14	560969	3955193	0.904	1.582	STOCK
I149	14	561683	3954600	0.885	2.124	STOCK
I1490	14	560456	3955401	0.300	0.450	STOCK
I1491	14	559258	3954852	0.239	0.347	STOCK
I1492	14	559201	3954662	0.753	1.284	STOCK
I1493	14	559404	3954080	0.989	1.752	STOCK
I1494	14	559236	3953876	0.464	0.740	STOCK
I1495	14	561037	3953935	1.684	1.684	STOCK
I1496	14	560363	3954290	0.945	1.664	STOCK
I1497	14	559549	3948687	0.318	0.481	STOCK
I1498	14	559617	3948663	0.276	0.409	STOCK
I1499	14	559342	3954111	0.366	0.564	STOCK
I151	15	589391	3949602	0.293	0.438	STOCK
I1510	15	574294	3944424	0.457	0.727	STOCK
I1511	15	571059	3948379	0.260	0.382	STOCK
I1512	15	568119	3946440	0.593	0.978	STOCK
I1513	15	568186	3946315	0.336	0.512	STOCK
I1514	15	570921	3942887	0.364	0.561	STOCK
I1515	15	582714	3955674	0.670	1.124	STOCK
I1516	15	572664	3946547	1.440	2.689	STOCK
I1517	15	583742	3950380	1.762	3.384	STOCK
I1518	15	584714	3952877	1.090	1.957	STOCK
I1519	15	573189	3939417	0.493	0.792	STOCK
I152	15	589590	3945741	0.866	1.506	STOCK
I1520	15	578108	3939359	0.440	0.696	STOCK
I1521	15	577032	3942281	0.728	1.236	STOCK
I1522	15	578709	3939217	45.871	138.894	STOCK
I1523	15	588487	3946178	0.368	0.568	STOCK
I1524	15	590061	3951370	1.165	2.112	STOCK

Hopi Reservation Water Use Claim from Impoundments by the United States

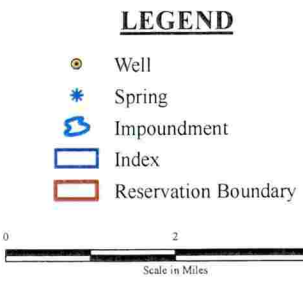
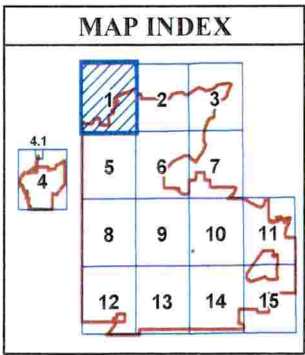
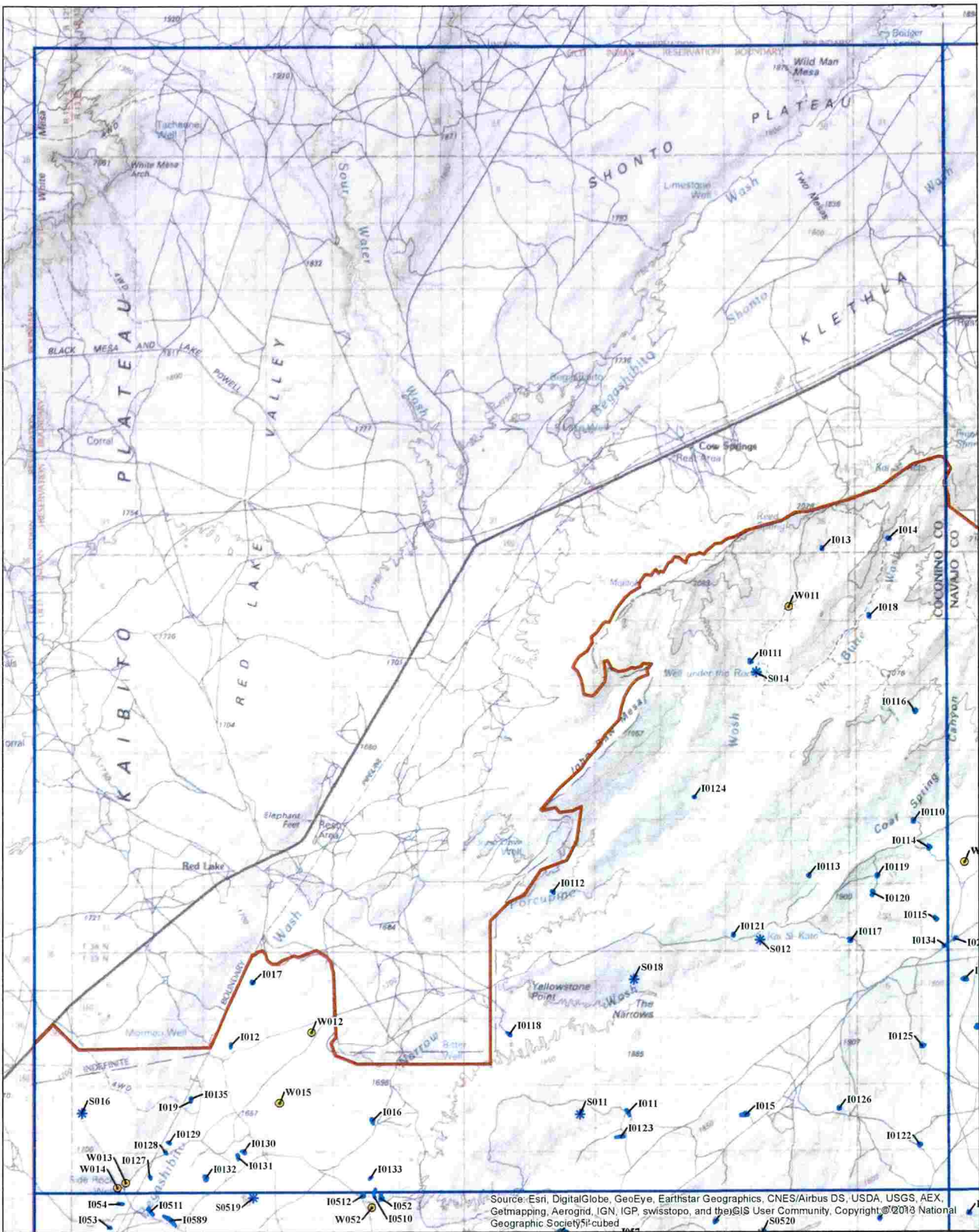
Coordinate System - UTM NAD 83 Zone 12 (meters)

ID nomenclature example I011, I for impoundment, 01 for plate number 1, and 1 for number

US Label	Plate	Easting	Northing	Area (acres)	Capacity (ac-ft)	Use
I1525	15	590157	3951494	0.800	1.376	STOCK
I1526	15	572112	3945102	1.286	2.363	STOCK
I1527	15	587288	3955737	0.049	0.057	STOCK
I1528	15	575433	3945690	0.157	0.215	STOCK
I1529	15	569587	3943709	0.152	0.207	STOCK
I153	15	589340	3954796	2.437	4.897	STOCK
I1530	15	571670	3945190	0.243	0.354	STOCK
I154	15	589626	3951006	1.754	3.366	STOCK
I155	15	587796	3945897	1.096	1.970	STOCK
I156	15	581908	3947038	2.399	4.810	STOCK
I157	15	589391	3950606	0.599	0.989	STOCK
I158	15	588574	3952494	0.647	1.080	STOCK
I159	15	569233	3942571	0.658	1.101	STOCK

Number of Impoundments	1001
Total Area of Impoundments	1487 acres
Total Capacity of Impoundments	3388 acre-feet

Appendix 7



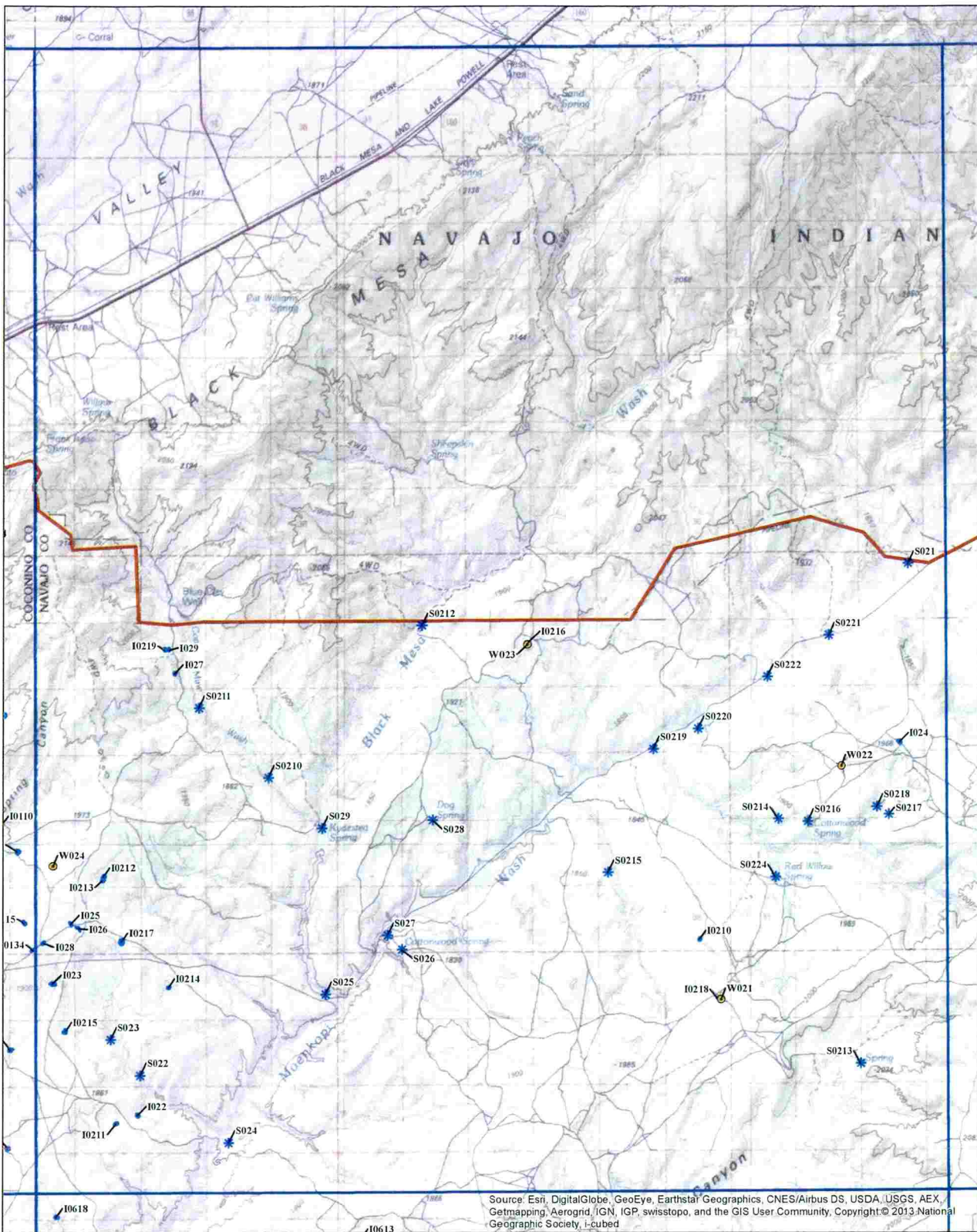
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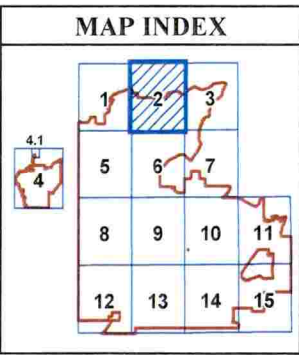
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SPRING, WELL AND IMPOUNDMENT INVENTORY MAPS
JUNE 2, 2015
Plate 1

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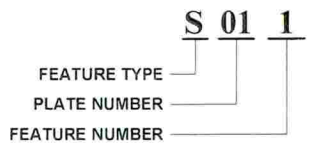
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- LEGEND**
- Well
 - Spring
 - Impoundment
 - Index
 - Reservation Boundary

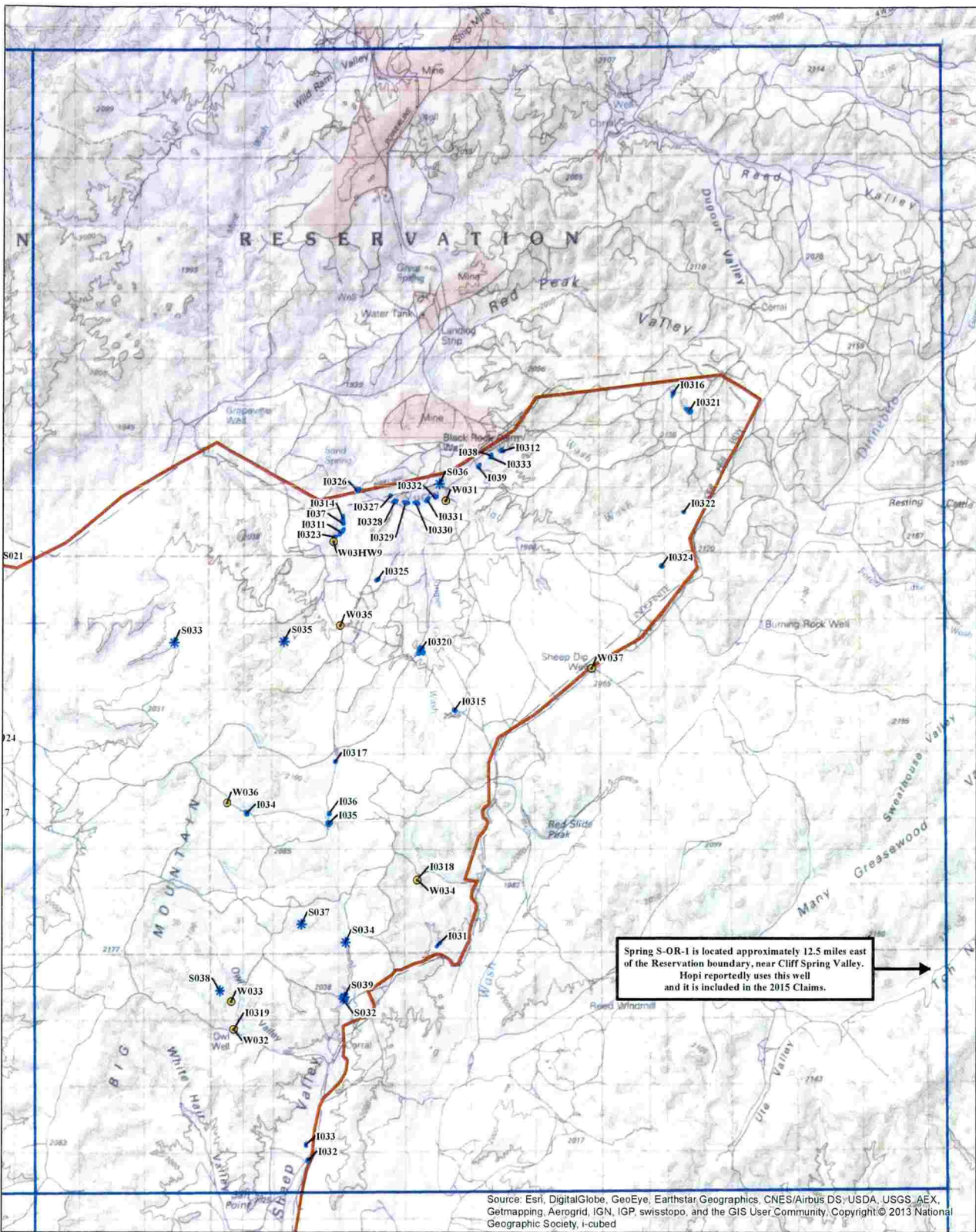


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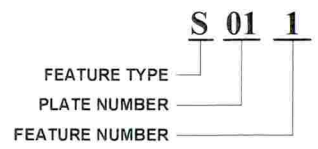
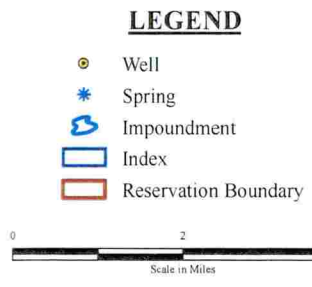
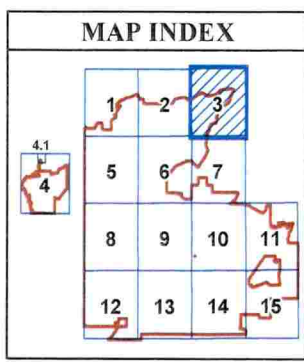


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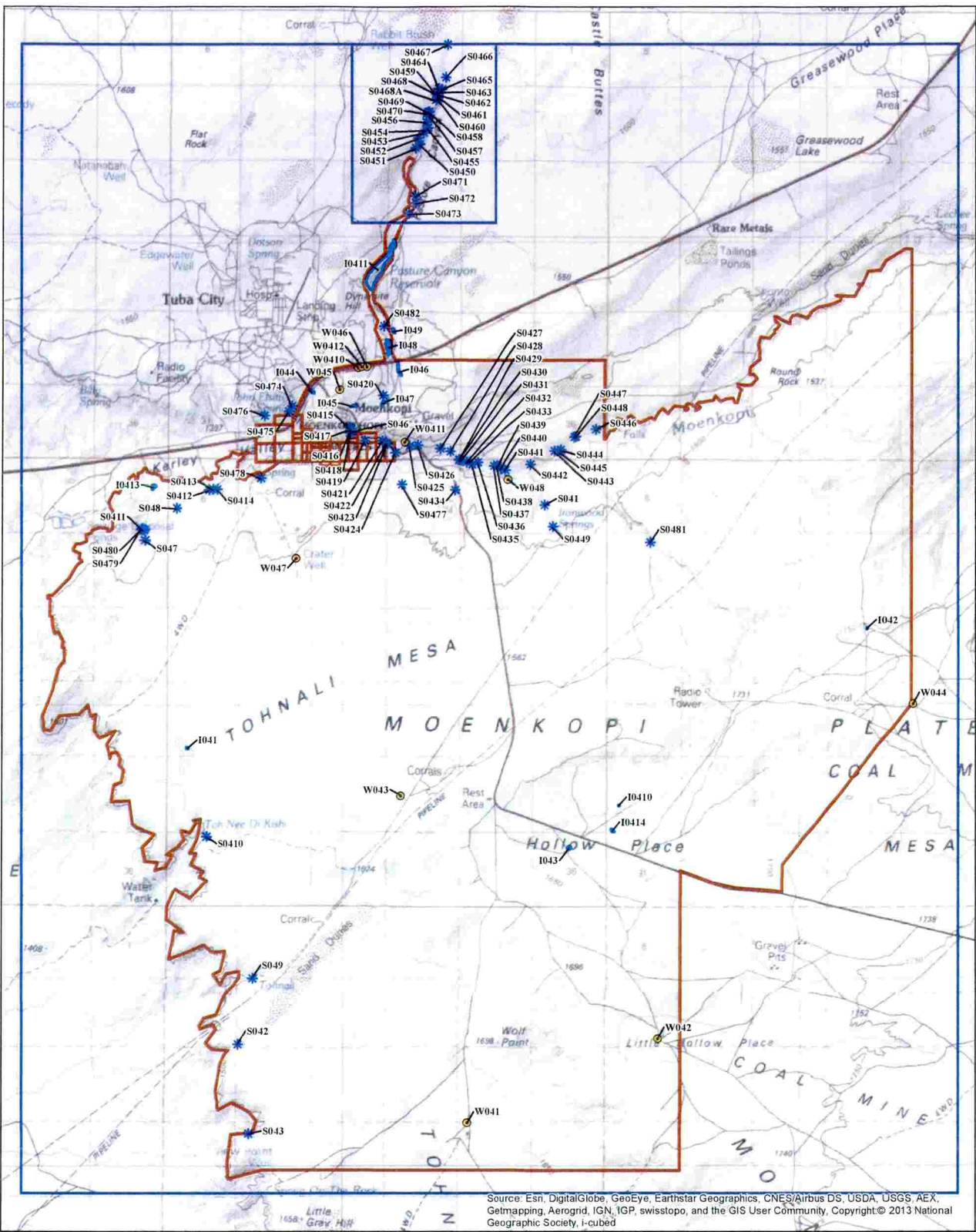
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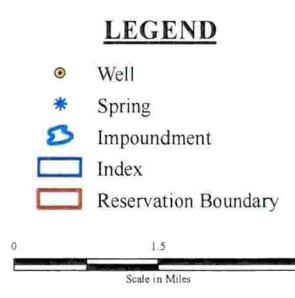
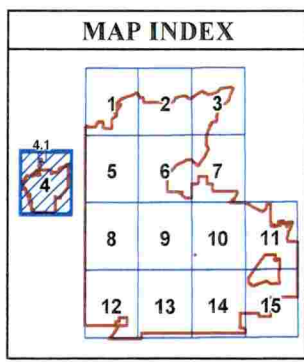
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HOPI INDIAN RESERVATION
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 JUNE 2, 2015
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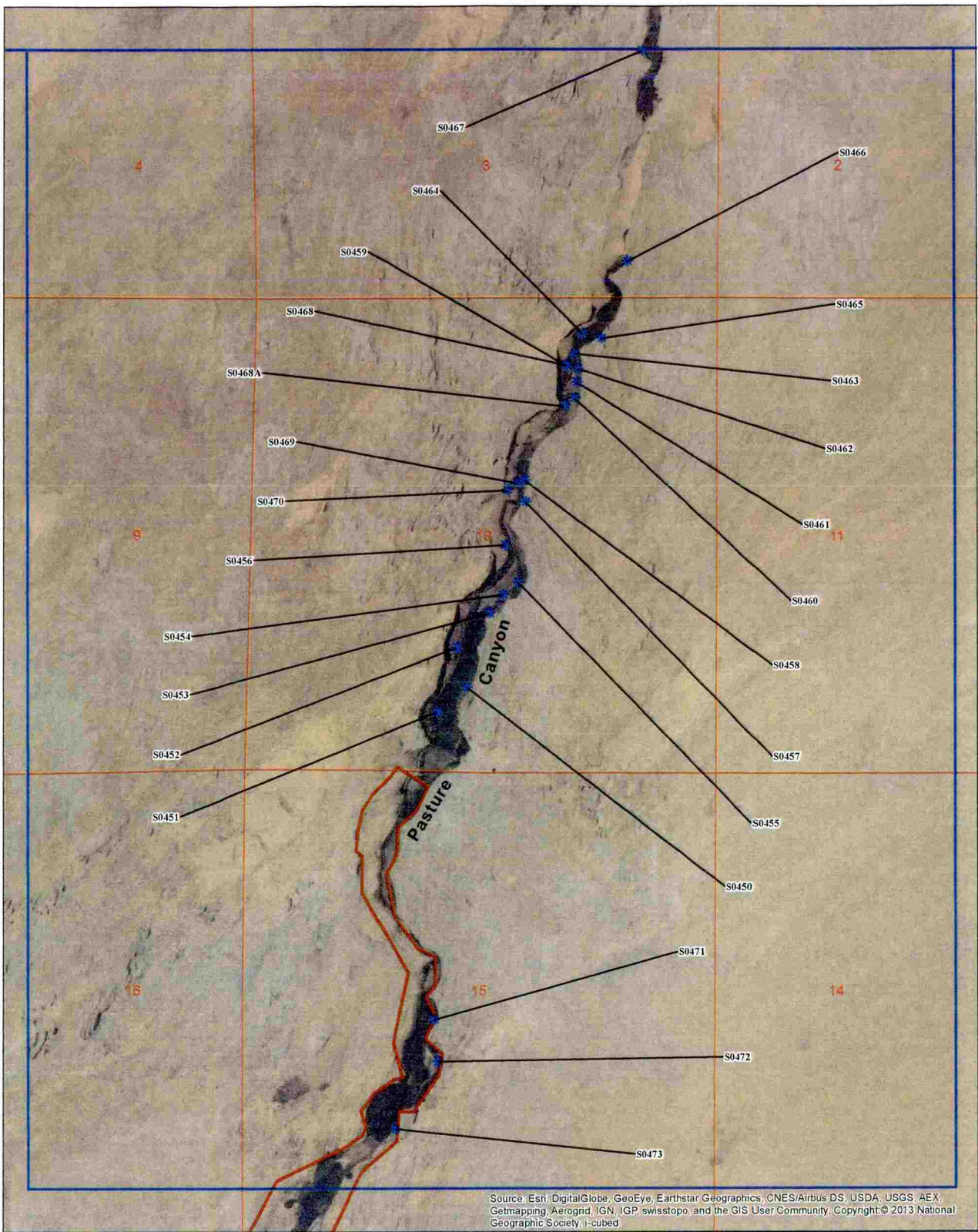


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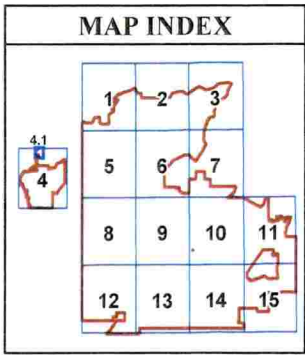
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HOPÍ INDIAN RESERVATION
 SPRING, WELL AND IMPOUNDMENT INVENTORY MAPS
 JUNE 2, 2015
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LEGEND

- Well
- Spring
- Impoundment
- Section Boundary
- Index
- Reservation Boundary



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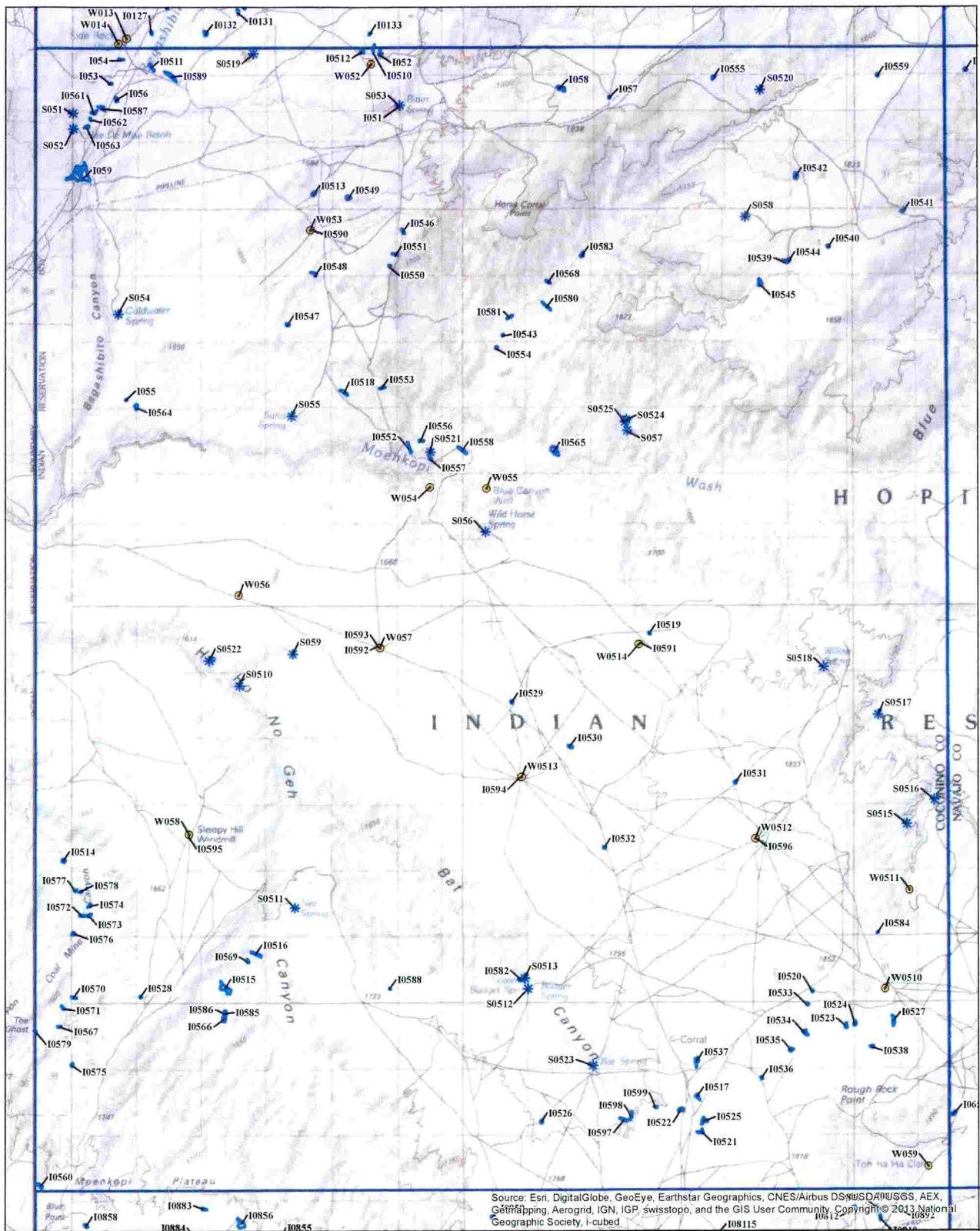


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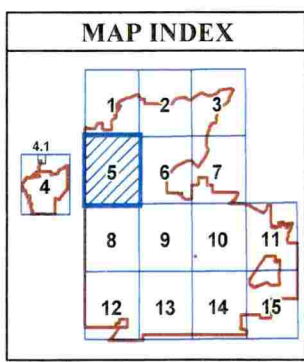
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 JUNE 2, 2015
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LEGEND

- Well
- Spring
- Impoundment
- Index
- Reservation Boundary

0 2 4
Scale in Miles



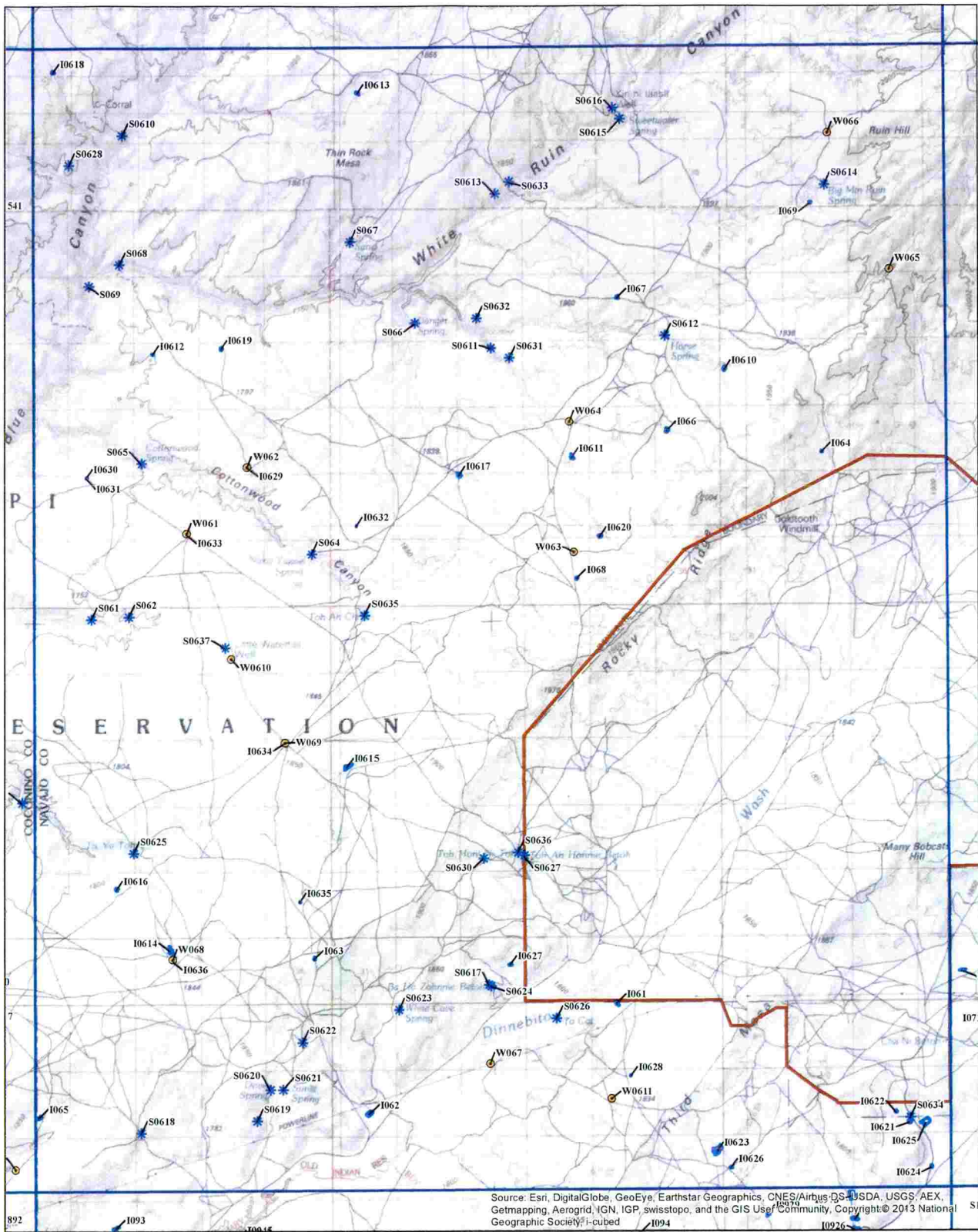
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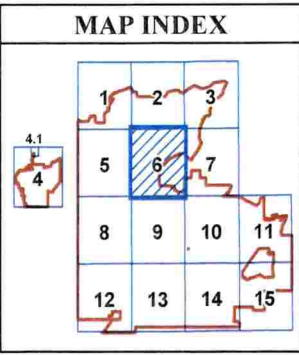
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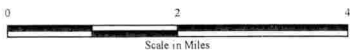


- LEGEND**
- Well
 - Spring
 - Impoundment
 - Index
 - Reservation Boundary



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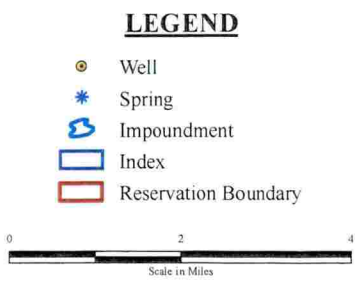
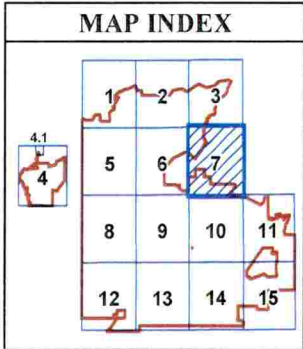
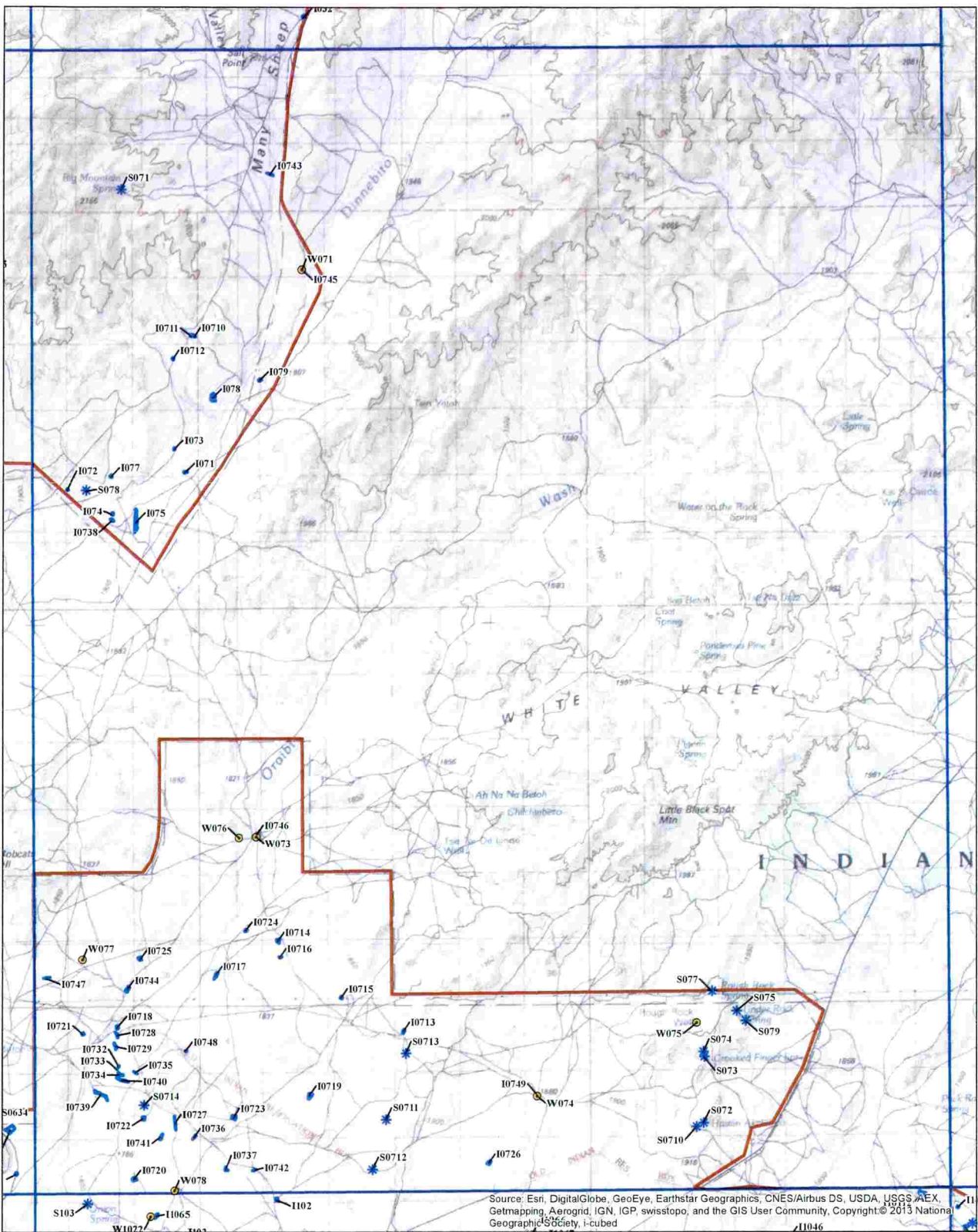
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 JUNE 2, 2015
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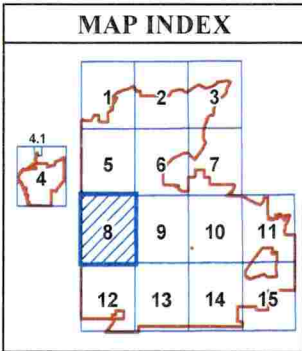
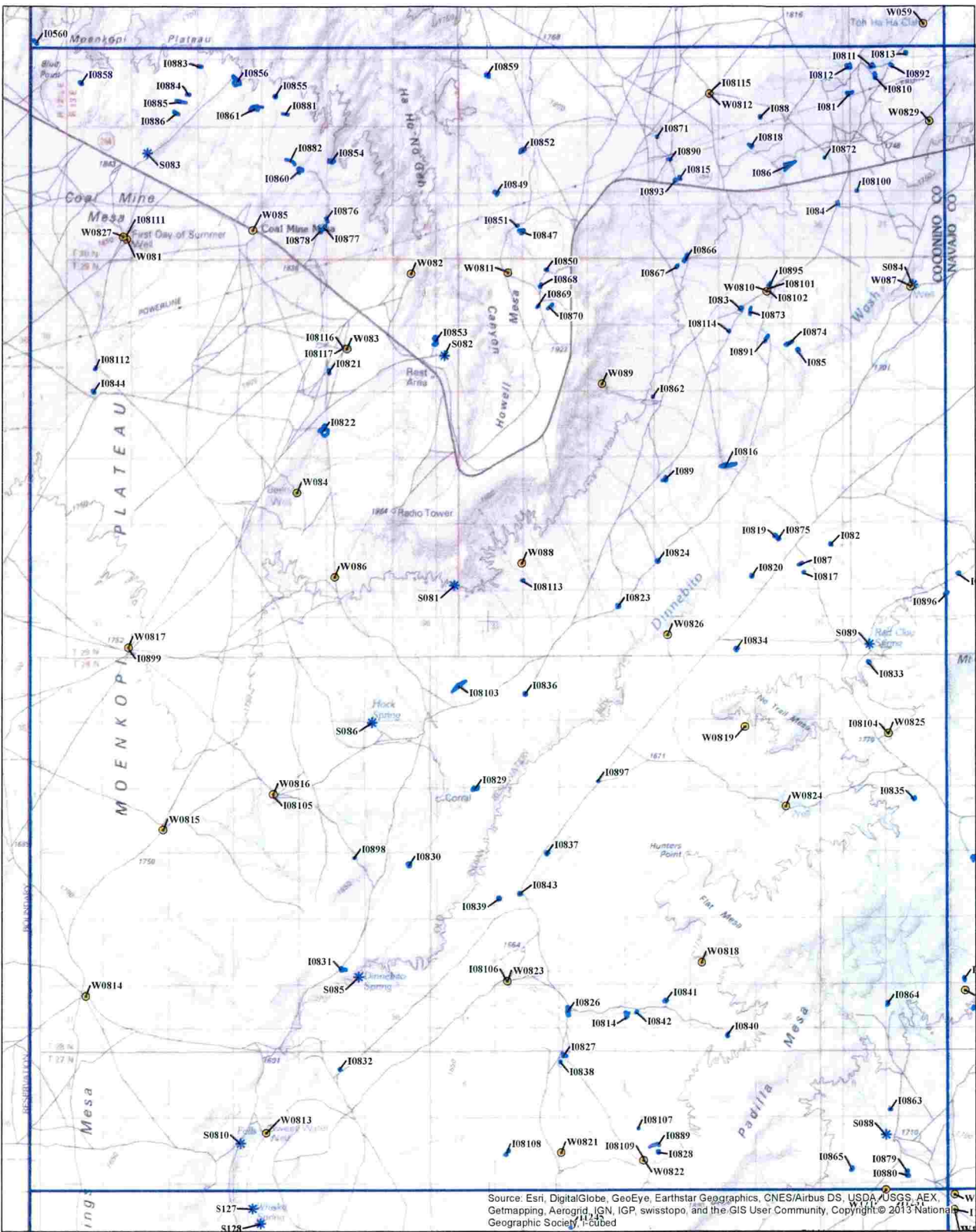


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 SPRING, WELL AND IMPOUNDMENT INVENTORY MAPS
 JUNE 2, 2015
 Plate 7

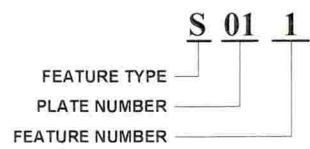
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- ### LEGEND
- Well
 - Spring
 - Impoundment
 - Index
 - Reservation Boundary

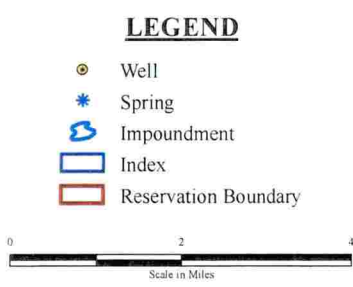
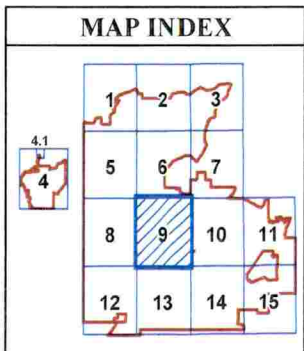
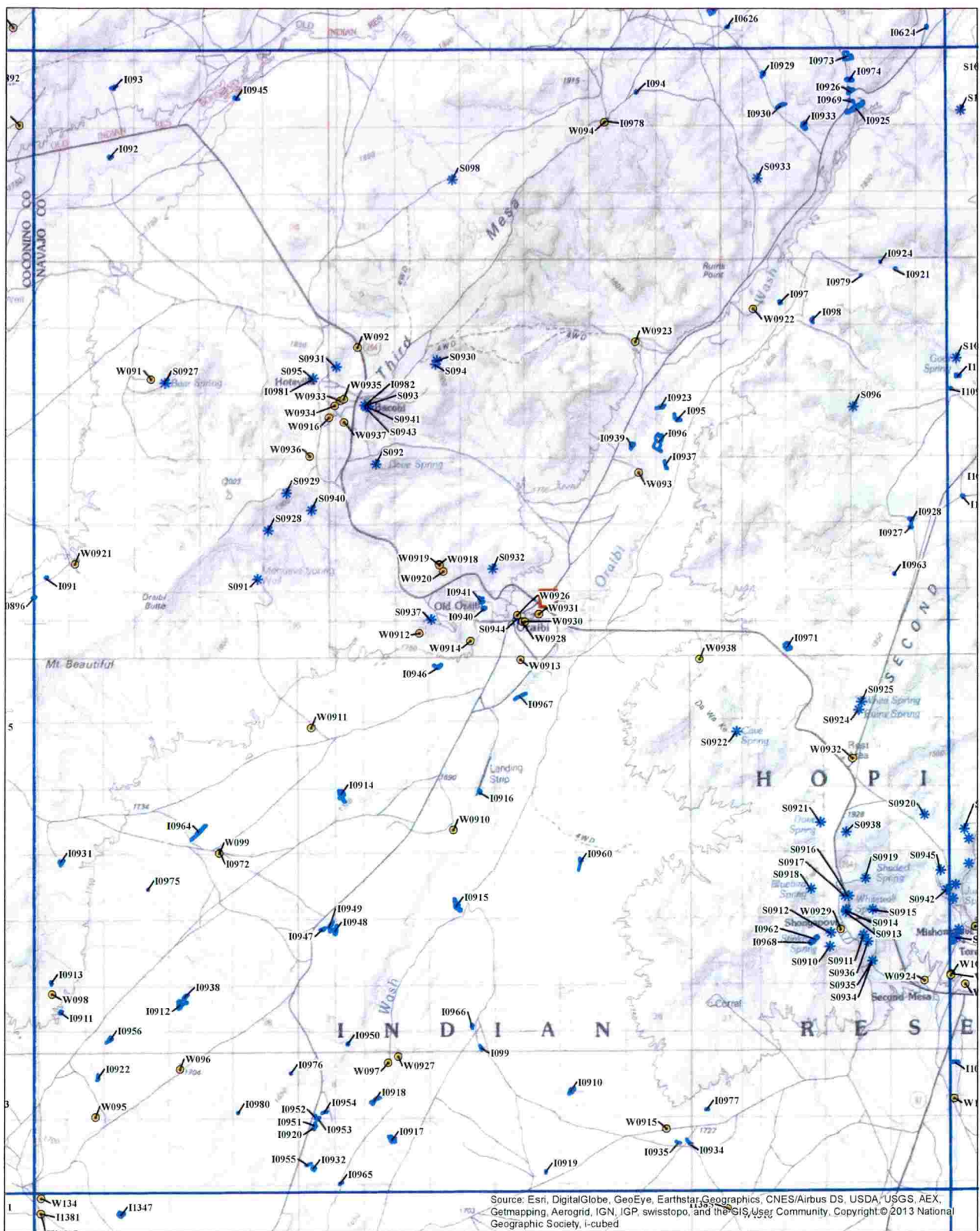


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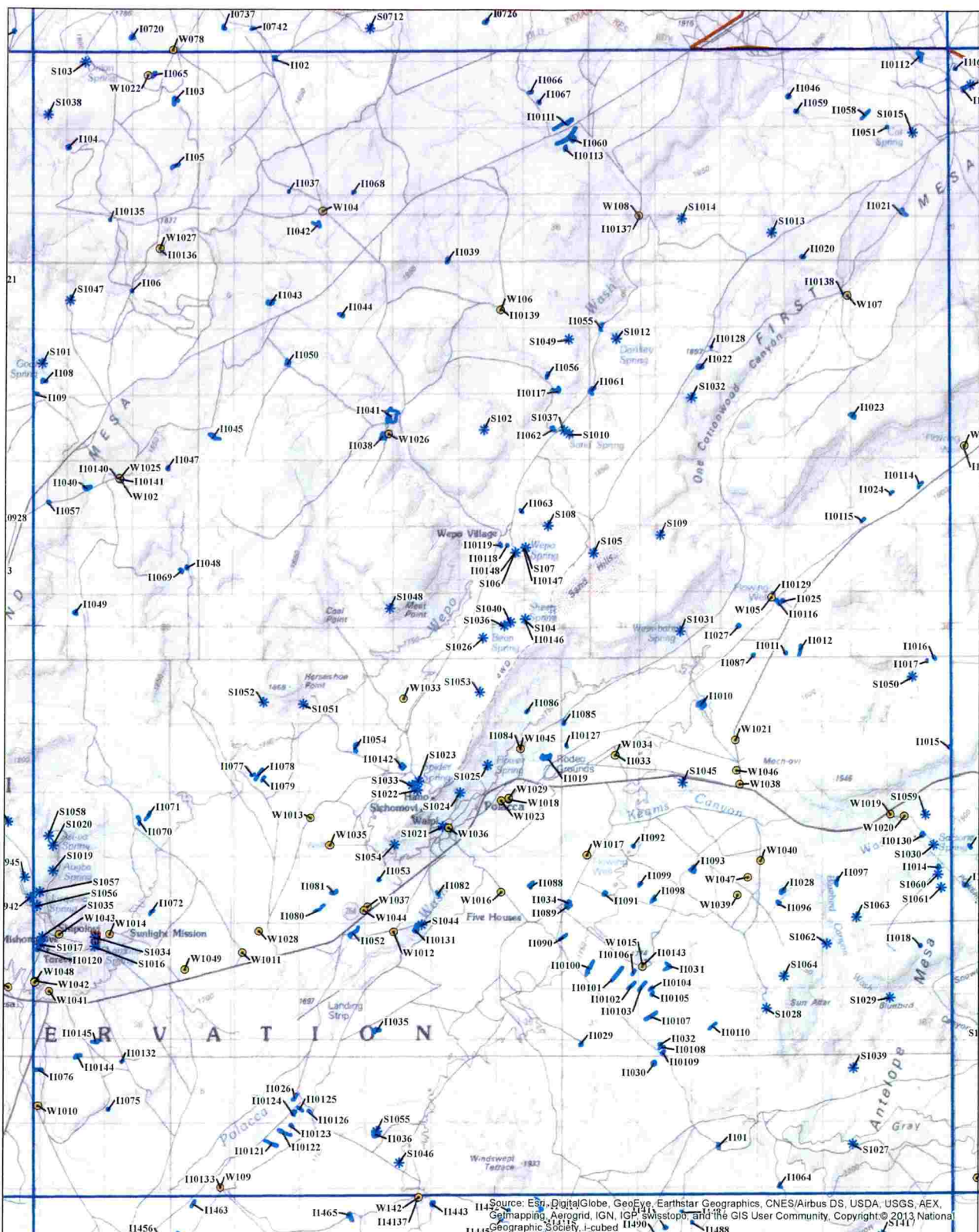
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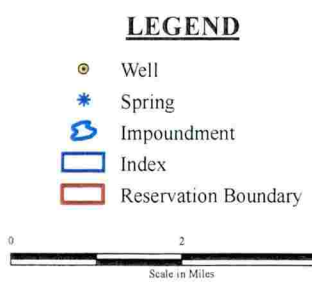
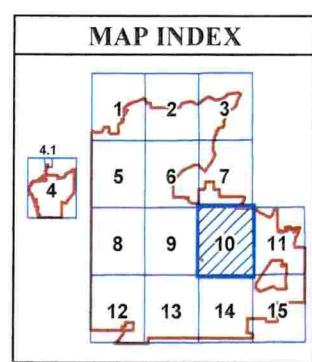
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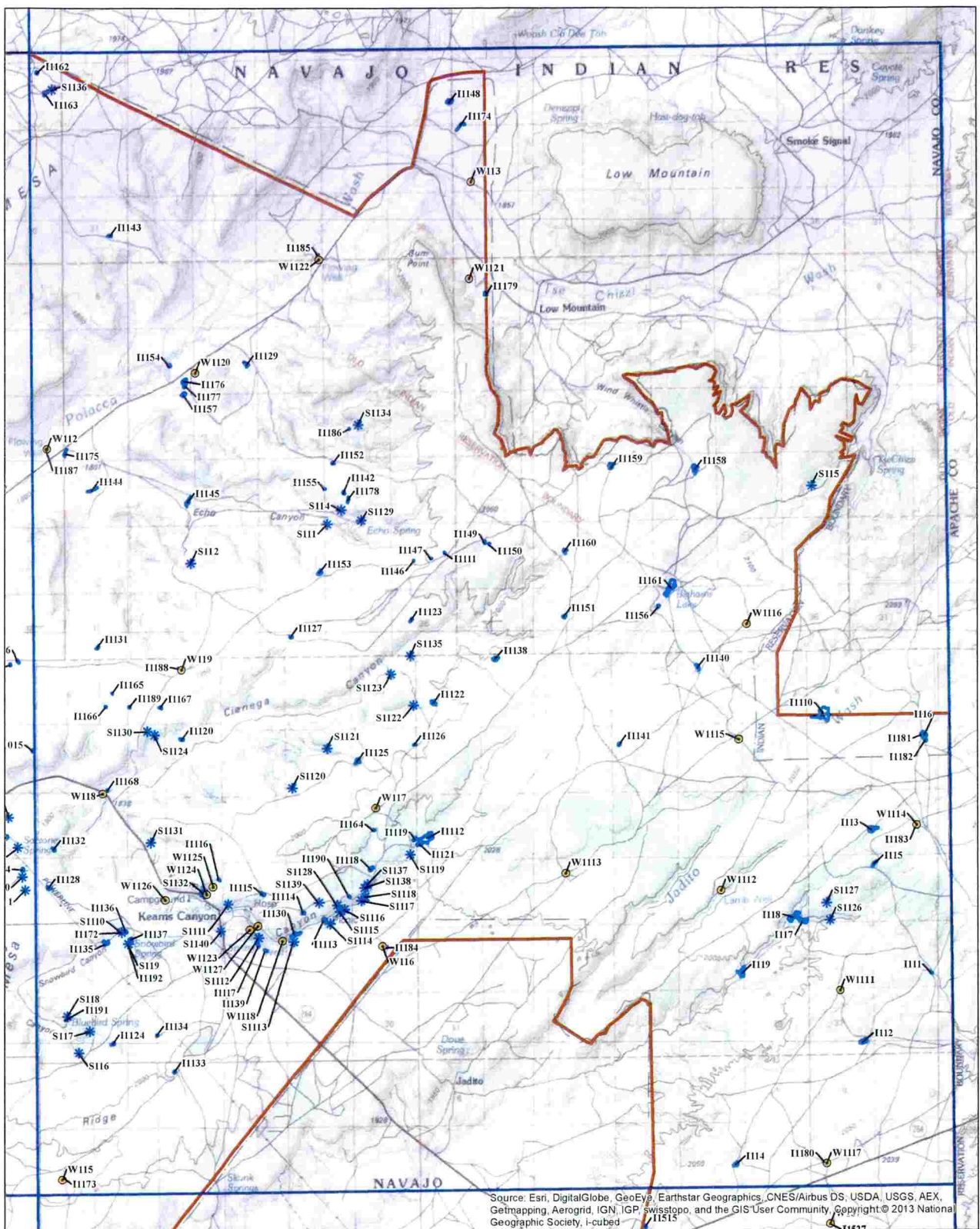
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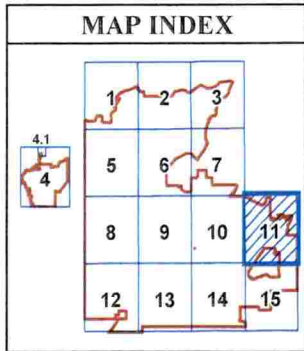
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 SPRING, WELL AND IMPOUNDMENT INVENTORY MAPS
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- LEGEND**
- Well
 - ★ Spring
 - ☁ Impoundment
 - Index
 - ▭ Reservation Boundary



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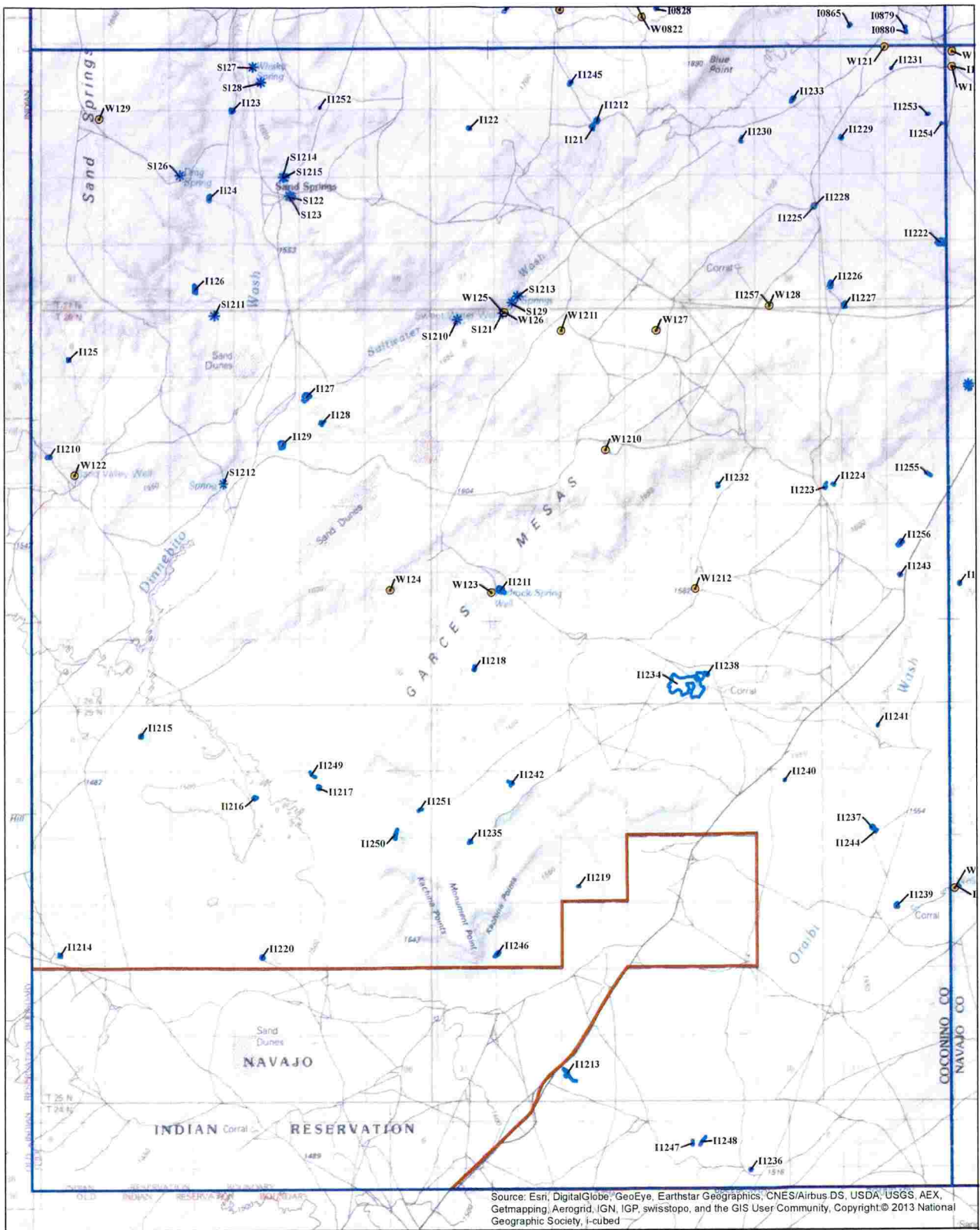
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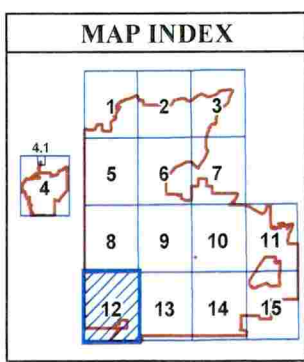
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HOPÍ INDIAN RESERVATION
 SPRING, WELL AND IMPOUNDMENT INVENTORY MAPS
 JUNE 2, 2015
 Plate 11

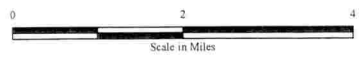
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- LEGEND**
- Well
 - Spring
 - Impoundment
 - Index
 - Reservation Boundary



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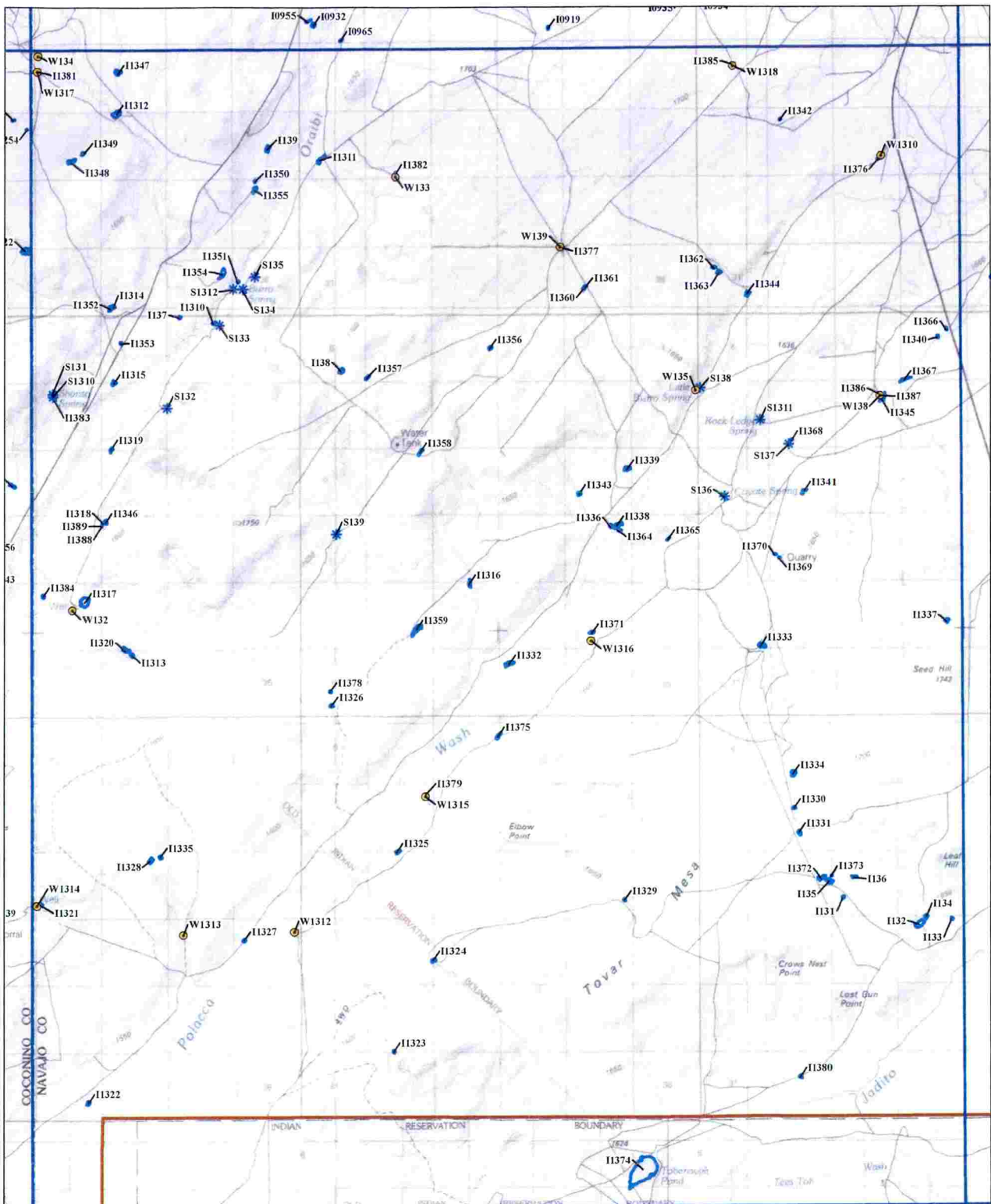


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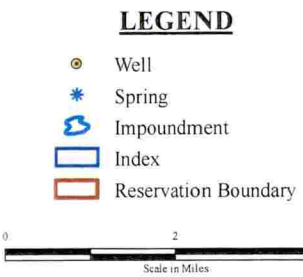
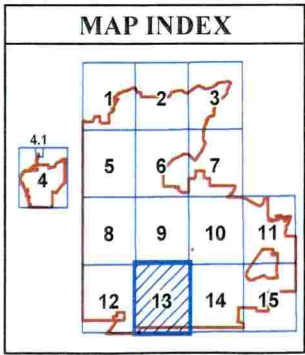
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 JUNE 2, 2015
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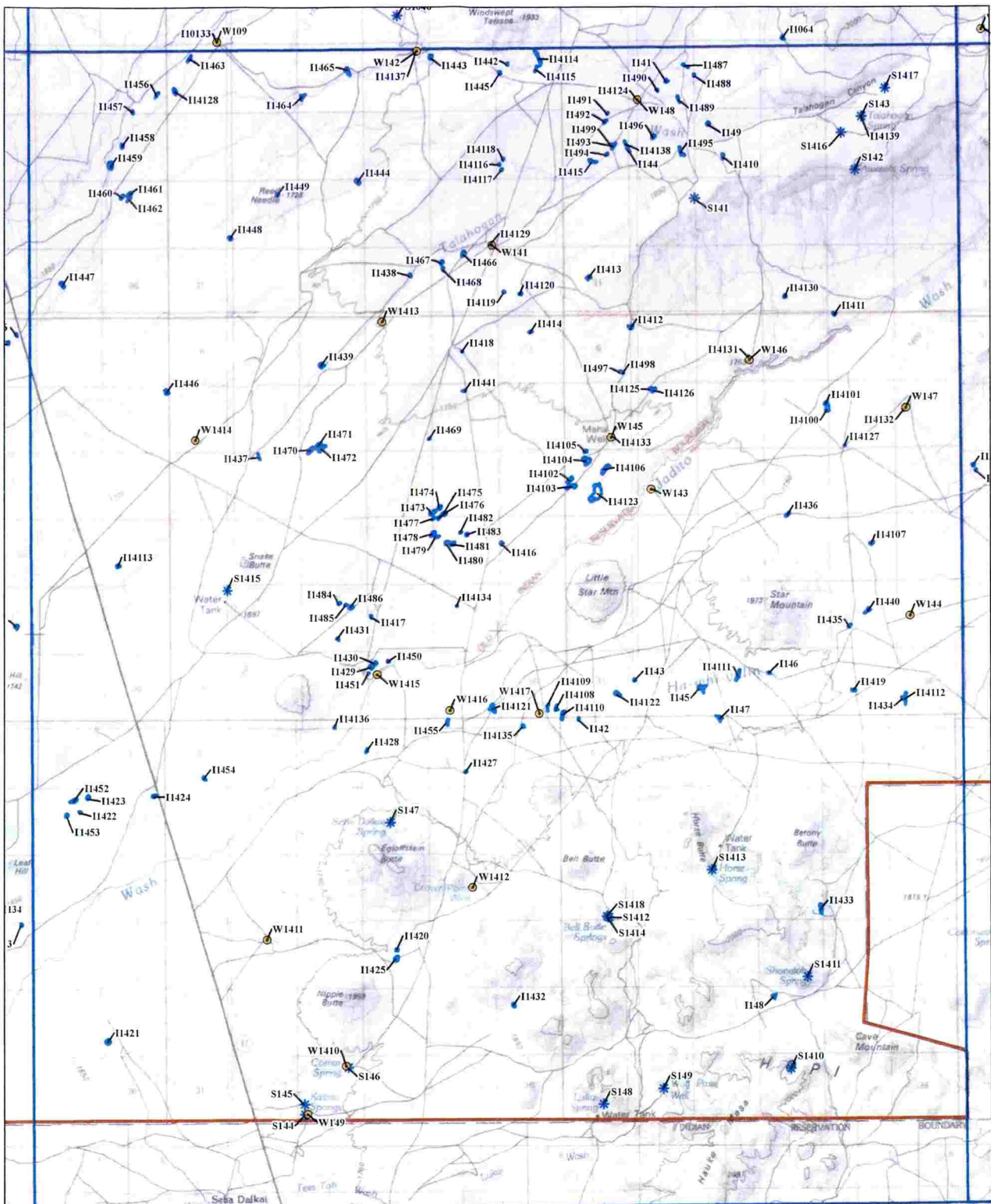
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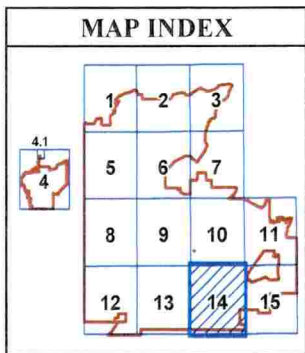
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 SPRING, WELL AND IMPONDMENT INVENTORY MAPS
 JUNE 2, 2015
 Plate 13

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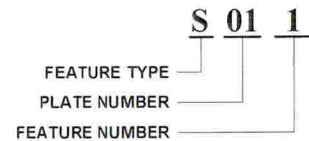


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LEGEND

- Well
- Spring
- Impoundment
- Index
- Reservation Boundary



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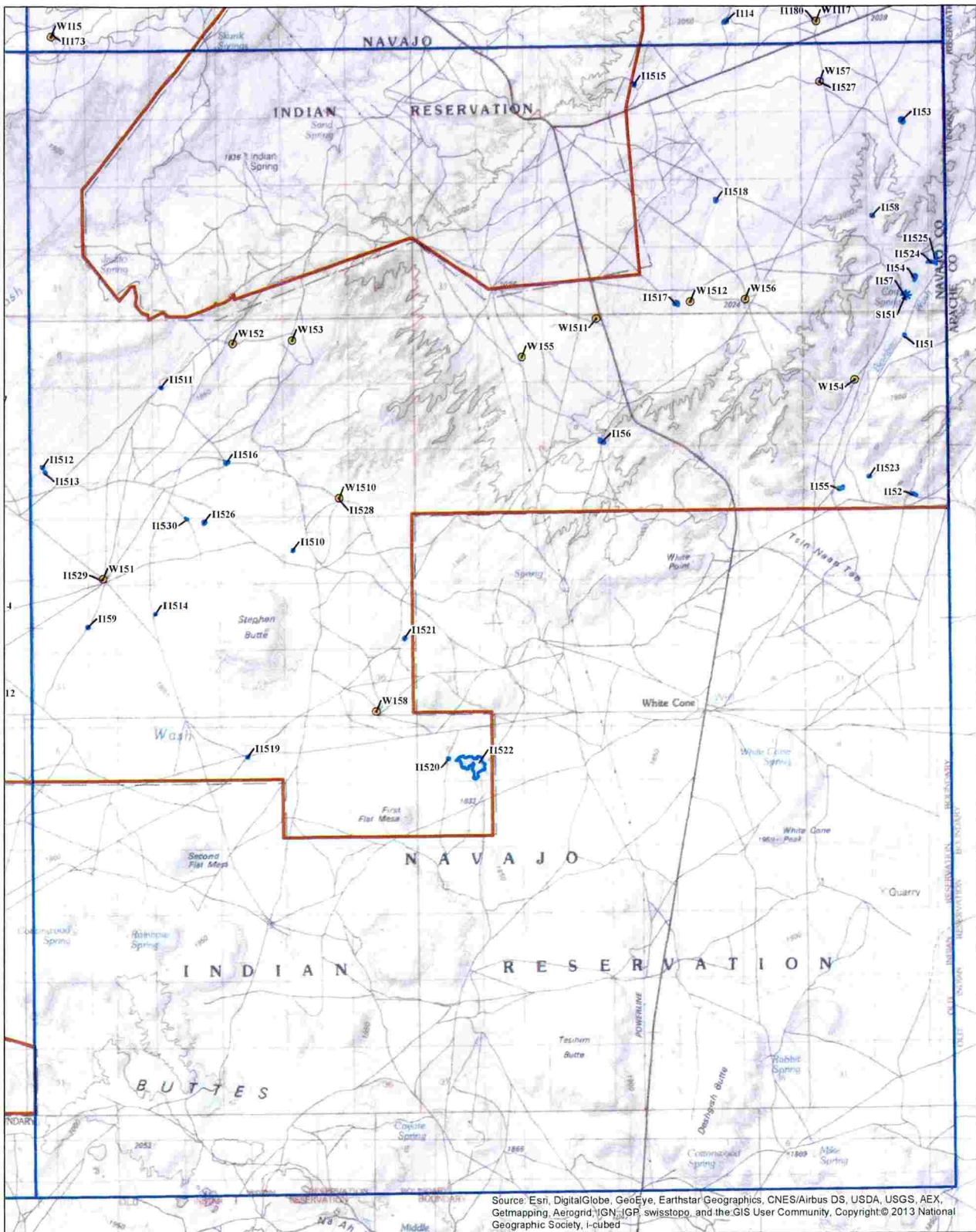
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Plate 14

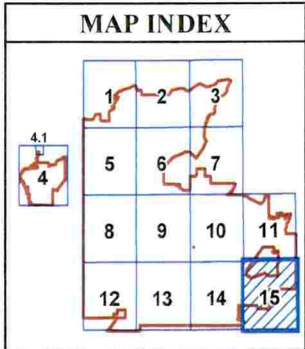


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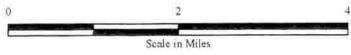
LEGEND

- Well
- * Spring
- ☪ Impoundment
- Index
- ▭ Reservation Boundary



S 01 1

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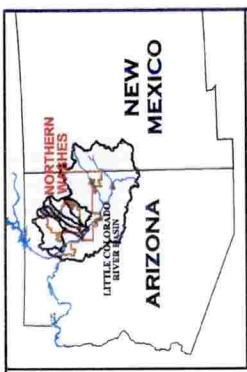
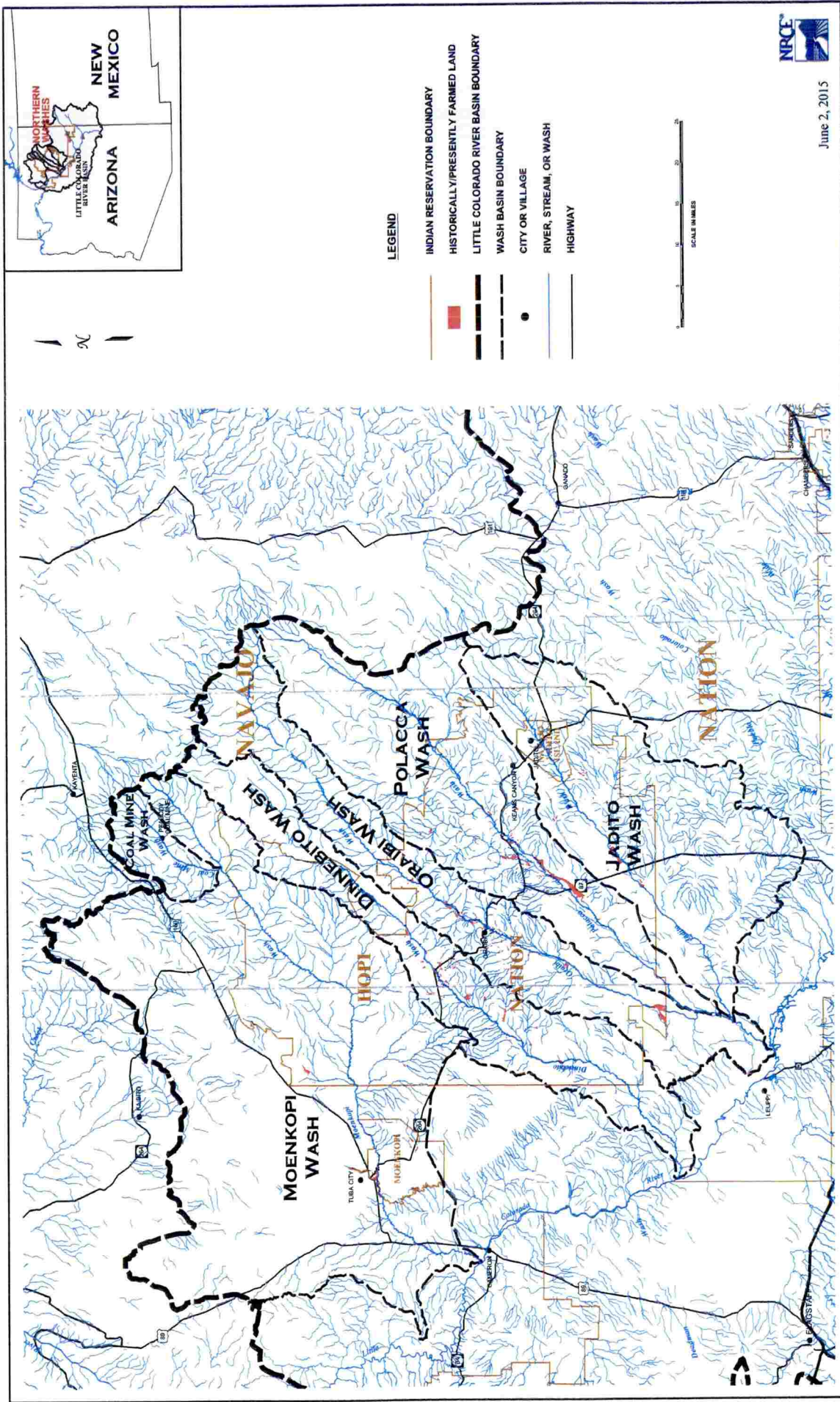


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 SPRING, WELL AND IMPOUNDMENT INVENTORY MAPS
 JUNE 2, 2015
 Plate 15

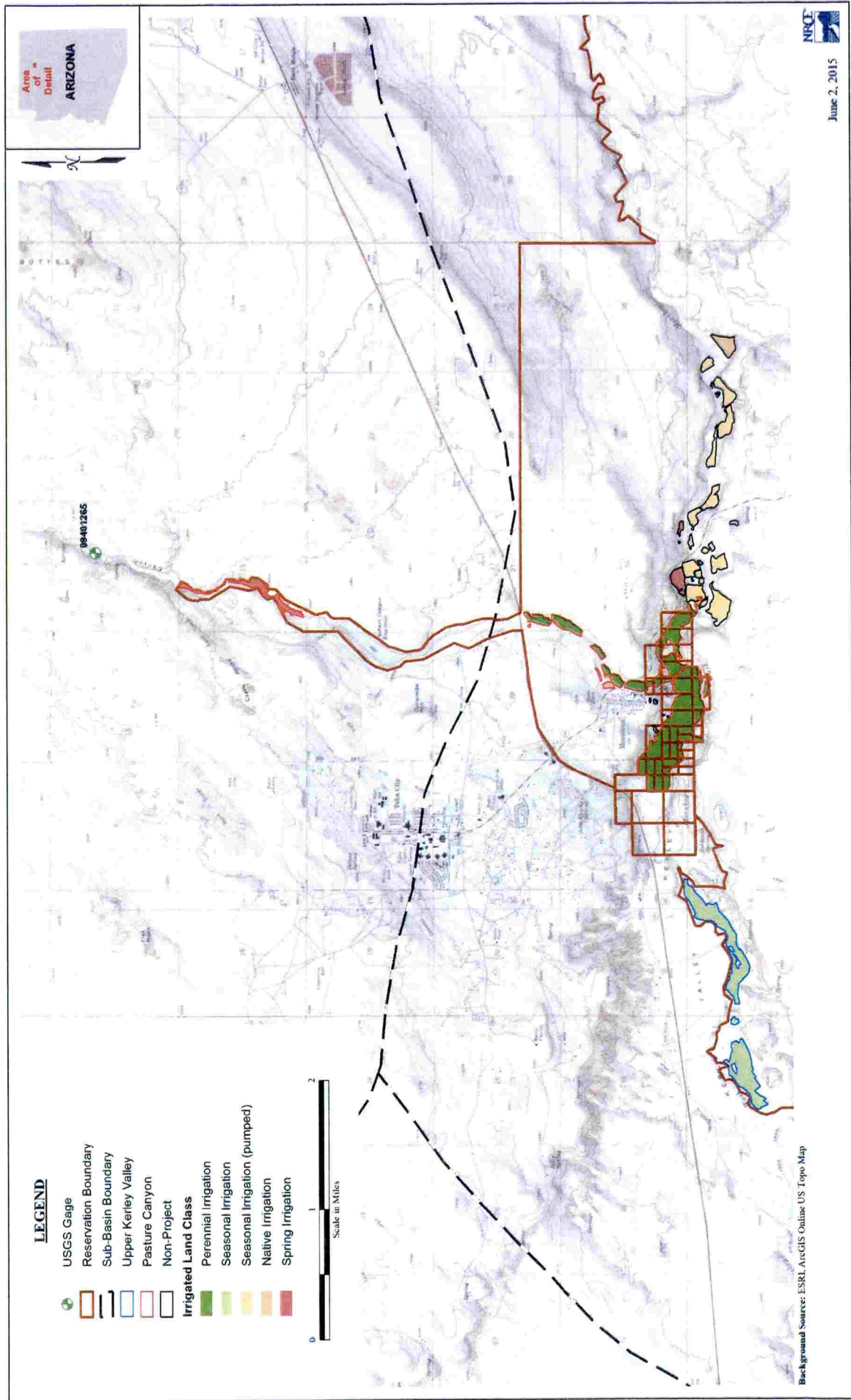
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Appendix 8



General distribution of historically irrigated areas within the Northern Washes, Hopi Indian Reservation.

Appendix 9



LEGEND

- USGS Gage
- Reservation Boundary
- Sub-Basin Boundary
- Upper Kerley Valley
- Pasture Canyon
- Non-Project
- Irrigated Land Class**
- Perennial Irrigation
- Seasonal Irrigation
- Seasonal Irrigation (pumped)
- Native Irrigation
- Spring Irrigation



Background Source: ESRI, ArcGIS Online US Topo Map

NRCF
June 2, 2015

Overview Map of Pasture Canyon

Appendix 10

