

# FEASIBILITY REPORT

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## **SOUTH PLATTE DITCH COMPANY DIVERSION STRUCTURE REHABILITATION PROJECT**

DIVISION 1, WATER DISTRICT 64  
WASHINGTON & LOGAN COUNTIES, COLORADO

March 31, 2021



*Prepared for:*

South Platte Ditch Company  
15099 County Road 59.5  
Merino, CO 80741

In cooperation with the Colorado Water Conservation Board.

*Prepared by:*

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## EXHIBITS

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- Exhibit A: Articles of Incorporation and Bylaws
- Exhibit B: State Engineer Diversion Reports 1950-2019  
South Platte Ditch  
(from CDSS HydroBase)
- Exhibit C: Service Area Map
- Exhibit D: Site Photos
- Exhibit E: Preliminary Design Drawings
- Exhibit F: Detailed Construction Cost Estimate and Loan Amortization
- Exhibit G: CWCB Loan Application
- Exhibit H: Financial Statements: 2018 thru 2020
- Exhibit I: Stockholders List and Assessment History

**South Platte Ditch Company**

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*President*

Mike Hettinger  
*Vice-President*

Derk Kailey  
*Secretary*

Darrell Albrandt  
*Treasurer*

Ron Quint  
*Ditch Superintendent*

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HARRIS ENGINEERING CONSULTANTS, INC. would like to thank the South Platte Ditch Company for the valuable assistance provided during the preparation of this report. Special thanks are offered to the following individuals of the Company and other organizations:

**Mr. Dave Kautz**

President, South Platte Ditch Company

**Mr. Cole Bedford, P.E.**

Colorado Water Conservation Board

**Mr. Jim Boone**

Owner, Ransom Boone Excavating

## Executive Summary

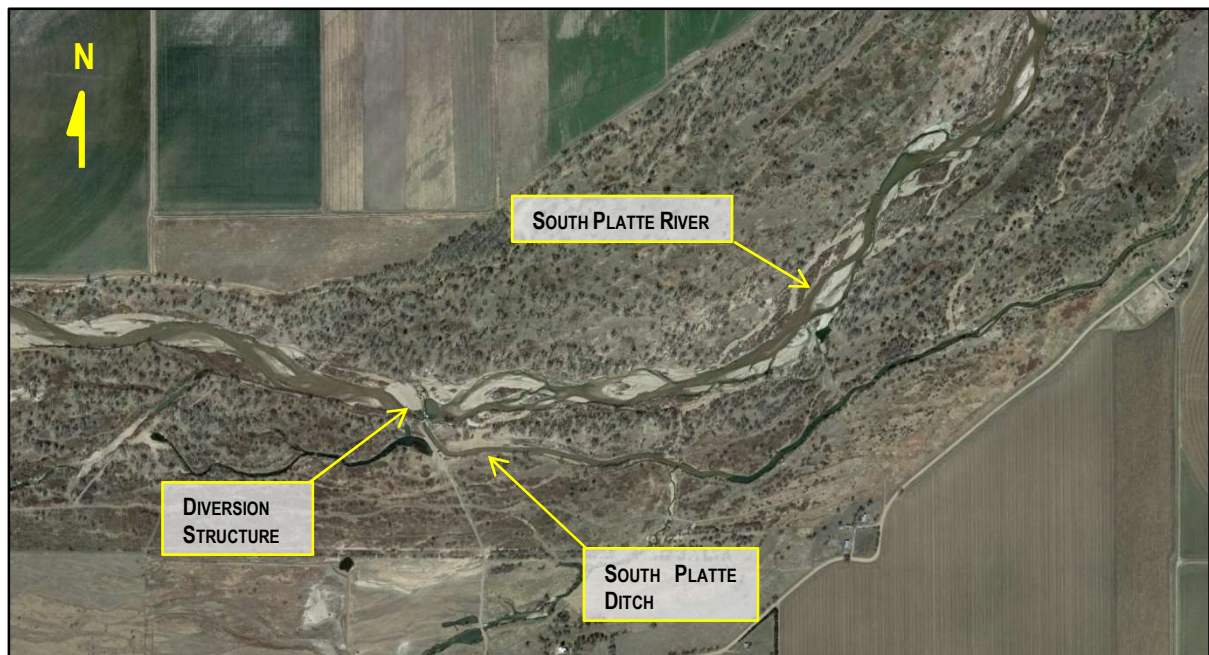
The South Platte Ditch Company (SPDC) operates and maintains an irrigation ditch system in Logan and Washington Counties for the distribution of water for direct flow irrigation and augmentation. The system serves approximately 4,400 acres for 20 shareholders. Water is diverted from the South Platte River at a diversion structure located approximately six miles southwest of the Town of Merino in Washington County, Colorado. The diversion structure is positioned just upstream of a bend, where the river channel changes course, veering sharply to the northeast. Past flood events have resulted in a broadening of the channel at the structure, necessitating the construction of a sand dam off the north end of the structure to prevent the river from flanking the headworks. An aerial image of the existing structure is provided on Figure 1, below.

Principal concerns regarding the existing structure include: the poor physical condition of the structure floor; significant erosion of the downstream channel; undermining of the downstream face of the structure; and deterioration of the diversion bladder gate. The diversion bladder gate was installed in 1997; however, abrasive action due to high-velocity, sand-laden river water has deteriorated the carbon steel gate panels and eroded a section of the concrete floor downstream of the bladder gate. The concrete of the original structure floor is deteriorating as a result of time and wear. Scour downstream of the structure has resulted in the erosion of the channel floor and undermining of the structure. Pictures of the existing structure are included in Exhibit D.

The cost to rehabilitate the diversion structure is estimated at \$1,065,000 (rounded to the nearest thousand dollars). A detailed cost estimate is included in Exhibit F.

The SPDC is requesting a low-interest water project loan from the Colorado Water Conservation Board (CWCB) to fund the project.

**Figure 1: Aerial View of Existing Structure**



## Project Sponsor

The South Platte Ditch Company (SPDC), located in Logan and Washington Counties, Colorado is a mutual ditch company and a non-profit corporation. Articles of Incorporation and Company Bylaws are included in Exhibit A; a list of current shareholders can be found in Exhibit I.

The SPDC, incorporated in June of 1881, was formed to construct and operate the South Platte Ditch for the benefit of shareholders by providing direct flow irrigation water. The Company currently has 20 shareholders with 206.9 total shares of stock and a decreed absolute water right of 137.5 cubic feet per second (cfs) from the South Platte River. Water is diverted at the Company's headworks located on the south bank of the South Platte River. The diversion structure is located at stream mile 90.90, in the southeast quarter of the southwest quarter of Section 8 of Township 5 North, Range 54 West of the Sixth Principal Meridian. The Company's distribution system consists of approximately 14 miles of surface ditch with two wasteways that allow for the return of excess water to the river. The Company also operates the Sandhill Recharge Project which branches off the main ditch and delivers water to both natural ponds and man-made impoundments to recharge the aquifer. The average annual diversion for the SPDC is approximately 12,413 acre-feet, which equates to approximately 60 acre-feet per share.

## Project Service Area

The service area is located in Logan and Washington Counties, positioned on the south side of the South Platte River between the Town of Atwood and the City of Sterling, Colorado. The service area is comprised of, on the average, approximately 4,400 acres of irrigated cropland. Water diverted from the river is typically used to irrigate corn, alfalfa, beans, and sugar beets. The elevation at the point of diversion is approximately 4080 feet. A location map of the service area can be found in Exhibit C.

## Water Rights

A summary of the historic water rights held by the SPDC are included in Table 1, below. This information was obtained from the Structure Summary Report in the Colorado Water Resources Decision Support System (CDSS) attached in Exhibit B. The SPDC has a decreed absolute water right of 137.5 cfs.

**Table 1: Historic Water Rights Data**

| APPRO. DATE | ADJ. DATE  | CASE NO. | AMOUNT (CFS) |
|-------------|------------|----------|--------------|
| 05/01/1872  | 11/15/1894 | CA0304   | 22.5         |
| 02/15/1876  | 02/24/1903 | CA0765   | 7.5          |
| 04/21/1883  | 02/24/1903 | CA0765   | 20.0         |
| 05/01/1890  | 02/24/1903 | CA0765   | 37.5         |
| 04/01/1896  | 09/29/1902 | CA0605   | 50.0         |

**Table 2: Water Rights and Diversion Summary**

| DESCRIPTION                                    | AMOUNT     |
|--|------------|
| Decreed Water Right (cfs)                      | 137.5      |
| Maximum Day Diversion (cfs)                    | 115        |
| Date of Maximum                                | 07/09/1970 |
| Average Annual Diversion 1950 – 2019 (acre-ft) | 12,413     |

Yearly diversions over the past fifteen years have generally exceeded the historic average shown in Table 2 due to the advent of augmentation plans and the proliferation of associated recharge sites across the service area. In fact, annual diversions over the last fifteen years have averaged 15,620 acre-feet. The average and maximum monthly historic diversions into the South Platte Ditch are included in Table 3.

**Table 3: Historic Diversions**

| MONTH     | AVG.<br>DIVERSION<br>(CFS) | MAX.<br>DIVERSION<br>(CFS) |
|-----------|----------------------------|----------------------------|
| November  | 15                         | 37                         |
| December  | 14                         | 36                         |
| January   | 24                         | 43                         |
| February  | 23                         | 44                         |
| March     | 18                         | 59                         |
| April     | 25                         | 72                         |
| May       | 30                         | 90                         |
| June      | 30                         | 112                        |
| July      | 38                         | 115                        |
| August    | 37                         | 80                         |
| September | 30                         | 73                         |
| October   | 20                         | 56                         |

## Streamflow

The South Platte River Basin is hydrologically diverse, receiving drainage from the eastern slope of the Rocky Mountains with headwaters near 14,000 feet culminating into large tributaries before emptying into the South Platte River. Conversely, the basin is likewise comprised of many small ephemeral tributaries in the plains region that extend as far south as the Palmer Divide. The Basin also includes many heavily urbanized regions, including the Denver metropolitan area. Although streamflow in the South Platte is primarily the result of snowmelt, major flood events over the past century have been the product of inflows generated from large convective storms occurring between May and September. Namely, the major floods of 1894, 1921, 1935, 1965, 1973, 2013, and, most recently, 2015 were all the result of large precipitation events within the Basin.

As there are no historic records of streamflow at the Company's headworks, records from the nearest river gaging station located approximately 7 miles upstream near Balzac were used to represent conditions at the point of diversion. There are records available for two gaging stations near Balzac:

### Station 06760000

*Operating Entity: USGS*

*Location: N40° 24' 24" W103° 27' 58" (NAD27)*

*Date of Record: 01/1917 through 05/1980*

*Drainage Area: 16,623 square miles*

*Elevation: 4091.06 feet (NGVD29)*

### Station 06759910

*Operating Entity: Colorado Department of Water Resources (DWR)*

*Location: N40° 21' 27" W103° 31' 41" (NAD83)*

*Date of Record: 10/1980 through present*

Drainage Area: 16,609 square miles  
Elevation: 4135.02 feet (NAVD88)

Tables 4 through 6 summarize the streamflow characteristics at the point of diversion. Peak discharges for the South Platte River at Balzac were adopted from a hydrologic evaluation conducted in 2015 [Ref. 2], as part of the Colorado Hazard Mapping Program (CHAMP) study for the Lower South Platte River Basin. The flood frequency analysis documented in the study included peak flows from flooding events that occurred in September of 2013 and the Spring of 2015. Peak flood discharges are enumerated in Table 4, while Tables 5 and 6 illustrate the average monthly streamflow and flow duration exceedance values, respectively.

**Table 4: Flood Discharges, South Platte River**

| FLOOD EVENT | PEAK DISCHARGE<br>(cfs) |
|-------------|-------------------------|
| 2 yr        | 3,652                   |
| 5 yr        | 9,143                   |
| 10 yr       | 15,088                  |
| 25 yr       | 26,152                  |
| 50 yr       | 37,643                  |
| Sept. 2013  | 51,000                  |
| 100 yr      | 52,549                  |
| 500 yr      | 105,067                 |

**Table 5: Mean Monthly Flows, South Platte River**

| MONTH     | MEAN FLOW<br>(cfs) |
|-----------|--------------------|
| November  | 203                |
| December  | 309                |
| January   | 444                |
| February  | 413                |
| March     | 357                |
| April     | 484                |
| May       | 1,216              |
| June      | 1,839              |
| July      | 484                |
| August    | 375                |
| September | 378                |
| October   | 260                |

**Table 6: Flow Duration Data, South Platte River**

| EXCEEDENCE<br>(%) | FLOW<br>(cfs) |
|-------------------|---------------|
| 5                 | 1,830         |
| 10                | 1,080         |
| 20                | 590           |
| 30                | 348           |
| 40                | 236           |
| 50                | 177           |
| 60                | 132           |
| 70                | 80            |
| 80                | 30            |
| 90                | 16            |
| 95                | 12            |

## Need for the Project

The SPDC is undertaking repairs to their diversion structure to ensure that it can continue to divert water from the South Platte River.

The ditch intake is a concrete structure with one (1) 4-foot tall, 16-foot long bladder gate. The gate consists of an epoxy-coated carbon steel panel supported by a rubber bladder that is pneumatically actuated. A small gate control building made of concrete is situated adjacent to the headgate and houses the air compressor and gate control system. The intake structure is positioned approximately 15 degrees off the perpendicular from the diversion barrage and is recessed slightly into the river bank, which may encourage sedimentation in front of the headgate. The ditch intake structure is less than 25 years old and is in good condition.

The diversion barrage is a reinforced concrete slab structure that consists of a 6-foot-wide radial arm gate, a 4-foot tall, 20-foot long bladder gate and approximately 175 feet of concrete rollover wall. The total length of the structure is approximately 202 feet from the north to the south abutment. The height of the rollover wall is approximately 4 feet above the concrete floor slab. Although the exact age of the original structure is unknown, it has likely been in place since the early 1900's. The concrete of the original structure shows signs of extensive age and deterioration with spalling, fatigue cracking, significant erosion from abrasion, and general decay evident throughout. The bladder gate, the radial gate and the control building were installed in 1997 as part of a rehabilitation project incited by extensive damage sustained as a result of the 1995 flood. Although relatively new, the bladder gate has been subjected to heavy abrasive action from contact with sand-laden water impinging across its surface and is substantially deteriorated. The concrete floor downstream of the bladder gate has likewise been eroded; a section of the floor just below gate has been worn down to such a degree that the top rebar mat is exposed. Photos of the existing structure can be found in Exhibit D.

Past flood events in conjunction with a restriction of sediment continuity have resulted in the erosion of the channel bottom downstream of the structure. At present, there is a 2-to-3-foot elevation difference (drop) between the structure floor and the channel bottom. The erosive action has resulted in substantial undermining along the downstream face of the structure. If left unmitigated, this could result in the catastrophic failure of the dam.

## **Alternatives Evaluated**

Four alternatives were considered: 1) Do not build the project; 2) Rehabilitate the existing structure; 3) Rehabilitate the structure and install additional diversion bladder gates; and 4) Replace the existing structure with a new structure located at/near the present point of diversion. A subjective evaluation of the alternatives is summarized below:

### ***1. Do not build the project:***

If this project is not pursued, the structure will continue to deteriorate. As a worst-case scenario, if the diversion dam fails, the shareholders would be unable to divert irrigation water supporting approximately 4,400 acres of farmland. This could potentially lead to a substantial loss of crops reliant on the South Platte Ditch. The value of affected irrigated lands in the SPDC system could potentially drop from \$5300 to \$1370 per acre, based on average land values for irrigated and non-irrigated farm ground in the State of Colorado [Ref. 9].

For the reasons above, this alternative is not considered acceptable by the Company.

### ***2. Rehabilitate the existing structure:***

This alternative consists of the rehabilitation of the existing structure. Repair efforts will focus on addressing areas of immediate concern identified on the structure. Specifically, repairs will include the following:

- Remove the existing components of the diversion gate and replace with new components, including 3CR12 stainless steel panels for enhanced durability and abrasion resistance;
- Install a reinforced concrete overlay over the damaged structure floor;
- Install a scour pad, constructed of reinforced concrete, on the channel floor downstream of the diversion structure. The scour pad will be attached to the existing structure and will include baffles strategically positioned to improve energy dissipation.

This alternative will arrest further undermining and improve the overall stability of the structure in addition to ensuring that the diversion gate continues to function as expected.

The cost of this alternative is approximately \$1,065,000.

**3. *Rehabilitate the existing structure and install additional diversion bladder gates:***

This alternative includes the repair efforts described in #2 and also involves the installation of an additional 40 feet of bladder gate to the diversion structure. The new gate would be placed adjacent to the existing 20-foot gate to provide a total of 60 feet of operable bladder gates on the river. Upgrades would be required to the existing air supply and control system to accommodate the additional gates.

Advantages of lengthening the bladder gate include enhanced sluicing operations, sediment transport capacity and reduced abrasion to gate components. The latter is a result of increasing the area available for conveyance, and therefore, reducing the velocity (the primary mechanism for abrasive action) for the same discharge.

The cost of this alternative is estimated at \$1,381,000. Because of the high capital cost, this alternative was not selected.

**4. *Replace the existing structure with a new structure:***

This alternative consists of the complete removal and replacement of the existing diversion barrage and control building; the existing intake structure and bladder gate would be preserved. The new diversion barrage would be constructed on or near the footprint of the existing structure, but would be preferentially oriented to the intake structure. The floor of the new structure would be lowered at least 2 feet below the elevation of the existing structure to accommodate the river channel.

The new diversion barrage would be constructed of reinforced concrete and arranged in a traditional slab and buttress configuration and include the following major components:

- One 60-foot long, 7-foot tall inflatable crest gate spillway (bladder gate) as manufactured by Obermeyer Hydro, Inc. (Obermeyer) and placed in the river channel;
- One 15-foot by 20-foot control building, constructed of reinforced concrete. The control building would contain the following:
  - Gate air-supply system, including air compressors, dryers, and air receiver tanks.
  - Gate control system, consisting of a pneumatic control panel and PLC for gate automation.
  - Solar panel array to supply power for operation of the gate system.

The cost of this alternative is approximately \$1,795,000. This alternative is feasible but not very economical and was therefore not selected.

## **The Selected Project**

The SPDC plans to construct alternative #2. Features of this alternative are as follows:

- The new reinforced concrete floor overlay will have a minimum thickness of 8 inches with reinforcement sized to provide a minimum area of steel to gross area ratio of 0.005.
- The new scour pad will be founded on friction piling driven into the riverbed in a grid pattern. Steel sheet piling will be driven around the perimeter of the pad to preclude seepage, reduce uplift pressures



and exit gradient, and confine the material under the foundation during all conditions of river flow and turbulence. The new pad will have a minimum thickness of 12 inches.

- The existing diversion bladder gate panels will be replaced with new panels fabricated out of 3CR12 stainless steel for enhanced durability and abrasion resistance.

The features narratively described above are shown on the preliminary plan set found in Exhibit E.

### Cost Estimate

The estimated total project cost is \$1,065,000. A detailed cost estimate is attached to this report in Exhibit D.

| <u>Item</u>                                 | <u>Estimated Cost</u> |
|---|-----------------------|
| 1. Planning, Design, and Legal Costs        | \$ 52,000             |
| 2. Construction Cost                        | \$ 878,000            |
| 3. Miscellaneous and Contingency @ +/-14.5% | \$ 135,000            |
| Total Cost                                  | \$ 1,065,000          |

### Implementation Schedule

The proposed implementation schedule anticipates a completed project by March of 2022. This is based on construction commencing in late fall of 2021, after irrigation season and when conditions in the river are optimal. Project milestone dates are as follows:

| <u>Task</u>                                      | <u>Date of Completion</u> |
|--|---------------------------|
| 1. Feasibility Study Submitted to CWCB           | 04/01/21                  |
| 2. Preliminary Design                            | 05/01/21                  |
| 3. Feasibility Study Review and Approval by CWCB | 05/19/21                  |
| 4. Complete Final Design                         | 07/01/21                  |
| 5. Order Long Lead Time Items (Obermeyer gates)  | 08/02/21                  |
| 6. Bidding and Contract Award                    | 09/01/21                  |
| 7. Notice to Proceed with Construction           | 11/02/21                  |
| 8. Begin Construction                            | 12/01/21                  |
| 9. Complete Construction                         | 03/15/22                  |

### Social, Economic, and Physical Impacts

The project will have no significant social impacts.

The construction activity itself will result in short term, localized economic benefits. The primary economic impact, however, will be borne by the shareholders who will assume a considerable increase in annual assessments to subsidize the acquired debt service. This may be offset somewhat by obviated maintenance expenditures associated with the existing structure. From a reliability perspective, the project will have a long term positive economic impact by assuring continued diversions into the South Platte Ditch. As indicated before, the 'no action' alternative is not acceptable.

The project will have no significant negative physical impacts once construction is complete. Positive environmental impacts include: improved sediment passage; river continuity for habitat migration at intermediate flows when the bladder gate in the river is sufficiently lowered; and enhanced conveyance of low to moderate flood flows.

## Permitting

The project is located on private land with a long-standing easement that includes both the headworks at the point of diversion and the South Platte Ditch. No additional easements or rights of way for the selected alternative are anticipated as the new structure will be located at or near the existing point of diversion.

The Company expects to be exempt from 404 permitting by Statutory Exemption, 33 CFR Section 323.4 (a) 3 (repair of an existing diversion structure). As the project is unlikely to have any federal nexus, the Company believes no Environmental Assessment (EA) or Environmental Impact Statement (EIS) will be required.

## Financial Plan

The total cost of the project is \$1,065,000. The SPDC is requesting a 30-year low interest loan from the Colorado Water Conservation Board (CWCB) for the full amount of the project.

Lending rates for CWCB loans are set based on the designation of the entity applying for a loan. Ownership of shares in the South Platte Ditch are approximately 98% agricultural, with 2% of total shares held by the State of Colorado. It is therefore anticipated that the Company will qualify for a blended interest rate of 1.1% at current lending rates. Accordingly, a rate of 1.1% was used to estimate the debt service associated with the project. The financial analysis summarized in Table 10 is based on a 100% loan from the CWCB.

**Table 10: Project Loan Summary**

|                                       |              |
|---------------------------------------|--------------|
| Total Project Cost (rounded)          | \$ 1,210,000 |
| 1% CWCB Service Fee                   | \$ 10,650    |
| CWCB Loan (including 1% service fee)  | \$ 1,075,650 |
| Annual Payment (30 year term @ 1.50%) | \$ 42,291    |
| Number of Shares                      | 206.9        |
| Annual Cost per Share for Loan        | \$ 204.40    |
| Current Assessment per Share          | \$ 350.00    |
| New Assessment per Share              | \$ 554.40    |

A \$1,075,650 loan from the CWCB (including a 1% origination fee) at 1.1% interest over a 30-year repayment period yields an annual payment of approximately \$42,291, for a total principal plus interest payment of \$1,268,728 over the 30-year term. As there are 206.9 shares in the SPDC, this results in an annual project cost of \$204.40 per share. Based on a combined average annual diversion of 12,413 acre-feet of water, the project will entail an incremental commodity rate increase of \$3.41 per acre-foot diverted. Considering the existing assessment of \$350 per share, the total cost of water diverted after the project is complete will be \$9.24 per acre-foot. This financial analysis should stay consistent over the period of the CWCB debt retirement.

## Collateral

The SPDC has the following collateral it can offer for the CWCB loan, in this order of preference:

1. The project itself. The project will be owned by the SPDC and can be offered by vote of the stockholders.
2. A pledge of assessment revenue of the SPDC stockholders, if approved by vote.
3. One annual payment in the form of a Certificate of Deposit (CD), to be held by the State Treasurer.

## **Institutional Considerations**

The SPDC will need authorization to borrow \$1,075,650 from the CWCB Construction Fund. The loan from the CWCB, if approved, will be contingent upon the successful negotiation of a contract between CWCB and the SPDC. Agreements with contractors will be finalized upon authorization of the CWCB loan.

## **Opinion of Feasibility**

The selected alternative is technically and financially feasible. There are no significant roadblocks which would keep the SPDC from successfully completing this project.

## References

- 1) **Flood Insurance Study for Logan County, Colorado and Incorporated Areas**, Federal Emergency Management Agency, Flood Insurance Study No. 08075CV000B, April, 2019.
- 2) **Colorado Hazard Mapping Program Hydrologic Analysis Technical Support Data Notebook for the South Platte River**, AECOM, CWCB Contract CT 2016-1452, August 2017.
- 3) **South Platte River Watershed Phase 2 Hydrologic Evaluation**, URS, December 2015.
- 4) **Colorado Hazard Mapping Program Hydraulic Analysis Technical Support Data Notebook for the South Platte River**, AECOM, CWCB Contract CT 2016-1452, March, 2018.
- 5) **7.5-Minute Series Topographic Maps**, U.S. Department of the Interior, Geological Survey, Scale 1:24,000, Contour Interval 10 Feet: Messex, Colorado (1971); Merino, Colorado (1971).
- 6) **Digital Elevation Models**, Colorado GeoData Cache, Colorado Governor's Office of Information Technology, <https://geodata.co.gov/>, August, 2019.
- 7) **Open-Channel Hydraulics**, Chow, Ven Te, McGraw-Hill, Inc., 1959.
- 8) **HEC-RAS River Analysis System, Version 4.1.0**, U.S. Department of the Army, Corps of Engineers, Hydrologic Engineering Center, January 2010.
- 9) **Land Values 2020 Summary**, U.S. Department of Agriculture, National Agricultural Statistics Service, August 2020.

## EXHIBIT A

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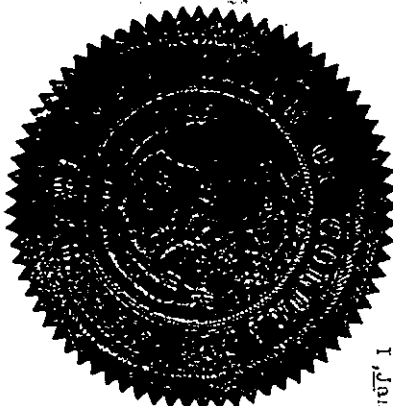
### *Articles of Incorporation and Bylaws*



personally known to me to be the persons whose names are subscribed to the annexed and foregoing certificate of incorporation, appeared before me this day in person, and acknowledged that they signed, sealed and delivered the said instrument of writing as their free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and seal, this 24th day of May A. D. 1887

*Richard R. Pugh*  
*Richard R. Pugh*



State of Colorado,  
Secretary's Office)

I, James Rice, Secretary of State of the State of

Colorado, do hereby certify that the foregoing is a full, true and complete transcript of the Certificate of Incorporation of the South Platte Ditch Company, which was filed in this office on the 1st day of June, A.D. 1887 at 9 o'clock, A.M. and admitted to record.  
In Testimony Whereof, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Colorado at the City of Denver, this 2nd day of March, A.D. 1887.

NOTARY OF STATE

|   |                 |
|---|-----------------|
| 433   |                 |
| No.   |                 |
| Certificate of Incorporation.   |                 |
| OF THE  |                 |
| <i>South Platte Ditch</i>   |                 |
| COMPANY,  |                 |
| State of Colorado,  | County.         |
| STATE OF COLORADO,  | ss.             |
| County  |                 |
| I hereby certify that this instrument was   |                 |
| filed for record in my office, on the   |                 |
| day of  | A. D. 188       |
| at... o'clock,  | M., and is duly |
| recorded in book  | page            |
| County, Colorado,   | RECORDED        |
| MAY 2 1887  |                 |
| <i>Charles W. Heller</i>  | CLERK.          |
| Fees,...  |                 |
| <i>State of Colorado ss.</i><br><i>for Aug 6 1887</i><br><i>Filed June 1, 1887, 9 o'clock</i><br><i>W.M. Recorded in Book 11</i><br><i>Page 32. N.W. McClellan</i><br><i>Secretary of State</i><br><i>Richard R. Pugh</i> |                 |





# Know all Men these Presents,

Jerome B. Litch  
C. Kendel

Charles Baller and John

residents of the State of Colorado

of the South Platte

of the Laws of the State of Colorado

and acknowledge in

and by virtue of said Laws.

FIRST—The corporate name

Ditch Company

SECOND—The objects

Agricultural, Horticultural

out from the Platte

in Township Five North of Range

extending in a North

being solely in the County

associated ourselves together as a Corporation

for the purpose of becoming a body politic under and by virtue

of the Laws of the State of Colorado in accordance with the provisions of the Laws

and we do hereby make, execute

this certificate in writing of our intent

to become a body corporate, under

of our said Corporation

is formed

for the purpose of

the said Ditch to be located

in Township Five North of Range

terminating at point A in

in the State of Colorado

under the name and style

South Platte

for the purpose of

the said Ditch to be located

on the South Side of

from 154, Westward

to 16 X. Range 53 West

THIRD—Our said

FOURTH—The affairs and

Directors

Jerome B. Litch

are hereby selected to be

until the election of

SIXTH—The operations

in the State of

and the principal place and

the County of

SEVENTH—The

for the management of the

IN TESTIMONY WHEREOF

of May

In presence of

to exist for the term of

of our said Corporation

Jerome B. Litch

Charles Baller

and to manage the affairs

of their said

will be carried

in the County of Weld

of our said Corporation will be located

and State

shall have power to make such

according to the statutes

we hereunto set our hands and seals, on this

1881

under the control of Five

Charles Baller

for the first year

of Weld

North Platte, in

aforsaid.

shall be made and provided.

day

STATE OF CALIFORNIA, DO, }

COUNTY OF

Not

in and for said County, in and for said County, do hereby certify that

I, *Henry R. Pickett*, *Notary Public*,  
*John C. Ball*, *John C.*

personally known to me, whose names are subscribed to the annexed certificate of incorporation, appeared before me this day and acknowledged that they signed, sealed and delivered the same as their free and voluntary act, for the purposes therein set forth.

Given under my hand and Notary Public on this 24<sup>th</sup>

day of May

*Sidney Pickett*  
*Notary Public*

**Certificate of Incorporation.**

OF THE

*South Platte Ditch Co.*

State of Colorado, County of Weld

STATE OF COLORADO, }  
COUNTY OF }

Filed for record at \_\_\_\_\_ o'clock \_\_\_\_\_ M.,

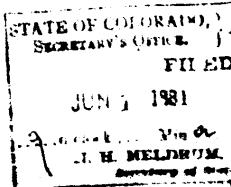
188

in my office, and duly recorded in Book  
page No

Recorder.

No.

Fees, \$



This document has been inspected  
and properly entered on the Re-  
cords of the Flat Tax Department

Date *September 30, 1968*

*Sage*

Clerk

RESOLUTION

BE IT RESOLVED by the South Platte Ditch Company ("Company") that the proposed Bylaws of the Company which were presented to the shareholders of the Company for their consideration at the Annual Meeting of Shareholders on February 6, 1978, a copy of which are attached, are hereby approved, and the directors of the Company are hereby authorized to adopt such Bylaws substantially in the form presented at the aforesaid Annual Meeting.

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I, Charles Bartlett, Secretary of the South Platte Ditch Company, hereby certify that the foregoing Resolution was adopted by a majority of the shareholders of the South Platte Ditch Company at the Annual Meeting of Shareholders held on February 6, 1978, after notice duly mailed on the 20<sup>th</sup> day of January, 1978 to all shareholders of record on that day.

Charles Bartlett, Secy  
Charles Bartlett, Secretary

BYLAWS  
OF  
THE SOUTH PLATTE  
DITCH COMPANY  
("Company")

ARTICLE I. - Offices

The principal offices of the company shall be at Merino, Colorado, or at any other location which the board of directors, in its discretion, may determine.

ARTICLE II. - Meetings of Shareholders

1. Time and Place: Any special meeting of the shareholders may be held at such reasonable time and place within the State of Colorado as may be fixed by the person or persons calling the special meeting.

2. Annual Meeting: The annual meeting of the shareholders shall be held at Merino, Colorado, on the first Monday in February of each year, or at such other reasonable date and place as the board of directors may determine.

3. Special Meetings: Special meetings of the shareholders, for any purpose or purposes, may be called by the president, the board of directors, or the holders of not less than one third of all of the shares entitled to vote at the meeting. The business transacted at any special meeting shall be limited to the objects or purposes stated in the notice of that meeting.

4. Record Date: For the purpose of determining shareholders entitled to notice of or to vote at any meeting of shareholders or any adjournment thereof, or entitled to receive a distribution of water, or in order to make a determination of shareholders for any other proper purpose, the board of directors may fix in advance a date as the record date for any such determination of shareholders. The record date may not be fixed more than fifty and, in the case of a meeting of the shareholders, not less than ten days before the date of the proposed action.

5. Notices: Written notice stating the place, day and hour of the meeting and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than ten nor more than fifty days before the date of the meeting. Notice shall be given either personally or by mail, by or at the direction of the president, the secretary, or the person or persons calling the meeting, to each shareholder of record entitled to vote at such meeting. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail, postage prepaid, addressed to the shareholder at his address as it appears on the stock transfer books of the company. If delivered personally, such notice shall be deemed to be delivered when handed to the shareholder or deposited at his address as it appears on the stock transfer books of the company.



6. Quorum: Except as otherwise provided by law, a majority of the shares entitled to vote, represented in person or by proxy, shall constitute a quorum at any meeting of the shareholders. If a quorum shall not be present or represented, the shareholders present in person or by proxy may adjourn the meeting from time to time, without notice other than announcement at the meeting, for a period not to exceed sixty days at any one adjournment, until the number of shares required for a quorum shall be present. At any such adjourned meeting at which a quorum is represented, any business may be transacted which might have been transacted at the meeting originally called. The shareholders present or represented at a duly organized meeting at which a quorum is originally present may continue to transact business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum.

7. Voting: Except as otherwise provided in these bylaws or by law, all matters shall be decided by a vote of the majority of the shares represented at the meeting and entitled to vote on the subject matter, provided a quorum is present. Each outstanding share shall be entitled to one vote on each matter submitted to a vote of the shareholders, and each outstanding fraction of a share shall be entitled to the same fraction of one vote. A shareholder may vote either in person or by proxy executed in writing by

the shareholder or by his duly authorized attorney-in-fact. Such proxy shall be filed with the secretary of the corporation before or at the time of the meeting. No proxy shall be valid after eleven months from the date of its execution, unless otherwise provided in the proxy. Voting shall be oral, except as otherwise provided by law, but shall be by written ballot if such written vote is demanded by any shareholder present in person or by proxy and entitled to vote.

8. Waiver: Whenever law or these bylaws require a notice of a meeting to be given, a written waiver of notice signed by a shareholder entitled to notice, whether before, at, or after the time of the meeting stated in the notice, shall be equivalent to the giving of notice. Attendance of a shareholder in person or by proxy at a meeting shall constitute a waiver of notice of a meeting, except where a shareholder attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened.

9. Action by Shareholders Without a Meeting: Any action required to or which may be taken at a meeting of the shareholders may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the shareholders entitled to vote with respect to such action. Such consent may be executed in

counterparts and shall be effective as of the date of the last signature thereon.

### ARTICLE III. - Directors

The business and affairs of the company shall be managed by a board of directors which shall exercise all the powers of the company except as otherwise provided by Colorado law or the certificate of incorporation of the company, and any amendments thereto.

1. Number; Directors to be Shareholders: The number of directors of this company shall be five. Each director shall be a shareholder in the company or a representative of an entity which is a shareholder in the company.

2. Election: The board of directors shall be elected at the annual meeting of the shareholders or at a special meeting called for that purpose.

3. Term: Each director shall be elected to hold office until the next annual meeting of shareholders and until his successor shall have been elected and qualified.

4. Removal and Resignation: Any director may be removed at a meeting expressly called for that purpose, with or without cause, by a vote of the holders of the majority of shares entitled to vote at an election of directors. Any director may resign at any time by giving written notice to the president or to the secretary, and acceptance of such resignation shall not be necessary to make it effective unless the notice so provides.

5. Vacancies: Any vacancy occurring on the board of directors shall be filled by the affirmative vote of a majority of the remaining directors. A director elected to fill a vacancy shall hold office during the unexpired term of his predecessor in office.

6. Meetings: Meetings of the board of directors may be called by the president or any two members of the board of directors other than the president. Such meetings shall be held at any reasonable time and place as determined by the president or the calling directors.

7. Notices: Notice of a directors' meeting stating the date, hour and place of such meeting shall be given to each member of the board of directors by the secretary, the president or the members of the board calling the meeting. The notice may be deposited in the United States mail at least seven days before the meeting addressed to the director at the last address he has furnished to the company for this purpose, and any notice so mailed shall be deemed to have been given at the time it is mailed. Notice may also be given at least two days before the meeting in person, or by telephone, prepaid telegram, telex, cablegram or radiogram, and such notice shall be deemed to have been given at the time when the personal or telephone conversation occurs, or when the telegram, telex, cablegram or radiogram is either personally delivered to the director or delivered

to the last address of the director furnished to the company by him for this purpose.

8. Quorum: A majority of the number of directors fixed by these bylaws shall constitute a quorum for the transaction of business at all meetings of the board of directors. The act of a majority of the directors present at any meeting at which a quorum is present shall be the act of the board of directors, except as otherwise specifically required by law or these bylaws.

9. Waiver: A written waiver of notice signed by a director entitled to notice, whether before, at, or after the time of the meeting stated therein, shall be equivalent to the giving of notice. Attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened.

10. Attendance by Telephone: Any director shall be deemed present at a meeting of directors if that director is present by conference telephone or similar communications equipment which allows all participants to hear and be heard by each other or otherwise participate immediately, fully and continuously during the meeting.

11. Action by Directors Without a Meeting: Any action required to or which may be taken at a meeting of the

board of directors may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the directors entitled to vote with respect to the proposed action either before or after the taking of such action. Such consent may be executed in counterparts and shall be effective as of the date of the last signature thereon.

#### ARTICLE IV - Officers

1. Number and Election: The officers of the company shall be a president, a vice president, a secretary and a treasurer, who shall be elected by the board of directors from among their number. Each officer shall be a shareholder, except that in the discretion of the board of directors, the secretary and the treasurer need not be shareholders or directors. Any two or more offices may be held by the same person, except the offices of president and secretary. In addition, the president may appoint such other subordinate officers as he shall deem necessary, who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the president.

2. President: The president shall be the chief executive officer of the company and shall preside at all meetings of shareholders and of the board of directors. Subject to the direction and control of the board of direc-

tors, he shall have general and active management of the business of the company and shall see that all orders and resolutions of the board of directors are carried into effect. He may execute contracts, deeds and other instruments on behalf of the company as is necessary and appropriate. He shall perform such additional functions and duties as are appropriate and customary for the office of president and as the board of directors may prescribe from time to time.

3. Vice President: The vice president shall be the second executive officer after the president. The vice president shall also perform such duties and exercise such powers as are appropriate and as are prescribed by the board of directors or president. Upon the death, absence or disability of the president, the vice president shall perform the duties and exercise the powers of the president.

4. Secretary: The secretary shall give, or cause to be given, notice of all meetings of the shareholders and of the board of directors, keep the minutes of such meetings, have charge of the corporate seal and stock records, be responsible for the maintenance of all corporate records and files and the preparation and filing of reports to governmental agencies, other than tax returns, have authority to affix the corporate seal to any instrument requiring it (and, when so affixed, it may be attested by



his signature), and perform such other functions and duties as are appropriate and customary for the office of secretary as the board of directors or the president may prescribe from time to time.

5. Treasurer: The treasurer shall have control of the funds and the care and custody of all stocks, bonds and other securities owned by the company and shall be responsible for the preparation and filing of tax returns. He shall receive all moneys paid to the company and shall have authority to give receipts and vouchers, and to sign and endorse checks and warrants in its name and on its behalf. He shall also have charge of disbursement of the funds of the company, shall keep full and accurate records of the receipts and disbursements, and shall deposit all moneys and other valuable effects in the name and to the credit of the company in such depositories as shall be designated by the board of directors. He shall perform such other duties and have such other powers as are appropriate and customary for the office of treasurer as the board of directors or president may prescribe from time to time.

7. Removal and Resignation: Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the board of directors. Any officer appointed by the president may be removed at any time by the board of directors or the presi-

dent. Any officer may resign at any time by giving written notice of his resignation to the president or to the secretary, and acceptance of such resignation shall not be necessary to make it effective, unless the notice so provides. Any vacancy occurring in any office, the election or appointment to which is made by the board of directors, shall be filled by the board of directors. Any vacancy occurring in any other office of the company may be filled by the president for the unexpired portion of the term.

8. Compensation: Officers shall receive such compensation for their services as may be authorized or ratified by the shareholders. Election or appointment of an officer shall not of itself create a contract right to compensation for services performed as such officer.

#### ARTICLE V. - Stock

1. Certificates: Certificates representing shares of the capital stock of the company properly issued prior to the effective date of these bylaws are hereby confirmed as valid. Certificates representing shares of the capital stock of the company issued or transferred on or after the effective date of these bylaws shall be in such form as may be approved by the board of directors and shall be signed by the president or the vice president and by the secretary. All such certificates issued or transferred on or after the effective date of these bylaws shall be conse-

cutively numbered and the names of the owners, the number of the shares and the date of issue shall be entered on the books of the company. Each certificate representing shares issued or transferred on or after the effective date of these bylaws shall state upon its face (a) that the company is organized under the laws of the State of Colorado, (b) the name of the person to whom the certificate is issued, and (c) the number of shares which the certificate represents.

2. Transfers of Stock: Transfers of shares on or after the effective date of these bylaws shall be made on the books of the company only upon presentation of the certificate or certificates representing such shares properly endorsed by the person or persons appearing upon the face of such certificate to be the owner, or accompanied by a proper transfer or assignment separate from the certificate, except as may otherwise be expressly provided by the statutes of the State of Colorado or by order of a court of competent jurisdiction. The officers or transfer agents of the company may, in their discretion, require a signature guaranty before making any transfer. The company shall be entitled to treat the person in whose name any shares of stock are registered on its books as the owner of those shares for all purposes, and shall not be bound to recognize any equitable or other claim or interest in the shares on the part of any other person, whether or not the company shall have notice of such claim or interest.

3. Distributions of Water:

A. Shareholders shall be entitled to receive water as follows:

(i) Each shareholder shall be entitled to receive water in an amount equal to the proportion of the total water available to and deliverable by the company under the water right priorities of the company, or purchased or otherwise obtained by the company, which the number such shareholder's shares of stock bears to the total number of shares of stock issued and outstanding ("share water"). The board of directors may provide for the use of such reasonable methods of water management and delivery, including but not limited to the rotation of water deliveries among the company's shareholders, as it believes in its discretion may be necessary or desirable to make efficient and equitable deliveries of share water. In its discretion, the board of directors may authorize the delivery of share water in accordance with any reasonable agreement among company shareholders, provided that any such agreement shall first be submitted to the board of directors, and the board shall determine that neither the company nor any shareholder will be injured by the delivery of share water in accordance with such agreement. Each shareholder may take delivery of his share water by

surface means; or, if he has a well or wells which have been decreed by the Water Court for Water Division No. 1 as alternate or supplemental points of diversion for one or more of the South Platte Ditch's decreed priorities, he may take delivery of an appropriate portion of his share water through such well or wells. Any shareholder who diverts a portion of his share water through a well or wells as described above shall measure the amount of water so diverted, and shall report the amount so diverted to the company.

(ii) Notwithstanding the above subparagraph V.3.A.i., water available pursuant to the company's alluvial storage project shall be managed by the board of directors in their discretion for the benefit of the shareholders of the company.

B. Any shareholder who proposes to accomplish any one or more of the purposes listed below must first (and prior to filing an application with the Water Court) submit such proposal to the board of directors. The board of directors shall consider such proposal, and within 60 days after such submission may impose any reasonable terms and/or conditions upon its accomplishment which, in its discretion, it believes are necessary to protect the company and/or the shareholders from any injury or burden due to the accomplishment of such purpose. Neither the imposition nor the failure

to impose terms and conditions shall limit participation by the company in judicial or administrative proceedings related to the proposed accomplishment. Such terms and conditions may include, but are not limited to, protection from injury due to increased carriage losses; protection from a diminished quantity or quality of water available to the company and/or the shareholders; protection from the burden of increased administrative and operational difficulty and expense; and the requirement that the shareholder continue to pay his annual assessments for maintenance costs.

The purposes subject to the above requirement are as follows:

(i) The delivery of water to any person or entity not a shareholder.

(ii) The delivery of water to any person or entity, whether a shareholder or not, for use outside the area served by the South Platte Ditch and the Sand Hill Ditch (or South Platte Extension Ditch) as of the effective date of these bylaws.

(iii) The delivery of water to any person or entity, whether a shareholder or not, for any use other than domestic, irrigation or stockwatering.

(iv) Any change of any water right represented by company stock, including the use of such water right in any plan for augmentation.

4. Lost or Destroyed Certificate: If any stock certificate is claimed to be lost, stolen, or destroyed, a new or replacement certificate shall be issued according to the following procedure, or as otherwise provided by law:

(a) The person seeking the replacement certificate shall file with the company a bond of indemnity satisfactory to the board of directors, holding the company harmless with regard to any claim arising from the certificate claimed to be lost.

(b) The person seeking the replacement certificate shall file with the company a sworn affidavit setting forth (i) the circumstances under which the affiant believes the certificate sought to be replaced was lost or destroyed, and (ii) the affiant's right to the issuance of a replacement certificate.

(c) The board of directors shall review the aforesaid indemnity bond and affidavit and, if both are satisfactory, shall by resolution direct the secretary to issue a replacement certificate.

#### ARTICLE VI - Assessments

1. Assessments on Stock: Each share of stock issued and outstanding shall be subject to a regular annual pro-rata assessment for the company's maintenance and operating expenses, in an amount to be determined by the shareholders at their annual meeting. In addition, at a

special meeting of the shareholders, the shareholders may make any special assessment necessary to meet additional operating or maintenance expenses, provided that the notice of such special meeting includes the fact that a special assessment will be considered at said meeting. If the shareholders shall fail to make or authorize any regular assessment by the first of April in any year, the board of directors shall have the power to make such an assessment for that year.

2. Delinquent assessments: Every assessment, whether made at the annual meeting or at a special meeting of shareholders, or by the board of directors, shall be due in full within 90 days after the date on which the assessment is made, and shall thereafter be delinquent, unless the board of directors shall in writing approve a shareholder's request for a later due date. Every delinquent assessment shall be subject to a penalty of one percent per month until paid, such penalty to attach upon the first day of each calendar month after delinquency. All such penalties shall be deemed a part of the assessment and collected as such. All assessments and any penalties levied thereon shall constitute a perpetual lien on the subject shares, in favor of the company. In its discretion, the board of directors may determine that no water be delivered on shares as to which any assessment is delinquent, or as to which any penalty on assessment remains unpaid.



In addition, in the discretion of the board of directors, any shares upon which any assessment has been delinquent for one year or more may be forfeited and sold in the following manner: The board of directors shall cause a demand for payment of the amount due to be made upon the shareholder of such shares, either in person or by a written notice signed by an officer of the company and mailed to the last address furnished to the company by such shareholder. Said demand whether written or in person, shall also include the information that if the amount due is not paid by a date certain, no less than 30 days after mailing or delivery of such demand, the subject shares will be forfeited to the company and sold. If payment is not made on or before the date specified, the secretary shall cause to be mailed to each shareholder of record on said specified date a notice declaring the subject shares forfeited and advertising that the subject shares will be sold at the company's office in Merino, Colorado, or at another reasonable location in Washington or Logan County, on a day and at an hour specified in the notice, to the highest bidder, provided, however, that such high bidder must also be a shareholder of the company on the date of said sale. At the time and place specified in the published notice, an officer of the company shall offer the subject shares for sale, shall receive bids, and shall sell the shares for the highest price obtainable,

but not less than the amount of the delinquent assessment or assessments, plus accrued penalties, plus the costs of sale, provided, however, that the subject shares shall not be sold to any person or entity who is not a shareholder of the company on the date of said sale. The delinquent shares shall be sold in a block, if possible, but if no satisfactory bids are received for the entire block of shares, the selling officer may offer the shares in smaller blocks or one by one. The proceeds of the sale over and above the amount due on the shares (including penalties and costs of sale), if any, shall be paid to the delinquent stockholder. New certificate or certificates shall be issued to the purchaser or purchasers and the certificate or certificates of the delinquent shareholders shall be cancelled on the books of the company. The delinquent shareholder may, at any time prior to actual sale of the shares, redeem said shares by payment in full of the amounts due thereon, including assessments, accrued penalties, and any costs incurred by the company in attempting to collect said amounts.

The remedies provided in this section are cumulative and not exclusive, and shall not be deemed to prevent the collection of assessments (and penalties thereon) by any other lawful means.

ARTICLE VII. - Seal

The corporate seal shall be circular in form and shall bear the name of the company and the words "SEAL" and "COLORADO." The seal may be used by causing it or a facsimile thereof to be impressed or affixed or manually reproduced.

ARTICLE VIII. - Fiscal Year

The board of directors may, by resolution, adopt a fiscal year for this company.

ARTICLE IX. - Amendment

These bylaws may at any time and from time to time be amended, supplemented or repealed, at any annual meeting of shareholders or at any special meeting of shareholders called for the purpose, by vote of two-thirds of the shares represented at the meeting and entitled to vote on the subject matter, provided a quorum is present.

ARTICLE X. - Effective Date

The effective date of these bylaws shall be

February 6, 1978.

## EXHIBIT B

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*State Engineer Diversion Reports 1950-2019*  
*(Colorado Decision Support System, HydroBase)*



## Structure Summary Report

Structure Name: SOUTH PLATTE DITCH (6400535)

Associated Permits:

Structure Type: DITCH

Water Source Type: Tributary

CIU Code: Active Structure with contemporary diversion records (A)

Water Source: SOUTH PLATTE RIVER [00201759] @ Stream  
Mile: 90.90

### Water Rights - Net Amounts

| Adj Date   | Appro Date | Priority Admin No | Order No | Priority No | Associated Case Numbers             | Net Absolute | Net Conditional | Net APEX Absolute | Net APEX Conditional | Decreed Units | Seasonal Limits | Comments  |
|------------|------------|-------------------|----------|-------------|-------------------------------------|--------------|-----------------|-------------------|----------------------|---------------|-----------------|---|
| 11/15/1894 | 5/1/1872   | 8157.00000        | 0        |             | 03CW0195, CA0765, CA0547, CA0304    | 22.5000      | 0.0000          | 0.0000            | 0.0000               | C             | No              | 9 ASP 35 SMART AUG W-8686, 83 ASP 94 MODIFICATION OF ORIGINAL, 169 INJUNCTIVE DECREE ABAN 08/24/1903, ABAN 08/24/1903, LOGAN WELL USERS CHNG USE, LOGAN WELL USERS CHNG USE |
| 11/15/1894 | 7/15/1875  | 9327.00000        | 0        |             | CA1669, CA1435                      | 0.0000       | 0.0000          | 0.0000            | 0.0000               | C             | No              | TB213 TFR FM SCHNEIDER D 03/07/1910, TB241A TFR TO DAVIS BROS D 11/15/1911  |
| 2/24/1903  | 2/15/1876  | 9542.00000        | 0        |             | 03CW0195, CA0765                    | 7.5000       | 0.0000          | 0.0000            | 0.0000               | C             | No              | 169 SMART AUG W-8686 INJUNCTIVE DECREE, LOGAN WELL USERS CHNG USE, LOGAN WELL USERS CHNG USE  |
| 11/15/1894 | 10/20/1880 | 11251.00000       | 0        |             | CA1669, CA1435                      | 0.0000       | 0.0000          | 0.0000            | 0.0000               | C             | No              | TB213 TFR FM SCHNEIDER D 03/07/1910, TB241A TFR TO DAVIS BROS D 11/15/1911  |
| 2/24/1903  | 4/21/1883  | 12164.00000       | 0        |             | 03CW0195, CA0765                    | 20.0000      | 0.0000          | 0.0000            | 0.0000               | C             | No              | 169 SMART AUG W-8686 INJUNCTIVE DECREE, LOGAN WELL USERS CHNG USE, LOGAN WELL USERS CHNG USE  |
| 2/24/1903  | 5/1/1890   | 14731.00000       | 0        |             | 03CW0195, CA0765                    | 37.5000      | 0.0000          | 0.0000            | 0.0000               | C             | No              | 172 SMART AUG W-8686, LOGAN WELL USERS CHNG USE, LOGAN WELL USERS CHNG USE  |
| 9/29/1902  | 4/1/1896   | 16893.00000       | 0        |             | 03CW0195, CA0605                    | 50.0000      | 0.0000          | 0.0000            | 0.0000               | C             | No              | 22 ASP 136 ASP 94, LOGAN WELL USERS CHNG USE, LOGAN WELL USERS CHNG USE   |
| 12/31/1974 | 3/15/1974  | 45364.00000       | 0        |             | W7839, 96CW0097                     | 26.8000      | 0.0000          | 0.0000            | 0.0000               | C             | No              | STRG IN D RECHARGE AREA AMT=CAPACITY OF D 03CW195 LOGAN WL USERS, MADE ABS 11/27/1996   |
| 12/31/1977 | 7/23/1977  | 46590.00000       | 0        |             | 10CW0051, W8686, 93CW0039, 03CW0207 | 14.2830      | 0.0000          | 0.0000            | 0.0000               | C             | No              | STORAGE IN SMART RECHARGE AREA 93CW039/03CW207, MADE ABS 04/30/1997, MADE ABS 01/22/04, MADE ABS 5/4/2010, CANCELLED; STORAGE IN SMART RECHARGE AREA 93CW039/03CW207        |
| 12/31/2003 | 3/21/1997  | 55882.53771       | 0        |             | 12CW0017, 03CW0195                  | 55.0000      | 65.0000         | 0.0000            | 0.0000               | C             | No              | MADE ABSOLUTE   |
| 12/31/2005 | 4/23/2003  | 56613.55995       | 0        |             | 03CW0195                            | 0.0000       | 0.0000          | 0.0000            | 104.0000             | C             | No              | EXCH FM ILIFF & PLATTE VLY REACH, EXCH FM STERLING NO 1 REACH   |

### Diversion Record - Totals

| Water Class        | Irr Year | FDU     | LDU      | MaxQ  | Nov     | Dec    | Jan    | Feb    | Mar    | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Annual Amount | Units | Data Status |
|--------------------|----------|---------|----------|-------|---------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------------|-------|-------------|
| Total (Diversions) | 2019     | 11/1/18 | 10/29/19 | 53.31 | 1237.51 | 853.18 |        |        |        | 413.50  | 2295.74 | 2758.73 | 3281.26 | 2690.28 | 2093.29 | 1063.28 | 16686.77      | AF    | Approved    |
| Total (Diversions) | 2018     | 11/1/17 | 10/31/18 | 50.84 | 1942.56 | 865.56 |        |        |        | 1328.77 | 2036.46 | 2792.45 | 2505.85 | 2759.17 | 1948.27 | 967.21  | 17146.31      | AF    | Approved    |
| Total (Diversions) | 2017     | 11/1/16 | 10/31/17 | 51.71 | 872.44  | 137.00 |        |        | 679.05 | 1217.57 | 831.28  | 2483.74 | 3240.92 | 3017.82 | 2181.99 | 1546.93 | 16208.75      | AF    | Approved    |
| Total (Diversions) | 2016     | 11/1/15 | 10/31/16 | 40.82 | 1238.22 | 394.50 |        |        | 695.85 | 1462.83 | 1321.59 | 1598.40 | 1893.09 | 2259.33 | 1369.47 | 1223.82 | 13457.10      | AF    | Approved    |
| Total (Diversions) | 2015     | 11/1/14 | 10/31/15 | 47.58 | 588.70  |        |        |        | 992.35 | 1667.93 | 847.37  | 1353.54 | 2544.24 | 2421.85 | 1604.02 | 1402.53 | 13422.52      | AF    | Approved    |
| Total (Diversions) | 2014     | 11/1/13 | 10/31/14 | 49.00 | 1105.94 | 82.83  |        |        | 621.17 | 2099.30 | 1971.22 | 1940.85 | 2626.17 | 1846.16 | 1541.04 | 1516.84 | 15351.54      | AF    | Approved    |
| Total (Diversions) | 2013     | 11/1/12 | 10/28/13 | 54.96 | 15.00   | 313.95 | 197.28 | 766.82 | 403.15 | 451.17  | 1643.92 | 2463.67 | 2128.75 | 1918.28 | 992.17  | 407.33  | 11701.48      | AF    | Approved    |

| Water Class        | Irr Year | FDU      | LDU      | MaxQ   | Nov     | Dec     | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Annual Amount | Units | Data Status |
|--------------------|----------|----------|----------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|-------|-------------|
| Total (Diversions) | 2012     | 11/1/11  | 10/31/12 | 43.16  | 1474.73 | 0.00    |         |         | 310.32  | 1590.77 | 2028.70 | 1992.03 | 1785.96 | 1860.96 | 1702.24 | 1073.61 | 13819.32      | AF    | Approved    |
| Total (Diversions) | 2011     | 11/13/10 | 10/31/11 | 55.45  | 553.04  | 1186.93 |         | 277.29  | 1104.02 | 1162.73 | 1217.12 | 2404.62 | 2440.34 | 2709.88 | 1855.86 | 1742.90 | 16654.72      | AF    | Approved    |
| Total (Diversions) | 2010     | 11/1/09  | 10/19/10 | 51.40  | 712.37  | 67.34   |         |         | 551.81  | 1617.54 | 2143.65 | 1535.74 | 2419.97 | 2585.16 | 1956.94 | 892.65  | 14483.18      | AF    | Approved    |
| Total (Diversions) | 2009     | 11/1/08  | 10/31/09 | 53.00  | 643.33  | 721.60  | 223.66  | 1584.62 | 1241.47 | 983.02  | 1878.99 | 1795.29 | 2862.23 | 2686.19 | 2053.58 | 1753.57 | 18427.55      | AF    | Approved    |
| Total (Diversions) | 2008     | 11/1/07  | 10/31/08 | 51.19  | 367.01  | 543.70  |         | 192.92  | 1685.80 | 1533.23 | 2457.04 | 2068.61 | 2311.31 | 2027.73 | 0.00    | 1983.24 | 15170.58      | AF    | Approved    |
| Total (Diversions) | 2007     | 12/19/06 | 10/31/07 | 55.81  |         | 25.65   |         |         | 1260.53 | 1869.55 | 1399.74 | 2584.36 | 2495.20 | 2417.97 | 1890.81 | 1867.64 | 15811.45      | AF    | Approved    |
| Total (Diversions) | 2006     | 11/16/05 | 10/31/06 | 70.40  | 654.34  | 557.46  | 2181.59 | 1296.48 | 1007.06 | 1452.20 | 1851.70 | 1883.51 | 2435.48 | 1958.85 | 1394.96 | 1491.53 | 18165.15      | AF    | Approved    |
| Total (Diversions) | 2005     | 11/1/04  | 10/31/05 | 55.90  | 71.41   | 878.51  | 828.73  | 1622.36 | 561.35  | 1316.94 | 2041.76 | 2194.43 | 1995.28 | 2032.79 | 1550.38 | 2677.21 | 17771.15      | AF    | Approved    |
| Total (Diversions) | 2004     | 12/21/03 | 10/31/04 | 59.30  |         | 499.05  | 1405.31 | 1196.05 | 648.01  | 1725.45 | 2226.08 | 1723.26 | 2325.46 | 2688.24 | 1902.18 | 1454.30 | 17793.38      | AF    | Approved    |
| Total (Diversions) | 2003     | 12/10/02 | 10/31/03 | 58.50  |         | 530.19  | 1514.20 | 1039.75 | 1229.57 | 781.90  | 1966.64 | 1370.40 | 1706.80 | 1776.42 | 1603.66 | 1790.51 | 15310.04      | AF    | Approved    |
| Total (Diversions) | 2002     | 11/1/01  | 10/31/02 | 50.00  | 1085.37 |         |         |         | 311.41  | 2002.54 | 2017.02 | 1842.47 | 1781.98 | 1728.22 | 3087.52 | 2523.21 | 16379.74      | AF    | Approved    |
| Total (Diversions) | 2001     | 3/22/01  | 10/31/01 | 50.00  |         |         |         |         | 491.51  | 2011.27 | 2115.20 | 2114.81 | 2678.52 | 2708.47 | 1666.14 | 1958.90 | 15744.82      | AF    | Approved    |
| Total (Diversions) | 2000     | 4/11/00  | 10/31/00 | 49.00  |         |         |         |         |         | 1498.93 | 1495.96 | 2452.40 | 2435.54 | 1851.40 | 1159.75 | 645.23  | 11539.21      | AF    | Approved    |
| Total (Diversions) | 1999     | 11/11/98 | 10/27/99 | 68.80  | 533.76  | 0.00    |         |         | 216.80  | 1152.02 | 1482.07 | 1319.13 | 2523.81 | 1928.76 | 1420.58 | 1056.07 | 11632.99      | AF    | Approved    |
| Total (Diversions) | 1998     | 11/6/97  | 10/28/98 | 53.40  | 181.69  |         |         |         | 346.72  | 1425.74 | 2190.97 | 2002.34 | 1444.58 | 2308.40 | 1496.55 | 721.40  | 12118.39      | AF    | Approved    |
| Total (Diversions) | 1997     | 11/1/96  | 10/14/97 | 58.50  | 116.63  |         |         |         | 681.53  | 1721.48 | 2997.27 | 1583.82 | 2692.60 | 2092.99 | 2076.72 | 659.51  | 14622.56      | AF    | Approved    |
| Total (Diversions) | 1996     | 4/17/96  | 10/31/96 | 63.00  |         |         |         |         |         | 428.04  | 2400.43 | 1716.32 | 2901.86 | 2687.64 | 1364.05 | 717.23  | 12215.58      | AF    | Approved    |
| Total (Diversions) | 1995     | 11/1/94  | 10/18/95 | 70.00  | 585.53  |         |         |         | 69.82   | 835.05  | 1718.11 | 364.77  | 2758.45 | 3082.76 | 2264.76 | 641.66  | 12320.91      | AF    | Approved    |
| Total (Diversions) | 1994     | 11/1/93  | 10/31/94 | 50.60  | 146.38  |         |         |         | 272.73  | 2005.32 | 2831.84 | 2525.99 | 2005.12 | 2172.53 | 1740.12 | 268.96  | 13969.00      | AF    | Approved    |
| Total (Diversions) | 1993     | 11/1/92  | 10/31/93 | 49.00  | 65.40   |         |         |         |         | 555.82  | 2033.68 | 1806.91 | 2404.20 | 2160.82 | 2006.01 | 829.40  | 11862.24      | AF    | Approved    |
| Total (Diversions) | 1992     | 3/17/92  | 10/31/92 | 39.00  |         |         |         |         | 271.94  | 1355.13 | 2017.22 | 1863.70 | 1627.46 | 1826.80 | 1623.69 | 661.30  | 11247.24      | AF    | Approved    |
| Total (Diversions) | 1991     | 11/1/90  | 10/31/91 | 51.00  | 786.89  |         |         |         | 804.11  | 1125.99 | 2144.16 | 1588.64 | 2487.31 | 2279.04 | 1920.76 | 759.68  | 13896.60      | AF    | Approved    |
| Total (Diversions) | 1990     | 11/1/89  | 10/31/90 | 56.00  | 526.78  | 129.96  |         |         | 411.16  | 542.82  | 2124.33 | 1721.68 | 2306.81 | 2039.04 | 1799.03 | 826.98  | 12428.59      | AF    | Approved    |
| Total (Diversions) | 1989     | 11/18/88 | 10/31/89 | 58.00  | 348.56  | 182.92  |         |         | 95.29   | 1107.73 | 2378.22 | 1200.02 | 2087.63 | 1542.17 | 724.20  | 1011.37 | 10678.09      | AF    | Approved    |
| Total (Diversions) | 1988     | 11/1/87  | 10/29/88 | 41.00  | 586.20  | 113.40  |         |         | 39.99   | 1036.46 | 1086.24 | 1319.27 | 1926.97 | 2223.50 | 1428.12 | 479.45  | 10239.60      | AF    | Approved    |
| Total (Diversions) | 1987     | 11/1/86  | 10/31/87 | 66.00  | 23.70   |         |         |         |         | 217.41  | 1113.02 | 1421.06 | 2854.26 | 2588.47 | 1816.89 | 1142.24 | 11177.04      | AF    | Approved    |
| Total (Diversions) | 1986     | 11/1/85  | 10/31/86 | 61.00  | 307.44  |         |         |         | 882.66  | 610.92  | 1449.94 | 1132.58 | 2755.08 | 2651.94 | 1418.20 | 751.75  | 11960.51      | AF    | Approved    |
| Total (Diversions) | 1985     | 11/1/84  | 10/31/85 | 56.00  | 761.66  | 142.81  |         |         | 190.42  | 1122.66 | 1828.79 | 1512.42 | 2318.71 | 2766.98 | 1826.80 | 1229.77 | 13701.03      | AF    | Approved    |
| Total (Diversions) | 1984     | 11/9/83  | 10/31/84 | 75.00  | 468.11  |         |         |         | 168.60  | 721.99  | 1364.65 | 1243.65 | 3210.29 | 3909.48 | 1880.36 | 1348.78 | 14315.91      | AF    | Approved    |
| Total (Diversions) | 1983     | 11/1/82  | 10/4/83  | 80.00  | 773.57  | 458.19  |         | 99.18   | 928.28  | 430.42  | 357.03  | 485.96  | 2124.33 | 3290.63 | 1836.72 | 214.22  | 10998.51      | AF    | Approved    |
| Total (Diversions) | 1982     | 11/1/81  | 10/31/82 | 71.00  | 892.58  | 357.03  |         |         | 285.62  | 1779.20 | 2233.42 | 1410.27 | 2607.31 | 3178.56 | 2140.20 | 1436.05 | 16320.24      | AF    | Approved    |
| Total (Diversions) | 1981     | 11/1/80  | 10/31/81 | 62.00  | 1334.90 | 148.76  | 1368.62 | 487.94  | 747.78  | 797.37  | 1537.21 | 1771.27 | 2066.81 | 2269.12 | 2100.53 | 1053.24 | 15683.53      | AF    | Approved    |
| Total (Diversions) | 1980     | 11/1/79  | 10/31/80 | 101.00 | 253.55  |         |         |         |         | 505.24  | 3016.03 | 2565.86 | 3770.85 | 3760.72 | 2582.52 | 1640.35 | 18095.11      | AF    | Approved    |
| Total (Diversions) | 1979     | 11/1/78  | 10/31/79 | 66.00  | 277.69  |         |         |         |         |         | 277.69  | 1484.25 | 2968.31 | 2433.75 | 2404.00 | 1729.12 | 11574.81      | AF    | Approved    |
| Total (Diversions) | 1978     | 4/4/78   | 10/29/78 | 63.00  |         |         |         |         |         | 2025.15 | 952.08  | 1118.69 | 2409.95 | 2310.78 | 1457.87 | 460.17  | 10734.70      | AF    | Approved    |
| Total (Diversions) | 1977     | 4/14/77  | 10/20/77 | 58.00  |         |         |         |         |         | 545.46  | 2015.24 | 999.68  | 1868.46 | 2056.89 | 1580.85 | 335.21  | 9401.79       | AF    | Approved    |
| Total (Diversions) | 1976     | 4/9/76   | 10/15/76 | 79.00  |         |         |         |         |         | 1110.76 | 1860.52 | 1449.94 | 1912.09 | 2261.19 | 1731.60 | 158.68  | 10484.78      | AF    | Approved    |
| Total (Diversions) | 1975     | 4/16/75  | 10/21/75 | 90.00  |         |         |         |         |         | 1118.69 | 1440.02 | 1067.12 | 3397.74 | 3235.09 | 2062.84 | 525.63  | 12847.13      | AF    | Approved    |

| Water Class        | Irr Year | FDU      | LDU      | MaxQ   | Nov     | Dec   | Jan    | Feb    | Mar    | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Annual Amount | Units | Data Status |
|--------------------|----------|----------|----------|--------|---------|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------------|-------|-------------|
| Total (Diversions) | 1974     | 4/24/74  | 10/11/74 | 78.00  |         |       |        |        |        | 247.94  | 2812.60 | 1791.10 | 2223.50 | 2267.14 | 1717.71 | 172.56  | 11232.56      | AF    | Approved    |
| Total (Diversions) | 1973     | 5/26/73  | 9/21/73  | 82.00  |         |       |        |        |        |         | 297.53  | 1358.70 | 2564.67 | 2979.22 | 852.91  |         | 8053.01       | AF    | Approved    |
| Total (Diversions) | 1972     | 4/11/72  | 10/20/72 | 50.00  |         |       |        |        |        | 1190.10 | 1557.05 | 527.61  | 1747.46 | 1886.31 | 1309.11 | 1265.47 | 9483.11       | AF    | Approved    |
| Total (Diversions) | 1971     | 5/25/71  | 10/22/71 | 55.00  |         |       |        |        |        |         | 204.30  | 2201.69 | 2421.85 | 1927.96 | 2062.84 | 228.10  | 9046.74       | AF    | Approved    |
| Total (Diversions) | 1970     | 5/1/70   | 10/16/70 | 115.00 |         |       |        |        |        |         | 2271.11 | 1408.29 | 4117.75 | 2429.79 | 1646.31 | 253.89  | 12127.12      | AF    | Approved    |
| Total (Diversions) | 1969     | 4/13/69  | 10/3/69  | 63.00  |         |       |        |        |        | 1071.09 | 1086.96 | 1017.54 | 2318.71 | 1995.40 | 1836.72 | 119.01  | 9445.43       | AF    | Approved    |
| Total (Diversions) | 1968     | 4/7/68   | 10/10/68 | 66.00  |         |       |        |        |        | 1088.94 | 1725.65 | 1467.79 | 1844.66 | 1761.35 | 2618.22 | 287.61  | 10794.21      | AF    | Approved    |
| Total (Diversions) | 1967     | 4/2/67   | 10/19/67 | 63.00  |         |       |        |        |        | 1658.21 | 535.55  |         | 1368.62 | 1931.93 | 1576.88 | 523.64  | 7594.82       | AF    | Approved    |
| Total (Diversions) | 1966     | 5/1/66   | 10/6/66  | 40.00  |         |       |        |        |        |         | 1445.97 | 513.73  | 1507.46 | 1590.77 | 1279.36 | 238.02  | 6575.30       | AF    | Approved    |
| Total (Diversions) | 1965     | 4/11/65  | 9/25/65  | 73.00  |         |       |        |        |        | 989.77  | 1683.99 | 158.68  | 702.16  | 1509.44 | 1326.96 |         | 6371.00       | AF    | Approved    |
| Total (Diversions) | 1964     | 4/26/64  | 10/31/64 | 51.00  |         |       |        |        |        | 144.80  | 1616.55 | 1396.38 | 1592.75 | 1674.07 | 1682.01 | 1291.26 | 9397.82       | AF    | Approved    |
| Total (Diversions) | 1963     | 4/7/63   | 10/10/63 | 51.00  |         |       |        |        |        | 1358.70 | 1904.16 | 1898.21 | 1723.66 | 1668.12 | 1449.94 | 119.01  | 10121.80      | AF    | Approved    |
| Total (Diversions) | 1962     | 4/18/62  | 9/29/62  | 71.00  |         |       |        |        |        | 896.54  | 1047.29 | 395.71  | 1178.20 | 2324.66 | 2596.40 |         | 8438.80       | AF    | Approved    |
| Total (Diversions) | 1961     | 4/28/61  | 9/9/61   | 67.00  |         |       |        |        |        | 148.76  | 1505.48 | 884.64  | 2780.87 | 1925.98 | 632.74  |         | 7878.46       | AF    | Approved    |
| Total (Diversions) | 1960     | 4/22/60  | 10/22/60 | 56.00  |         |       |        |        |        | 448.27  | 833.07  | 1731.60 | 1715.73 | 1826.80 | 1981.52 | 1031.42 | 9568.40       | AF    | Approved    |
| Total (Diversions) | 1959     | 5/4/59   | 9/26/59  | 54.00  |         |       |        |        |        |         | 460.17  | 1523.33 | 1896.23 | 1884.33 | 1852.59 |         | 7616.64       | AF    | Approved    |
| Total (Diversions) | 1958     | 5/27/58  | 10/23/58 | 112.00 |         |       |        |        |        |         | 222.15  | 2326.65 | 1658.21 | 2056.89 | 1473.74 | 765.63  | 8503.26       | AF    | Approved    |
| Total (Diversions) | 1957     | 11/1/56  | 10/17/57 | 68.00  | 59.51   |       |        |        |        | 35.70   | 936.21  | 1037.37 | 2243.34 | 2181.85 | 1723.66 | 759.68  | 8977.32       | AF    | Approved    |
| Total (Diversions) | 1956     | 4/14/56  | 10/31/56 | 55.00  |         |       |        |        |        | 950.10  | 1672.09 | 1719.69 | 1378.53 | 1608.62 | 1612.59 | 1820.85 | 10762.47      | AF    | Approved    |
| Total (Diversions) | 1955     | 11/1/54  | 10/28/55 | 59.00  | 1055.22 |       |        |        |        | 1459.86 | 1477.71 | 1090.93 | 1672.09 | 1922.01 | 1799.03 | 1259.52 | 11736.37      | AF    | Approved    |
| Total (Diversions) | 1954     | 11/8/53  | 10/31/54 | 49.00  | 138.85  |       |        |        |        | 1194.07 | 1957.71 | 1717.71 | 1640.35 | 1721.68 | 1654.24 | 1412.25 | 11436.86      | AF    | Approved    |
| Total (Diversions) | 1953     | 11/1/52  | 10/31/53 | 73.00  | 511.74  |       |        |        |        |         | 1019.52 | 2778.88 | 2116.39 | 2689.63 | 2495.24 | 2245.32 | 13856.73      | AF    | Approved    |
| Total (Diversions) | 1952     | 5/2/52   | 10/31/52 | 95.00  |         |       |        |        |        |         | 1194.07 | 2404.00 | 2227.47 | 1586.80 | 2840.37 | 1747.46 | 12000.18      | AF    | Approved    |
| Total (Diversions) | 1951     | 11/1/50  | 10/6/51  | 71.00  | 87.27   |       |        |        |        | 311.41  | 2009.29 | 1834.74 | 2277.06 | 2576.57 | 1654.24 | 238.02  | 10988.59      | AF    | Approved    |
| Total (Diversions) | 1950     | 4/11/50  | 10/31/50 | 65.00  |         |       |        |        |        | 1297.21 | 2713.43 | 1557.05 | 2134.25 | 1963.67 | 989.77  | 666.46  | 11321.82      | AF    | Approved    |
| Total (Releases)   | 2006     | 11/25/05 | 10/31/06 | 10.47  | 27.31   | 3.05  | 125.97 | 162.03 | 66.96  | 113.34  | 0.00    |         |         | 4.09    | 219.00  | 313.73  | 1035.49       | AF    | Approved    |
| Total (Releases)   | 2005     | 12/10/04 | 10/31/05 | 13.00  |         | 15.63 | 4.52   |        |        | 32.07   | 272.24  | 179.92  | 269.68  | 307.74  | 191.73  | 123.53  | 1397.06       | AF    | Approved    |
| Total (Releases)   | 2003     | 5/10/03  | 10/15/03 | 21.40  |         |       |        |        |        |         | 207.47  | 213.42  | 35.90   | 1.19    | 298.72  | 741.63  | 1498.34       | AF    | Approved    |
| Total (Releases)   | 2002     | 11/1/01  | 10/31/02 | 28.00  | 188.63  |       |        |        |        | 117.03  | 1.59    | 69.62   |         | 266.38  | 1363.85 | 1048.68 | 3055.78       | AF    | Approved    |
| Total (Releases)   | 2001     | 4/7/01   | 10/31/01 | 13.20  |         |       |        |        |        | 100.17  | 246.35  | 162.05  | 169.19  | 349.89  | 307.84  | 223.74  | 1559.23       | AF    | Approved    |
| Total (Releases)   | 2000     | 4/11/00  | 10/15/00 | 14.00  |         |       |        |        |        | 76.56   | 225.72  | 112.27  | 100.17  | 93.62   | 226.91  | 0.79    | 836.05        | AF    | Approved    |
| Total (Releases)   | 1999     | 11/15/98 | 10/27/99 | 19.00  | 56.93   | 0.00  |        |        |        | 48.60   | 246.95  | 238.62  | 291.57  | 332.83  | 421.49  | 306.25  | 1943.23       | AF    | Approved    |
| Total (Releases)   | 1998     | 3/29/98  | 10/26/98 | 17.80  |         |       |        |        | 58.91  | 394.32  | 485.76  | 480.80  | 356.24  | 269.76  | 485.96  | 263.81  | 2795.54       | AF    | Approved    |
| Total (Releases)   | 1997     | 3/25/97  | 10/14/97 | 20.00  |         |       |        |        | 128.93 | 188.43  |         |         |         |         |         | 476.04  | 793.40        | AF    | Approved    |
| Total (Releases)   | 1996     | 5/12/96  | 10/31/96 | 40.00  |         |       |        |        |        |         | 158.68  |         |         | 144.80  | 587.12  | 666.46  | 1557.05       | AF    | Approved    |
| Total (Releases)   | 1995     | 4/25/95  | 10/18/95 | 30.00  |         |       |        |        |        | 198.35  | 466.12  | 1043.32 |         |         | 119.01  | 436.37  | 2263.17       | AF    | Approved    |
| Total (Releases)   | 1994     | 4/8/94   | 4/27/94  | 17.00  |         |       |        |        |        | 245.95  |         |         |         |         |         |         | 245.95        | AF    | Approved    |

Note:

FDU - First day used

LDU - Last day used

MaxQ - Maximum flow rate

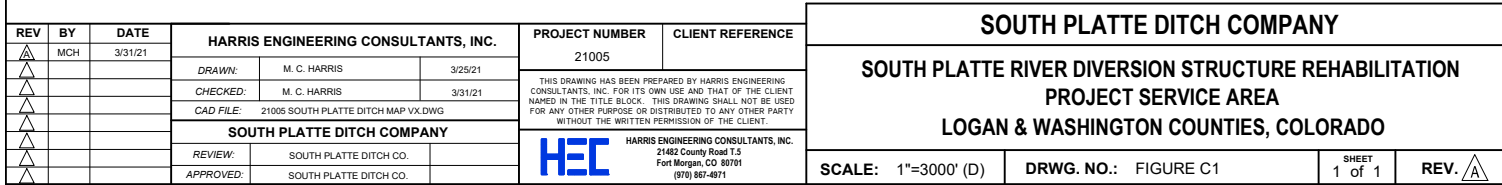


## EXHIBIT C

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### *Service Area Map*







## EXHIBIT D

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### *Site Photos*



**Fig. 1:** Diversion structure, south abutment, looking north.



**Fig. 2:** Rollover wall, looking north.





**Fig. 3:** Diversion bladder gate, note exposed rebar.



**Fig. 4:** Gate control building.





**Fig. 5:** Intake structure and head gate, looking southwest.



**Fig. 6:** Radial gate, looking upstream.

## EXHIBIT E

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### *Preliminary Design Drawings of the Preferred Alternative*

## EXHIBIT F

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### *Detailed Construction Cost Estimate and Loan Amortization*



**SOUTH PLATTE DITCH COMPANY**

Merino, CO

SOUTH PLATTE RIVER DIVERSION STRUCTURE

**PROJECT COST ESTIMATE****\$1,065,386****FEASIBILITY COST ESTIMATE****DIVERSION STRUCTURE REHABILITATION PROJECT**

Overlay Damaged Sections of Existing Structure, Replace Existing Diversion Bladder Gate  
and Install New Scour Pad with Energy Breakers.

**PROCUREMENT AND INSTALLATION**

|    | Description  | Quantity | Unit | Unit Cost | Base Cost | Contg. | Total Cost | Basis    |
|----|--|----------|------|-----------|-----------|--------|------------|----------|
| 1  | Mobilization and Demobilization, Insurance and Bonding   | 1        | LS   | \$38,000  | \$38,000  | 10%    | \$41,800   | Estimate |
| 2  | Preparation of Existing Concrete Structure for Installation of Scour Pad, Concrete Overlays and Replacement Bladder Gate   | 1        | LS   | \$25,000  | \$25,000  | 15%    | \$28,750   | Estimate |
| 3  | Control of Water and De-Watering   | 1        | LS   | \$160,000 | \$160,000 | 25%    | \$200,000  | Estimate |
| 4  | Unclassified Excavation  | 1,500    | CY   | \$10      | \$15,000  | 25%    | \$18,750   | Estimate |
| 5  | Structural Fill  | 1,000    | CY   | \$15      | \$15,000  | 25%    | \$18,750   | Estimate |
| 6  | Imported Demolished Concrete for Use as Rip-Rap  | 500      | Tons | \$40      | \$20,000  | 25%    | \$25,000   | Estimate |
| 7  | Place Demolished Concrete Rip-Rap  | 250      | CY   | \$25      | \$6,250   | 25%    | \$7,813    | Estimate |
| 8  | Furnish and Install 3-1/4" x 18" x 7 Gauge Galvanized Sheet Piling   | 8,325    | SF   | \$20      | \$166,500 | 10%    | \$183,150  | Estimate |
| 9  | Furnish and Install Friction Piling, 8.625" O.D. x 0.322" W.T.   | 945      | LF   | \$45      | \$42,525  | 10%    | \$46,778   | Estimate |
| 10 | Furnish Obermeyer Bladder Gate Replacement Parts, 20' x 4', 3CR12 Stainless Steel Panels and Peripheral Parts, New Bladder | 1        | LS   | \$50,000  | \$50,000  | 10%    | \$55,000   | Estimate |
| 11 | Installation of Item #10   | 1        | LS   | \$12,000  | \$12,000  | 15%    | \$13,800   | Estimate |
| 12 | Cast-In-Place Concrete, 4500 psi @ 28 days   | 340      | CY   | \$600     | \$204,000 | 10%    | \$224,400  | Estimate |
| 13 | Reinforcing Steel, Epoxy Coated, A615 Gr. 60   | 51,900   | LB   | \$1.30    | \$67,470  | 15%    | \$77,591   | Estimate |
| 14 | Fill Concrete (to be placed in voids under existing structure floor)   | 50       | CY   | \$250     | \$12,500  | 25%    | \$15,625   | Estimate |
| 15 | Final Cleanup and Site Restoration   | 1        | LS   | \$15,000  | \$15,000  | 25%    | \$18,750   | Estimate |
| 16 | Install Energy Breaker Blocks, Cast-in-Place Concrete  | 69       | LS   | \$400     | \$27,600  | 10%    | \$30,360   | Estimate |
| 17 | Rework Existing Radial Gate (trim edges, add side seals, etc.)   | 1        | LS   | \$1,700   | \$1,700   | 10%    | \$1,870    | Estimate |
| 18 |  |          |      |           |           |        |            |          |
| 19 |  |          |      |           |           |        |            |          |
| 20 |  |          |      |           |           |        |            |          |
| 21 |  |          |      |           |           |        |            |          |
| 22 |  |          |      |           |           |        |            |          |
| 23 |  |          |      |           |           |        |            |          |
| 24 |  |          |      |           |           |        |            |          |
| 25 |  |          |      |           |           |        |            |          |
| 26 |  |          |      |           |           |        |            |          |
| 27 |  |          |      |           |           |        |            |          |
| 28 |  |          |      |           |           |        |            |          |

**SUBTOTAL: \$878,545 14.8% \$1,008,186**

**ENGINEERING, ADMINISTRATION AND CONTINGENCY**

|    | Description   | Quantity | Unit | Unit Cost | Base Cost | Contg. | Total Cost | Basis    |
|----|---|----------|------|-----------|-----------|--------|------------|----------|
| 29 | Engineering, Planning & Design                              |          | LS   |           | \$11,000  | 10%    | \$12,100   | Estimate |
| 30 | Construction Management & Administration                    |          | LS   |           | \$32,000  | 10%    | \$35,200   | Estimate |
| 31 | Legal Services (review of company by-laws, contracts, etc.) |          | LS   |           | \$3,000   | 10%    | \$3,300    | Estimate |
| 32 | Materials Testing   | 5        | Days | \$800     | \$4,000   | 10%    | \$4,400    | Estimate |
| 33 | Surveying, 2-Man Crew                                       | 1        | Days | \$2,000   | \$2,000   | 10%    | \$2,200    | Estimate |

**SUBTOTAL: \$52,000 10.0% \$57,200**

**TOTAL INSTALLED COST 2021 CONSTRUCTION: \$930,545 14.5% \$1,065,386**

*Net Contingency @ 14.5% of Total Installed Cost: \$134,841*

**FEASIBILITY**

TOTAL PROJECT COST **\$1,065,000**

|                  | <u>SOURCE 1</u> | <u>SOURCE 2</u> | <u>TOTAL</u>    |
|------------------|-----------------|-----------------|-----------------|
| FINANCING SOURCE | CWCB Loan       | -               |                 |
| COST SHARE       | 100%            |                 |                 |
| BASE LOAN AMOUNT | \$1,065,000     | \$0             |                 |
| SERVICE FEE @ 1% | \$10,650        | \$0             |                 |
| PRINCIPAL        | \$1,075,650     | \$0             |                 |
| INTEREST RATE    | 1.10%           |                 |                 |
| TERM (YEARS)     | 30              |                 |                 |
| ANNUAL PAYMENT   | <b>\$42,291</b> | <b>\$0</b>      | <b>\$42,291</b> |
| STARTING YEAR    | 2022            |                 |                 |

District Shares 206.9  
Annual Diversions (ac-ft)\* 12,413  
Cost per Share **\$204.40**  
Cost per ac-ft **\$3.41**

| <u>YEAR</u> | <u>PAYMENT</u> | <u>INTEREST</u> | <u>PRINCIPAL</u> | <u>BALANCE</u> |
|-------------|----------------|-----------------|------------------|----------------|
| 2022        | \$42,291       | \$11,832        | \$30,459         | \$1,075,650    |
| 2023        | \$42,291       | \$11,497        | \$30,794         | \$1,045,191    |
| 2024        | \$42,291       | \$11,158        | \$31,133         | \$1,014,397    |
| 2025        | \$42,291       | \$10,816        | \$31,475         | \$983,265      |
| 2026        | \$42,291       | \$10,470        | \$31,821         | \$951,790      |
| 2027        | \$42,291       | \$10,120        | \$32,171         | \$919,968      |
| 2028        | \$42,291       | \$9,766         | \$32,525         | \$887,797      |
| 2029        | \$42,291       | \$9,408         | \$32,883         | \$855,272      |
| 2030        | \$42,291       | \$9,046         | \$33,245         | \$822,389      |
| 2031        | \$42,291       | \$8,681         | \$33,610         | \$789,144      |
| 2032        | \$42,291       | \$8,311         | \$33,980         | \$755,534      |
| 2033        | \$42,291       | \$7,937         | \$34,354         | \$721,554      |
| 2034        | \$42,291       | \$7,559         | \$34,732         | \$687,200      |
| 2035        | \$42,291       | \$7,177         | \$35,114         | \$652,468      |
| 2036        | \$42,291       | \$6,791         | \$35,500         | \$617,355      |
| 2037        | \$42,291       | \$6,400         | \$35,891         | \$581,855      |
| 2038        | \$42,291       | \$6,006         | \$36,285         | \$545,964      |
| 2039        | \$42,291       | \$5,606         | \$36,684         | \$509,679      |
| 2040        | \$42,291       | \$5,203         | \$37,088         | \$472,994      |
| 2041        | \$42,291       | \$4,795         | \$37,496         | \$435,906      |
| 2042        | \$42,291       | \$4,383         | \$37,908         | \$398,410      |
| 2043        | \$42,291       | \$3,966         | \$38,325         | \$360,502      |
| 2044        | \$42,291       | \$3,544         | \$38,747         | \$322,176      |
| 2045        | \$42,291       | \$3,118         | \$39,173         | \$283,429      |
| 2046        | \$42,291       | \$2,687         | \$39,604         | \$244,256      |
| 2047        | \$42,291       | \$2,251         | \$40,040         | \$204,652      |
| 2048        | \$42,291       | \$1,811         | \$40,480         | \$164,612      |
| 2049        | \$42,291       | \$1,365         | \$40,925         | \$124,132      |
| 2050        | \$42,291       | \$915           | \$41,376         | \$83,206       |
| 2051        | \$42,291       | \$460           | \$41,831         | \$41,831       |
| 2052        | \$0            | (\$0)           | \$0              | (\$0)          |

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**TOTAL      \$1,268,728      \$193,078      \$1,075,650**

\*Average annual diversion per State of Colorado's records for the years 1950 through 2019 (Colorado Decision Support System).

## EXHIBIT G

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### *CWCB Loan Application*



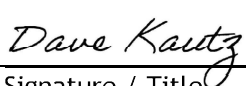
# COLORADO

## Colorado Water Conservation Board

Department of Natural Resources

## Water Project Loan Program

Projects financed by the Water Project Loan Program must align with the goals identified in Colorado's Water Plan and its measurable objectives.

|  |  |
|--|--|
| <b>Application Type</b>  |  |
| <input type="checkbox"/> Prequalification (Attach 3 years of financial statements) <input checked="" type="checkbox"/> Loan Approval (Attach Loan Feasibility Study)               |  |
| <b>Agency/Company Information</b>  |  |
| Company / Borrower Name: South Platte Ditch Company  |  |
| Authorized Agent & Title: Dave Kautz, President  |  |
| Address: 15099 County Road 59.5 Merino, CO 80741   |  |
| Phone: ( 970-580-9787  | Email: dkautz@platinumtech.net   |
| Organization Type: <input checked="" type="checkbox"/> Ditch Co, <input type="checkbox"/> District, <input type="checkbox"/> Municipality<br><input type="checkbox"/> other: _____ |  |
| Incorporated? <input checked="" type="checkbox"/> YES<br><input type="checkbox"/> NO   |  |
| County: Washington   | Number of Shares/Taps: 206.9 shares  |
| Water District: 64   | Avg. Water Diverted/Yr <u>12,413</u> acre-feet   |
| Number of Shareholders/Customers Served: 20  | Current Assessment per Share \$ <u>350</u> (Ditch Co)  |
| Federal ID Number: 84-0425471  | Average monthly water bill \$ <u>N/A</u> (Municipality)  |
| <b>Contact Information</b>   |  |
| Project Representative: Dave Kautz   |  |
| Phone: ( 970-580-9787  | Email: dkautz@platinumtech.net   |
| Engineer: Matt Harris  |  |
| Phone: ( 970 ) 867-4971  | Email: matt@harrisec.com   |
| Attorney: Zach Miller & Andrea Bronson Davis, Graham & Stubbs LLP  |  |
| Phone: ( 303-892-7391  | Email: zach.miller@dgsllaw.com andrea.bronson@dgsllaw.com  |
| <b>Project Information</b>   |  |
| Project Name: South Platte Ditch Diversion Structure Rehabilitation  |  |
| Brief Description of Project: (Attach separate sheets if needed)   |  |
| See attached summary sheet.  |  |
|  |  |
|  |  |
| Project Start Date(s) Design: <u>May 2021</u> Construction: <u>December 2021</u>   |  |
| General Location: (Attach Map of Area)   |  |
| SE/4 SW/4 Sec. 8 T5N R54W, Washington County, Colorado   |  |
| <b>Project Costs - Round to the nearest thousand</b>   |  |
| Estimated Engineering Costs: \$52,000  | Estimated Construction Costs: \$878,000  |
| Other Costs (Describe Above): \$135,000 (15% contg.)   | Estimated Total Project Costs: \$1,065,000   |
| Requested Loan Amount: <b>\$1,065,000</b>  | Requested Loan Term (10, 20, or 30 years):<br><u>30</u> Years  |
| <b>Signature</b>   |  |
| <br>Signature / Title   | Return to: Finance Section Attn: Matt Stearns<br>1313 Sherman St #718<br>Denver, CO 80203<br>Ph. 303/866.3441<br>e-mail: matthew.stearns@state.co.us |

# CWCB Water Project Loan Application

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## PROJECT DESCRIPTION

The South Platte Ditch Company (SPDC) diverts water from the South Platte River for both irrigation and recharge purposes. Water deliveries are made through the South Platte Ditch to recharge sites and irrigation lands lying south of the South Platte River between the Town of Atwood and the City of Sterling, Colorado. The original diversion structure was constructed in the early 1900's but a repair project in 1997 added a 20-foot long section of bladder gate in the river to improve sluicing operations and a new intake structure with a 16-foot bladder gate to control the flow of water into the ditch system. The floor of the original structure is in poor physical condition and erosion of the downstream channel has resulted in the undermining of the structure. Significant abrasive action of high-velocity, sand-laden river water has resulted in the deterioration of the diversion bladder gate and erosion of the concrete floor downstream of the gate.

The SPDC river diversion structure is in need of repairs to maintain diversion operations. The proposed South Platte Ditch Diversion Structure Rehabilitation Project will include the following activities/components:

- Replacing the worn components of the existing 20-foot long diversion bladder gate with new components;
- Installation of a reinforced concrete floor to overlay the old, deteriorated, structure floor; and
- Installation of a reinforced concrete scour pad on the downstream side of the structure.

The South Platte Ditch Diversion Structure Rehabilitation Project is consistent with the following goals of the Colorado Water Plan (CWP Section 10, pgs. 3-4):

- Supports a vibrant agricultural economy;
- Improves the efficiency of water delivery infrastructure and
- Promotes a strong and healthy environment by improving water quality in the South Platte River and enhancing in-channel accessibility for aquatic habitat.

The project supports the Colorado Water Plan's identified Agricultural Critical Actions to (CWP Section 10, pg. 10):

- Maintain agricultural viability; and
- Support agricultural water conservation and efficiency.

## EXHIBIT H

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*Financial Statements: 2018 thru 2020*