Form No. 1(ev. 10-74)

Received
Cultural Resources

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTO

DETERMINATION OF ELIGIBILITY

FOR NPS USE ONLY
RECEIVED AUG 29 1983
ENTERED

IAL REGISTER FORMS
BLE SECTIONS

1 NAME

HISTORIC

IRRIGATION CANALS IN THE UINTA BASIN, UTAH

AND/OR COMMON

2 LOCATION

STREET & NUMBER

see individual site forms

__NOT FOR PUBLICATION

CITY, TOWN

CONGRESSIONAL DISTRICT

__ VICINITY OF

STATE
Utah

CODE

COUNTY
Duchesne & Uintah

CODE

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	__PUBLIC	__OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	X BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	PUBLIC ACQUISITION	ACCESSIBLE	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
X thematic resources	__BEING CONSIDERED	__YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	X OTHER: irrigation canals

4 OWNER OF PROPERTY

NAME

Multiple ownership; see individual site forms

STREET & NUMBER

CITY, TOWN

STATE

__ VICINITY OF

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.

1. Uintah County Recorder
2. Duchesne County Recorder

STREET & NUMBER

CITY, TOWN

1. Vernal
2. Duchesne

STATE

Utah

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

"Cultural Resources Survey of the Duchesne River Area Canal Rehabilitation Program"

DATE

February, 1982

__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS

MESA Corporation

CITY, TOWN

Orem

STATE

Utah

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	__DETERIORATED	__UNALTERED	X ORIGINAL SITE
X GOOD	__RUINS	X ALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The irrigation canals included in this thematic determination of eligibility are historically associated with the development of irrigation in the Uinta Basin, Utah. Although some of the Indian and Ashley Valley canals were constructed before the turn of the century, most date from the time the Indian Reservation was opened to homestead entry (August 28, 1905) and have been in continual use to the present time. The development and construction of irrigation canals was critical in establishing an agrarian way of life in the Uinta Basin. Canals, laterals, ditches, reservoirs and appurtenant structures were parts of the irrigation system that enabled water to be delivered to the individual farms. The canals, of necessity, have been continuously upgraded through time and have, therefore, not been evaluated based on engineering significance.

The Uinta Basin is a large area of land in the northeastern part of the State of Utah. The Basin is a dissected plateau region characterized by level bench lands and broad valleys along the major waterways. The Uinta Mountains form the northern boundary of the Basin. These mountains, which are one of the few mountain ranges in the world that run east and west, are the water source for rivers that drain through the Basin. The principal rivers and creeks which supply irrigation water include the Duchesne, Lake Fork and Uinta rivers, and Ashley Creek. The Whiterocks River is tributary to the Uinta River; the Yellowstone River is tributary to the Lake Fork River. Prior to the development of reservoirs, these rivers would gradually dry up as the winter snows melted from the mountains. Numerous rocky ridges, mesas, and large areas of rough, broken, steep and stony land are within the Basin. Only a small proportion of the Uinta Basin is suitable for agriculture.

Alfalfa, and other grasses, are the major crops grown here. Oats, wheat, and a variety of other crops, comprise a small proportion of agricultural production. Low levels of annual precipitation prevented fruit and other garden produce from becoming profitable. Grazing lands for livestock were increasingly set aside. Sheep, cattle and turkeys were raised for market. During the period of 1921 through 1925, the production of alfalfa seed was an important cash crop when nearly one-third of the total output in the state was produced in the Basin. In almost all cases, fields are irrigated by the flooding method.

Irrigation in the Uinta Basin developed for the most part in a different pattern compared to other areas of the state. Unlike the gradual settlement of Mormons in the Great Basin, the Uinta Basin was suddenly thrown open to settlement in 1905 when homestead entries were allowed on the former Uintah Indian Reservation. Over fifty years of experience in developing irrigation systems in other parts of Utah gave these settlers the knowledge and experience to develop complex and efficient irrigation systems. Irrigation technology, including canal construction and irrigation methods, was well-advanced by 1905.

The two organizations which took the greatest advantage of this knowledge were the Uintah Irrigation Project (Indian) and the Dry Gulch Irrigation Company. Over half of the canals in the Uinta Basin were constructed by these two organizations. Engineers and construction supervisors were on both organization's payrolls. Construction labor was generally paid in cash, although the Dry Gulch company occasionally allowed labor to be applied to annual assessments. Both organizations were capable of drawing on substantial financial reserves, either through bonding, loans, assessments or federal appropriations, and therefore could hire experienced people and purchase pre-manufactured structures such as headgates, flumes and weirs. The result was a far more sophisticated irrigation system compared to other areas in the Uinta Basin and the State of Utah.

In contrast to the Dry Gulch and Uintah Irrigation Project, numerous smaller irrigation companies and associations in the Basin did not have these resources, neither financial or technological, to develop irrigation systems in the manner of the larger organizations. Labor was most often performed by shareholders in the companies. Only on rare occasions did the irrigation company have a paid employee. Even then, such as in the Ashle Valley, only part of the payment was in cash, the remainder being paid with oats or other farm products of the shareholders.

In laying out canals, the larger irrigation companies utilized the services of a surveyor. The smaller canals and ditches were simply surveyed by eye or by sighting the grade with a water-filled bottle. Because of the dissected nature of the Basin, canals often had to cross benches, draws and creeks. Sometimes a canal would simply drop off the edge of a bench through a series of waterfalls, only to continue its course afterwards. Sighting a canal so that it could irrigate as many acres as possible was no easy task in certain circumstances. The Knight Ditch, for example, was built and designed to irrigate land on the Blue Bench, just north of Duchesne. To get the water onto the bench, the contractors had to build five miles of side-hill flumes and cross several broad hollows. Syphons were used to cross these hollows but problems with the wood flumes began almost immediately. Most often, however, companies did not construct canals where they would require a large number of structures. Generally, cash and resources were scarce while labor was abundant.

Until recent years, all canals in the Basin were gravity flow, earthen canals. Canals were dug with pick and shovel, slipscrapers and go-devils. Canals constructed prior to 1905 were generally crude with very few structures. Rock and brush dams diverted water int the canal while farmers directed the flow onto their fields simply by cutting a hole in the side of the field ditch. As the area became more populous and the demand on the available water greater, ways of accurately measuring the water became necessary. Headgates and gauging stations, at first constructed out of wood, were placed in the canals. These original structures required systematic replacement as spring floods, winter storms and ice, and other causes tore at the structures. Metal headgates, flumes and weirs, reinforced with concrete, replaced the original wooden structures.

Operation and maintenance costs are assessed annually to water-users. Maintenance and rehabilitation of all the canals has become part of the historic process. Similar to other industrial and commercial processes, irrigation companies have had to provide its shareholders with a product: water. In order to provide that product, canals had to be dredged periodically, relined where seepage was great and structures replaced as they fell into disrepair.

Eighty years of systematic replacement and rehabilitation of canals has resulted in a diminished number of historic structures associated with the canals. The integrity of a canal is assessed within the context of a total irrigation system. Specific structures are only one part of this system. A canal can run anywhere from one to over twenty miles, require one or thirty headgates, and deliver water flow capable of irrigating tens or thousands of acres. In this survey, the historical significance of a canal was judged by its association with the important themes in Uinta Basin irrigation development.

The survey of historic irrigation canals in the Uinta Basin was conducted by three members of a HABS/HAER team of the National Park Service. Supervisor for the project was Craig Fuller, historian for the State of Utah. Jim Jurale, master's candidate at the University of Wyoming and David Stalheim, historian formerly with Washington State's Office of Archaeology and Historic Preservation, were the team's other two members.

At the beginning of the project (June, 1983), the project team was given a list of canals in the Uinta Basin. This list was compiled by Carol Wiens of the Bureau of Reclamation and formed the study unit. Extensive field survey work was completed on every canal, documenting important features, crops that were irrigated, and relative importance of the canal in the agricultural and community development of the area. A short synopsis of field survey results was written and placed in project files. Photographs of important features were taken with 35mm cameras and contact prints mounted to the backs of HABS/HAER inventory cards. Some oral interviews were conducted with ditch riders, watermasters and farmers encountered during the field survey work.

With the exception of a 1982 cultural resource survey along the Duchesne River, there has not been any historical survey work done in the Uinta Basin. Historical research was conducted in numerous depositories. Historical information was obtained from Uintah Irrigation Project records, local libraries, recorder's offices in Uintah, Duchesne and Wasatch counties, the State Engineer's Office, several private irrigation company records, Utah State Historical Society, Utah State University, University of Utah, Brigham Young University and the Federal Archives in Denver, Colorado.

HABS/HAER inventory cards were completed on every canal. Inventory cards have been included in this determination of elegibility for those canals that have been determined eligible. On August 12, 1983, a committee of six people gathered in Salt Lake City to evaluate the historical significance of irrigation canals in the Uinta Basin. Canals were evaluated against National Register criteria. The committee of six included

Carol Wiens, Bureau of Reclamation, Cultural Resources;
Chuck Lane, Bureau of Reclamation, Environmental Office;
Donald Jackson, HABS/HAER program, National Park Service;
Kent Powell, Assistant State Historic Preservation Officer, State of Utah;
Greg Kendrick, Historian, Rocky Mountain Regional Office, National Park Service;
Craig Fuller, Supervisor, Uinta Basin Historic Irrigation Survey.

The committee determined that Uintah Irrigation Project and Dry Gulch Irrigation Company canals were significant within the themes of Uinta Basin irrigation development, plus the Rocky Point Canal, Knight Ditch, Jepp Thomas Canal, Ashley Central Canal and the Duchesne Feeder Canal. Those canals surveyed but not determined eligible under National Register criteria are listed in Table 1.

The Powerplant and Pole Creek canals were included in the original study unit but have been ommitted because they are used solely for power purposes. These canals, however, could be determined eligible within the theme of power development in the Uinta Basin.

Table 1 Canals determined NOT eligible

Rhodes Canal
Farm Creek Canal (Duchesne River)
Tabby Canal
Pioneer Canal
Murray-White Canal
City Canal
Pleasant Valley Canal
Farnsworth Canal
Lake Fork Western Canal
South Boneta Canal
Purdy Canal
Uteland Canal
Payne Canal
Dodd Ditch
Larsen Ditch
Uintah Independent Canal
Military Canal
Moffat Canal
Whiterocks and Ouray Valley Canal
High Line Canal
Ashley Upper Canal
Steinaker Ditch
Pitt's Ditch
Steinaker Feeder Canal
Rock Point Canal
Steinaker Service Canal
Midview Lateral

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
_PREHISTORIC	_ARCHEOLOGY-PREHISTORIC	_COMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	_RELIGION	
_1400-1499	_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW	_SCIENCE	
_1500-1599	X AGRICULTURE	_ECONOMICS	_LITERATURE	_SCULPTURE	
_1600-1699	_ARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITARIAN	
_1700-1799	_ART	X ENGINEERING	_MUSIC	_THEATER	
X 1800-1899	_COMMERCE	_EXPLORATION/SETTLEMENT	_PHILOSOPHY	_TRANSPORTATION	
X 1900-	_COMMUNICATIONS	_INDUSTRY	_POLITICS/GOVERNMENT	X OTHER (SPECIFY) irrigation development	
		_INVENTION			

SPECIFIC DATES

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The individual canals included in this thematic determination of eligibility, with one exception, are significant for their historic association with the settlement and subsequent development of irrigation in the Uinta Basin, Utah. In order to establish an agrarian economy, irrigation of the arid, yet fertile land, was an absolute necessity. Thirty-five of the sixty-eight irrigation canals that were surveyed in the Basin were constructed, operated and maintained as systems by two central organizations--the Dry Gulch Irrigation Company and the United States Indian Irrigation Service's Uintah Irrigation Project. No individual canal within these systems was more important than the others; each canal was part of the whole and played an equal role within that particular project. Four independent canals (Jepp Thomas, Rocky Point, Ashley Central and Duchesne Feeder) were also determined eligible for their important role in the settlement and subsequent development of irrigation in the Basin. Finally, the Knight Ditch was determined eligible because it embodies the distinctive characteristics of the period and methods of construction of canal building in the early twentieth century.

Between 1861 and 1905, most of the Uinta Basin was set aside as the Uintah Indian Reservation, created by Executive Order in 1861. 3,186 square miles or 2,039,040 acres were under the jurisdiction of the Bureau of Indian Affairs and the U.S. Army. Several Indian agents were assigned to the reservation to establish farms and agencies in order to persuade the Indians to become sedentary people. Small ditches, constructed under the supervision of the Indian agents, irrigated isolated farms adjacent to the streams. Some of these ditches were enlarged after 1905 as part of the Uintah Irrigation Project. Most of these early ditches, however, have not been located in this survey due to inadequate information and the effects of erosion over the years.

The land of the Uintah Indian Reservation was severely diminished in 1905 when parts of the reservation were opened to homesteading and other parts assigned as National Forests and reservoir sites. The new reservation, called the Uintah & Ouray Indian Reservation, encompassed only 389,000 acres. Slightly over 113,000 of these acres were allocated to Indians under a trust patent; these allotments were distributed in a checkerboard fashion along the major rivers in the Basin. The Indian allotments, and 269,710 acres of tribal grazing lands, became the focus of the Uintah Irrigation Project, authorized by an Act of Congress on June 21, 1906 (34 Stat. 375). The Act authorized the U.S. Indian Irrigation Service to spend up to $600,000 for the construction of the irrigation system; the allocation was to be reimbursed from the proceeds of the sale of lands from the former Uintah Indian Reservation.

"By June 30, 1937, according to project books of account, $926,059.99 had been expended for the original construction of project works. Additional expenditures of $142,496.11 were made from an allotment of Public Words Administration funds for drainage and rehabilitation purposes in the years 1935, 1936 and 1937, and $89.21 from a regular construction appropriation on the Uncompahgre Reservation, giving a total expenditure of $1, 068,645.31 for construction purposes."[2]

The Uintah Irrigation Project was designed to irrigate 77,195 acres of project lands. 162 miles of main canals, 635 miles of laterals and sublaterals, and over 5,000 structures (flumes, headgates, weirs) primarily made of wood, were constructed between 1905 and 1935.[3] The lumber used in the origianl construction came from the Indian Timber Reserve in the Uintah Canyon and on Dry Gulch, and was sawed to specifications at the tribal sawmill near Whiterocks.[4] By the 1930's, the bulk of the original structures were requiring systematic replacement because of their age and condition.

"Engineers, at the turn of the century, were cognizant of the fact that irrigation development was entering an era of rapid development. 'Wood was considered to have a life of ten years (as a material used in canal construction). Cement and masonry, while more expensive, were recognized to be more durable and thus more economical in the long run."[5]

Table 2 includes a list of all canals constructed by the Uintah Irrigation Project, and therefore determined eligible.

The earliest development of irrigation in the Uinta Basin by non-Indians occurred in the Ashley Valley, located in the eastern portion of the Basin. Excluded from the original boundaries of the Uintah Indian Reservation, the Ashley Valley was first settled in the 1870's. The first ditch tapping water from Ashley Creek, the major water source in the valley, was dug by Captain Pardon Dodds, a former Indian Agent on the Uintah Reservation. In 1879, two larger canals were constructed: the Ashley Central and the Ashley Upper, followed one year later with the construction of the Rock Point Ditch. Although each canal was independently operated, the irrigation companies of the Ashley Valley were joined together through the Ashley Reservoir Co. in a cooperative effort to develop reservoirs and increase the flow of Ashley Creek. The Ashley Central was the first canal constructed in the valley which still maintains its historical association; therefore, this canal is the only one determined eligible in the Ashley Valley.

The opening of the Uintah Indian Reservation was anticipated several years in advance by Mormon colonizers. The Great Basin, and other Mormon colonies, were quickly running out of available farmland. Pressure to open the Reservation to homestead entry had been exerted for several years. Passes were allowed to prospective homesteaders to see the available land on the Reservation. Some irrigation companies held preliminary meetings outside of the Basin, often organized through Mormon church wards. By the time the Reservation was actually opened, the colonizers were quick to act in developing irrigation systems and establishing community settlements.

By far the largest and most complex non-Indian irrigation system to be developed in the Basin, and in Utah, was the Dry Gulch. The Dry Gulch Irrigation Company was organized and articles of incorporation adopted on December 1, 1905. Four years after organizing, the corporation increased its capital stock from $200,000 to $800,000. The company applied for 2,110 second-feet of water from the Lake Fork, Uintah and Duchesne

rivers. An additional application for 50,000 acre-feet of the flood waters of the Lake Fork River was made. Eighty thousand acres lying west of the Uintah River, east of the Lake Fork River and north of the Duchesne River, were owned by stockholders in the Dry Gulch Irrigation Company.

The Dry Gulch company constructed several of their own canals and laterals but relied heavily on conveying water through Uintah Irrigation Project canals. Uintah No. 1, Bench, U.S. Lake Fork, and Uintah canals were all used in this manner. Indian lands were condemned as right-of-ways for private irrigation canals and laterals. Water and land became so intermingled that at one point both organizations were paying the same ditchrider.[6] Surveyors, like Ed. Harmston, worked for both the Uintah Irrigation Project and the Dry Gulch Irrigation Company.

Like all other irrigation companies in the Uinta Basin, the Dry Gulch Irrigation Company is a cooperative. The company offered their prospective stockholders an efficient irrigation system. With such a large financial backing, the company could hire experienced engineers, surveyors, supervisors and managers. The company could also afford expensive construction costs. The Dry Gulch Irrigation Company designed an irrigation system which would irrigate all eighty thousand acres of its stockholders. Project lands were subdivided into classes of land according to geographic location and water supply. Even today, canals are not looked at as individual entities but as part of an overall irrigation system. Table 2 includes a list of canals operated by the Dry Gulch Irrigation Company, and therefore determined eligible.

Although the Dry Gulch Irrigation Company and the Uintah Irrigation Project jointly worked together, in some aspects they were adversaries. The Indians had applied and received prior water rights to the Lake Fork, Uintah and Duchesne rivers. The Indians, however, had to prove beneficial use of the water under Utah State Law. The supervisors and agents of the Reservation had limited success in persuading the Indians to farm their allotments. When Albert Kneale came to the Reservation in 1914 as Superintendent, he attempted to put under cultivation the number of acres applied for in their water appropriation.

> "Unsuccessful, Kneale then encouraged whites to buy or lease Indian lands. A number of whites came to the Basin resulting in diminished lands for the People but did save the water rights...The whites became partners in the use of the Uintah Irrigation Project without Ute consent."[7]

The other irrigation canals in the Basin were constructed either by small, private companies or by an association of adjacent landholders. These systems were generally designed in a simple and direct fashion. Some of these canals, however, were extremely critical in settling key communities in the Basin. The Rocky Point and Ashley Central were two such systems. Respectively, these canals irrigated lands around Duchesne and Vernal, two of the larger cities in the Basin. There were, of course, smaller communities with smaller irrigation systems. An excellent example of this theme is represented in the Jepp Thomas Canal near Tabiona. Other canal systems were developed in a speculative nature. The Knight Ditch was designed to irrigate the Blue Bench, located north of Duchesne. The project failed, however, due to difficulties in canal construction. These four independent canals (Jepp Thomas, Rocky Point, Ashley Central, Knight Ditch) have been determined eligible for the significant themes they represent in Uinta Basin irrigation development.

In order to guarantee a sufficient water flow in private canals, the private irrigation companies in the Basin began an extensive reservoir construction program. Numerous high mountain lakes were dammed and other reservoirs created at lower elevations. Projects that required large capital investments, however, were not feasible without federal assistance. One of the largest, and earliest, reservoir projects undertaken in the Basin was the Moon Lake Project.

Investigations into utilizing Moon Lake as a reservoir occurred as early as 1918. On March 26, 1918, the Dry Gulch Irrigation Company joined with John D. and LeRoy Dixon of Provo, Utah in constructing and impounding the waters at Moon Lake.[8] An earthen dam was constructed, but failed, resulting in serious damage. Only enough work was done at the lake between 1920 and the early 30's to maintain storage rights by the company.

Unusually dry years in the early 30's prompted the formation of the Moon Lake Water User's Association in 1934. Table 3 shows the amount of shares subscribed in the Association by various private irrigation companies. The purpose of the Association was to gain financial and technical support from the federal government. President Franklin D. Roosevelt approved the Moon Lake Project on November 6, 1935. "The government agreed to construct and the Association agreed to repay the cost of the Moon Lake Reservoir and related works, not to exceed $1,500,000."[9] Moon Lake, when finished, provided water to the irrigation companies proportionate to the amount of shares subscribed.

Another part of the Moon Lake Project was the Midview Exchange. The Duchesne Feeder Canal and Midview Reservoir (Lake Boreham) were constructed with C.C.C. labor to irrigate "Indian Project lands on the Lake Fork River in exchange for Lake Fork waters which are used on the higher lands of the Moon Lake Project."[10] The Bureau of Reclamation appropriated water from the Duchesne River, conveyed the water through the Duchesne Feeder Canal to the Midview Reservoir, which, in turn, supplied water to the Pahcease Canal, Midview Lateral to the U.S. Dry Gulch Canal and other Indian canals along the Lake Fork River. Although the Duchesne Feeder Canal is not quite fifty years old, it is included in this determination of eligibility because enough time has elapsed to illustrate the historical significance the Moon Lake Project and Midview Exchange had on irrigation in the Uinta Basin.

Irrigation developed quite differently in the Uinta Basin compared to most other areas of the state. An area once passed over by the Mormons because they believed that the land had little agricultural potential, the Uinta Basin was rapidly settled, canals dug and fields cultivated when the Reservation was opened in 1905. Irrigation of the Basin was generally developed in a well-organized, systematic approach by two large, well-financed organizations—the Uintah Irrigation Project and the Dry Gulch Irrigation Company. Instead of providing irrigation water on a case-by-case basis, the larger picture was scrutinized, assessing which lands were best suited for agriculture and/or if water could be economically provided to that area. The canals of the Dry Gulch Irrigation Company and the Uintah Irrigation Project, plus five other individual canals (Rocky Point, Ashley Central, Knight Ditch, Duchesne Feeder, Jepp Thomas), represent the significant themes in the historical development of irrigation in the Uinta Basin, Utah.

Table 2 Canals determined eligible

Uintah Irrigation Project Canals

Jasper Pike Canal
Bridger Jim Ditch
Gray Mountain Canal
Pahcease Canal
Myton Townsite Canal
Riverdell Canal
Ouray School Canal
Leland Canal
Wissiup Ditch
U.S. Lake Fork Canal
Red Cap Canal
U.S. Dry Gulch Canal
Uintah Canal
Uintah No. 1 Canal
Big Six Canal
Ditch D
Bench Canal
Ditch A
Harmes Canal
Ditch B
U.S. Deep Creek Canal
Ouray Park Canal
Henry Jim Canal
U.S. Farm Creek Canal (Whiterocks River)
U.S. Whiterocks Canal

Dry Gulch Irrigation Company Canals

Lake Fork No. 1 Canal
C Canal
Lake Fork Canal
Yellowstone Feeder Canal
Hancock Lateral
Sheehan Lateral
Martin Lateral
Page Canal
State Road Lateral
Cedarview Canal

Others

Jepp Thomas Canal
Duchesne Feeder Canal
Ashley Central Canal
Knight Ditch
Rocky Point Canal

Table 3 Shares subscribed in Moon Lake Water User's Association

Name of Company	Number of Shares
Monarch Canal and Reservoir Co.	250
Lake Fork Irrigation Co.	1,520
T.N. Dodd Irrigation Co.	500
Farmer's Irrigation Co.	3,400
Farnsworth Irrigation Co.	7,400
Lake Fork Western Irrigation Co.	1,250
Uteland Ditch Co.	830
Dry Gulch Irrigation Co.	29,400
Total	44,550

Source: U.S. Interior, Reclamation, "Draft--final feature Report--Moon Lake Dam Moon Lake Project," by L.W. Spengler, 1947, p. 4-c.

1. Planning Support Group of the Bureau of Indian Affairs, "The Uintah and Ouray Indian Reservation, Its Resources and Development Potential," Report No. 214, (Billings, Montanta, February 1974).

2. A. L. Walker, "A Study of Economic Conditions of the Uintah Irrigation Project, Utah," Irrigation Division, Office of Indian Affairs, Department of Interior (Washington, D.C., 1938).

3. "Uintah Irrigation Project Annual Report for Operations and Maintenance for Fiscal Year 1935," Irrigation Division, Office of Indian Affairs, Department of Interior (Washington, D.C., 1935).

4. H. C. Williams, "Monthly Progress Report, Uintah Irrigation Survey, February 29, 1912,: Department of Interior (Washington, D.C., 1912).

5. Elwood Mead, Plans of Structures in Use on Irrigation Canals in the United States.

6. Correspondance, C. C. Early to J. M. Bryant, June 22, 1912, Uintah and Ouray Reservation, Irrigation Office, Fort Duchesne, Utah.

7. Fred A. Conetah, A History of the Northern Ute People, ed. Kathryn L. MacKay (Salt Lake City; University of Utah Press, 1982). P. 129

8. Miscellaneous Book #2, Duchesne County Recorder's Office, Duchesne Utah. p. 13.

9. L. W. Spengler, "Draft--Final Feature Report--Moon Lake Dam--Moon Lake Project" Bureau of Reclamation, Department of Interior, 1947. P. 4 & 6.

10. Ibid., P. 2f

9 MAJOR BIBLIOGRAPHICAL REFERENCES

See continuation sheet

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

UTM REFERENCES

	ZONE	EASTING	NORTHING
A			
B			
C			
D			

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
		Duchesne	
STATE	CODE	COUNTY	CODE
		Uintah	

11 FORM PREPARED BY

NAME / TITLE

David B. Stalheim

ORGANIZATION — DATE

National Park Service — August, 1983

STREET & NUMBER — TELEPHONE

Rocky Mountain Regional Office — (303) 234-2560

CITY OR TOWN — STATE

Denver — Colorado

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE — DATE

FOR NPS USE ONLY

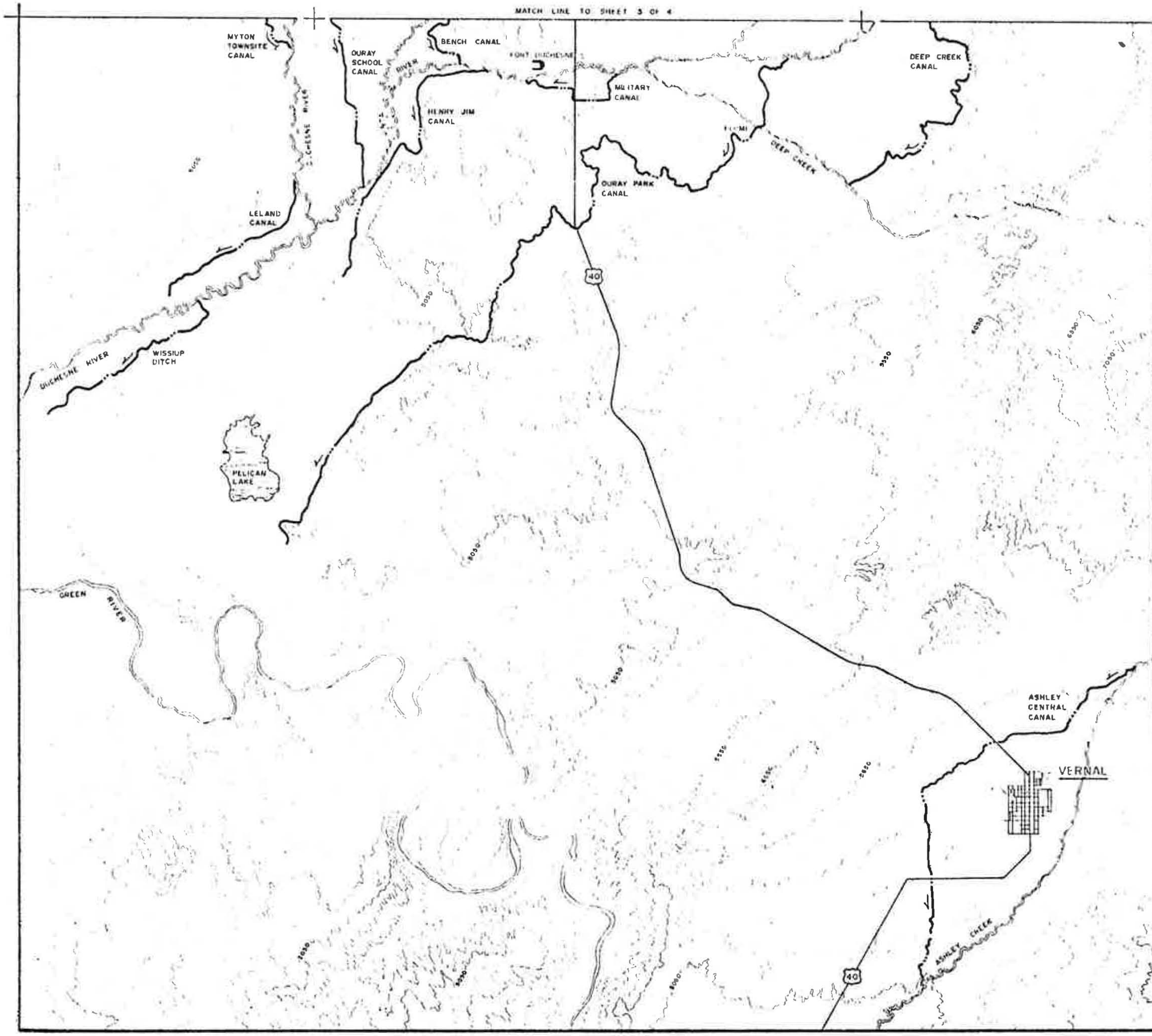
I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST: DATE

KEEPER OF THE NATIONAL REGISTER



LEGEND

CANALS SHOWING FLOW
ROADS
RIVERS
100 FOOT CONTOURS
500 FOOT CONTOURS

BASED ON THE FOLLOWING USGS 7.5 MINUTE SERIES:

LAPOINT, 1964
FT DUCHESNE, 1964
RANDLETT, 1964
VERNAL NW, 1964
VERNAL SW, 1964
PELICAN LAKE, 1964
VERNAL NE, 1964
VERNAL SE, 1964
BRENNAN BASIN, 1964
NAPLES, 1965
RASMUSSEN HOLLOW, 1965
RED WASH NW, 1968

N

SCALE

0 1 2 3 4 MILES

0 2 4 6 8 KILOMETERS

HISTORIC AMERICAN ENGINEERING RECORD

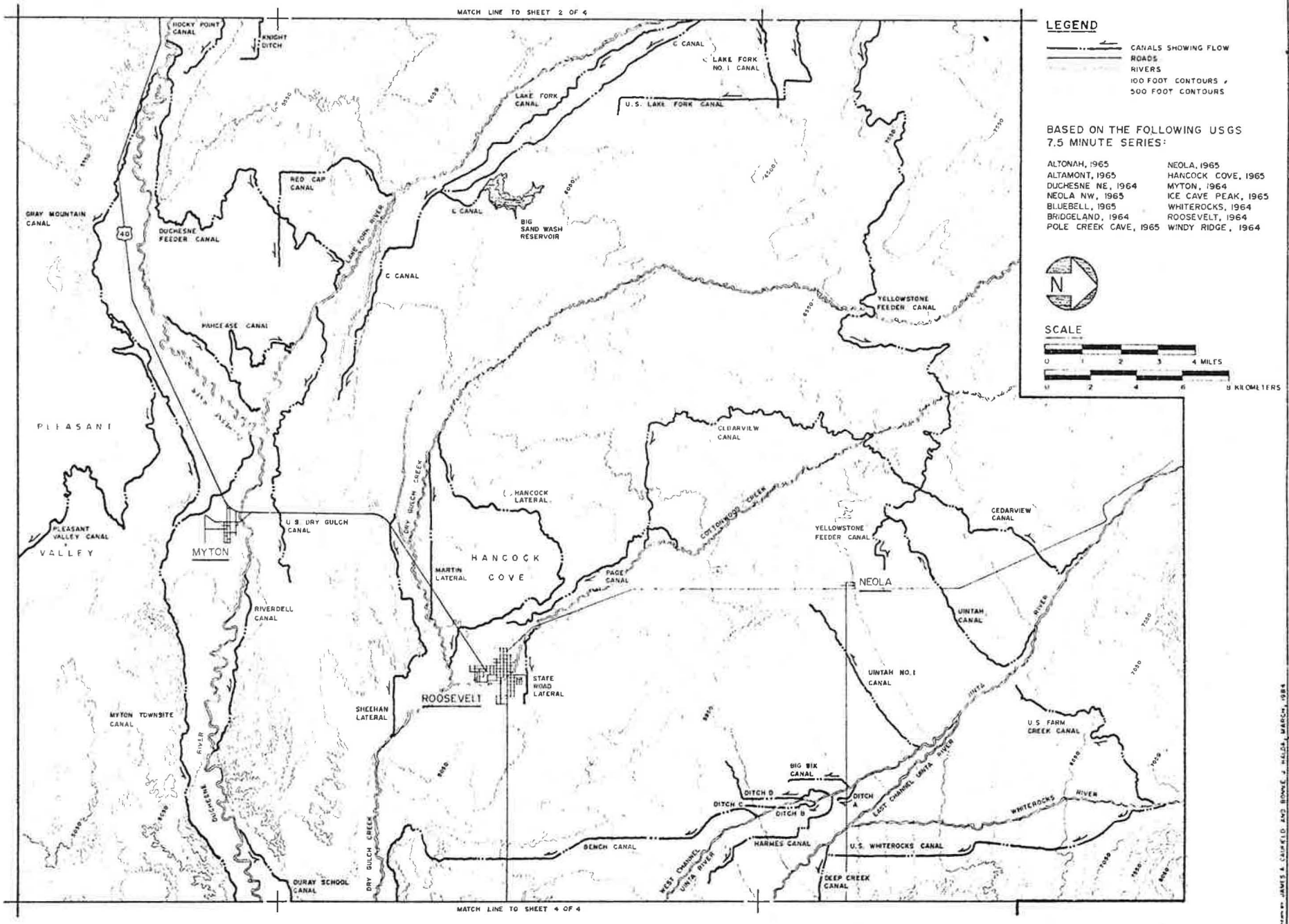
UT-3C

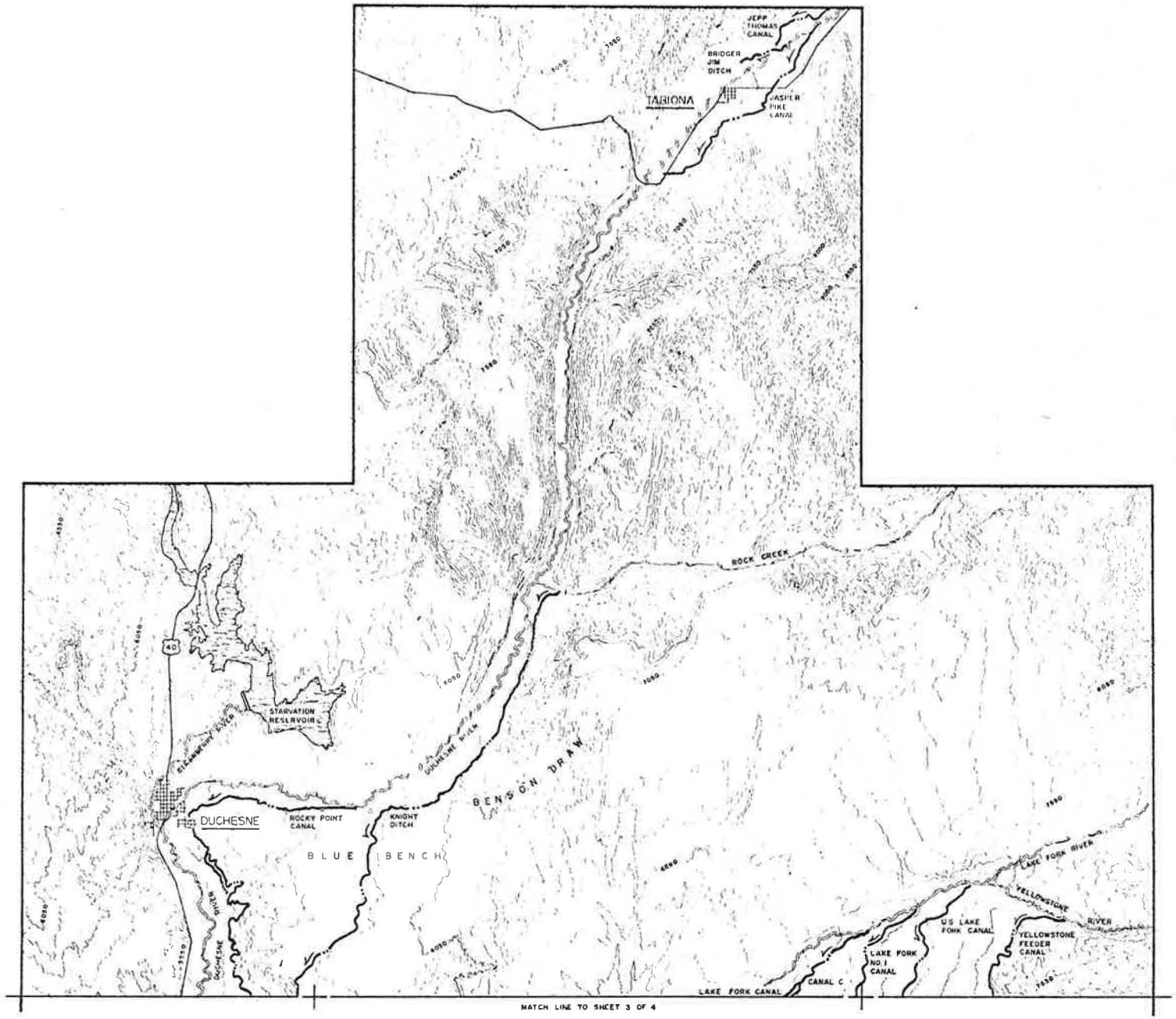
UTAH

HISTORIC IRRIGATION CANALS OF THE UINTA BASIN

VERNAL VICINITY

DRAWN: JAMES A. CAUFIELD AND BONNIE J. HALDA, MARCH, 1984


MATCH LINE TO SHEET 2 OF 4
ROCKY POINT CANAL
KNIGHT DITCH
C CANAL
LAKE FORK NO. 1 CANAL
LAKE FORK CANAL
U.S. LAKE FORK CANAL
RED CAP CANAL
GRAY MOUNTAIN CANAL
DUCHESNE FEEDER CANAL
LAKE FORK RIVER
BIG SAND WASH RESERVOIR
C CANAL
HUNCEASE CANAL
YELLOWSTONE FEEDER CANAL
PLEASANT
CEDARVILW CANAL
HANCOCK LATERAL
DRY GULCH CREEK
COTTONWOOD CREEK
PLEASANT VALLEY CANAL
VALLEY
MYTON
U.S. DRY GULCH CANAL
HANCOCK COVE
MARTIN LATERAL
YELLOWSTONE FEEDER CANAL
CEDARVIEW CANAL
PAGE CANAL
NEOLA
RIVERDELL CANAL
UINTAH CANAL
UINTA RIVER
STATE ROAD LATERAL
ROOSEVELT
UINTAH NO. 1 CANAL
SHEEHAN LATERAL
MYTON TOWNSITE CANAL
DUCHESNE RIVER
U.S. FARM CREEK CANAL
BIG BIK CANAL
DITCH D
DITCH C
DITCH B
DITCH A
EAST CHANNEL UINTA RIVER
WHITEROCKS RIVER
BENCH CANAL
HARMES CANAL
U.S. WHITEROCKS CANAL
WEST CHANNEL UINTA RIVER
DEEP CREEK CANAL
OURAY SCHOOL CANAL
DRY GULCH CREEK
MATCH LINE TO SHEET 4 OF 4
LEGEND
CANALS SHOWING FLOW
ROADS
RIVERS
100 FOOT CONTOURS
500 FOOT CONTOURS
BASED ON THE FOLLOWING USGS 7.5 MINUTE SERIES:
ALTONAH, 1965
ALTAMONT, 1965
DUCHESNE NE, 1964
NEOLA NW, 1965
BLUEBELL, 1965
BRIDGELAND, 1964
POLE CREEK CAVE, 1965
NEOLA, 1965
HANCOCK COVE, 1965
MYTON, 1964
ICE CAVE PEAK, 1965
WHITEROCKS, 1964
ROOSEVELT, 1964
WINDY RIDGE, 1964
N
SCALE
0 1 2 3 4 MILES
0 2 4 6 8 KILOMETERS
HISTORIC IRRIGATION CANALS OF THE UINTA BASIN
ROOSEVELT VICINITY
UT-30
UTAH



LEGEND

- CANALS SHOWING FLOW
- ROADS
- RIVERS
- 100 FOOT CONTOURS
- 500 FOOT CONTOURS

BASED ON THE FOLLOWING USGS 7.5 MINUTE SERIES:

FARM CREEK PEAK, 1962
TABIONA, 1962
STRAWBERRY PINNACLES, 1962
DRY MOUNTAIN, 1962
BLACKTAIL MOUNTAIN, 1962
RABBIT GULCH, 1962
MOUNTAIN HOME, 1965
TALMAGE, 1965
DUCHESNE, 1965
ALTONAH, 1965
ALTAMONT, 1965
DUCHESNE NE, 1964

N

SCALE

0 1 2 3 4 MILES

0 2 4 6 8 KILOMETERS

HISTORIC IRRIGATION CANALS OF THE UINTA BASIN

DUCHESNE VICINITY

UTAH

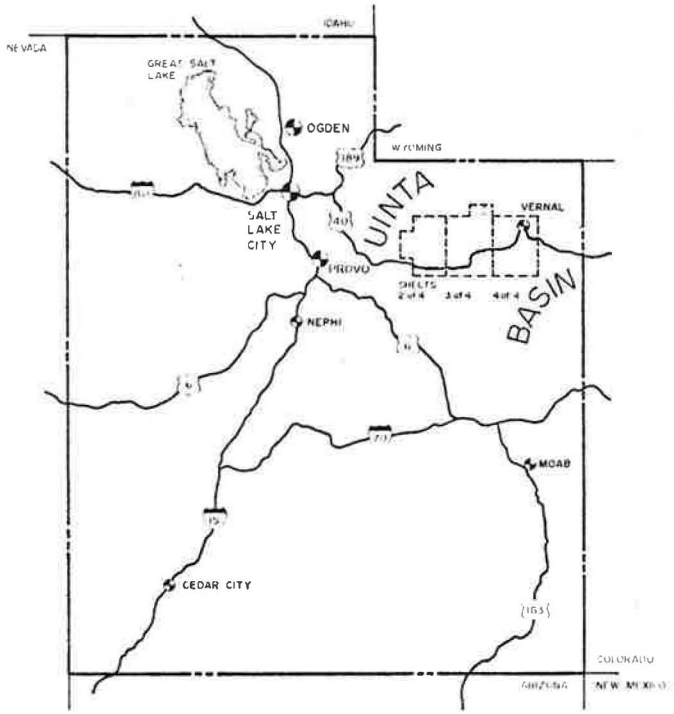
UT-30

HISTORIC AMERICAN ENGINEERING RECORD

JAMES A. CAUFIELD AND BONNIE J. HALDA, MARCH, 1984

NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

HISTORIC IRRIGATION CANALS OF THE UINTA BASIN



UTAH SHOWING A PORTION OF THE UINTA BASIN

SCALE

0 25 50 75 100 MILES

0 40 80 120 160 200 KILOMETERS

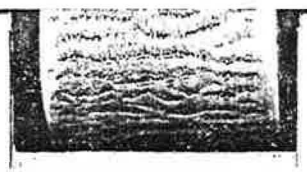
MAP BASED ON RAND MCNALLY ROAD ATLAS, 1980

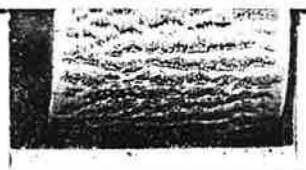
N

SETTLEMENT OF THE UINTA BASIN, BEGINNING IN THE 1870s AND STRETCHING INTO THE 20th CENTURY, REPRESENTED A CAREFULLY PLANNED AND PRAGMATIC EFFORT OF THE MORMON CHURCH TO COLONIZE ONE OF THE LAST REMAINING AGRICULTURAL FRONTIERS IN UTAH. CONDITIONED BY EARLIER COLONIZATION EFFORTS THROUGHOUT THE GREAT BASIN KINGDOM, THE MORMON CHURCH FULLY UNDERSTOOD THE IMPORTANCE OF IRRIGATION FOR THE INITIAL SUCCESS AND ULTIMATE SURVIVAL OF THEIR SETTLEMENTS IN THE UINTA BASIN. THE COMPLEX SYSTEM OF HISTORIC IRRIGATION CANALS EXISTING IN THE BASIN TODAY LARGELY REFLECTS THE KNOWLEDGE, SKILLS, AND COMMITMENT OF THESE 20th CENTURY LATTER-DAY SAINTS. THE MAJORITY OF THE IRRIGATION CANALS WERE CONSTRUCTED, OPERATED, AND MAINTAINED BY TWO LARGE ORGANIZATIONS: THE MORMON CONTROLLED "DRY GULCH IRRIGATION COMPANY" AND THE UNITED STATES INDIAN IRRIGATION SERVICE'S "UINTAH BASIN PROJECT."

THIS PROJECT WAS UNDERTAKEN BY THE HISTORIC AMERICAN ENGINEERING RECORD (HAER) OF THE NATIONAL PARK SERVICE'S ROCKY MOUNTAIN REGIONAL OFFICE, IN COOPERATION WITH THE UPPER COLORADO REGION, BUREAU OF RECLAMATION. UNDER THE DIRECTION OF HISTORIAN GREGORY D. KENDRICK (NATIONAL PARK SERVICE), THIS PROJECT WAS COMPLETED DURING THE SUMMER OF 1983, AT THE HAER FIELD OFFICE, DUCHESNE, UTAH, BY PROJECT SUPERVISOR CRAIG W. FULLER (BRIGHAM YOUNG UNIVERSITY), PROJECT HISTORIANS DAVID B. STALHEIM (THE EVERGREEN STATE COLLEGE) AND JAMES A. JURALE (UNIVERSITY OF WYOMING), PROJECT ARCHITECTS JAMES A. CAUFIELD AND BONNIE J. HALDA (NATIONAL PARK SERVICE), AND PROJECT PHOTOGRAPHER CLAYTON B. FRASER (LOVELAND, COLORADO).

HISTORIC AMERICAN ENGINEERING RECORD
UT-30
UTAH
HISTORIC IRRIGATION CANALS OF THE UINTA BASIN
DUCHESNE-ROOSEVELT-VERNAL VICINITY





UTAH

E.O. 11593

DETERMINATION OF ELIGIBILITY NOTIFICATION

National Register of Historic Places

National Park Service

Project Name: Irrigation Canals in the Uinta Basin Thematic Resources (43 Canals)

Location: Duchesne and Uintah Counties **State:** UT

Request submitted by: DOI/BOR Clifford I. Barrett

Date Received: 6-21-84 **Additional information received:**

---

36 CFR Part 63
Determination

Name of property	Eligibility SHPO opinion	Eligibility Secretary of the Interior's opinion	Criteria
Jasper Pike Canal	Eligible	Eligible	
Bridger Jim Ditch	"	"	
Gray Mountain Canal	"	"	
Pahcease Canal	"	"	
Myton Townsite Canal	"	"	
Riverdell Canal	"	"	
Ouray School Canal	"	"	
Leland Canal	"	"	
Wissiup Ditch	"	"	
U.S. Lake Fork Canal	"	"	
Red Cap Canal	"	"	
U.S. Dry Gulch Canal	"	"	
Uintah Canal	"	"	
Uintah No. 1 Canal	"	"	
Big Six Canal	"	"	

(con't)

for Keeper of the National Register
Determined Eligible

Date: 7-5-84

WASO-27

E.O. 11593

DETERMINATION OF ELIGIBILITY NOTIFICATION
National Register of Historic Places
National Park Service

Project Name:

Location: **State:**

Request submitted by:

Date Received: **Additional information received:**

36 CFR Part 63.3
Determination

Name of property	SHPO opinion	Eligibility Secretary of the Interior's opinion	Criteria
Ditch D	Eligible	Eligible	
Bench Canal	"	"	
Ditch A	"	"	
Harmes Canal	"	"	
Ditch B	"	"	
Deep Creek Canal	"	"	
Ouray Park Canal	"	"	
Henry Jim Canal	"	"	
U.S. Farm Creek Canal (Whiterocks River)	"	"	
U.S. Whiterocks Canal	"	"	
Ditch C	"	"	
Lake Fork No. 1 Canal	"	"	
C Canal	"	"	
Lake Fork Canal	"	"	

(con't)

for Beth L. Savage
Keeper of the National Register
Determined Eligible
Date: 7-5-84

WASO-27

E.O. 11593

DETERMINATION OF ELIGIBILITY NOTIFICATION
National Register of Historic Places
National Park Service

Project Name:

Location: **State:**

Request submitted by:

Date Received: **Additional information received:**

---

36 CFR Part 63.3
Determination

Name of property	Eligibility: SHPO opinion	Eligibility: Secretary of the Interior's opinion	Criteria
Hancock Lateral	Eligible	Eligible	
Sheehan Lateral	"	"	
Martin Lateral	"	"	
Page Canal	"	"	
State Road Lateral	"	"	
Cedarview Canal	"	"	
Jepp Thomas Canal	"	"	
Ashley Central Canal	"	"	
Knight Ditch	"	"	
Rocky Point Canal	"	"	
Military Canal	Eligible	Eligible	

for Beth L. Savage
Keeper of the National Register
Determined Eligible
Date: 7-5-84

WASO-27