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INDIAN WATER RIGHTS

in

THE WEST

Prepared by the Staff of the
Western States Water Council

INDIAN WATER RIGHTS IN THE WEST

A Study Prepared by
the Staff of
The Western States Water Council
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INTRODUCTION

The following is an investigative study undertaken at the request of the Western Governors' Policy Office dealing with the subject of Indian water rights in the Western United States. It has been compiled by the staff of the Western States Water Council and does not necessarily represent the individual views of Council members or the collective view of the Council as a whole.

The study does not purport to be an exhaustive report on the general topic of Indian water rights. Its specific focus is the potential quantity of such rights and the issues related immediately thereto.

The aim of the study is description as opposed to persuasion or advocacy. Because of the generally uncertain nature of the subject matter, few definitive conclusions are reached. Nothing in the study should be taken as a statement of what any tribe's water rights "ought" to be, nor as an endorsement of any formula for quantification or method of settling Indian water right claims.

The study begins with a look at the availability of water in the West and the legal system used to create and administer rights to that water. It then discusses Indian water right issues, focusing specifically on the potential

quantity of Indian water claims. A review of the methods which have been used to attempt to quantify Indian water rights concludes the study.

I. Water in the West

A brief description of the water supply picture in the western United States is necessary to give perspective to the question of the quantification of Indian water rights.

Water is a scarce resource in the arid West. Early American cartographers often referred to the region as the "Great American Desert." Even including the water-rich areas of the coastal states, states west of the 100th meridian receive only about one-fourth of the rainfall which occurs in the East. [1/] Yet 1975 per capita consumption in the West was 12.4 times that in the East. [2/]

The amount of water available for use in the West is finite. Some methods of augmentation, such as weather modification and desalinization, have added slightly to available water, while others, such as importation of icebergs and massive interbasin transfer plans, offer theoretical but problematic possibilities for further increase. Also, the western states are implementing conservation measures to better use available water resources. Still, absent some as yet undiscovered innovation in water development

technology, western water supplies will remain a limiting resource.

For various reasons it is difficult to define precisely the relationship between water supply and water use in the West. These reasons include the varying factors of timing and location of available water, water quality fluctuations, and "third-party" effects such as maintenance of non-consumed return flows and priority of rights.

Notwithstanding these difficulties, the following table gives an idea of the water supply/water use relationship in the western states. The table's definition of "water use" includes both instream needs and off-stream consumption. In-stream needs are defined as the minimum flow necessary for maintenance of fish and wildlife populations or for navigation. Off-stream consumption is estimated as the total water that would have been consumed or lost assuming a demand based on 1975 levels of activity. Although there is an absence of consensus as to the amount of water which should be allocated to instream uses, this does not mean that including them overstates the degree of water scarcity in the West. Recently increasing concern with instream values probably indicates that future water use for maintenance of such values will not dimish and may increase.

The "average" column in the table is based on precipitation levels that will be equaled or exceeded 50% of the

time while the "dry" column is based on levels which will be equaled or exceeded 80% of the time. It should be noted that demands and diversions for off-stream water consumption as well as maintenance of instream flows have increased since 1975.

ILLUSTRATION I

Total Water Use as a Percentage of Streamflow in Average and Dry Years

Region number	Subregion number	Name	Average years	Dry year
09		SOURIS-RED-RAINY	62	110
	01	Souris-Red-Rainy	62	110
10		MISSOURI	87	120
	01	Missouri-Milk-Saskatchewan	82	105
	02	Missouri-Marias	82	104
	03	Missouri-Musselshell	81	102
	04	Yellowstone	96	117
	05	Western Dakotas	84	108
	06	Eastern Dakotas	82	102
	07	North and South Platte	140	160
	08	Niobrara-Platte-Loup	103	122
	09	Middle Missouri	91	107
	10	Kansas	123	191
	11	Lower Missouri	87	120
11		ARKANSAS-WHITE-RED	83	138
	01	Upper White	84	126
	02	Upper Arkansas	134	175
	03	Arkansas-Cimarron	114	243
	04	Lower Arkansas	83	152
	05	Canadian	122	261
	06	Red-Washita	129	180
	07	Red-Sulphur	83	133
12		TEXAS-GULF	101	197
	01	Sabine-Neches	85	163
	02	Trinity-Galveston Bay	89	176
	03	Brazos	142	327
	04	Colorado (Texas)	119	188
	05	Nueces-Texas Coastal	96	183
13		RIO GRANDE	136	180
	01	Rio Grande Headwaters	110	159
	02	Middle Rio Grande	140	165
	03	Rio Grande-Pecos	148	176
	04	Upper Pecos	144	177
	05	Lower Rio Grande	136	180

ILLUSTRATION I (Cont.)

Total Water Use as a Percentage of Streamflow in Average and Dry Years

Region number	Subregion number	Name	Average years	Dry year
14		UPPER COLORADO	84	112
	01	Green-White-Yampa	87	114
	02	Colorado-Gunnison	80	106
	03	Colorado-San Juan	84	112
15		LOWER COLORADO	225	239
	01	Little Colorado	80	103
	02	Lower Colorado Main Stem	225	239
	03	Gila	304	315
16		GREAT BASIN	125	158
	01	Bear-Great Salt Lake	102	125
	02	Sevier Lake	186	204
	03	Humboldt-Tonopah Desert	177	222
	04	Central Lahontan	116	165
17		PACIFIC NORTHWEST	84	102
	01	Clark Fork-Kootenai	62	73
	02	Upper / Middle Columbia	79	94
	03	Upper / Central Snake	91	119
	04	Lower Snake	78	96
	05	Coast-Lower Columbia	85	102
	06	Puget Sound	81	96
	07	Oregon Closed Basin	101	161
18		CALIFORNIA	82	113
	01	Klamath-North Coastal	65	95
	02	Sacramento-Lahontan	76	106
	03	San Joaquin-Tulare	109	131
	04	San Francisco Bay	91	152
	05	Central California Coast	83	169
	06	Southern California	107	116
	07	Lahontan-South	243	290

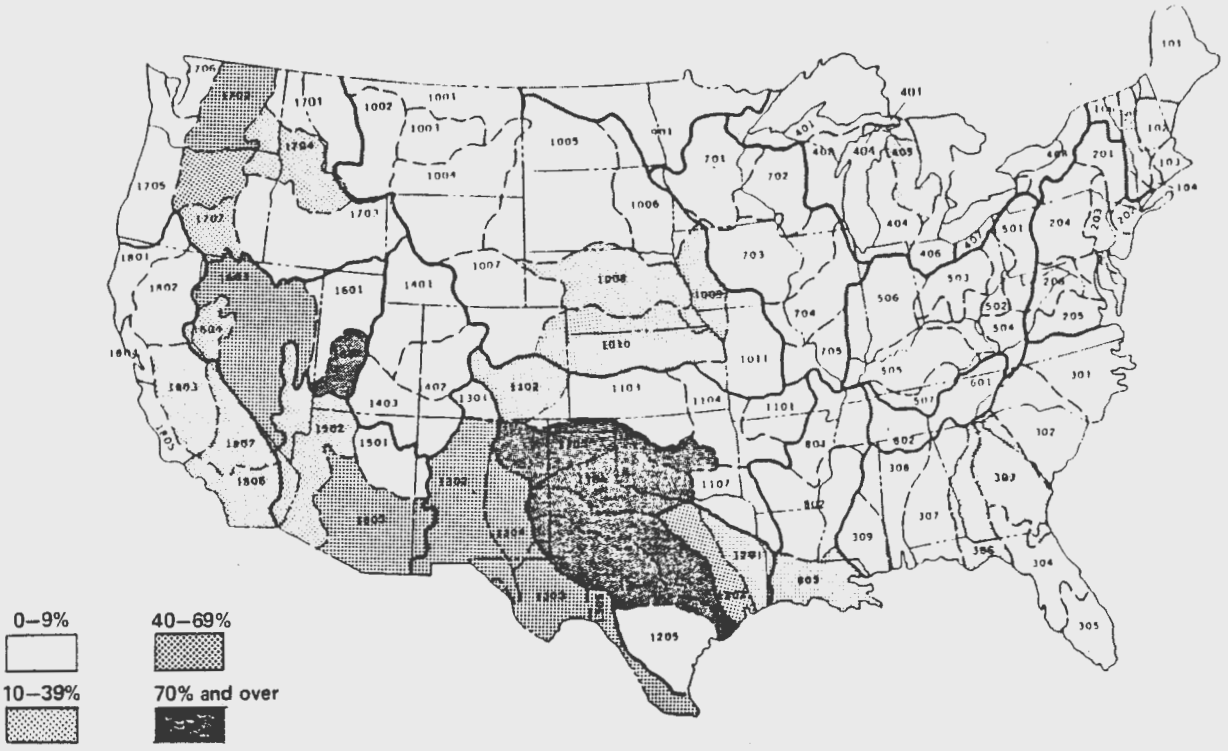
Source: U.S. Water Resources Council, The Nation's Water Resources: The Second National Water Assessment, Vol. 3, app. II (Washington, D.C., GPO 1978) Tables II-5 and II-6, app. IV, Table IV 2.

With the exception of a portion of North Dakota (Souris-Red-Rainy River Basins sub-region) the average water use as a percentage of stream flow exceeded 80% in all of the western United States in 1975. In approximately half of the area water

use exceeded stream flow in an average year of precipitation. In virtually the entire area stream flow is exceeded by water use in a dry year. In areas where water use exceeds stream flow ground water supplies must be used to supplement surface flows. In many cases, ground water "mining" occurs. In these situations ground water extraction exceeds natural replenishment. Many areas are currently experiencing the various difficulties associated with serious ground water over-draft. The following illustration shows where this problem is most accute. It is also based on 1975 levels of withdrawal.

ILLUSTRATION II

THE PERCENTAGE OF GROUNDWATER WITHDRAWN THAT IS IN EXCESS OF NATURAL RECHARGE RATES - 1975



(Note: According to the State of Arizona Department of Water Resources the sub-region in the southeastern part of that state should be shaded black.)

Source: U.S. Water Resources Council, 1975 National Water Assessment, Draft Final Report (Washington, D.C., 1975)

Although the scarce and static supply of water in the West is already heavily used, numerous demands for additional use are constantly being made. Population growth with its concomitant municipal, industrial, and food and fiber requirements account for many of these demands. Also pressing is the emphasis being placed on the need to develop the energy related natural resources in the western United States. As a rule, such development is water-intensive, thus serving to pose tremendous additional burdens on the already water-short West.

II. Western Water Law

The early miners in the West often needed water for mining operations which were located far from natural water sources. They built diversionary structures and water transport devices and thereby established use of water supplies. Their "first in time, first in right" use of water was looked upon with the same validity as their "first in time, first in right" establishment of mining claims. The doctrine of prior appropriation grew from this tradition.

The growth and development of the appropriation doctrine received the support and approval of the federal government.

By passage of the Mining Act in 1866 [3] and the Desert Land Act in 1877 [4] Congress approved past and future appropriations of water on public lands which had been made pursuant to local laws and customs. This included the vast majority of appropriations since most western land was in public ownership at the time.

The Desert Land Act stated that all water on public lands was "free for appropriation and use of the public for irrigation, mining and manufacturing purposes." The Supreme Court later recognized in California-Oregon Power Co., v. Beaver Portland Cement Co.[5] that this statute affected a severance of the land and water estates in the public domain, directing that rights to the land be established independently of water rights. This decision affirmed the principle that water could be appropriated and property rights in it established under traditional state practices and laws. Although a few states provided for establishment of some riparian water rights, the majority opted for the appropriation doctrine as the controlling standard of water law. That standard prevails.

The water rights created under the appropriation doctrine are considered constitutionally protected property interests. They are given a priority date by which they are integrated into a hierarchy of rights controlled by the "first in time" principle. The attributes of appropriative water rights are: (1) Their basis is publicly defined beneficial use: (2) The

rights are stated in terms of a definite quantity, nature of use, and time of use; (3) The rights may be terminated by abandonment or forfeiture; (4) Their priority is the date on which beneficial use began and; (5) They are transferrable.[6/] One of the most important characteristics of the appropriation doctrine is its protection of economies based upon existing water uses. The stability afforded by the doctrine has contributed significantly to making the West an inhabitable and economically productive region.

III. Indian Water Rights Issues

In 1906, years after Congress had approved the creation of vested property interests in water under the appropriation doctrine, the United States brought suit on behalf of the Indians living on the Fort Belknap Indian Reservation in Montana alleging that all of the water of the Milk River, some of which was being used by non-Indians, was necessary for reservation purposes. The defendants in the suit held valid state water rights under Montana law and had appropriated and were beneficially using 5,000 miners' inches of Milk River water for farming and ranching purposes. They claimed they would be forced to abandon their homes and farms if deprived of that water. They stressed the validity of their state created water rights.

The resolution of the dispute between the Indians and

the Milk River water users would have been a simple one if Congress had included provisions establishing Indian water rights in the legislation which created the Fort Belknap Reservation. Unfortunately such was not the case. The lack of a clearly established Indian water right led the Supreme Court in Winters v. United States [7] to creatively fashion a "reserved" Indian water right based on the reasoning that Congress must have intended to reserve water for the Indian reservation at the time of its creation because such water was necessary to convert the "nomadic and uncivilized" Indians to "pastoral and civilized people". [8] Thus, the Winters doctrine, or the Indian "reserved water rights" doctrine, was born.

In the seventy-five years since Winters was decided many more questions about Indian reserved rights have been asked than answered. Thus, queries abound relating to, among other things, priority dates, rights of allotees, lease and sale of rights, jurisdiction for purposes of adjudication and administration, scope and purpose of the rights, as well as their termination. Because the Winters doctrine has been judicially created and defined, answers to these questions come only sporadically (when a case presenting them arises) and then often in less than definitive fashion.

In comparison to the attributes of appropriative water rights, with which the Indian reserved rights must eventually be integrated, the following is known. The basis of Winters

rights is not a publicly defined beneficial use under state law, but the implied intent of Congress. Winters rights have rarely been stated in terms of a definite quantity, nature of use or time of use. They are not terminated by abandonment or forfeiture. Their priority date is not later than the date the Indian reservation to which they pertain was created. Winters rights apparently are transferable. However certain restrictions pertain to such transfers, some of which are currently being defined through litigation. In short, there is really little similarity between Winters water rights and appropriative water rights. This lack of similarity has been a major factor in the controversy which Winters rights have engendered.

Of all the questions relating to Winters rights, possibly the one which will have the greatest impact when answered is the question relating to their potential quantity. In Winters the Court seemed more concerned with establishing the existence of the impliedly reserved Indian water right than defining the quantity of the right. The Winters decree can be read to have established a reserved water right for the Fort Belknap Reservation of 5,000, 7,000 or 11,000 miners inches from the Milk River, or all of the water in the river. [9/] Since Winters, the courts have struggled to ascertain a formula for quantifying Indian reserved rights. Today the quantity question is unanswered for most reservations.

In United States v. Walker River Irrigation District, [10] the court held that the "extent to which the use (by Indians) of a stream might be necessary could only be demonstrated by experience." Although there were 10,000 acres of land on the reservation susceptible to cultivation, the tribe had never cultivated more than 2,100 acres. The court used this amount to calculate a reserved water right with a priority date of 1859, which was when the Secretary of Interior set aside land for the reservation. Thus, according to the Walker River court, past and present use was the measure of the reserved right.

A different standard was imperfectly identified in United States v. Alexander [11] which seems to support the proposition that reserved water rights apply to all waters on an Indian reservation. The vagueness of the opinion, according to one commentator, [12] made its precedential value questionable.

In United States v. Ahtanum Irrigation Dist., [13] the court held that the quantity of the Indian reserved right should not be measured by use at the time the reservation was created, because water should be recognized as having been reserved for future uses. Thus, "ultimate need" (based on future uses) was the standard articulated by the Ahtanum court. This result seemed to be supported by the holding in an older case, Conrad Inv. Co. v. United States. [14]

Perhaps as an attempt to accommodate past, present and future needs and, at the same time, make possible the determination of a fixed quantity, in 1963 the United States Supreme Court in Arizona v. California [15] held that the standard for quantifying Indian reserved water rights for five lower Colorado River Indian reservations was the amount of water necessary to irrigate the "practicably irrigable acreage" (PIA) on the reservations. The Court provided few guidelines regarding technological standards for irrigation, nor was much guidance given on questions of economic practicability (although the most recent decision in the case, with accompanying Special Masters Report, is more helpful in this regard). [16] But, the Court did decide upon a formula which facilitates determination of a fixed quantity for Indian reserved water rights. Nowhere in the opinion, however, did the court declare the Arizona standard as that by which a quantification would (or should) be reached for all Indian reservations. Nevertheless, Arizona is the only Supreme Court authority on the question of quantification.

Many observers believe that the Arizona practicably irrigable acreage (PIA) standard is not the "final word" on quantification of Indian water rights. Some have argued that a PIA diversionary water right of 900,000 acre feet per year to five Indian tribes with the total population of approximately 2,000 members is far too generous. This is especially true, they insist, when viewed in the light of the current Colorado

River water use in the United States, which is approximately 10,000,000 per acre feet per year. Others opine that the Supreme Court has recently placed under a cloud of uncertainty the PIA standard and noted willingness to reconsider its universal applicability. 17/

On the other hand, others have argued that the PIA standard unreasonably limits the quantification of Indian water rights to a formula based on reservation size. They stress that water rights should be quantified on the basis of other Indian needs such as municipal, domestic, stock watering, propagation and harvesting of fish, recreation and industrial purposes in addition to irrigation. Also of particular importance is water for the development of energy related resources. Many of these observers would have Indian water rights quantified only on the basis of open-ended decrees which could be modified to expand the rights as Indian needs and uses increase.

Although the law of reserved water rights requires that such rights be recognized only for the purposes for which a reservation was established 18/ and limits the water right to fulfillment of those purposes and "no more," 19/ proponents of the expanded view of Indian water rights argue that the purpose for which Indian reservations were reserved was to create for the members of the tribe a "tribal homeland." This definition, they insist, both acurately reflects historical reality and provides for recognition of expansive Indian water rights.

Two very recent cases shed light on the open-endedness of Winters rights. In Nevada v. United States [20] the Supreme Court held that a decree which resulted from a general adjudication could not be re-opened to enlarge Indian water rights for fishery purposes when the Indian rights were originally quantified for irrigation uses. In the most recent Arizona v. California decision [21] the Supreme Court held that while language in the Supreme Court decree which mandated continuing jurisdiction over the case allowed for changes in quantified rights because of changes in reservation size (i.e., for boundary changes), the language did not allow establishment of expanded water rights for lands within reservation boundaries which were omitted from consideration in the earlier determination of rights. Perhaps these decisions signify a flat rejection of the theory that Indian water rights were open-ended and susceptible to expansion at any time. A narrower interpretation, however, is that they were evidence of the Court's respect for earlier court decrees establishing water rights and its reluctance to upset them under most circumstances.

Three other recent cases dealing with quantification should also be mentioned. In Colville Confederated Tribes v. Walton [22] the Ninth Circuit Court of Appeals recognized the existence of an Indian water right to support a fishery and to maintain

spawning grounds for a non-native species of fish. In United States v. Adair [23/] the Ninth Circuit established an Indian water right for hunting and fishing purposes on the terminated Klamath Indian Reservation. The scope of the right will be based on the Tribe's current hunting and fishing activities. Both the Colville reservation and the former Klamath reservation are located in the Northwest where Indian assertions of water right claims for fishery purposes are significant.

In In Re: The General Adjudication of all Rights to Use of Water in the Big Horn System and all Other Sources [24/] the Wyoming district court generally accepted the Special Master's findings as to the scope and extent of practicably irrigable acreage on the Wind River reservation and decreed to the Indians' accompanying water rights. However, the Master recommended extensive instream flow rights which were rejected by the district court on the basis that the reservation was established as an agricultural reservation, not a hunting and fishing reservation. Using the same reasoning, the court also rejected a recommended award for mineral development and municipal and industrial uses.

IV. Potential Quantity of Indian Water Rights

In spite of all the litigation (and legislation and negotiation) aimed at quantifying Indian water rights, such

rights have been finally determined for only a small handful of reservations. Great controversy surrounds the unquantified majority of the rights, yet it has only rarely motivated further or better attempts at quantification.

Specific estimates of Indian water rights for individual reservations have been relatively few. However, some related statistics give a feel for the enormity of the possible impact of quantification of water rights for all reservations in the West.

For example, the following chart shows the approximate amount of Indian land in each western state in relation to the size of the states themselves. The chart also shows approximate Indian populations for each state in relation to state population. For all states but two (Nebraska and North Dakota) the Indian populations are significantly smaller in relation to state populations than are reservation lands in relation to state lands.

ILLUSTRATION III

State	# of Ind. Res.[1]	State Land Area-Acres[2]	Indian Land Area-Acres[1]	State Population[3]	Indian Population[4]
Alaska	7	375,296,000	386,142*	400,481	44,944
Arizona	20	72,901,760	19,897,489	2,717,866	173,412
California	80	101,563,520	573,235	23,668,562	6,824
Colorado	2	66,718,080	755,400	2,888,834	2,144
Idaho	5	53,476,480	826,863	943,935	4,849
Montana	7	94,168,320	5,224,864	786,690	24,137
Nebraska	4	49,425,280	64,476	1,570,006	2,601
Nevada	24	70,745,600	1,154,110	799,184	4,866
New Mexico	26	77,866,240	7,408,225	1,299,968	30,125
North Dakota	6	45,225,600	851,926	652,695	16,735
Oregon	3	62,067,840	757,363	2,632,663	2,718
South Dakota	9	49,310,080	5,091,219	690,148	29,119
Utah	5	54,346,240	2,283,986	1,461,037	1,961
Washington	23	43,642,880	2,490.423	4,103,163	18,258
Wyoming	1	62,664,960	1,888,032	470,816	4,435

* Alaska natives will own substantially more land (perhaps as much as 40 million acres) when land is distributed to them under the Alaska Native Claims Settlement Act.

Sources

1. Department of Interior, "Lands Under the Jurisdiction of the Bureau of Indian Affairs as of Sept. 30, 1979" (Unpublished Report 1979) (Totals modified slightly for some states based on information provided by those states.)

2. Public Land Law Review Commission, One Third of the Nation's Land 224 (1970)

3. The Council of State Governments, The Book of the States, 1982-83, Table 3, 697 (1982)

4. Department of Commerce, Federal and State Indian Reservations and Indian Trust Areas (no date) (Population totals for each state calculated by adding reservation populations listed under each state.)

Though it has not been unanimously accepted, there has been a general assumption since the Supreme Court's decision in Arizona v. California that Indian water rights will generally be quantified using a method based on the number of PIA acres on a reservation. Obviously, such a determination is closely tied to the total amount of Indian land, which, as the chart demonstrates, is substantial.

Refinement of the PIA standard has brought to it a technical and site-specific meaning based not only on geographic land features but on economic factors as well. It remains to be seen whether this refinement means that less land is eligible for water under the standard than some observers may have previously imagined. In any event, possible water right awards based on a standard which hinges on reservation size could be immense.

As large as the PIA rights could be for certain reservations, in some areas, especially the Northwest, PIA rights might be dwarfed by rights based on other theoretical standards to, for example, protect fish resources. While fisheries do not consume water, they often require substantial minimum flows to protect fish habitat or maintain spawning grounds. For a reservation located substantially downstream on a river, this could mean preclusion of many upstream diversions.

Which standard will be applied to any given reservation is not clear. Nevertheless, a certain sense of the region-wide magnitude of potential Indian water right claims in the West can be gleaned from existing information dealing with various aspects of Indian water uses and perceived Indian water needs. That information, to the extent that the WSWC staff has been able to obtain it, is reproduced below, state by state for each Indian reservation.

While the tabulation does contain some settled Indian water rights, it does not purport to set forth estimates of what Indian water rights "ought" to be. Nor is it intended as a statement regarding how quantification should take place. Nor is it a PIA estimate for the various reservations. Rather, it is a listing of available information relating to irrigable lands on Indian reservations as well as Indian reservation "water needs" for purposes other than irrigation as perceived by the Indians themselves or their federal trustees.

The staff of the Western States Water Council specifically disclaims any implicit validation of any and all listed estimates. The process ultimately used to determine water rights for individual reservations may reasonably be expected to result in awards both larger and smaller than the listed estimates. The intent of the information below is to provide a general overview of the potential Indian water right

claims in the West based on the best available information regarding such claims.

The reproduced information has been gathered from various sources. These include formal and informal state agency estimates of possible Indian water claims, published and unpublished tabulations and studies by the Bureau of Indian Affairs, the Department of Interior and other federal agencies, documents relating to litigation, negotiation and legislation of Indian water rights and "at large" literature. In gathering the information, the WSWC staff conducted extensive research itself and contacted each western state requesting information relating to Indian water claims. BIA area offices were also contacted, as was the Department of Interior in Washington, D.C.

All obtainable information was assembled and tabulated in the tables below. The first two colums in the tables list the names of the Indian land holdings and their corresponding acreages. The second two list currently irrigated Indian lands, potentially irrigable Indian lands and a calculated unit withdrawal coefficient for the listed reservations. Unless specifically noted otherwise (see notes for each reservation), none of this information purports to be a "PIA" estimate as that term has been judicially defined. Such estimates are beyond the scope of this study. Some of the estimates of "potentially

irrigable lands" are higher and some lower than a PIA figure would probably be. This is because in some cases the listed estimates are of all irrigable lands on a reservation (in these cases application of the economic analysis of the PIA standard would probably make the PIA figure different) while other listed estimates include only a portion of the irrigable lands on a reservation (in these cases the PIA figure for the entire reservation might be greater). The fifth column lists potential water rights based on estimates other than those related to irrigable lands or estimates which include water for irrigable lands and other needs or uses. The sixth column lists a potential total acre-feet per year claim for the reservation, based on the figures in the other columns.

Except for reservation names and gross acreages, each entry in the tables is footnoted. Accompanying notes are located immediately following the tabulation for each state. These notes list the source of the information and, where appropriate, how the information was calculated.

Where no information was obtainable for a reservation, none is included in the tabulation below. Note that there appears to be a lack of uniformity in the relationship between the figures in the "Potential Claim" column and those in the "Presently Irrigated Acres," "Potentially Irr. Acres (Unit W/Drwl.)" and,"Other Estimate of Water Needs" columns. This is because of the differing kinds of information included

below. In some instances only a potential water claim or a settled water right was found in researched literature. In other instances only a number of potentially irrigable acres was found. In these cases a unit withdrawal coefficient was calculated and the number of potentially irrigable acres was multiplied by that coefficient to arrive at the potential claim. In still other instances the only available information for a reservation was the number of presently irrigated acres. In these cases, that number was multiplied by a calculated unit withdrawal coefficient and the total was included in the "Potential Claims" column.

For some reservations information appears in each of the last four columns or in two or three of them. Where an "Other Estimate of Water Needs" figure appears, it usually includes water for irrigation purposes. It is, therefore, the total potential claim for a reservation and is included in the "Potential Claim" column whether or not other information relating to irrigable lands is included for that reservation. Where a "Potentially Irr. Acres" figure appears with a "Presently Irrigated Acres" figure, the potential claim is based on "Potentially Irr. Acres" figure. Where no unit withdrawal figure appears, the figure in the "Potential Claims" column appears as it was found in sources researched.

STATE OF ALASKA

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Anchorage Pub. Dom. Allotmts. & Townsite Lots	39,959.23				
Bethel Pub. Dom Allotments & Townsite Lots	54,863.97				
Fairbanks Pub. Dom. Allotments & Townsite Lots	4,610.09				
Inupiat Comm. Pub. Dom. Allotments & Townsite Lots	6,579.08				
Tanana Chiefs Pub. Dom. Allotments & Townsite Lots	83.477.38				
Nome Pub. Dom. Allotments & Townsite Lots	106,884.19				
Annette Island (Metlakatla)	86,741.00				
Pub. Dom. Allotments & Townsite Lots	3,027.25				
AL TOTAL 7	*386,142.19				
	*plus fee land under Alaska Native Claims Settlement Act (possibly 40 million acres)				

NOTES - ALASKA

Although no estimates of Indian water right claims or irrigable acreage could be found, a letter from L. A. Dutton, Chief of the Water Management and Procedures Section of the Alaska Department of Water Resources to Western States Water Council reads in part:

> In Alaska, water use for agricultural irrigation is an important but minor use of water. Indian water uses in Alaska center around subsistence use and potential conflicts include water use for development projects, particularly resource development, such as for oil and gas and locatable minerals.
>
> In general, conflicts between Indian or Native claims to water and the State of Alaska stem from conflicts of interpretation of the Alaska Native Claims Settlement Act. In general, Native groups feel that they are entitled to manage water on Native Corporation Lands while the State of Alaska holds that the Alaska Constitution and the Alaska Water Use Act, AS 46.15, vests issuance of water rights on all lands in the state; including local, state, federal, and private lands; ...

STATE OF ARIZONA

(1)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
FLAGSTAFF JOINT USE ADMINISTRATIVE OFFICE					
Hopi-Navajo Joint Ownership	1,765,944.00		*See Navajo Res. below		*See Navajo Res. below
NAVAJO AREA					
Navajo Reservation	8,956,525.75	9,800[a]	*3,700,000[a] (3.00)	15,000,000[a]	*15,000,000[a]
Navajo Off-Res	7,332.57				
PHOENIX AREA					
Colorado River Agency					
Colorado River Reservation	225,995.45	77,000[a]	99,375[b] (6.67)		662,042[b]
Fort Mohave Reservation	22,820.45	10,000[a]	14,916[b] (6.46)		96,416[b]
Fort Apache Agency					
Fort Apache Reservation	1,664,972.00	1,700[a]	49,859[c] (5.38)	518,169[c]	518,169[c]
Fort Yuma Agency					
Cocopah Reservation	1,772.53	400[a]	431[b] (6.37)		2,744[b]
Fort Yuma Homesteads	480.00				
Fort Yuma Reservation	1,581.46	ø[a]	ø[b]		ø[b]

STATE OF ARIZONA

(2)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Hopi Agency					
Hopi Reservation	706,310.26		*See Navajo Res. Above		*See Navajo Res. Above
Kiabab-Paiute Reservation	120,413.00	70[a]	48,000[a] (3.45)		166,000[a]
Papago Agency					
Gila Bend Reservation	10,337.00	570[a]	4,500[d] (5.4)		24,300[a]
Papago Reservation	2,773,437.56	2,000[a]	2,260,000[a] (5.4)		12,200,000[a]
Papago Off-Res	20.00				
San Xavier Reservation	71,095.00	1,800[a]		60,000[e]	60,000[e]
Pima Agency					
Gila River Reservation	371,932.63	62,000[a]	266,472[f] (6.0)[b]	1,865,470[f]	1,865,470[f]
Maricopa Ak-Chin Reservation	21,840.00	6,100[a]			85,000[g]
Peoples Valley Public Domain	160.00				
Phoenix Indian School	104.25				
Salt River Agency					
Fort McDowell Reservation	24,680.00	1,200[a]	6,190[h] (5.4)	45,000[h]	45,000[h]
Salt River Reservation	49,293.30	13,000[a]	30,500[d] (5.40	191,000[a]	191,000[a]

STATE OF ARIZONA

(3)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
San Carlos Agency					
San Carlos Reservation	1,826,541.00	2,300[a]	35,400[h] (6.0)	350,000[h]	350,000[h]
San Carlos Public Domain	880.00				
Truxton Cañon Agency					
Havasupai Reservation	188,077.38	270[a]	204[i] (5.49)		1,120[i]
Hualapai Reservation	992,462.95	20[a]	83[i] (4.65)		386[i]
Prescott Yavapai Reservation	1,398.60			986[h]	986[h]
Public Domain	709.64				
Camp Verde Reservation	653.10	180[a]	220[h] (5.0)	3,000[a]	3,000[h]
Yavapai-Tonto Community	85.00			510[h]	510[h]
Pasqua Yaqui	202.00		58[h]	1,200[h]	1,200[h]
AZ TOTAL 20	19,808,056.88	188,410	6,516,208	18,034,825	31,273,343

NOTES - ARIZONA

a. Estimates by Arizona. Values do not represent claims by Indian tribes.

b. Arizona v. California
Note that these numbers are based on the 1964 decision and may increase when boundaries for these reservations are finalized.

c. Claimed in 1983 lawsuit, White Mountain Apache Tribe v. James G. Watt et al, filed in U.S. District Court, District of Arizona.

d. Amount identified in S. 3298 introduced by Senator Edward Kennedy in 1976.

e. Southern Arizona Water Rights Settlement Act of 1982 (P.L. 97-293).

f. Claimed in current Gila River Adjudication.

g. Congressional Act - "Water Right Claims - Ak Chin Indian Community" (P.L. 95-328).

h. Amount claimed by Indian tribe and shown in report by U.S. Bureau of Reclamation, "Finding of No Significant Impact of CAP Indian Allocation."

NOTES - ARIZONA (Cont.)

i. Claim by United States in Arizona v. California.
Claims by Indian tribes expected to exceed values.

STATE OF CALIFORNIA

(1)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
PHOENIX AREA					
Colorado River Agency					
Chemehuevi Reservation	30,653.87	Ø[e]	1,900[a]		11,340[a]
Colorado River Reservation	42,696.00	2,000[e]	8,213[a]		54,746[a]
Fort Mojave Reservation	5,997.05	2,500[e]	2,119[a]		13,698[a]
Fort Yuma Agency					
Fort Yuma Reservation	41,979.62	7,500[e]	7,743[a]		51,616[a]
Western Nevada Agency					
Public Domain	967.88				
Sherman Indian School	83.14				
SACRAMENTO AREA					
Central California Agency					
Alturas Rancheria	20.00				
Benton Paiute Reservation	160.00				
Berry Creek Rancheria	33.04				
Big Pine Rancheria	279.00				
Bishop Reservation	875.00				

STATE OF CALIFORNIA

(2)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Bridgeport Colony	40.00				
Cachil Dehe Colony	268.68				
Cedarville Rancheria	17.00				
Cold Springs Rancheria	100.65				
Cortina Rancheria	640.00				
Dry Creek Rancheria	75.00				
Enterprise Rancheria	40.00				
Fort Bidwell Reservation	3,334.97	228[b]	300[b]		990[b]
Fort Independence Reservation	352.24	81[b]	240[b]		960[b]
Grindstone Creek Rancheria	80.00				
Hopland Rancheria	17.57				
Jackson Rancheria	330.66				
Laytonville Rancheria	200.00				
Likely Rancheria	1.32				
Lone Pine Reservation	237.00	120[b]	237[b]		948[b]
Lookout Rancheria	40.00				

STATE OF CALIFORNIA

(3)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Manchester Rancheria	363.09				
Middletown Rancheria	108.70				
Public Domain	11,564.14				
Robinson Rancheria	6.40				
Round Valley Reservation	19,067.87				
Rumsey Rancheria	66.51				
Santa Rosa Rancheria	170.00	ø[b]	110[b]		528[b]
Sheep Ranch Rancheria	.92				
Sherwood Valley Rancheria	292.22				
Shingle Springs Rancheria	160.00				
Stewarts Point Rancheria	40.00				
Sulfer Bank Rancheria	50.00				
Susanville Reservation	150.00				
Tule River Reservation	54,116.00	10[b]	115[b]		510[b]
Tuolumne Rancheria	323.10	25[b]	50[b]		180[b]
X. L. Ranch Reservation	9,254.86				

STATE OF CALIFORNIA

④

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Hoopa Agency					
Yokayo Ranch	.50				
Big Bend Rancheria	40.00				
Big Lagoon Rancheria	9.26				
Hoopa Valley Reservation	86,727.88	287[b]	1457[b]		4,954[b]
Hoopa Valley Res. Extension	7,027.85				
Montgomery Creek Rancheria	72.00				
Orleans Karok	6.62				
Public Domain	6,421.15				
Resighini Reservation	228.00				
Roaring Creek Rancheria	80.00				
Trinidad Rancheria	43.68				
Palm Springs Office					
Agua Caliente Reservation	24,463.12				
Southern California Agency					
Augustine Rancheria	502.29				

STATE OF CALIFORNIA

(5)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Barona Rancheria	5,180.66				
Cabazon Reservation	1,461.53				
Cahuilla Reservation	18,272.38				
Campo Reservation	15,010.00				
Capitan Grande Reservation	15,753.40				
Cuyapaipe Reservation	4,100.13				
Inaja Cosmit Rancheria	851.81				
Jamul Reservation	4.66				
LaJolla Reservation	8,228.06	Ø[c]	1,434[c]		5,139[c]
LaPosta Reservation	3,672.29				
Los Coyotes Reservation	25,049.63				
Manzanita Reservation	3,599.38				
Mesa Grande Reservation	120.00				
Morongo Reservation	32,254.82	345[b]	6,287[b]		31,476[b]
Pala Reservation	11,481.33	260[c]	4,903[c]		11,804[c]

STATE OF CALIFORNIA

(6)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Pauma-Yuima Reservation	5,877.25	25[c]	232[c]		558[c]
Pechanga Reservation	4,093.80				
Public Domain & Purchased	1,621.82				
Ramona Reservation	560.00				
Rincon Reservation	3,960.25	171[c]	3,625[c]		7,872[c]
San Manuel Reservation	653.15				
San Pasqual Reservation	1,379.58				
Santa Rosa Reservation	11,092.60				
Santa Ynez Reservation	126.63				
Santa Ysabel Reservation	15,526.78				
Soboba Reservation	5,035.68	ø[b]	708[b]		3,080[b]
Sycuan Reservation	640.00				
Torres-Martinez Reservation	24,760.74				
Twenty-Nine Palms Reservation	402.13				
Viejas Rancheria	1,609.00				

STATE OF CALIFORNIA

(7)

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Sub-Total Rancherias					
Miscellaneous Northern Calif. Reservations		216[d]	317[d]		1,046[d]
Miscellaneous Southern Calif. Reservations		123[d]	17,521[d]		63,223[d]
CA TOTAL 80	573,235.34	14,741	58,665		269,282

NOTES - CALIFORNIA

a. Arizona v. California

Note that these numbers may increase when boundaries for these reservations are finalized. The Chemehuevi Reservation boundary is not being challenged and the water right associated therewith is final.

Note also that the numbers contained in the "Potential Irrigable Acres" column are, in this instance, "practically irrigable acres" as that term has been judicially defined.

b. Information from unpublished tabulation entitled "Indian Irrigation Projects Presently Included in the BIA Irrigation Construction Program - October 1975," compiled by the Bureau of Indian Affairs. Copy provided to Western States Water Council by the Department of Interior's Office of Water Policy.

c. Id. Footnote 27 to the document states: "A proposed action being considered by the Federal Power Commission regarding the use of the water of the San Luis Rey River in Southern California could result in considerable expansion of irrigation facilities of the La Jolla, San Pasqual, Pauma, and Pala Reservations.

d. Id. Footnote 25 to the document states, in part, "Development of the acreage shown in the California Miscellaneous (Northern) and (Southern) are presently not feasible because of a lack of firm water supply..."

e. Estimates provided by the State of California

STATE OF COLORADO

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
ALBUQUERQUE AREA					
Southern Ute Agency					
Southern Ute Reservation	307,370.22		*93.000[a]		
Ute Mountain Ute Agency					
Ute Mountain Reservation	448,029.49		*(Number above incl. both Colo. reservations)		
	755,399.71		93,000[a]		

NOTES - COLORADO

a. Information based on maps of arable acres developed for BIA. Information provided by Colorado Water Conservation Board of Colorado.

STATE OF IDAHO

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
PHOENIX AREA					
Eastern Nevada Agency					
Duck Valley Reservation	145,545.00	16,250[a]	33,600[a] (3.00)[a]		100,800[b]
PORTLAND AREA					
Fort Hall Agency					
Wyandotte Allotments	240.00				
Fort Hall Reservation	522,332.45	85,940[a]	160,940[a] (3.50)[a]		563,290[b]
Northern Idaho Agency					
Coeur d'Alene Reservation	69,966.21	Ø[a]	28,025[a] (3.50)[a]		84,075[b]
Kootenai Reservation	2,335.78				
Nez Perce Reservation	86,443.82	39[a]	4,852[a] (3.00)[a]		14,556[b]
ID TOTAL 5	826,863.26	102,229	227,417		762.721

NOTES - IDAHO

a. Information provided by Phillip Rassier, Assistant Attorney General, State of Idaho. For more information see Rassier, Indian Water Rights: A Study of the Historical and Legal Factors Affecting the Water Rights of the Indians of the State of Idaho: Idaho Department of Water Resources Legal Affairs Report #1 (1978).

b. Calculated based on a.

STATE OF MONTANA

(1)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
BILLINGS AREA					
Blackfeet Agency					
Blackfeet Reservation	908,349.87		450,000[f] (4.5)[f]		2,0250,000[g]
Crow Agency					
Crow Reservation	1,557,238.78			2,114,100[a]	2,114,100[a]
Flathead Agency					
Flathead Reservation	618,507.95	102,338[b]	(6.0)[c]		614,030[d]
Flathead Off-Res	723.12				
Fort Belknap Agency					
Fort Belknap Reservation	588,756.19			211,400[a]	211,400[a]
Fort Belknap Off-Res	28,731.08				
Turtle Mountain Public Domain	39,630.22				
Fort Peck Agency					
Fort Peck Reservation	919,208.54			1,050,472[e]	1,050,472[e]
Turtle Mountain Public Domain	21,831.08				

STATE OF MONTANA

(2)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Northern Cheyenne Agency					
Northern Cheyenne Reservation	432,792.18			486,500[a]	486,500[a]
Turtle Mountain Public Domain	680.00				
Rocky Boy's Agency					
Rocky Boy's Reservation	108,015.05			131,400[a]	131,400[a]
MUSKOGEE AREA					
Osage Off-Res	400.00				
MT TOTAL 7	5,224,864.06	102,338	450,000	3,993,872	6,632,902

NOTES - MONTANA

a. Information provided by the State of Montana. A copy of that information and the footnotes used to prepare it is attached. Sources for that information are not relisted here but can be found in the attached Montana document.

b. United States Department of Interior Bureau of Reclamation, West Wide Study Report on Critical Water Problems Facing the Eleven Western States 310 (1975) (hereafter referred to as West Wide Study.)

c. U.S. Water Resources Council, Nationwide Analysis, (June 1977) (calculated from date from Tables 4A and 5A, Appendix I)

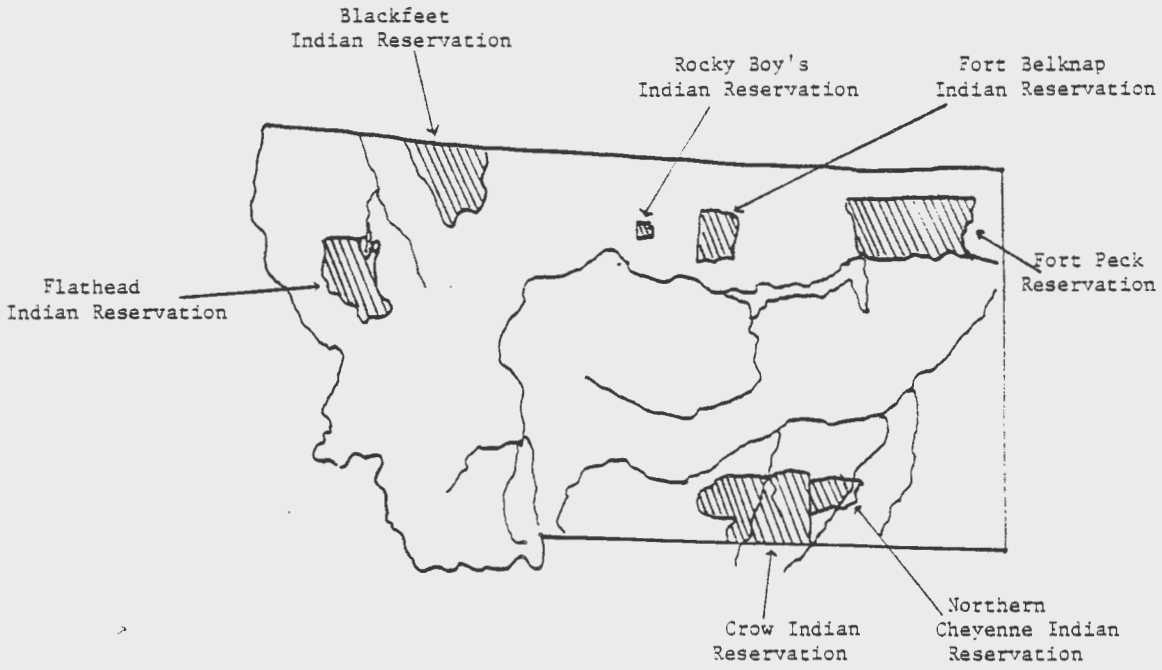
d. Calculated based on b. and c.

e. Information derived from claims made during negotiation on the Fort Peck Compact.

f. Claims made in Blackfeet Tribe v. Watt U.S. District Court, CV83-151-Gf.

g. Calculated based on f.

INDIAN RESERVATIONS OF MONTANA

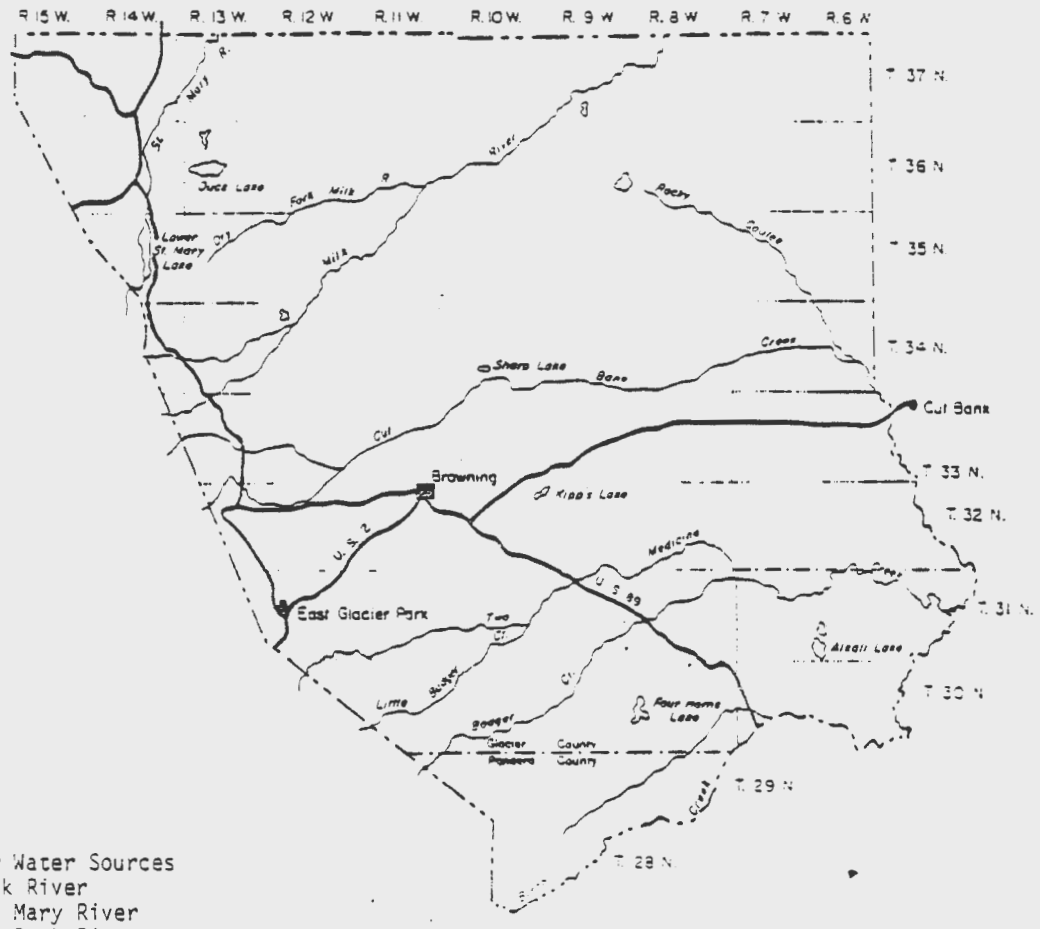


Indians living on or near Reservations: 24,366
Total land area of Reservations: 8,347,458 Acres

Source: Bureau of Indian Affairs, Department of the Interior, 1978, Report No. 262.

BLACKFEET INDIAN
RESERVATION

Size: 1,525,712 Acres
Pop: 6,246 Indians
1,200 Non Indians



Major Water Sources
Milk River
St. Mary River
Cut Bank River
Two Medicine Creek
Birch Creek

Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	663,336	70.4
Dry Farm	115,666	12.3
Irrigable	23,056	2.4
Forest	115,793	12.3
Waste, Idle or Unclassified	24,195	2.6
Total	942,046 1/	100.0

1/ Includes approximately 31,989 acres of tribal fee land.

Source: USDI, BIA, Land Use Inventory and and Production Record, Report 50-1.

Estimated Water Requirements-2020[a] (Acre-Feet)

Agriculture	644,100 322,500
Domestic	1,600 300
Industrial	800 100
Minerals	2,500 500
Energy	0 0
Forestry	0 0
Wildlife	228,600 0
Recreation	500 100
Total	878,100 323,500

[a]Double entries indicate diversion requirements and corresponding depletions.

Reference Source: Bureau of Indian Affairs, Department of Interior, 1978, Report No. 262.

THE BLACKFEET INDIAN RESERVATION

Estimated Annual Water Requirements for the Development of Area Resources - Blackfeet Reservation

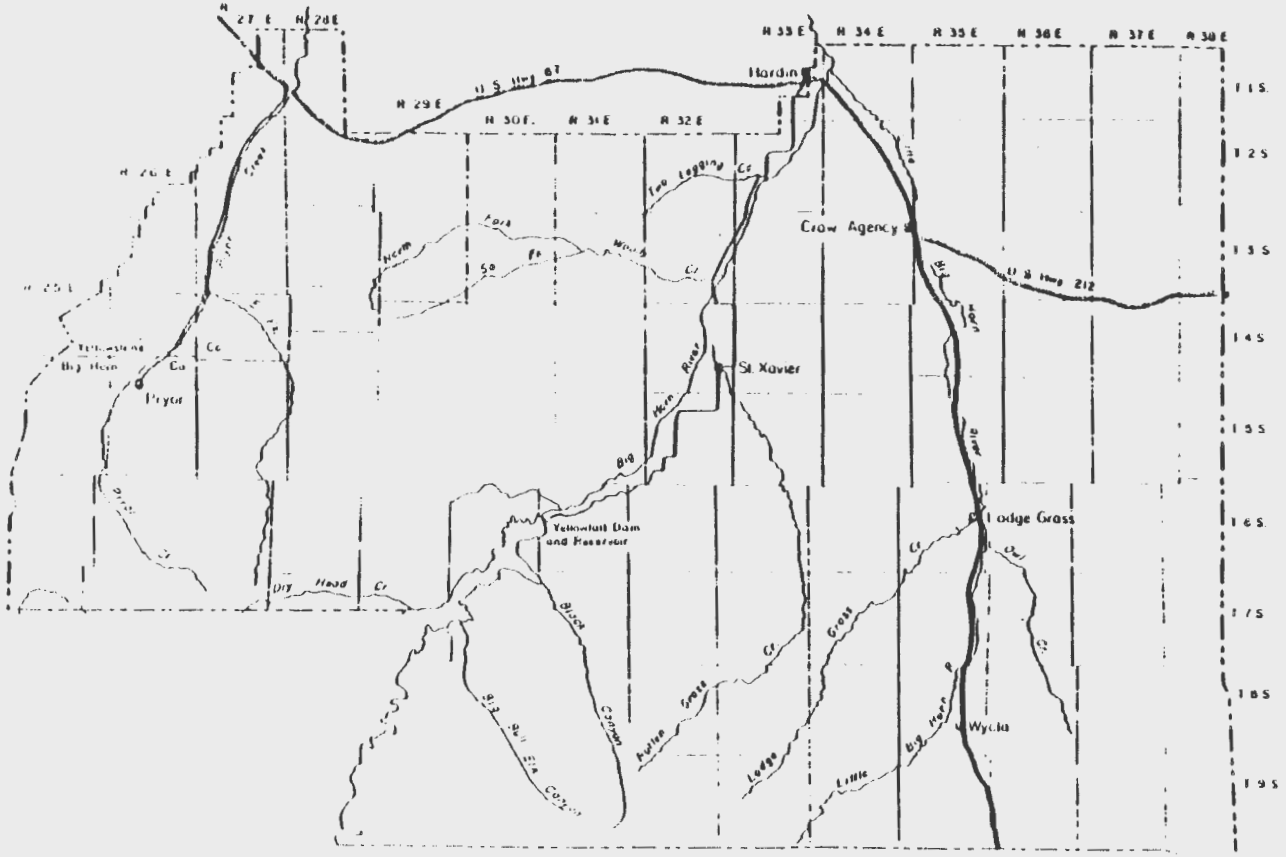
Water Use	1980 Acre-Feet	2000 Acre-Feet	2020 Acre-Feet
Irrigation, full serv.	69,984	259,442	351,743
Municipal & rural domestic	293	344	397
Industrial & mineral	391	387	388
Thermal electric	130	550	1,310
Livestock & dry crop	350	730	1,280
Watershed treatment	240	740	1,240
Secondary oil recovery	113	225	450
Recreation	454	1,782	2,727
Evaporation from reservoirs 1/	(1,260)	(2,960)	(3,930)
Total	71,955	264,200	359,535

1/ Evaporation from reservoirs is prorated among some of the other uses and is, therefore, not to be included in the summation.

According to BIA(Report No. 252- The Blackfeet Reservation-Its Land and People, 1977) 359,535 acre-feet is approximately 24% of the water that flows through or adjacent to the reservation annually.

CROW RESERVATION

Size: 2,282,764 Acres
Pop: 4,500



Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	1,212,911	77.3
Dry Farm	200,867	12.8
Irrigable	30,287	1.9
Forest	107,612	6.9
Waste, Idle or Unclassified	17,551	1.1
Total	1,569,228	100.0

Source: USDI, BIA, Land Use Inventory and Production Record, Report 50-1.

Estimated Water Requirements 2020[a] (Acre-Feet)

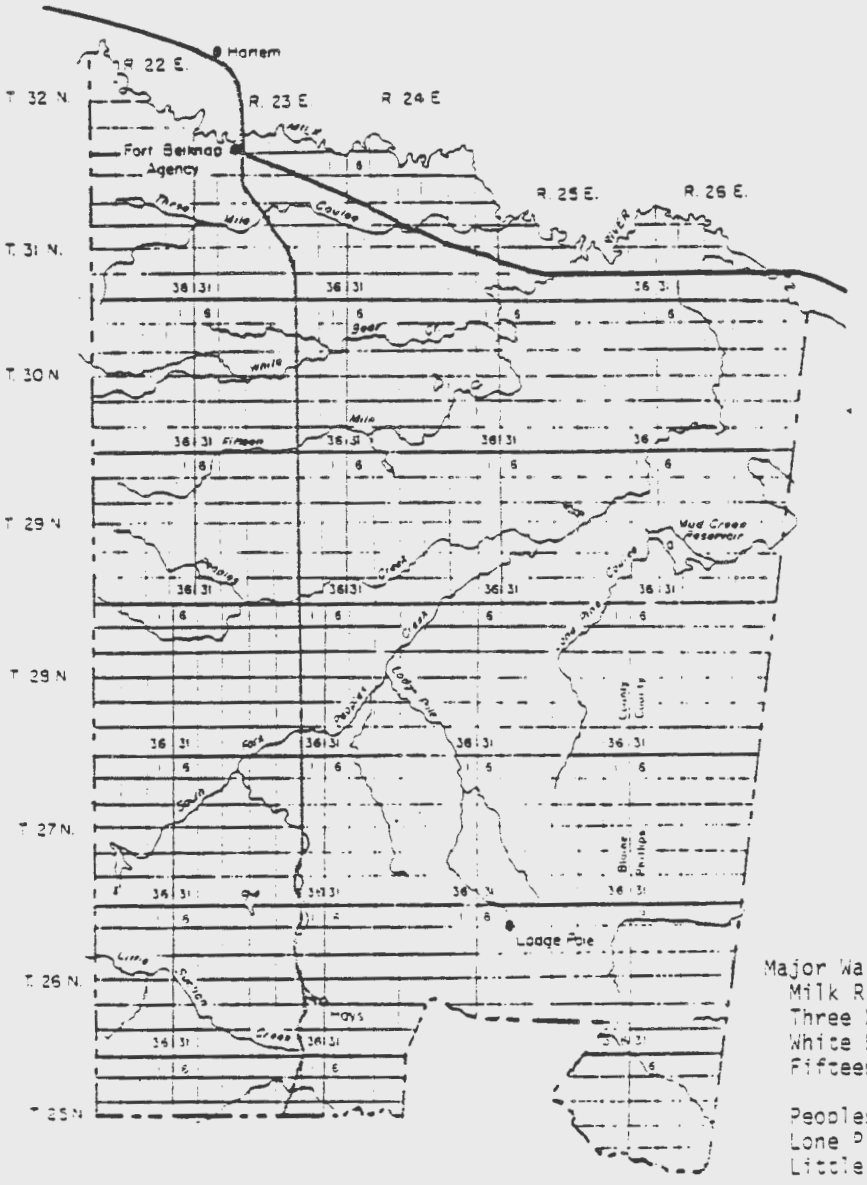
Agriculture	1,080,000 540,000
Domestic	1,800 400
Industrial	7,000 1,540
Minerals	0 0
Energy	196,500 196,500
Forestry	0 0
Wildlife	823,300 0
Recreation	500 115
Total	2,114,100 738,550

[a]Double entries indicate diversion requirements and corresponding depletions.

Reference Source: Bureau of Indian Affairs, Department of Interior, 1978, Report No. 262.

FORT BELKNAP RESERVATION
(ASSINIBOINE AND GROS VENTRE)

Size: 651,119 Acres
Pop: 1,797 Indians



Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	560,004	85.0
Dry Farm	50,661	7.7
Irrigable	18,081	2.8
Forest	26,831	4.1
Waste, Idle or Unclassified	2,900	0.4
Total	658,477 1/	100.0

1/ Includes land in Montana allotted to Turtle Mountain Indians (This is approximately 40,510 acres administered by the Fort Belknap Agency).

Source: USDI, BIA, Land Use Inventory and Production Record, Report 50-1.

Estimated Water Requirements 2020[a] (Acre-Feet)

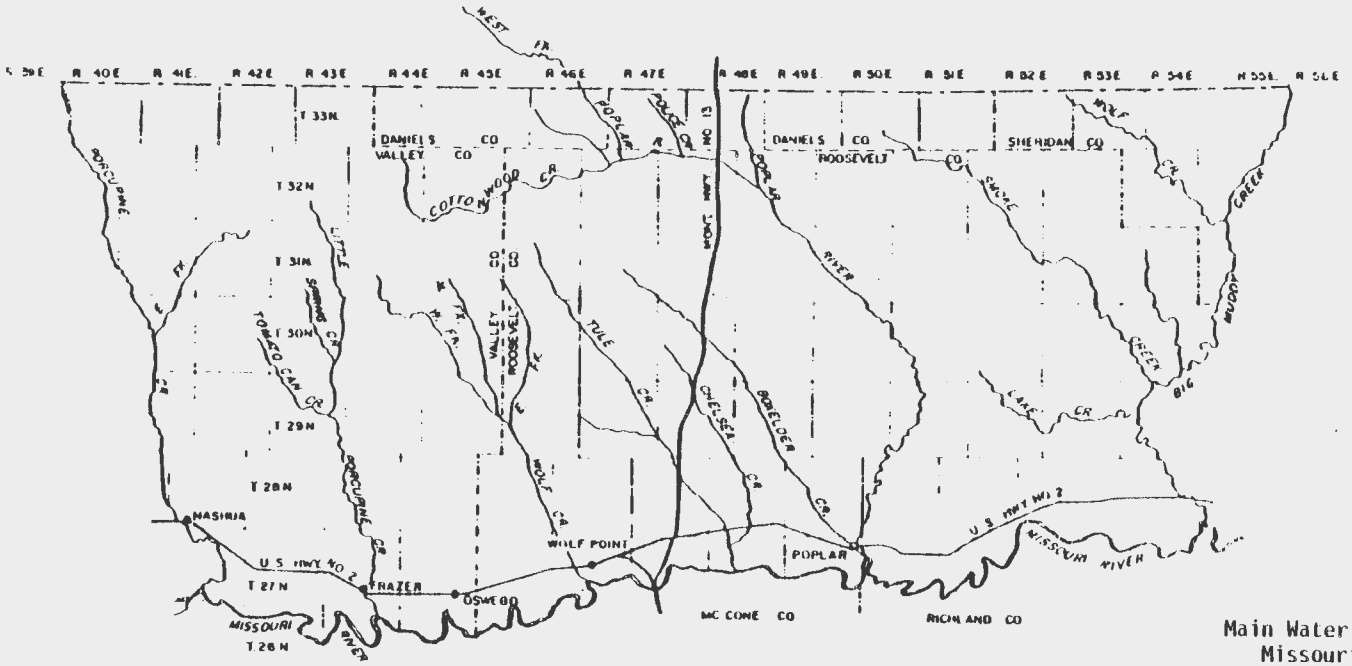
Agriculture	173,100 86,500
Domestic	400 100
Industrial	200 0
Minerals	0 0
Energy	0 0
Forestry	0 0
Wildlife	37,500 0
Recreation	200 0
Total	211,400 86,600

[a]Double entries indicate diversion requirements and corresponding depletions.

Reference Source: Bureau of Indian Affairs, Department of Interior, 1978, Report No. 262.

FORT PECK

Size: 2,093,124 Acres
Pop: 4,300 Sioux and Assiniboine
500 Chippewa and Cree



Main Water Sources
- Missouri River
- Milk River
- Porcupine Creek
- Little Porcupine Creek
- Big Muddy
- Poplar River

Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	649,850	68.2
Dry Farm	274,166	28.8
Irrigable	12,057	1.3
Forest	12,000	1.2
Waste, Idle or Unclassified	5,109	0.5
Total	953,182 [1/]	100.0

[1/] Includes land in Montana allotted to Turtle Mountain Indians (This is approximately 22,311 acres administered by the Fort Peck Agency).

Source: USDI, BIA, Land Use Inventory and Production Record, Report 50-1.

Estimated Water Requirements 2020[a] (Acre-Feet)

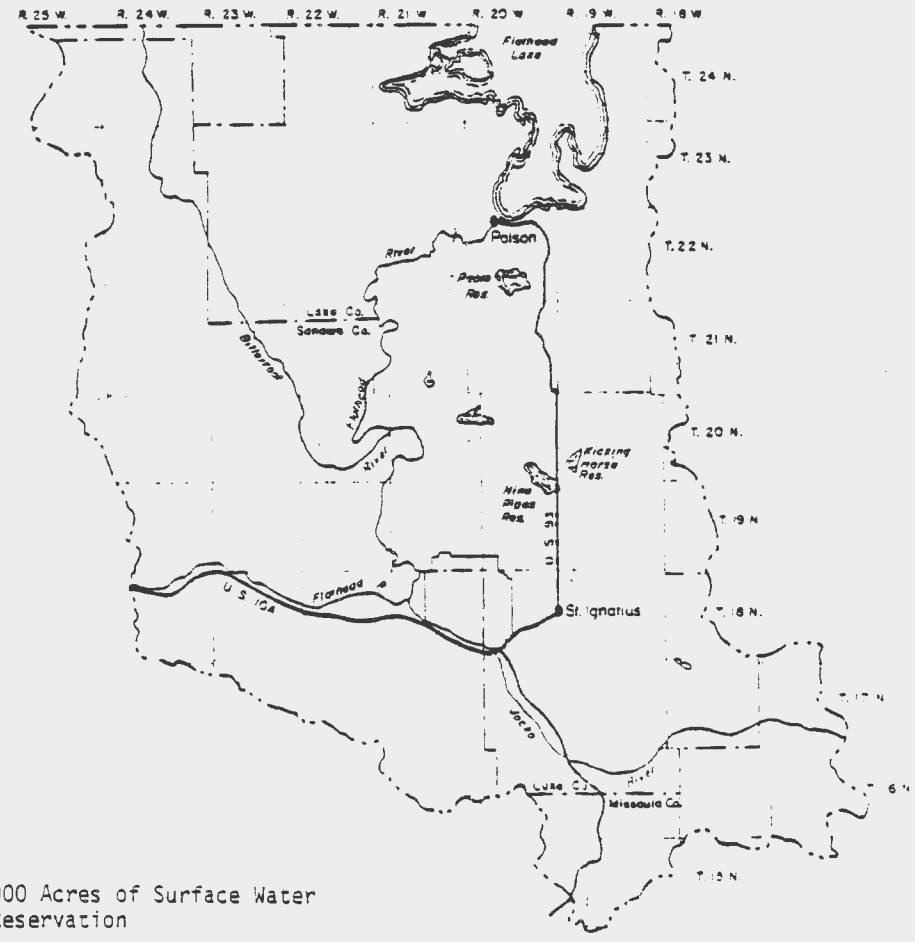
Agriculture	413,800 206,900
Domestic	1,100 200
Industrial	600 100
Minerals	0 0
Energy	0 0
Forestry	0 0
Wildlife	1,077,200 0
Recreation	300 100
Total	1,493,000 207,300

[a] Double entries indicate diversion requirements and corresponding depletions.

Reference Source: Bureau of Indian Affairs, Department of Interior, 1978, Report No. 262.

FLATHEAD INDIAN RESERVATION
CONFIDERATE SALISH AND KOOTENAI TRIBES

Size: 1,242,969 Acres
Pop: 3,150 Indians
16,000 Non Indians



69,000 Acres of Surface Water
On Reservation

Major Water Sources
Jocko River
Flathead River
Bitterroot River

Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	119,804	19.4
Dry Farm	5,791	0.9
Irrigable	12,636	2.1
Forest	448,522	72.6
Waste, Idle or Unclassified	30,696	5.0
Total	617,449	100.0

Source: USDI, BIA, Land Use Inventory and Production Record, Report 50-1.

Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	235,441	54.2
Dry Farm	32,000	7.4
Irrigable	632	0.1
Forest	161,560	37.2
Waste, Idle or Unclassified	4,786	1.1
Total	434,419 1/	100.0

1/ Includes land in Montana allotted to Turtle Mountain Indians (This is approximately 680 acres administered by the Northern Cheyenne Agency).

Source: USDI, BIA, Land Use Inventory and Production Record, Report 50-1.

Estimated Water Requirements 2020[d] (Acre-Feet)

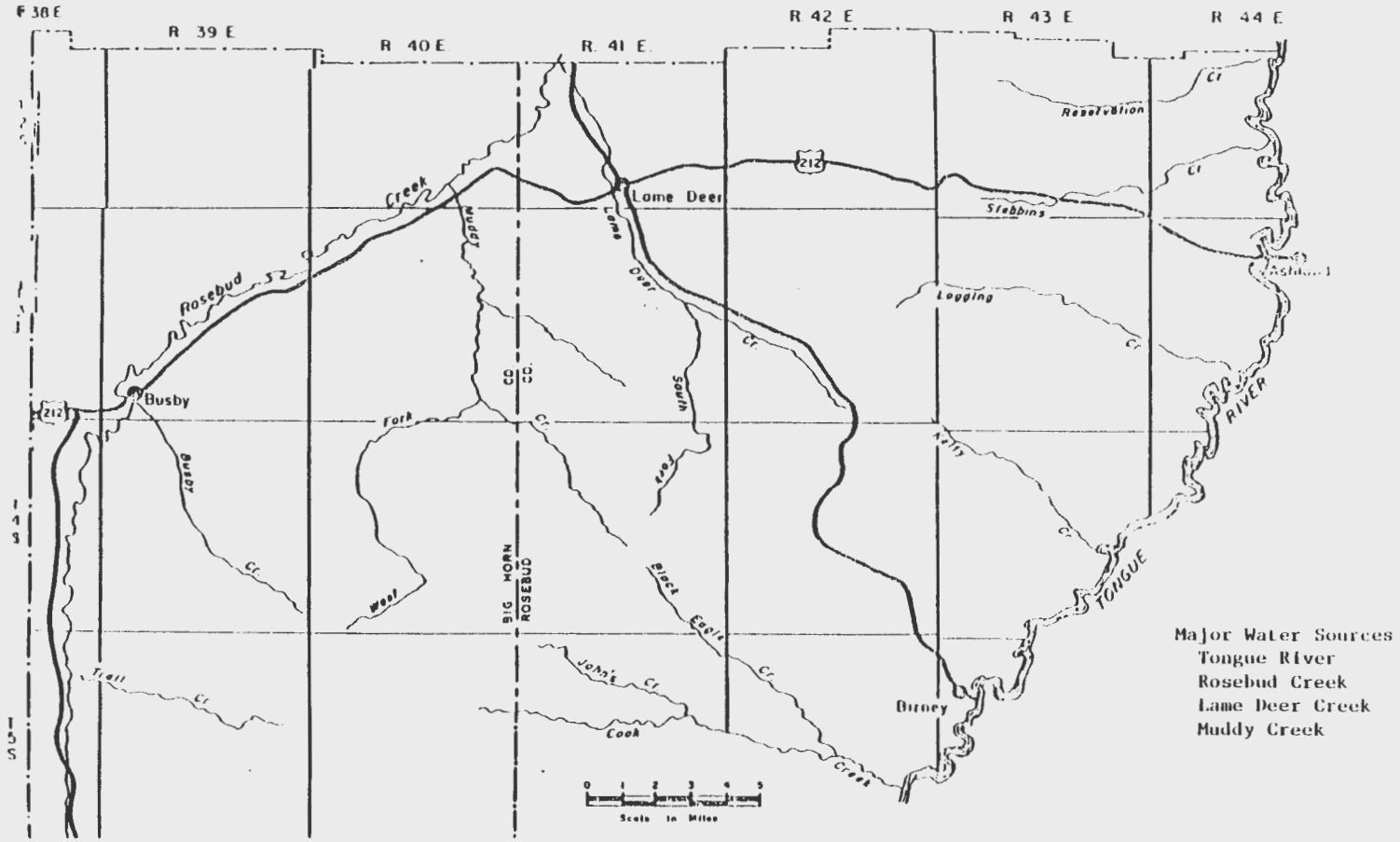
Agriculture	109,200 54,600
Domestic	1,400 300
Industrial	300 60
Minerals	0 0
Energy	196,500 196,500
Forestry	0 0
Wildlife	178,800 0
Recreation	300 60
Total	486,500

[a]Double entries indicate diversion requirements and corresponding depletions.

Reference Source-Bureau of Indian Affairs, Department of Interior, 1978, Report No. 262.

NORTHERN CHEYENNE RESERVATION

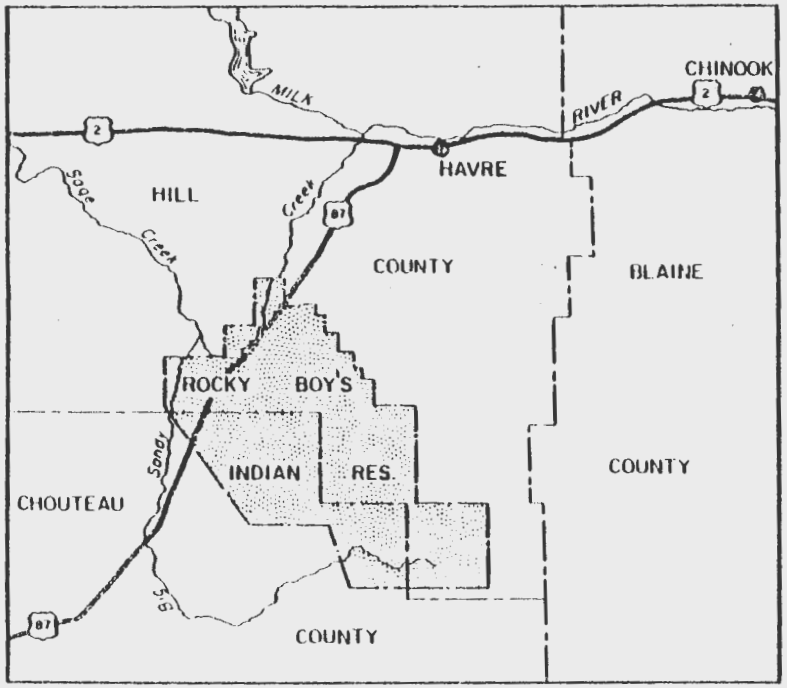
Size: 444,157 acres
Pop: 3,122 Indians



Major Water Sources
Tongue River
Rosebud Creek
Lame Deer Creek
Muddy Creek

ROCKY BOY
CHIPPEWA AND CREE

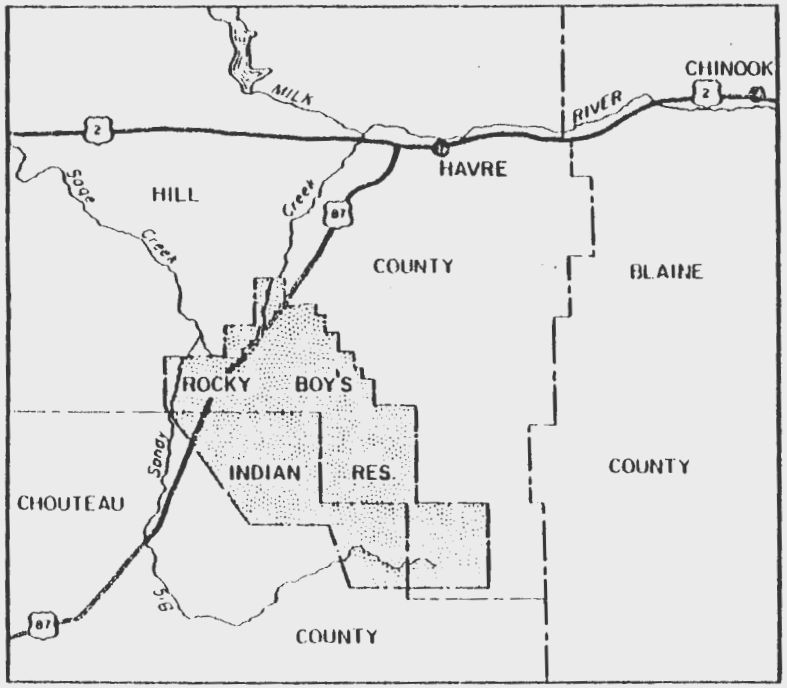
Size: 107,613 Acres
Pop: 1,749 Indians



Major Water Sources
Big Sandy Creek
and Sage Creek

ROCKY BOY
CHIPPEWA AND CREE

Size: 107,613 Acres
Pop: 1,749 Indians



Major Water Sources
Big Sandy Creek
and Sage Creek

Use of Indian Trust
Land on Reservation

	Acres	Percent
Grazing	80,872	75.1
Dry Farm	7,411	6.9
Irrigable	598	0.6
Forest	17,105	15.9
Waste, Idle or Unclassified	1,627	1.5
Total	107,613	100.0

Source: USDI, BIA, Land Use Inventory and Production Record, Report 50-1.

Estimated Water Requirements 2020[a] (Acre-feet)

Agriculture	128,900 64,400
Domestic	300 100
Industrial	100 0
Minerals	0 0
Energy	0 0
Forestry	0 0
Wildlife	2,100 0
Recreation	0 0
Total	131,400 64,500

[a]Double entries indicate diversion requirements and corresponding depletions.

Reference Source: Bureau of Indian Affairs, Department of Interior, 1978, Report No. 262.

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STATE OF NEBRASKA

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Pine Ridge Reservation (See South Dakota for bal)	552,24		30[a]		81[a]
Omaha Reservation	27,012.39		7,390[b]		13,500[b]
Santee Sioux Reservation	9,358.06		1,640[c]		3,000[c]
Winnebago Reservation	27,469.85		5,422[b]		9,900[b]
Winnebago Off-Reservation	83.16				
NB TOTAL 4	64,475.70		14,482		26,481

NOTES - NEBRASKA

a. United States Department of the Interior Bureau of Indian Affairs, Potential Irrigation Development: Missouri River Basin Reservations (Missouri River Basin Investigations Project, Billings, Montana) (1976), Appendix 13, Table I (total irrigable acreage prorated between portions of reservation in Nebraska and South Dakota).

b. Id., Appendix 16-17-18, Table 2.

c. Id., Table 1.

STATE OF NEVADA

(i)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
PHOENIX AREA					
Colorado River Agency					
Fort Mojave Reservation	3,862.15	1,322[a]	2,340[a] (6.46)[b]		15,116.40[c]
Eastern Nevada Agency					
Battle Mountain Colony	683.30	ø[d]			
Duck Valley Reservation	144,274.30	13,000[d]	17,350[f] (5.5)[e]		95,425[g]
Duckwater Reservation	3,814.52	2,600[d]	(5.5)[e]		14,300[h]
Elko Colony	192.80	ø[d]			
Ely Colony	100.32	ø[d]			
Goshute Reservation	70,489.00	485[d]	(5.5)[e]		2,668[h]
Odgers Ranch	1,987.04				
Public Domain	1,709.70				
South Fork Reservation	13,049.52	4,073.89[d]			10,950.66[d]
Wells Colony	80.00	ø[d]			
Wild Horse Reservoir	3,981.68				

STATE OF NEVADA

(2)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Western Nevada Agency					
Carson Colony	160.00	Ø[d]			
Dresslerville Colony	39.80	Ø[d]			
Fallon Colony	60.00				
Fallon Reservation	8,120.00	3,025[d]	(4.5)[d]		13,612[j]
Ft. McDermitt Reservation	16,336.90	3,043.45[d]	(3.0)[d]		9.130[j]
Las Vegas Colony	10.15	Ø[d]			
Lovelock Colony	20.00	Ø[d]			
Moapa Reservation	1,185.59	550[d]	(7.5)[e]		4,125[h]
Public Domain	62,396.60				
Pyramid Lake Reservation	476,668.94	1,002[d]	(4.25)[d]		4,258[j]
Reno-Sparks Colony	28.87	Ø[d]			
Stewart Indian High School	3,102.14				
Summit Lake Reservation	10,862.91	Ø[d]			

STATE OF NEVADA

(5)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Walker River Reservation	323,386.35	2,547[d]	4,980[i]		25,000[i]
Washoe Ranches	794.57	ø[d]			
Winnemucca Colony	340.00	ø[d]			
Yerington Colony	22.37	ø[d]			
Yerington Reservation	1,631.88	750[d]	(6.3)[e]		4,725[h]
Yomba Reservation	4,718.49	2,044[d]	(5.5)[e]		11,242[h]
NV TOTAL 24	1,154,109.89	34,442.34	24,670		210,556.06

NOTES - NEVADA

a. Information provided by Arizona for an earlier WSWC draft report on potential Indian water right claims.

b. Unit withdrawal coefficient from Arizona v. California decree, 376 U.S. 340 (1964).

c. Calculated based on a. and b.

d. Information provided by Peter G. Morros, Nevada State Engineer.

e. U.S. Water Resources Council, Nationwide Analysis, (June 1977) (calculated from data from Tables 4A and SA, in Appendix I).

f. Information provided by Idaho for an earlier WSWC draft report on potential Indian water right claims.

g. Calculated based on f. and e.

h. Calculated based on d. and e.

i. This information is from a tabulation entitled "Indian Irrigation Projects Presently Included in the BIA

NOTES - NEVADA (Cont.)

Irrigation Construction Program - October 1975."
This document was compiled by the Bureau of Indian Affairs.

j. Calculated based on d.

STATE OF NEW MEXICO

(1)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
ALBUQUERQUE AREA					
Albuquerque Indian School	47.12				
Jicarilla Agency					
Jicarilla Apache Reservation	742,315.42	Ø[a]	13,500[a]		36,288[a]
Mescalero Agency					
Mescalero Apache Reservation	460,401.99			17,309[b]	17,309[b]
Northern Pueblos Agency					
Nambe Pueblo	19,075.99	158[a]	3,154[c]		9,694.3[c]
Picuris Pueblo	14,946.88	75[a]	220[a]		770[a]
Pojoaque Pueblo	11,602.77	13[a]	3,016[c]		9,115.0[c]
San Ildefonso Pueblo	26,192.28	252[a]	2,139[c]		6,819.5[c]
San Juan Pueblo	12,237.46	873[a]	4,800[a]		16,800[a]
Santa Clara Pueblo	45,747.68	547[a]	2,500[a]		8,750[a]
Taos Pueblo	95,341.36	1,835[a]	6,000[a]		21,000[a]
Tesuque Pueblo	16,813.16	117[a]	3,702[c]		36,888.6[c]

STATE OF NEW MEXICO

(2)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim Acft/Yr
Ramah-Navajo Agency					
Ramah-Navajo	146,953.13				
Southern Pueblos Agency					
Acoma Pueblo	249,655.70	575[a]	2,302[a]		11,239[a]
Agency Headquarters	31.24				
Cochiti Pueblo	28,779.03	318[a]	1,864[a]		10,830[a]
Demonstration Range Mgt.	24.42				
Isleta Pueblo	211,034.30	4,078[a]	6,195[a]		37,108[a]
Jemez Pueblo	89,618.34	677[a]	2,105[a]		10,209[a]
Jemez Diversion Site	4.65				
Laguna Pueblo	443,106.19	287[a]	3,211[a]		15,670[a]
Laguna Public Domain	1,900.75				
Sandia Pueblo	22,870.91	1,054[a]	3,418[a]		19,859[a]
San Felipe Pueblo	48,929.90	398[a]	3,808[a]		22,124[a]
Santa Ana Pueblo	60,868.24	222[a]	3,031[a]		17,610[a]
Santo Domingo Pueblo	69,259.82	879[a]	4,300[a]		24,983[a]
Zia Pueblo	117,360.46	183[a]	2,432[a]		11,795[a]
Zia Diversion Site	22.15				

STATE OF NEW MEXICO

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Ramah-Navajo Agency					
Ramah-Navajo	146,953.13				
Southern Pueblos Agency					
Acoma Pueblo	249,655.70	575[a]	2,302[a]		11,239[a]
Agency Headquarters	31.24				
Cochiti Pueblo	28,779.03	318[a]	1,864[a]		10,830[a]
Demonstration Range Mgt.	24.42				
Isleta Pueblo	211,034.30	4,078[a]	6,195[a]		37,108[a]
Jemez Pueblo	89,618.34	677[a]	2,105[a]		10,209[a]
Jemez Diversion Site	4.65				
Laguna Pueblo	443,106.19	287[a]	3,211[a]		15,670[a]
Laguna Public Domain	1,900.75				
Sandia Pueblo	22,870.91	1,054[a]	3,418[a]		19,859[a]
San Felipe Pueblo	48,929.90	398[a]	3,808[a]		22,124[a]
Santa Ana Pueblo	60,868.24	222[a]	3,031[a]		17,610[a]
Santo Domingo Pueblo	69,259.82	879[a]	4,300[a]		24,983[a]
Zia Pueblo	117,360.46	183[a]	2,432[a]		11,795[a]
Zia Diversion Site	22.15				

STATE OF NEW MEXICO

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Ramah-Navajo Agency					
Ramah-Navajo	146,953.13				
Southern Pueblos Agency					
Acoma Pueblo	249,655.70	575[a]	2,302[a]		11,239[a]
Agency Headquarters	31.24				
Cochiti Pueblo	28,779.03	318[a]	1,864[a]		10,830[a]
Demonstration Range Mgt.	24.42				
Isleta Pueblo	211,034.30	4,078[a]	6,195[a]		37,108[a]
Jemez Pueblo	89,618.34	677[a]	2,105[a]		10,209[a]
Jemez Diversion Site	4.65				
Laguna Pueblo	443,106.19	287[a]	3,211[a]		15,670[a]
Laguna Public Domain	1,900.75				
Sandia Pueblo	22,870.91	1,054[a]	3,418[a]		19,859[a]
San Felipe Pueblo	48,929.90	398[a]	3,808[a]		22,124[a]
Santa Ana Pueblo	60,868.24	222[a]	3,031[a]		17,610[a]
Santo Domingo Pueblo	69,259.82	879[a]	4,300[a]		24,983[a]
Zia Pueblo	117,360.46	183[a]	2,432[a]		11,795[a]
Zia Diversion Site	22.15				

STATE OF NEW MEXICO

(5)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Ute Mountain Ute Agency					
Ute Mountain Reservation	104,978.00				
Zuni Agency					
Zuni Pueblo	408,403.81	1,305[a]	2,600[a]		9,100[a]
NAVAJO AREA					
Navajo Reservation	2,383,015.00				
Navajo Off-Res	1,436,494.34				
Eastern Navajo Agency					
Alamo Navajo	63,108.83				
Canoncito Navajo	76,812.84				
NM TOTAL 26	7,408,225.35	13,846	74,297	17,309	353,961.40

NOTES - NEW MEXICO

a. This information is from a tabulation entitled "Indian Irrigation Projects Presently Included in the BIA Irrigation Construction Program - October 1975." This document was compiled by the Bureau of Indian Affairs.

b. Claim made by the Mescalaro Apache Tribe in New Mexico v. Lewis, Chaves County, Cause Nos. 20294 & 22600.

c. Claims made by the listed Pueblos in New Mexico v. Aamodt, U.S. District Court, Cause No. VIV 6639M.

STATE OF NORTH DAKOTA

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Fort Berthold Reservation	419,037.08		25,000[a] (2.85)[e]		71,250[f]
Fort Berthold Off-Reservation	1,760.00				
Devil's Lake Sioux Reserva. (Fort Totten)	51,702.97		20,099[b] (2.85)[e]		57,282.15[f]
Sisseton Wahpeton Reservation (See South Dakota for Balance)	2,592.26		277.67[c]		970.25[c]
Standing Rock (See South Dakota for Balance)	299,542.45		21,249.84[d]		60,542.63[d]
Turtle Mountain Reservation	33,282.72				
Turtle Mountain Off Reservation	43,956.44				
Wahpeton School	52.07				
TOTAL	851,925.99		66,626.51		190,045.03

STATE OF NORTH DAKOTA

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Fort Berthold Reservation	419,037.08		25,000[a] (2.85)[e]		71,250[f]
Fort Berthold Off-Reservation	1,760.00				
Devil's Lake Sioux Reserva. (Fort Totten)	51,702.97		20,099[b] (2.85)[e]		57,282.15[f]
Sisseton Wahpeton Reservation (See South Dakota for Balance)	2,592.26		277.67[c]		970.25[c]
Standing Rock (See South Dakota for Balance)	299,542.45		21,249.84[d]		60,542.63[d]
Turtle Mountain Reservation	33,282.72				
Turtle Mountain Off Reservation	43,956.44				
Wahpeton School	52.07				
TOTAL	851,925.99		66,626.51		190,045.03

NOTES - NORTH DAKOTA

a. United States Department of Interior Bureau of Indian Affairs, The Fort Berthold Reservation Area: Its Resources & Development Potential, (Missouri River Basin Investigations Project, Billings, Montana) (1971), pg 79.

b. United States Department of Interior Bureau of Indian Affairs, The Fort Totten Reservation: Its Resources and Development Potential Affairs, (The Planning Support Group, Billings, Montana) (1976).

c. United States Department of the Interior Bureau of Indian Affairs, Potential Irrigation Development: Missouri River Basin Reservations (Missouri River Basin Investigations Project, Billings, Montana) (1976), Appendix 20, Tables 1,2,3, (total irrigable acreage listed prorated between portions of reservations in North Dakota and South Dakota).

d. Id., Appendix 9, Table 1 (total irrigable acreage listed prorated between portions of reservations in North Dakota and South Dakota).

e. Unit withdrawal coefficient from Standing Rock Reservation used. (Calculated by dividing the potential claim for the Standing Rock Reservation by the number of irrigable acres on the reservation as per information contained in the report listed in note d. above.)

STATE OF OREGON

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
PHOENIX AREA					
Western Nevada Agency					
Fort McDermitt Reservation	18,828.79				
PORTLAND AREA					
Celilo Village	35.98				
Celilo Village Fishing Sites	10.60				
Chemawa Indian School	347.36				
Umatilla Agency					
Umatilla Reservation	85,261.51		25,360[a] (5.0)[b]		126,800[c]
Warm Springs Agency					
Wyandotte Allotments	80.00				
Burns Paiute Public Domain	11,625.93	140[d]	140[d]		800[d]
The Dalles Public Domain	5,166.47				
Warm Springs Reservation	636,003.50	282[d]	1,292[d]		7,493[d]

STATE OF OREGON

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
West Wide Study Est.		1,800[e]	100,000+[e] (4.5)[f]		450,000[g]
OR TOTAL 3	757,362.54	1,800[h]	100,000[h]		450,000[h]

NOTES - OREGON

a. United States Department of Interior Bureau of Indian Affairs, The Confederated Tribes of the Umatilla Indian Reservation: Its Resources and Development Potential, (Planning Support Group, Billings, Montana) (1976).

b. U.S. Water Resources Council, Nationwide Analysis, (June 1977) (calculated from the data in Appendix I).

c. Calculated using information in a. and b.

d. This information is from a tabulation titled "Indian Irrigation Projects Presently Included in the BIA Irrigation Construction Program - October 1975." This document was compiled by the Bureau of Indian Affairs.

e. West Wide Study p. 365. ("Ultimate irrigable reservation lands (in Oregon) are in excess of 100,000 acres.")

f. West Wide Study p. 132.

g. Calculated based on f. and g.

h. The totals listed are not based on the addition of all numbers in the respective columns, Rather, the West Wide Study estimates for the entire state have been used as

NOTES - OREGON (Cont.)

the state total. This is done on the assumption that the estimates listed in the columns above the West Wide Study estimates would be included in the West Wide Study total.

STATE OF SOUTH DAKOTA

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Cheyenne River Reservation	1,400,483.38		50,176[a]		175,700[a]
Cheyenne River Off-Reservation	4,020.92				
Crow Creek Reservation	127,152.74		43,868[b]		153,600[b]
Crow Creek Off-Reservation	274.49				
Flandreau Santee Sioux	2,182.81				
Flandreau School	173,50				
Lower Brule Reservation	126,475.44		17,010[b]		59,500[b]
Pierre School	141.62				
Pine Ridge Reservation (See Nebraska for Balance)	1,781,990.73		96,770[c]		261,219[c]
Rosebud Sioux Reservation	958,152.82		156,715[d]		423,000[d]
Sisseton Wahpton Reservation (See North Dakota for Bal.)	105,347.76		11,284.33[e]		39,429.75[e]

STATE OF SOUTH DAKOTA

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Standing Rock Reservation (See North Dakota for Balance)	550,460.87		39,050.16[f]		111,257.37[f]
Yankton Reser.	34,361.65		24,924[g]		45,600[g]
SD TOTAL 9	5,091,218,73		439,797.49		1,269.306.37

NOTES - SOUTH DAKOTA

a. United States Department of the Interior Bureau of Indian Affairs, Potential Irrigation Development: Missouri River Basin Reservations (Missouri River Basin Investigations Project, Billings, Montana) (1967), Appendix 10, Table 1.

b. Id., Appendix 11-12 , Tables 1,2.

c. Id., Appendix 13, Table 1 (total irrigable acreage prorated between portions of reservation in South Dakota and Nebraska).

d. Id., Appendix 14, Table 1.

e. Id., Appendix 20, Tables 1,2,3 (total irrigable acreage prorated between protions of reservation in South Dakota and North Dakota).

f. Id., Appendix 9, Table 1 (total irrigable acreage prorated between portions of reservation in South Dakota and North Dakota).

g. Id., Appendix 15, Table 1.

STATE OF UTAH

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
ALBUQUERQUE AREA					
Ute Mountain Ute Agency					
Ute Mountain Reservation	11,135.57				
NAVAJO AREA					
Navajo Reservation	1,193,565.46				
Navajo Off-Res.	965.99				
PHOENIX AREA					
Eastern Nevada Agency					
Goshute Reservation	38,523.70	443[a]	820[a]		3,300[a]
Intermountain School	265.48				
Uintah and Ouray Agency					
Skull Valley Reservation	17,444.65	40[a]	6,040[a]		18,120[a]
Uinta & Ouray Reservation	1,021,445.65		120,157[b]	481,078[b]	481,078[b]

STATE OF UTAH

BIA Area, BIA Agency, Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
"Miscellaneous" Utah Reservations (not inc. Uin & Our Skull Val or Goshute)		2,692[a]	45,503[a]		127,509[a]
UT TOTAL 5	2,283,986	3,175	172,520	481,078	630,007

NOTES - UTAH

a. This information is from a tabulation entitled "Indian Irrigation Projects Presently Included in the BIA Irrigation Construction Program - October 1975." This document was compiled by the Bureau of Indian Affairs.

b. Values contained in the unratified Ute Indian Water Compact.

STATE OF WASHINGTON

(1)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
PORTLAND AREA					
Colville Agency					
Colville Reservation	1,011,871.12		15,000[a] (5.0)[b]		75,000[c]
Public Domain	2,675.95				
Olympic Peninsula Agency					
Chehalis Reservation	2,076.06				
Hoh River Reservation	443.00				
Lower Elwah Reservation	372.00				
Makah Reservation	27,027.13				
Ozette Reservation	719.00				
Public Domain	2,348.35				
Quileute Reservation	813.84				
Quinault Reservation	130,750.08				
Shoalwater Reservation	335.00				
Skokomish Reservation	2,951.02				
Squaxin Island	827.89				

STATE OF WASHINGTON

(2)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Washington Fishing Site	30.93				
Puget Sound Agency					
Lummi Reservation	7,386.66		4,390[a] (4.8)[d]		21,072[e]
Muckleshoot Reservation	1,234.76				
Nisqually Reservation	770.86				
Nooksack Reservation	0.97				
Port Gamble Reservation	1,303.00				
Port Madison Reservation	2,849.42				
Public Domain	4,336.75				
Puyallup Reservation	65.04				
Swinomish Reservation	3,609.76				
Tulalip Reservation	10,805.05				
Spokane Agency					
Kalispel Reservation	4,557.41				
Spokane Reservation	133,179.15				
Public Domain	464.72				

STATE OF WASHINGTON

(3)

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/Drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
Yakima Agency					
Yakima Reservation	1,120,736.49			3,275,733[g]	3,275,733[g]
Public Domain	21,881.48				
West Wide Study Est. (entire state)		165,000[f]			
WA TOTAL 23	2,496,422.89	165,000	19,390	3,275,733	3,371.805

NOTES - WASHINGTON

a. This information is from a tabulation entitled "Indian Irrigation Projects Presently Included in the BIA Irrigation Construction Program - October 1975." This document was compiled by the Bureau of Indian Affairs.

b. U.S. Water Resources Council Nationwide Analysis (June 1977) (calculated from data from Tables 4A and 5A in Appendix I.)

c. Calculated based on a. and b.

d. West Wide Study p. 132.

e. Calculated based on a. and d.

f. West Wide Study p. 401.

g. United States Department of Interior, Bureau of Indian Affairs Yakima Indian Reservation: Agricultural Potential (1956). The publication lists the total water needs of the Yakima Indian Reservation by the year 2020 as:

Municipal	6,627
Rural Domestic	8,482
Irrigation	2,189,594
Tribal Industry	8,880
Fish & Wildlife	587,650
Water Quality	474,500
	3,275,733 AcFt/Yr.

STATE OF WYOMING

BIA Area; BIA Agency; Jurisdiction	Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres (Unit W/drwl.)	Other Estimate of Water Needs	Potential Claim AcFt/Yr
BILLINGS AREA					
Wind River Agency					
Wind River Reservation	1,888,031.81		103,000[a]		477,292[b]
WY TOTAL 1	1,888,031.81		103,000		477,292

NOTES - WYOMING

a. Acreage established in In Re The General Adjudication of all Rights to use Water in the Big Horn River System and all Their Sources, State of Wyoming, Judgement and Decree Civil No. 4993, Fifth Judicial District, State of Wyoming.

b. Id., To ameliorate the impact of exercise of the rights the court decreed that, before the Indians could use approximately 188,000 acre feet of the right to irrigate future projects, storage facilities would have to be constructed to provide such water

STATE BY STATE SUMMARY

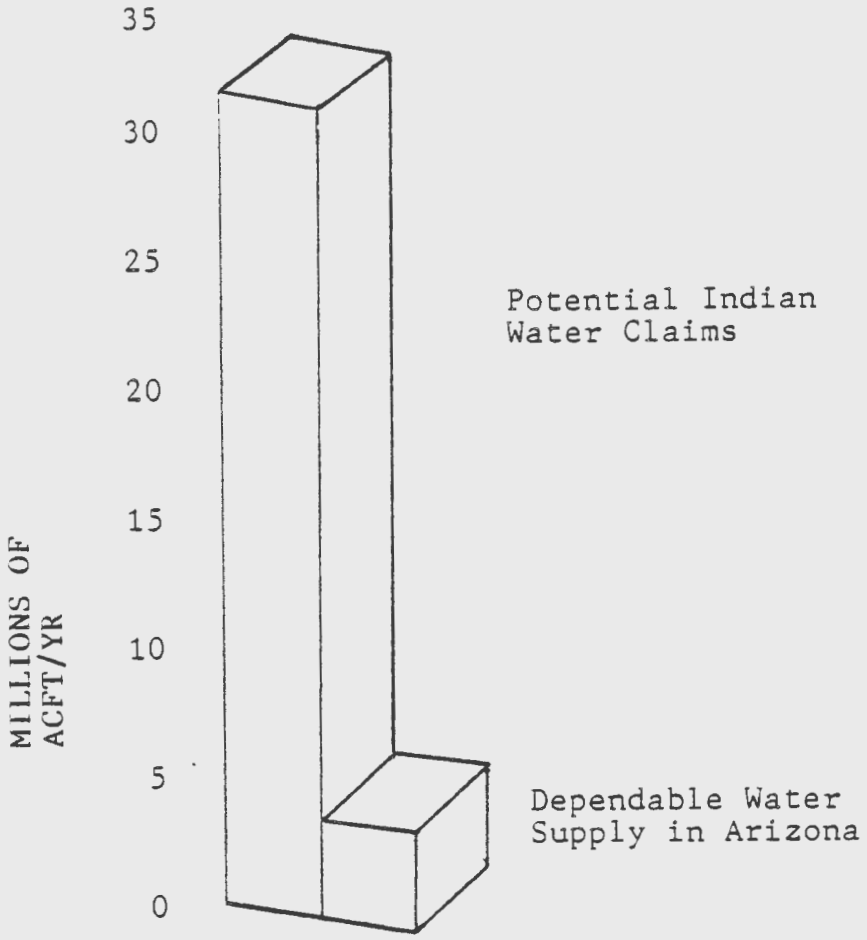
BIA Area, BIA Agency, Jurisdiction		Gross Area in Acres	Presently Irrigated Acres	Potentially Irr. Acres	Other Estimate of Water Needs	Potential Claim AcFt/Yr
ALASKA	7	386,142.19	Ø	Ø	Ø	Ø
ARIZONA	20	19,808,056.88	188,410	6,516,208	18,034,825	31,273,343
CALIFORNIA	80	573,235.34	14,741	58,665	Ø	269,282
COLORADO	2	755,399.71	Ø	93,000	Ø	Ø
IDAHO	5	826,863.26	102,229	227,417	Ø	762,721
MONTANA	7	5,224,864.06	102,338	450,000	3,993,872	6,632,902
NEBRASKA	4	64,475.70	Ø	14,482	Ø	26,481
NEVADA	24	1,154,109.89	34,442.34	24,670	Ø	210,556.06
NEW MEXICO	26	7,408,225.35	13,846	74,297	17,309	353.961.40
NO. DAKOTA	6	851,925.99	Ø	66,626.51	Ø	190,045.03
OREGON	3	757,362.54	1,800	100,000	Ø	450,000
SO. DAKOTA	9	5,091,218.73	Ø	439,797.49	Ø	1,269,306.37
UTAH	5	2,283,986.00	3,175	172,520	481,078	630,007
WASHINGTON	23	2,496,422.89	165,000	435,000	Ø	3,371,805
WYOMING	1	1,888,031.81	Ø	103,000	Ø	477,292

It should be understood that this summary is intended only to provide an overview of the quantity of potential Indian water claims. As noted previously, application of the PIA standard to the number of potentially irrigated acres listed for some of the reservations in the tables would probably result in a smaller water right award than the potential claim listed. On the other hand, because of lack of information, no irrigable acreage or potential claim data were listed for many reservations, some with very large gross areas. Also, few Indian claims for fisheries, natural resource or industrial development, et cetera, were included. Thus the listed potential claims are less than they would be had a claim for all reservations been included and had all theories on which claims might be based been pursued.

Consideration of the following comparisons gives a feel for the relative magnitude of the potential claims. Added together they total approximately 45.9 million acre feet per year. This is equal to, for example, approximately 3.5 times the average annual flow of the Klamath or Colorado Rivers, more than 5 times the flow of the Flathead or Salmon Rivers or nearly 25 times the flow of the San Juan or Yuba Rivers. It is equal to roughly 1.5 times the storage capacity of Lake Powell or Lake Mead.

The state with the largest potential claim is Arizona. As the graphic below illustrates, Arizona's dependable water supply pales in comparison.

ILLUSTRATION III



COMPARISON OF POTENTIAL INDIAN WATER CLAIMS AND DEPENDABLE WATER SUPPLY IN ARIZONA

In the other states the proportions reflected above in Illustration III would be reversed. That is to say the potential Indian claims would be a fraction of the dependable water supply, in some instances a very small fraction. However, in this regard, the important question seems to be not the amount of water physically located within a state's borders but rather the amount available for new uses. As Illustration I demonstrated (reproduced on pages 4-5) when instream needs and off-stream consumption are considered, there is little unused water left in the West.

V. Attempts to Quantify Indian Water Rights

A. Litigation

Since Winters was decided, there has been little agreement as to the procedure which should be used to quantify Indian water rights. Clearly, litigation remains the most frequently used recourse. However, settlement through negotiation and legislation has also been used. 25/

With respect to litigation, considerable controversy has revolved around the question of whether state or federal courts should be the favored forum for determining the scope of the Winters right. Though the early cases were generally decided in federal court, with passage of the McCarran amendment in 1952 26/ Congress stated its intention that Indian water rights be adjudicated in state courts. The Indians and their federal trustees resisted this, fearing prejudice and provinciality. Nevertheless, recent Supreme Court decisions have re-emphasized the federal statutory preference for the state forum. 27/

When given the opportunity to function properly, state courts have proven their ability to effectively and fairly resolve conflicting water claims to a given water source. The courts effectuate this process through water decrees which quantify water rights, establish conditions for use,

and assign priority dates among competing water users. The court orders used to issue such decrees are protected by legal doctrine of res judicata which generally prevents relitigation of court decreed rights. The judicial process, therefore, is capable of effectuating a permanent and all-encompassing determination of competing rights to a single water source.

Unfortunately, few court decrees have been issued which include Indian water rights. In 1910 and 1928 decrees establishing Indian water rights in portions of the Salt and Gila watersheds were issued. 28/ A similar decree, the Orr Ditch decree, was issued in 1944, 29/ determining the rights of the Pyramid Lake Paiute Indian Tribe to water from the Truckee River for the Pyramid Lake Reservation. The Indian parties to each of these decrees have traditionally viewed them as unrepresentative of their full water right entitlements. However, this position is not supported by the Supreme Court's recent decision in Nevada v. United States 30/ holding that res judicata prevents relitigation of the Pyramid Lake Indian Tribe's alleged right to an increase in water from the Truckee River to support a fishery. This reaffirmation of the finality of such a decree is significant. However, as mentioned above, relatively few adjudication decrees include Indian water rights.

Water litigation is oft times expensive and time consuming and has led to delivery of very little "wet water" for Indian tribes. The original action which led to the Orr Ditch decree in 1944 was commenced in 1913. The decision upholding the finality of the decree was handed down in 1983.[31/] The Arizona v. California case was filed approximately 10 years before the decision was issued in 1963. However, the Court issued further opinions in the case in 1979 and 1983. [32/] Often, many years are spent preparing for complex cases involving Indian water rights before the cases ever go to trial.

In addition to investments of time, a great deal of money has been expended litigating Indian reserved water right claims. Although most states have incomplete information relating to such costs, the following gives some idea of the amount the states have spent. Nevada estimates its expenditures at $1.5 to $2 million on such litigation. New Mexico has expended $475,000 for contractual services for three cases for which figures are available. South Dakota estimates its expenditures at approximately $200,000 for one recently dismissed action which never proceeded past initial stages. Wyoming, with a single Indian reservation within its borders, estimates its reserved rights litigation expenditures at approximately $7.2 million.

The above numbers are rough estimates and probably do not reflect any state's entire expenditures for Indian reserved rights litigation. A look at the federal expenditures may give a more complete picture of the costs involved. In a speech to the National Water Resources Association, Interior Solicitor William Coldiron stated, "The Bureau of Indian Affairs has recently estimated that the average tribal water rights case costs the BIA $3 million." He went on to explain that this figure included "just the BIA's costs" and did not reflect expenditures by the Justice Department or by other Department of Interior entities.[33/]

Even though litigation has proven expensive, time consuming and productive of relatively few settled Indian water rights, it remains the favored method of seeking resolution of Indian water rights issues. In addition to the decided cases, the following state by state summary of pending litigation involving Winters rights demonstrates the present dependence on litigation as a method of resolving Indian water claims. The list is not necessarily exhaustive. In many instances the listed actions have been pending for several years.

ILLUSTRATION IV

PENDING INDIAN WATER RIGHT CASES IN THE WESTERN STATES

ALASKA

None

ARIZONA

Gila River General Adjudication

The state court has lifted its stay in the consolidated adjudications on the Gila River Watershed. At the present time the court has set up a briefing schedule in which motions to dismiss the proceedings filed by the United States and some of the tribes and the responses to those motions are being updated. Oral argument on the motions is set for December 16, 1983.

United States v. City of Phoenix, et al

Suit on behalf of the Salt River Pima-Maricopa Indian Community seeking a declaration of their rights to surface and ground water in the eastern portion of the Phoenix Active Management Area. The suit also requests damages from numerous defendants for use of plaintiffs' surface and ground water rights and seeks an injunction prohibiting the continued withdrawal of surface water and groundwater by the defendants. Presently the U.S. has notified the Court that it will not be ready to proceed in this matter for some time and the judge has agreed to maintain the case in an inactive posture for several months.

United States v. Roosevelt Water Conservation District, et al.

This suit was brought on behalf of the Gila River Indian Community and seeks the same relief as that in the Salt River proceeding relating to surface water and ground water within the Pinal and Phoenix Active Management Areas and including the Gila River and its tributaries. The case is presently on the same inactive status as the Salt River suit.

Salt River Pima-Maricopa Indian Community v. U.S., et al.

Suit was filed by the tribe seeking a declaration that it was entitled to additional water based upon the Executive Order creating the reservation, the Kent Decree, specific acts by the Secretary of the Interior and the surplus water created by the Salt River Project. On March 22, 1983, the Court dismissed that part of the complaint alleging that the tribe was being damaged by contracts authorizing the withdrawal and transportation of water outside the boundaries of the Salt River Project. That decision is being appealed by the tribe to the 9th Circuit Court of Appeals while the remaining issues have yet to be decided by the district court.

United States v. Gila Valley Irrigation District, et al.

The Gila River Indian Community has been granted the right to intervene in the Gila River proceeding which produced the Globe Equity Decree in 1935. Under the terms of that decree the United States District Court for the District

of Arizona retains jurisdiction. In its motion seeking intervention the Community stated that if it was allowed to intervene it would file a complaint which would seek to have the Globe Equity Decree properly administered and would also seek to assert its Winters rights. Although the Court has allowed the Community to intervene, it has requested the Community to amend the proposed complaint filed with the motion to intervene to more specifically set forth the tribal claims.

Salt River Pima-Maricopa Indian Community v. H.S. Aquilar, et al.

This proceeding was instituted by the Community against all ground water users located in what it terms the East Salt River Valley ground water basin. The complaint alleges that the withdrawals of ground water by non-Indian pumpers have been in excess of the recharge and that such withdrawals have diminished the value of the Community's farmlands and substantially increased the costs of using ground water to irrigate its lands. The Community requests $150,000,000 in damages, a determination of what the average annual safe yield is for the area in question, a declaration that the Community has first priority to withdraw the safe yield, a finding as to how much water is necessary to cultivate the Community's land, a determination of what portion of the safe yield may be withdrawn by the defendants and an injunction prohibiting all of the defendants from withdrawing ground water in excess of their apportioned shares.

White Mountain Apache Tribe v. Watt, et al.

In a recently filed action the tribe seeks to have the court declare that the United States is inadequately representing the tribe's interests relating to water rights, that the U.S. is exercising the tribe's water rights for the benefit of other federal projects, that the U.S, has mismanaged the tribe's natural resources and that the consolidated state court adjudications be enjoined.

CALIFORNIA

Arizona v. California

The pending portion of this case relates to boundary changes of the Colorado River, Fort Mohave and Fort Yuma Indian reservations. (See immediately following item.)

Metropolitan Water District, et al. v. United States, et al.

This case has been filed in the United States District Court, San Diego, and was held in abeyance while the Supreme Court was considering Arizona v. California. With the Court's decision now released, this case is now under way. The issue is the validity of three orders of the Secretary of the Interior to alter the boundaries of three Indian reservations in such a way as to effect water rights under the Winters doctrine.

Rincon Bank of Mission Indians v. Escondidio Mutual Water Co.

At issue is the quantification of the water rights of the La Jolla, Rincon, Pala, Pauma and San Pasqual Indian Tribes. Also in question is the liability of the Secretary of the Department of Interior for the past loss of Indian water rights.

COLORADO

In the Matter of the Application for Water Rights of the United States, Water District No. 7 Colorado

The Ute Mountain Ute and Southern Ute Tribes are participating in this general adjudication proceeding aimed at quantification and determination of rights to streams flowing through their reservations. This is the case that was remanded to state court from federal court by the Supreme Court's decision in Colorado River Conservation District v. United States (the Akin case).

IDAHO

None

MONTANA

Seven separate federal actions involving the quantification of reserved rights for various Indian reservations in the state were consolidated into a single action, Northern Cheyenne Tribe v. Adsit et al. The United States Supreme Court recently held that the federal district court acted properly in dismissing the federal actions in favor of state actions which would adjudicate the rights for the same tribes.

The case was remanded to the Ninth Circuit Court of Appeals where it is currently pending.

Blackfeet Tribe v. Watt

This federal court suit challenges Montana's authority to administer (as opposed to adjudicate) Indian water rights inside the Blackfeet Indian reservation. It further claims that there are 450,000 acres of PIA lands within the reservation (which require a unit withdrawal of 4.5 acre feet of water per year) and that conflict of interest and capriciousness have kept the Secretary of Interior from recognizing the Tribe's vested water right to the water necessary to irrigate these lands. The amount to which the tribe claims a vested right is approximately twice the amount of water on the reservation.

Confederated Salish and Kootenai Tribe v. Montana

This federal suit challenges Montana's authority to administer water rights (either reserved rights or rights to "surplus" water) within the Flathead reservation. It contends that the McCarran Amendment waived the sovereign immunity of the United States but not Indian tribes.

NEBRASKA

None

NEVADA

The Supreme Court's recent decision in Nevada v. United States, which held that res judicata prevents the reopening of the Orr Ditch decree for a newly alleged fishery water right for the Pyramid Lake Piaute Indian Tribe, brought finality to the most critical Indian water rights litigation the state has faced. The objective of the tribe in the action was to enhance the flow of the Truckee River into Pyramid Lake to improve the fishery in the lake. As many as eight other law suits aimed at this purpose are still pending although not all involve Indian reserved water rights directly. Also, the Carson River adjudication is being challenged in the Supreme Court.

NEW MEXICO

New Mexico v. United States

This is a general adjudication intended to determine the water rights of all parties to the San Juan River. The suit involves water rights of the Ute Mountain Ute, Navajo and Jicarilla Apache Tribes.

Jicarilla Apache Tribe v. United States

This suit was brought by the Jicarilla Apache Tribe to determine its water rights to the Navajo River, a tributary to the San Juan.

New Mexico v. Aamodt

This is a general stream adjudication of the Rio Pojoaque system which involves the water rights of the San Ildefonso, Nambe, Tesuque and Pojoaque Pueblos. As with some of the other cases pending in New Mexico, the suit is complicated by the possible affect of Spanish and Mexican law on the determination of water rights for the Pueblos.

Anaya v. Public Service Co.

This is a general adjudication suit for the Santa Fe stream system. It may involve water right claims for the Cochiti Pueblo.

New Mexico v. Abbott

This is a general adjudication suit for a portion of the Rio Grande system. It involves water rights for the San Juan, Santa Clara and San Ildefonso Pueblos.

Zuni Tribe v. City of Gallup

This is a general adjudication suit for the Zuni stream system and related ground water aquifers.

New Mexico v. Abeyta

This is a general adjudication for tributaries of the Rio Grande involving the water rights of the Taos Pueblo.

New Mexico v. Lewis

This is a general adjudication suit for the tributaries of the Pecos River which involves the water rights of the Mescalero Tribe.

New Mexico v. Aragon

This is a general adjudication suit for the Chama River and tributaries which involves the water rights to the San Juan Pueblo and the Jicarilla Apache Tribe.

United States v. Bluewater Tolteck Irrigation District

This is a water "trespass" suit under 28 U.S.C. § 2415 brought against all surface and ground water right claimants in the Rio San Jose stream system. The suit was brought on behalf of the Acoma and Laguna Pueblos.

United States v. Abousleman

This is a suit to adjudicate all water right claims in the Rio James stream system. It also requests injunctive relief and damages for trespass under 28 U.S.C. § 2415. The suit was brought on behalf of the Jemez, Santa Ana and Zia Pueblos.

NORTH DAKOTA

None

OREGON

United States v. Adair

This is a suit filed by the United States to determine among other things, the water rights of the Klamath Tribe and individual allottees in the Williamson River. A separate state adjudication involves the entire Klamath River above the California-Oregon border. The Ninth Circuit Court of Appeals recently handed down its opinion in Adair holding, among other things, that: (1) reserved water rights are appurtenant to Indian lands, including allotments, and may be acquired by non-Indians who purchase Indian lands, and (2) the Klamath Tribe has hunting and fishing water rights with an immemorial priority date to be defined based on the tribe's current hunting and fishing activities. A petition for rehearing has been filed in the case. It is expected that petitions for writ of certiorari may eventually be filed.

SOUTH DAKOTA

None

UTAH

None

WASHINGTON

Washington v. Aquavella, et al.

This is a general adjudication in state court of the Yakima River. It involves the water right claims of the United States on behalf of the Confederated Tribes and Bands

of the Yakima Indian Nation. The case is now pending in the Washington State Supreme Court on a "necessary parties" issue.

Colville Confederated Tribes v. Walton

This is a federal court suit to determine water rights to the small reservation-restricted No Name Creek. It involves water right claims of the Confederated Tribes of the Colville Reservation.

United States v. Anderson

This is a suit brought by the United States as trustee for the Spokane Indian Tribe to determine the water rights of the Spokane Indian Tribe to the Chamokane Creek. It is presently on appeal to the Ninth Circuit Court of Appeals.

In re Antoine Creek

This state court suit involves a claim made by the United States on behalf of an individual Indian allottee asserting reserved rights for allotments located outside the reservation, for irrigation purposes.

Holly v. Totus

This federal court suit was brought by the State of Washington, several corporations, and individuals seeking to invalidate a "water code" adopted by the Yakima Nation.

In re Omak Creek

This is a general adjudication of the Omak Creek system, a tributary of the Columbia River System, whose reach is located within the Colville Indian Reservation.

Yakima Indian Nation v. United States

This is a federal court suit brought by the Yakima Indian Nation to determine the scope and extent of its water rights on the Yakima River System. The case has been stayed pending the outcome of Washington v. Acquvella.

Sunnyside Valley Irrigation Dist. v. Kittitas Reclamation District

This case centers on the scope of Indian reserved rights held by the United States for the benefit of the Yakima Indian Nation with primary emphasis centering on water rights for fisheries.

WYOMING

The Wyoming Fifth Judicial District Court recently decided In re: The General Adjudication of All Rights to Use Water in the Big Horn River System and All Other Sources, a general adjudication suit which quantifies water rights for the Wind River Indian Reservation. All parties have filed motions for amendments to the decree. An appeal of the decision to the State Supreme Court is anticipated.

B. Legislation

Attempts to quantify Winters water rights through legislative avenues fall generally into two categories. These are situation-specific (or reservation-specific) legislation and legislative proposals which would establish nationwide standards for quantification. Relatively speaking, neither method has yet proven particularly successful in quantifying Winters rights.

Among the reservation-specific legislative attempts are the Navajo Indian Irrigation Project (NIIP), and the Ak Chin and Papago settlements. The bill authorizing NIIP was enacted by Congress in 1962. Its intent was to create a farming operation for the Navajo Tribe based on irrigation water from the San Juan River to which the Tribe was entitled because of its Winters water rights. A companion bill authorized the San Juan-Chama Diversion Project. The legislation quantified an amount of water the Navajos were entitled to receive for NIIP and also created a mechanism for sharing shortages of water between Indian and non-Indian users.

Unfortunately, so many questions have arisen regarding the interpretation of the NIIP legislation that its utility as a "settlement" of the Navajo Winters rights is questionable. These questions relate to what might be considered the most basic of concerns regarding the legislation, such as whether

the Indians may deplete or divert the 508,000 acre-feet entitlement the legislation specifies. Also questionable is whether the entitlement fully settled the Tribe's Winters right to the San Juan River or whether, the Indians, are entitled to further water rights. Additionally, the federally constructed irrigation works for the project are more efficient than those contemplated by the legislation. Thus, over 100,000 acre-feet of water less than the legislatively quantified amount is necessary to irrigate the same amount of land. Various questions relating to the surplus have surface including what entity is entitled to the surplus and for which additional purposes (agriculatral, energy development, etc.) it may be used. 34/

A more definitive piece of legislation led to the settlement of the Ak Chin Indian Community's water rights. 35/ The legislation was preceded by threats of litigation. It authorizes delivery of 85,000 acre-feet of water per year by contract to the Ak Chin Community and assures construction by the federal government of a delivery system and ground water pumping facilities on federal lands. Once the settlement is in effect and the tribe is provided with the prescribed water supplies, the tribe agrees to waive its assertions and future claims for additional Winters rights.

The Ak Chin settlement was precipitated by a situation

where non-Indian farmers adjacent to the reservation were withdrawing ground water to the extent that the water level beneath the reservation was impacted. The proposed settlement involved importing water supplies to the reservation. Both the non-Indians adjacent to the reservation and the Indians had the objective of bringing new water to the area. With this mutual goal, the legislation was drawn up and enacted with local support, essentially placing on the federal government the responsibility to find a water supply for the reservation. After enactment of the legislation questions arose regarding the financial responsibility it placed on the United States. This has led to efforts to reach a final solution to the Ak Chin controversy through renegotiation of the original settlement.

The most recent reservation-specific settlement occurred for the Papago reservation. 36/ Like the Ak Chin settlement, it was precipitated by litigation. In this instance the Tribe and the United States on behalf of the Tribe had filed claims against all water users in the upper Santa Cruz Basin. They claimed that the Papago's Winters rights had been violated by non-Indian uses.

Considerable negotiation took place in advance of introdction of a Papago settlement bill. Because of the law suit, all the major water users in the area had incentive to come

to the bargaining table. Like the Ak Chin situation, the proposed solution involved the importation of a new water supply and the use of available municipal effluent. According to parties involved in the negotiations, had the proposed solution involved only use of limited local water supplies, little opportunity would have existed for unifying the parties.

The initial settlement which was negotiated and enacted by Congress was vetoed by the President. Regarding this veto, Interior Solicitor Coldiron has stated:

> In his veto message the President sent one loud and clear message. Indian tribes, states, cities and private parties cannot negotiate a settlement of their water rights differences and then present to the United States a bill for tens of millions of dollars where the United States has not participated in the negotiations and has not been responsible for injury to the Indians' water rights. 37/

The settlement was then renegotiated with less federal financial participation. The second version was also enacted by Congress and was signed into law by the President.

The settlement is viewed by some as a success in that it establishes in finality a water supply for a major portion of the Papago Reservation. However, from the perspective of the State of Arizona as a whole, the settlement is seen by others as making it more difficult to allocate limited water supplies in an already overdrafted basin. Additionally, some view the substantial guarantees of water to both the Papago and the

Ak Chin Indians as probably in excess of amounts which would have resulted from a comprehensive quantification of all Indian water rights in the state.

In addition to the reservation-specific legislation mentioned above, proposals have been offered for nationwide quantification of reserved water rights. None of the proposals has been enacted by Congress. Most of them have included two themes: (1) to subject the holders of reserved water rights to the systems and procedures of state water law, and (2) to require inventory and quantification of reserved water rights.

Recently, at least two major national proposals have been discussed with renewed interest. One has been sponsored by the Western Regional Council, a group of western business interests involved in natural resource development. It calls for an exhaustive study of Indian water rights aimed at providing a data base for the "informed and intelligent" quantification of the rights. After such quantification, the rights would be integrated into state systems of water law. The bill provides for compensation of "unexercisable" rights and would establish an Indian Water Projects Commission with the responsibility to finance Indian water projects to permit the beneficial use of quantified Indian water rights. 38/

The other recent major proposal, which has been endorsed by the Western Conference of the Council of State Governments,

has been termed the Water Rights Coordination Act (WCRA). It would recognize Winters rights exercised before passage of the Act, but thereafter would establish an eight-year period within which Indians would have to exercise or lose their Winters rights. An exception would be provided where the Secretary of Interior, pursuant to a determination of the feasibility of future exercise, could issue a certificate of exerciseability, which would allow the right to continue in existence after eight years. Winters rights not exercised and not falling within this exception would be extinguished. The bill would provide payment for constitutionally compensable loss of Winters rights. Claims for such compensation would have to be filed within two years following the date of extinguishment. The WRCA also provides for settlement of non-Indian reserved water rights. 39/

Indian tribes have generally expressed disagreement with any proposal calling for comprehensive quantification of Winters rights. A recent position paper of the National Congress of American Indians entitled "Assertion of Indian Rights and Standards for Natural Resources and Trust Responsibilities" is reflective of this feeling. It reads, In part:

> At a tribe's request a moratorium shall be declared on all major agricultural, industrial or other projects using waters to which Indians have a claim under the Winters doctrine, and existing contracts shall be cancelled relating to such projects until such time as the Indian water rights

> have been specifically and acurately measured by Indians and allocated to Indian uses. Adequately funded irrigation projects primarily serving Indians shall be implemented immediately. Because each Indian Nation has unique water rights, plans, laws and needs, each Indian Nation must set its own priorities and goals and must direct its own relationship with federal agencies, programs and policies. Recognizing that these are sovereign prerogatives and not matters for a single national Indian position, the National Congress of American Indians supports the water rights positions of each tribe, particularly the individual tribal positions regarding the National Water Policy and Principles and Standards developed under it, quantification of water usage and negotiations concerning future allocations of water... (emphasis added) 40/

C. Negotiation

In addition to and most often in concert with litigation and legislation, negotiation has offered a third avenue for the settlemt of Winters claims. (It should be noted that "arbitration" has been mentioned as a fourth method of settlement.[41/] Under this theory, "arbitration agencies" would be created under state or federal governments and would be empowered to seek settlements of Indian water right claims. In practice, this theory has progressed very little because of the feeling that it would simply add one more layer of decision making and that the courts would ultimately be called upon to review the decisions of the arbitration agencies.)

As noted above, extensive negotiations preceded the legislative determinations of the Winters claims of the Ak Chin

and Papago Indian Communities. Other attempts to negotiate settlements are currently underway. President Reagan has recently stated, "I strongly believe that the most appropriate means of resolving Indian water rights disputes is through negotiated settlement and legislation, if it is needed to implement any such settlement."[42/] This feeling seems to be shared by the Secretary of Interior, his Solicitor, and various other officials in the present Administration. They have stressed that the United States must be an active party in any Winters settlements reached through negotiations. The Administration has appointed a federal negotiating team, called the Federal Water Policy Advisory Group, charged with seeking, wherever possible, negotiated settlements of Winters claims. The advisory group worked extensively on the Papago settlement, which has now been completely implemented. It is currently engaged in seeking final negotiated settlements for the Ak Chin, Escondido and Fort Peck Indian Communities. Further, according to a speech by William P. Horn, Deputy Under Secretary of the Department of Interior, four or five other tribes have contacted the advisory group and expressed an interest in negotiation while, the advisory group believes, other tribes will come forward to negotiate once successes through negotiation are seen. [43/]

While some settlement of Winters claims has been reached through negotiation, other attempted negotiated settlements have so far proven unsuccessful. In 1977 the Uintah and Ouray

Tribal Business Committee of the Ute Indian Tribe passed a resolution requesting the State of Utah to recognize certain tribal water rights. The State decided to evalute the Tribe's water right claims and formulate a negotiating position. A task force was formed for this purpose. The total acreage for which the Tribe claimed water rights was 129,201 acres, with 77,800 acres in irrigation and the remaining land proposed for irrigation. After approximately two years of negotiation between the State and the Tribe an agreement was reached concerning the extent of the Ute Indian water right claims. This agreement was submitted to the Utah Legislature, which voted to ratify the agreement, which is known as the Ute Indian Water Compact. Since that time, however, the Compact has been before the Tribe and Tribe has failed to act upon its ratification.

As noted above, notwithstanding some setbacks, many interested parties view negotiation as the best possible solution to the many questions involved in settling Indian water right claims. The State of Montana has taken a particular interest in this regard and has created the Montana Reserved Water Rights Compact Commission. This entity has been delegated the authority to negotiate on behalf of the state to seek settlement of reserved water rights claims with Indian tribes and federal agencies. Special exemptions from the state's new water rights law have been granted tribes who enter

negotiations with the state. Thus far the Fort Peck, Fort Belknap, Northern Cheyenne, Crow, Rocky Boys and Turtle Mountain Tribes have expressed interest in negotiating with the Commission.

Also, the governors of the Western Governors' Policy Office have sent a formal resolution to the Secretary of Interior encouraging negotiated settlement as the preferred solution to conflicts between Indian water claims and non-Indian uses. Three other organizations joined in the resolution, namely, the Council of Energy Resource Tribes, the Native American Rights fund and the Western Regional Council.

VI. Effect of Unquantified Indian Water Rights

Water law in the West emphasizes stability and predictability among interrelated water rights. The "first in time - first in right" rule of prior appropriation law protects existing economies which are predicated upon established uses while at the same time insuring maximum beneficial water use as defined by the public. The reliability of the appropriation doctrine has, in large part, made the West a socially inhabitable and economically fruitful region.

The unquantified nature of the vast majority of the Indian water rights in the West creates substantial uncertainty

with regard to the management of water resources and the administration of water rights and is of concern to state and federal governments and Indians and non-Indians alike.

Unquantified Winters rights make it difficult, and sometimes impossible, to implement legal and adminstrative systems on which the appropriation doctrine is based. Many states must hold applications for new water permits where the land or water resources involved are within or near Indian reservations until Indian water rights are determined as it is impossible for state officials to determine the availability of water for new appropriations. Also, construction of approved water projects can suffer significantly. For example, in Utah the Bonneville UPALCO and Unitah units of the Central Utah Project have been significantly delayed, with accompanying increases in cost, due to the inability of the states and the Indians to come to an agreement on the Ute Indian Water Compact. Delay in construction of the White River Dam is also partially attributable to the uncertainty caused by unquantified Indian water rights.

The lack of definition of Indian rights also adversely impacts the ability of the western states to properly carry out some water conservation and management programs. For example, Arizona has enacted legislation intended to remedy its ground water overdraft problem. However, the state will

be hampered in its efforts to carry out the law if ground water pumping on the Indian reservations goes unchecked. The State of Washington's basin management program planning effort is designed to determine physical availability of waters, determine and subtract out the demands on the system under existing rights (which include Indian rights and minimum flows) and then determine, tentatively at least, the best use for the remaining water. Not knowing the quantity of Indian water rights precludes a good planning effort.

Tremendous federal resources, both time and money, are being expended litigating Indian water right claims, considering legislative proposals and preparing for and participating in negotiation proceedings. Considering successes so far, it is questionable whether present approaches can be considered cost effective. Moreover, there has been considerable controversy regarding the issue of compensation for both the potential loss of Indian water rights not yet quantified and non-Indian water rights which may be affected when Indian claims are quantified. The federal government is seen as the entity responsible for providing such compensation. Postponing the quantification of Indian water rights likely means increasing the amount of money which will be needed to meet any such obligation. The uncertainties of Indian water right entitlements also affects federal water planning. Without guaranteed water supplies to specific reservations or tribes, it is

difficult for the federal government to invest in construction of Indian water projects, diversion works and/or irrigation facilities.

Indian tribes as well are in a poor position to finance development of water resources without quantified water rights, or to otherwise utilize tribal resources dependent on water supplies. Many observers argue that the piecemeal approach which has been used to quantify Indian water rights may eventually result in inequity in that those tribes which come forward early and seek quantification may receive awards in excess of what other tribes can possibly be granted in a comprehensive all-encompassing quantification. Additionally, unquantified Indian water rights cannot be protected by the traditional legal mechanisms which regulate vested water rights in the West.

The fact that Indian water claims are largely unquantified may represent a significant problem for many non-Indians as well. Non-Indians are using water pursuant to state granted water rights largely without knowledge of the potential extent of the Indian water rights. The early priority dates of Indian water rights means that when such rights are established they may displace state created water rights with later priorities. As Illustration I above demonstrates, this could mean substantial dislocation of non-Indian uses, since the vast majority of all available water in the West is in use, while very few Indian water rights have yet been quantified.

FOOTNOTES

1. U.S. Water Resources Council, The Nation's Water Resources 1975-2000, The Second National Water Assessment, Vol. 1, Summary 56-59 (Washington, D.C., GPO, December 1978)
2. R. Murray & B. Reeves, Estimated Use of Water in the United States in 1975, 8-9 (U.S. Geological Survey Circular - 765) (Arlington, Va, 1977)
3. 14 Stat. 262 (1866), 43 U.S.C. §661 (1970).
4. 19 Stat. 377 (1877), as amended 43 U.S.C. §322 (1970).
5. 295 U.S. 142 (1935).
6. R. Dewsnup and D. Jensen, A Summary - Digest of State Water Laws 1-72 (1973)
7. 207 U.S. 564 (1908).
8. 207 U.S. at 576.
9. S. Matheson, Indian Reserved Water Rights: The Winters of Our Discontent, 88 Yale L.J. 1689, 1695 note 40.
10. 104 F.2d 334 (9th Cir. 1939).
11. 131 F.2d 359 (1942).
12. R. Foreman, Indian Water Rights; A Public Policy and Administrative Mess 69 (1981).
13. 236 F.2d 321 (9th Cir.), cert. denied, 352 U.S. 988 (1956), rev'd on other grounds., 330 F.2d 897 (9th Cir. 1964), cert. denied., 381 U.S. 934 (1965).
14. 161 F. 829 (9th Cir. 1908).
15. 373 U.S. 456 (1963), decree at 376 U.S. 340 (1964).

FOOTNOTES

16. Arizona v. California, ___U.S.___, 103 S. Ct. 1382 (1983).

17. For example, these observers point to the Court's statement in Arizona v. California which reads:

> The States have already indicated, if the issue (the water rights decreed in Arizona v. California 376 U.S. 340 (1964)) were reopened, that the irrigable acreage standard itself should be reconsidered in light of our decisions in United States v. New Mexico, 328 U.S. 696 (1978) and Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n, 443 U.S. 658 (1979), and we are not persuaded that a defensible line can be drawn between the reasons for reopening this litigation advanced by the Tribes and the United States on the one hand and the States on the other. It would be counter to the interests of all parties to this case to open what may become a Pandora's Box, upsetting the certainty of all aspects of the Decree. (emphasis added.) 103 S. Ct. at 1395.

See also statements made by Justice White during the oral argument for the most recent Arizona v. California decision.

18. United States v. New Mexico, 438 U.S. 696 (1978).

19. Cappaert v. United States,426 U.S. 128 (1976).

20. ___U.S.___, 103 S. Ct. 2906 (1983).

21. ___U.S.___, 103 S. Ct. 1382 (1983).

22. 460 F. Supp. 1320 (E.D. Wash. 1979) reversed on reh'g 647 F.2d 42 (1981). cert. denied, 102S. Ct. 657 (1982).

23. Nos. 80-3229 and 80-3245 - F (9th Cir. Nov. 15, 1983).

24. Civil No. 4993 (District Court of the Fifth Judicial District State of Wyoming, May 10, 1983).

FOOTNOTES

25. See Papago Settlement reached through passage of the Southern Arizona Water Rights Settlement Act of 1982, P. L. 97-293. Compare Ahtanum Creek Settlement, see United States v. Ahtanum Irrigation Dist., 236 F.2d 321 (9th Cir. 1956) cert. denied 352 U.S. 988 (1957).
26. McCarran Amendment, 43 U.S.C. § 666.
27. Colorado River Water Conservation Dist. v. United States, 424 U.S. 800 (1976); Arizona et al. v. San Carlos Apache Tribe, ___U.S.___, 103 S. Ct. 3201 (1983). Cf. Jicarilla Apache Tribe v. United States, 601 F.2d 1116 (10th Cir.), cert. denied, 444 U.S. 995 (1979).
28. See Hurley v. Abbott, 259 F.Supp. 669 (D.Ariz 1966).
29. United States v. Orr Ditch Water Co., Equity No. A-3 (Orr Ditch) Final Decree 87.
30. ___U.S.___, 103 S Ct. 2906 (1983).
31. Id.
32. See Arizona v. California, ___U.S.___, 103 S. Ct. 1382, 1385-1388 (1983).
33. Address by William Coldiron, National Water Resources Association (July 30, 1983, Kalispell, Montana).
34. J. Folk-Williams, What Indian Water Means to the West 13 (1982).
35. Water Right Claims - Ak Chin Indian Community Act, P.L. 95-328 (1978).
36. Southern Arizona Water Rights Settlement Act, P.L. 97-293 (1983).
37. Address by William Coldiron, National Water Resources Association (July 30, 1983, Kalispell, Montana).

FOOTNOTES

38. J. Folk-Williams, What Indian Water Means to the West 17 (1982).

39. Id. 15-17. See also J. Little, Administration of Federal Non-Indian Water Rights, 27 Rocky Mt. Min. L. Inst. 1709, 1776-1777 (1982).

40. Id. 18.

41. Address by William Coldiron, National Water Resources Association (July 30, 1983, Kalispell, Montana).

42. As quoted in Id.

43. Address by William Horn, Deputy Under Secretary of Interior, Workshop on Recent Developments in Water Rights Law (November 21, 1983 San Diego, California).