



# WATER-RIGHT DOCKET

## Theodore Roosevelt National Park

Docket No: 1

### SQUAW CREEK CAMPGROUND WELL

#### Preliminary Docket Information

00-00-0000: water right record: id no. thro,w,31,148,99,a,f,01; squaw creek campground

#### WATER RIGHT RECORD

Park: THRO

Docket Number:  
Federal #1

IDENTIFICATION NO: THRO, W, 31, 148, 99, A, F, 01,

DITCH/WATER SYSTEM: Squaw Creek Campground

SOURCE OF SUPPLY: Well

LOCATION: Sec. 31, T148N, R99W, 5th PM

#### WATER RIGHT:

Appropriator: United States of America, National Park Service

Application/Permit Number:

Certificate Record Number:

Date of Priority:

Quantity of Water: 0.27 *cfs*

Purpose: Domestic, recreational

Irrigated Land Description:

SUMMARY OF STATUS: This is a Federal water right consisting of a well and distribution system.

Well drilled in May, 1956. Apparently no water right application filed.

Permit No. \_\_\_\_\_ Notice of Completion Received \_\_\_\_\_

APPLICATION FOR A PERMIT TO DIVERT AND APPROPRIATE  
WATER OF THE STATE OF NORTH DAKOTA

I, John W. Jay, for the United States of America, Department of the Interior, National  
Park Service  
of Medora, County of McKenzie, State of North Dakota

being duly sworn according to law, upon my oath say:

1. The postoffice address of the applicant is Superintendent, Theodore Roosevelt National Memorial Park, Medora, North Dakota
2. The name of the project Squaw Creek Campground Water System
3. The source of the proposed appropriation is Underground water  
beneath Little Missouri River  
which is the tributary of Little Missouri River
4. The point of diversion in the NE  $\frac{1}{4}$  of NW  $\frac{1}{4}$  of Section 31 T. 148 N.  
R. 99 W.
5. The said annual amount of water to be diverted is Domestic 5.00 acre-feet  
Other recreational 45.00  
including incidental irrigation acre feet.
6. The rate of flow to be diverted is 0.27 cubic feet per second for the irrigating season.
7. The method of irrigation is Gravity or Sprinkler by hose and sprinkler
8. The estimated cost of said project is Thirty Thousand Dollars.
9. The time required for the completion of the project is 5 years from December 31st, 19 56.

10. The land to be irrigated is described in the following tabulation:  
(Give irrigable acreage in each 40-acre subdivision)

| Twp.        | Rge.       | Sec.      | NE $\frac{1}{4}$                                                          | NW $\frac{1}{4}$                                                          | SW $\frac{1}{4}$                                                          | SE $\frac{1}{4}$                                                          | Total     |
|-------------|------------|-----------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------|
|             |            |           | NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , SE $\frac{1}{4}$ | NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , SE $\frac{1}{4}$ | NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , SE $\frac{1}{4}$ | NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , SW $\frac{1}{4}$ , SE $\frac{1}{4}$ |           |
| <u>148W</u> | <u>99W</u> | <u>31</u> | <u>20</u>                                                                 | <u>20</u>                                                                 |                                                                           | <u>25</u>                                                                 | <u>80</u> |
| <u>148W</u> | <u>99W</u> | <u>32</u> |                                                                           | <u>5</u>                                                                  | <u>15</u>                                                                 |                                                                           | <u>20</u> |

Approximately 23 developed acres in following gross area:

- Notes: (1) The initial development will permit diversion of 0.05 sec.ft. by December 31, 1956 by 2" pipe. Storage and distribution capacity to be increased as needed.
- (2) Nothing herein shall constitute a waiver of any other rights the United States may have to the same water.

Total number of acres to be irrigated 23 of 100

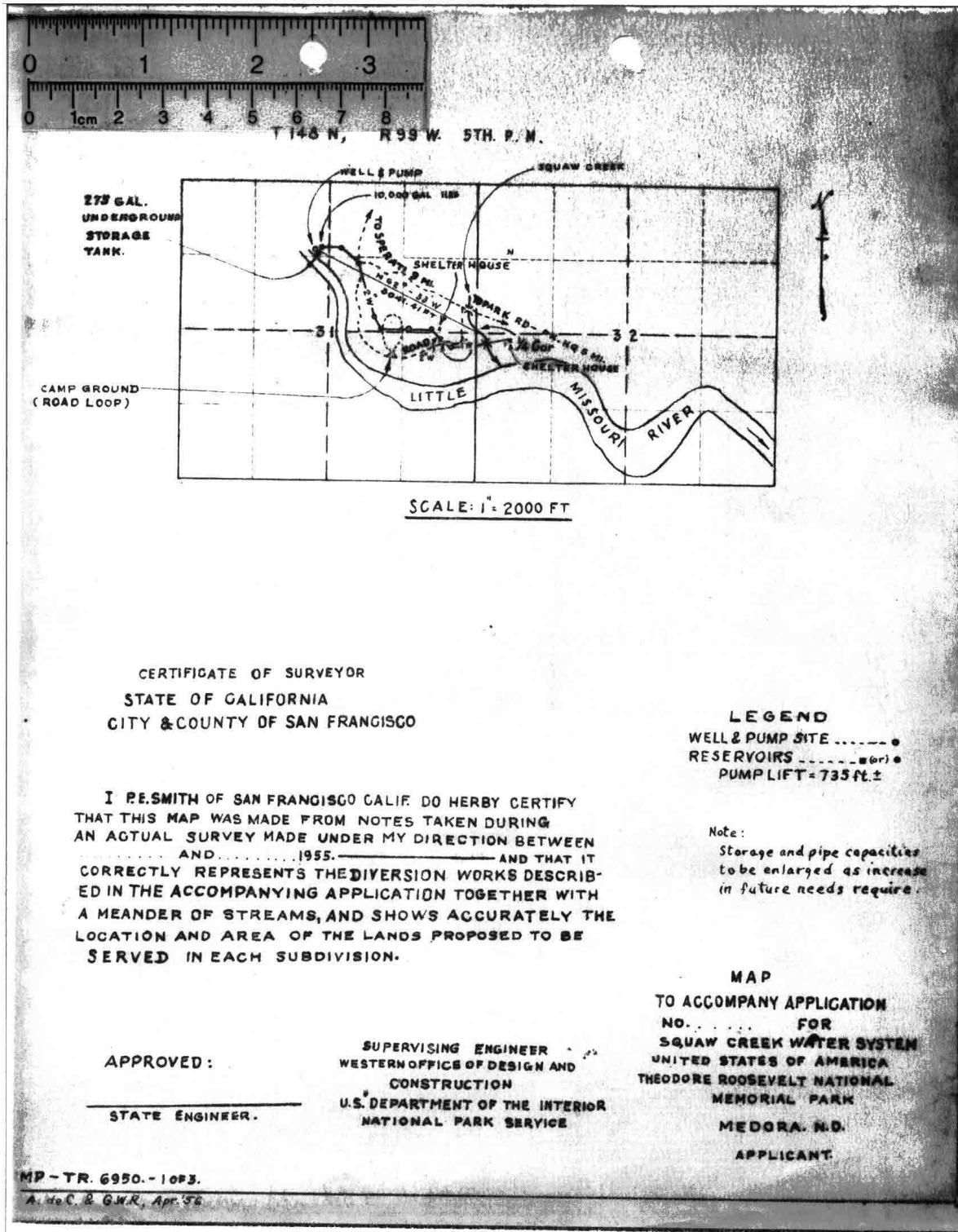
THE STATE OF NORTH DAKOTA,

County of \_\_\_\_\_

I hereby certify that the foregoing application was signed in my presence and sworn to before me by

(Signed)  
Superintendent, Theodore Roosevelt National Memorial Park for the United States of America

this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

LS4-L

File  
H2 6/5/56

May 11, 1956

Memorandum

To: Superintendent, Theodore Roosevelt NHP  
From: Engineer Sholes, WOBC  
Subject: Progress Report on Water Well, Squaw Creek Campground  
April 30 through May 10

The Harris Drilling Company moved their equipment to the site on the afternoon of April 30. A storm prevented work on May 1, but on May 2 the drill was set up over Station "A" of the water line, surveyed by Engineer Stratton last fall, and drilling of the 4½" exploration bore commenced.

Drilling progressed rapidly most of the day through shales, gneiss, and some veins of soft coal. The contractor was instructed to take samples of drill cuttings every 10 feet and at all changes in formation, which he has done. Total depth of drilling on this date was about 340 feet.

On May 3 a hard shale formation was encountered at about depth 360 which continued to top of the water bearing sand formation at about depth 372. The contractor's pump circulating drilling mud failed at depth 370 and he had to shut down for repairs.

Work was continued on May 7. A water bearing formation of tightly packed and very firm, fine, sand was encountered at the 372 foot depth.

Drilling was continued through this sand formation to depth 430. At this point it was believed a suitable water bearing formation had been encountered, and warranted a yield test with the bailer.

Before pulling the 4½" drill bit and pipe out of the hole, the drilling mud was flushed from the sand formation by circulating about 1,000 gallons of clear water through the system. Clear water was obtained from the water reservoir at North Unit headquarters. Upon completion of flushing operations, the 4½" bit was removed from the bore and replaced with a 6½" reamer. Reaming progressed to about depth 120 feet on May 7.

Reaming was completed to about depth 365 on May 8, the plan being to case only the upper portion of the bore through

gumbo and the softer shales. From 365 to top of the water bearing sands is hard rock, strong enough to stand without casing. A solid foundation for the casing is provided in the rock on the shoulder formed by reduction in size of bore from the 6 $\frac{1}{4}$ " reamed hole to the 4 $\frac{1}{4}$ " exploratory bore. The 6 $\frac{1}{4}$ " hole was carried about 9" into this hard rock to assure a firm footing.

Reaming was completed on May 8. On May 9 the hole was again cleaned out to total depth, 430 feet, by circulating about 1,200 gallons of clear water obtained from the reservoir at the North Unit headquarters. Water level in the well was allowed to settle to static level before bailing tests were started. Static level was 18 $\frac{1}{2}$  feet below ground surface.

The bailer, made from about 3 $\frac{1}{2}$ " OD pipe, 18 feet long, holds 6 $\frac{1}{4}$  gallons. After 15 minutes bailing at a rate of 16 gallons per minute, the water level dropped to 67 feet below the ground surface and recovered to 48 feet from the surface after 15 minutes rest. Following 30 minutes of continuous bailing at an average of 10 $\frac{1}{2}$  gpm, the water level had fallen to 68 feet. Bailing rate was then increased to 15 $\frac{1}{2}$  gpm and the water level dropped to 72 $\frac{1}{2}$  feet after 15 minutes. Bailing was then continued for 2 hours at about 12 gpm and the water level remained at 73 feet. After another hour (making total 3 hours continuous bailing) the water surface was at 72 feet. It was concluded the source of water was adequate and it was decided to set casing the next day.

Small amounts of fine sand were observed in the water bailed; however, it could not be determined whether the sand was washing from the water bearing formation or uncased sidewall.

Casing was set on May 10. Before setting casing, the 6 $\frac{1}{4}$ " reaming bit was lowered the full depth of the reamed hole to make sure the hole had not caved during bailer tests. The hole was found to be clean. Four inch inside diameter black steel pipe having a wall thickness of  $\frac{1}{4}$ " as measured with a ruler and weighing not less than 11.00 pounds per foot, with threads and coupling, was set as casing. The pipe was of random lengths, measurement for length of each piece being made from the middle of the coupling to the threaded end. The following sections were placed in the hole, beginning with the top and progressing to the bottom: 15'-3" (top), 14'-7", 17'-10", 18'-0", 19'-9", 21'-6", 20'-3", 22'-2", 21'-6", 22'-3", 21'-3", 22'-3", 22'-3", 21'-1", 21'-4", 22'-2", and 21'-11" (piece on bottom of hole) for a total length of 366'-6". Top of the casing is about 1 $\frac{1}{2}$  feet above the top of the ground.

A length of rope was tied around the last piece of pipe to go into the ground about 15 feet from the end to act as a seal when grout is placed in the upper 10 feet between sidewalls of the bore and casing.

Heavy rains prevented work late in the afternoon of May 10 and since the ground around the well is a heavy gumbo the driller decided not to attempt work the following day, Friday, May 11. He expects to continue on Monday, May 14.

Mr. Harris, the drilling contractor, indicated to me it was usual practice to drill the 4 1/2" exploratory bore to the bottom of any water bearing formation. I made no comment at the time but discussed this with Park Engineer Thuring during his visit to the area on Thursday. It was tentatively agreed we need not go deeper. However, on discussing this further with the drilling contractor, it was pointed out that greater volumes of water were produced from lower levels in sand and that since the sand is so firm and tightly packed (the open bore in the sand to depth 430 was still standing after a couple of days immediately prior to bailer testing) it would be advantageous to go deeper into the sand. Then, even if it caved in at some later date, the caved section would be loose and allow a more free passage of water through it than now exists. I tend to go along with this line of thinking, and feel additional bore to the bottom of the sand would be advantageous to the water well. It is believed this additional drilling would not be more than 20 feet - at any rate, that's all the drill pipe the driller has on hand at the well site.

James R. Sholes  
Civil Engineer

*Send Met a copy.*



Lynn Heiser/THRO/NPS  
07/19/2011 03:33 PM MDT

To: Jeff Hughes/FTCOLLINS/NPS@NPS  
cc  
bcc  
Subject: Re: THRO water rights - wells in the North Unit

Jeff,

I apologize for not getting back to you sooner. Mainly just forgot.

Regardless, what I can find is that a new well was apparently drilled in 1982. This well was used until 2004 when a new one was drilled to the same depth of around 400' and about 10 to 20 feet away from the old one. I remember this to be accurate as I know where the old one was. They are/were in nearly the same location which according to the well driller's log is SW1/4, NE1/4 of Sec. 31 TWP148N, R99W. I will look some more for what if any well that existed there before. I did find some reference to the 1982 well being revamped in 1982 of a well that was drilled in the 50's.

Kind of fun to research this stuff but also aggravating as somewhere records should have been kept to reveal the history of the park, wells included.

Thanks  
Lynn

---

Lynn M. Heiser  
Chief Of Maintenance  
Fleet Manager

Theodore Roosevelt National Park  
P.O. Box 7  
Medora, North Dakota 58645

PH: 701-623-4730 (ext. 3413)  
FX: 701-623-4840  
lynn\_heiser@nps.gov

---



Jeff  
Hughes/FTCOLLINS/NPS  
07/19/2011 02:57 PM MDT

To Lynn Heiser/THRO/NPS@NPS  
cc  
bcc  
Subject Re: THRO water rights - wells in the North Unit

Hi Lynn,

I was wondering if you had any time to look into the water rights question I sent to you earlier. I have attached it below in case you can't find it right away. There is no hurry on this, however, it would be good to update our files while we have a student working on them this summer. Thanks! Jeff

\*\*\*\*\*

Jeffrey C. Hughes, Hydrologist  
National Park Service  
Natural Resource Stewardship and Science  
1201 Oakridge Dr. Suite 250, Fort Collins, CO 80525  
(970) 225-3527 (direct)  
(970) 225-9965 (fax)  
jeff\_hughes@nps.gov  
\*\*\*\*\*

Lynn Heiser Jeff, I will get you some info when and if I get ba... 06/22/2011 08:55:26 AM



Lynn Heiser/THRO/NPS  
06/22/2011 08:55 AM MDT

To Jeff Hughes/FTCOLLINS/NPS@NPS  
cc  
Subject Re: THRO water rights - wells in the North Unit

Jeff,

I will get you some info when and if I get back in my South Unit office later this week but no later than next week. I think I can give you some helpful info. Juniper is the right name of the campground now, I believe there was a shallow well from the 60's in section 31, another drilled there in the mid 1970's, another to 400' in the early 1980's and then the current one in about 2002 or so. I will be back in touch once I can look at my contract files, they should help quite a bit.

Thanks

Lynn

---

Lynn M. Heiser  
Chief Of Maintenance  
Fleet Manager

Theodore Roosevelt National Park  
P.O. Box 7  
Medora, North Dakota 58645

PH: 701-623-4730 (ext. 3413)  
FX: 701-623-4840  
lynn\_heiser@nps.gov

Hi Lynn,

I work with the NPS, Water Resources Division, Water Rights Branch in Fort Collins. I have been involved with water-rights related work at Theodore Roosevelt NP for several years, most notably evaluating the impacts of the Medora Golf Course diversion on flows in the Little Missouri River. I have also been surveying stream cross sections in the North Unit on a (mostly) annual basis to evaluate how the channel changes with various sizes of peak flows. Should be a good one this year.

The Water Rights Branch has the responsibility of keeping the water rights records for all NPS water rights. While going through our records for THRO, I find 11 different dockets for water rights with little information contained within. I may try to see what you have in your files sometime while I am up there if that is alright. I'd make copies to update our files.

Now to why I am writing to you. I have some miscellaneous documentation for a well in the Juniper Campground in the North Unit. It is a Well Driller's Report for a well drilled in August, 1982 and located in the SW1/4 NW1/4 Sec. 31, T148N, R99W. The well log states the well is 400 feet deep.

We have two existing water right dockets for wells in the Squaw Creek Campground. Am I correct that this is now called the Juniper Campground? These wells were drilled in the 1950s or 60s and their locations are:

THRO Docket No. 1 (Squaw Creek Campground Well): NE1/4 NW1/4 Sec. 31, T148N, R99W. Maybe this well was drilled in 1956?

THRO Docket No. 9 (Squaw Creek Campground, North Unit): NW1/4 NE1/4 Sec. 31, T148N, R99W. This has a ND Permit number (1197).

Please note they have slightly different locations.

Questions for you:

1. Are the above two dockets really for the same well? They seem to be very close.
2. Is it possible that the well log for the well drilled in 1982 is for a replacement well for one or both of the above wells?
3. If so, which one?
4. Or, are there really three wells drilled and in use in this campground?
5. Have any of these wells been abandoned?

I realize you are very busy and may not have time to get to this for awhile. However, when you do have some time, I would greatly appreciate it if you could help me figure this out so I can properly update the THRO water rights records.

Thank you very much Lynn. Please feel free to contact me if you have any questions about this.

Jeff

\*\*\*\*\*  
Jeffrey C. Hughes, Hydrologist  
National Park Service, Water Resources Division  
1201 Oakridge Dr. Suite 250  
Fort Collins, CO 80525  
(970) 225-3527 (direct)  
(970) 225-9965 (fax)  
jeff\_hughes@nps.gov  
\*\*\*\*\*

Form 10-174  
(June 1962)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

## FACE SHEET FOR COMPLETION REPORT

Work Order No.

2-WR-65B

| Fund Symbol | Fund Name                    | Assets Under Management (\$B) | Investment Objective    | Risk Rating | Expense Ratio (%) | Minimum Investment (\$K) | Load (%) | Redemption Fee (%) | Dividend Yield (%) | YTD Return (%) | 3-Year Annualized Return (%) | 5-Year Annualized Return (%) | 10-Year Annualized Return (%) | Rating |
|-------------|------------------------------|-------------------------------|-------------------------|-------------|-------------------|--------------------------|----------|--------------------|--------------------|----------------|------------------------------|------------------------------|-------------------------------|--------|
| FND001      | Global Growth Fund           | 12.5                          | Global Equity           | High        | 1.2%              | \$5K                     | 4.0%     | 0.5%               | 2.5%               | 15.2%          | 8.5%                         | 9.1%                         | 10.3%                         | A-     |
| FND002      | Tech Innovators Fund         | 8.7                           | Technology              | Very High   | 1.5%              | \$10K                    | 3.5%     | 0.7%               | 3.1%               | 22.8%          | 12.1%                        | 13.5%                        | 14.2%                         | B+     |
| FND003      | Healthcare Leaders Fund      | 15.3                          | Healthcare              | Medium-High | 1.1%              | \$5K                     | 3.8%     | 0.6%               | 2.8%               | 18.5%          | 9.8%                         | 10.5%                        | 11.2%                         | A      |
| FND004      | Sustainable Future Fund      | 6.2                           | Environmental & Social  | Medium      | 1.0%              | \$3K                     | 3.2%     | 0.4%               | 2.2%               | 12.1%          | 7.3%                         | 7.8%                         | 8.5%                          | C+     |
| FND005      | Artisan Craftsmen Fund       | 3.1                           | Small Cap US Equity     | Low-Medium  | 0.9%              | \$2K                     | 2.8%     | 0.3%               | 1.8%               | 8.9%           | 5.1%                         | 5.5%                         | 6.2%                          | D+     |
| FND006      | Emerging Markets Fund        | 9.8                           | Emerging Markets        | High        | 1.3%              | \$10K                    | 4.2%     | 0.8%               | 3.5%               | 20.1%          | 11.5%                        | 12.8%                        | 13.5%                         | B-     |
| FND007      | Fixed Income Plus Fund       | 11.4                          | Fixed Income            | Low         | 0.8%              | \$5K                     | 2.5%     | 0.2%               | 1.5%               | 5.2%           | 3.8%                         | 4.1%                         | 4.5%                          | C      |
| FND008      | Real Estate Development Fund | 4.5                           | Real Estate             | Medium      | 1.0%              | \$7K                     | 3.0%     | 0.5%               | 2.0%               | 10.5%          | 6.2%                         | 6.8%                         | 7.5%                          | D      |
| FND009      | Commodity Resources Fund     | 2.8                           | Commodities             | High        | 1.1%              | \$4K                     | 3.5%     | 0.6%               | 2.5%               | 14.3%          | 7.9%                         | 8.2%                         | 8.8%                          | C-     |
| FND010      | AI Revolution Fund           | 7.9                           | Artificial Intelligence | Very High   | 1.4%              | \$10K                    | 3.8%     | 0.7%               | 3.0%               | 25.1%          | 13.5%                        | 14.8%                        | 15.5%                         | B+     |

1.4x10<sup>35</sup> (0343)

|                 |  |
|-----------------|--|
| Year Programmed |  |
|-----------------|--|

1963

|         |  |
|---------|--|
| PCP No. |  |
|---------|--|

Master Plan No.

|                          |  |
|--------------------------|--|
| Master Plan Corrected By |  |
|--------------------------|--|

As Built Drawings By

|              |  |
|--------------|--|
| Date Started |  |
|--------------|--|

August, 1962

|                |  |
|----------------|--|
| Date Completed |  |
|----------------|--|

October, 1964

DESCRIPTION OF FIXED ASSETS  
(For completion by employee in charge of project)

**TOTAL COSTS**  
(For completion by FFO)

100.8 Utilities: Sewer Systems and Water Systems:

~~\$276.70~~  
252.70

Water rights filing for 8 water wells located within Theodore Roosevelt National Memorial Park (6 wells in the South Unit and 2 wells in the North Unit).

|                 |                     |        |
|-----------------|---------------------|--------|
| Surveyor Fee    | \$ 36.00            |        |
| Application Fee | <del>152.00</del>   | 160.00 |
| Notary Fee      | 12.00               |        |
| Advertising Fee | 20.70               |        |
| Filing Fee      | <del>24.00</del>    |        |
|                 | <del>\$276.70</del> |        |
|                 | 252.70              |        |

Filings For Wells:  
Peaceful Valley Picnic Area Well  
North Unit Headquarters Well  
Halliday Well  
Rasmussen Well  
Squaw Creek Campground Well  
Medora Headquarters Well  
Cottonwood Campground Well  
Peaceful Valley Headquarters Well  
or Peaceful Valley Ranch Well

Prorated Cost for  
Each Well:  
\$31.60

TOTAL

3

252.70

~~256-70~~

| DISTRIBUTION |      | THE FIXED ASSET DESCRIBED ABOVE HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED DRAWINGS, SPECIFICATIONS, AND AUTHORIZED CHANGES |                             |             |
|--------------|------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------|
| No.          | To   | Submitted By:                                                                                                                   | Title:                      | Date:       |
| 2            | WASO | <i>Warren D. Hotchkiss</i>                                                                                                      | Superintendent              | 10/27/64    |
| 2            | MRO  |                                                                                                                                 |                             |             |
| 1            | Area |                                                                                                                                 |                             |             |
|              |      | Approved By:                                                                                                                    | Title:                      | Date:       |
|              |      | Warren D. Hotchkiss                                                                                                             |                             |             |
|              |      | COSTS VERIFIED                                                                                                                  |                             | Date:       |
|              |      | (Sgt) Evelyn E. Ebert                                                                                                           | Regional Accounting Officer | DEC 14 1964 |
|              |      | BY                                                                                                                              |                             |             |

Form 10-174A  
(June 1962)UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICEWork Order Number  
**2-WR-65B**

## COMPOSITION OF COST FOR COMPLETION REPORT

Fund Symbol  
**14X1035 (0343)**

|                                                                                                            |                          |                                |
|------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|
| Park<br><b>Theodore Roosevelt National Memorial Park</b>                                                   | Region<br><b>Midwest</b> | Year Programmed<br><b>1963</b> |
| Location in Park<br><b>At various locations within the North and South Units of Theodore Roosevelt NMP</b> |                          |                                |
| Work Order Title<br><b>Filings for water rights with State Water Commission; carry-over from 1963 F.Y.</b> |                          |                                |

## COMPOSITION OF COST

## COSTS CHARGED TO FUNDS ALLOTTED TO FIELD FINANCE OFFICE

|                                    |                   |
|------------------------------------|-------------------|
| (1) Personal Services.....         | \$                |
| (2) Travel.....                    |                   |
| (3) Contract Work.....             |                   |
| (4) Supplies and Materials.....    |                   |
| (5) Other Direct Expenses.....     | 252.70            |
| (6) Operation of Equipment.....    | <del>276.70</del> |
| (7) Depreciation of Equipment..... |                   |

(8) Purchase of Construction Equipment

(9) Purchase of Other Miscellaneous Equipment

(10) Other Costs:

(11) TOTAL COST CHARGED TO THE FUNDS

TOTAL COSTS:

(12) FUND OF WHICH FURNISHING TO

(13) FUND OF WHICH FURNISHING TO

(14) FUND OF WHICH FURNISHING TO

FUND:

(15) Residual Value of Construction Equipment on line 8

(16) Other Credits

(17) NET COST OF WORK

Identify other costs and other credits by line item entry on an attached schedule or explain in narrative.

252.70

~~276.70~~

252.70

~~276.70~~

NARRATIVE PORTION OF COMPLETION REPORT  
ON  
WATER RIGHTS FILINGS  
IN  
THEODORE ROOSEVELT NATIONAL MEMORIAL PARK

Much of the information required to complete the eight (8) "Record of Well" forms attached is unavailable. An inspection was conducted of records in the Billings County Court House with no success. Evidently, water sources developed before the Park was established, ~~was~~ was accomplished without keeping a written record of progress.

From checking the files at Park Headquarters, it is noted that there was an interest in 1948 to obtain water rights for wells located within the Park. However, due to the lack of funds, this project did not get underway until 1962.

The completion costs of most of the wells could not be determined because the cost of the drilling operation had been included with the installation of water lines and other utilities.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

Theodore Roosevelt National Memorial Park  
Medora, North Dakota

June 27, 1956

Memorandum

To: Director

Attention: Chief, Water Resources Section

From: Superintendent, Theodore Roosevelt NMP

Subject: Proposed water right application for Squaw Creek  
Campground Water System.

Reference is made to a memorandum dated May 3, 1956, from Chief, Water Resources Section. The following are our comments and corrections as requested in reference memorandum.

Attached is a sketch of a surveyed tie to a quarter corner that will cause some adjustments in the map that accompanied the memorandum. Also attached is a copy of the formentioned map with some minor corrections.

Chemical analysis of the water obtained from the well showed presence of certain suspended solids which would be detrimental to most plants. Since the river would be the obvious source of any irrigation water needed under these circumstances, we can see no need for claiming water for this purpose on this application.

Although there is always the possibility that the system will become inadequate and enlargement will become necessary, there is no indication of this at the present time. Therefore it seems that the 5.00 acre-feet claimed for domestic use would be sufficient.

(Sgd) John W. Jay, Jr.

John W. Jay, Jr.  
Superintendent

In duplicate

Attachments: Map, Squaw Creek Water System  
Sketch of Quarter Corner Ties

Copy to: Regional Director, Region Two  
WODC

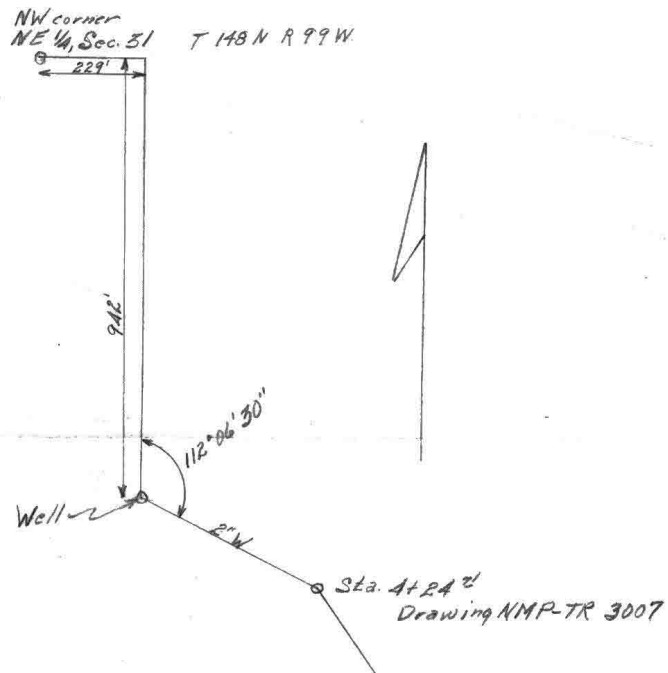
154 JHRO  
15039 JHRO

|                           |  |
|---------------------------|--|
| REG. DIRECTOR             |  |
| ASST. REG. DIRECTOR       |  |
| CHIEF, DIV. OF ADMIN.     |  |
| CHIEF, DIV. OF OPERATIONS |  |
| CHIEF, DIV. OF INTERP.    |  |
| CHIEF, DIV. OF COMM. ACT. |  |
| FIELD SOLICITOR           |  |
| ACTION TAKEN              |  |

6-29-56

REC'D IN GEN. FILES JUL 10 1956

Sketch of Tie to  $\frac{1}{4}$  corner for Squaw Creek  
Campground Well



REC'D IN GEN. FILES JUL 10 1956



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
WASHINGTON 25, D. C.

June 6, 1956

IN REPLY REFER TO:

154-L

|                           |
|---------------------------|
| REG. DIRECTOR             |
| ASST. REG. DIRECTOR       |
| CHf. DIV. OF ADMIN.       |
| CHf. DIV. OF OPER.        |
| CHf. DIV. OF INTERP.      |
| CHf. DIV. OF CORP. ACT.   |
| FIELD SOLICITOR           |
|                           |
|                           |
|                           |
| ACTION TAKEN              |
| <i>CHf. DIV. OF OPER.</i> |
| <i>156</i>                |

Memorandum

To: Regional Director, Region Two  
From: Chief, Water Resources Section  
Subject: Proposed Water Right Application for Squaw Creek Campground,  
Theodore Roosevelt National Memorial Park

The memorandum of May 31 to Chief, Western Office of Design and Construction, from Mr. Robertson, needs no further comments from here at this time. As he states, there is probably no need to file an application, particularly if irrigation water were to be obtained from the Little Missouri through another system. However, the Fish and Wildlife Service has started complying with the North Dakota Water Laws, and the Assistant Solicitor has advised informally that certain of our recent instructions should be construed to prescribe that we comply with the state water laws in all cases.

For these reasons, we wish to complete the application for the Squaw Creek Campground water system, with corrections suggested in my memorandum of May 3, get final clearance from the Solicitor, or specific instructions to the contrary, and then obtain the State Engineer's reaction if we file the application.

*A. van V. Dunn*

A. van V. Dunn  
Chief, Water Resources Section

Copy to: Superintendent, Theodore Roosevelt  
Western Office of Design and Construction

REC'D IN GEN. FILES JUN 14 1956

|                                         |  |
|-----------------------------------------|--|
| WESTERN OFFICE<br>DESIGN & CONSTRUCTION |  |
| MAY 9 1956 A.M.                         |  |
| CHIEF                                   |  |
| ADMIN. ASSIST.                          |  |
| PERSONNEL                               |  |
| PLANS & PROG.                           |  |
| SAFETY                                  |  |
| ARCHITECT                               |  |
| ENGINEER                                |  |
| LAND ACCH.                              |  |
| ACTION TAKEN-DATE                       |  |

L54-L

*Ames file*

May 3, 1956

**Memorandum**

**To:** Regional Director, Region Two  
**From:** Chief, Water Resources Section  
**Subject:** Proposed Water Right Application for Squaw Creek Campground, Theodore Roosevelt National Memorial Park

With copies of this memorandum to the Superintendent and the Western Office of Design and Construction, we are distributing copies of a draft of a proposed water right application and two prints of supporting map for the Squaw Creek Campground water system, and copies of certain sections of the North Dakota water laws.

We understand that bids were opened during April. We assume that the licensed well driller will have no difficulty in starting operations without a water right permit because of the Federal exemption under Sec. 61-1630 which was passed in 1949, but we have been instructed to comply with the State water laws and believe the application should be filed as soon as possible.

It is requested that the Superintendent and WODC offer corrections and suggestions through you, as soon as possible. Several specific answers are desired. The drawing must be on linen and 8 1/2 X 11 in size, with full sections shown for all land to be used, which limits details. It is also necessary to cross hatch any irrigated areas, but we have not yet done so. The second print of the drawing, in each case, is for use with the corrections and comments.

The application has been prepared with the intent to claim water on any land between the main road and the river, and assumed that the first campground loop might be duplicated if the facilities become popular. An average ultimate domestic water demand of 0.03 sec.ft. for domestic purposes in August would result, and the total annual domestic use would probably be about 5.0 acre-feet. The 2" gravity pipeline from the 10,000 gallon reservoir would be adequate except on some peak days when 0.05 sec.ft. might be needed.

If there is to be need for irrigation, the state laws permit 2 acre-feet per acre per year diverted at the rate of 1 sec.ft. for 80 acres. By hose irrigation in two campgrounds, and for about 100 feet out from other buildings, I estimate a smaller need of about 45 acre-feet per year on about 23 acres, with maximum application of about 0.22 sec.ft.

The first question is whether irrigation water should be claimed at all. Second, if you agree that duplicate campground might be desired, where should we show the road loop? Third, since 2 inch pipe would only supply 0.025 sec.ft. to campground under a 16 pound pressure, we wonder where larger facilities should be shown for greater future fire protection. Although the present project is estimated to cost only \$11,800, we have suggested ultimate cost of \$30,000 to cover said enlargements.

The application claims completion within five years, as maximum allowed by State Engineer's instructions. We assume that an extension of time can be obtained. We believe you should consider all development which may be needed by 1966.

From the State Engineer we have obtained the following documents which all of you might also obtain:

1. Revised Water Code of 1945.
2. Supplement for 1945-1961.
3. Supplement of 1953.
4. Supplement of 1955.
5. Circular of Instructions for Filing Applications for Water Rights (Revised April 1940).

The water laws imply that all water use needs water rights, but the application is definitely for irrigation. We find that the Fish and Wildlife Service has filed claims for nonirrigation use, but we have not learned how they were received. Accordingly, this application will be experimental, and we will defer other potential claims until we see how it is received.

**RECEIVED**  
A. van V. Dunn  
Chief, Water Resources Section

Attachments 4

Copy to: ~~Superintendent~~, Theodore Roosevelt, with 4 attachments  
~~Western Office of Design and Construction~~, with 4 attachments  
~~Acting Assistant Solicitor~~, Parks  
Mr. Dunn

AVD:unn:act

#### Docket Information

Number of Documents in Docket 17  
Documents Dated from 5/3/1956 to 7/19/2011  
Docket Compiled: 3/28/2012