



Strategic Plan 2021

San Juan Water Conservancy District

San Juan Water Conservancy District

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Strategic Plan 2021



I. Introduction

The purpose of this Strategic Plan (the Plan) is to identify water resource issues in the Upper San Juan River Basin within the San Juan Water Conservancy District's (SJWCD or District) geographical scope, evaluate the District's options for addressing those issues, and outline the options selected for action. All agricultural, municipal, environmental, and recreational water needs are considered. Other objectives in undertaking this planning process are to assist the Board of Directors in developing long-term direction for the District, relay that direction to the public, and identify measures the District can implement in the future to further that direction.

The Plan is intended to be a dynamic document the Board reviews annually and updates as necessary to reflect changing conditions in the District and its water environment. In addition to providing guidance for the District in executing Board policies, the Plan is intended to serve as an accessible informational tool for interested parties regarding the activities of the District's Board and staff. Public comments on the Plan are encouraged, particularly during the budget process conducted by the Board in September, October, and November of each year.

Strategic Objectives have been developed by the Board based on the District's statutory authority, Mission Statement, and Values Statements. They are intended to define the District's course of action in meeting the identified water issues. This

edition of the plan has been organized to reflect the correlation of the District's activities with those specific objectives. The Plan, including the Strategic Objectives, will be reviewed for possible revision annually by the Board as part of its budget process and serves as the basis for the Board's expenditure of District revenues.

II. Mission Statement

**To be an active leader in all issues affecting the water resources of the
Upper San Juan River Basin**

III. Value Statements

The following Values Statements are listed in a collective fashion such that the order of the statements does not indicate a priority or relative value to any of the statements. The Board considers these statements as our principal guiding values that will enable us to accomplish our mission.

- The Board is committed to ensuring the current and future agricultural, municipal, industrial, environmental and recreational water supply needs are met through the various conservation and water management strategies and methodologies available. The Board strongly supports the agricultural, municipal, environmental, and recreation values derived from our water resources because of their importance to the economic, cultural, and social aspects of the community.
- The Board opposes any new transfers of water from the Upper San Juan River and its tributaries upstream of Navajo Reservoir to basins outside of the Upper San Juan River Basin. We believe such transfers would interfere with existing beneficial uses of water, damage economic stability, and reduce environmental quality within the District and as such form the basis for our opposition.
- The Board is committed to effectively managing the water rights it holds on the San Juan River and other streams/ditches and the property it jointly owns

with the Pagosa Area Water and Sanitation District as valuable assets of the District's constituents.

- The Board supports implementation of wise land use policies and planning processes by local, County, State, and Federal governments to conserve and protect the water resources of the San Juan River Basin.
- The Board regards irrigation, flood control, municipal and industrial uses, ecological needs, recreational opportunities, and aesthetic values to be important matters for the District and the public it serves, and it advocates achieving a balance among competing uses of water within the District to minimize conflict among them, in accordance with Colorado water law.
- The Board is committed to managing and funding, within approved budgets, effective monitoring, protection, and restoration programs in order to maintain high water quality standards as a necessary part of a healthy economy and environment in the District.
- The Board acknowledges scientific evidence of recurring moderate to severe drought cycles in the American Southwest indicating a trend towards a general warming and possibly more arid conditions in the foreseeable future. This warming trend has negatively impacted precipitation, evaporative water losses, natural stream flows, ground moisture content, and associated ecosystems. We believe the District must be proactive in its planning to ensure availability of current and future water resources in light of these changing conditions.
- The Board believes that the District must participate in statewide planning processes, such as the Colorado Water Plan, to address challenges like climate change, drought, population pressure, water shortages, and projects and programs to address those challenges. In those statewide processes, the District must be a strong and consistent voice guarding against inequitable and unmitigated damage to Western Slope interests.
- The Board is aware of the close relationship between the many water issues, including but not limited to agricultural, municipal, environmental, and recreational matters. Through this awareness the Board acknowledges a responsibility to treat them in policy-making decisions and action steps as

interrelated, but also in accordance with Colorado water law. The Board recognizes the need for collaborative efforts with partners to develop positions regarding legislation that has a nexus with water.

- The Board recognizes that effective water management requires attention to the health and viability of the entire watershed and the groundwater moving through the land and interacting with the surface waters. As such, collaborative efforts with local and governmental entities and non-profits should be maintained based on District priorities.
- The Board recognizes the need to inform and educate the public about water matters.

IV. Executive Summary

The San Juan Water Conservancy District was formed on October 22, 1987, as a duly organized water conservancy district pursuant to the Water Conservancy Act following approval by Archuleta County voters. The District is charged with providing water issues and conservation education, water resource planning, stream improvement, water rights protection, and development services within its service area, which is located wholly within Archuleta County along the headwaters of the Upper San Juan River. The District, which encompasses approximately 10% of Archuleta County's land area, includes nearly all of the developed residential and commercial areas in the county, but almost none of the larger ranches, national forest, or Southern Ute Indian Tribe land. The District is governed by a Board of three to nine Directors who are appointed by the District Court Judge.

The District's primary focus since its inception in 1987 has been ensuring water availability through water storage solutions. Following the historic drought of 2001 – 2002 and based on anticipated population growth in Archuleta County, the District initiated a project in 2003 to construct a reservoir on the Upper San Juan River. In 2007, the Running Iron Ranch property was purchased through a partnership between the SJWCD, Colorado Water Conservation Board, and the Pagosa Area Water and Sewer District (PAWSD). That partnership has since been restructured with PAWSD retaining the primary financial obligation for the land purchase, and the District now responsible for developing partnerships for the

future construction, maintenance, and operation of any reservoir deemed necessary to meet the District's water needs. This project, originally known as the Dry Gulch Reservoir Project, is now referred to as the San Juan River Headwaters Project.

This Plan outlines the Strategic Objectives for the District and highlights the actions required to accomplish these objectives. The Plan is intended to be a dynamic document that is reviewed annually and updated as needed based on changes in water needs and availability that result in changes to the District priorities.

The Strategic Objectives of the District focus on:

- 1) Determining the water needs (agricultural, municipal, environmental, and recreational) of the District, and how the San Juan River Headwaters Project and other projects might meet those needs.
- 2) Education of the community at large regarding critical water issues that face the District, the Southwest Basin of Colorado, and the Colorado River Basin and its tributaries.
- 3) Conservation of our limited water resources through continued existing programs and initiation of new programs.
- 4) Ensuring the financial health and viability of the District through cost-effective asset management including, but not limited to the District's water rights and collaboration with existing and new partners.
- 5) Establish a reputation of operational excellence through communication both internally and externally with partners and the public.

The SJWCD Board of Directors invites the community at large to provide feedback on the Strategic Objectives outlined in this Plan and to participate as much as possible in the accomplishment of the actions highlighted herein. The regular board meetings are open to the public and opportunities for public comment are available during each meeting. Additional information regarding the activities of SJWCD are

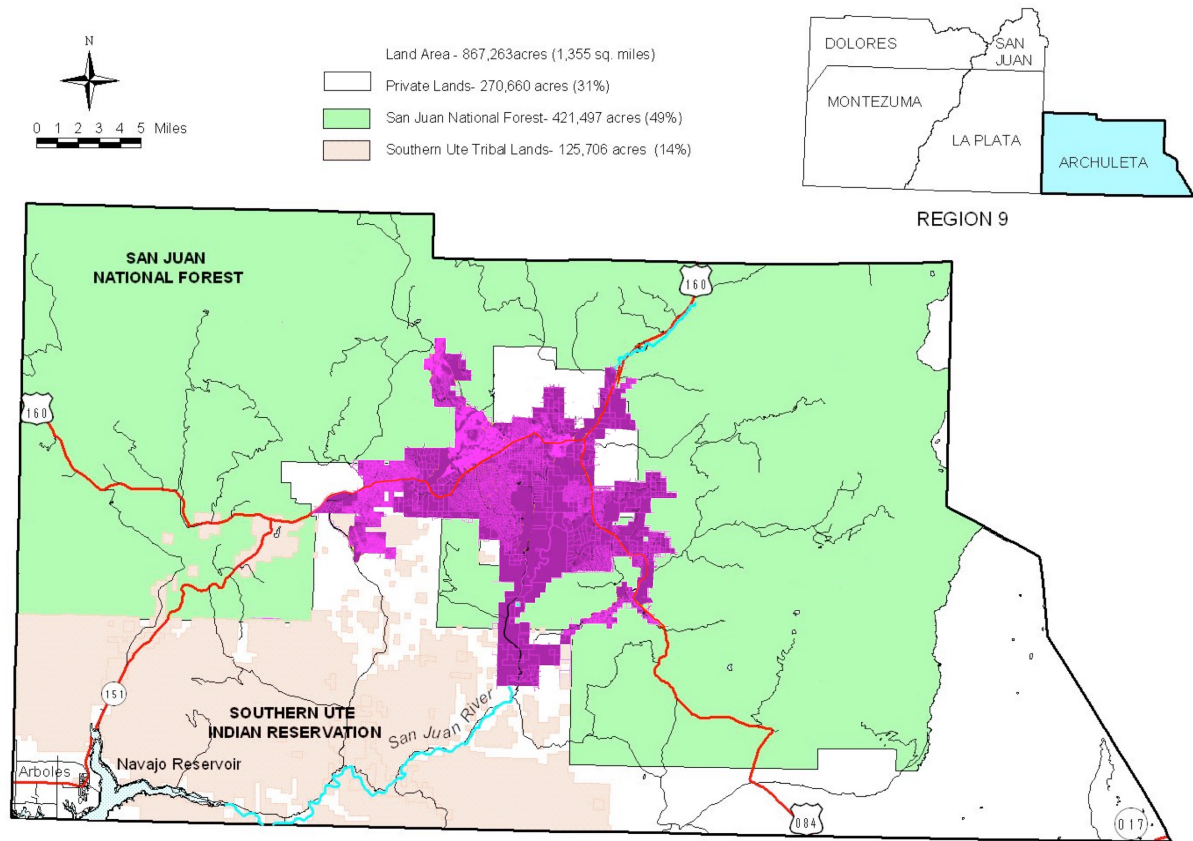
available on the District's website at <https://sjwcd.org>, and specific questions can be addressed to the Board by sending an email to the Board President/Chairman at the address provided on the website.

V. Description and Operating Environment

ORGANIZATION

SJWCD was formed on October 22, 1987 by decree entered in Case No. 1987CV100 by the District Court of Archuleta County following a majority vote of approval by its electors. It is a political subdivision of the State of Colorado and a duly organized water conservancy district pursuant to the Water Conservancy Act, §37-45-101 *et seq.*, C.R.S. The charge of the District is to provide water issues and conservation education, water resources planning, stream improvement, water rights protection, and development services within the District's boundaries. SJWCD is also charged with ensuring the property and residents within the District, the water resources of the San Juan River, and its tributaries will be benefited by these activities. See Region 9 Economic Development District of SW Colorado below, and the District's boundaries map courtesy of Archuleta County attached as Appendix G.

The District is funded through a mill levy of 0.316 on all property within its boundaries. When SJWCD was first formed the mill levy was approved at 1.0 mill; however, the implications of TABOR over the intervening years have reduced the levy to what it is today. Attempts to increase the mill levy have been made over the years, but have not been successful.



District Boundaries – Denoted in Purple¹

GEOGRAPHY

SJWCD is located wholly within Archuleta County, Colorado along the headwaters of the Upper San Juan River, near the southwestern corner of Colorado. To the north and east, the county includes portions of the San Juan Range of the Rocky Mountains, descending into rolling hills and meadows in the central portion of the county, and high desert terrain along the southern areas.

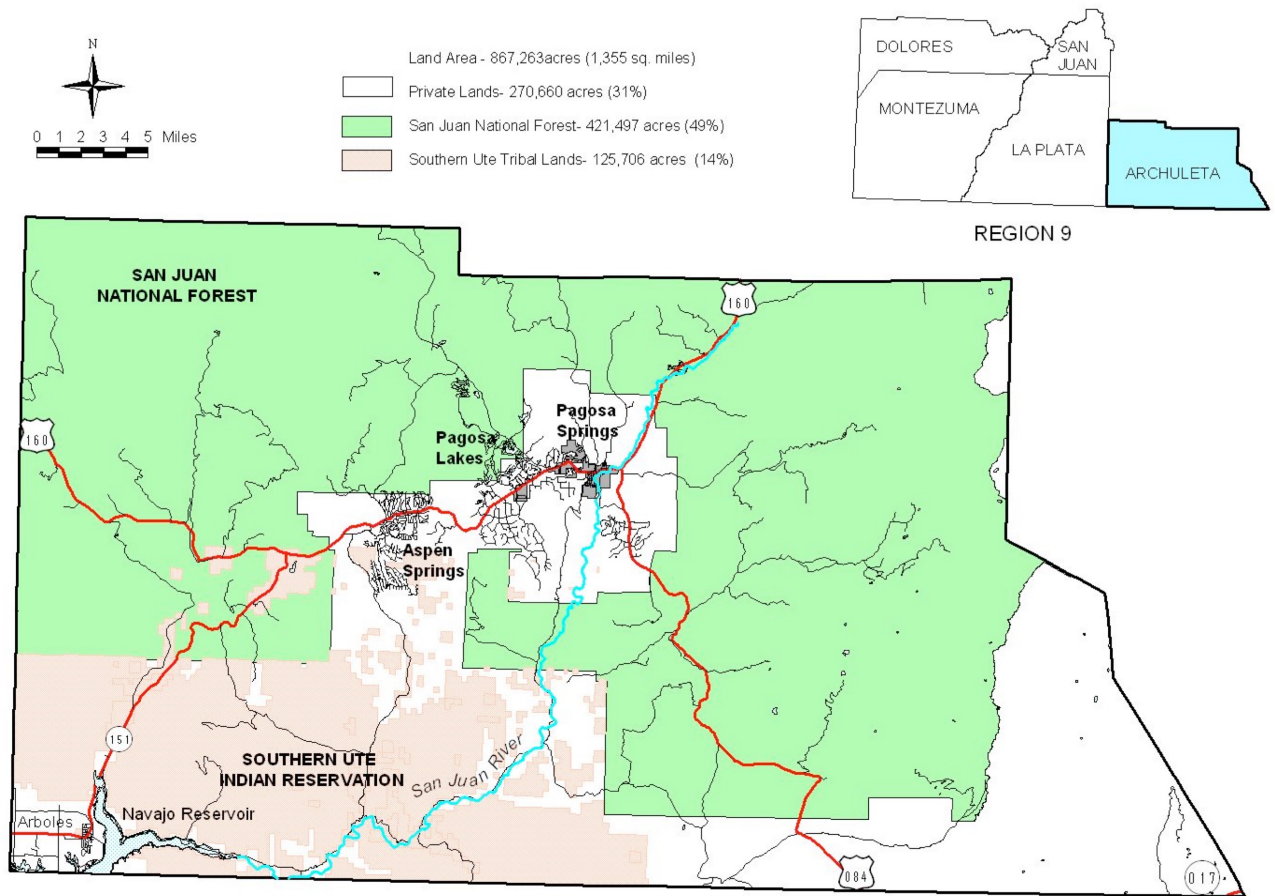
The San Juan River — running roughly north to south through the center of the county — is largely fed by runoff from the winter snowpack in the San Juan Mountains. The San Juan River is a tributary of the Colorado River, eventually

¹ Region 9 Economic Development District Map of SW Colorado Map.

flowing 383 miles to Lake Powell in Utah. Tributaries that feed into the main stem of the San Juan originate in both Mineral and Archuleta Counties. Another significant river — the Piedra — courses through the western part of the county. The San Juan, and its tributaries the Piedra, Rio Blanco, and Navajo Rivers, feed into Navajo Reservoir in the southwest corner of the county.

Archuleta County is comprised of 867,263 acres (1,355 sq. miles). Most of the northern and eastern portions of the county (49%) are within the San Juan National Forest and are under the management of the U.S. Forest Service. Another 14% of the land within Archuleta County is comprised of Tribal lands administered by the Southern Ute Indian Tribe. See Region 9 Economic Development District of SW Colorado Map below.²

² Region 9 Economic Development District of SW Colorado, *Southwest Colorado's Comprehensive Economic Development Strategy, Fourth Edition 2011 – 2012*, (2011), https://www.scan.org/uploads/2011_CEDS_archuleta.pdf.



Pagosa Springs Area Map³

About 31% of lands in Archuleta County are in private ownership, but only a small portion of the private lands have been developed in urban or suburban residential patterns. The remaining private lands consist mainly of rural cattle ranches.

Approximately 10% of Archuleta County's land area is included in the San Juan Water Conservancy District. The District includes nearly all of the developed residential and commercial areas in the county, but almost none of the ranches, National Forest, or Southern Ute Indian Tribe land. See District boundaries map courtesy of Archuleta County as Appendix G.

³ id.

POPULATION

The population of Archuleta County over the first century of its existence remained at approximately 3,000 residents, but around the time voters created the District in 1987 the county's population was experiencing a dramatic increase. The population in 1970 was around 2,700; by 1990, the population had doubled to approximately 5,300; and, by 2010, the population had again doubled to around 12,000. Following the Great Recession of 2008 - 2009, however, the county's population has remained fairly static. The population was estimated at 14,000 in 2019. Of these 14,000 residents, it is estimated that 90% lived within the SJWCD boundaries.⁴

The residential and commercial areas served by the District include the Town of Pagosa Springs, the various Pagosa Lakes subdivisions, the Alpha subdivision, the Aspen Springs subdivisions, the Lower Blanco subdivision, residential properties along Trujillo Road, and numerous other small subdivisions located within 10-15 miles from the central core of town.

Archuleta County has attracted a large population of retirees and second-home owners. While the average age in Colorado in 2017 was 37, the average age in Archuleta County for the same year was around 50 years old.⁵ About 27 percent of the county population is age 65 or older and about 11 percent of the residents live below the federal poverty line.⁶

The Growing Water Smart Work Group, a collaboration of several Archuleta County agencies, published a population study in 2019 suggesting that Archuleta County might grow at an annual rate of between 1 and 2 percent over the next 30 years. Such a growth rate would suggest a population, in 2050, of between 18,000 and 24,000 residents.⁷ Based on the current population growth patterns, it can be reasonably assumed the majority of this increase will be within the District's current boundaries.

⁴ See U.S. Census Bureau, *Quick Facts – Archuleta County, CO*, (2019), <https://www.census.gov/quickfacts/fact/table/archuletacountycolorado/PST045219>.

⁵ See Colorado Department of Local Affairs – State Demography Office, *Age and Gender Population Data* (2020), <https://demography.dola.colorado.gov/population/age-gender-population-data/>.

⁶ See U.S. Census Bureau, *Quick Facts – Archuleta County, CO*, (2019), <https://www.census.gov/quickfacts/fact/table/archuletacountycolorado/PST045219>.

⁷ RPI Consulting, LLC, *Growth Trends and Projections: Archuleta County Growing Water Smart* (2019).

ECONOMY

Since the decline of the timber and other extraction industries in the late 1970s, the economy of Archuleta County has relied more heavily on tourism and recreation largely due to the area's natural resources and outdoor recreation opportunities. The Pagosa Springs Area Tourism Board noted in materials presented to the Town Council in March 2020 that tax revenues from municipal and county Lodgers Taxes have increased from about \$477,000 in 2010 to a projected \$890,000 for 2019.

The growth of the tourism sector has encouraged a similar growth in vacation rentals, which are mostly private homes converted to short-term rentals. Some estimates put the number of vacation rentals at around 600, which is approximately equivalent to the number of motel rooms in the county.⁸ The retirement and second home industry is also experiencing growth as a result of increasing tourism. A report published in 2016 estimated that in 2006 approximately 38 percent of the homes in the county were second homes. The same report estimates the percentage of second homes in 2015 was about 41 percent, illustrating the stability of the second home market in the area.⁹

Employment in the tourism industry also corresponds with the growth and now accounts for approximately 32 percent of the jobs in Archuleta County.¹⁰ While the average annual wage in the county is \$34,990, this is only about 60 percent of the average annual wage for the state at \$58,942, and housing costs are second only to Durango as the most expensive in southwest Colorado. Recognizing the need for a skilled and reliable work force, the Town of Pagosa Springs, Archuleta County Housing Authority, and the non-profit Pagosa Housing Partners have been spearheading efforts to address affordable housing issues as the lack of work force housing can stymie economic growth and diversity.

Diversification of the economic base has been a much-discussed goal in Archuleta County since the decline of the extraction industries. While much of the current diversification is focused on tourism, the retirement and second home community, and the corresponding service industries, efforts have also included attracting other professional services such as medical. The largest increase in jobs since 2007 has

⁸ id.

⁹ Donna K. Graves, Information Services, *Archuleta County Housing Report 2016* (2016).

¹⁰ id.

been in the health services and governmental sectors.¹¹

In January 2008, Pagosa Springs Medical Center opened to offer comprehensive hospital services, EMS, diagnostic testing, and wellness programs. The hospital's federal designation as a Critical Access Hospital allows for higher reimbursements for Medicare and access to grants only available to communities with this designation. Pagosa Springs Medical Center also operates a family practice clinic.¹² The new facility has been a significant factor in attracting medical professionals to the area and currently employs a staff of approximately 280.¹³

VI. Strategic Objectives

Community Focused Objectives

Strategic Objective 1: Meet the agricultural, municipal, environmental and recreational water needs of the SJWCD community.

Goal 1a: Determine how the San Juan River Headwaters Project (SJRHP) can meet the SJWCD community's water needs.

Actions:

- Collect and analyze data on the agricultural, municipal, environmental, and recreational water needs of the SJWCD community and assess the impact on available water resources.
- Assess the impact of climate change and drought on water availability.
- Identify and prioritize options for Running Iron Ranch property.

¹¹ RPI Consulting, LLC, *Growth Trends and Projections: Archuleta County Growing Water Smart* (2019).

¹² See Region 9 Economic Development District of SW Colorado, *Southwest Colorado's Comprehensive Economic Development Strategy, Fourth Edition 2011 – 2012*, (2011), https://www.scan.org/uploads/2011_CEDS_archuleta.pdf.

¹³ See Region 9 Economic Development District of SW Colorado, *Region 9 Economic Snapshot 2020*, (2020), https://www.scan.org/uploads/Final_Report_Economic_Snapshot_2020.pdf.

- Gather SJWCD community and partner feedback on support for SJRHP.
- Identify potential financial partners in SJRHP and determine interest in proceeding.

Goal 1b: Determine most cost-effective development of the West Fork Reservoir and West Fork Canal water rights by June 2021.

Actions:

- Contract with Wilson Water Group to study water needs and availability and to identify options for West Fork Reservoir and West Fork Canal water rights.
- Assess conclusions of Wilson Water Group study and define course of action.

Goal 1c: Identify alternatives to meet SJWCD community water needs through 2050 by December 2023 (see also Strategic Objective 3).

Actions:

- Research “water banking” opportunities.
- Support Upper San Juan Watershed Enhancement Partnership (WEP) progress on Phases 2 and 3.
- Support Forest Headwaters Restoration programs of the San Juan Headwater Forest Health Partnership.

Goal 1d: Increase monitoring capabilities for water supply and demand within SJWCD community.

Actions:

- Establish a subcommittee to drive stream monitoring program.
- Research desired locations for additional streamgages.

- Research installation and operating costs for streamgages.
- Gather feedback from community at large on increased stream monitoring.
- Identify potential financial partners for installation of additional streamgages.

Strategic Objective 2: Educate community on water issues facing SJWCD.

Goal 2a: Provide resources for the development and distribution of educational materials.

Actions:

- Appropriate funding, when available, for the development of educational materials.
- Work with teachers to define educational needs (e.g., materials and programs).
- Provide small grants to develop and sustain local water education programs.
- Participate in Chamber of Commerce “Business Bites” session that focuses on educational programs.

Goal 2b: Communicate SJWCD plans, actions, and results to community (see also Goal 5b).

Actions:

- Create a presentation template that can be updated for communicating with local organizations, partners, and the community at large.
- Host a Chamber of Commerce “Business After Hours” session on water issues.
- Submit articles to local media on water issues.

- Participate in annual Chamber of Commerce sponsored KWUF radio interview.
- Participate in local Earth Day celebrations and July 4th parade to generate public awareness of SJWCD activities.

Goal 2c: Publicize SJWCD plans/status/results metrics.

Actions:

- Create SJWCD “Balanced Scorecard.”
- Maintain and promote SJWCD website.
- Define appropriate and most impactful ways to share Balanced Scorecard with community at large.

Strategic Objective 3: Reduce water demand through conservation.

Goal 3a: Support water conservation programs within the SJWCD community.

Actions:

- Establish subcommittee or Board representative to work with PAWSD and other partners to define water conservation programs in the SJWCD community.
- Establish subcommittee or Board representative to work with agricultural community and partners to reduce agricultural water consumption.
- Establish subcommittee to work with WEP, agricultural community, Natural Resources Conservation Service, San Juan Conservation District, and other partners to support water conservation programs in the SJWCD community.

Financial Objectives

Strategic Objective 4: Ensure financial health and viability of the District.

Goal 4a: Maintain a cost-effective organization.

Actions:

- Develop annual budget that supports basic operations, protects existing water right investments and contractual obligations, and sustains progress on strategic objectives.
- Continue to maintain operations within existing budget limitations.
- Assess conclusions of Wilson Water Group study regarding cost-effective development of the West Fork Reservoir and West Fork Canal water rights.
- Determine future management of Running Iron Ranch in collaborations with PAWSD.

Goal 4b: Build and maintain collaborative relationships with entities that share water resource interests in the San Juan River Basin.

Actions:

- Continue to foster mutually beneficial partnerships to enhance water resource opportunities within the SJWCD service area.
- Continue to engage with local organizations and stakeholder groups to promote greater awareness of important water issues regarding water resources and demand.
- Establish subcommittee or Board representative to collaborate with the Town of Pagosa Springs, Archuleta County, and the Chamber of Commerce to identify water issues and define solution courses of action.

Goal 4c: Access Board sources of project funding.

Actions:

- Establish a supplemental funding subcommittee or Board representative to research funding opportunities.

- Identify strategic projects requiring supplemental funding.
- Identify potential financial partners for specific strategic projects.
- Create business cases to encourage participation of financial partners in specific strategic projects.
- Prepare a calendar for funding opportunity deadlines.

Internal Process Objectives

Strategic Objective 5: Establish a reputation for operational excellence.

Goal 5a: Create and maintain a project tracking system.

Actions:

- Establish a subcommittee or Board representative to build the project tracking system.
- Gather feedback from the SJWCD community and partners regarding desired information on status of projects.
- Research software available to facilitate project tracking and status communication.

Goal 5b: Create communication system to share information on SJWCD projects and issues.

Actions:

- Establish a subcommittee or Board representative to build communication system.
- Gather feedback from the community at large and partners regarding desired information from SJWCD.
- Continue maintaining SJWCD website as backbone of communication system.

- Build “Balanced Scorecard” to facilitate project status and metrics communication.

Goal 5c: Consistently monitor progress and execution on Strategic Objectives.

Actions:

- Ensure that all Strategic Objectives are “SMART” (i.e., Specific, Measurable, Achievable, Reasonable, and Timely).
- Assign individual ownership of actions with deadlines for accomplishment.
- Include Strategic Objective actions in “Balanced Scorecard” for ease of reporting.
- Hire Four Corners Water Center at Fort Lewis College intern to assist with strategic SJWCD programs.

Organizational Development Objectives

Strategic Objective 6: Ensure SJWCD remains a community-focused organization addressing water issues.

Goal 6a: Gather and utilize community and partner feedback on SJWCD projects.

Actions:

- Consistently utilize SJWCD communication system.
- Identify opportunities to communicate with small groups within the SJWCD community, partners, and community at large.
- Identify ways to best elicit feedback on SJWCD projects from the SJWCD community, partners, and community at large as applicable.

- Assess and incorporate feedback on SJWCD processes and projects as appropriate and communicate changes in feedback loop.

Goal 6b: Build sustainable relationships and collaborations.

Actions:

- Identify key partners within the SJWCD community.
- Establish effective communication/feedback loop with key partners.

VII. Major Projects

A. Current Projects

San Juan River Headwaters Project

The District's primary focus since its inception in 1987 has been water storage. To this end, the main project has been what was formerly referred to as the Dry Gulch Reservoir Project and is now called the San Juan River Headwaters Project (SJRHP or the Project). This effort followed the historic drought years of 2001 - 2002 coupled with relatively rapid growth in Archuleta County from 1990 to 2010.

The proposed site for the Project was selected based on studies completed in 1989 and 2003 of potential reservoir sites in Archuleta County, of which, the 2003 study concluded the Dry Gulch site was the most favorable.¹⁴ The SJRHP site is located approximately three miles northeast of downtown Pagosa Springs just east of U.S. Highway 160. See map of Dry Gulch/San Juan Headwaters Project site courtesy of Archuleta County attached as Appendix H. It includes approximately 660 acres of ranch property, but additional land would be needed to complete the Project. As planned to date, the SJRHP includes an 11,000 acre-feet storage facility that would be filled and refilled by siphon from the San Juan River. This method reduces the construction and operational costs of the Project. The proposed reservoir site is an "off channel" site in that it does not require the source water, the San Juan River, to be dammed. For reference to size, 11,000 acre-feet is approximately 10% of the capacity of Vallecito Lake and 1% of the capacity of Navajo Lake.

¹⁴ See Harris Engineering, Inc., *Appraisal Report to Evaluate Future Raw Water Demands and Water Supply Alternative Plans as of March 2003* (2003).

The conditional water rights intended for Dry Gulch Reservoir were originally decreed in 1968 for 6,300 acre-feet of storage. In 2004, the District and PAWSD applied for a junior water right for a larger reservoir in Dry Gulch, a refill right, and specific filling sources and rates for it. Trout Unlimited opposed those claims, leading to protracted litigation and new standards from the Colorado Supreme Court for evaluating conditional water rights owned by municipal providers. The District, PAWSD, and Trout Unlimited eventually stipulated to a decree providing for a maximum storage capacity of 11,000 acre-feet for Dry Gulch Reservoir and other limitations on its use.

The District proposed a ballot issue in 2004 to increase the mill levy to fund the Project, but the voters rejected the proposed increase. SJWCD formally partnered with PAWSD on the SJRHP in 2006 through a Memorandum of Understanding (MOU). The MOU addressed the acquisition, permitting, design, and construction. Funding for the Project was initially provided through tax revenues collected by the District and Capital Investment Fees collected by PAWSD.

In 2007, SJWCD received a \$1 million grant from the Colorado Water Conservation Board (CWCB) to use towards the purchase of the property for the Project, the Running Iron Ranch. PAWSD was authorized a loan of approximately \$11 million from CWCB to provide the remaining funds necessary for the purchase of the property. PAWSD ultimately borrowed \$9,219,363 against the loan authorization as no other property purchases were made and secured the loan with its revenues.

In addition to the Running Iron Ranch property, the proposed 11,000 acre-foot reservoir would require a small amount of additional land currently owned by the U.S. Forest Service (USFS) and the Lavery Family, adjacent landowners to the proposed project property. The District contracted with the Western Land Group, land conservation specialists, to identify potential properties that might be acceptable to the USFS for a land exchange. A proposal for a land exchange was submitted to the USFS in August 2013. In addition, negotiations with the Lavery Family were initiated. The District also contracted in 2017 with Rhea Environmental Consulting for an environmental baseline study and with La Plata Archeological Consultants for a cultural resources survey of the 11,000 acre-foot reservoir pool basin.

Following the purchase of the property described above, the PAWSD Board decided to suspend the Project due to community concerns regarding need and cost. Through a restructuring effort in 2016 titled Agreement to Restructure Colorado Water Conservation Board Dry Gulch Reservoir Loan Contract Number C150261,

the recognized lead entity for the Project changed from PAWSD to SJWCD. PAWSD restructured its loan into two parts – Loan A and Loan B. Loan A is for \$4,290,930.32 at 1.75% for 20 years. Loan B is for \$4,565,000 at 3.5% and payments against the loan are deferred for 20 years. This restructuring allowed for a 20-year planning period with an option for an additional 20 years, which provides the entities with greater opportunity for additional partners to join the Project. There are several options for PAWSD and SJWCD regarding how to utilize the property during the planning period, but at this time PAWSD is making the annual payments on Loan A, both entities are financially supporting the water rights associated with the Project, and SJWCD is actively seeking additional partners.

In March 2017, the District submitted a loan application to the CWCB for an additional \$2,000,000 loan. This funding would allow for acquisition of the additional property necessary for the 11,000 acre-feet reservoir, as well as a road easement, fencing, additional environmental studies, and preliminary engineering. The loan was approved in May 2017. Included in the application was a detailed narrative description and cost estimate for the project, including the dam, river diversion, Park Ditch Inflow Siphon, and a pipeline drain back to the river. The estimated construction cost was \$60,600,000, including contingencies. These construction cost estimates were based on the cost of the Long Hollow Dam, which was substantially completed in La Plata County, Colorado in 2014. Although Long Hollow is smaller, the dam and embankment are similar to those required to construct the Project.

Amortization of a new CWCB loan would require an increase in the mill levy of the District. Therefore, another ballot initiative was attempted in 2017 to raise the mill levy to 1.0 mills as was originally approved by the voters when the District was formed. However, this ballot initiative was also not successful as the voters again rejected the proposed increase by a 3-to-1 margin. The actual execution of the CWCB loan was on hold while the District continued to pursue various partners for the Project, but was ultimately deactivated in November 2020 at the request of CWCB due to lack of execution.

Upper San Juan Watershed Enhancement Partnership

SJWCD has provided financial support to the Upper San Juan Watershed Enhancement Partnership (WEP). WEP is an effort within Archuleta County to implement one aspect of the Colorado State Water Plan – development of a Stream Management Plan (SMP). SMPs are intended to identify, through a community driven process, the issues and needs present in a given watershed. Upon

identification of the issues and needs, a scientifically based SMP will be developed and possibly implemented.

Envisioned as a three-phase process, the ultimate purpose of the WEP is to initiate, organize, and implement the Integrated Watershed Management Plan (IWMP) to seek opportunities to conserve the Upper San Juan Basin streams and their uses with wide-ranging community support and decisions based on current, relevant science and assessments. To this end, WEP is being led by a steering committee that is comprised of local agricultural, municipal, domestic, environmental, and recreational water users. The steering committee is working within the community using the IWMP process to identify representative stakeholders that will assist in implementation of the projects described in the SMP to address the identified needs and issues. Phase I of the WEP IWMP was finalized in April 2020.

Funding for Phase II of the WEP IWMP was approved by the CWCB in May of 2020. Phase II will directly address the identified information gap for water needs identified in the SW Basin Implementation Plan by tackling the next critical step in the process: identification of opportunities for multiple-use water projects from a combination of stakeholder input as well as technical expertise, analysis, and modeling.¹⁵ Phase II is anticipated to last 12 months.

Development and implementation of the WEP IWMP and ultimately the SMP are supported by the CWCB. The District is participating as a stakeholder and financial contributor to the WEP IWMP process and SMP development. Continued participation in the development and implementation of such efforts on common water resource issues will be mutually beneficial as it allows the District to continue to represent its constituents while efficiently utilizing resources.

Snowpack Enhancement

The District has financially participated for a number of years in cloud seeding activities managed by the Southwestern Water Conservation District, and now by the Dolores Water Conservancy District. Cloud seeding is considered by some to enhance the amount of snowfall in the area being seeded by 5 percent with estimated results ranging from 3 – 15 percent in affected areas. A report was recently prepared by the Desert Research Institute for the Southwest Basin

¹⁵ See Ann Oliver and Carrie Lile, Harris Engineering Inc., *Basin Implementation Plan: Southwest Basin Roundtable* (2015).

Roundtable that describes the effectiveness of such efforts in southwest Colorado.¹⁶

Water Education

The District has been an active participant in and financial contributor to the Water Information Program (WIP) that is managed by the Southwestern Water Conservation District. WIP provides and/or contributes to a wide variety of educational programs in southwest Colorado. These include, the annual Children's Water Festival, the Forests to Faucets program for teachers, and the annual Water 101 - 201 – Water Education Seminars, which focus on water law.¹⁷

Coordination with other Organizations

The District is a participant in several organizations with an interest in water in the Pagosa Springs area. One of the most active groups in this area is the San Juan River Headwaters Forest Health Partnership, which is a public/private body concerned with the health of our forests and fire management that is managed by the Mountain Studies Institute.¹⁸ Forest health has a direct bearing on water quality and quantity. The District also recently joined with the Town of Pagosa Springs, Archuleta County, the Pagosa Lakes Property Owners Association, the Pagosa Fire Protection District, and several private entities to support the Growing Water Smart Working Group. The intent of the working group was to develop a community consensus on population projections for the future growth of our county.¹⁹

B. Accomplished Projects

Colorado Water Plan

¹⁶ McDonough, F. and J.F. Mejia, *Department of Atmospheric Sciences Desert Research Institute Division of Atmospheric Sciences, High-resolution WRF Simulations for Six Storms that Produced Seedable Clouds and Precipitation Over the Western San Juan Mountains – Project Report* (2018).

¹⁷ See Water Information Program website: <https://waterinfo.org/about-wip/overview/>.

¹⁸ See Mountain Studies Institute website: <http://www.mountainstudies.org/forest-health>.

¹⁹ See RPI Consulting, LLC, *Growth Trends and Projections: Archuleta County Growing Water Smart* (2019).

The District was pleased to participate in the development of the Colorado Water Plan, which was completed in 2015.²⁰ This was the culmination of strategy crafted over a decade that allowed for more grassroots participation in water development and conservation. Efforts preceding the Colorado Water Plan established regional basin roundtables and expanded financial opportunities to fund water infrastructure and policy planning across the state. The District has participated actively in the Southwest Basin Roundtable and continues to be represented. The San Juan River Headwaters Project is included in the Identified Important Projects and Process list developed by the Southwest Basin Roundtable. The SW Basin Implementation Plan portion of the larger Colorado Water Plan is currently in the process of being reviewed and revised.

Lower Blanco River Restoration

Since 1971, the U.S Bureau of Reclamation's San Juan/Chama Project has annually diverted over 80,000 acre feet of water from the Rio Blanco, 70% of the historical flows of the river, into the Rio Grande River basin via a transmountain diversion. The diversion point is about six miles upstream from the U.S. 84 bridge across the Rio Blanco. This diversion caused poor water quality conditions and reduced fish habitat in the river below the diversion because the original channel was too large for too little flow after the diversion. Beginning in 1996, SJWCD participated in a multi-agency public/private effort to improve and restore the streambed habitat in the lower Blanco. The District was gratified to obtain the services of Dave Rosgen, an internationally known river restoration expert, in the design of the project. The first phase of the project was completed in 1999, extending from near the U.S. 84 bridge downstream about one mile. Based on the success of the first phase, a second phase was initiated in 2003, extending the project another 2.4 miles downstream. The second phase was completed in 2004.

The project had a number of objectives:

- Improve the natural stability of the lower Rio Blanco channel.
- Improve fish habitat to utilize the regulated low flow from the upstream diversion.

²⁰ State of Colorado, *Colorado Water Plan* (2015), <https://www.colorado.gov/cowaterplan>.

- Improve the visual values of the river.
- Maintain channel capacity during flood events.
- Improve the sediment transport capacity of the river channel.
- Raise water level elevation in shallow groundwater bodies hydraulically connected to surface water.

After more than 15 years, the restoration features remain in place and have withstood several major floods. The project is just one example of the District's proactive role in managing water resources for the benefit of its constituents.

VIII. District Administration

COMPOSITION OF THE BOARD OF DIRECTORS

SJWCD is governed by a Board of three to nine Directors who are appointed by the District Court Judge. A Director must reside and own real property within the District. All powers, privileges, and duties vested in, or imposed upon, the District by law shall be exercised and performed by and through the Board, whether set forth specifically or impliedly in the District Bylaws. The term of each Director shall be four years, or less if appointed to fulfill an unexpired term, and each Director shall execute an Oath of Office.

The Board of Directors elects from its membership a Chair and President, Vice-President, Secretary, and Treasurer and may also elect Assistant Secretaries and/or Assistant Treasurers who shall be the officers of the Board of Directors and of the District. The Vice-President has all powers of the offices of President and Chair in the absence of the President. The officers shall be elected by a majority of the Directors voting at the election. The Board may appoint an acting officer in the absence of any individual officer. The election of the officers shall be conducted biennially at the first regular meeting of the Board held in even numbered years. Each officer so elected shall serve for a term of two years, or as otherwise directed by the Board.

The Board regularly meets on the third Monday of even numbered months. Specific times may vary. Special meetings and work sessions may be scheduled at any time. All meetings are held at the District's office – 46 Eaton Drive, Suite #5, Pagosa

Springs, Colorado, unless otherwise notified. Board meeting notices are posted on the District's website www.sjwcd.org no less than 24 hours prior to the meeting.

THE BUDGET PROCESS

The fiscal year of the District shall commence on January 1st of each year and end on December 31st. Based upon the requirements of the Local Government Budget Law and procedures recommended by the Colorado Department of Local Affairs, the Board has adopted the following budget schedule and procedure:

June board meeting:

- Board appoints a budget officer and reviews current year's goals and activities.

August board meeting:

- Board reviews current year's goals and activities; preliminary discussion of next year's goals and activities with initial draft budget prepared/presented.
- County Assessor to certify to all taxing entities and the Division of Local Government the total assessed valuation and real property values of all taxable property within the District by August 25th.

September board meeting (optional):

- Budget officer presents an initial proposed budget if not done at August meeting, including goals and activities for the next year, to the Board for discussion, prioritizing, and preliminary approval. The statutory deadline for the proposed budget is October 15th.
- Budget officer advises the Board of the Assessors' estimates of assessed and actual values.

Special October board meeting (optional):

- Initial/revised proposed budget presented to the Board by budget officer, based on August/September discussion. Board discusses initial/revised proposed budget and directs budget officer to make any agreed-upon changes.
- Budget officer advises the Board of the Assessors' estimates of assessed and actual values if not done at a September meeting.

October board meeting:

- Review of the revised proposed budget, including any September/October changes, and draft budget message (optional). Proposed revisions must be based upon the budget officer's drafts, as reviewed at the August/September/October meeting.
- Board adopts proposed budget to be available to the public by October 15th.
- From this proposed budget, the Notice of Budget is prepared and published, and the public hearing on the budget noticed for the November board meeting.

November board meeting:

- Board conducts public hearing on the proposed budget approved at the October board meeting. Following the public hearing, the Board may revise the proposed budget. Board directs budget officer to prepare final budget and budget message (optional), subject to final assessed valuations.

December board meeting:

- Board adopts the budget and sets the mill levy for the next year based upon receipt of final assessed valuations from the County Assessor, received by the statutory deadline of December 10th.
- Certification of mill levies to the Board of County Commissioners is due by December 15th.

DISTRICT ASSETS

- Financial

SJWCD receives funds through a mill levy approved by the voters. The mill levy as of the 2019 certification is currently at a rate of 0.316 mils. This results in an annual income of \$70,000, on average.

- West Fork Reservoir and Canal Water Rights

SJWCD owns conditional water rights for the West Fork Reservoir and West Fork Canal, originally decreed in 1968 for 39,356 acre-feet and 70 cfs, respectively. Although at one time this was considered a viable reservoir location, PAWSD and SJWCD ultimately chose Running Iron Ranch as the property for the Dry Gulch Reservoir Project – now referred to as the San Juan River Headwaters Project. For

many reasons, this is no longer a viable reservoir location, and the viability and the use of the water rights in a different location need to be analyzed.

Due to several stipulations resulting from other water rights cases, the current West Fork Reservoir water right is for 24,000 acre-feet and the West Fork Canal water right for 50 cfs. Should SJWCD decide to pursue building a reservoir on the Running Iron Ranch, the West Fork water rights will have to be used or perfected prior to reservoir construction or abandoned. The point of diversion and the storage location must also be changed from the current location.

SJWCD has invested in this asset in legal fees through diligence applications. It will need to be determined by the Board if it is worthwhile to pursue moving the point of diversion and storage site. This will need to be determined prior to the next diligence deadline in June of 2021.

- Property owned in association with PAWSD

The District, working in cooperation with PAWSD, initiated the purchase of the Running Iron Ranch property northeast of Pagosa Springs for the purpose of developing a water storage reservoir. The property currently consists of three parcels that straddle U.S. Highway 160, which combined amount to approximately 660 acres. Presently, there are three leases in place: Occupancy, Agricultural, and Sand and Gravel. These leases all expire on January 3, 2023. The options available for the future management of the property, including leases, are currently being discussed with PAWSD. See map of Dry Gulch/San Juan Headwaters Project site courtesy of Archuleta County attached as Appendix H.

- Relationships and Collaboration with Organizations and Stakeholder Groups
Sharing Common Water Resource Interests

The District recognizes the importance of establishing and maintaining collaborative relationships with local and regional organizations and stakeholder groups that share mutual water resource interests in the Upper San Juan River Basin. These organizations include, but are not limited to:

- Member of the Southwest Water Conservancy District (SWCD)
- Participating member of the SWCD Water Information Program

- Supporter of the San Juan Watershed Enhancement Program
- Participating member and supporter of the San Juan Headwaters Forest Health Partnership
- Participating member of Southwest Basin Roundtable
- Member of Colorado Water Congress

WATER RESOURCES

SJWCD concerns itself with all water uses that affect District taxpayers, with a focus on the conservation and use of surface waters that flow into the San Juan River. Nearly all surface water in Archuleta County ultimately flows into the San Juan River. Because the vast majority of water users within the District are urban and suburban residential or commercial users, as opposed to agricultural users, the District needs to assess the domestic water supplies currently available to those users as well as potential water supplies that might be obtained or developed in the future.

PAWSD reservoir storage fluctuates from year to year depending on annual snowpack. PAWSD has a total of five storage reservoirs, rights to two additional non-constructed reservoirs, two diversion ponds, three diversions, and three water treatment plants.²¹

Diversions:

Water Rights			
Four Mile Diversion	12.8	Cfs	Absolute
San Juan Diversion	8.0	Cfs	Absolute
	16.0	Cfs	Conditional
West Fork Diversion	5.0	Cfs	Absolute
TOTAL	62.7	Cfs	

²¹ Email interview with Justin Ramsey, PAWSD District Manager (October 9, 2019).

The Four Mile Diversion, diverts water into the Dutton Pipeline. The first several hundred yards of the Dutton Pipeline is shared by PAWSD with the Dutton Creek Ranch and Anthony Trujillo/Alice Seavy. Both of these entities have a higher priority (i.e., earlier date of appropriation) than PAWSD and both take a varying percentage of the available diverted flows.

Storage²²:

Reservoir Name	Volume (acre-feet)	
	Spill way	Usable
Hatcher Lake	1735	880
Stevens Reservoir	1775	1730
Lake Pagosa	1276	920
Village Lake	700	228
Lake Forest	465	300
West Fork Diversion Pond	14	12
*Pinon	198	162
San Juan Diversion Pond	24	NA
**Martinez	760	
**Dry Gulch/San Juan River Headwaters Project	11,000	
TOTAL:		4,070*

Note: *PAWSD does not use water from Pinon. The golf course and several condominium villages in the area use the raw water from Pinon for landscape irrigation; thus, Pinon's usable acre-feet are not included in the total above.

**Both Martinez and Dry Gulch are not constructed.

PAWSD raw water storage either is held within the lakes outlined above or snowpack. During typical spring runoff PAWSD is able to fill the reservoirs from the melting snow. The lakes fill until around June 1st. As the snowmelt slows the

²² id.

lake levels will drop as PAWSD withdraws and treats more water than enters the lake system.

Lake Hatcher is primarily fed from the diversion on Four Mile Creek. Although the Four Mile Creek water right is about 13 cfs, it is a junior right and typically out of priority between June and November. Hatcher is the highest lake in the system and there is currently no method to move water from Stevens Reservoir or any other lake into Lake Hatcher.

Stevens Reservoir receives native flow from Dutton Creek and diversion water from the PAWSD Four Mile Diversion. PAWSD has the ability to divert water from the Dutton Pipeline into the Dutton Ditch, which flows into Stevens Reservoir. PAWSD will typically divert water into the Stevens Reservoir after Hatcher is full or nearly full. Water from Stevens can be released into Lake Pagosa through the Linn and Clark Ditch. Water from Lake Pagosa can be released into Village Lake.

Water in Village Lake is used by the golf course, multiple condominium communities, and the Pagosa Lakes Property Owners Association for raw water irrigation. The golf course also pumps raw water from Village Lake into Pinon Lake where it is used by the golf course and multiple condominium communities for irrigation water. Water from Village Lake can also be released into Lake Forest.

Water in Lake Forest can be pumped to the San Juan Water Treatment Plant. If water spills from Lake Forest, it enters Stevens Draw, which is a tributary to Stollsteimer Creek and eventually flows to the Piedra River.

Because precipitation from year to year is highly variable, the ability to store water becomes very important. Even with the storage PAWSD has available, there still exist some limitations in system flexibility that could become very evident in persistent drought years. The District's capacity to educate the SJWCD community on conservation and efficient water use, especially larger water users, will become vital. Working with PAWSD to improve its system flexibility and dynamics will also allow the Pagosa Springs area community to persevere through persistent drought years. Utilizing the District's current assets, especially water rights, in the most efficient and effective manner will be of the utmost importance.

IX. Appendices

A. Definition of Terms

Water Right - A private property right in the State of Colorado that establishes in what priority a water user may use water for a beneficial purpose. The priority in which someone can divert water to put it to a beneficial use is granted by the water courts in the State of Colorado. A water right allows diversion of a certain amount of water, in a specified order among other water users, from a certain point along a body of water and for a specified purpose. The older, or more senior, the water right, the fewer other water users whose needs must be satisfied before the user is allowed to divert water. The younger, or more junior, the water right, the greater number of senior water rights that must be satisfied before a junior right can divert water.

Prior Appropriation System - The priority system was established when Colorado was still a territory to solve disputes over ownership and use of water. The system prioritizes use of water based upon who used water first. Those who put water to beneficial use first retain the senior right to continue using that water before newer users. When there is not enough water to satisfy all of the water users, the junior, or most recent user, must curtail or forego use until senior rights are fulfilled.

Appropriation Date - An appropriation date is the earliest date approved by the water court demonstrating that a water rights holder intends to put water to beneficial use. The appropriation date places a water right in chronological order among other water rights, with those older being senior to it and those younger characterized as junior. In times of shortage, the oldest rights have first priority, with remaining water allocated in chronological order until there is no more water available for use. The older a water right's appropriation date, the greater its value due to the likelihood it will have water in times of short supply.

Perfected Water Right - Water right that is granted permanent status when water has been physically diverted or controlled and put to beneficial use. A water right is granted for a specific amount of water to be put to a beneficial use from a specific point of diversion or control, for a certain purpose and for some rights a specified period of use.

Diligence - The effort accomplished by a conditional water right holder to physically use water for a beneficial purpose, thereby perfecting that water right and making it absolute. Diligence must be proved to the water court every six years for the conditional right to remain on the books and hold its place in line. When diligence is not satisfactorily proved to the water court, it can be declared abandoned and its conditional decree date lost.

Conditional Water Right - A legal right that holds a place in line for a planned water project that is not yet complete. Conditional rights are granted to provide the time to get a water diversion or storage project planned and constructed without losing the priority date of when the project was originally conceived. Evidence that plans to develop the project are still moving forward must be proven to a water court judge every six years in an act called “diligence” to keep the conditional water right on the books and preserve its place in line among other water appropriators.

Diversion - The removal of water from its natural course or location by means of ditches, headgates, reservoirs, pipeline, conduit, well, pump or other structure, or device.

Exchange - An agreement between parties where water can be diverted or stored at one point, in exchange for an equivalent amount of water being released or bypassed at another point on a river system. In an exchange, the diversion or storage of water and the release or bypass of water from another point must occur simultaneously to prevent injury to other water users. Exchanges must be approved by the State Engineer’s Office, who will ensure the exchange functions properly.

Over-appropriation - A stream or river is over-appropriated when it does not have enough water to meet the needs of all the water rights holders. Many rivers and streams in Colorado are over-appropriated, especially in dry years, in which case the water rights system determines which water users have a right to use water.

Transbasin/ Transmountain Diversion - A transbasin diversion is the removal of water from one river basin to another river basin. A transmountain diversion is the removal and transport of water across the Continental Divide. These diversions of water are 100% consumptive since no water from the diversion will return to the basin of origin’s waters as return flow. Colorado water law (Coffin v. Left Hand Ditch) provides for transmountain diversions by allowing the diversion of water

from where it naturally flows to where it is needed within the state, regardless of distance.

Acre-feet / acre-foot – An acre-foot is the standard unit of measurement for standing or stored water. It is the amount of water required to cover one acre of land (43,560 square feet) one foot deep. An acre-foot is equal to 325,851 gallons.

B. Acronyms and Abbreviations

SJWCD - San Juan Water Conservancy District

PAWSD - Pagosa Area Water and Sewer District

SJRHP – San Juan River Headwaters Project

CWCB - Colorado Water Conservation Board

USFS - United States Forest Service

WEP - Watershed Enhancement Partnership

SMP - Stream Management Plan

IWMP - Integrated Watershed Management Plan

WIP - Water Information Program

BOR - Bureau of Reclamation

C. Colorado Water Law

In Colorado, water is a public resource. As such, water law in Colorado is the evolution of over 150 years of customs and values of the people to promote orderly development and use of their water resources. As the population has grown and evolved, some water rights that have historically provided irrigation for agriculture have been changed to providing municipal water supplies and water for recreation and piscatorial protection.

Despite evolution with population growth, water remains a scarcity in Colorado. Some areas of the state receive less than 12 inches of precipitation per year, while

the more mountainous areas can see over 40 inches. In light of water's scarcity and value in this arid region, Colorado water law must guarantee security, assure reliability, and create flexibility in the development and protection of water resources.²³

- **Security** resides in the law's ability to identify and protect water rights;
- **Reliability** is assured by the system's capacity to administer and enforce water rights over time; and
- **Flexibility** allows water rights to be leased, changed, transferred, sold, or exchanged as the economy or values evolved.

The Colorado Constitution defines the water doctrine known as "prior appropriation"—first in use, first in right—which has stood the test of time as Colorado developed from a frontier western state and into the late 20th century. "Prior appropriation" confers priority to use water from natural streams based upon when water rights were acquired and appropriated. Holders of senior rights have the first claim to withdraw water over holders who have filed later claims and own what are called "junior water rights." In times of shortage, water is provided in full to the most senior rights, with junior rights being cut off.

Water rights are awarded for bona fide "beneficial uses" such as irrigation, livestock uses, drinking water and general municipal uses, industrial uses, and habitat preservation. In issuing rights, water users may only appropriate the amount of water that can be beneficially used. Any water diverted, but not beneficially used must be returned to the stream to be available for use by others. Rights generally allow for a diversion of a certain quantity of water, or for the storage of a certain

²³ Colorado Foundation for Water Education, *Citizen's Guide to Colorado Water Law*, 3rd Edition (2009), https://www.courts.state.co.us/userfiles/file/Court_Probation/Water_Courts/cfwe%20Water%20Law%20Guide%20Third%20Edition%20Final%20June%2016%202009.pdf.

quantity of water. The rights require the water to be used for a specific purpose (i.e., beneficial use), as defined by the court decree.²⁴

D. Colorado River Compact of 1922

The Colorado River Compact of 1922 is a governing agreement established after long negotiations between the seven states within the Colorado River Basin to apportion water in the river among them. See C.R.S. § 37-61-101 the Colorado statute enacting the Compact. Although the Colorado Compact formed the basis for the “Law of the River,” much debate and deliberation followed the historic 1922 treaty. The State of Wyoming consistently challenged Colorado’s right to divert headwaters flows from the west to east slope of Colorado. After the U.S. Supreme Court ruled the waters of the Colorado River would be governed according to the Doctrine of Prior Appropriation, the Upper Basin States (Utah, New Mexico, Wyoming, and Colorado) became concerned the Lower Basin States (Arizona, Nevada, and California) would be at an unfair advantage due to their more rapid development of water resources. As a result of complex negotiations between the states in a forum called the Colorado River Commission, the elements of the Colorado River Compact were forged between the seven states that utilize Colorado River water. The various compacts and projections of river flows resulted in approximately 3 million acre-feet of depletions being available to the people of Colorado annually under the “Law of the River.”

In 1944, a treaty was signed with Mexico providing our neighbor to the south with 1.5 million acre-feet annually from the Colorado River system. In 1948, the Upper Basin States agreed to a percentage appropriation of the waters of the Colorado River system. Colorado’s share of the 7.5 million acre-feet Upper Basin States’ allotment was set at about 51%. Subsequent negotiations among the seven Upper and Lower Basin States and court decrees have quantified Colorado’s share of the Colorado River system, which is still estimated to be approximately 3.1 million acre-feet of water per year.

The Bureau of Reclamation (BOR) was created in 1902 as an agency of the federal government. Over the past 100 or so years, the BOR has been coordinating the planning, construction, and implementation of numerous water diversion and

²⁴ Id.

storage projects in the western United States. Many irrigation projects throughout the west are based on contracts between the water users and the BOR.

Recent drought conditions have resulted in a Drought Contingency Plan between the seven Upper and Lower Basin States party to the Colorado River Compact to consider ways to prevent Lake Mead and Lake Powell from dropping below the levels required for hydroelectricity generation and to maintain compliance with the Compact. Each state has come up with its own plan to help mitigate possible shortages as part of this contingency plan.

Several transbasin diversions are present in the Upper San Juan River Basin that have direct and indirect effects on water availability within Archuleta County. For example, the Treasure Pass diversion near Wolf Creek Pass diverts water into the Rio Grande drainage. The San Juan-Chama Project diverts water out of the Navajo River into the Rio Grande watershed supplying water to Albuquerque and other areas in New Mexico. A diversion out of the West Fork of the San Juan River ultimately feeds back into the Piedra River. All this demonstrating the complex “plumbing” system affecting water availability in Archuleta County.

E. Potential Sources of Project Funding

- Southwest Basin Roundtable
- Southwestern Water Conservation District
- Colorado Water Conservation Board
- Water Supply Reserve Fund
- Water Smart – BOR
 - Water and Energy Efficiency Grants – <https://www.usbr.gov/watersmart/weeg/index.html>
 - Small-Scale Water Efficiency Grants – small scale water efficiency projects funded with these grants include installation of flow measurement devices and automation technology, canal lining or piping to address seepage, municipal meter upgrades, and other

projects to conserve water –

<https://www.usbr.gov/watersmart/weeg/ssweg.html>

- Water Marketing Strategy Grants –
<https://www.usbr.gov/watersmart/weeg/watermarketing.html>
- Cooperative Watershed Management Program – provides funding to watershed groups to encourage diverse stakeholders to form local solutions to address their water management needs. Funding is provided on a competitive basis for:
 - **Watershed Group Development and Watershed Restoration Planning:** In 2012, the BOR began providing funding for watershed group development, watershed restoration planning, and watershed management project design (Phase I). A watershed group is a self-sustaining, non-regulatory, consensus-based group that is composed of a diverse array of stakeholders, which may include, but is not limited to, private property owners, non-profit organizations, Federal, State, or local agencies, and Tribes. As part of Phase I activities, applicants may use funding to develop bylaws, a mission statement, complete stakeholder outreach, develop a watershed restoration plan, and watershed management project design. In March 2020, BOR awarded \$2.8 million for 29 watershed group development and watershed restoration projects in 12 states with no non-Federal cost-share required. Approximately \$463,000 was awarded to entities in Colorado.
 - **Implementation of Watershed Management Projects:** In 2017, the BOR started providing cost-shared financial assistance to watershed groups to implement watershed management projects (Phase II). These on-the-ground projects, collaboratively developed by members of a watershed group, address critical water supply needs and water quality concerns, helping water users meet competing demands and avoid conflicts over water. BOR will award up to \$100,000 per project

over a two-year period. For Phase II projects, applicants must contribute at least 50% of the total project costs.

- Partner with Natural Resources Conservation Service – enhance riparian condition, whether through restoration efforts, enhancement of diversion structures; Environmental Quality Incentives Program; Regional Conservation Partnership Program.
- Establishment of a Water Fund – Water Funds provide support for conservation and restoration activities that will protect their water supply, water quality, and recreational opportunities, creating a steady revenue stream for a healthy water future. Water Funds are voluntary and locally controlled efforts that can be tailored to address the unique needs and priorities of different communities and partners. For example, the Yampa River Fund (the Fund), which is facilitated by The Nature Conservancy, will invest in conservation and restoration activities that positively impact Yampa River flows. These efforts support natural resource-based livelihoods, including agriculture and recreation, throughout the river basin. The Fund ensures that a healthy, flowing Yampa River remains the thriving center of communities for generations to come.
- Partner with San Juan Forest Health Partnership on projects that enhance the Upper San Juan River watershed (e.g., projects that enhance the water table, riparian condition, and fire mitigation).
- Each year in January, Colorado Water Trust and the Colorado Water Conservation Board launch the annual Request for Water Process. This process offers a streamlined approach to water transactions to benefit the environment on streams throughout the state.

F. Existing Streamgages On the San Juan River in Archuleta County

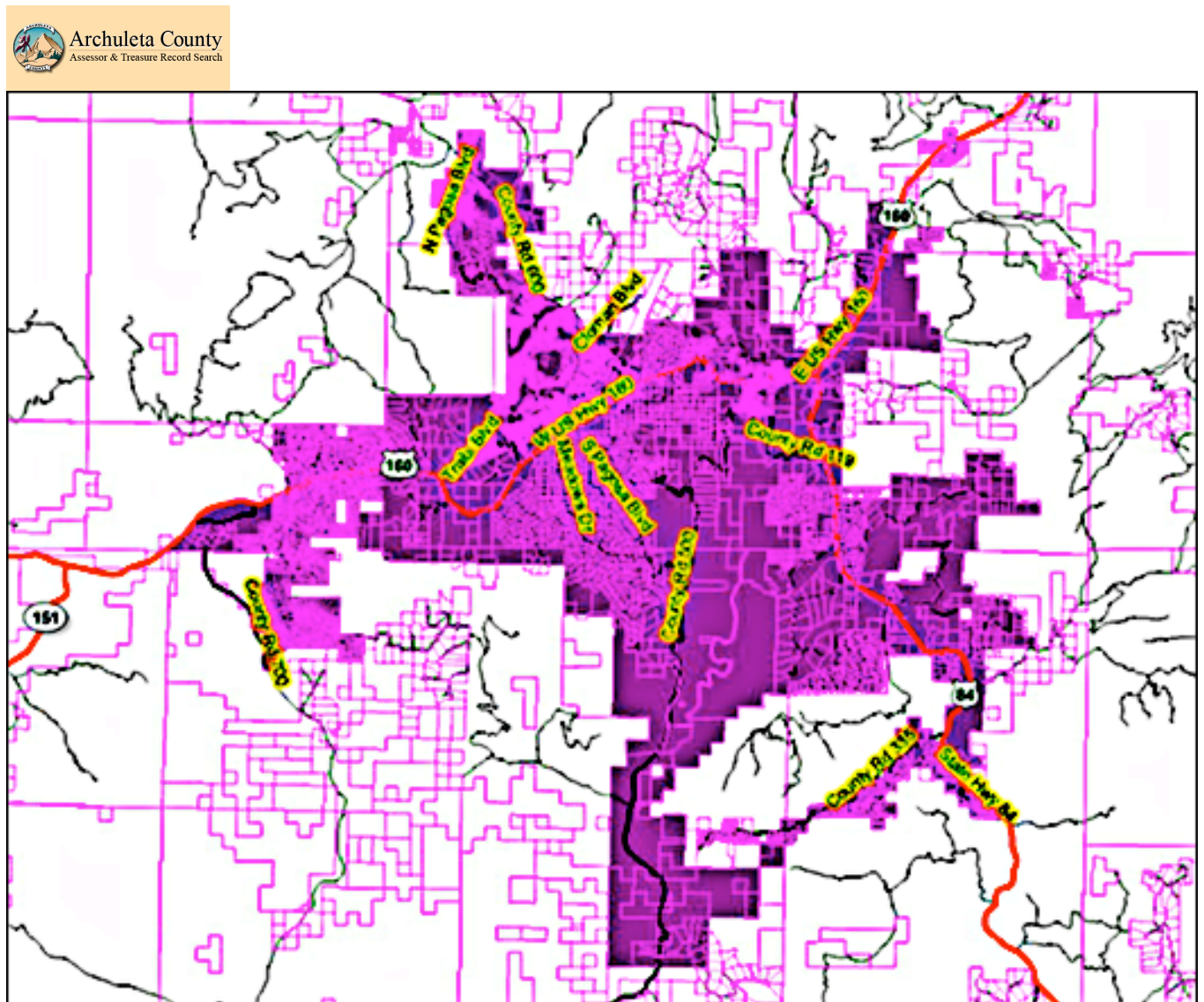
There are currently three gages located in Archuleta County that are automatically updated to provide stream data:

- #09342500- located on the San Juan River in Pagosa Springs, CO
- #09346400- located on the San Juan River near Carracas, CO

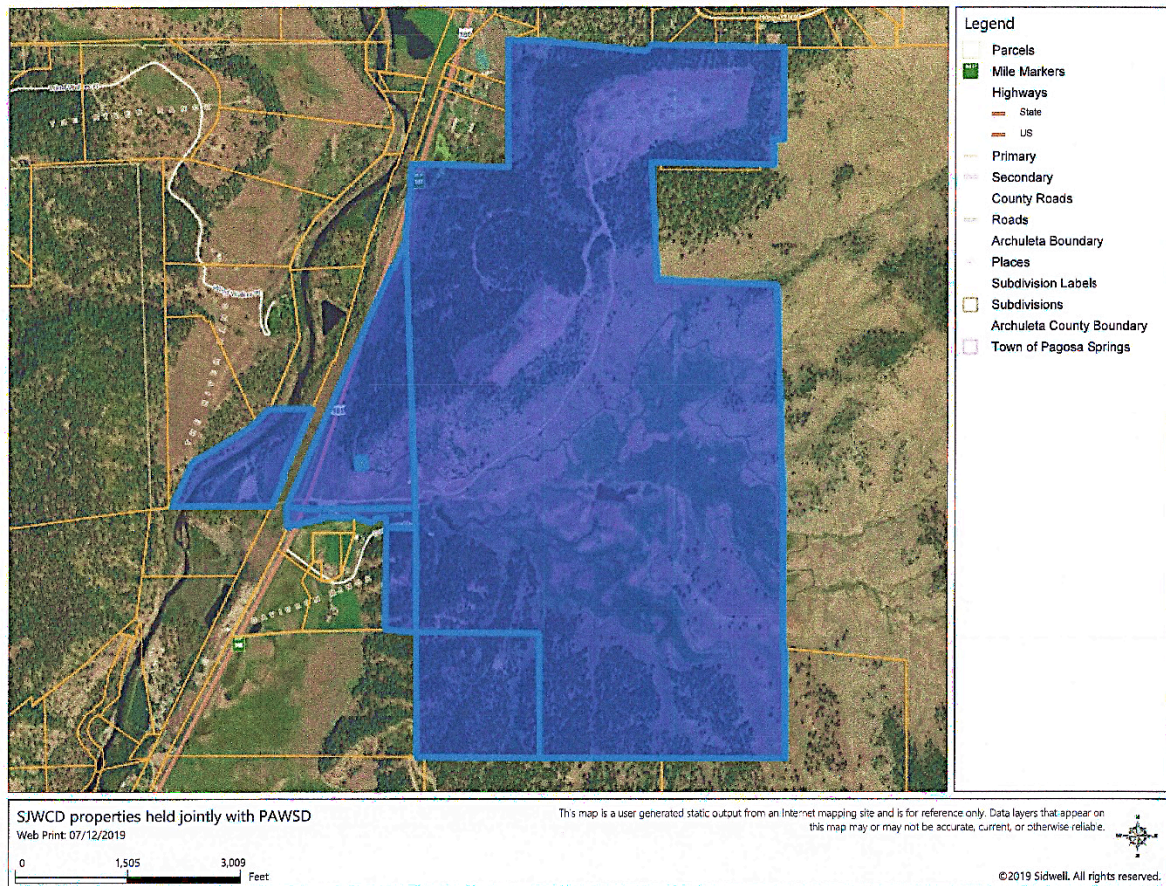
- #09349800- located on the Piedra River near Arboles, CO

The locations of historical gages in Archuleta County, especially in the Upper San Juan Drainage, have been identified on a map provided by Mountain Studies Institute.

G. District Boundaries Map – Courtesy of Archuleta County



H. San Juan River Headwaters Project Property Map – Courtesy of Archuleta County



I. SJWCD Water Rights Tabulation

Name	Source	Appr. Date	Adj. Date	Amount	Uses	Diligence Due
Dutton Ditch Second Enlargement	Stollsteimer Creek, Dutton Creek, and imported from Four Mile Creek	July 6, 1967 (1968-309)	1968 General Adjudication	20 cfs conditional	Irrigation Industrial Municipal Domestic	2026
Remarks <ul style="list-style-type: none"> • Original Decree: Case No. 73-308D (Dec. 19, 1968) • Total decreed amount is 40 cfs, conditional; PAWSD also owns 20 cfs • Diligence Case Nos.: 17CW3030 (entry of decree pending); 09CW17; 01CW29, 94CW39, 88CW50, 84CW60, 80CW104, W-581-76, W-581, and W-193 88CW50, 94CW39, 90CW17 • The decree in Case No. 04CW85 for Dry Gulch Reservoir provides that this right will be abandoned if are not used or perfected at the time the Dry Gulch/San Juan River Headwaters Project facilities are constructed. 						
West Fork Reservoir	West Fork of the San Juan River	August 23, 1967 (1968-324)	1968 General Adjudication	24,000 AF conditional	Industrial Municipal Domestic Recreation Piscatorial Irrigation	June 2021
Remarks <ul style="list-style-type: none"> • Original Decree: Case No. 73-308-D (Dec. 19, 1968) • Diligence Case Nos.: W-195, W583-76, 80CW106, 8466, 8472, 88CW43, 88CW49, 94CW47, 01CW65, and 11CW17 • The decree in Case No. 04CW85 for Dry Gulch Reservoir provides that this right will be abandoned if are not used or perfected at the time the Dry Gulch/San Juan River Headwaters Project facilities are constructed. • The decree Case No. 11CW17 provides that SJWCD must apply for to change the point of diversion and place of storage by June 21 and subordinates the water right to those located upstream and having an adjudication dates prior to December 31, 2013. 						

West Fork Canal	West Fork of the San Juan River	July 21, 1967 (1968-315)	1968 General Adjudication	50.00 cfs conditional	Irrigation Industrial Municipal	June 2021
Remarks <ul style="list-style-type: none"> Original Decree: Case No. 73-308-D (Dec. 19, 1968) Diligence Case Nos.: 88CW47, 94CW40, 01CW40, and 08CW67 The decree in Case No. 04CW85 for Dry Gulch Reservoir provides that this right will be abandoned if are not used or perfected at the time the Dry Gulch/San Juan River Headwaters Project facilities are constructed. The decree Case No. 08CW37 provides that SJWCD must apply for to change the point of diversion by June 21 and subordinates the water right to those located upstream and having adjudication dates prior to December 31, 2013. 						
Dry Gulch Reservoir (1967)	San Juan River	July 22, 1967 (1968-318)	1968 General Adjudication	6,300 AF conditional	Industrial Domestic Municipal Recreation Piscatorial	October 2022
Remarks <ul style="list-style-type: none"> Original Decree: Case No. 73-308-D (Dec. 19, 1968) Diligence Case Nos.: W-200; 80CW111, 84CW64, 88CW52, 94CW52, 01CW41, 08CW68, 16CW3011 The decree in Case No. 04CW85 places certain conditions on the use of this water right. 						
Dry Gulch Reservoir (2004)	San Juan River	December 20, 2004	December 20, 2004	4,700 AF (first fill); 11,000 AF (refill), conditional	Municipal Irrigation Exchange Augmentation	2026

Remarks <ul style="list-style-type: none"> • Original Decree Case No. 04CW85 (April 23, 2010) • Diligence Case No. 17CW3041 (entry of decree pending) • Remarks: <ul style="list-style-type: none"> ○ The decree in Case No. 04CW85 specifies reservoir and dam dimensions and includes several terms and conditions affecting use of this water right, including volumetric and diversion limitations, reality checks, and subordination limitations ○ Filling sources are Dry Gulch Pumping Station and Park Ditch ○ First fill may be made in conjunction with 1967 storage right 						
Dry Gulch Pumping Station	San Juan River	December 20, 2004	December 20, 2004	50 cfs, conditional	Municipal Irrigation Exchange Augmentation and Storage in Dry Gulch Reservoir and other reservoirs owned by SJWCD and PAWSD	2026
Remarks <ul style="list-style-type: none"> • Original Decree Case No. 04CW85 (April 23, 2010) • Diligence Case No. 17CW3041 (entry of decree pending) • Remarks: <ul style="list-style-type: none"> ○ The decree in Case No. 04CW85 includes several terms and conditions affecting use of this water right, including volumetric and diversion limitations, reality checks, and subordination limitations 						
Park Ditch	San Juan River	1886 to 1956 (varies)	1899 to 1968 (varies)	1.1 cfs, absolute	Irrigation	N/A
Remarks <ul style="list-style-type: none"> • SJWCD owns 6 Class "A" Share in the Park Ditch Company 						