WATER-RIGHT DOCKET

Rocky Mountain National Park

Docket No: 46

BEAVER CREEK, TRIBUTARY OF BIG THOMPSON RIVER-BALDWIN DITCH, HIGH DRIVE HEIGHTS DEVEL

Preliminary Docket Information

00-00-0000: water right record: identification no. romo r 340573 bf46; baldwin ditch

WATER RIGHT RECORD

Park: ROMO

Docket Number: Federal #46

IDENTIFICATION NO: ROMO, R,3,4,0,5,7,3, B,F, 4,6,

DITCH/WATER SYSTEM: Baldwin Ditch (High Drive Heights Development Co.)

SOURCE OF SUPPLY: Beaver Creek, a tributary of the Big Thompson River.

LOCATION: North bank of Beaver Creek at a point whence the NE corner of Section 34, T5N R73W, 6th P.M., bears N40°54'W, 1306 feet.

WATER RIGHT:

Appropriator: Edw. L. Baldwin prior to 1900, US acquired by deed August 19, 1957 from Wm. Grove.

Application/Permit Number: Map Filing #15602, accepted in the Office of the State Engineer of Colorado 7/6/1932.

Certificate Record Number:

Date of Priority: #6, December 31, 1899 - Baldwin Ditch, Decree of Nov. 14, 1939, Case #10077, 11/8/1939

Quantity of Water: 1.0 c.f.s.

Purpose: Domestic

Irrigated Land Description:

SUMMARY OF STATUS: Work of construction of the ditch was commenced prior to the year 1900 by Edw. L. Baldwin.

The High Drive Heights Development Co. - to Wm. Grove - Quit Claim Deed - April 3, 1948

WATER DOCKET INFORMATION

AREA ROCKY MOUNTAIN N P

DOCKET NO. 46 (Includes former Alien Water Right 9)

~~APPLICATION~~ FILING NO. 15602 DECREED PRIORITY NO 6

PERMIT NO.

CERTIFICATE NO.

TITLE OF DOCKET BALDWIN DITCH
HIGH DRIVE HEIGHTS DEVELOPMENT CO.- CLAIMANT

PRIORITY 12/31/1899

REMARKS:

00-00-0000: index of docket no. 46

ROCKY MOUNTAIN NATIONAL PARK
Docket No. 46
Baldwin Ditch

Index

PART I - Water Claim

A. Filing No. 15602.

PART II - Baldwin Ditch Protest

A. Analysis of the Baldwin Ditch capacity - 6/23/39.
B. Memo of 6/27/39, A. van V. Dunn to Attorney Joseph E. Taylor.
C. Copy of brief prepared by Worth Allen, Special Assistant to Attorney General, with letter of transmittal dated 8/30/39.
D. Letter to Attorney Allen from Attorney Stephenson - 9/11/39.
E. Letter to Attorney General from Allen, re Stephenson's letter - 9/16/39.
F. Transmittal of Attorney Stephenson's letter to Department of Justice in Denver - 9/16/39.
G. Letter to Worth Allen from A. van V. Dunn - 9/22/39.
H. Letter to Regional Attorney Taylor from Acting Superintendent McLaughlin, - 10/10/39.
I. Objections by the U.S. to proposed findings and decree with respect to the Baldwin Ditch.
J. Letter to Worth Allen from Regional Attorney Taylor - 10/20/39.
K. Letter to Attorney Stephenson from Attorney Allen - 11/4/39.
L. Letter from Eighth Judicial District to each Attorney in the case, with attachments - 11/8/39 by Judge Coffin.
M. Attorney Allen's transmittal of "L" above - 11/9/39.

PART III - Decree of November 14, 1939

PART IV - Federal Acquisition

A. Quit claim deed of August 29, 1957, with acceptance.

B. Baldwin Ditch deed of June 2, 1958, with acceptance.

Docket No. 46

B A L D W I N D I T C H

USE

Domestic (formerly served homes of High Drive Heights Development Co.)

HEADGATE

Point of Diversion is on the north bank of Beaver Creek at a point whence the NE corner of Sec. 34, T5N, R73W of the 6th P.M. bears North 40° 54' West 1,306 feet.

PRIORITY

Domestic Priority No. 6, Water District No. 4, as of December 31, 1899, provided that this Domestic Priority No. 6 shall be and remain subject and subservient to Domestic Priority No. 12 awarded to the Hondius-Beaver Pipeline.

AMOUNT OF DECREE

One (1.0) cubic feet of water per second of time.

OWNERSHIP

Owned by the United States, acquired by purchase from William F. Grove by Quit Claim deed of August 29, 1957, and Baldwin Ditch Deed of June 2, 1958, both with acceptance by United States.

MAPS

Filing No. 15602 (NP:RM-9062) accepted by the State Engineer of Colorado July 6, 1932.

FEB 17 1967

Rocky Mountain National Park
Alien Water Right No. 9

Baldwin Ditch

1. Filing No. 15602.

2. Statement of June 4, 1946, by A. van V. Dunn.

DOCKET INFORMATION SHEET

Docket Identity	ROMO R 34 05 73 B F 46
Region	ROCKY MOUNTAIN
Area	ROCKY MOUNTAIN NATIONAL PARK
Site	BALDWIN DITCH - HIGH DRIVE HEIGHTS DEVELOPMENT
State	COLORADO
County	LARIMER
Docket	ROMO WATER RIGHT DOCKET 46
Location	T5N R73W SEC 34
Acquired by	PURCHASE
Application	15602 JULY 6 1932
Permit	NO 6
Certificate	COURT CASE 10077
Priority	DECEMBER 31 1899 - 1.0 CFS
Reservation	JANUARY 26 1915
Status	ACTIVE FEDERAL NOVEMBER 8 1939
Source	SURFACE WATER
Use	DOMESTIC
Quantity	1.0 CFS
Hydrologic Unit	10190006
Remarks	CONSTRUCTION OF THE DITCH PRIOR TO 1900

State Water Rights Documentation

11-04-1939: letter to attorney at law from special assistant to the attorney general regarding general adjudication

C O P Y

332 Postoffice Building,

Denver, Colorado, November 4, 1939.

Steton R. Stephenson,
Attorney at Law,
Fort Morgan, Colorado.

Re:General Adjudication, Water District No. 4,-- Baldwin Ditch and Hondius-Beaver Pipe Line.

Dear Steton:

On my return from a trip to Idaho, I find your letter of November 1, and a copy of your letter of the same date addressed to Judge Coffin.

I saw you at the football game Saturday a week ago, and considered discussing this matter with you at that time. However, on second thought, I concluded it was a poor time and place to be talking shop.

When in Greeley the first part of last week, going over some suggested changes in the findings with regard to the Hondius-Beaver Pipe Line and other National Park structures, and the Colorado-Big Thompson Project, Judge Coffin brought up the subject of this ditch and discussed the matter with Tom Nixon, Baird of the Reclamation Bureau and me.

I suggested to the Court that, inasmuch as the Baldwin Ditch diverts water only in the Spring when there is enough for all, it might be a good idea to give you a final decree for 1 second foot of water, making your priority right, as you suggested, subordinate to the Hondius-Beaver Pipe Line.

I do not want to be understood, in making this suggestion, that we would waive our contention that your use is a wasteful one, in the event that the Court should not make your priority right subordinate to that of the Hondius-Beaver Pipe Line.

I suggested to the Court that, while I think the findings and decree as now proposed by him are quite sound, he is really postponing the problem instead of settling it. However, the impression I got at the end of the discussion was that he was going to let the findings and decree stand as now drawn.

You are at liberty to write him if you so desire, enclosing a copy of this letter, which is enclosed herewith.

Judge Coffin said something about the ditch having a capacity for some reasonable distance beyond the point of diversion of more than a second

foot. Of course, if your priority right is subordinated to that of the Hondius-Beaver Pipe Line, we would not object to the decree giving you a right to divert an amount of water which would equal 1 second foot at some reasonable distance from the stream. This would mean, of course, that there would be somewhat more than a foot diverted at the point of diversion. We are convinced that the capacity of the ditch at the present time at a substantial distance from the stream does not exceed, but is somewhat less than, one foot.

With kind regards,

Very truly yours,

Worth Allen,
Special Assistant to
the Attorney General.

CC to: Att'y Gen'l
Stoton R. Stephenson,
Joseph E. Taylor,
David Canfield.

WA/ELM

10-20-1939: letter to special assistant to the attorney general from regional attorney regarding general adjudication

C O P Y

601 Sheldon Building
October 20, 1939

Worth Allen, Esq.,
Special Assistant to the Attorney General,
332 Postoffice Building,
Denver, Colorado.

Re: General Adjudication, Water District 4, Claims for Rocky Mountain National Park.

Dear Mr. Allen:

Reference is made to your letter of October 19 to John McLaughlin in the above matter.

We have this day radioed the park, advising against the filing of the objection with respect to the Baldwin Ditch. A copy of our radiogram is herewith enclosed.

You will note that we have left the matter within your discretion to determine whether any further points should be made with respect to an acre foot limitation upon Griffith's Beaver Ditch and and a voluntary action with respect to our Hollowell Park Ditch No. 2.

Regarding the Baldwin Ditch, we feel as you do, that the protection in the decretal order requiring the owners of the Baldwin Ditch to make a further showing with respect to a reasonable method of use and a reasonably beneficial use, before any final determination upon the quantity of water to which they are entitled, will suffice for our purposes.

I believe your mythological analogy concerning Atlanta's golden apples is a good one (it was Atlanta, wasn't it?).

Sincerely yours,

cc: Supt., Rocky Mt.

Joseph E. Taylor,
Regional Attorney.

THE BALDWIN DITCH

(Domestic Priority No. 6; Ditch No. 7.
DECREE OF NOV. 14, 1939 — CASE 10077

1. The name of this ditch is the Baldwin Ditch.

2. The claimant of the Baldwin Ditch is the High Line Heights Development Company, a corporation, organized and existing under and by virtue of the laws of the State of Colorado, with postoffice address at Fort Morgan, Morgan County, Colorado.

3. This ditch derives its supply of water from Beaver Creek, a tributary of the Big Thompson River, in Water District No. 4, in the State of Colorado. Waters diverted from said Beaver Creek by means of said ditch have been used and are being used for domestic purposes.

4. The headgate of said ditch is located on the left or north bank of said creek, at a point whence the northeast corner of section 34, township 5 north, range 73 west of the 6th Principal Meridian, bears north 40° 54' west 1506 feet. From its headgate said ditch bears in a general northeasterly and then easterly direction on a meandering course approximately 7336 feet to the east boundary line of the southeast quarter of the southwest quarter of section 16, in said township and range.

5. The depth, width and grade of said ditch varies throughout its length, and the maximum effective carrying capacity of said ditch is estimated at 1 cubic foot per second of time.

6. Work of construction of said ditch was commenced prior to the year 1900, and was completed with diligence, and water was diverted through said ditch from said

Beaver Creek and used for domestic purposes in the season of the year 1900, and has thenceforward been continuously so used for domestic purposes; water diverted through said ditch being at times also used for irrigation, but such use for irrigation being only at times when water was not needed for domestic purposes. And the intent of the original appropriation, and the principal use, in manner as hereinafter stated, was for domestic purposes to supply domestic waters to homes and cottages.

7. As a means to the use of the water diverted through said ditch, said water has been discharged near the terminus of said ditch into and spread over a draw or natural depression and permitted to seep into the soil as a means of storage and of filtering and cleansing the water for human consumption; and by gravity water from said draw or natural depression gathers into a natural spring in said draw below the points of discharge from said ditch, from which spring it is led by gravity, or pumping by means of a power pump, to cottages and homes, where it is utilized for domestic purposes. Such manner of diversion and use has utilized storage in the seepage area above said spring. The character and method of use of the water aforesaid has necessarily entailed and does entail a relatively high degree of loss of water by seepage throughout the ditch, and evaporation from the seepage area described, and only a portion of the water diverted from said Beaver Creek by said method is eventually captured and utilized by means of the spring mentioned, and under the present means and character of diversion and use claimant's priority will be made subservient to the more economical di-

version made by the Hondius Beaver Pipe Line hereinafter mentioned. The character of flow of water in said Beaver Creek at the headgate of claimant's ditch is seasonal and has never required the claimant to call upon the Hondius-Beaver Pipe Line, having a junior priority from Beaver Creek, Domestic Priority No. 12, to permit water to pass said pipe line to supply the Baldwin Ditch with water, and the diversion permitted under this decree by the Baldwin Ditch under the present means and character of diversion and use is made subject to said junior priority of the Hondius-Beaver Pipe Line.

8. As a matter of law, claimant is entitled to a decree to the effect that there be permitted to flow from Beaver Creek into the Baldwin Ditch for domestic uses, so much water as may be reasonably necessary for domestic uses by claimant, not to exceed one cubic foot of water per second of time, for the benefit of the party or parties lawfully entitled thereto, by virtue of original construction, with domestic priority No. 6, as of date December 31, 1899; provided, however, that, under the present means and character of diversion and use, this domestic priority No. 6 shall be and remain subject and subservient to Domestic Priority No. 12 in this decree, awarded to the Hondius-Beaver Pipe Line.

WHEREFORE, IT IS ORDERED, ADJUDGED AND DECREED, that water be permitted to flow out of Beaver Creek into the Baldwin Ditch, for the benefit of the party or parties lawfully entitled thereto, for domestic purposes, to the extent of the needs of the claimant of said ditch for

domestic purposes, not in excess of one cubic feet of water per second of time, with DOMESTIC PRIORITY NO. 6, as of date December 31, 1899, subject to the general and paramount provisions of this decree. Provided, that this Domestic Priority No. 6 shall be and remain subject and subservient to Domestic Priority No. 12 in this decree, awarded to the Hondius Beaver Pipe Line.

C O P Y

STATE OF COLORADO)
) SS
COUNTY OF BOULDER)

IN THE DISTRICT COURT

NO. 10077.

IN THE MATTER OF THE ADJUDICATION OF PRIORITIES OF RIGHT TO THE USE OF WATER FOR IRRIGATION AND OTHER BENEFICIAL PURPOSES IN WATER DISTRICT NO. 4, WATER DIVISION NO. 1, IN THE STATE OF COLORADO.

OBJECTIONS BY UNITED STATES TO PROPOSED FINDINGS AND DECREE WITH RESPECT TO THE BALDWIN DITCH.

Now comes the United States of America, by Worth Allen and Wayne C. Williams, Special Assistants to the Attorney General of the United States, thereunto duly authorized and directed by the Attorney General, and by Joseph E. Taylor, Regional Attorney, National Park Service, and hereby objects to the proposed finding submitted by the Court to the effect that the capacity of the Baldwin Ditch "is estimated at 1 cubic foot per second of time" and to a conditional and qualified decree accordingly. While the United States agrees generally with the proposed findings and decree respecting this ditch, we respectfully submit that the evidence submitted by the engineer, A. van V. Dunn, who made careful measurements, clearly shows that the capacity of the said ditch is not over 0.8 cubic feet of water per second of time.

Respectfully,

UNITED STATES OF AMERICA

By (Sgd.) Worth Allen

(Sgd.) Wayne C. Williams
Special Assistants to the
Attorney General.

(Not filed)

(Sgd.) Joseph E. Taylor
Regional Attorney, National
Park Service.

Recorded JUN 3 1958 at 2:20 o'clock P.M. BOOK 1068 PAGE 73
Reception No. 741299 G. Marion Bradford, Recorder

THIS DEED, Made this 2nd day of June in the year of our Lord one thousand nine hundred and fifty eight between William F. Grove of the County of Larimer and State of Colorado, of the first part, and The United States of America and/or its assigns of the second part:

WITNESSETH, That the said party of the first part, for and in consideration of the sum of One Thousand Dollars, to the said party of the first part in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm, unto the said party of the second part, its heirs and assigns forever, all the following described ditch, domestic water right, rights-of-way and structures, situate, lying and being in the County of Larimer and State of Colorado, to-wit:

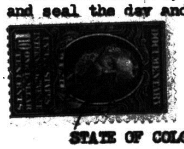
The Baldwin Ditch, including the right to divert from Beaver Creek 1.0 cubic foot of water per second of time, Domestic Priority No. 6, Ditch No. 7, as adjudicated and decreed by the District Court at Boulder, Colorado, November 14, 1939, in Case No. 10077, and all rights of way and structures belonging thereto or used in connection therewith; and, also, described in the map and statement, Filing No. 15602, accepted in the office of the State Engineer of Colorado on the 6th day of July, A.D. 1932.

Party of the first part warrants that there are no outstanding rights held by any person or persons to water from the ditch conveyed herein or rights obligating the owner of said ditch to maintain same. The party of the first part agrees to hold the United States harmless from any and all such obligations, if any there be.

TOGETHER with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of the said party of the first part, either in law or equity, of, in and to the above bargained property, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said property above bargained and described, with the appurtenances, unto the said party of the second part, its heirs and assigns forever. And the said party of the first part, for himself, his heirs, executors, and administrators, does covenant, grant, bargain, and agree to and with the said party of the second part, its heirs and assigns, that at the time of the ensealing and delivery of these presents, he is well seised of the property above conveyed, as of good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form as aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments and encumbrances of whatever kind or nature soever, and the above bargained property in the quiet and peaceable possession of the said party of the second part, its heirs and assigns against all and every person or persons lawfully claiming or to claim the whole or any part thereof, the said party of the first part shall and will WARRANT AND FOREVER DEFEND.

IN WITNESS WHEREOF, the said party of the first part has hereunto set his hand and seal the day and year first above written.



William F. Grove (SEAL)
William F. Grove

STATE OF COLORADO)
)ss.
County of Larimer)

The foregoing instrument was acknowledged before me this 2nd day of June A.D. 1958, by William F. Grove.

Witness my hand and official seal.

My commission expires
My Commission expires June 19, 1961

Notary Public

WARRANTY DEED.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

The within deed is accepted on behalf of the United States as of August 8, 1958, under the authority contained in the Interior Department Appropriation Act, 1957 (70 Stat. 257) (Acct. 347 Water Rights) and the act of August 24, 1949 (63 Stat. 826), and delegated by section 7 of Secretary's Order 2640, dated June 11, 1951 (16 F. R. 5846), as amended by Amendment 2, dated January 10, 1952 (17 F. R. 482).

Jackson E. Price
Assistant Director
National Park Service

COMPARED

744299

STATE OF COLORADO]
COUNTY OF LARIMER] ss.
I hereby certify that this instrument was filed for record in my office at 4:20 o'clock P. M., JUN 3 1958, 19 ---, and is duly recorded in book 429 R., Page 223.

---, Recorder
By ---, Deputy

JUN 3 '58 5989 $0001.25 M D

Supt Rocky Mtn Natl Park
Estes Park, Colo

08-29-1957: quit claim deed: baldwin ditch

Recorded AUG 30 1957 at 3:30 o'clock M BOOK 1051 PAGE 67

Reception No. 232828 G. Marion Brafford, Recorder

No. 3457 QUIT-CLAIM DEED Printed and for sale by The W. H. Kistler Stationery Co., Denver

Reception No.

QUIT CLAIM DEED

TO

Filed for Record at o'clock

M. A. D. 19

Clerk and Recorder.

This Deed, Made this 29th day of August in the year of our Lord one thousand nine hundred and fifty seven, BETWEEN William F. Grove of the County of Larimer and State of Colorado, of the first part, and The United States of America and/or its assigns ~~of the County of and State of Colorado~~, of the second part,

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Ten Dollars and other valuable considerations, ~~DOLLARS,~~ to the said party of the first part in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has remised, released, sold, conveyed and QUIT-CLAIMED, and by these presents does remise, release, sell, convey and QUIT-CLAIM unto the said party of the second part, its heirs, successors and assigns forever, all the right, title, interest, claim and demand which the said party of the first part has in and to the following described ditch right-of-way situate, lying and being in the County of Larimer and State of Colorado, to-wit:

All of the right-of-way of the Baldwin Ditch across that part of the South one-half of Section 27, Township 5 North, Range 73 West of the 6th Principal Meridian, lying South of the South boundary of the High Drive Road.

TO HAVE AND TO HOLD THE SAME, Together with all and singular the appurtenances and privileges thereunto belonging or in anywise thereunto appertaining, and all the estate, right, title, interest and claim whatsoever, of the said party of the first part, either in law or equity, to the only proper use, benefit and behoof of the said party of the second part, its heirs and assigns forever.

IN WITNESS WHEREOF, The said party of the first part has hereunto set his hand and seal the day and year first above written.

Signed, Sealed and Delivered in the Presence of

William F. Grove (SEAL)
William F. Grove

.....(SEAL)

.....(SEAL)

.....(SEAL)

STATE OF COLORADO, } ss.
County of Larimer }

The foregoing instrument was acknowledged before me this 29th day of August A. D., 1957, by William F. Grove.

My commission expires June 19, 1961

Witness my hand and official seal.

Ray Lumphrey
Notary Public.

*Note: If acknowledged by natural person or persons insert name or names, if by person acting in representative or official capacity, or as attorney-in-fact, then insert name of person as executor, attorney-in-fact, or other capacity or description; if by officer of corporation, then insert name of such officer or officers, as the president or other officers of such corporation, naming it.

BALDWIN DITCH

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

The within deed is accepted on behalf of the United States as of August 8, 1958, under the authority contained in the Interior Department Appropriation Act, 1957 (70 Stat. 257) (Acct.347 Water Rights) and the act of August 24, 1949 (63 Stat.826), and delegated by section 7 of Secretary's Order 2640, dated June 11, 1951 (16 F. R. 5846), as amended by Amendment 2, dated January 10, 1952 (17 F. R. 482).

Jackson S. Price

Assistant Director,
National Park Service

No. 732828

QUIT-CLAIM DEED

William F. Grove

TO

United States of America

STATE OF COLORADO, } ss.
County of Larimer }

I hereby certify that this instrument was filed for record in my office at 3:30 P. M. AUG 30 1957
and is duly recorded in book 467
page 62

Clerk and Recorder.

By Deputy.

Fees, $

Return to
Superintendent
Rocky Mountain National Park
Estes Park, Colorado.

THE W. H. KISTLER STATIONERY CO., DENVER

$0001.25=A 8 11 1 8

Other Supporting Information

06-15-1966: memorandum to supervisory hydraulic engineer from chief of park maintenance regarding water-estes park and hondi

OPTIONAL FORM NO. 10
5010-103

UNITED STATES GOVERNMENT

Memorandum

TO : Supervisory Hydraulic Engineer, DCSSC DATE: June 15, 1966

FROM : Chief of Park Maintenance, Rocky Mountain

SUBJECT: Water - Estes Park and Hondius Beaver Pipeline

Attached are the letters and memos which we were able to locate in our files.

Forrest O. Beardmore

11-18-1965: memorandum to regional director from superintendent regarding study of water rights

Mr. Lees

L54
WR 46

November 18, 1965

Memorandum

To: Regional Director, Midwest Region

From: Superintendent, Rocky Mountain

Subject: Study of water rights

This has further reference to my memorandum of August 16, 1965, and your reply of October 8, concerning the possibility of the Town of Estes Park obtaining additional water from the Park. The most recent correspondence with the mayor is contained in the enclosed copies of letters we have exchanged.

The mayor has indicated a need for two second feet from Glacier Creek and two second feet from Fall River.

Members of the Park staff are attempting to make an inventory of water rights, and I hope that this material will be completed this winter. In the meantime, in response to the mayor's request, we have tabulated adjudicated domestic water rights in the Glacier Creek drainage, Big Thompson drainage, Beaver Creek drainage, Fall River drainage, and copies are attached. A tabulation of adjudicated irrigation rights have also been tabulated on these same drainages.

It would appear that the only surplus domestic water would be the Baldwin Ditch, 1.0 CFS, Docket #46, located near the headquarters utility area. In the Fall River drainage, possibly .243 CFS could be considered surplus to our needs.

In a review of the irrigation rights, in the above drainages, there appears to be a considerable surplus.

This brings me to the pertinent questions below:

domestic has first priority

1. Is there a legal difference between giving a permit for water use for irrigation purposes to an outside government body as compared to the same privilege for domestic use? I ask this question because permits are now in force from this Park to the Recreation Districts of Estes Park and Grand Lake.

2. Can adjudicated irrigation rights be converted to domestic rights, should we have a surplus of irrigation water? Can we authorize the Town of Estes Park to use this water for domestic purposes?

I would like an answer to these questions. I have not consulted with Mr. Eynon of the Solicitor's Office in Denver on these specific questions, thinking that you might prefer discussing it with Mr. Cook in your office, or someone in the Director's Office. However, please let me know if I should contact Mr. Eynon, who is considered very conversant on water rights.

We have not yet discussed with Mr. William Grove the Hondius-Beaver pipe line, but we will in the near future. I do not see that this system would provide much additional water for the Town, even if we can work out a satisfactory arrangement with Mr. Grove. After reading a lot of correspondence in the files, and opinions of many people about this system, it appears that we have a moral obligation to continue some sort of plan for the High Drive people to obtain water from this source or work out a suitable alternate. This we will pursue with Mr. Grove.

In the meantime, we would like to obtain answers to the question above on conversion of irrigation rights to domestic rights.

Former U. S. Commissioner Wayne Hackett seems to have considerable knowledge about the water rights in this Park, and continues to have an interest. I understand that he has discussed the water situation with Director Hartzog and Congressman Aspinall in the past year. Although I have not personally discussed water matters with Mr. Hackett, I have concluded that maybe he is fairly conversant about our local situation. I plan to consult him in the near future in an effort to get clarification on some questions of local rights.

In view of the Director's promise to Mayor Graves that I would follow through on their discussion involving the request by the Town for additional water, it is urgent that we resolve these questions as soon as possible. Your continued assistance and advice will be appreciated.

GBLiles:hsk

Granville B. Liles

In duplicate

Enclosures 4

154-GEL

July 17, 1959

Memorandum

To: Regional Director, Region Two

From: Assistant Chief, Water Resources Section

Subject: Conversion of Alien Water Right No. 9 to Water Right Docket No. 46, Rocky Mountain

Attached is the material for the section in the present Alien Water Right Folder No. 9 marked Federal Acquisition. On the main tab, we are crossing out "Alien Water Right No. 9" and substituting "Water Right Docket No. 46" and suggest this be done to the field copies. This docket number may indicate a skip in the chronological order, but we have some folders for undistributed dockets which would account for this.

done –

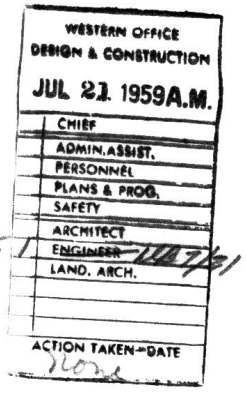
There is also attached a revised Index for this Docket with all of the items shown that are in our folder. WODC likely has only a part of these items as indicated by the transmittal memorandum of November 5, 1957, which states that much of the decree correspondence will not be needed in that field folder.

SIGNED

Gordon W. Robertson
Assistant Chief, Water Resources Section

Attachment

Copy to: Superintendent, Rocky Mountain, w/c attachment
Chief, WODC (2), w/c attachment



acty

154-L

March 5, 1958

Memorandum

To: Regional Director, Region Four

From: Chief, Water Resources Section

Subject: Baldwin Ditch, Alien Water Right 9, Rocky Mountain

With copy of this memorandum we are sending WODC copies of the instruments relating to the protest of water rights for the Baldwin Ditch, and the divider which should be filed just above Filing 15602, in your assembly of the subject alien water right. The copy of the decreed Domestic Priority No. 6, Ditch No. 7, should then fall above the divider. This makes all assemblies the same.

Also being distributed to all offices are the following dividers which now appear essential:

1. Water Claim, which should be inserted just above Filing 15602. This section might also include a copy of the written statement filed with the court, if we have reason to obtain it.

2. Water Right Decree, which should be filed above the copy of the aforementioned decree.

3. Federal Acquisition, which should be filed above the preceding divider. The contents of this section are still to be provided.

We are deferring the preparation of an assembly of Docket 13 for WODC. The contents are gradually being transferred to other assemblies, and what will ultimately consitute the assembly can be determined better at a later date. There seems to be nothing of vital importance to that office at this time.

WESTERN OFFICE
DESIGN & CONSTRUCTIC
MAR 10 1958 A.M
CHIEF
ADMIN.ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE
none

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Attachments - Dividers

Copy to: Superintendent, Rocky Mountain, with dividers
Chief, WODC, with attachments

L54-L

WESTERN OFFICE
DESIGN & CONSTRUCTI
JAN 27 1958A.
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
2 ENGINEER
LAND. ARCH.
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ACTION TAKEN—DAT

January 22, 1958

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water Rights, Beaver Creek, Dockets 4 and 28, and Alien Water Rights 9 and 61, Rocky Mountain

Your copies are attached of the deed to part of the Hondius-Beaver Pipeline from Mrs. Hondius to Mr. John M. Carmack, being entry no. 16 in the abstract of title to Tract 1,000 with the deed from Mrs. Hondius, and of Special Use Permit 14-10-235-275, for addition to subject Docket 4. Entry no. 16 should be filed at the top of contents of bottom section of the docket, on top of the copy of Special Use Permit issued to Mr. Hondius in 1932. The Special Use Permit should be filed above Special Use Permit No. I-35np-303 of February 7, 1952, to Mr. Grove in the top section of the docket. Similar copies are being sent to the Superintendent. An assembly of the significant parts of the docket is being made for WODC.

These instruments were copies in connection with the review of deed of September 12, 1957, by which Mr. William F. Grove has conveyed his interest in portion of the pipeline lying south of High Drive in S½ Sections 27 and 28, whose acceptance is the subject of separate correspondence.

With the acceptance of Mr. Grove's deed to the Baldwin Ditch (Alien Water Right 9) in compliance with the option accepted on January 9, the United States will have title to all water of Beaver Creek except ~~decreed~~ more decreed to Griffith's Beaver Creek Ditch as described in my Analysis of Beaver Creek Water Supply and Demand of January 27, 1945, of which extra copies have recently been sent to the Superintendent and WODC. Mr. Griffith's ditch was only decreed rights to 0.62 sec.ft. for the irrigation of 12 acres, under a priority junior to that of the Baldwin Ditch and for a purpose which is subordinate to the domestic uses by the Baldwin and Hondius-Beaver Pipeline.

It has come to my attention that Park development plans call for the future use of Thompson River water for the utility area and new High Drive Entrance, and that some water is now being obtained from the Moraine Museum water supply for the utility area. The explanation was offered that you or the Superintendent do not

wish to become entangled in future replacement of the Hondius-Beaver Pipeline with a capacity to also serve Mr. Grove's customers.

With all the rights now owned by the United States for the Hupps and Beaver Ditches and Hondius-Beaver Pipeline, pending acquisition of those in the Baldwin Ditch, it would appear that a gravity system from Beaver Creek should be more satisfactory than a pump system from the Thompson River. I am quite certain that there is ample, or even surplus water both physically and legally. I have also obtained Mr. Sander's confirmation that the Park Service can segregate the diversions for the United States and Mr. Grove's customers at any point between diversion and place of use.

There is, of course, the situation that the United States will still have title to the portions of the Hondius-Beaver Pipeline on Federal land which Mr. Grove might independently use. From the contracts of 1910, 1921 and 1931 of Mr. Hondius with Sinclair, Blackmar, and O. P. Low, there is a suggestion that Mr. Grove's interests might revert partially to the consumers, together with some claim to water rights. Mr. Sanders did not consider that our records were sufficient for consideration of potential reversion of interests to the consumers. However, the quantity of water involved in any appurtenant water rights would be small compared with the total rights of the United States.

Of course, in order to divert the Federal water in quantities other than as decreed at the headgates of all four Federal conduits, or to use the irrigation rights in the Hupps and Beaver Ditches for domestic purposes, it would be necessary to obtain decrees for changes in points of diversion and purpose of use. However, the Park Service can reduce its authorized diversions by any one or more of the conduits if necessary to maintain the quantity of water authorized to be diverted by the others.

These matters should be fully considered before any further water development is adopted for the Utility and High Drive Entrance area. We should also be advised as to how you do propose to use the Beaver Creek water available under Federal water rights, when some decision is reached.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: ~~Superintendent~~, Rocky Mountain, w/c two attachments
Chief, WODC

L54-L

WESTERN OFFICE
DESIGN & CONSTRUCTIO
DEC 5 1957A.M
CHIEF
ADMIN.ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE
none

December 2, 1957

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Baldwin Ditch - Alien Water Right No. 9 - Filing 15602, Rocky Mountain

The memorandum of November 14 from Mr. P. E. Smith of WODC, to us, was evidently written before receipt of my memorandum of November 5 with a folder for Alien Water Right No. 9, containing part of the records of the Baldwin Ditch rights under Filing 15602 and Decreed Priority No. 6, Ditch No. 7, for not to exceed 1.0 sec.ft. of the water of Beaver Creek.

We are aware that WODC does not have copies of all alien water right assemblies at Rocky Mountain, or most other areas. In general, it would be a needless clutter of its files to have all such assemblies, particularly those which do not have any bearing on area development, and those which appear to have been abandoned. At least for the time being, we should rely on the Superintendent or your staff, as suggested a year or so ago, to advise WODC and this office when an alien water right may affect proposed Federal developments and water rights.

Alien Water Right No. 9 does have two values to WODC: (1) as it may restrict the flow of Beaver Creek for senior appropriators; and (2) as an encumbrance on the land now being acquired for highway purposes. Attached is an extra copy of my analysis of Beaver Creek Water Supply and Demand of January 27, 1945. Presumably there is a copy in your office, and one in the Park, and this can be forwarded to WODC. Before forwarding, however, you should be sure that there are copies in your office and the Park. We have two more copies of the narrative, and can complete the supporting charts and maps if necessary for additional copies of the report.

The matter of water rights and conduit rights-of-way now being acquired with the new High Drive Road right-of-way is the subject of separate correspondence, but in reviewing our files we find no alien water right assembly for Griffith's "Beaver Creek Ditch", or copy of the decree which designates that ditch as No. 63 with Priority No. 97 of June 30, 1904. With copies of this memorandum to Superintendent,

and WODC, we are distributing a folder for Alien Water Right 61 with prints of Drawing 6950 and my memorandum of July 19, 1939, to Joseph E. Taylor. We will have to search correspondence, or purchase certain records from the District Court to complete the record.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Attachments 2

Copy to: Superintendent, Rocky Mountain, with docket folder
Chief, WODC, with docket folder

11-14-1957: memorandum to director from supervisory engineer regarding baldwin ditch - alien water right no. 9 - filing 15602

L Sh Crowley Smith

November 14, 1957

Memorandum

To: Director

From: Supervisory Engineer, WOOC

Subject: Baldwin Ditch - Alien Water Right No. 9 - Filing 15602, Rocky Mountain

Referring to Mr. Dunn's November 5 memorandum on the subject to the Regional Director, Region Two, this Office has Alien Water Right Nos. 18 and 19 and Water Right Dockets No. 19, 25, 26, 27, 29, 30, 31, etc., but nothing numbered below 18 for Rocky Mountain National Park.

(Sgd) P. E. Smith

P. E. Smith
Supervisory Engineer

In duplicate

Copy to: Regional Director, Region Two
Superintendent, Rocky Mountain

HLCrowley:as

FILE COPY

154-L

WESTERN OFFICE
DESIGN & CONSTRUCTION
NOV 8 1957 A.M.
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE

November 5, 1957

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Baldwin Ditch - Alien Water Right No. 9 - Filing 15602, Rocky Mountain

You and the Superintendent now have folders for Alien Water Right No. 9, containing the Filing 15602 for the Baldwin Ditch, my statement of June 4, 1946, concerning the decree, and an "outline" of the contents. The Superintendent may have a duplicate of the assembly due to the distribution of "original" assemblies on July 9, 1951. The first assembly was distributed by memorandum of October 1, 1946.

You and the Superintendent also have assemblies of Docket No. 13, formerly Deed 63, concerning the general features of the general adjudication, Case 10077, of 1939-1940. The second subdivision from the bottom of this Docket is designated as Baldwin Ditch Protest, and contains certain records used in my testimony--all above the first subdivision for the "Griffith Ditch Protest". A copy of the decree for the Baldwin Ditch, pages 119-122, appears near the middle of contents under the third subdivision of the Docket, designated as "General Adjudication of National Park Service Claims".

With memorandum of October 18 from you, we have received the Quit Claim deed to all or most of the Baldwin Ditch Right-of-way. In order to evaluate the Federal interest, we are transferring the contents of "Baldwin Ditch Protest", including the subdivision divider from Docket 13 to Alien Water Right 9, and placing them in the same order just above the copy of Filing 15602. The copy of the filing is the bottom instrument in Alien Water Right No. 9. We are also transferring the Baldwin Ditch (Domestic Priority No. 6, Ditch No. 7) from Docket No. 13 to Alien Water Right No. 9, and placing it just above the subdivision divider "Baldwin Ditch Protest". We are removing and destroying my statement of June 4, 1946, which was in the Alien Water Right assembly. At the top of the Ditch Decree, under "(Domestic Priority No. 6, Ditch No. 7)", we have lettered in "Decree of November 14, 1939 - Case 10077". In the table of contents of Docket 13 I have drawn a diagonal line through "Baldwin Ditch" and following contents, and written in "See Alien Water Right No. 9".

According to our memorandum of April 10, 1953, concerning previous transfers from Docket 13, there appears to have been no distribution of these dockets to WODC. If the Superintendent still has two assemblies of Docket 13 it is requested that the earlier assembly be sent to WODC. We are also sending WODC a copy of the memorandum of April 10, 1953, concerning previous transfers to Dockets 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 24, and a folder for Alien Water Right No. 9 which contains the photostat negative of Filing 15602. It is then requested by copy of this memorandum that WODC advise the office of the extent to which it has all of the listed assemblies. I do not think WODC needs all records of the adjudication but it should have the assembly folders with copies of the filings and decrees.

I have referred your memorandum of October 18 to the Chief of Lands for further consideration of the Quit Claim Deeds for rights-of-way for the Baldwin Ditch and Hondius-Beaver Pipeline, and those matters will be covered by separate memoranda. My first non-legal reaction is that the grants of easements are only part of the assignments which should be made, and that we should have better definition of what Mr. Grove still retains, and how his water rights and obligations still constitute encumberances on the land now being acquired for the new road, and on diversions which conflict with those of the Park Service from Beaver Creek.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Rocky Mountain
Chief, WODC, with Alien Water Right No. 9 and copy of memorandum of April 10, 1953

Starts with

WODC has Alien WR - No. 18 and 19
WR - no. 19, 25, 26, 27, 29, 30, 31 etc

04-10-1953: memorandum to regional director from chief regarding revision of water right dockets,

In reply refer to:
LSh ROMO-L

April 10, 1953

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Branch

Subject: Revision of Water Right Dockets, Rocky Mountain

We have had a series of water right dockets, Nos. 2 to 12, and 24, which include little more than the filed maps of Federal water systems in Water District No. 4, and Docket No. 13 covering the decree. We also have a series of alien water rights which now relate to water systems of private landowners, and some water systems which have been, or will be, acquired by the United States in the land acquisition program. In order to find the records more easily, I am transferring part of the data from Docket No. 13 to the individual water system dockets, to produce the following assemblies, and suggest that you and Mr. Canfield do the same. (The pages of decree will give some clue to order of earlier statements of claim, bothof which are to be moved.)

Docket No. 2 - Brimwood Water Systems

1. Map - now in Docket 2.
2. Statement of claim for Brimwood Ditches 1-5 (from Docket 13).
3. Decree for said ditches (pages 84-87) (from Docket 13).
4. Attached index tab reading "Brimwood Ditches 1-5".
5. Statement of claim for Brimwood Pipe Line (from Docket 13).
6. Decree for said pipe line (from Docket 13).
7. Attached index tab reading "Brimwood Pipe Line".
8. Statement for cross reference to Docket 13 (attached).

Docket No. 3 - Moraine Museum Water System

1 & 2. Maps - now in docket.
3. Statement of claim for said water system (from under Mr. Allen's letter of July 8, 1939, to Attorney General in Docket 13).
4. Decree for said pipe line (pages 131-134) from Docket 13.
5. Statement for cross reference to Docket 13 (attached).

Docket No. 4 - Hondius-Beaver Pipe Line

1. Map of Hondius Pipe Line and Adjoining Subdivisions (second map from bottom in present Docket 4).
2. Filing 14283 by Peter Hondius (former bottom map in Docket 4).
3. Filing 15370 by Peter Hondius (former third map from bottom in Docket 4).
4. My memorandum of March 24, 1952 (formerly just above item 3).
5. Photostat copies of deeds (entire bottom section from Docket 13 except index tab on top reading "Assignment of Hondius Title").
6. Air mail memorandum of February 4, 1939, to Director from Acting Superintendent McLaughlin (bottom instrument under Hondius-Beaver Pipe Line Details in Docket 13).
7. Agreement of December 2,1910, between Hondius and Sinclair et al. (from just above item 6 in Docket 13).
8. Supplemental agreement of November 4, 1931, between Hondius and Low (item just above item 7 in Docket 13).
9. Sample contract between Hondius and water users (just above item 8 in Docket 13).
10. Special use permit to Peter Hondius from February 1932 to February 1933, with automatic renewals for 20 years (just above item 9 in Docket 13).
11. Index tab reading "Assignment of Hondius Title" (top of bottom section of Docket 13).
12. Filing 16549 by United States (sheets 5 and 6 of NP-RM-6983) (formerly above aforesaid maps in Docket 4).
13. Profile and Capacity Study of said pipe line - (sheet 4 of NP-RM-6983 now in Docket 4).
14. Statement of claim filed with court (from Docket 13).
15. Decree for said pipe line, pages 135-139 (from Docket 13).
16. Attached index tab reading "Adjudication of Rights".
17. Another copy of special use permit to Peter Hondius from February 1932 to February 1933 (from section of Docket 13 under Hondius-Beaver Pipe Line Details).

18. Letter to Senator Adams of November 3, 1941 from Mrs. Hondius, with copy of aforesaid special use permit (from same section of Docket 13).
19. Copy of assignment to John M. Carmack from Mrs. Hondius of May 1, 1945 (from same section of Docket No. 13).
20. Copy of assignment to William F. Grove from John M. Carmack (from same section of Docket 13).
21. Special Use Permit I-35np-303 to authorize William F. Grove to operate pipe line from January 1, 1952, to December 31, 1961 (from same section of Docket 13).
22. Attached index tab reading "Alien Interests and Authorized Use".
23. Statement for cross reference to Docket 13 (attached). (Throw away old index tab reading "Hondius-Beaver Pipe Line Details).

Docket No. 5 - Sprague's Water Systems

1. Filing No. 16527 (now in Docket 5).
2. Statement of claim for Sprague Ditch (from Docket 13).
3. Decree for Sprague Ditch (pages 206 and 207) (from Docket 13).
4. Attached index tab reading "Sprague Ditch - Power".
5. Statement of claim for Sprague Pipe Line (from Docket 13).
6. Decree for Sprague Pipe Line, pages 140-141 (from Docket 13).
7. Attached index tab reading "Sprague Pipe Line - Domestic".
8. Statement for cross reference to Docket 13 (attached).

Docket No. 6 - Hollowell Park Water Systems

1. Filing 16526 in 2 sheets (now in Docket 6).
2. Statement of claim for Hollowell Park Ditch No. 2 (from Docket 13).
3. Decree for Hollowell Park Ditch No. 2, pages 112-114 (from Docket 13).
4. Attached index tab reading "Hollowell Park Ditch No. 2".
5. Statement of claim for Hollowell Park Pipe Lines 1 and 2 (from Docket 13).

6. Decree for Hollowell Park Pipe Lines 1 and 2, pages 153-156 (from Docket 13).
7. Attached index tab reading "Hollowell Park Pipe Lines 1 & 2".
8. Statement for cross reference to Docket 13 (attached).

Docket No. 7 - Owls Pipe Lines 1 and 2

1. Filing 16529 (now in Docket 7).
2. Statement of claim for Owls Pipe Lines 1 and 2 (from Docket 13).
3. Decree for Owls Pipe Lines 1 and 2, pages 161-163 (from Docket 13).
4. Statement for cross reference to Docket 13 (attached).

Docket No. 8 - Tuxedo Park Pipe Line

1. Filing 16558 (now in Docket 8).
2. Statement of claim for Tuxedo Park Pipe Line (from Docket 13).
3. Decree for Tuxedo Park Pipe Line, pages 173-174 (from Docket 13).
4. Statement for cross reference to Docket 13 (attached).

Docket No. 9 - Fall River Entrance Pipe Line (and Alien Sunny Slope Pipe Line) (Please print "Sunny Slope Pipe Line" under "Fall River Entrance Pipe Line" on tab of folder.)

1. Filing 15042.
2. Statement (attached).
3. Decree for Sunny Slope Pipe Line, pages 179-181 (from Docket 13).
4. Index tab reading "Part I - Sunny Slope Pipe Line" (attached). (Supplemental records concerning Snyder deed will be supplied in a week or so.)
5. Filing 16528 (now in Docket 9).
6. Statement of claim for Fall River Entrance Pipe Line (from Docket 13).
7. Conditional decree for Fall River Entrance Pipe Line, pages 182-186 (from Docket 13).
8. Petition for final decree for Fall River Entrance Pipe Line (from section of Docket 13 reading "Supplemental Decree to make Conditional Decrees Final").
9. Final decree for Fall River Entrance Pipe Line (from section of Docket 13 reading "Supplemental Decree to make Conditional Decrees Final").

10. Attached index tab reading "Part II - Fall River Entrance Pipe Line".
11. Statement for cross reference to Docket 13 (attached).

Docket No. 10 - Bear Lake Pipe Line No. 2

1. Filing 16551 (no in Docket 10).
2. Statement of claim for Bear Lake Pipe Line No. 2 (from Docket 13).
3. Conditional decree for Bear Lake Pipe Line No. 2, pages 197-199 (from Docket 13).
4. Petition for final decree (from section of Docket 13 reading "Supplemental Decree to make Conditional Rights Final").
5. Final decree (from section of Docket 13 reading "Supplemental Decree to make Conditional Rights Final").
   (I am leaving the letters of October 2 and 15 under said index tab for Supplemental Decree . . . . . in Docket 13.)
6. Statement for cross reference to Docket 13 (attached).

Docket No. 11 - Horseshoe Fish Pond Pipe Line

1. Filing 16553 (now in Docket 11).
2. Statement of claim for Horseshoe Fish Pond Pipe Line (from Docket 13).
3. Decree for said pipe line, pages 210-211 (from Docket 13).
4. Statement for cross reference to Docket 13 (attached).

Docket No. 12 - Endovalley Fish Pond Pipe Line

1. Filing 16552 (now in Docket 12).
2. Statement of claim for Endovalley Fish Pond Pipe Line (from Docket 13).
3. Decree for said pipe line, pages 212-213 (from Docket 13).
4. Statement for cross reference to Docket 13 (attached).

Docket No. 24 - Rocky Mountain Boys Camp Pipe Line

1. Print of map of Rocky Mountain Boys Camp Pipe Line (attached).
2. Copy of letter of January 25, 1952, to Mr. Dunn from Mr. Owens. (Now in Docket 24).
3. Statement of claim for Rocky Mountain Boys Camp Pipe Line (from Docket 13).
4. Decree for Rocky Mountain Boys Camp Pipe Line (from Docket 13).
5. Attached index tab reading "Water Rights Perfected by Primrose".
6. Copy of Warranty Deed from Primrose to Bowen-Wood. (1 copy in Docket 24 and 1 copy in section of Docket 13 reading "Assignment of Rocky Mountain Boys Camp Pipe Line by Primrose". Destroy 1 copy.)
7. Copy of memorandum of November 28, 1951, to Regional Director from Superintendent. (2 copies as above. Destroy 1 copy.)
8. Photostat copy of deed from Primrose to United States (from same section of Docket 13).
9. Print of map (same as item 1) (from S.U.P. in Docket 24, extra attached).
10. Special Use Permit 1-35np-297 (from aforesaid section of Docket 13; destroy one copy).
    (This eliminates all contents of said section of Docket 13, and index tab should be destroyed. In addition, destroy my memo of March 24, 1952, now in Docket 24, which is no longer correct cross reference.)
11. Attached index tab reading "Assignment of rights to United States and Bowen-Woods Partnership.
12. Statement for cross reference to Docket 13.

This revamping will greatly simplify future reference to the specific rights, and save a great deal of time now spent pawing through Docket 13. I believe the hour, or such a matter, spent in making the changes in your office and at the Park will be well repaid.

As a result of recent land acquisition, there are doubtless alien water right assemblies to convert to dockets. For reference, see the total list of decrees near the middle of the section on

General Adjudication of National Park Service Claims in Docket 13. We hope to give some attention to the matter as soon as possible, but will appreciate any information which the Superintendent can supply as a quick reference to lands acquired since 1932 with appurtenant water rights.

(SGD.) A. VAN V. DUNN.
A. van V. Dunn
Chief, Water Resources Branch

In duplicate

Attachments 2

AvanVDunn:sh

12-06-1957: memorandum to chief from regional chief of lands regarding baldwin ditch - alien water right no. 9 - filing 15602

IN REPLY REFER TO:

L54

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Region Two Office
307 Federal Office Building
Omaha 2, Nebraska

Address Reply to:
Regional Director, Region Two
National Park Service

DEC 6 1957

Memorandum

To: Chief, Western Office, Division of Design and Construction

From: Regional Chief of Lands

Subject: Baldwin Ditch - Alien Water Right No. 9 - Filing 15602, Rocky Mountain National Park

Attached is a copy of Mr. Dunn's Analysis of Beaver Creek Water Supply and Demand, Rocky Mountain National Park, of January 27, 1945.

This analysis is forwarded in accordance with instructions contained in the third paragraph of Mr. Dunn's memorandum of December 2, 1957, copy furnished your office direct.

John F. Aiton
Regional Chief of Lands

Attachment

Copy to: Director
Supt., Rocky Mountain NP

WESTERN OFFICE
DESIGN & CONSTRUCTION
DEC 9 1957 A.M.

CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE
None

12/2/9

10-23
(May 1929)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

---------- NATIONAL PARK

Extra for WODC
three Reg Two @

FILE NO.

ANALYSIS OF BEAVER CREEK
WATER SUPPLY AND DEMAND
ROCKY MOUNTAIN NATIONAL PARK

By

A. van V. Dunn,
Chief, Water Rights Division.

IMPORTANT

This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge.
All Files should be returned promptly to the File Room.
Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER,
Director.

U. S. GOVERNMENT PRINTING OFFICE 6—7410

Water Rights Division,
Branch of Engineering,
Merchandise Mart,
Chicago, Illinois,
January 27, 1945.

January 27, 1945.

Analysis of Beaver Creek Water Supply and Demand Rocky Mountain National Park

by

A. van V. Dunn,
Chief, Water Rights Division.

Introductory Explanation

The Chief Counsel has rendered an opinion, by memorandum of January 9, 1945, regarding the relative title and other interests of the United States and Mrs. Eleanor Hondius, successor to Pieter Hondius, in the Hondius-Beaver Pipe Line and appurtenant water rights at Rocky Mountain National Park. To make a practical application, it is necessary to determine the availability of water, the rights to divert that water, and the capacity of the pipe line for diversion and conveyance of that water. The following discussion is intended to provide as much of that data as is available, and is largely a summary of previous reports and correspondence.

Estimate of Beaver Creek Flow

From a few measurements of Beaver Creek flow and the official records for the Thompson River just south of the town of Estes Park, it was determined that Beaver Creek had approximately 1% of the flow of the Thompson River when preparing data for the adjudication of the transfer of part of Decreed Priority No. 58 in 1938. The approximate flow of Beaver Creek from May to September in the years 1931 to 1934, as so estimated, is shown on accompanying drawing NP-RM-6978. This record includes some of the driest years on record, and suggests a possible minimum flow of 0.5 second-foot in September but a relatively sure flow of 1.0 second-foot, or better, when water is most needed in July and August.

Beaver Creek Water Rights in Order of Priority

Accompanying drawing NP-RM-6950 shows all water systems on Beaver Creek. The owners of these systems are entitled to divert water as follows:

1. Hupps and Beaver Ditches of United States -- 94.389 AF/yr. at rate not to exceed 2.848 sec. ft., for irrigation with Irrigation Priority No. 58 as of May 5, 1876. A uniform diversion of 94.389 AF over a 120-day season, from mid-May to mid-September will be at a rate of only 0.397 second-foot, however.

2. The Baldwin Ditch of Ross Seybold was awarded a Domestic Priority No. 6 of December 31, 1899, but is enjoined from exercising the priority to the detriment of the Hondius-Beaver Pipe Line until a more efficient and sanitary system is installed. This priority may be disregarded at this time, but becomes vital in long-time planning.

3. The Beaver Ditch of A. Griffith (not to be confused with Beaver Ditch of the United States) -- 0.62 second-foot for irrigation of 12 acres with Irrigation Priority No. 97 of June 30, 1904. The local duty of water is 4 acre-feet per acre per annum. Therefore, Mr. Griffith is entitled to only 48 AF/yr. and will be subject to court action for non-beneficial diversions if he takes more. A uniform flow, for 120 days, at 0.202 second-foot will produce 48 AF.

4. The Hondius-Beaver Pipe Line, including all interests of the United States and Mrs. Hondius, was awarded Domestic Priority No. 12 of September 1, 1906, for the diversion of 0.33 second-foot. This is the maximum rate, to be further analyzed later.

5. Baldwin Ditch of Ross Seybold -- 1.0 second-foot under Domestic Priority No. 6 subject to prior satisfaction of rights for Hondius-Beaver Pipe Line until an efficient and sanitary system is installed. This system serves only approximately 67% of the population served by the Hondius-Beaver Pipe Line. Therefore, with an efficient system the demand should fall from 1.0 second-foot to approximately 0.22 second-foot.

6. A ditch, shown as West Ditch on drawing NP-RM-6950, was built by Mr. Hondius with diversion just above the headgate of the Hondius-Beaver Pipe Line, but no claim has ever been filed or adjudicated for water. The United States acquired this ditch as an appurtenance to the land conveyed by Mr. Hondius. This ditch must never be operated except after all other rights are satisfied, which means it can never be operated when it would be beneficial unless the United States transfers part of the federal rights to it, which are now assigned to other water systems.

Griffith's Beaver Ditch and the Baldwin Ditch profit from the return flow of the federally owned Hupps and Beaver Ditches, but there is also an indication from the flow measurements shown on drawing NP-RM-6950, that much of the Beaver Creek flow is below the surface. As none of the diversions include adequate dams to catch underground flow, there is no justification for considering such matters here.

Monthly Variations in Water Demand

Decreed water rights determine the maximum quantity which may be diverted but the decrees also specify that the quantity must not exceed that which can be used beneficially for the decreed purpose. Beneficial needs for irrigation near Estes Park are limited to 4 acre-feet per acre per annum and the portion of that water applied from month to month will depend on the stage of crop growth. Domestic demand is the product of the per capita consumption and the population, and the population varies from month to month. Mr. Griffith's Beaver Ditch was decreed a right to water for the irrigation of 12 acres and the maximum rate of application will be only approximately one-third of the 0.62 second-foot which was decreed, if the irrigation is limited to the beneficial need. The federal rights to divert by the Hupps and Beaver Ditches are limited to 94.389 acre-feet per year, which is far below the 4 acre-feet per acre duty because part of the right has been transferred but none of the original area has been withdrawn from irrigation. Maximum Park attendance and occupancy of the cottages served by the Hondius-Beaver Pipe Line and the Baldwin Ditch occur in August, and the Park attendance and cottage occupancy of the other months bear approximately the same ratio to the attendance and occupancy of that peak month.

No record is available for the monthly irrigation demand in the vicinity of Estes Park, so the data for the Grand Valley Canal on the opposite side of the Park are used. Drawing NP-RM-6981, sheet 2, includes a chart of the monthly variation in attendance at Rocky Mountain National Park which will be suitable for estimating proportionate domestic water demands. The following table gives the monthly diversions for the various water systems, based on the maximum beneficial use of water under the various decreed rights.

Monthly Decreed Water Use from Beaver Creek

Month	Hupp & Beaver Ditches	Griffith's Beaver Ditch	Baldwin Ditch	Hondius-Beaver Pipe Line	Total
May	0.27 s.f.	0.14 s.f.	0.02 s.f.	0.03 s.f.	0.46 s.f.
June	0.35 s.f.	0.18 s.f.	0.12 s.f.	0.17 s.f.	0.82 s.f.
July	0.40 s.f.	0.20 s.f.	0.18 s.f.	0.27 s.f.	1.05 s.f.
August	0.28 s.f.	0.14 s.f.	0.22 s.f.	0.33 s.f.	0.97 s.f.
September	0.25 s.f.	0.13 s.f.	0.08 s.f.	0.12 s.f.	0.58 s.f.

Maximum Water Demand

The sum of the decreed rates of diversion is 4.798 second-feet while the maximum average monthly beneficial demand, from the preceding table, is only 1.05 second-feet in July of each year. It is proper to assume that diversions may reach the decreed rates during July and August for a few days at a time, but there will then be a complementary interval of less than average diversions. The irrigation demands can be handled by having the United States and Mr. Griffith irrigate on alternate days, half weeks, or weeks. The peak domestic demands are nominally controlled by storage. The past tendency has been for all water claimants, including the United States, to divert all the water they can get for fear that the others might construe a lower diversion as an indication of lack of need. A water master is needed to enforce the spirit and terms of the decrees.

Beaver Creek has a small surface channel and a large underground channel through the glacial silts. Most of the summer flow is below the ground and the headworks of the various systems are small and inadequate for the collection of this subsurface flow. Hence, the mere fact that upper appropriators might reduce their diversions does not at the moment mean that the water would be available for the lower appropriators. A consolidated system from near the headgate of the Hondius-Beaver Pipe Line to a point near the Park Utility Area, with a pipe or lined ditch as a conduit, and an adequate diversion works would be much more in harmony with present trends toward conservation, and would probably eliminate most of the present causes of friction between the water users.

Present Capacity of Hondius-Beaver Pipe Line

The decreed right to 0.33 second-foot of water for the Hondius-Beaver Pipe Line is final, but like most municipal rights it was awarded on the basis of ultimate demand rather than past diversions and use. Drawing NP-RM-6985, sheet 4, gives the profile of the pipe line based on the few elevations available when preparing testimony for the adjudication. It shows a diversion capacity of only 0.114 second-foot. Any additional water which has been diverted and used, has come from Spring No. 4 at the distribution reservoir on Buck Creek, and it has not been possible to measure this spring at the time when most needed in August, but Assistant Engineer Loucks found it to be 0.0535 second-foot on April 12, 1939. Adding this to the 0.114 second-foot from other sources, gives a maximum available delivery to the distribution system of 0.168 second-foot. For this analysis this spring (really two springs a few feet apart) will be considered to be nearly dry in August.

It is also possible to obtain an additional capacity of 0.054 second-foot between Springs 2 and 3, and the SE corner of Section 28 by proper manipulation of the lower, or southerly pipe line. Such water would be available only to the National Park Service and only to the extent of spring

flow. The flow of these two springs on April 12, 1939, was roughly 0.05 second-foot. This capacity is too hypothetical to consider here.

Per Capita Water Consumption from Hondius-Beaver Pipe Line limited by Contracts

In March 1939 Mrs. Hondius supplied a list of the contracted water users and the number of known cottages served under each contract. There were 140 cottages at that time. Many of the cottages are high-priced summer homes with accommodations for 8 to 12 people, and nearly all can accommodate at least 6 people. In preparing testimony for the adjudication, therefore, an average population of 5 people per cottage was used, or a total of 700 people demanding water in August. The contracts for water service are specific in prohibiting sprinkling, irrigation, water motors, service to barns and other outhouses, and waste, and defines the use as domestic. Copies of the contract are included in Deed No. 63, and in the assembly of data regarding the Hondius-Beaver Pipe Line from the files on the Solinsky Purchase. By memorandum of January 16, 1940, to Superintendent Canfield, I showed how the contract limited water use to between 51 gallons and 79 gallons per capita. Since the terms of the contracts are not fully enforced the higher value is more probable and fixes the total demand at 55,300 gallons per day at the time of the adjudication in 1939. It happens, too, that this total demand would be the same if the lower rate were used and cottage population were raised from 5 to 8.

Hourly Demand from Hondius-Beaver Pipe Line

There is an hourly fluctuation in water use, but we have no records of measurement for the Hondius-Beaver Pipe Line. In lieu of such records, drawing PG-6975 showing the hourly demand for Middleton, Massachusetts, in 1936 and 1939 is offered. Middleton, it should be noted, had a population approximately double that of the community served by the pipe line, and has some fire protection, but is otherwise quite similar to the case under consideration. Using the same hourly percentages, the hourly demand on the Hondius-Beaver Pipe Line can be estimated. On the basis of contract limitations, the daily demand should be approximately 55,300 gallons, or, if full use is made of the pipe capacity of 0.114 second-foot, the daily use would be 73,680 gallons. The use of 55,300 gallons per day would require 2,337 gallons of storage and result in 16,043 gallons of daily waste. The use of 73,680 gallons per day would require 13,454 gallons of storage and there would be no waste. There is at least as much storage as required for a demand of either 55,000 gallons per day or 73,000 gallons per day, and either demand is reasonable at somewhere between 79 and 105 gallons per capita per day, depending on the accuracy of the population estimate. As a matter of fact, the pipe line probably has enough storage for approximately one day of present peak demand. The estimated hourly drafts are shown in the following table:

Approximate Hourly Water Use of Hondius Beaver Pipe Line

Time	Based on Contract Rates		Using Full Pipe Capacity	
	Demand	Draft From Storage	Demand	Draft From Storage
12-1 A.M.	1,086		1,447	
1-2 A.M.	724		965	
2-3 A.M.	634		845	
3-4 A.M.	634		845	
4-5 A.M.	634		845	
5-6 A.M.	1,810		2,412	
6-7 A.M.	2,941		3,919	849
7-8 A.M.	4,075	1,003	5,920	2,350
8-9 A.M.	3,846	776	5,124	2,054
9-10 A.M.	3,530	460	4,704	1,634
10-11 A.M.	2,896		3,859	789
11-12 A.M.	2,715		3,618	548
12-1 P.M.	2,534		3,376	306
1-2 P.M.	2,896		3,859	789
2-3 P.M.	2,806		3,739	669
3-4 P.M.	2,987		3,980	910
4-5 P.M.	2,444		3,257	187
5-6 P.M.	2,896		3,859	789
6-7 P.M.	3,168	98	4,221	1,151
7-8 P.M.	2,625		3,499	429
8-9 P.M.	2,172		2,894	
9-10 A.M.	1,901		2,533	
10-11 P.M.	1,810		2,412	
11-12 Midnight	1,538		2,049	
Daily Total	55,300	2,337	73,680	13,454
Daily Waste		16,043		0
Hourly Average	2,304 gal.		3,070 gal.	

Surplus Pipe Capacity Which is Temporarily Available for the United States

It is evident from the preceding discussion that little, if any, additional water service can be provided from the Hondius-Beaver Pipe Line until the pipe capacity is increased. There were approximately 18,000 gallons per day available for additional service in August 1939 only to the extent that consumers already under contract could be held to the restricted use specified in those contracts, and this is difficult because there are no meters and all water is sold on the basis of outlets rather than quantity of water. For other months, by reference to aforementioned NP-RM-6981, sheet 2, the following service is available for the case of an August demand of 73,680 gallons per day.

	Water Demand		Water Available for Additional Service
Month	% of August	Quantity	
January	3.0	*	
February	2.5	*	
March	2.5	*	
April	2.2	*	
May	10.0	7,368 gpd	66,312 gpd
June	50.0	36,840 "	36,840 "
July	82.0	60,418 "	13,262 "
August	100.0	73,680 "	0 "
September	35.0	25,788 "	47,892 "
October	9.0	*	
November	2.0	*	
December	2.0	*	

* Contracts do not cover service during these months and pipe line is not designed for such winter use.

Hondius-Beaver Pipe Line Capacity is Not Now Adequate for Additional Contract Service

By memorandum of December 14, 1939, for the Regional Attorney, Acting Superintendent McLaughlin asked: "Does Mr. Dunn with his knowledge of the pipe line . . . believe it possible to authorize Mrs. Hondius to connect more houses or cabins on the present system?" The same question has arisen at various times since that date. The answer has always been that no more water service can be assured until the capacity of the system is increased by larger pipe or more storage, that none of the present consumers should tolerate any attempt by Mrs. Hondius to serve more people in July and August until the additional capacity is provided, and no prospective consumer should be interested in building a summer home which he cannot now occupy in July or August because of water shortage.

Present and Future Allocation
of Water to Land Areas

In spite of the above statement, Mrs. Hondius is obligated, under the contracts with Blackmer, Sinclair and Low, to provide water for all lots in the various subdivisions as they are sold, except as prevented by acts of God. These real estate subdivisions are shown on accompanying drawing NP-RM-6985, sheet 5, and comprise the following approximate acreage, as explained in my memorandum of March 2, 1939, for the Regional Attorney:

Lots sold and improved with 140 cottages -	285 acres
Lots sold but not fully developed -	66 acres
Unsold portions of subdivisions -	156 acres
Portions of subdivisions sold to United States-	159 acres
Total -	664 acres

When estimating future needs for the adjudication, I indicated an average cottage site of 2 acres and that the total privately owned land was only 50% developed. To be liberal it was decided to provide for an ultimate demand of 0.22 second-foot or nearly double the present pipe capacity, to satisfy present and future contracts of Mrs. Hondius.

Federal Quota of Water

On direct proportion of acreage the United States was then estimated to be entitled to approximately 35% of the ultimate quota allocated for Mrs. Hondius' contracts, or 0.075 second-foot, in addition to that needed for private contracts. However, since the United States was both a potential contractee, and a part owner, it did not seem necessary to recognize the drastic limitation of per capita use. It was also decided that the United States would transfer its use to the Utility Area where fire protection and other industrial needs of a small village would be concentrated. Therefore, the federal quota, for adjudication purposes, was increased by the ratio of 80 to 120 gpd per capita, or from 0.075 second-foot to 0.11 second-foot.

From the preceding paragraph the United States is entitled to one of the two following percentages of the decreed right to 0.33 second-foot:

(1) 0.075/0.295 x 0.33 second-foot = 0.0822 second-foot or 53,127 gallons per day by straight proportion of acreage of subdivisions owned.

(2) 0.11/0.33 x 0.33 second-foot = 0.11 second-foot or 71,095 gallons per day, based on the reasoning and testimony used at the adjudication.

By case one, Mrs. Hondius may, after increasing her water system capacity, make additional contracts to cover 160,158 gallons of use per day. By case 2, she may increase contracts to cover 142,190 gallons of use per day. It has already been shown that the existing pipe line is only able to deliver 75,680 gallons per day without Spring No. 4, or 107,935 gallons per day when Spring No. 4 has the flow found on April 12, 1939.

At the time of the adjudication the United States was obtaining approximately 1,000 gallons per day for use at the Utility Area from the overflow waste at the distribution reservoir on Buck Creek. Very shortly thereafter it built a 100,000-gallon reservoir for the Utility Area use, and provided direct connection to the Hondius-Beaver Pipe Line. It also improved the pipe line between Springs 2 and 3 and that reservoir to permit winter use of these springs, which had a flow of 0.03 second-foot, or 19,389 gpd on April 12, 1939.

Additional Water Service Should be Subject to Prior Satisfaction of Existing Obligations

The court decreed 0.33 second-foot to the Hondius-Beaver Pipe Line with no regard to individual consumers. That quantity of water can be diverted and used subject to prior rights of senior appropriators as previously explained. So far as the Court is concerned, any shortages due to priority, should be shared equally by all consumers. However, there should be a further priority of interest in pipe capacity as long as it is inadequate for the full right, and a priority based on development. For instance, the new subdivisions covered by Mr. Hondius' second contract with O. P. Low should have lower priority than service to the subdivisions covered by his contracts with Blackmer and Sinclair, and any subdivisions Mr. Hondius made himself and had not sold at the time of the second contract with O. P. Low should have the lowest priority of all. It will require further investigation of the history of the various subdivisions to give a complete answer, but the higher priorities of water use and portions of the water right seem to be approximately as follows, listed in the order of the suggested priority:

1. A right to 55,300 gallons per day to serve the 140 cottages under contract in 1939.

2. A right to 1,000 gallons per day to serve the Park Utility Area.

3. A right to store 100,000 gallons in the National Park Service Reservoir at not to exceed 18,000 gallons per day, as of the date that the construction of that reservoir was started.

4. Other service to new contractees on former land of Blackmer, Sinclair, and Low, and additional federal use within the limits of water allocated to federally owned portions of the same tracts to be allocated priorities based on the initiation of such additional water use.

5. Water service to lots as sold in subdivisions of Mrs. Hondius as successor to Pieter Hondius (subdivisions to which Mr. Hondius was never obligated to provide service through agreements with others), and federal use to the extent of its quota based on parts of such subdivisions as the United States has acquired to same priorities based on the initiation of such use.

This would mean that further water use is subject to prior satisfaction of existing use under Domestic Priority No. 12, and that further use on subdivisions other than those of Mr. and Mrs. Hondius, covered by master contracts, have preference over further use on subdivisions made solely by Mr. and Mrs. Hondius. The share of the expanding federal use would have the same priority as any other use on the respective subdivisions under master contracts and those of Mr. and Mrs. Hondius.

Mrs. Hondius is Entitled to Recompense from All Who Use Pipe Capacity

The priority of pipe capacity is complicated by the dual status of federal title, as sovereign owner and as a prospective contractee. In the preceding discussion it has been shown that Mrs. Hondius has probably used the full capacity of the pipe line during a large part of the month of August to satisfy contracts which were in force before the United States acquired any interest. She charges $15 per year per cottage with four fixtures and an extra amount for additional fixtures. Although incorrect, we can assume for the moment that each of the 140 cottages has just four fixtures and that the full annual revenue is $2100. From the last table, the probable total water delivery per year is approximately as follows:

Month	Average Daily Demand		No. of Days		Total Delivery	
May	7,368 gpd	x	31	=	228,408	gallons
June	36,840 "	x	30	=	1,105,200	"
July	60,418 "	x	31	=	1,872,958	"
August	73,680 "	x	31	=	2,284,080	"
September	25,788 "	x	30	=	773,640	"
			Total		6,264,286	gallons

This is a crude estimate to show that Mrs. Hondius was obtaining approximately $0.335 per 1000 gallons. The system to deliver this water has cost at least $25,000 which shows that Mrs. Hondius is obtaining close to 8% on her investment. Her maintenance and operation involve the part-time employment of one man, the use of a truck, and minor materials.

United States May Invest in Independent System or Make Annual Payments to Mrs. Hondius for Pipe Capacity She May Provide

The present federal use of waste water may properly come under the class of a free privilege of an owner; but since the ultimate delivery of the federal quota, whether by the Hondius-Beaver Pipe Line or an independent conduit, will require an equal capacity and approximately duplicate the present investment, there is a strong argument for charging the United States for any pipe capacity provided by Mrs. Hondius. Mrs. Hondius also has to duplicate the system to comply with the rest of her potential private contractual service. There would be a saving in a single conduit for the full 0.35 second-foot. It is necessary, therefore, that the development plan and possible cooperative agreements between Mrs. Hondius and the United States be well considered before construction plans are completed. Does the United States wish to contribute $25,000 toward an enlarged joint system or pay approximately $2,000 per year to Mrs. Hondius for such enlargement and service?

With the Chief Counsel's opinion of January 9, 1945, and this discussion, it is evident that the United States has title to one-third of the decreed Domestic Right No. 12 and a right to water service by the Hondius-Beaver Pipe Line at an annual charge which might be somewhat below the rate charged other consumers because of proprietary features. From the Chief Counsel's further opinion of December 23, 1944, the United States may also participate in ditch companies when it is to the advantage of the United States.

United States Should Supply Its Domestic Demands from Its Best Right with Decreed Priority No. 58

This Service also owns the primary decreed Irrigation Right No. 58 on Beaver Creek, and by State water law may transfer right under either Priority No. 12 or Priority No. 58 to any diversion point it desires, paying damages to other water users if there are any such damages. The United States may build its own water system, and have part of Priority No. 58 converted to domestic use and transferred from the Hupps and Beaver Ditches to its diversion. It may also convert and transfer its portion of the decreed domestic right from the Hondius-Beaver Pipe Line to the Hupps and Beaver Ditches. This would give the United States the first right to Beaver Creek water for its domestic use, eliminate one-third of the potential demand on the Hondius-Beaver Pipe Line capacity and all federal interest in that pipe line, and merely reduce the priority of a small part of the right to irrigate by the Hupps and Beaver Ditches. In fact, the federal rights not needed for domestic purposes can be amended to be used through the Hupps, Beaver and West Ditch, if desirable, provided the acre-foot limitation is not exceeded.

Unified Water Development by All Appropriators Would Have Many Merits

As a third solution, all the claimants to water from Beaver Creek, including the United States, could form a water users association and build one water system to deliver the quantities of water involved in the various decreed rights to distribution systems provided by each. This latter method would be in the interest of conservation and efficient use of this natural resource. It might also be the best way to eliminate friction resulting from independent action. However, there is a river master on the Thompson River who may be asked to make periodic inspections, if desirable, to prevent friction and act as an impartial referee of water allocation.

List of Memoranda Relating to the Quantity of Water to Which the United States Is Entitled from Hondius-Beaver Pipe Line.

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1. Memorandum from Associate Engineer A. van V. Dunn to Regional Attorney Joseph E. Taylor, dated March 2, 1939.

2. List of Contracted Users of Hondius Water System (Hondius-Beaver Pipe Line) (A list of 140 house owners).

3. Memorandum from Associate Engineer A. van V. Dunn to Regional Attorney Joseph E. Taylor, dated March 16, 1939.

4. Memorandum from Regional Attorney Joseph E. Taylor to Acting Superintendent McLaughlin, dated March 22, 1939.

5. Memorandum from Assistant Engineer Garvice M. Loucks to Superintendent Canfield, dated April 12, 1939. (A record of spring flow measurements.)

6. Memorandum from Associate Engineer A. van V. Dunn to Regional Attorney Taylor, dated June 1, 1939.

7. Memorandum from Associate Engineer A. van V. Dunn to Regional Attorney Taylor, dated July 19, 1939.

8. Memorandum from Acting Superintendent John S. McLaughlin to Regional Attorney Taylor, dated December 14, 1939.

9. Memorandum from Hydraulic Engineer A. van V. Dunn to Superintendent Canfield, dated December 19, 1939.

10. Memorandum from Hydraulic Engineer A. van V. Dunn to Regional Attorney Taylor, dated January 4, 1940.

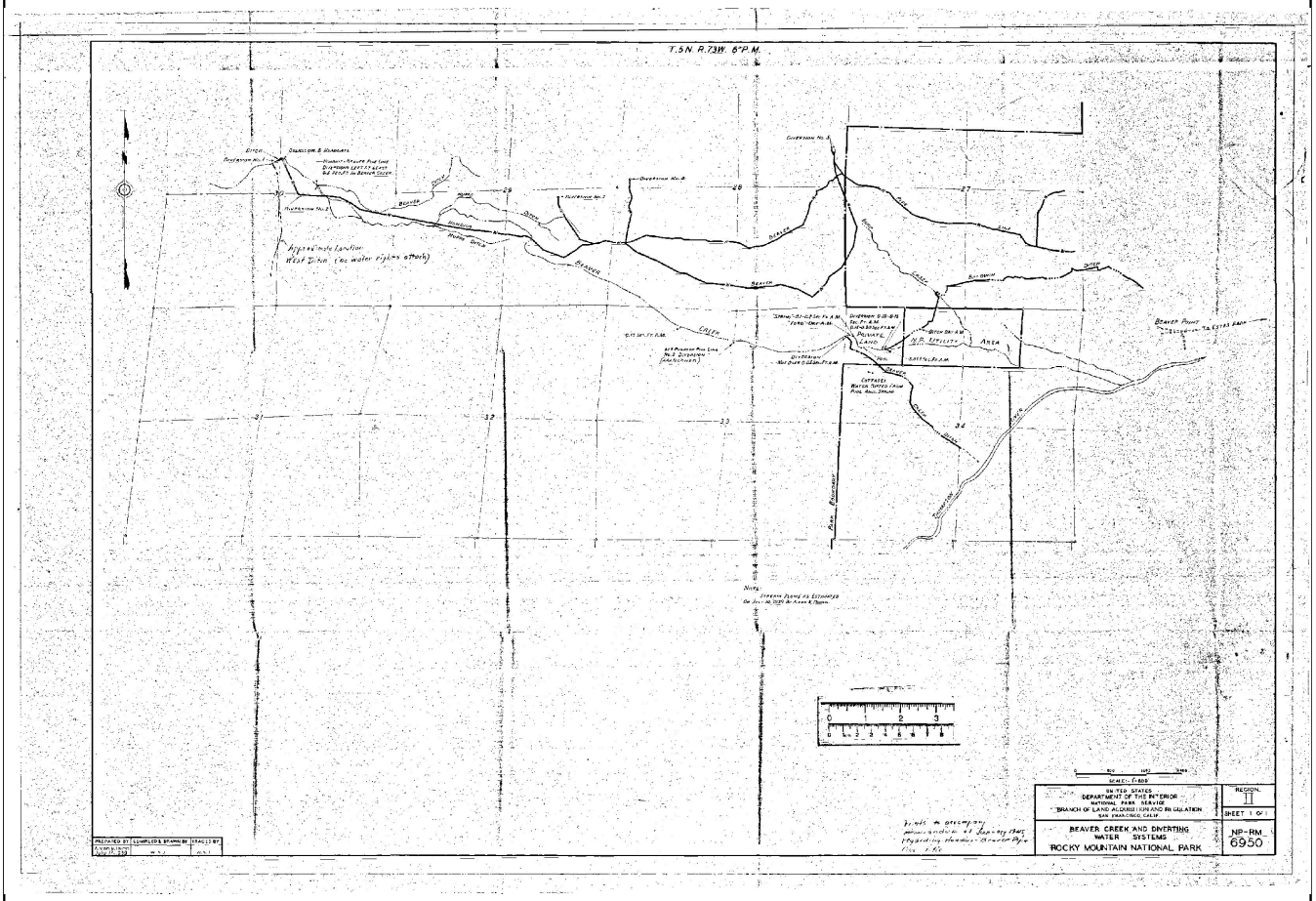
11. Memorandum from Regional Attorney Joseph E. Taylor to Superintendent Canfield, dated January 5, 1940.

12. Memorandum from Hydraulic Engineer A. van V. Dunn to Superintendent Canfield, dated January 16, 1940.

13. Memorandum from Hydraulic Engineer A. van V. Dunn to Regional Attorney Taylor, dated August 13, 1940.

14. Memorandum from Hydraulic Engineer A. van V. Dunn to Regional Attorney Taylor, dated October 1, 1940.

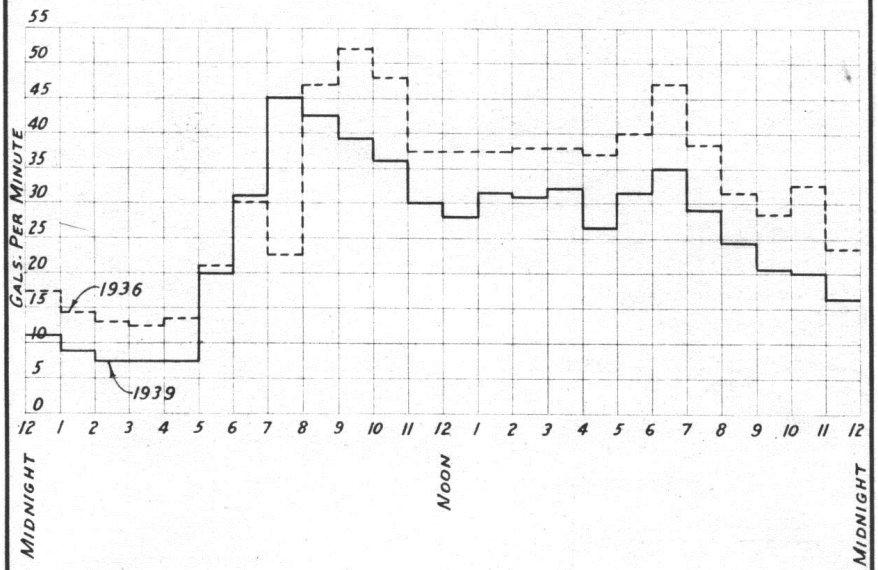
07-27-1939: map of the beaver creek and diverting water systems



From Journal Am. Water Works Association – Dec. 1939,
by Roger W. Esty, Supt. Water Dept. Danvers, Mass.

NOTES:

8.49 miles of 1" to 18" pipe.
35 fire hydrants.
Chiefly residential.
Aggriculture chief industry.
Many residents work at industrial plant 1 mile from the water system.

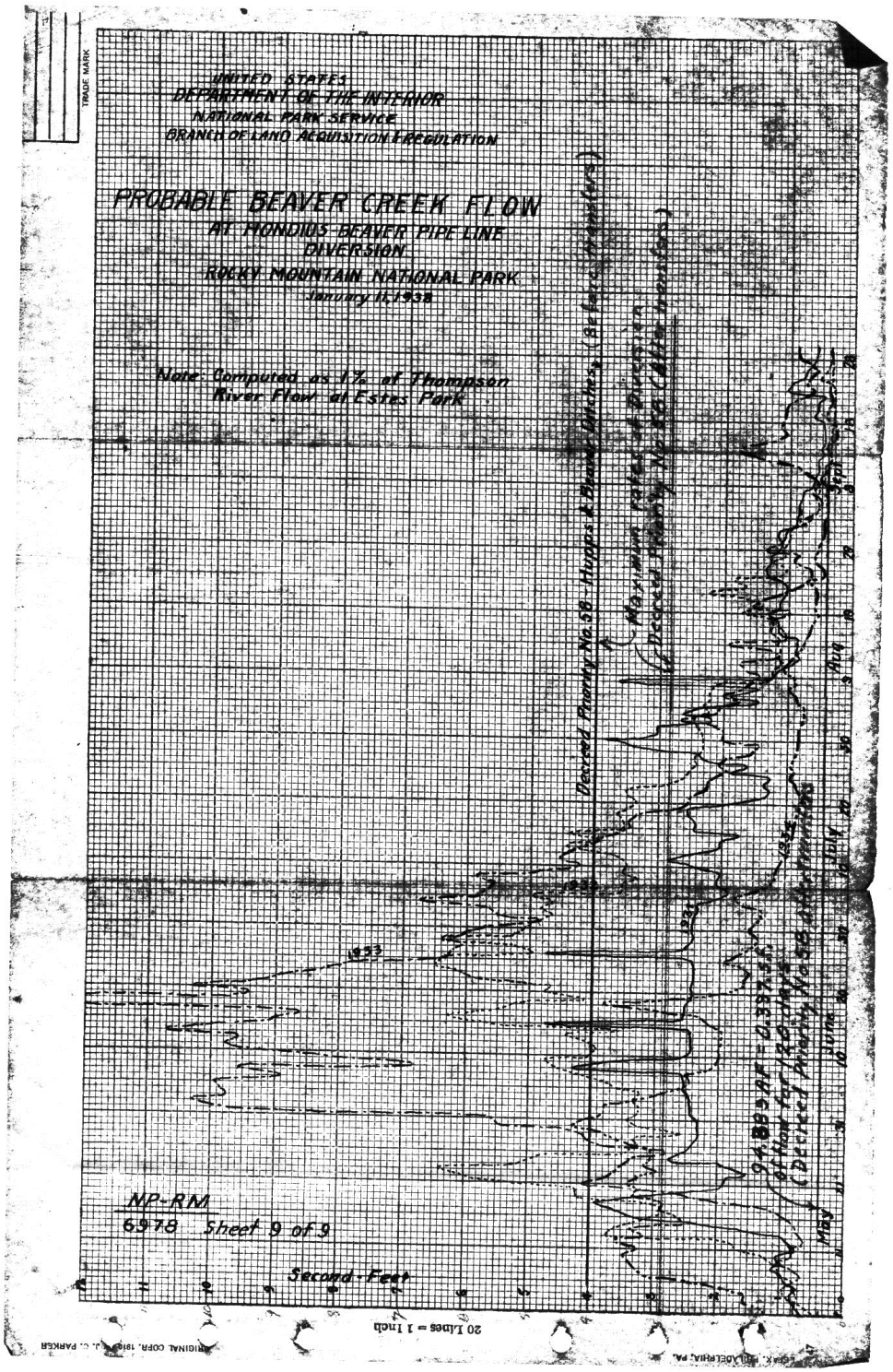


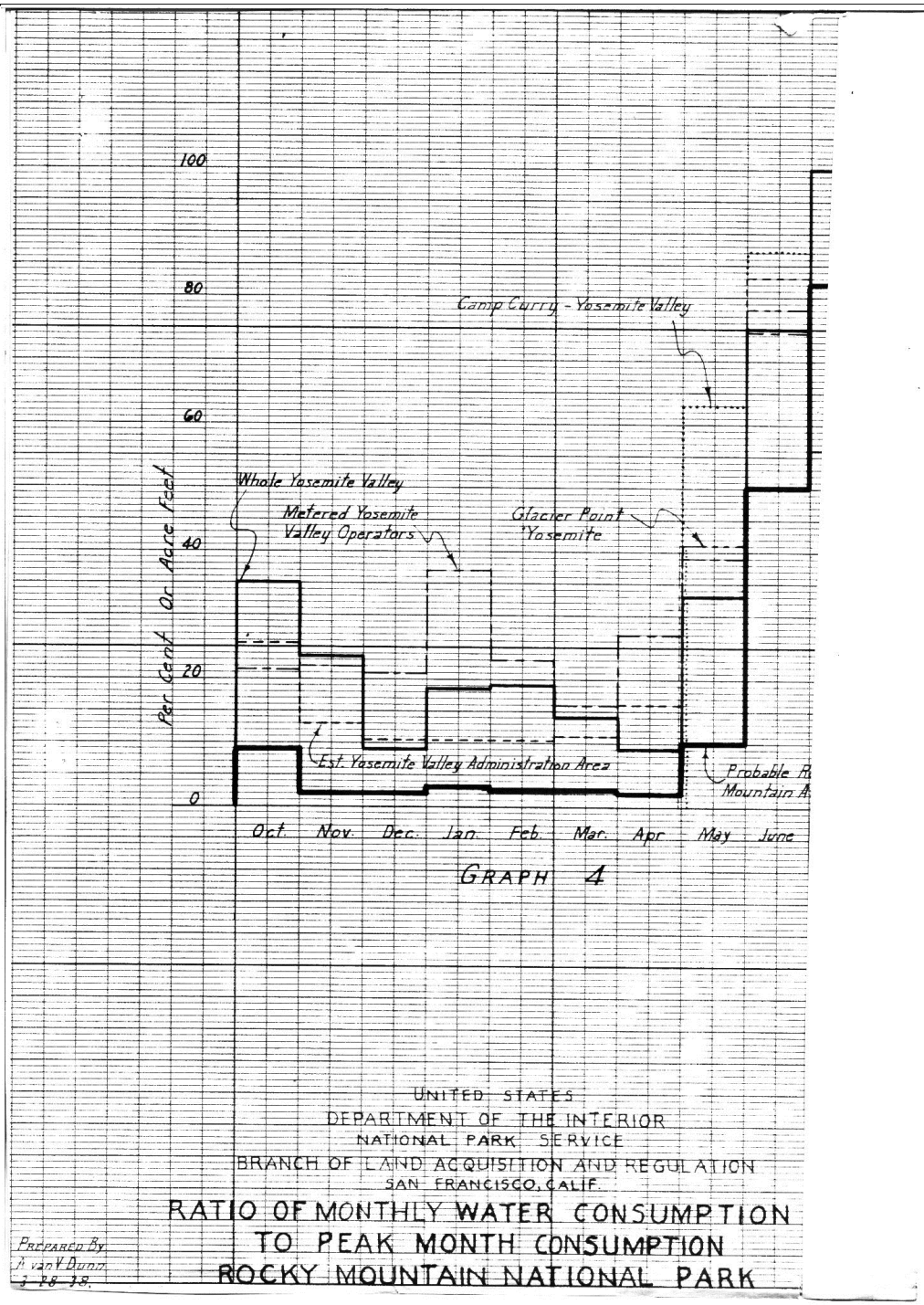
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF LAND ACQUISITION AND REGULATION
SAN FRANCISCO, CALIF.

SHEET 1 OF 1

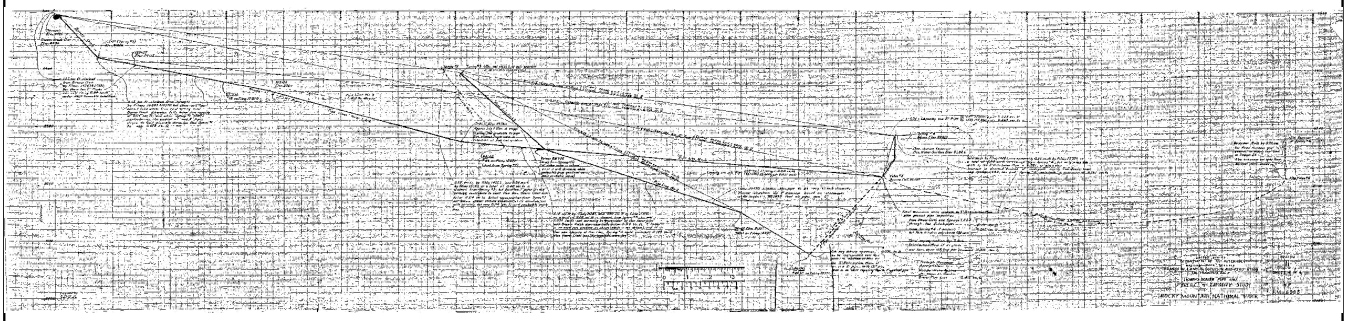
DAILY WATER DEMAND OF 319 SERVICES
SUPPLYING 1300 PEOPLE AT MIDDLETON, MASS.

DRAWING NO.
P G
6975

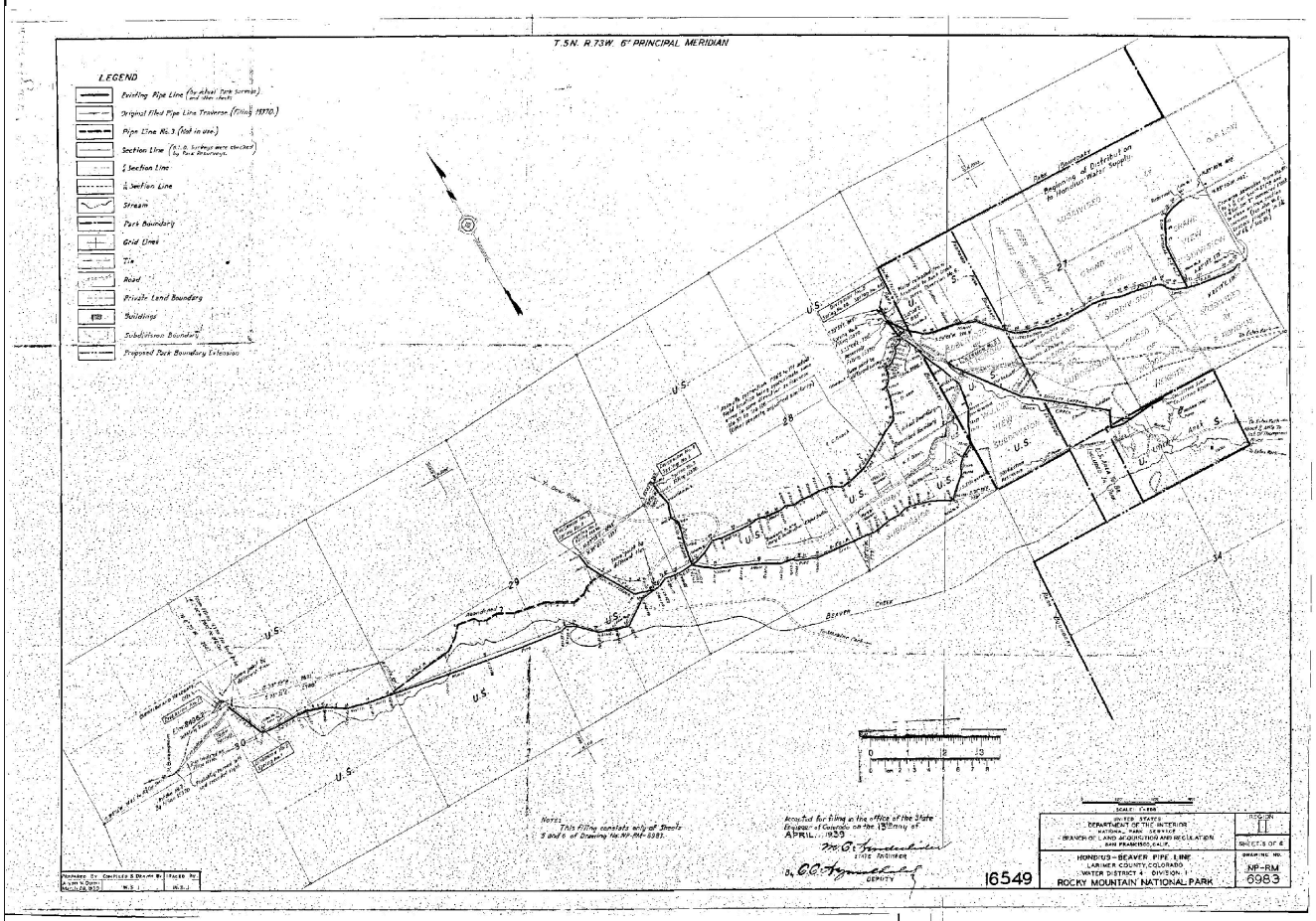

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF LAND ACQUISITION & REGULATION
PROBABLE BEAVER CREEK FLOW
AT PROPOSED BEAVER PIPE LINE
DIVERSION
ROCKY MOUNTAIN NATIONAL PARK
January 11, 1938
Note: Computed as 1% of Thompson
River Flow at Estes Park
Decreed Priority No. 58 - Hupp's & Bond's Ditches (8 cubic feet per second)
Maximum Rate of Diversion
of Decreed Priority No. 58 (Cubic feet per second)
1933
1935
1937
94.88 acre-feet
(Total for April 1935
Decreed Priority No. 58 only)
MP-RM
6978 Sheet 9 of 9
Second-Feet
20 Lines = 1 inch
April
May
June
July
Aug


100
80
60
40
20
0
Per Cent Or Acre Feet
Camp Curry - Yosemite Valley
Whole Yosemite Valley
Metered Yosemite Valley Operators
Glacier Point Yosemite
Est. Yosemite Valley Administration Area
Probable R
Mountain A
Oct.
Nov.
Dec.
Jan.
Feb.
Mar.
Apr
May
June
GRAPH 4
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF LAND ACQUISITION AND REGULATION
SAN FRANCISCO, CALIF.
RATIO OF MONTHLY WATER CONSUMPTION
TO PEAK MONTH CONSUMPTION
ROCKY MOUNTAIN NATIONAL PARK
Prepared By
A. van V. Dunn
3-28-38.

00-00-0000: profile of the hondius - beaver pipeline



03-28-1939: map of the hondius-beaver pipeline



June 4, 1946.

Statement Relating to Baldwin Ditch
Rocky Mountain National Park

This filing was granted decreed priority No. 6 of December 31, 1899. For copy of the decree, see Rocky Mountain National Park Deed 63.

(SGD.) A. VAN V. DUNN

Chief, Water Rights Division.

C O P Y

332 Postoffice Building,

Denver, Colorado, November 4, 1939.

Steton R. Stephenson,
Attorney at Law,
Fort Morgan, Colorado.

Re:General Adjudication, Water District No. 4,-- Baldwin Ditch and Hondius-Beaver Pipe Line.

Dear Steton:

On my return from a trip to Idaho, I find your letter of November 1, and a copy of your letter of the same date addressed to Judge Coffin.

I saw you at the football game Saturday a week ago, and considered discussing this matter with you at that time. However, on second thought, I concluded it was a poor time and place to be talking shop.

When in Greeley the first part of last week, going over some suggested changes in the findings with regard to the Hondius-Beaver Pipe Line and other National Park structures, and the Colorado-Big Thompson Project, Judge Coffin brought up the subject of this ditch and discussed the matter with Tom Nixon, Baird of the Reclamation Bureau and me.

I suggested to the Court that, inasmuch as the Baldwin Ditch diverts water only in the Spring when there is enough for all, it might be a good idea to give you a final decree for 1 second foot of water, making your priority right, as you suggested, subordinate to the Hondius-Beaver Pipe Line.

I do not want to be understood, in making this suggestion, that we would waive our contention that your use is a wasteful one, in the event that the Court should not make your priority right subordinate to that of the Hondius-Beaver Pipe Line.

I suggested to the Court that, while I think the findings and decree as now proposed by him are quite sound, he is really postponing the problem instead of settling it. However, the impression I got at the end of the discussion was that he was going to let the findings and decree stand as now drawn.

You are at liberty to write him if you so desire, enclosing a copy of this letter, which is enclosed herewith.

Judge Coffin said something about the ditch having a capacity for some reasonable distance beyond the point of diversion of more than a second

foot. Of course, if your priority right is subordinated to that of the Hondius-Beaver Pipe Line, we would not object to the decree giving you a right to divert an amount of water which would equal 1 second foot at some reasonable distance from the stream. This would mean, of course, that there would be somewhat more than a foot diverted at the point of diversion. We are convinced that the capacity of the ditch at the present time at a substantial distance from the stream does not exceed, but is somewhat less than, one foot.

With kind regards,

Very truly yours,

Worth Allen,
Special Assistant to
the Attorney General.

CC to: Att'y Gen'l
Stoton R. Stephenson,
Joseph E. Taylor,
David Canfield.

WA/ELM

C O P Y

601 Sheldon Building
October 20, 1939

Worth Allen, Esq.,
Special Assistant to the Attorney General,
332 Postoffice Building,
Denver, Colorado.

Re: General Adjudication, Water District 4, Claims for Rocky Mountain National Park.

Dear Mr. Allen:

Reference is made to your letter of October 19 to John McLaughlin in the above matter.

We have this day radioed the park, advising against the filing of the objection with respect to the Baldwin Ditch. A copy of our radiogram is herewith enclosed.

You will note that we have left the matter within your discretion to determine whether any further points should be made with respect to an acre foot limitation upon Griffith's Beaver Ditch and and a voluntary action with respect to our Hollowell Park Ditch No. 2.

Regarding the Baldwin Ditch, we feel as you do, that the protection in the decretal order requiring the owners of the Baldwin Ditch to make a further showing with respect to a reasonable method of use and a reasonably beneficial use, before any final determination upon the quantity of water to which they are entitled, will suffice for our purposes.

I believe your mythological analogy concerning Atlanta's golden apples is a good one (it was Atlanta, wasn't it?).

Sincerely yours,

cc: Supt., Rocky Mt.

Joseph E. Taylor,
Regional Attorney.

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ROCKY MOUNTAIN NATIONAL PARK
ESTES PARK, COLO.

October 10, 1939

Memorandum for Regional Attorney Taylor:

Reference is made to Adjudication of Water Rights in District No. 4 and particularly the Baldwin Ditch.

On Friday, October 6, 1939, Judge Claude C. Coffin, accompanied by United State Commissioner Hackett in the morning, and also by Acting Superintendent McLaughlin in the afternoon, made a field inspection of the Baldwin Ditch, the Hondius-Beaver Pipe Line, Beaver Creek, Beaver Meadows, and Bear Lake Pipe Line No. 2.

After visiting the Bear Lake Pipe Line, Judge Coffin stated that either Mr. McLaughlin or Mr. Hackett could appear in Court on October 23 and make proof for a final decree as he considered the system ready to deliver water.

The Judge expressed surprise at the numbers and excellent class of the property being served by the Hondius-Beaver Pipe Line and the apparent skill in making use of all the available water. He visited the different points of diversion and the area served by the distribution system.

Judge Coffin started at the point of diversion of the Baldwin Ditch and walked down its course about one-half mile at which time he remarked to Mr. Hackett that it would be impossible to get a flow of more than one second foot of water through the ditch in its present condition. He met the engineer for the Baldwin Ditch at the end of the lateral and carefully covered the storage or spring area. The Judge called the engineer's attention to the fact that they were only irrigating or spreading the water out over an area of about four acres and could only give a decree for the actual beneficial domestic use as served from their present pipe line and that any decree which he gave for irrigating or spreading water over the four acres of storage land would have to be junior to the Hondius-Beaver Pipe Line. He thought that the Baldwin Ditch Attorney and Mr. Worth Allen might work out a final decree on something along this line. He was much troubled with the apparent waste of water by the Baldwin Ditch and stated that he had not realized before the big demand for water use out of BeaverCreek drainage.

We feel that this visit proved much to the advantage of our past and future water claims.

(Sgd.) John S. McLaughlin

John S. McLaughlin
Acting Superintendent

cc: Regional Director, Region II
Mr. Worth Allen

C O P Y

601 Sheldon Building
September 22, 1939

Worth Allen, Esq.,
Special Assistant to the Attorney General,
332 Postoffice Building,
Denver, Colorado.

Dear Mr. Allen:

Pending Mr. Taylor's return to the office next week, I should like to call your attention to certain points in Mr. Stephenson's suggestions which you forwarded by letter of September 16, 1939:

1. Mr. Stephenson is trying to get all the water he can instead of what is needed beneficially. That is contrary to the water code.

2. Mr. Stephenson states that Mr. White testified to measurements of diversions in excess of 1.0 second foot. This was not exactly the case. Mr. White, or his other engineer, testified to measuring a stream flow of approximately 1.0 second foot in Beaver Creek a short distance above the diversion, but admitted he could not obtain a measurement at the diversion. Further, his testimony was for isolated ditch capacities of 1.0 second foot at points he selected along the ditch, and he admitted he had not checked for the minimum section.

3. I testified that I had found sections, on the Park Utility Area, where not over 0.8 second foot could be carried or delivered to the place of use in the ditch proper.

4. A diversion of 1.0 sec. ft. would amount to 722.7 acre feet per year, while the average stream flow is only about 650 acre feet, and the flow of a dry year like 1939 is only about 300 acre feet, out of which the following demands should be filled:

Hupps & Beaver Ditches - Priority #57 -	94.389 acre ft.
Griffith Ditch (if 12 acres recognized) -	36.000 acre ft.
* Hondius-Beaver Pipe Line -	100.000 acre ft.
* Baldwin Ditch -	36.138 acre ft.
Total	266.524 acre ft.
Unused in dry years	33.476 acre ft.
Total dry year flow -	300.000 acre ft.

* Amounts quoted are approximate annual consumption, and less than would be obtained by flow in second feet because full diversion and use is only in summer.

5. Priority for the Baldwin Ditch junior to the priority for the Hondius-Beaver Pipe Line would give the Park Service some protection, but if the Baldwin Ditch were decreed a large amount of flow, it would jeopardize any Park Service plans for future transfers of point of diversion from the Hupps and Beaver Ditches to the Hondius-Beaver Pipe Line, if that became desirable. (I make this statement on the assumption that Mr. White or Mr. Griffith might protest such change later.)

A suggestion

I should like to see the decree provide:

Griffith Ditch 0.62 sec. ft., but not more than 24.0 acre ft. per year (on basis of 8 acres irrigated) priority 1904.

Hondius-Beaver Pipe Line 0.33 sec. ft., but not more than 100 acre ft. per year, priority 1906.

Baldwin Ditch 0.10 sec. ft., but not to exceed 36.00 acre ft. per year, priority (1907 would be fine, as Stephenson suggests).

Therefore, be it further decreed that when said Beaver Creek has a flow of more than 1.05 sec. ft., exclusive of other earlier decrees (Hupps and Beaver Ditches have priority #57 for 94.389 acre ft.) said Baldwin Ditch may divert such other waters as are available but not to exceed a total of 0.8 sec. ft.

It might also be decreed that all of the three systems shall be provided with proper measuring devices at their diversions.

Sincerely yours,

A. van V. Dunn,
Associate Engineer.

09-16-1939: letter to regional attorney, prouder valley national bank building from special assistant to the attorney general regardin

C O P Y

DEPARTMENT OF JUSTICE

332 Postoffice Building,

Denver, Colorado, Sept. 16, 1939.

Joseph E. Taylor, Esq.,
Regional Attorney, National Park Service,
601 Sheldon Bldg., San Francisco, Calif.

Fred. W. Stover, Esq.,
Poudre Valley National Bank Bldg.
Fort Collins, Colorado.

Gentlemen:

Enclosed herewith is a copy of a letter from Stoton R. Stephenson, and a copy of a letter which I have written to the Attorney General.

I believe you will agree with me that, if the Baldwin Ditch is to be made subordinate and junior to the Hondius-Beaver Pipe Line, we should offer no objection to a decree for one cubic foot of water for the Baldwin Ditch.

Kindly let me hear from you at once.

Very truly yours,

(Sgd.) Worth Allen.

Worth Allen,
Special Assistant to
the Attorney General.

WA/ELM

C O P Y

90-1-2-79.

332 Postoffice Building,

Denver, Colorado, September 16, 1939.

The Attorney General,
Washington, D. C.

Re: General adjudication, Water District No. 4-- Claims for Rocky Mountain National Park-- Baldwin Ditch.

Sir:

Enclosed is a copy of a letter from Stoton R. Stephenson, Esq., Attorney for High Drive Development Company. A draft of the brief prepared by us in this matter was mailed to you some time ago. The brief, as slightly amended and changed, was presented to the Court on September 6, at which time Mr. Stephenson, representing the claimant in question and owner of the Baldwin Ditch, was given ten days in which to answer.

We are now in receipt of a letter from Mr. Stephenson, two copies of which are enclosed herewith.

While undoubtedly the proper solution of this matter is for the Baldwin Ditch to be converted into a pipe line which would result in the line not needing anything like as much as one cubic foot of water per second of time, it is quite possible that the Court will not limit the amount of water to be diverted by this ditch to the extent that we have proposed. If the corporation owning the ditch is willing to subordinate its priority to ours, it seems to me that we should by all means accept their proposal.

The priority rights of the United States in connection with the Hupps and Beaver ditches acquired from Peter Hondius are prior in time to the rights in connection with the Baldwin Ditch. If the priority rights in connection with the Hondius-Beaver Pipe Line are likewise made superior and senior to those of the Baldwin Ditch, the result will be that the rights of the Baldwin Ditch will be subordinate and junior to all of the rights of the United States.

It is very important that I give Mr. Stephenson our answer to his proposal immediately, as his brief will be past due after this date, and as the Court is insisting on closing the case.

For your information, I might say that I am sending to Joseph E. Taylor, Regional Attorney of the National Park Service, and one to Judge F. W. Stover of Fort Collins, Attorney for Eleanor Hondius.

Respectfully,
(Sgd.) Worth Allen.
Special Assistant to the Attorney General.

WA/ELM

C O P Y

STOTON R. STEPHENSON

Attorney and Counsellor at Law

FORT MORGAN, COLO.

September 11, 1939.

Mr. Worth Allen,
Special Assistant to the Attorney General,
332 Postoffice Building,
Denver, Colorado.

Re: General adjudication
Water District No. 4,
Baldwin Ditch.

Dear Mr. Allen:

On Friday last week I prepared a general statement of my clients position without any debate with you on the law involved and with very little debate relative to the facts involved. In going over it with Mr. White, it occurs to me that it might be of advantage to both your client and mine if we would subordinate our decree to the Hondius pipe line decree and I should like to have you give this matter your immediate consideration with a view of submitting it to the Court on that basis.

I now understand that there isn't any water available in Beaver Creek to supply my clients demands after about the first of July and that when my clients demands are satisfied prior to July 1st, there is sufficient water to take care of all your demands in addition to the water required by the Baldwin Ditch. Mr. White indicates that if they are given a decree for one cubic foot they can safely subordinate their decree to yours and leave you both in the same relative position so far as practical operation is concerned. That is to say that when there is any water for the Baldwin Ditch you will have your full supply and if the Baldwin Ditch decree is subordinated to yours we can not call for water to pass your pipe line.

It seems that there is another ditch which is taken out at about the same point of diversion as the Baldwin Ditch. I think this is called the Griffith Ditch but it calls of a Decree as of 1904 whereas the Baldwin Ditch can anti date the Griffith Ditch by several years but, if agreeable to the Court can be surbordinated to your Decree.

For this solution I suggest one cubic foot for the Baldwin Ditch in view of Mr. Dunn's testimony to the effect that the ditch would carry 0.8 of a cubic foot and in arriving at that conclusion he used a high coefficient. Mr. White testified that the ditch would carry an excess of one cubic foot; his testimony being based on measurements and calculations seven years preceeding Mr. Dunn's measurements. At any rate the

quantity seems to be immaterial if our decree is subordinated to yours and I believe that amount is not excessive so far as it relates to the Griffith claim if we are not entitled to demand a supply from you.

If you think this suggestion is any good and would satisfy your clients please so indicate and I will finish my brief on that theory.

Very truly yours,

(Sgd) Stoton R. Stephenson.

SRS:L

C O P Y

90-1-2-79.

332 Postoffice Building,

Denver, Colorado, August 12, 1939.

The Attorney General,
Washington, D. C.

Re: Adjudication proceedings,
Water District No. 4,
Claims for Rocky Mountain
National Park.

Sir:

I enclose herewith a copy of a brief which I have prepared in support of our objection to the Court awarding a decree to the Baldwin Ditch authorizing the use of some 3.2 second feet of water.

I have sent a copy thereof to Joseph E. Taylor, Esq., Regional Attorney, National Park Service, and have asked him to supply certain figures after consultation with Mr. Dunn, the engineer.

The legal rules dealt with are more or less elementary, but I have found from experience that one makes a mistake in taking too much for granted even with respect to elementary matters.

It will be interesting to note that the opinion of the court in Hardy, et al. v. Beaver County Irrigation Co., 234 P. 524, was written by Judge Iverson.

Respectfully,

(Sgd.) Worth Allen.

Worth Allen,
Special Assistant to
the Attorney General.

WA/ELM

Aug. 30 '39 3140

C O P Y

STATE OF COLORADO)
) SS
COUNTY OF BOULDER)

IN THE DISTRICT COURT

NO. 10077.

IN THE MATTER OF THE ADJUDICATION OF PRIORITIES OF RIGHTS TO USE OF WATER FOR IRRIGATION AND OTHER BENEFICIAL PURPOSES IN WATER DISTRICT NO. 4, WATER DIVISION NO. 1, IN THE STATE OF COLORADO.

BRIEF RE EXTENT -- OF WATER APPROPRIATION BALDWIN DITCH.

The ultimate question for the Court's determination with respect to the Baldwin Ditch, as with respect to all other ditches and water systems, is how much water has been appropriated by the claimant herein, High Drive Development Company. That question turns on the answers to two other questions. They are:

1. How much water actually has been diverted?

2. How much of the water actually diverted from the stream is needed for an economical and prudent use?

It is obvious that the maximum amount of water that may be decreed is the maximum amount that has been diverted. If the physical limitations of a ditch through which the water must be carried is .6 of a second foot, the amount of water decreed cannot in any event exceed that amount.

> "Under this rule, the extent of the rights of the first appropriator is measured by the capacity of the ditch."
> Conrow v. Huffine, et al., 138 P. (Mont.) 1094, 1096.

Just as the strength of a chain is that of its weakest link, so the carrying capacity of a ditch is the capacity at the ditch's smallest point or points.

> "Obviously the carrying capacity of the ditches is to be tested by its carrying capacity at its smallest point, and not by its carrying capacity at its largest point."
> Pabst, et al. v. Finmand, et al., 211 P.(Cal.) 11, 16.

The testimony of Mr. Dunn, the engineer who had made a careful study of this ditch, including the making of measurements

AUG 30 '39 3140

of the capacity thereof, was to the effect that it did not and had not been able to carry more than second feet of water.

After the determination by the Court of the maximum carrying capacity of the ditch, there still remains the question how much water diverted has been and will be economically and prudently used.

The cases unanimously hold that the mere fact that one has been diverting and making use of some certain amount of water does not ipso facto determine the amount to which he is entitled. The Court must determine how much of the water has been and can be used in an economical and prudent manner. The sentence following the one which we quoted from the opinion of the court in the Conrow case follows:

> "After the use has been installed, however, if the capacity of the ditch exceeds the amount required for reasonable use, the necessity for the use, and not the size of the ditch, is the measure of the extent of the right."

In Church v. Stillwell, 12 Colo. App. 43, 48, the court held:

> "Under the constitution and laws of Colorado, the right to the use of water for irrigation is dependent upon its diversion and actual and continuous appropriation to such beneficial use, and then only to such extent as is necessary for the use intended."

(Underscoring throughout is ours).

In the opinion of the court in the early case of Combs v. Agricultural Ditch Co., 17 Colo. 146, 153, is found the following:

> "In the trial of such an issue, it is also important to observe that no matter how early a person's priority of appropriation may be, he is not entitled to receive more water than is necessary for his actual use. An excessive diversion of water cannot be regarded as a diversion to beneficial use within the meaning of the constitution. Water in this country is too scarce and consequently too precious to admit of waste. The constitutional rule of distribution, 'first come, first served,' does not imply that the prior appropriator may be extravagantly prodigal in dealing with this peculiar bounty of nature."

In Comstock, State Engineer, et al. v. Larimer and Weld Reservoir Co., 58 Colo. 186, 205-206, the Colorado Supreme Court urged the trial courts to deal promptly and efficiently with the

"wasteful, or other unnecessary or unlawful use of water." We quote briefly from the opinion of the court as follows:

> "This court recognizes the urgent and ever increasing necessity for the enforcement of the doctrine of economical use of water for irrigation, as it has consistently done in the past, and urges upon the offices of the law, the courts and users and consumers of water themselves ready acquiescence therein and an efficient enforcement thereof. Whenever there is a wasteful, or other unnecessary or unlawful use of water, it should be promptly and efficiently dealt with under the law."

In Weldon Valley Ditch Co., et al. v. Farmers Pawnee Canal Co., 51 Colo. 545, 550, the court stated that the dimensions of the ditch and its carrying capacity were immaterial in determining how much water had been put to a beneficial use. We quote one paragraph of the court's opinion:

> "The court apparently based the first appropriation upon the amount of water carried through the canal, and not the amount necessary for the irrigation of the land, applied to a beneficial use. The complaint, on the same line, ingeniously alleges that the ditch was originally constructed twelve feet wide on the bottom, with a capacity of 100 cubic feet per second, and capable of irrigating 5,000 acres of land. Admitting all this, the ditch might not be entitled to any decree. We have endeavored to show these settlers could not make a beneficial use of more water on the tracts than was necessary for their irrigation. It is immaterial whether the Buffalo ditch was ten, twelve, or fifteen feet wide on the bottom, or whether it was capable of irrigating 5,000 acres of land and was filled to its capacity. Anyone familiar with irrigation, knows that 47 cubic feet of water per second is not necessary for the irrigation of 640 acres of land. That amount, therefore, was not beneficially applied thereto."

In Fort Lyon Canal Co. v. Chew, et al., 33 Colo. 392, 399, the court stated that the water which cannot be applied by an appropriator

> "without waste * * * should be turned back into the natural stream, to be utilized by other appropriators in accordance with their respective numerical priorities."

It appears in

Doherty v. Pratt, et al., 184 P. (Nev.) 574,

that the water in question, in being conveyed some three miles to the point of use, was carried through a swamp. The court condemned the practice, saying that the appropriator should devise some method of avoiding such waste "even though it occasioned some additional expense to the appropriator." The court further said that it is

as much the province and duty of the trial court to determine whether the methods adopted for diversion are reasonable and economical as it is to determine the amount of water required by the appropriator at the place of use. The following two sentences are taken from the opinion of the court:

> "Such a method of diversion would not be an economical use of the water providing another reasonable method could be devised to avoid such loss, even though it occasioned some additional expense to the appropriator. It is as much the province and duty of the trial court to determine whether the methods adopted for diversion are reasonable and economical under all the facts of the case as it is to determine the amount of water required by the appropriator at the place of use."

Likewise, in

Broughton, et al. v. Stricklin. et al., 28 P. 2d (Or.) 219, the court required the elimination of waste in the use of water "even though it becomes necessary to change at the company's expense the old methods."

From the opinion of the court (224) the following is taken:

> "The appropriator of water must exercise a reasonable degree of care to prevent waste * * * * The plaintiffs should be allowed at the first appropriate season, and within a year from date, to practically eliminate such waste. An economical use of the water for irrigation without excessive waste should be made even though some expense is incurred in constructing facilities therefor. In re Waters of Deschutes River, supra, at page 860 of 134 Or., 286 P. 583, 294 P. 1048 In Hough v. Porter, supra, paragraph 44 of the syllabus reads: 'The water must be used in such manner and such economical methods must be adopted in its appropriation to uses desired as will secure the greatest duty available, even though it becomes necessary to change at considerable expense the old methods, which had their origin when there was but little demand, and the supply correspondingly abundant.'"

We quote from the opinion of the Supreme Court of Oregon, in In re Water Rights in Sylvies River, 237 P. 322, 328, in which it appeared use had been made of sloughs and depressions in the ground "as a means of conveying water," saying that:

> "Such means, however, are obviously wasteful, * * * and should be sanctioned only until a fair opportunity is had to construct ditches or canals and pipe lines, or other artificial works, where necessary."

The court stated further that that crude manner of use resulted in the application of only a portion of the water diverted. We quote from the opinion of the court (328):

> " * * * Natural irrigation in the crude manner indicated apparently applies only a portion of the water to a real beneficial use."

The Oregon court in

Abbott v. Ready, 75 P. 765,

stated that the policy of the laws of that State, which undoubtedly is the policy of the laws of all western states where water is the life-blood of the community, is to require "the highest and greatest possible duty from the waters of the state in the interest of agriculture and other beneficial purposes." The court continued in that case, saying:

> "The inquiry was therefore not what he had used, but how much was actually necessary."

We conclude our references to that case by quoting the following matter found in the opinion of the court:

> "Water users should not be allowed an excessive quantity of water to compensate for and counterbalance their neglect or indolence in the preparation of their lands for the successful and economical application of the water. One farmer, although he has a superior water right, should not be allowed to waste enough water in the irrigation of his land to supply both him and his neighbor simply because his land is not adequately prepared for the economical application of the water."

So, we contend here that the owners of the Baldwin Ditch should not be permitted to waste water by dissipation thereof in a mountain side when there are others who so vitally need the water in Beaver Creek which carries such a limited supply.

The Wyoming court's statement of the rule that the mere fact that a certain amount of water had been allowed to flow upon land does not prove a legal appropriation of all of it for a beneficial use is found in

Nichols v. Hufford, 133 P. 1084, as follows:

> "The showing that all of the water of the stream had been at times used or allowed to flow upon the land does not necessarily prove an appropriation of all of it for a beneficial use, for the appropriation must be limited to the amount reasonably required for the proper and successful cultivation of the land or other use to which the water is applied."

There cannot be any such thing as a right to an excessive amount of water based upon prescription or usage. It is elementary that the State is a party in interest in all water cases, and a rule to the contrary would work an injustice not only on the users of water, but on the State itself, which has an interest in the economical and prudent use of the waters therein. An excessive and wasteful use is at most permissive until such time as the needs of junior appropriators require the prohibition of its continuance.

The rule is briefly stated as follows in

Hough, et al. v. Porter, et al., 98 P. (Or.), 1883, 1102:

> "The wasteful methods so common with early settlers can, under the light most favorable to their system of use, be deemed only a privilege permitted merely because it could be exercised without substantial injury to anyone; and no right to such method of use was acquired thereby."

In Hardy v. Beaver Co. Irrigation Co., 234 P. (Utah) 524, it appears that senior appropriators of water were engaged in a wasteful use thereof on land which was not level. The court held:

> " * * * Such being the case, it is the duty of respondents so to prepare their land, by leveling or otherwise, that it may be irrigated with reasonable economy in the use of water, to provide themselves with reasonably efficient means for diverting and applying the water to their land."

Characterizing the method of use as a"profligate waste

as well as an unlawful use of the water", the court further held:

> " * * * Respondents could not legally establish a prior right to the use of water for irrigation by merely flooding their lands and by permitting it to gather into pools on the surface of raising the water level underneath the surface in the hope of obtaining sufficient moisture to raise crops in the ensuing summer. Such a use of water in this arid region is too wasteful to be tolerated when it can be used in the ordinary way for irrigation and other domestic purposes."

So, we submit here, that the saturation of a mountain side with the hope of obtaining sufficient water in a small well near the foot of the slope "is too wasteful to be tolerated."

Our first contention is that the physical limitation of the Baldwin Ditch has prevented and does prevent the carrying of more water than second feet.

Our second contention is that not more than second feet has been or can be economically used. The court will recall that the statement of claim of the United States with respect to the Hondius-Beaver Pipe Line asked for a decree for only .33 cubic feet of water per second of time. The evidence showed that this limited amount of water is all that is needed to supply some 140 private cottages and a number of buildings owned by the United States in what is known as the utility and residential area. The number of cottages supplied by the Baldwin Ditch was stated by Mr. Glenn S. White, president of High Drive Development Company, claimant, to be some 40 or 50.

The water in the Baldwin Ditch is used for domestic purposes. Testimony shows that it runs below cesspools and outhouses which overflow and drain into the ditch. The result is that the water is run into a mountain side which is used as a filter. A small percentage of the water run into the ground finds its way into a well constructed at the foot of the slope.

Mr. Dunn testified that the average use of water per capita in towns and cities is . This includes street flushing, and all other uses. It is common knowledge that mountain cabins

do not have the facilities for extensive use of water which are found in town and city homes. For instance, most cabins do not have bath tubs. Most of them do not have inside toilets. It is, therefore, safe to assume that the use per person in mountain cabins is far less than that in city and town homes. If we assume that the cabins are all occupied continuously and that there are an average of four people to a cabin, the number of gallons per day required by the occupants of 50 cabins would be gallons. To supply this number of gallons second feet only would be required.

It would, of course, be unreasonable to require ordinary irrigating ditches to be converted into pipe lines. It does not follow that such a requirement with respect to domestic water is unreasonable. As a matter of fact, that is the common method of conveying such water. Domestic water is more valuable and will and should stand a heavier expense of conveyance than water for irrigation of crops.

In the present case, the Baldwin Ditch owners do not have their ditch run directly into a storage tank. Such a method of use would prevent the loss from using a mountain side for filtering purposes. Instead they use a mountain side as a filtering system, and capture a small percentage of the water in a well at the foot of the slope.

We respectfully submit that second feet should be permitted to be taken through the ditch in question for a limited time, so as to permit the owners of this ditch to install a pipe line or other means of economical use of water, and that at the end of such reasonable time, the amount of water which should be permitted to be taken should not exceed one-fourth of a second foot.

Respectfully submitted,

_____
Attorney for Eleanor E. Hondius.

_____
Regional Attorney for National Park Service.

_____

_____
Special Assistants to the Attorney Gen'l of the U. S.

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
REGION FOUR
SAN FRANCISCO, CALIFORNIA

601 Sheldon Building
June 27, 1939

Memorandum for Regional Attorney Joseph E. Taylor:

In analyzing the Baldwin Ditch, and that of John Griffith's father, both with diversions from Beaver Creek, I made a point of the value of "n" in computing capacities. As a more practical approach, I should like to analyze the velocity of the water.

The capacity of a ditch is the product of the cross section area, and the velocity at which the water flows through the ditch. The cross section is definitely fixed and easily measured. The velocity is obtained by various formulae involving the grade of the ditch, its cross section area, and the distance around the edge of the cross section that is submerged. Different constants are applied, depending on the method in which these other factors are arranged in the formula.

The constant "n" is that used for Kutter's formula, which is most generally accepted by hydraulic engineers.

Baldwin Ditch Velocities

Regardless of the value of "n", if the Baldwin Ditch had the cross section claimed by its owners -- "Top width, 2.4 ft.; bottom width, 1.0 ft.; depth 0.7 ft. and grade of 10 ft./1000 ft." -- the capacity of 3.25 sec. ft. is only possible with a velocity of 2.73 feet per second.

For the same cross section, at the top of page 2 of my analysis, I obtained the following velocities for different values of "n":

"n" = 0.030; capacity 2.48 sec. ft.; velocity 2.17 ft. per sec.
"n" = 0.035; capacity 2.13 sec. ft.; velocity 1.79 ft. per sec.

It will be my attempt, in a moment, to show that all these velocities are greater than are possible in the ditch.

At the bottom of page 2, I further cited two probable limits of normal capacity, which would result from the following velocities:

"n" = 0.030; capacity 0.688 sec. ft.; velocity 1.03 ft. per sec.
"n" = 0.035; capacity 0.562 sec. ft.; velocity 0.84 ft. per sec.

Both of these are for a water depth of 0.458 ft. If the water were just to overflow the berm, with a total depth of 0.708 feet, with the capacity given on the middle of the same page, the velocity would be:

"n" = 0.035; capacity 1.305 sec. ft.; velocity 1.303 ft. per sec.

On page 3 of the analysis, the following velocities were obtained for various capacities:

Gross Ditch:
"n" = 0.030; capacity 1.52 sec. ft.; velocity 2.76 ft. per sec.
"n" = 0.035; capacity 1.27 sec. ft.; velocity 2.30 ft. per sec.

Net Ditch:
"n" = 0.030; capacity 0.915 sec. ft.; velocity = 2.31 ft. per sec.
"n" = 0.035; capacity 0.760 sec. ft.; velocity = 1.92 ft. per sec.

At the various places where these cross sections were measured, and for considerable distance each way, the ditch showed no signs of erosion. In fact, the growth of plants and deposits of silt and other debris are evidence that no erosion takes place under normal operation. The problem, then, is to accept only ditch capacities with velocities of the water which will not cause erosion.

Critical Velocity

The ditch is built in a formation of glacial sand with very little very small particles, and no clay, loam or other bonding material. Particles are chiefly round and from 1/32 to 1/4 inch in diameter, and those along the wetted surface are loose and free to move.

B. A. Etcheverry, on page 149, volume 1 of "Irrigation Practice and Engineering", gives the following "Safe Maximum Velocities":

Light sandy soil.....1.00-1.25 ft. per second.
Light sandy loam, or course loose sand...1.50-2.00 ft. per second.

Ing. Dr. Techn. Armin Schoklitsch, on page 773, Vol. II, of Hydraulic Structures, as translated and published by the American Society of Mechanical Engineers in 1937 (translation by Samuel Shulitz, and revised translation by Lorenz G. Straub), gives the following maximum permissible mean velocities for ditches:

Sand.....0.50 meters per sec.=1.64 ft. per sec.
Pebbles and round stones.....1.00 meters per sec.=3.28 ft. per sec.
Stony and loamy soil; course
gravel.....1.50 meters per sec.=4.92 ft. per sec.

I further know that in trail construction in the same material in Rocky Mountain National Park between 1929 and 1936, I had difficulty with erosion. The trail was built 4 ft. wide, tipping inward at 1 inch drop per foot, and the back cut slope was 2:1. Water breaks, or spillways, were provided at intervals to keep all flow of precipitated water in the lowest quarter of the cross section width. Erosion was negligible if the trail grade was not over 12%. Computations of runoff, using the Hydraulic and Excavation Tables of the U. S. Reclamation Service, are as follows:

a = 0.04843; p = 1.269; r= a/p = 0.0382
s = 0.12; "n" = 0.0225; velocity = 1.43 per second
Runoff = 0.06925 sec. ft.

From the above examples, the Baldwin Ditch would probably erode if water velocity were allowed to exceed

By Etcheverry (sand control).....1.25-1.50 ft. per second
By Dr. Schoklitsch (sand control)...1.53 ft. per second
By my experience.....1.43 ft. per second.

In other words, the Baldwin Ditch has had no capacity to cause a velocity in excess of 1.50 sec. ft.

Limiting Baldwin Ditch Capacities

From the preceding statement, the Baldwin Ditch capacity can be computed without further regard to "n" as a product of cross section area and velocity, as follows:

At point in NPS Utility Area.....0.668 x 1.5 = 1.002 sec. ft.
At point 500 above distribution..0.5 x 1.5 = 0.75 sec. ft.

The latter must be the controlling value and the maximum diversion has been not more than 0.75 sec. ft.

Griffith Ditch

As stated in my analysis of the Griffith Ditch, the cross section area was 0.44 sq. ft. Since it, too, flows through the same glacial deposit, the maximum allowable velocity has not exceeded 1.50 feet per second. This gives a maximum diversion of not over 0.66 sec. ft.

Conclusions

This memo has not attempted to agree with the individual analyses of the two ditches, but to prove independently that these analyses were liberal and fair. It further shows that neither ditch actually conveys more than 0.75 second feet of water, which I have previously shown to be at least half waste, which is not applied to beneficial use.

(Sgd.) A. van V. Dunn.

A. van V. Dunn,
Associate Engineer.

NATIONAL PARK SERVICE

BRANCH OF LAND ACQUISITION AND REGULATION
WATER RIGHTS SECTION

ANALYSIS OF

THE

BALDWIN DITCH CAPACITY

ROCKY MOUNTAIN NATIONAL PARK

By

A. van V. Dunn,
Associate Engineer.

601 Sheldon Bldg.,
San Francisco, Calif.,
June 23, 1939.

Ditch Capacity

Owners of Baldwin Ditch Claim the following:

Width at top 2.4 ft.; width at bottom 1.0 ft.; grade 10 ft. per 1000 ft.; capacity 3.25 second-feet.

I can testify:

This capacity is only possible if the co-efficient "n" equals 0.025. For "n" to equal 0.025, see page 10 "Hydraulic and Excavation Tables" of Bureau of Reclamation for river or canal "of tolerably uniform cross section, slope and direction in average condition; the water slopes being lined with sediment and minute algae or composed of loose, course gravel". This does not describe the condition of the ditch now, or as it has been during the period from July 1929 to the present date.

In its upper portion, across the National Park Utility Area, the ditch is generally as above, but with the addition of grass, weeds, and other aquatic growth along both banks and at places obstructing half of cross section. The said "Hydraulic and Excavation Tables" give a value of "n" between 0.030 and 0.035 for such condition.

Along its lower two-thirds of length, across private property, the ditch has slightly less vegetation, but is obstructed with

larger boulders, tin cans, and other refuse, thrown in by neighboring cottage occupants and overflowing from cesspools and septic tanks above ditch and at places within 10 to 20 feet of said ditch. The said "Hydraulic and Excavation Tables" give "n" the value 0.035 for this condition. Using the ditch cross section and grade claimed for said ditch, the capacity would be:

"n" = 0.030 - Ditch capacity 2.48 second-feet.
"n" = 0.035 - Ditch capacity 2.13 second-feet.

A capacity of 2.13 second-feet would be quite fair if the ditch had the properties claimed, but it does not. At various times during the period 1932 to June 18, 1939, inclusive, I have measured the capacity at a limiting section in the National Park Utility Area, where the following gross capacities exist:

Width at top 2.167 ft.; width at bottom 0.75 ft.; depth 0.708 ft.; grade 6 ft. per 1000 ft., and most probable value for "n" from said tables equal to 0.035; gross ditch capacity 1.305 second-feet.

Any more than 1.305 second-feet would overflow into the National Park Utility Area. I know of no time between 1929 or 1930 and June 18, 1939, when there has been any overflow or full capacity to the top of the levee.

The preceding capacity includes more than the actual ditch. It includes a capacity made possible by a ridge of dirt formed from the material excavated from the ditch proper. The normal ditch cross section, which I have never seen exceeded, is as follows:

Top width 2.167 ft.; bottom width 0.75 ft.; depth 0.458; grade 6 ft. per 1000 ft. Possible capacities as follows:

"n" = 0.030 - 0.688 second-feet.
"n" =0.035 - 0.562 second-feet.

Most probably the lower, and certainly not more than the upper of these two quantities, has been conveyed beyond the National Park Utility Area, or been available by the owner of said ditch for beneficial use.

On June 18, 1939, I further observed the ditch when the actual water depth at said last cross section was only 0.168 feet, and the flow with "n" = 0.035 was 0.082 second-feet. I further observed that the flow completely disappeared in seepage 500 feet before reaching the point of distribution for initial use. In other words, 0.082 second-feet of any diversion is lost or wasted in seepage.

Thus, if 0.562 second-feet is the maximum diversion during the period 1930-1939 inclusive, only 0.48 second-feet has been released for use.

Further, at said point approximately 500 feet above distribution of water from ditch, the cross sections were as follows:

Gross (Water would overflow levee.)

Top width 1.083 ft.; bottom width 0.5 ft.; depth 0.67 ft. grade 15 ft. per 1000 ft.

Capacity: if "n" equals 0.030 - 1.52 second-feet.
if "n" equals 0.035 - 1.27 second-feet.

Net (Water at maximum depth in recognized ditch.)

Top width 1.083 ft.; bottom width 0.5 ft.; depth 0.5 ft.; grade 15 ft. per 1000 ft.

Capacity: if "n" equals 0.030 - 0.915 second-feet.
if "n" equals 0.035 - 0.760 second-feet.

I cannot testify that these properties of the ditch have been the same during the whole period 1930-1939, but I can testify that they are nominally consistent with those limiting the ditch capacity to 0.56 second-feet through the National Park Utility Area.

I, therefore, protest any claim for a diversion in excess of 0.6 second-feet.

Method of Distribution

At said point of distribution, the water is released from the ditch to flood (as far as possible) a sandy hill slope. Buried collecting pipes pick up part of the resulting seepage, and convey it to the point of use.

I cannot testify to the percentage of the diverted water which is so collected, but it is of necessity small. I question any estimate in excess of 50%, or 0.3 second-feet.

I testify that this method of distribution is temporarily necessary to filter out part of the pollution resulting from flow in an open ditch, through an area of cottages occupied by careless and indifferent people, and collecting overflow sewage at least part of the time.

I further testify that the method of filtering is wasteful, and that the portion of the water not collected (probably 50%) is not applied to any beneficial use.

Water Use

The water, once in the pipe, serves cottages, auto camps, gas stations, and stores, for domestic, recreational, and some fire protection purposes. There is no formal irrigation, though hose application may be made to lay dust in some areas, and to wash some cars. There is no power developed.

Water Demand

The area served by the Baldwin Ditch is smaller than that served by the Hondius-Beaver Pipe Line, and the population is certainly no greater.

I protest any claim of present or past beneficial use in excess of that claimed for the Hondius-Beaver Pipe Line, or 0.33 second-feet. I further doubt if more than 0.20 second-feet have ever been applied to beneficial use.

Conclusions:

From the preceding discussion, I recommend that the Park Service take the following stand with regard to the Baldwin Ditch at the present general adjudication:

1. Protest any decreed water right in excess of 0.33 second feet.

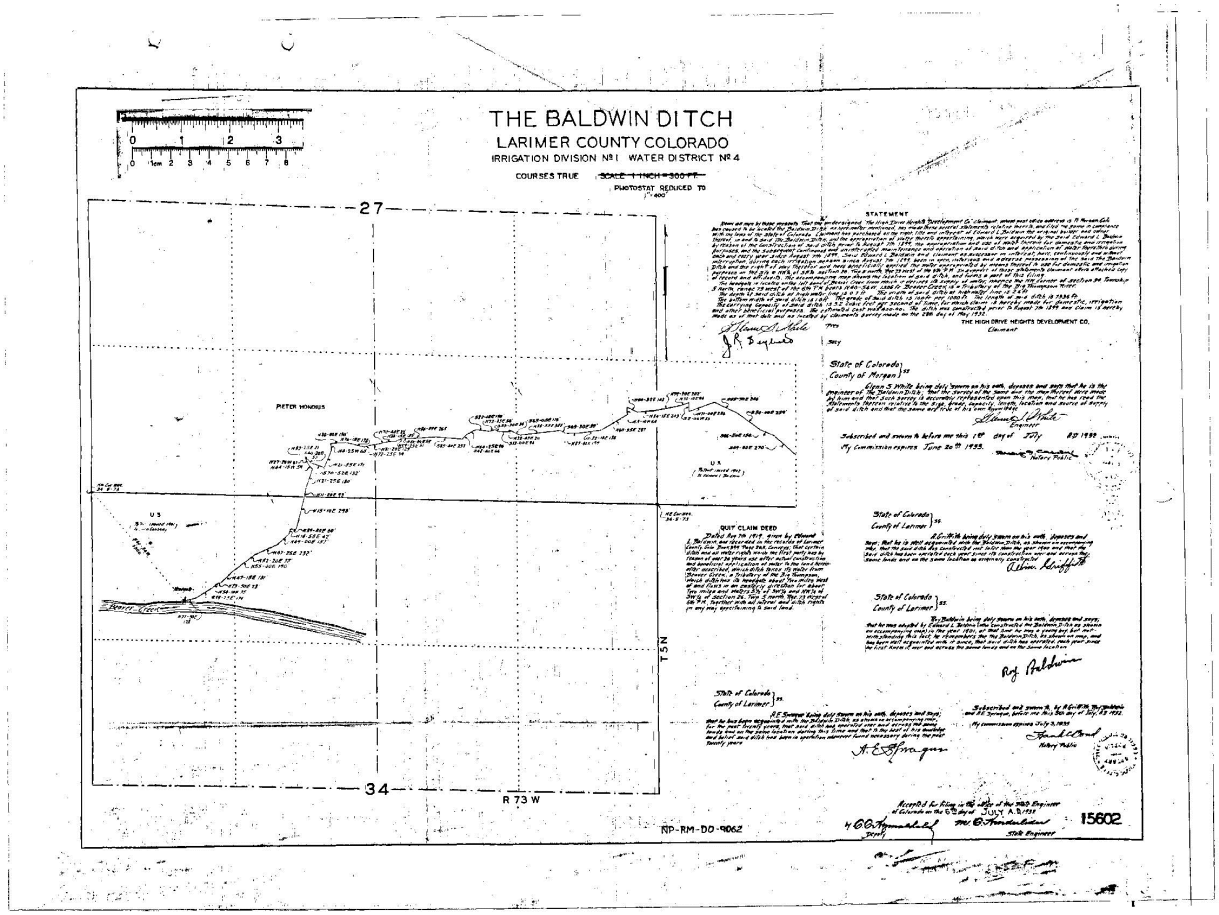
2. Recommend a 2-year period in which to permit ditch owners to convert their ditch to a pipe, both to conservewater and increase sanitation.

3. Permit temporary diversion of 0.6 second-feet, as at present, until pipe is installed, but recognize that 0.27 second feet thereof is not now justified, and that any permanent rights thereto are conditional on:

   A. Completion of said pipe line.

   B. Increased population served to justify said additional use.

   and that any conditional right to said 0.27 second-feet shall date from start of installation of pipe line only if said pipe line is completed within two years from July 6, 1939.



Docket Information

Number of Documents in Docket 90

Documents Dated from 7/15/1932 to 6/15/1966

Docket Compiled: 6/8/2016