MEMORANDUM OF AGREEMENT BETWEEN THE BUREAU OF RECLAMATION AND THE NEVADA STATE HISTORIC PRESERVATION OFFICER REGARDING THE RESOLUTION OF ADVERSE EFFECTS TO THE NEWLANDS PROJECT HISTORIC DISTRICT FROM THE REMOVAL OF ONGOING SUPPORT FEATURE PROPERTY TYPES, NEWLANDS PROJECT, NEVADA

Whereas, the Bureau of Reclamation (Reclamation) has established that the proposed removal of two Reclamation-owned dam-tender residential complexes (Attachment 1) on the Newlands Project in Fallon and Sparks, Nevada, requires compliance with Title 54 USC § 306108, commonly known as Section 106 of the National Historic Preservation Act, and its implementing regulations found at 36 CFR § 800, as this action constitutes an Undertaking with the potential to affect historic properties, as defined in 36 CFR § 800.3(a); and

Whereas, Reclamation, in consultation with the Nevada State Historic Preservation Officer (SHPO), has established the area of potential effects (APE), as defined at 36 CFR § 800.16(d), to be the proposed area in which the two dam-tender residential complexes reside, which includes two residences, a garage, bunkhouse, sheds, pump houses, animal shelters, a chicken coop, and corrals at two different locations; and

Whereas, components of the Newlands Project, the first large-scale Federal irrigation project in the West authorized under the Reclamation Act, are listed on the National Register of Historic Places (National Register) under a 1981 Thematic Listing; and Reclamation treats the entire Newlands Project as a historic district (Attachment 2), eligible under Criterion A for its association with the themes of reclamation, irrigation, and the development of agriculture in the state of Nevada; and

Whereas, Reclamation previously found, in consultation with the SHPO, that the removal of five ditchrider complexes on the Newlands Project in Fallon, Nevada, resulted in an adverse effect, and negotiated a documented titled *Memorandum of Agreement Between the Bureau of Reclamation and the Nevada State Historic Preservation Officer Regarding the Mitigation of Adverse Effects to the Newlands Project Historic District from the Demolition of Five Ditchrider Complexes, Churchill County, Nevada*, between Reclamation and the SHPO in 2010; and

Whereas, Reclamation has also found, in consultation with the SHPO, that the removal of two Reclamation-owned dam-tender complexes on the Newlands Project in Fallon and Sparks, Nevada, will result in an adverse effect to the Newlands Project Historic District; and

Whereas, Reclamation has identified Ongoing Support Features, a property type which includes dam-tender and ditchrider residential complexes, to be a contributing element to the Newlands Project; and

Whereas, Reclamation has determined that resolving the adverse effects of these two Undertakings may more effectively be accomplished by treating them together, as projects that adversely affect Ongoing Support Features; and

Whereas, Reclamation intends to terminate the 2010 Memorandum of Agreement (MOA) and supersede it with this MOA; and

Whereas, Reclamation has consulted with the SHPO and notified the Advisory Council on Historic Preservation (ACHP) of the adverse effects in accordance with 36 CFR § 800 and the ACHP has chosen not to participate in the consultation on pursuant to 36 CFR § 800.6(a)(1) (iii); and

Whereas, the Truckee Carson Irrigation District (TCID) is responsible for the operation and maintenance of the Newlands Project and is proposing the Undertakings for operational and environmental reasons, Reclamation has invited TCID to sign this MOA as a concurring party; and

Whereas, the definitions listed in 36 CFR § 800.16 are applicable throughout this MOA;

Now, Therefore, Reclamation and the SHPO agree that the Undertakings shall be implemented according to the following stipulations in order to take into account the effects of the undertakings on historic properties.

Stipulations

Reclamation will ensure that the following measures are carried out:

I. Deliverable 1: Documentation

A. Reclamation will follow the Nevada Documentation Standards for Resources of State and Local Significance (Standards) that will include a historic context that describes the purpose and function, and conveys the significance of the property type defined as "Ongoing Support Features" in Reclamation's draft Newlands Project Multiple Property Listing. This property type includes ditchrider houses, dam-tender houses, service yards, and administration buildings on the Newlands Project. When available, historic and contemporary photographs of typical views of these extant features will be included in this report. The historic context will utilize existing reports, documentation, and archival information on the importance of this property type to Reclamation. All relevant original construction reports, original drawings, or original construction photographs that describe or illustrate the construction of these features on the Newlands Project will be included in the

documentation, as appropriate. Photographs for removed features from the Newlands Project may be included if available and will consist of medium format black and white film instead of the Standards guideline of 35mm black and white film.

B. A copy of the documentation will be sent by Reclamation to the Churchill County Museum, Nevada Historical Society, University of Reno Archives, and any other appropriate archives designated by Reclamation and the SHPO.

II. Deliverable 2: Website

A. Reclamation will develop a website that will publish the historic context described in Stipulation I. In addition, the website will contain photographs, both historic and contemporary, for the general public to access. This website will be linked to a Reclamation-created website that discusses the Newlands Project. Drawings, if available, will also be posted on the website.

III. Deliverable 3: Education

A. Reclamation will give presentations discussing the role and significance of ditchriders and dam-tenders to audiences at various professional conferences. Other outreach activities to provide educational information on the role of the supporting features, as appropriate, may also be scheduled.

B. Reclamation will prepare, with SHPO review, an informational tri-fold brochure to be distributed to applicable organizations such as the Churchill County Museum, the Lahontan Basin Area Office in Carson City, Nevada, and the Mid-Pacific Regional Office in Sacramento, California. This document will be also be available on the website described in Stipulation II and at any conferences that Reclamation employees will present at as part of Stipulation III.A.

IV. Comment Period

The SHPO will have 30 days following receipt to review and comment on any documentation submitted under this MOA. Reclamation shall modify the documentation in accordance with any SHPO comments provided within the specified time frame. Failure of the SHPO to reply within the specified time frame shall be deemed by Reclamation to constitute SHPO acceptance of the documentation as adequate.

V. Notice to Proceed

Once Reclamation has completed the fieldwork associated with photographic documentation of the dam-tender houses, draft photographs will be submitted to SHPO for review. Reclamation, in consultation with the SHPO, will authorize TCID to proceed with the undertaking after review and approval of the fieldwork documentation is

completed.

VI. Post-Review Discoveries

If potential historic properties are discovered or unanticipated effects on historic properties found, Reclamation shall follow the 36 CFR § 800.13 post-review discoveries section of the regulations.

VII. Dispute Resolution

Should any signatory or concurring party to this MOA object at any time to any actions proposed or to the manner in which the terms of the MOA are implemented, Reclamation shall consult with the objecting party to resolve the objection. If Reclamation determines, within 15 days after consultation begins, that such objection cannot be resolved, Reclamation will either:

a. Render a decision regarding the dispute within 30 days after it has determined that the dispute cannot otherwise be resolved. Reclamation will notify all parties or its decision in writing within this time frame. In reaching its decision, Reclamation will take all comments from the objecting party regarding the dispute into account. Reclamation's decision will be final; or

b. Forward all documentation relevant to the dispute including Reclamation's proposed resolution to the ACHP in accordance with 36 CFR 800.2(b)(2). The ACHP shall provide Reclamation with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Reclamation shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response.

VIII. Amendments

This MOA may be amended when such an amendment is agreed to in writing by all signatory parties The Amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

IX. Termination

If any signatory party to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an Amendment per Stipulation VIII, above. If within thirty (30) days an Amendment cannot be reached, any signatory party may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the Undertaking, Reclamation must either (a) continue consultation to resolve the adverse effects pursuant to 36 CFR § 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. Reclamation shall notify the signatories as to the course of action it will pursue.

X. Duration of the MOA

Unless terminated pursuant to Stipulation IX, above, this MOA will be in effect until Reclamation, in consultation with the other signatories, determines that all of its terms have been satisfactorily fulfilled, not to exceed five (5) years from the signing of the MOA. At that time, this MOA will terminate and have no further force or effect. Reclamation will promptly provide the other signatories with written notice of its determination that all terms have been fulfilled and of termination of the MOA.

EXECUTION of this MOA by Reclamation and the SHPO and implementation of its terms evidence that Reclamation has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment.

Signatures for the Memorandum of Agreement:

SIGNATORY PARTIES:

BUREAU OF RECLAMATION

By: _____ Date: 10/6/15

David Murillo, Regional Director, Mid-Pacific Region

NEVADA STATE HISTORIC PRESERVATION OFFICE

By: _____ Date: 11/9/15

Rebecca L. Palmer, State Historic Preservation Officer

CONCURRING PARTY:

TRUCKEE CARSON IRRIGATION DISTRICT

By: _____ Date:_____
Rusty Jardine, District Manager

Attachment 1

RECLAMATION

Managing Water in the West

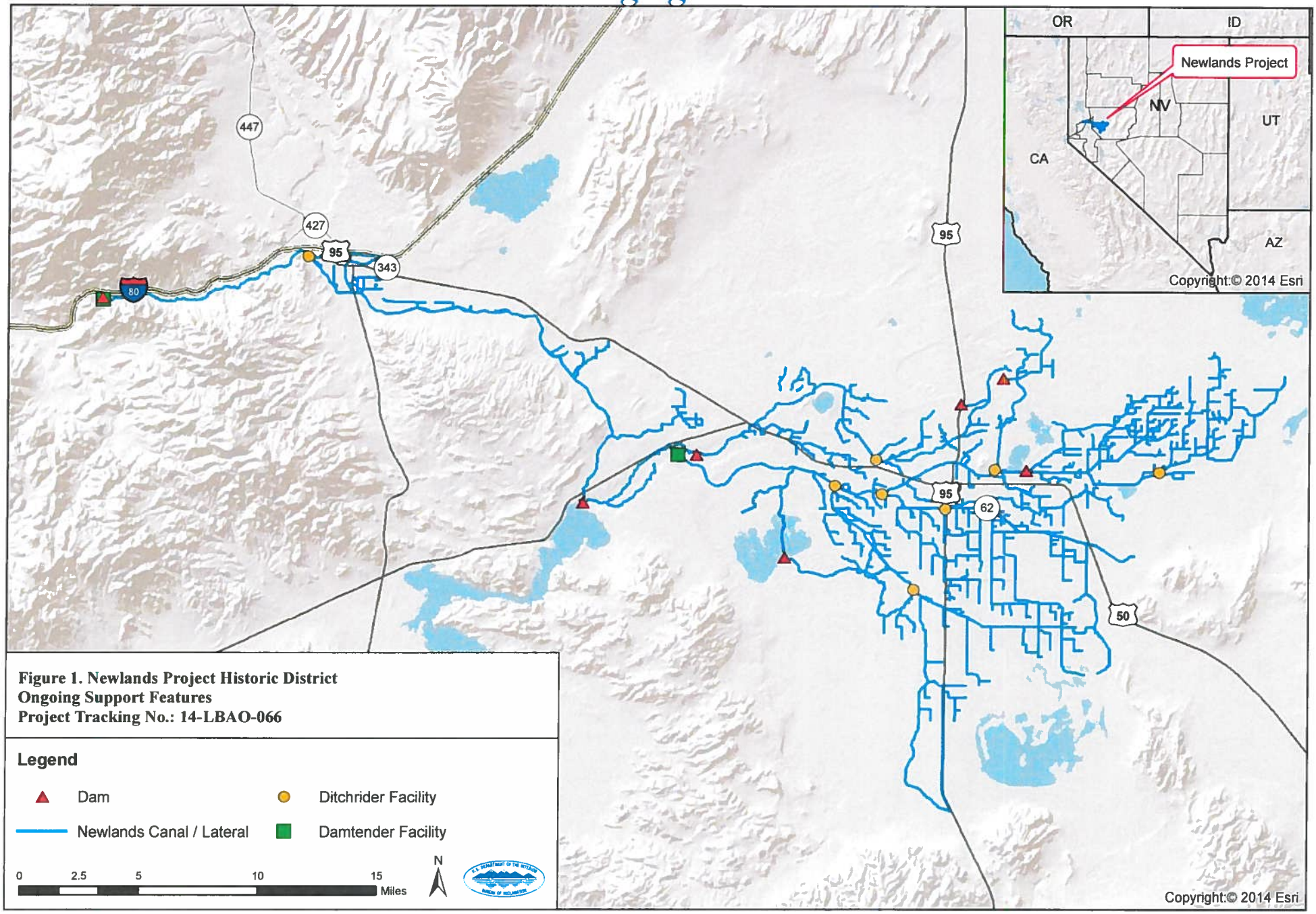

Figure 1. Newlands Project Historic District
Ongoing Support Features
Project Tracking No.: 14-LBAO-066

Attachment 2

Form No. 10-300 (Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED FEB 10 1981
DATE ENTERED MAR 25 1981

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC ~~THE~~ NEWLANDS RECLAMATION ~~PROJECT~~ (TRUCKEE-CARSON PROJECT) Thematic Resources

AND/OR COMMON The Truckee-Carson Irrigation District (TCID)

2 LOCATION

STREET & NUMBER The project area encompasses a large area in west-central Nevada centered near Reno and a smaller area in north-eastern California within the Sierra Nevada range. (See enclosed map) __NOT FOR PUBLICATION

CITY, TOWN Fallon __X VICINITY OF Reno CONGRESSIONAL DISTRICT Nevada-at-large

STATE California/Nevada CODE 04/32 COUNTY CODE

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	X OCCUPIED	X AGRICULTURE	__MUSEUM
X BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	PUBLIC ACQUISITION	ACCESSIBLE	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	X GOVERNMENT	__SCIENTIFIC
X Thematic	__BEING CONSIDERED	__YES: UNRESTRICTED	X INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

NAME Water & Power Resources Service - Mid-Pacific Region

STREET & NUMBER Federal Building, 2800 Cottage Way

CITY, TOWN Sacramento __ VICINITY OF STATE California

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC. Churchill County Courthouse

STREET & NUMBER

CITY, TOWN Fallon STATE Nevada

6 REPRESENTATION IN EXISTING SURVEYS

TITLE Nevada Historic Engineering Site Survey

DATE 3/25/79 __FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS History of Engineering Program. Texas Tech University

CITY, TOWN Lubbock STATE Texas 79409

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
_EXCELLENT	_DETERIORATED	_UNALTERED	X_ORIGINAL SITE
XGOOD	_RUINS	X_ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The theme of this nomination is Conservation. The Newlands Reclamation Project, began in 1903, was among the first projects to be started as a result of National legislation passed to reclaim the arid lands of the west for agricultural uses. All the components of the project were designed to conserve water and then divert it for beneficial uses. The production and distribution of electrical energy is a beneficial by-product.

The Truckee River flows from Lake Tahoe east to Pyramid Lake while the Carson River flows out of the Sierra Nevada mountains and empties into the Carson Sink. Water made available from natural flow and storage in Lake Tahoe and Boca Reservoir is diverted from the Truckee River into the 32.5 mile Truckee Canal at Derby Diversion Dam about twenty miles east of Reno. Land along the canal receives some of the water, but most is discharged directly into the Carson River through the penstock of the Lahontan Powerplant or through a chute into the Lahontan Reservoir for storage or use on the lands of the Carson Division. Water released from Lahontan Reservoir is diverted into the T and V canals at the Carson River Diversion Dam and two minor diversion dams downstream and flows to the largest area of the project lands in the vicinity of Fallon.

Other features of the project are 69 miles of main canals, 312 miles of laterals and 345 miles of open drains. Full irrigation service is provided to almost 1,000 farms, a total of 73,000 acres. There are three electrical substations in operation and sixteen miles of transmission lines which serve the communities of Fernley, Wadsworth and Hazen as well as rural sections of the project. At Lahontan Reservoir there are beaches, boating facilities, fishing and campgrounds.

The Lake Tahoe Dam is a concrete control structure 14 feet high with 17 outlet gates. It regulates the elevation of the water surface of the lake and controls releases of irrigation water and water for power generation. It is located at the outlet of Lake Tahoe into the Truckee River in California

Detailed specifications are as follows:

LAKE TAHOE DAM

Type: Concrete slab-and-buttress sluiceway regulator.

Construction period: 1909-1913

Dimensions (feet):

Height	14
Crest length	109
Crest elevation	6233.2
Volume (cubic yards)	400.

Outlet works: Seventeen 5'by4' gates

Capacity (cubic feet per second)	3,000

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION
__1400-1499	__ARCHEOLOGY-HISTORIC	X CONSERVATION	__LAW	__SCIENCE
__1500-1599	X AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN
__1700-1799	__ART	X ENGINEERING	__MUSIC	__THEATER
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES 1903, 1911, 1915 BUILDER/ARCHITECT U.S. Bureau of Reclamation

STATEMENT OF SIGNIFICANCE

The Newlands Reclamation Project is of national historical significance because it was one of the first five projects authorized by the Director of the Reclamation Service under the Newlands Reclamation Act of 1902.

The project design was the result of investigations begun by the United States Geological Survey in 1889. When the United States Reclamation Service was organized, shortly after the National Reclamation Act of 1902, the Truckee-Carson Project was among the first five projects selected for construction. The Secretary of the Interior authorized the project on March 14, 1903, and construction began the same year. Project features shown in the accompanying drawings, include outlet works at Lake Tahoe; Derby Diversion Dam (placed in the National Register of Historic Places in 1978), Lahontan Dam Reservoir and Powerplant; Carson River Diversion Dam; 104 miles of main canals; 504 miles of laterals; and 335 miles of open drains. Most of the features are located in ancient Lake Lahontan which was named for Baron La Hontan, an early western explorer.

Lahontan Power plant was finished November 11, 1911. Using the fall from the Truckee Canal to the Carson River, the plant supplied electric power for most of the construction of Lahontan Dam (begun in January 1911). Electric motors powered the main borrowpit shovel, a dragline excavator, a 925 foot belt conveyor to transport gravel and soil to the main embankment, the sand-cement batching plant, a 1,600 foot cableway for transporting concrete, and numerous pumps, blowers, drills and conveyors. According to the project manager, D. W. Cole, "probably the first electric shovel was employed on this work and handled the 500,000 cubic yards of gravel at a cost very much below what a steam shovel would have shown at the local prices for coal" (Engineering News, vol. 73, April 22, 1915, p. 760). The electrical machinery proved highly effective and dam construction was completed in June 1915.

The original scope of the Truckee-Carson Project included irrigation of over 400,000 acres. The Omnibus Adjustment Act of 1926 contained a provision that reduced the project scope considerably. In recent years about 70,000 acres have been under irrigation of which 60,000 to 65,000 acres are under irrigation at any one time.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Cole, D.W. "Lahontan Dam, Truckee-Carson Irrigation Project, Nevada." Engineering News, Vol. 16, No. 16 (April 22, 1915), pp. 758-62.

Hardman, George and Howard G. Mason. The Irrigated Lands of Nevada. The University of Nevada Agricultural Experiment Station Bulletin No. 183. Reno: University of Nevada 1949.

UTM NOT VERIFIED

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 228.59 Ac+ excluding canals ACREAGE NOT VERIFIED

UTM REFERENCES (see supplemental sheet attached)

	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
A				B			
C				D			

VERBAL BOUNDARY DESCRIPTION

(see supplemental sheets attached)

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

STATE		CODE	COUNTY		CODE
	Nevada	32		Churchill	001
				Lyon	019
				Storey, Washoe	029,031
	California	04		Nevada	057
				Placer	061

11 FORM PREPARED BY

NAME / TITLE Wilbur E. Wieprecht, Historian, Nevada HP&A in cooperation with Wendell Bell, Research Assoc. & Donald Abbe, Research Assist.

ORGANIZATION History of Engineering Program — DATE May 1980

STREET & NUMBER Texas Tech University, P.O. Box 4089 — TELEPHONE (806) 742-3591

CITY OR TOWN Lubbock — STATE Texas

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL X 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.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Dixie Reaser

TITLE Administrator SHPO — DATE 23 July 1980

FOR NPS USE ONLY

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

DATE 3/25/81

Chief, Office of Archeology and Historic Preservation

ATTEST: Patrick Andrus (actg) all but three returned - Document Text

DATE 3/25/81

Keeper of the National Register

GPO 892-453

Boca Dam is located on the Little Truckee River within one mile above its junction with the Truckee River and approximately seven miles east of Truckee, California. It stores water primarily for the Truckee Storage Project around Reno and also for the Newlands Project.

Detailed specifications are as follows:

BOCA DAM

Type: Zoned earthfill

Construction period: 1937-1939

Dimensions (feet):

Height	100
Crest length	1,629.
Crest elevation	5,612.0
Volume (cubic yeards)	912,000.0

Spillway:

Width (feet)	40
Discharge capacity (cubic feet per second)	8,000

Outlet Works:

Concrete-lined tunnel in right abutment to two 4x4 slide gates in the gate chamber; thence two plate steel outlet pipes, controlled by two 42-inch needle valves.

Maximum discharge capacity (cubic feet per second)	900

The Derby Diversion Dam is located on the Truckee River 20 miles east of Reno. It is a concrete dam with an earthen embankment wing. This 31 foot high dam diverts river waters into the Truckee Canal.

As an entrant on the National Register, we recommend that it be made a part of this nomination.

LAHONTAN DAM is an earthen dam 120' high with an overall length of 5,400 feet. The main embankment, built in the bed of the Carson River, has a crest length of approximately 1,300 feet including an overflow spillway crest 250 feet in length at each end. The spillways step down with the terrain, curve and converge on a circular spillway pool 220 feet in diameter. An earthen wing dam or dike about 4 feet high, level with the top of the principal dam, extends southward for three-quarters of a mile (see attached Bureau of Reclamation drawings). The

cross section of the dam has a top width of 20 feet and a maximum base width of 660 feet. The upstream slope is 3 to 1 while the downstream slope is 2 to 1 broken 12 feet above the spillway pool wall by a circular berm 10 feet in width. The 12-foot roadway at the top of the dam is carried across each spillway by means of five-span continuous reinforced concrete arches with 50-foot spans and 5-foot rises. A concrete railing guards the roadway and carries electric wire conduits for lighting the dam, gatehouse and roadway.

The outlet tower is a massive reinforced concrete structure in which are set 12 gates at two different elevations. Water from Lahontan Reservoir, which has an active capacity of 295,000 acre-feet, is let into the central chambers for discharge into the spillway pool via a 9-foot diameter conduit controlled by a hydraulically balanced cylindrical valve at the bottom of the tower. A 6-foot 6-inch diameter steel penstock, also controlled by a cylindrical valve, carries water to the power plant. A concrete penstock and separate outlet at the left or north side of the dam was abandoned in 1924. All of the gates in the tower are controlled by hydraulic oil pressure provided by an electrically operated pump. Access to the gatehouse is by means of a suspension footbridge extending from the top of the dam.

The powerhouse is a rectangular stone and concrete structure containing three generators with a combined capacity of 1,920 kilowatts. The fall from the Truckee Canal, which terminates at Lahontan Dam, was first utilized for hydro-electric generation at the powerhouse. This installation provided power for much of the dam construction (1911-1915). Since completion of the dam, the turbines driving the generators have been supplied by means of the steel penstock from the outlet tower in addition to the penstock from the Truckee Canal. The power plant continues to supply electric power to the surrounding area.

The Lahontan Dam and powerplant retains it original appearance, having undergone only minor modifications since its construction.

The Carson River Diversion Dam is a low concrete gate structure built in 1904 and 1905, to divert water into the canal system used to irrigate the farms in the Newlands Projects. Located on the Carson River five miles northeast of Lahontan Dam, this diversion dam performs a vital water distribution function for hundreds of farms in the Newlands Project.

Detailed specifications are as follows:

CARSON RIVER DIVERSION DAM

Type: Concrete gate structure

Construction period: 1904-1905

Dimensions (feet):

Height	21
Crest length	241
Crest elevation	4044.75
Volume (cubic yards)	2,700

Spillway: Twenty-one 5 by 10 foot double leaf slide gates and one 15 by 10 foot gate.
Capacity (cubic feet per second) ... 30,000

Headworks: Three double leaf rising weir gates, each 5 by 15 feet, for V Canal heading (commonly used as underflow gates). Two wood slide gates 7 by 5 feet for T Canal heading.

V Canal capacity (c.u. ft. per second)	1,500
T Canal " " " "	450

See attached Bureau of Reclamation drawings.

Carriage Facilities

These principal canals carry waters from the Truckee and Carson Rivers to the storage, power, and diversion works described previously. A description of these facilities will round out an account of the main engineering works in the Newlands Project. Beyond the works described, there are many lesser dams, storage facilities, canals, drains, auxiliary power plants, and feeder systems to the agricultural land being utilized.

The Truckee Canal serves to carry waters from the Truckee River, diverted at Derby Dam, for thirty one miles to the Lahontan Dam.

Detailed specifications are as follows:

TRUCKEE CANAL

Type: Both concrete and earth lined.

Construction period: 1903-1906

Length (miles)	31
Diversion capacity (cubic feet per second)	1,500

Typical maximum section in earth:

Bottom width (feet)	20.0
Side slopes	1 1/2:1
Water depth (feet)	13.0

Typical maximum section, concrete-lined:

Bottom width (feet)	20.4
Side slopes	1/2:1
Water depth (feet)	13.0
Usual maximum flow (cubic feet per second)	1,000

The V Canal carries waters from both the Truckee and Carson Rivers east from the Carson River Diversion Dam south of the Carson River to the vicinity of Fallon, Nevada.

Detailed specifications are as follows:

V CANAL

Type: Earth

Construction period: 1904-1905

Length (miles)	26
Diversion capacity (cu. ft. per second)	1,500

Typical maximum section in earth:

Bottom width (feet)	22
Side slopes	2:1
Water depth (feet)	12
Usual maximum flow (cu. ft. per second)	

The T Canal carries waters east from the Carson River Diversion Dam north of the Carson River to the vicinity of Fallon.

Detailed specifications are as follows:

T CANAL

Type: Earth

Construction period: 1904-1905

Length (miles)	9
Diversion (cu. ft. per second)	450

Typical maximum section in earth:

Bottom width (feet)	10

T Canal (continued

Side slopes	2:1
Water depth (feet)	6
Usual maximum flow (cu. ft. per second)	

The "V" Canal Powerplant is a rectangular poured concrete structure, an approximate size 40'x60' feet. It is located at a 26 foot drop in the canal, six miles west of Fallon, Nevada. The unit was built by the Truckee-Carson Irrigation District and is operated by the Sierra Pacific Power Company of Reno. Output is fed into the power company's system.

Detailed specifications are as follows:

"V" CANAL POWERPLANT (constructed by TCID)

Year of initial operation: 1955

Year last generator placed into operations: 1955

Name plate capacity (kilowatts):

Existing	800
Ultimate	1,600

Number and name plate capacity of generators (kilowatts): 800

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

The Truckee-Carson Project was renamed in 1919 in honor of the late Nevada Senator Francis G. Newlands who was instrumental in promoting the passage of the National Reclamation Act of 1902. The operating agency which assumed control in 1926 is named the Truckee-Carson Irrigation District. Several disputes over water appropriations have arisen, but the technical feasibility of most of this significant project is unquestioned.

In a state with extremely limited agricultural resources, the Newlands Project has assured the production of crops and livestock on what was once desert. Besides assuring pasture lands, crops raised include alfalfa, barley, wheat, vegetables and small fruits. It is significant to Nevada for its conversion of waste lands to productive lands.

Headly, F.B. and Cruz Venstrom. Economic History of the Newlands Project. The University of Nevada Agricultural Experiment Station Bulletin Np. 120. Reno: University of Nevada, 1930.

Little, H.Clay. The Truckee's Agricultural Value. College of Agriculture Bulletin No. 3. Reno: University of Nevada, 1965.

Miller, Meredith R., George Hardman and Howard G. Mason. Irrigation Waters of Nevada. The University of Nevada Agricultural Experiment Station Bulletin No. 187. Reno: University of Nevada, 1953.

Townley, John M. Turn This Water Into Gold. Reno: Nevada Historical Society, 1977.

U.S. Bureau of Reclamation. Reclamation Project Data. Washington: Government Printing Office, 1961.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

[redacted]

UTM References:

Lake Tahoe Dam - 10/746760/4339000

Boca Dam - 10/750340/4363940

Derby Diversion Dam - 11/189850/4384700

Lahontan Dam & Powerplant - A. 11/321950/4370000
B. 11/322750/4370250
C. 11/322400/4369500

Carson River Diversion Dam - 11/328100/4373650

V-Canal Powerplant - 11/336450/4372150

Verbal Boundary Descriptions

Lake Tahoe Dam - The proposed boundary includes the area within a 55' radius from the center of the dam. 0.10 acres

Boca Dam - The proposed boundary includes that area within a 1055' radius from the center of the dam. 80.04 acres

Derby Diversion Dam (on National Register) - The proposed boundary includes that area with a 150' radius from the intersection of the two concrete structures that form the dam proper. 0.52 acres

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

Lahontan Dam and Powerplant - The nominated property includes the dam and powerplant structures within the area delineated on the accompanying map beginning at Point A 1,000 feet west-southwest of the intersection of the service road and road across the dam to Point B 300 feet northwest of the powerhouse to Point C 350 feet southwest of the intersection of the service road at the other end of the dam. 68.87 acres

Carson River Diversion Dam - The proposed boundary of the nominated property includes the area within a 130 foot radius from the center of the dam. 1.35 acres

V-Canal Powerplant - The proposed boundary of the nominated property extends 30' from all sides of the powerplant. 0.31 acre