



Board of directors regular meeting

2000 E. Horsetooth Road, Fort Collins, CO 80525
Thursday, May 25, 2023, 9 a.m.

Call to order

1. Consent agenda
 - a. Minutes of the regular meeting of April 27, 2023
 - b. Employee total compensation policy
 - c. Revision to wholesale transmission service tariff (Tariff WT-24)

Motion to approve

Resolution 07-23

Resolution 08-23

Public comment

Management presentations

2. Strategic Plan
3. State legislation recap
4. Hydro allocation update
5. Integrated Resource Plan overview
6. Wholesale rate projections

Management reports

7. Water Resources Reference Document (updated version)

Monthly informational reports - April

8. Legal, environmental and compliance report
9. Resource diversification report
10. Operating report
11. Financial report
12. General management report

Strategic discussions

Adjournment



2023 board meeting planning calendar

Updated May 17, 2023

June 16-21, 2023

APPA National Conference (Seattle, Washington)

July 27, 2023

Board action items	Management presentations	Management reports	Monthly informational reports
Acceptance of the Strategic Plan	Enterprise risk management		Q2 performance dashboard
			Legal, environmental and compliance report
			Resource diversification report
			Operating report
Committee report			Financial report
Retirement committee report			General management report

Aug. 31, 2023

Retirement committee meeting

Board action items	Management presentations	Management reports	Monthly informational reports
			Legal, environmental and compliance report
			Resource diversification report
			Operating report
			Financial report
			General management report

Sept. 28, 2023

Board action items	Management presentations	Management reports	Monthly informational reports
	2024 proposed strategic budget work session	Strategic financial plan update	Legal, environmental and compliance report
	2024 rate tariff schedules	Staffing update	Resource diversification report
			Operating report
Committee report			Financial report
Retirement committee report			General management report

Oct. 26, 2023

Board action items	Management presentations	Management reports	Monthly informational reports
2023 FORVIS financial audit plan	2024 proposed strategic budget update – public hearing		Q3 performance dashboard
2024 rate tariff schedules	Strategic financial plan update		Legal, environmental and compliance report
			Resource diversification report
			Operating report
			Financial report
			General management report

November 2023

Retirement committee meeting

No board of directors meeting

Dec. 7, 2023

Board action items	Management presentations	Management reports	Monthly informational reports
2023 budget contingency appropriation transfer (if required)		Benefits update	Legal, environmental and compliance report
2024 Strategic Budget review and adoption			Resource diversification report
2024 proposed board of directors regular meeting schedule			Operating report
Strategic financial plan			Financial report
Committee report			General management report
Retirement committee report			

Topics to be scheduled:

- Chimney Hollow Reservoir tour

This calendar is for planning purposes only and may change at management's discretion.



2023 board of directors

Owner communities

Term expiration

Town of Estes Park

P.O. Box 1200, Estes Park, Colorado 80517

Mayor Wendy Koenig

April 2024

Reuben Bergsten—Chair, Board of Directors

December 2024

City of Fort Collins

P.O. Box 580, Fort Collins, Colorado 80522

Mayor Jeni Arndt

November 2023

Kendall Minor

December 2026

City of Longmont

350 Kimbark Street, Longmont, Colorado 80501

Mayor Joan Peck

November 2023

David Hornbacher

December 2026

City of Loveland

500 East Third Street, Suite 330, Loveland, Colorado 80537

Mayor Jacki Marsh

November 2023

Kevin Gertig—Vice Chair, Board of Directors

December 2025



Our vision

To be a respected leader and responsible power provider improving the region's quality of life through a more efficient and sustainable energy future.

Our mission

While driving utility innovation, Platte River will safely provide reliable, environmentally responsible and financially sustainable energy and services to the owner communities of Estes Park, Fort Collins, Longmont and Loveland.

Our values

Safety

Without compromise, we will safeguard the public, our employees, contractors and assets we manage while fulfilling our mission.

Integrity

We will conduct business equitably, transparently and ethically while complying fully with all regulatory requirements.

Service

As a respected leader and responsible energy partner, we will empower our employees to provide energy and superior services to our owner communities.

Respect

We will embrace diversity and a culture of inclusion among employees, stakeholders and the public.

Operational excellence

We will strive for continuous improvement and superior performance in all we do.

Sustainability

We will help our owner communities thrive while working to protect the environment we all share.

Innovation

We will proactively deliver creative solutions to generate best-in-class products, services and practices.



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Angela Walsh, executive assistant and board secretary

Subject: **Consent agenda – May**

Staff requests approval of the following items on the consent agenda. Approval of the consent agenda will approve all items unless a member of the board removes an item from consent for further discussion.

The board meeting packet includes the supporting items listed below. Staff provided background information and presentations on the employee total compensation policy at the March and April 2023 board meetings. The materials supporting revisions to Platte River's wholesale transmission service tariff include an explanatory memorandum prepared by accounting staff.

Attachments

- Minutes of the regular meeting April 27, 2023
- Employee total compensation policy
 - Employee total compensation policy – clean version
 - Employee total compensation policy – redline version
 - Resolution 07-23
- Revision to wholesale transmission service tariff (Tariff WT-24)
 - Staff memorandum
 - Revision to wholesale transmission service tariff (Tariff WT-24) – clean version
 - Redline showing revisions to prior form of wholesale transmission service tariff (Tariff WT-23)
 - Resolution 08-23



Regular meeting minutes of the board of directors

2000 E. Horsetooth Road, Fort Collins, CO
Thursday, April 27, 2023

Attendance

Board members

Representing Estes Park: Mayor Wendy Koenig and Reuben Bergsten
Representing Fort Collins: Mayor Jeni Arndt¹ and Kendall Minor
Representing Longmont: Mayor Joan Peck and David Hornbacher²
Representing Loveland: Mayor Jacki Marsh and Kevin Gertig

Platte River staff

Jason Frisbie (general manager/CEO)
Sarah Leonard (general counsel)
Dave Smalley (chief financial officer and deputy general manager)
Melie Vincent (chief operating officer)
Raj Singam Setti (chief transition and integration officer)
Eddie Gutiérrez (chief strategy officer)
Angela Walsh (executive assistant/board secretary)
Kaitlyn McCarty (executive assistant – finance and IT)
Josh Pinsky (IT service desk technician II)
Libby Clark (director of human resources and safety)
Shelley Nywall (director of finance)
Jason Harris (controller)
Javier Camacho (director of public and external affairs, strategic communications and social marketing)
Staci Sears (human resource manager)

Guests

Chris Telli (FORVIS, LLP)
Anna Thigpen (FORVIS, LLP)
Kevin Jones (Fort Collins area chamber of commerce)

¹ Joined via Zoom Webinar; left the meeting at the break

² Joined via Zoom Webinar

Call to order

Chair Bergsten called the meeting to order at 9:00 a.m. A quorum of board members was present via roll call. The meeting, having been duly convened, proceeded with the business on the agenda.

Action items

1. Consent Agenda

- a. Approval of the regular meeting minutes of March 30, 2023
- b. Revised general manager annual performance review policy: Resolution 06-23

Director Marsh moved to approve the consent agenda as presented. Director Koenig seconded. The motion carried 8-0.

Public comment

Chair Bergsten opened the public comment section by reading instructions, noting that time to accommodate each speaker would be divided equitably by the number of callers wishing to speak at the start of public comment. No members of the public asked to address the board.

Board action items

2. 2022 FORVIS financial audit report

Dave Smalley, chief financial officer and deputy general manager, introduced Chris Telli and Anna Thigpen with FORVIS, LLP, to present the financial audit report for 2022 starting on page 31 of the board packet.

Chris Telli, FORVIS, LLP partner, introduced the new reporting format for required communications to the board, thanked the board for the opportunity to present the report and stated that Platte River's 2022 financial audit received a clean, unmodified opinion. Anna Thigpen summarized the post audit letter and financial audit results stating there were no matters applicable or reportable, no alternative accounting treatments and no audit adjustments required for 2022. Looking forward there will be a new Governmental Accounting Standards Board (GASB) 96 implementation standard for 2023.

Mr. Telli reiterated there were no proposed audit adjustments, no written deficiencies or no written findings. He provided an overview of GASB 96, which addresses subscription-based information technology arrangements and is expected to require additional work compared to GASB 87.

Mr. Telli thanked Platte River staff and board members for their attention to detail and commitment to providing information during the auditing process.

Chair Bergsten asked about GASB 96 and how that affects our transition and integration team with new software to implement and how it will affect entering the market. Raj Singam Setti, chief transition and integration officer, noted Platte River energy market software and distributed energy resources management system software are subscription-based services consistent throughout the industry, but clarified systems related to compliance with reliability standards of the North American Electric Reliability Corporation (such as Energy Management System by Open Systems International) will be physically based at Platte River. Directors thanked staff for their work on the 2022 financial audit.

Director Hornbacher moved to approve the 2022 FORVIS financial audit report as presented. Director Gertig seconded. The motion carried 8-0.

3. Acceptance of the 2022 annual report

Eddie Gutiérrez, chief strategy officer, provided an overview of the annual report provided in the board packet. The board had no comments or questions.

Director Koenig moved to accept the 2022 Annual Report as presented. Director Peck seconded. The motion carried 8-0.

Management presentations

4. Proposed employee total compensation policy update (presenter: Libby Clark)

Libby Clark, director of human resources and safety, summarized the current policy, the limitations of the current policy for benchmarking data, and the process to update Platte River's compensation philosophy. She presented the proposed changes to the employee total compensation policy reflecting a more flexible and evergreen document to evolve with current and future board direction.

Director Marsh asked if the policy addresses training and educational commitments to invest in current employees. Ms. Clark responded that training is part of Platte River's total rewards strategy. Director Arndt asked if there are any potential downside to future discrimination challenges with a discretionary policy. Ms. Clark responded that staff is working in parallel with an external legal team to complete a pay equity analysis to ensure Platte River's pay practices are nondiscriminatory. Platte River will continue equity analyses on a periodic basis. Jason Frisbie, general manager and chief executive officer, noted the policy includes language requiring Platte River pay and benefits to be fair, equitable and competitive. Chair Bergsten suggested clarifying the policy to require a routine pay equity review process. Mr. Frisbie agreed to add a statement in the policy for implementing a three-year review process for evaluating pay equity and including a report to the board.

Sarah Leonard, general counsel, summarized the two action items being requested by the board to add a periodic equity evaluation process and periodic reporting to the board. Discussion ensued among directors and staff about the changing industry, policy review process and the current energy transition work to meet future needs.

Staff will provide an updated form of the policy reflecting the additions for the board to review and potentially approve at the next board meeting in May.

Director Minor asked how Platte River conducted the current market analysis. Ms. Clark described past practices of using a handful of market salary surveys with a manual process. She noted Platte River purchased software in 2022 allowing access to over 2,000 market surveys. This enables staff to benchmark data with all utilities-based positions or expand into other areas to match positions. Mr. Frisbie commented on the 'art' piece to evaluating Platte River compensation due to the size of the organization and the amount of work each position is asked to do. This is also included in the evaluation process. Director Minor suggested further collaboration among Platte River and the owner communities on compensation analyses.

Chair Bergsten observed that Platte River is ahead of the industry in its decarbonization goals and talked about a Google funded program to attract the same talent in the electric industry and how that creates additional competition.

Mr. Frisbie and Ms. Leonard confirmed the board's staff direction to include the revised policy, including the board-recommended language, in the consent agenda for the May board meeting and noted the board can remove the policy from consent if further review and discussion is needed.

5. Gainsharing program (presenter: Libby Clark)

Ms. Clark presented Platte River's gainsharing program, highlighting how it unites employees around a common mission to meet criteria focused on compliance, financial integrity and operational excellence. She also previewed refreshing the gainsharing program to align with Platte River's evolving strategic priorities.

Director Marsh asked about a bonus system for all employees for reaching carbon reduction milestones. Chair Bergsten commented on other metrics that could be more relevant with the energy transition and integration goals. He asked Mr. Singam Setti how long a virtual power plant will take to implement. Mr. Singam Setti estimated five years from the starting point. Chair Bergsten suggested the board should focus on more strategic direction for meeting milestones than defining how employees will be incentivized.

Mr. Frisbie commented on tying the gaining sharing program, the Resource Diversification Policy (RDP), the mission, vision and values of the organization, and other employee programs together. Staff will explore options to modify the existing gainshare program to reflect the challenges of Platte River's resource transition. Director Hornbacher observed how the gainsharing program is a great way to recognize overall operations at a utility. The question is how to shift the program to encourage employees to be innovative and creative. Director Marsh noted the current program does not reflect the 2030 goals. Director Koenig commented on people joining an organization with interest to help them achieve goals and creating internal motivation from leadership to help meet those goals. Director Peck emphasized the importance of goal setting and commented on Platte River leadership's responsibility in setting compensation, bonus structures and how they reward staff. Director Arndt expressed

concurrence with Director Koenig and her support for leadership's ability to set recognition strategies to reward staff appropriately. Mr. Frisbie noted that staff is working to revise the program to fit the current focus on diversification and carbon reduction, adding that all employees and positions matter at Platte River. Discussion ensued among directors and staff on inspiring internal motivation, the gainsharing program and other compensation strategies to accomplish the 2030 goal.

6. Organized markets update (presenter: Melie Vincent)

Melie Vincent, chief operating officer, provided an overview of market structure history, readiness projects for market operations in the Southwest Power Pool (SPP), the results from the first few days after Platte River entered the Western Energy Imbalance System (WEIS) market on March 30 and what it will look like moving forward into SPP's Regional Transmission Organization - West.

Chair Bergsten commented on the market results and pointed out being in the shoulder season also affects market prices and resource output. Mr. Frisbie referred to the RDP and commented on needing time to experience the market, learn from the market and back test for budgeting appropriately in the future. Director Minor commented on evaluating coal contracts in the future with flexibility to match the dispatchability. Discussion ensued among directors and staff on market results and the various factors that affect resource dispatch and managing the challenges of volatility.

Ms. Vincent recognized Rawhide Energy Station staff for the work they completed to improve the flexibility of Unit 1 to create the greatest value in the market. Director Minor commented that coal units are not built to ramp up and ramp down so quickly, they are meant to run fully for long periods of time. Mr. Frisbie noted Rawhide staff is reevaluating maintenance scheduling and strategies while factoring in how the market dispatches the units.

Ms. Vincent shared a handout showing hour-by-hour location marginal prices (LMPs) and the average LMP trends for the first 17 days in the market. Chair Bergsten commented on seeing the contrast for time of use rates versus actual costs and Platte River managing the costs for the owner communities. Director Marsh asked if correlating carbon statistics would be provided for the energy produced and consumed. Mr. Singam Setti noted the same request has been made in the eastern markets. The PJM Regional Transmission Organization created a Locational Marginal Emissions report showing what emissions are being produced by location. Chair Bergsten encouraged looking at everything holistically and how renewables are maximized on the grid. Ms. Leonard commented on renewables being available in the market and how load can be served by resources not in our portfolio without transferring associated renewable energy credits. Chair Bergsten observed state requirements may not reflect how resources are used in a market.

5-minute break (10:48-10:53)

7. Ensuring reliability with the integration of renewable energy (presenter: Raj Singam Setti)

Mr. Singam Setti recapped Platte River's RDP goals and provided an overview of the current challenges all utilities face to maintain reliability and decarbonize in a financially sustainable manner.

Director Koenig asked whether storage technology may not be adequate to solve the reliability concern by 2030. Mr. Singam Setti responded that the need for dispatchable capacity is key to reliability until energy storage technology advances, complemented by what the communities will do together to contribute to a virtual power plant (VPP).

Director Minor commented on a misconception that utilities can use advanced metering infrastructure to communicate with a VPP. Chair Bergsten noted Platte River and the four owner communities will be treated as a single load in the market. Mr. Singam Setti stressed the importance of system visibility, being able to predict how much demand will be on the system and how load and demand-side resource response is submitted into the market will be essential to realize VPP benefits.

Chair Bergsten commented on how time-of-use rates and the future time of peak will affect the system. Mr. Singam Setti discussed using pricing signals and carbon-to-device signals to encourage changes in customer use patterns to shift peak usage to when noncarbon generation is available.

Mr. Frisbie commented that fuel reliability, the differences between coal and future dispatchable fuels and availability of hydropower energy will be big challenges in our future. Mr. Singam Setti noted the importance of new technologies to help handle limited flexibility. Director Minor observed that the market does not necessarily reflect the risks and costs of adding new resources. Discussion ensued among directors and staff on dispatchable generation, financial incentives to help with new generation and costs passed on to the rate payers.

Director Gertig thanked staff for presenting solid information with data and illustrating this complex issue for everyone to understand. Director Hornbacher commended staffs' efforts to anticipate the future so that decisions today are effective in the future. Director Peck asked how many batteries Platte River would need to serve load when no renewable resources are available. Mr. Singam Setti clarified that the hypothetical example he provided is not feasible, but staff continues forecasting and modeling for 200 megawatts of energy storage to work in conjunction of other dispatchable resources; using 2,400 megawatts of four-hour batteries is not the direction Platte River intends to take. Mr. Frisbie noted staff and utility directors will visit emerging technology developers in California in May to see what technologies could be feasible for Platte River to consider. Discussions ensued among directors and staff regarding resource technology, planning responsibly, use of distributed energy resources management systems and VPPs.

8. Engagement strategies preview (presenter: Eddie Gutiérrez)

Mr. Gutiérrez presented engagement strategies with the four owner communities and previewed the regional approach and philosophy for sharing Platte River's story to provide context for Platte River's resource transition and integration in the future.

Director Marsh suggested staff meeting with the League of Women Voters. Mr. Gutiérrez requested leaning on municipal staff to suggest the best groups to reach out to and present to. Director Koenig noted the communities are excited for the communications plan. Chair Bergsten asked how long the message testing will take before communications are activated in the owner communities. Mr. Gutiérrez responded that there is enough messaging to start telling Platte River's story leading up to the energy transition, but the board can expect to see the next edition of communications by the first of the year.

Management reports

9. Wholesale rate projections (presenter: Dave Smalley)

Mr. Smalley summarized the memorandum in the board packet proposing revised scheduling to provide information to owner community staff for budgeting purposes sooner in the year. The memorandum confirms an estimated five percent rate increase for 2024 and describes significant changes in resource planning forecasting and modeling. Staff will present the long-term wholesale rate projections at the May board meeting. Director Minor asked if the five percent will be consistent through 2029. Mr. Smalley responded that at this point staff estimates a five percent increase every year to 2029, but projections will be updated as new information is available. Director Gertig discussed the fundamental gap between where Platte River and the owner communities are heading and budgeting for that outcome. He asked staff to be proactive in communicating the changes in rates and collaboration on financial decisions. Discussion ensued among directors and staff discussing financial requirements, asset management and resource planning.

10. Draft overview of the strategic plan (presenter: Eddie Gutiérrez)

Mr. Gutiérrez explained the strategic plan draft document is content only. The full document will be presented at the May board meeting, with approval requested in July.

Monthly informational reports for March

11. Q1 performance dashboard (presenter: Jason Frisbie)

Mr. Frisbie summarized quarterly results for reliability, environmental responsibility and financial sustainability. There were no questions from the board.

12. Legal, environmental and compliance report (presenter: Sarah Leonard)

Ms. Leonard highlighted the rulemaking to address the Colorado Air Pollution Control Division's proposed revisions to Regulation Number 3 for sources in disproportionately impacted communities. There were no questions from the board.

13. Resource diversification report (presenter: Raj Singam Setti)

Mr. Singam Setti highlighted the continued negotiations related to Platte River's 2021 solar request for proposals and the status of activities among the distributed energy resources working groups. They are working on distributed energy resource management system functional requirements and distributed storage projects.

14. Operating report (presenter: Melie Vincent)

Ms. Vincent discussed the variance report for March. Net variable cost to serve owner community load was above budget because Platte River could not offer surplus energy into the market. Year to date, wind and solar generation is close to budget but above budget for March. Ms. Vincent noted that with the Craig Station outage and Rawhide's planned minor outage in May, the focus will be on purchasing low-cost energy. Director Minor asked about the issues at the Craig Generation Station and unit outages. Ms. Vincent explained the challenges at Craig, the planned minor outage at Rawhide and expected start-up dates. Mr. Frisbie provided further details.

Chair Bergsten asked if the shaft share agreement with the Craig Station will continue. Ms. Vincent said staff is evaluating whether the shaft share agreement still makes sense now that Platte River is part of the WEIS market.

15. Financial report (presenter: Dave Smalley)

Mr. Smalley discussed the financial results for March and year to date variances. Revenues and surplus sales are below budget, municipal sales are at budget, expenses are below budget and net income results reflect unrealized gains on investments. There were no questions from the board.

16. General management report (presenter: Jason Frisbie)

Mr. Frisbie mentioned the upcoming community events including the NoCo Time Trials and invited the board members to attend. There were no questions from the board.

Roundtable and strategic discussion topics

Directors provided updates from their individual communities.

Adjournment

With no further business, the meeting adjourned at 12:23 p.m. The next regular board meeting is scheduled for Thursday, May 25, 2023, at 9:00 a.m. either virtually or at Platte River Power Authority, 2000 E. Horsetooth Road, Fort Collins, Colorado.

AS WITNESS, I have executed my name as Secretary and have affixed the corporate seal of the Platte River Power Authority this _____ day of _____, 2023.

Secretary

 Platte River Power Authority	<h1 style="text-align: center;">Policy</h1>	Version #: 2.1 Original effective date: 3/28/2013 Next review date: 10/29/2025
	TITLE: Employee Total Compensation Policy	Page 1 of 3

Purpose:

The purpose of this policy is to provide high-level guidance to Platte River Power Authority as it establishes and implements employee total compensation practices and procedures. This policy applies to the full range of total compensation program elements to include establishing competitive pay structures, determining annual adjustments, recognizing employee growth and development, and recognizing employee performance, as well as the development and implementation of competitive health care, benefit and leave programs. The board of directors is committed to providing pay and benefits sufficient to attract and retain qualified employees with the right skills, knowledge and abilities to carry out Platte River's mission.

Policy:

Platte River provides a total compensation package and pay plan competitive with the external market in which it competes to support its established business goals. The board recognizes that Platte River's ability to successfully carry out its stated mission depends on its people, and therefore supports a policy to ensure fair, equitable, and competitive pay and benefits for Platte River employees. Platte River is committed to ensuring pay and benefit programs, procedures and practices are applied in a non-discriminatory manner.

Platte River regularly reviews the market to determine appropriate comparisons consistent with the job duties, level of work and geographical recruiting market. The market may vary for each position taking into consideration factors such as the location and industry from which employees are recruited or lost.

The methodology for evaluating competitive pay alignment should include comprehensive routine market pricing and periodic benchmarking as the primary factor, where data is available, balanced with internal relationship factors. Pay ranges should reflect evolving workforce needs and expectations, as well as the complexity and unique nature of positions at Platte River as applicable.

Employees may be hired into a salary range taking into consideration their education and experience. Progression through a salary range may occur as employees become more proficient in their jobs and demonstrate the required knowledge, skills and abilities.

Incentive or other performance-based pay programs should be tied to business goals and objectives and other considerations relevant to Platte River's ability to carry out its mission.

Platte River should review its benefits periodically to ensure they remain competitive and support Platte River's ability to carry out its mission.

The board delegates the review of individual market data, development of a job classification system, salary ranges for each job, pay progression practices, incentive or performance based

Proposed for board approval – May 25, 2023

 Platte River Power Authority	<h1 style="text-align: center;">Policy</h1>	Version #: 2.1 Original effective date: 3/28/2013 Next review date: 10/29/2025
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programs, overall benefit package design, and development of internal procedures for carrying out this policy to the general manager. The general manager is also responsible for

- (1) ensuring salary surveys are conducted at appropriate intervals,
- (2) ensuring Platte River engages one or more qualified, independent experts to conduct periodic pay equity benchmarking and assessments,
- (3) approving all changes to Platte River's pay ranges or compensation philosophy, and
- (4) updating the board regularly (at least every three years) on policy compliance.

Estimated compensation expenditures and staffing levels are approved by the board as part of its annual budget review and approval process.

Implementing parties and assigned responsibilities:

The general manager is assigned responsibility for carrying out this policy.

Associated items (if applicable):


Definitions (if applicable):

Proposed for board approval – May 25, 2023

 Platte River Power Authority	Policy	Version #: 2.1 Original effective date: 3/28/2013 Next review date: 10/29/2025
	TITLE: Employee Total Compensation Policy	Page 3 of 3

Document owner: Director of human resources and safety	Original effective date: 03/28/2013
Authority: Board of directors	Review frequency: Every 5 years
Counsel review: General counsel	Current effective date: 10/29/2020

Version	Date	Action	Author	Change Tracking (new, review, revision)
1.0	03/28/2013	Approved by the board of directors / Resolution No. 07-13	Karin Hollohan	New
2.0	10/29/2015	Revised by the board of directors / Resolution No. 12-15	Karin Hollohan	Revision
3.0	10/08/2020	Placed on new template, reviewed with minor edit to comply with the new Equal Pay for Equal Work Act effective January 2021	Libby Clark	Review with minor revision

 Platte River Power Authority	<h1 style="text-align: center;">Policy</h1>	Version #: 2.1 Original effective date: 3/28/2013 Next review date: 09/01/2021
	TITLE: Employee Total Compensation Policy	Page 1 of 3

Purpose:

The purpose of this policy is to ~~establish guidelines and parameters within which provide high-level guidance to~~ Platte River Power Authority ~~can implement as it establishes and implements~~ employee total compensation practices and procedures. This policy applies to the full range of total compensation program elements to include establishing competitive pay structures, determining annual adjustments, recognizing employee growth and development, and recognizing employee performance, as well as the development and implementation of competitive health care, benefit and leave programs. The board of directors is committed to providing pay and benefits sufficient to attract and retain qualified employees with the right skills, knowledge and abilities to carry out Platte River's mission ~~while maintaining a mid-market total compensation cost target.~~


Policy:

Platte River provides a total compensation package and pay plan competitive with the external market in which it competes ~~and which supports the to support its~~ established business goals. The board recognizes that Platte River's ability to successfully carry out its stated mission ~~is dependent upon depends on~~ its people, and therefore ~~has established supports~~ a policy ~~to that~~ ensures fair, equitable, and competitive pay and benefits for Platte River employees. Platte River is committed to ensuring pay and benefit programs, procedures and practices are applied in a non-discriminatory manner.

Platte River regularly reviews the market to determine appropriate comparisons consistent with the job duties, level of work and geographical recruiting market. The market may vary for each position taking into consideration factors such as the location and industry from which employees are recruited or lost. ~~Typical markets will include:~~

- ~~Local and Colorado data for non-exempt office or field-based positions.~~
- ~~Local and regional utility data for non-exempt journey level craft and plant positions.~~
- ~~Local, regional, and national data for professional and management positions, including both general industry and utility data where appropriate.~~

The methodology for evaluating competitive pay alignment should include comprehensive ~~annual routine~~ market pricing and periodic benchmarking as the primary factor, where data is available, balanced with internal relationship factors. Pay ranges ~~are anchored to the actual average pay within the designated market using weighted average or 50th percentile data should reflect evolving workforce needs~~ and ~~may include progression above market for some jobs expectations, as a result of well as~~ the complexity and unique nature of positions at Platte River ~~as applicable.~~

 Platte River Power Authority	<h1 style="text-align: center;">Policy</h1>	Version #: 2.1 Original effective date: 3/28/2013 Next review date: 09/01/2021
		TITLE: Employee Total Compensation Policy Page 2 of 3

Employees may be hired into a salary range taking into consideration their education and experience. Progression through a salary range may occur as employees become more proficient in their jobs and demonstrate the required knowledge, skills and abilities.

Incentive or other performance-based pay programs ~~must~~ should be tied to business goals and objectives and ~~be reasonably consistent with the utility industry~~ other considerations relevant to Platte River's ability to carry out its mission.

~~Benefits will be reviewed on an annual basis within the utility industry, regional employers, and Platte River's municipal owners~~ Platte River should review its benefits periodically to ensure they remain competitive and are neither the highest nor the lowest within the markets surveyed support Platte River's ability to carry out its mission.

The board delegates the review of individual market data, development of a job classification system, salary ranges for each job, pay progression practices, incentive or performance based programs, overall benefit package design, and development of internal procedures for carrying out this policy to the general manager. The general manager is also responsible for

- (1) assures that ensuring salary surveys are conducted ~~each year at appropriate intervals,~~
- (2) ensuring Platte River engages one or more qualified, independent experts to conduct periodic pay equity benchmarking and assessments,
- (3) and approves all ~~individual changes to Platte River's~~ pay adjustments ranges or compensation philosophy, and
- (1)(4) updating the board regularly (at least every three years) on policy compliance.

Estimated compensation expenditures and staffing levels are approved by the board as part of its annual budget review and approval process.

[Explanatory note: Yellow highlighting indicates language added to reflect board member feedback at the April 2023 board meeting. All other redlines were in the version included in the April 2023 board meeting packet.]

Implementing parties and assigned responsibilities:

The general manager is assigned responsibility for carrying out this policy.

Associated items (if applicable):

Definitions (if applicable):

May 25, 2023 markup – comparison to current form

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	TITLE: Employee Total Compensation Policy		Page 3 of 3

Document owner:	Original effective date:
Authority:	Review frequency:
Counsel review:	Current effective date:

Version	Date	Action	Author	Change Tracking (new, review, revision)

RESOLUTION NO. 07-23

Background

- A. The board of directors (board) of Platte River Power Authority (Platte River) has established an employee total compensation policy (policy).
- B. The board wishes to update the policy to provide more flexibility to address evolving employee needs and expectations.
- C. Staff presented a redlined draft form of the policy, showing suggested updates, to the board at its April 2023 meeting.
- D. Board members provided feedback for further refinements to the policy.
- E. The attached clean form of the policy incorporates the updates staff presented in April, as well as further changes to reflect board feedback (shown for ease of reference in an accompanying markup with new edits responding to board feedback highlighted).
- F. Staff recommends the board adopt the updated form of the policy.

Resolution

The board of directors of Platte River Power Authority therefore resolves that the employee total compensation policy, in the clean form attached to this resolution, is approved.

AS WITNESS, I have executed my name as Secretary and have affixed the corporate seal of the Platte River Power Authority this _____ day of _____, 2023.

Secretary



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
 Dave Smalley, chief financial officer and deputy general manager
 Shelley Nywall, director of finance
 Wade Hancock, financial planning and rates manager

Subject: **Wholesale Transmission Service tariff (Tariff WT-24)**

The board of directors is required by the amended contracts for the supply of electric power and energy between Platte River and the owner communities to review the rates for electric power and energy furnished by Platte River no less frequently than once each year. It has been routine practice to review and modify the Wholesale Transmission Service tariff, under which Platte River offers transmission service to third parties, on an annual basis in the second quarter after the audited year-end financial results are available. This ensures the rate reflects the most recent costs of operation and maintenance and actual transmission usage.

Accompanying this memo in the May board materials are the following documents:

- Wholesale Transmission Service tariff (Tariff WT-24)
- Redline version of the Wholesale Transmission Service tariff (Tariff WT-24)
- Resolution to adopt the Wholesale Transmission Service tariff (Tariff WT-24) as proposed

Platte River collects transmission revenues through two separate tariffs. The owner communities are charged for transmission service via the Firm Power Service tariff. The Wholesale Transmission Service tariff includes multiple rates for transmission services charged to other utilities (such as Xcel Energy and Tri-State Generation and Transmission, Inc.) that use Platte River's transmission system. The Wholesale Transmission Service tariff is also charged to Platte River for merchant sales. Although Platte River is not subject to Federal Energy Regulatory Commission (FERC) jurisdiction, Platte River's tariff is based on the FERC pro-forma open access transmission tariff. The following proposed wholesale transmission service components and rates were calculated using the 2022 year-end financial and operational information.

Real power loss factor

Based on the 2022 loss analysis, the real power loss factor is decreasing to 0.99% from 1.00% relative to 2021.

Reactive supply and voltage control from generation sources service (RSVC)

The RSVC charge is decreasing 2.7% to \$88.07 from \$90.56 per megawatt of reserved capacity per month.

The RSVC revenue requirement (numerator) is increasing 2.3% primarily due to an increase in operations and maintenance expense partially offset by a decrease in margin and an increase in other revenue credits.

The transmission usage (denominator) increased 5.2% primarily due to increased owner community loads.

Point-to-point transmission service

Long-term and short-term firm point-to-point transmission service and non-firm point-to-point transmission service are decreasing 4.1% to \$6,539.76 from \$6,816.88 per megawatt of reserved capacity per month. The net increase is the result of a 0.9% increase in the adjusted transmission revenue requirement (numerator), as noted below and an 5.2% increase in transmission usage (denominator), as noted above.

Transmission revenue requirement

The revenue requirement is increasing 0.9% to \$45,044,265 from \$44,641,143 primarily due to increased personnel expenses for administrative and general services, less credit for wheeling on other providers' transmission lines for Platte River load, and a decrease in the nonfirm transmission revenue credit for Platte River's merchant sales relative to the previous year. The increases were offset by reduced margin and a credit for increased point-to-point transmission sales.

Recommendation

Platte River staff recommends the board adopt the Wholesale Transmission Service tariff (Tariff WT-24), under which Platte River offers transmission service to third parties, as proposed, with an effective date of June 1, 2023. Platte River continues to reserve the right to offer discounted transmission rates for specific transmission paths.

Attachments

- Resolution 08-23
- Redline: Wholesale Transmission Service Tariff (Tariff WT-24)
- Final: Wholesale Transmission Service Tariff (Tariff WT-24)

Wholesale Transmission Service Tariff (Tariff WT-24)

Platte River Power Authority (Platte River) offers transmission service through this Wholesale Transmission Service Tariff (Tariff WT-24). Tariff WT-24 does not apply to any entity taking service under Platte River's Firm Power Service Tariff; Standard Offer Energy Purchase Tariff; or Large Customer Service Tariff. Tariff WT-24 may or may not be equivalent to Platte River's open access transmission service tariff (OATT), posted on Platte River's Open Access Same-Time Information System (OASIS) web site.

A summary of the charges follows.

(1) Scheduling, System Control, and Dispatch Service

Platte River is not a Balancing Authority Area and does not offer this service. To the extent a Balancing Authority performs this service for the Transmission Provider, charges to the Transmission Customer reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

(2) Reactive Supply and Voltage Control from Generation Sources Service

The charges equal the following:

Yearly	\$1,056.85 per megawatt of Reserved Capacity per year
Monthly	\$88.07 per megawatt of Reserved Capacity per month
Weekly	\$20.32 per megawatt of Reserved Capacity per week
Daily	\$4.06 per megawatt of Reserved Capacity per day
Hourly	\$0.25 per megawatt of Reserved Capacity per hour

(3) Regulation and Frequency Response Service

Platte River is not a Balancing Authority Area and does not offer this service. To the extent a Balancing Authority performs this service for the Transmission Provider, charges to the Transmission Customer reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

(4) Energy Imbalance Service

Platte River is not a Balancing Authority or market operator and does not offer this service. To the extent the Balancing Authority or Western Energy Imbalance Service (WEIS) Market Operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by the Balancing Authority or WEIS Market Operator.

(5) Operating Reserve—Spinning Reserve Service

Platte River is not a Balancing Authority Area and does not offer this service. To the extent a Balancing Authority performs this service for the Transmission Provider, charges to the Transmission Customer reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

(6) Operating Reserve—Supplemental Reserve Service

Platte River is not a Balancing Authority Area and does not offer this service. To the extent a Balancing Authority performs this service for the Transmission Provider, charges to the Transmission Customer reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

(7) Long-Term and Short-Term Firm Point-to-Point Transmission Service

The charges can be up to the following limits:

Yearly delivery	\$78,447.13 per megawatt of Reserved Capacity per year
Monthly delivery	\$6,539.76 per megawatt of Reserved Capacity per month
Weekly delivery	\$1,509.18 per megawatt of Reserved Capacity per week
Daily delivery	\$301.84 per megawatt of Reserved Capacity per day
Hourly delivery	\$18.87 per megawatt of Reserved Capacity per hour

Daily rate of \$301.84 not to exceed the product of the number of megawatts reserved for the week times the maximum weekly demand charge of \$1,509.18.

Hourly rate of \$18.87 not to exceed the product of the number of megawatts reserved for the day times the maximum daily demand charge of \$301.84 not to exceed the product of the number of megawatts reserved for the week times the maximum weekly demand charge of \$1,509.18.

(8) Nonfirm Point-to-Point Transmission Service

The charges can be up to the following limits:

Monthly delivery	\$6,539.76 per megawatt of Reserved Capacity per month
Weekly delivery	\$1,509.18 per megawatt of Reserved Capacity per week
Daily delivery	\$301.84 per megawatt of Reserved Capacity per day
Hourly delivery	\$18.87 per megawatt of Reserved Capacity per hour

Daily rate of \$301.84 not to exceed the product of the number of megawatts reserved for the week times the maximum weekly demand charge of \$1,509.18.

Hourly rate of \$18.87 not to exceed the product of the number of megawatts reserved for the day times the maximum daily demand charge of \$301.84 not to exceed the product of the number of megawatts reserved for the week times the maximum weekly demand charge of \$1,509.18.

Real power losses

Real Power Losses are associated with all Transmission Service and Network Integration Transmission Service. The Transmission Provider is not obligated to provide Real Power Losses. The Transmission Customer and Network Customer must replace losses associated with all Transmission Service and Network Integration Transmission Service as calculated by the Transmission Provider or the Balancing Authority. Transmission Customer and Network Customer will pay based on the Real Power Loss factor of 0.99% for Transmission Service and Network Integration Transmission Service on the Transmission Provider's transmission capacity in the Public Service Company of Colorado (PSCo) Balancing Authority. Transmission Customer and Network Customer will pay a pass-through charge of Western Area Power Administration (WAPA) assessed losses for Transmission Service and Network Integration Transmission Service on the Transmission Provider's transmission capacity in the WAPA Balancing Authority Area. Transmission Customer and Network Customer will pay both the Real Power Loss factor and the WAPA pass-through charges for Transmission Service and Network

Integration Transmission Service using transmission capacity in both PSCo and WAPA Balancing Authority Areas.

Transmission Revenue Requirement

The charge for Network Integration Transmission Service is calculated pursuant to the Federal Energy Regulatory Commission (FERC) Pro Forma Open Access Transmission Tariff Attachment H based on Platte River's annual transmission revenue requirement of \$45,044,265. This transmission revenue requirement is calculated in accordance with the FERC pro-forma Network Service Rate calculation requirement.

WEIS Joint Dispatch Transmission Service

Platte River, as a WEIS Joint Dispatch Transmission Service Provider, will provide WEIS Joint Dispatch Transmission Service on Platte River's transmission facilities to a WEIS Joint Dispatch Transmission Service Customer commensurate with, and to accommodate, the energy dispatched within the WEIS Market, as set forth in the WEIS Tariff. The rate Platte River for WEIS Joint Dispatch Transmission Service is set forth below:

Hourly delivery:

On-Peak Hours: the on-peak rate \$0.00/MWh

Off-Peak Hours: the off-peak rate \$0.00/MWh

Wholesale Transmission Service Tariff (Tariff WT-~~23-124~~)

Platte River Power Authority (Platte River) offers transmission service through this Wholesale Transmission Service Tariff ([Tariff WT-~~23-24~~](#)). Tariff WT-~~23-24~~ does not apply to any entity taking service under Platte River's Firm Power Service Tariff; Standard Offer Energy Purchase Tariff; or Large Customer Service Tariff. Tariff WT-~~23-24~~ may or may not be equivalent to Platte River's open access transmission service tariff (OATT), posted on Platte River's Open Access Same-Time Information System (OASIS) web site.

A summary of the charges follows.

(1) Scheduling, System Control, and Dispatch Service

Platte River is not a Balancing Authority Area and does not offer this service. To the extent a Balancing Authority performs this service for the Transmission Provider, charges to the Transmission Customer reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

(2) Reactive Supply and Voltage Control from Generation Sources Service

The charges equal the following:

<u>Yearly</u>	<u>\$1,056.85 per megawatt of Reserved Capacity per year</u>
<u>Monthly</u>	<u>\$88.07 per megawatt of Reserved Capacity per month</u>
<u>Weekly</u>	<u>\$20.32 per megawatt of Reserved Capacity per week</u>
<u>Daily</u>	<u>\$4.06 per megawatt of Reserved Capacity per day</u>
<u>Hourly</u>	<u>\$0.25 per megawatt of Reserved Capacity per hour</u>

<u>Yearly</u>	<u>\$1,086.72 per megawatt of Reserved Capacity per year</u>
<u>Monthly</u>	<u>\$90.56 per megawatt of Reserved Capacity per month</u>
<u>Weekly</u>	<u>\$20.90 per megawatt of Reserved Capacity per week</u>
<u>Daily</u>	<u>\$4.18 per megawatt of Reserved Capacity per day</u>
<u>Hourly</u>	<u>\$0.26 per megawatt of Reserved Capacity per hour</u>

(3) Regulation and Frequency Response Service

Platte River is not a Balancing Authority Area and does not offer this service. To the extent a Balancing Authority performs this service for the Transmission Provider, charges to the Transmission Customer reflect only a pass-through of the costs charged to the Transmission Provider by that Balancing Authority.

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Platte River is not a Balancing Authority or market operator, and does not offer this service. To the extent the Balancing Authority or Western Energy Imbalance Service (WEIS) Market Operator performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by the Balancing Authority or WEIS Market Operator.

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<u>Yearly delivery</u>	<u>\$78,447.13 per megawatt of Reserved Capacity per year</u>
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<u>Weekly delivery</u>	<u>\$1,509.18 per megawatt of Reserved Capacity per week</u>
<u>Daily delivery</u>	<u>\$301.84 per megawatt of Reserved Capacity per day</u>
<u>Hourly delivery</u>	<u>\$18.87 per megawatt of Reserved Capacity per hour</u>

Yearly delivery — \$81,802.60 per megawatt of Reserved Capacity per year
Monthly delivery — \$6,816.88 per megawatt of Reserved Capacity per month
Weekly delivery — \$1,573.13 per megawatt of Reserved Capacity per week
Daily delivery — \$314.63 per megawatt of Reserved Capacity per day
Hourly delivery — \$19.66 per megawatt of Reserved Capacity per hour
Daily rate of \$301.84 not to exceed the product of the number of megawatts reserved for the week times the maximum weekly demand charge of \$1,509.18.

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(8) Nonfirm Point-to-Point Transmission Service

The charges can be up to the following limits:

<u>Monthly delivery</u>	<u>\$6,539.76 per megawatt of Reserved Capacity per month</u>
<u>Weekly delivery</u>	<u>\$1,509.18 per megawatt of Reserved Capacity per week</u>
<u>Daily delivery</u>	<u>\$301.84 per megawatt of Reserved Capacity per day</u>
<u>Hourly delivery</u>	<u>\$18.87 per megawatt of Reserved Capacity per hour</u>

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Transmission Revenue Requirement

The charge for Network Integration Transmission Service is calculated pursuant to the Federal Energy Regulatory Commission (FERC) Pro Forma Open Access Transmission Tariff Attachment H based on Platte River's annual transmission revenue requirement of ~~\$44,641,143~~\$45,044,265. This transmission revenue requirement is calculated in accordance with the FERC pro-forma Network Service Rate calculation requirement.

WEIS Joint Dispatch Transmission Service

Platte River, as a WEIS Joint Dispatch Transmission Service Provider, will provide WEIS Joint Dispatch Transmission Service on Platte River's transmission facilities to a WEIS Joint Dispatch Transmission Service Customer commensurate with, and to accommodate, the energy dispatched within the WEIS Market, as set forth in the WEIS Tariff. The rate Platte River for WEIS Joint Dispatch Transmission Service is set forth below:

Hourly delivery:

On-Peak Hours: the on-peak rate \$0.00/MWh

Off-Peak Hours: the off-peak rate \$0.00/MWh

RESOLUTION NO. 08-23

Background

A. Platte River Power Authority's "Wholesale Transmission Service Tariff" (Tariff WT-24) sets forth the terms and conditions for unbundled transmission service to entities other than Platte River's owner communities.

B. Platte River's board typically reviews Platte River's wholesale transmission service tariff offering annually in May, reflecting audited financial results for the prior year.

C. In calculating its wholesale transmission service revenue requirement, Platte River uses: (1) its previous year actual operations and maintenance costs, and other applicable income and expenses, such as administrative and general costs, to account for Platte River's costs for its transmission system; (2) debt service (principal and interest) for capital costs associated with building, maintaining, and operating its transmission system; and (3) a debt service coverage margin to allow it to prudently invest in capital to meet the transmission needs of its owner communities and third-party wholesale transmission service customers.

D. Platte River's staff recommends in a memorandum dated May 17, 2023, that the board adopt Tariff WT-24, which supersedes Platte River's existing wholesale transmission service tariff (Tariff WT-23), to reflect audited and updated year-end financial results.

Resolution

The Board of Directors of the Platte River Power Authority adopts Tariff WT-24, in the form recommended by staff, to become effective June 1, 2023.

AS WITNESS, I have executed my name as Secretary and have affixed the corporate seal of the Platte River Power Authority this _____ day of _____, 2023.

Secretary



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Eddie Gutiérrez, chief strategy officer

Subject: **Strategic Plan**

This presentation is the final overview of Platte River's updated strategic plan in the design phase, providing the visual layout of the final document with the strategic areas presented at the April board meeting.

This presentation is informational only, and no action is required.

We anticipate requesting final approval of Platte River's strategic plan in July.



Platte River
Power Authority

Estes Park • Fort Collins • Longmont • Loveland

2023 STRATEGIC PLAN

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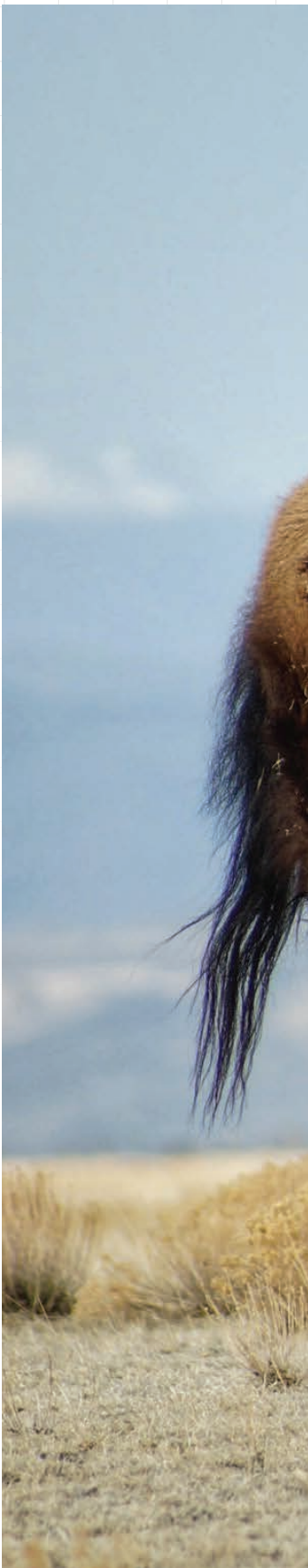
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PLATTE RIVER AT A GLANCE

Platte River Power Authority is a not-for-profit, community-owned public power utility that generates and delivers safe, reliable, environmentally responsible and financially sustainable energy and services to Estes Park, Fort Collins, Longmont and Loveland, Colorado, for delivery to their utility customers.

Headquarters

Fort Collins, Colorado

2022 peak demand of owner communities

684 MW

General manager/CEO

Jason Frisbie

2022 deliveries of energy

5,036,762 MWh

Began operations

1973

2022 deliveries of energy to owner communities

3,249,401 MWh

Staff

268

Transmission system

Platte River has equipment in 27 substations, 263 miles of wholly owned and operated high-voltage lines, and 522 miles of high-voltage lines jointly owned with other utilities.

CAPACITY AND ENERGY

Resource capacity

MW

Coal	431	
Natural gas	388	
Hydropower	80	
Wind power ⁽¹⁾⁽²⁾	303	67
Solar ⁽¹⁾	52	22
Total	1,254	988

(1) For the effective capacity calculation, wind facilities are assigned firm capacity of 22% of their nameplate capacity and solar facilities are assigned 42% of their nameplate capacity. Platte River is also using a 2 MWh battery charged by solar.

(2) 72 MW of wind is currently sold to other entities, 60 MW of which will return to Platte River in 2030.



2022 system total

- Coal **54%**
- Wind **26%**
- Hydropower **8%**
- Other purchases **6.5%**
- Natural gas **3.2%**
- Solar **2.3%**

Includes renewable energy credit allocations to carbon resources

VISION, MISSION, VALUES AND CORE PILLARS

VISION

To be a respected leader and responsible power provider improving the region's quality of life through a more efficient and sustainable energy future.

MISSION

While driving utility innovation, Platte River will safely provide reliable, environmentally responsible and financially sustainable energy and services to the owner communities of Estes Park, Fort Collins, Longmont and Loveland.

CORE PILLARS

RELIABILITY, ENVIRONMENTAL RESPONSIBILITY,
FINANCIAL SUSTAINABILITY

VALUES

The following values define our daily commitment to following the vision and mission of Platte River, which will strengthen our organization and improve the quality of life in the communities we serve.

SAFETY

Without compromise, we will safeguard the public, our employees, contractors and assets we manage while fulfilling our mission.

RESPECT

We will embrace diversity and a culture of inclusion among employees, stakeholders and the public.

INNOVATION

We will proactively deliver creative solutions to generate best-in-class products, services and practices.

SUSTAINABILITY

We will help our owner communities thrive while working to protect the environment we all share.

INTEGRITY

We will conduct business equitably, transparently and ethically while complying fully with all regulatory requirements.

SERVICE

As a respected leader and responsible energy partner, we will empower our employees to provide energy and superior services to our owner communities.

OPERATIONAL EXCELLENCE

We will strive for continuous improvement and superior performance in all we do.

OUR COMMUNITIES

Platte River Power Authority is a Colorado political subdivision established to provide wholesale electric generation and transmission to the communities of Estes Park, Fort Collins, Longmont and Loveland.



*Based on the U.S. Census Bureau



BOARD OF DIRECTORS

Platte River is governed by an eight-person board of directors designed to bring relevant expertise to the decision making process. The board includes two members from each owner community.

The mayor may serve or designate some other member of the governing board of their owner community to serve in their place on Platte River's Board of Directors. Each of the other four directors is appointed to a four-year staggered term by the governing body of the owner community represented by that director.



Wendy Koenig
Mayor
Town of Estes Park



Reuben Bergsten
Director of utilities
Town of Estes Park



Jeni Arndt
Mayor
City of Fort Collins



Kendall Minor
Utilities executive
director
City of Fort Collins



Joan Peck
Mayor
City of Longmont



David Hornbacher
Assistant city
manager (interim)
City of Longmont



Jacki Marsh
Mayor
City of Loveland



Kevin Gertig
Director of Loveland
Water and Power
City of Loveland

SENIOR LEADERSHIP TEAM

Platte River operates under the direction of a general manager who serves at the pleasure of the board of directors. The general manager is the chief executive officer with full responsibility for planning, operations and the administrative affairs of Platte River. Platte River's senior leadership team has substantial experience in the utility industry.



Jason Frisbie
General manager/CEO



Eddie Gutiérrez
Chief strategy officer



Sarah Leonard
General counsel



Raj Singam Setti
Chief transition and
integration officer



Dave Smalley
Chief financial officer
and deputy general
manager



Melie Vincent
Chief operating officer



Angela Walsh
Executive assistant to
the GM/CEO, board
secretary, administrative
services supervisor



EXECUTIVE SUMMARY

As Platte River Power Authority (Platte River) celebrates 50 years of service for Estes Park, Fort Collins, Longmont and Loveland, the utility is looking forward to the next 50 years of transformation, innovation and opportunity to build a cleaner energy future. Platte River has one of the most accelerated decarbonization plans for an electric utility in the country. The energy landscape is also changing rapidly with emerging technologies including battery and thermal storage, advanced metering infrastructure, renewable noncarbon-emitting energy sources and lower carbon natural gas resources. These changes are happening amid

an electrification of transportation, homes and businesses, evolving customer needs and expectations and a sweeping commitment to a cleaner energy future.

To address the evolving energy landscape, Platte River has updated the strategic plan for the benefit of our four owner communities of Estes Park, Fort Collins, Longmont and Loveland. The update to the strategic planning process started in early 2022 evaluating the initiatives laid out in 2018: enhanced customer experience, communications and community outreach, resource diversification and alignment and



infrastructure advancement and technology development. The 2018 Strategic Plan created the framework that outlined the path for the Platte River Board of Directors to adopt the Resource Diversification Policy (RDP) that was approved later that year. This moment in Platte River's history marked an inflection point for our organization. As Platte River celebrates a half century of providing power in 2023, this updated strategic plan reflects the ongoing evolution our industry has experienced over the last several years and now outlines how this trajectory is inspired by our organization's legacy to proudly serve northern Colorado.

The purpose of the 2023 Strategic Plan is to provide Platte River with direction and guidance for our organization's future. It is also intended to align activities throughout the organization with these four strategic initiatives that are anchored by Platte River's vision, mission, values and core pillars to safely provide energy and services.

- Resource diversification planning and integration
- Community partner and engagement
- Workforce culture
- Process management and coordination

*More specific information about the strategies, tactics and activities related to implementing these initiatives will be developed over time, communicated through key business documents, including the strategic financial plan and annual budget, integrated resource plan and annual report.

RESOURCE DIVERSIFICATION PLANNING AND INTEGRATION

Since the Platte River Board of Directors adopted the RDP in 2018, one of the major areas of strategic focus is the implementation phase of our overall resource planning into 2030. In 2021, Platte River created a new division – transition and integration – to direct resources into Platte River’s overall portfolio integration and strategy, which is fundamentally committed to implementing the RDP as the organization proactively works toward a 100% noncarbon energy future. This includes developing sustainable solutions through resource planning and integration of distributed energy solutions (DES) and distributed energy resources (DER).

Platte River is committed to identifying emerging technologies, information and operational efficiencies as well as developing more data science capabilities to ensure Platte River and the owner communities can transition to a noncarbon energy future. The new portfolio strategy and integration team works directly with operations and finance to ensure system reliability and financial sustainability are maintained as Platte River’s portfolio continues to decarbonize.

Platte River’s carbon reduction effort and portfolio transition will be led by an acceleration of renewable integration while maintaining our overall system reliability, leveraging current energy storage technologies at a large scale, DER integration and additional dispatchable thermal capacity that balances the core pillars of the organization.

IMPLEMENTATION AREAS

- Incorporate reliability resources, including additional dispatchable capacity and emerging technologies such as long-duration storage and hydrogen
- Undertake strategic transmission planning and expansion
- Participate in a full regional transmission organization
- Design and align rates for the energy transition
- Leverage data science, artificial intelligence and machine learning



INTEGRATED RESOURCE PLAN

Platte River's Board approved the 2020 integrated resource plan (IRP) outlining a roadmap for a zero-coal energy portfolio by 2030. The plan called for the systematic expansion of large-scale solar and wind resources, energy storage projects, and DERs and low-carbon thermal generation between 2020 and 2030. Platte River's accelerated asset integration schedule is designed to gain operational experience before retiring coal-fired generation and fully test the reliability and operational flexibility of new renewable resources.

In 2021, Platte River issued a request for proposals to competitively procure up to 250 MW of new solar generating capacity and energy storage capacity with estimated commercial operation in late 2025. Resource planning, portfolio strategy and integration staff also analyzed and evaluated the cost effectiveness and market for large-scale four-hour and longer duration energy storage and evaluated adding more wind and solar resources to Platte River's portfolio

In 2023, Platte River confirmed the purchase of 150 MW of solar energy from the selected vendor for the Black Hollow Solar project. The agreement was restated in 2022 and the project is slated for commercial operation in 2025. Platte River also signed an easement and purchase agreement for 20 acres of land to construct a 230-kilovolt (kV) switching substation. This substation will facilitate interconnection of the Black Hollow Solar project, as well as other future renewable projects, with Platte River's system.

At the time of publishing this strategic plan, current resource planning anticipates an 85% carbon reduction in our generation portfolio by 2030, pending the next IRP process in 2024. Platte River remains committed to pursuing a 100% noncarbon energy portfolio that does not compromise the core pillars of the organization.





ORGANIZED ENERGY MARKET

Together with our joint dispatch agreement partners, Platte River entered the Southwest Power Pool's (SPP) Western Energy Imbalance Service (WEIS) market in April 2023, defining an important milestone in our pursuit of a carbon-free energy future. Participating in the SPP WEIS market enables Platte River to reduce costs and balance our energy generation with the real-time power needs of the region, as well as integrate greater amounts of renewable energy.

Platte River is also among several western electric service providers committed to exploring SPP's regional transmission organization – West (RTO West) expansion into the Western Interconnection. Moving into a full RTO membership could bring additional savings and benefits to reliably and economically serve our owner communities while meeting the region's clean energy goals. All efforts to participate in an organized energy market are part of Platte River's initiative to achieve the goals set forth in the RDP.





COMMUNITY PARTNER AND ENGAGEMENT

Guided by its vision to serve as a respected leader and responsible energy provider, Platte River fundamentally believes in collaboration and regionalism alongside our owner communities to become a trusted community partner. The organization strives to facilitate, convene and educate with message discipline and consistency, working in partnership with our owner communities and the customers they serve.



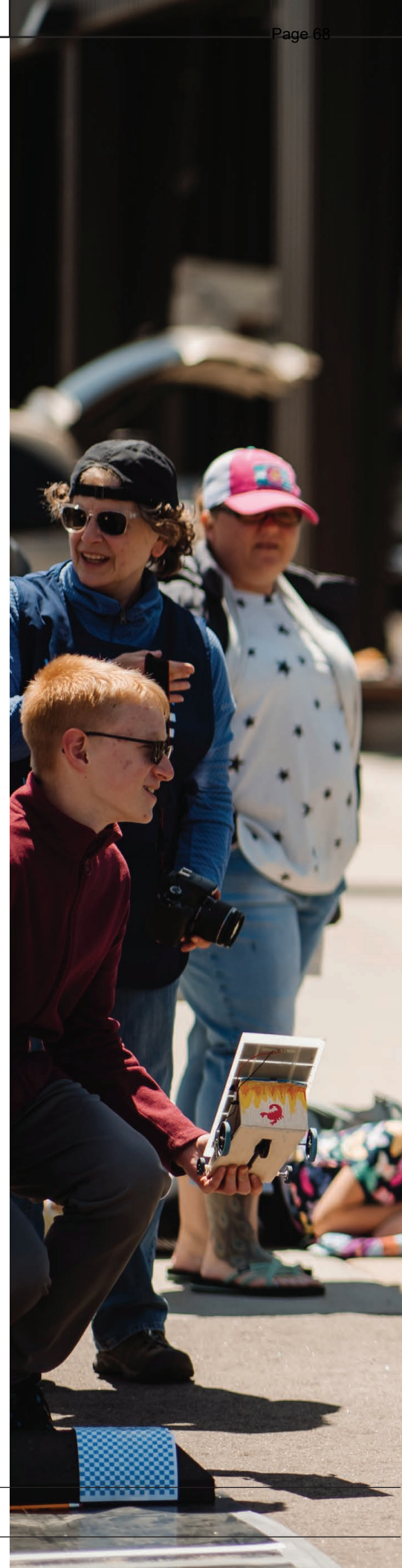
PHILOSOPHY AND APPROACH

In recent years, demand for more renewable energy integration, emerging technologies and environmentally conscious solutions have challenged the very idea of what an electric utility should become. This focus is also sparking increased public interest in Platte River's strategic initiatives and overall operations.

Historically Platte River has relied on its owner communities to communicate with the public; however, the utility is working to build a stronger presence with a more regional focus across our owner communities to speak with a unified voice about the complexities and opportunities associated with the energy transition. Collaborating to create more regional engagement to emphasize the relationship between our organization and our owner communities – that is, Platte River was created 50 years ago by the township of Estes Park and the cities of Fort Collins, Longmont and Loveland as a community-owned, public power entity dedicated to providing energy and services guided by its three core pillars. Platte River and our owner communities are working together to amplify the vision of our organization as it strives to be one of the most transformative energy providers in the country.

IMPLEMENTATION AREAS

- Organize working groups across the owner communities to develop consistent, key messages
- Identify regional engagement opportunities through digital and community activations to develop deeper partnerships with local organizations and stakeholder groups
- Create and implement regional educational assets and campaigns to ensure transparency and access to RDP information
- Engage proactively with national, regional and industry media partners to share our strategic initiatives and respond effectively to public inquiries
- Develop and deploy an effective, multi-media strategy to further engage and educate the public about programs, services and initiatives





WORKFORCE CULTURE

As Platte River works toward a more decarbonized energy portfolio and develops into a more data-driven organization, Platte River must equally focus on maintaining a high-performing workforce that can successfully achieve this transition. Platte River's philosophy is to advocate for both the employee and the organization, focusing on career longevity and modernized workforce practices that retain and attract the brightest and most talented in the industry.

Workforce culture at Platte River is deeply rooted in the values the organization holds for its employees. As employees develop a deeper understanding of how they can be part of the decision-making process, the organization will more clearly define how employee performance and accountability are evaluated and rewarded. This strategic initiative will systematically guide Platte River's trajectory to becoming the utility of the future.



IMPLEMENTATION AREAS

- Build a workforce roadmap that focuses on employee development and planning that clearly defines career advancement and growth opportunities for employees, to include the development of a transition strategy directed by the board-adopted Responsible Transition for Rawhide Employees resolution
- Modernize the organization's total benefits and rewards program to reflect industry-leading practices
- Utilize market-based modeling for a new, comprehensive compensation philosophy and approach
- Create more hybrid and work flexibility as the organization evolves into a multi-state employer
- Create a talent review and succession planning process to baseline strategies for long-term retention and recruitment
- Create a matrix-driven, performance review process that aligns with the organization's current strategic plan
- Identify more systemic ways to bridge a digital and physical workforce, with a combination of virtual and in-person engagement opportunities and initiatives that could include more immersion activations to engage employees cross-functionally
- Create a baseline assessment for a larger diversity, equity and inclusion initiative that could lead to specific emerging leaders and leadership pipeline programs
- Work alongside the strategic budgeting process, forecasting immediate and multi-year staffing needs across the organization based on growth areas and larger enterprise goals

PROCESS MANAGEMENT AND COORDINATION

Platte River will continue to accelerate the decarbonization of our energy portfolio, focus on improved integration, planning and collaboration with our owner communities, and create new processes to aid in more cross-functional teamwork across the organization. The emphasis on process management and coordination will support the organization's ability to deliver on its core services and improve efficiencies in internal and external processes and systems.

DER implementation is an example of process management and coordination to serve Platte River's carbon reduction effort. The success of this project will be measured in the coordination and collaboration between Platte River and its four owner communities. The flow of data between Platte River and the owner community will be integral to the results DERs can produce. This information will enable DERs to respond to dynamic system conditions such as energy prices, renewable energy availability and system reliability constraints. The work between Platte River and each owner community will deliver DERs at a scale that can support the integration of dispatchable energy sources, renewable energy generation and emerging technologies.

Internally, process management and coordination will help create new structures and processes for Platte River teams to work more collaboratively across the organization. The cross-functionality of these team members and their work areas will optimize our energy transformation. There will be an emphasis on creating more project management structures, which include developing a comprehensive risk management strategy.

IMPLEMENTATION AREAS

- Create a project management culture guided by the design of project and process management strategies for internal and external initiatives
- Develop energy management tools and other integration capabilities
- Facilitate more regional transmission and distribution coordination and planning
- Clearly define roles and responsibilities to create more cross-functional teams across owner communities and within Platte River
- Develop a comprehensive risk management strategy for Platte River





ACKNOWLEDGMENT AND NOTES



The continued publication of the Platte River Power Authority Strategic Plan is to provide a specific focus on the strategic initiatives and to reduce overlap or redundancy with other key business documents. The 2023 Strategic Plan reflects the most current strategic initiatives guiding Platte River's leadership per the approval of the Board of Directors.

Please visit www.prpa.org to view Platte River's:

- Strategic financial plan
- Strategic budget
- Integrated resource plan
- Annual report
- Other reports and plans



Platte River

Power Authority

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Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Eddie Gutiérrez, chief strategy officer
Javier Camacho, director of public and external affairs, strategic communications and social marketing

Subject: State legislative recap

The First Regular Session of the Seventy-fourth General Assembly convened on Jan. 9, 2023 and adjourned on May 8, 2023. This session introduced legislation affecting Colorado's electric utilities. Platte River staff and Husch Blackwell Strategies will provide an overview of this legislation and related matters.

This presentation is for informational purposes only and no board action will be requested.



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Melie Vincent, chief operating officer
Carol Ballantine, director of power markets

Subject: **Hydro allocation update**

This presentation will provide an update on recent hydropower conditions, highlighting what has changed over the past year. Staff will also update how current drought conditions are expected to affect future hydropower operations.

This presentation is for informational purposes only and no board action will be requested.



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Raj Singam Setti, chief transition and integration officer

Subject: **Integrated Resource Plan overview**

Platte River Power Authority will soon formally kick off its Integrated Resource Plan (IRP) for 2024. The IRP is a crucial planning process that guides implementation of our Resource Diversification Policy.

As we embark on the IRP, our goal is to ensure that our power supply remains reliable, environmentally responsible, and financially sustainable. We are committed to delivering on these three key objectives, which are critical to our clean energy transition.

The IRP process will span approximately 12 months and will involve collaborative efforts among all departments at Platte River.

During the first phase of the process, we will initiate the first public engagement. Platte River's resource planning staff will define the scope of the IRP, including its objectives. We will also review the challenges and assess changes that have occurred in the clean energy landscape.

Once the scope has been defined, we will proceed to the second phase, which includes the modeling process and analysis phase. This phase will consider the impacts of emerging technologies, such as energy storage, electric vehicles, and renewable energy sources.

In the third phase, we will develop the resource plan, outlining the preferred mix of resources and the timeline for implementation. This phase will involve evaluating various scenarios and considering trade-offs between different options.

Finally, we will present the results of the IRP process to Platte River's Board of Directors. We will also develop a communication plan to inform stakeholders about the IRP process and its results.



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Dave Smalley, chief financial officer and deputy general manager
Shelley Nywall, director of finance
Wade Hancock, financial planning and rates manager

Subject: **Average wholesale rate projections and 2024 tariff schedule charges**

Platte River staff prepared the attached white paper that includes the average wholesale rate projections and the proposed 2024 rate tariff schedule charges. The 2024 average wholesale rate recommendation is a 5.0% increase from the 2023 Strategic Budget. The white paper includes the proposed 2024 Firm Power Service tariff charges and the Standard Offer Energy Purchase tariff avoided energy rate.

Staff has provided the charges earlier than in years past to accommodate the owner communities' budget preparation and rate development schedules. The charges are based on an estimate of Platte River's 2024 budget, as the budget is in progress but not complete.

At the May board meeting, staff will provide an accompanying presentation of the white paper material. No formal action is required at this time.

Attachment

- Average wholesale rate projections and 2024 rate tariff schedule charges white paper



Average wholesale rate projections and 2024 rate tariff schedule charges

Platte River Power Authority white paper

May 2023

Overview

Platte River establishes service offerings and supporting rate structures that complement its foundational pillars, vision, mission and values, strategic plan, and underlying policies of the organization. Platte River establishes its tariffs and charges to achieve Strategic Financial Plan (SFP) targeted financial metrics.

Under the Amended Contracts for the Supply of Electric Power and Energy between Platte River and each of the four owner communities, Platte River's Board of Directors is required to review the rates for electric power and energy furnished to the owner communities at least once each calendar year.

This white paper discusses the following:

- 2024 average wholesale rate recommended 5.0% increase to \$71.26/MWh from \$67.88/MWh in the 2023 Strategic Budget: 4.7% due to increases in the Firm Power Service tariff charges and 0.3% due to projected load increases
- Long-term average wholesale rate projections: 5.0% (2024 – 2030), 2.5% (2031 – 2033)
- Factors driving rate pressure
- 2024 rate tariff schedule charges to achieve the recommended 5.0% average wholesale rate increase

Platte River continues to actively pursue the Resource Diversification Policy (RDP) goal of reaching a 100% noncarbon resource mix while maintaining the three pillars of providing reliable, environmentally responsible and financially sustainable electricity and services. Platte River prioritizes preventive and predictive maintenance strategies and proactive capital investments to provide long-term system

benefits and efficiencies. Platte River will continue to invest in its existing power generation and electrical transmission assets to maintain operational efficiency and to proactively address federal and state regulatory requirements.

Rate setting framework

Platte River's board-approved SFP provides direction for the organization to support Platte River's mission, vision and values, create long-term financial sustainability and manage financial risk. The priorities of the SFP are to generate adequate cash flows, maintain access to low-cost capital, provide wholesale rate stability and maintain sufficient liquidity for operational stability.

The board implements appropriate rate increases and rate smoothing strategies that achieve SFP metrics and balance the following:

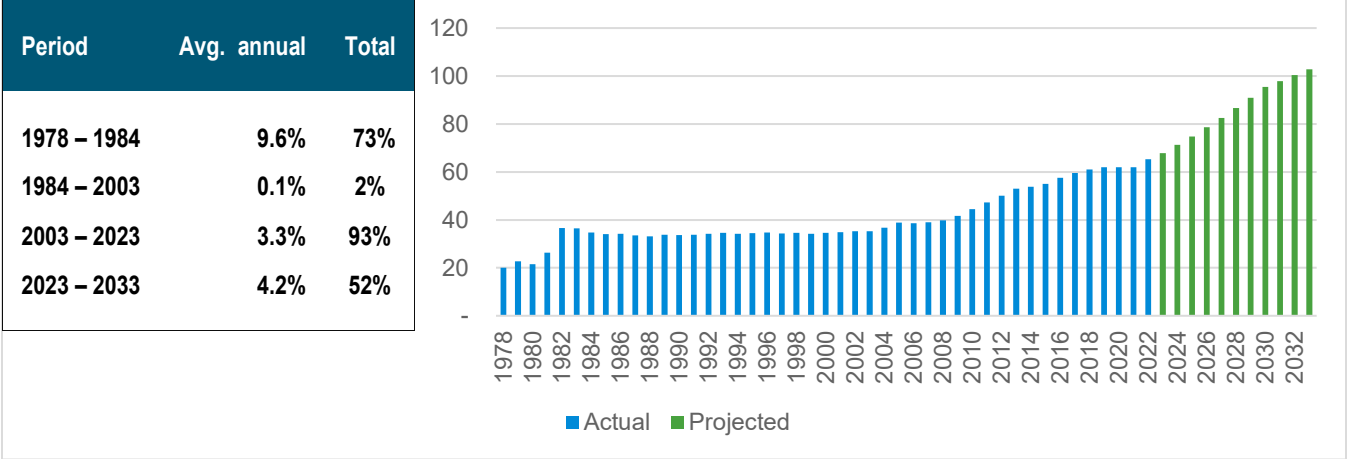
- Avoiding significant single or multiple year rate hikes by smoothing rates over multiple years.
- Providing greater rate predictability to aid owner communities and customers with more accurate, long-term planning.

Rate increases help Platte River maintain a strong financial position and its AA credit rating, which enable it to obtain favorable debt financing. Over the long term, rate increases fund continued general infrastructure investment, resource portfolio transition, general inflationary expenses and market-based expenses.

Historical average wholesale rates

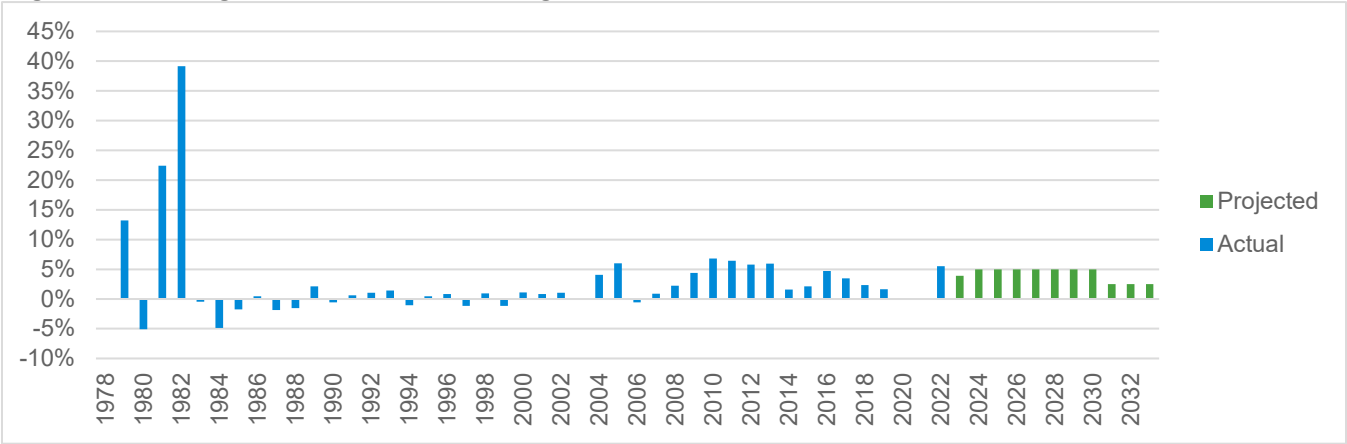
From 1978 to 2022, Platte River's average wholesale rate has increased an average 2.7% annually. However, there are several distinct periods when the average 2.7% increase has not been representative of the rate pressure for a specific period. As shown in Figure 1, in the period before Rawhide Unit 1 became operational in 1984, rates increased significantly to fund its construction and initial operation. From the mid-1980s throughout the 1990s there was a period with rate stability. During this period, Platte River relied heavily on surplus sales revenues from excess baseload capacity. As Platte River's loads grew, and were projected to continue to grow, the average wholesale rate began to rise in the early 2000s with increased capital investment in transmission projects and the natural gas combustion turbines. The rate increases beyond 2022 occur as Platte River transitions to a noncarbon based generation resource portfolio.

Figure 1: Average wholesale rate (\$/MWh)



Not shown as clearly in Figure 1 are the significant annual changes in the average wholesale rate during the construction and early operation of Rawhide Unit 1. Figure 2 highlights this annual change. The rate increases associated with Rawhide Unit 1 were significant: 73% from 1978 to 1984. These substantial increases over such a short period contributed to the implementation of the strategic financial plan strategy and the board’s preference to smooth rates to avoid significant increases over shorter periods. The generation asset transition to support the RDP goal is Platte River’s most significant generation resource transition since the addition of Rawhide Unit 1. Implementing rate smoothing strategies will avoid increases similar to those in the early 1980s and provide greater financial flexibility and sustainability.

Figure 2: Average wholesale rate change (\$/MWh)

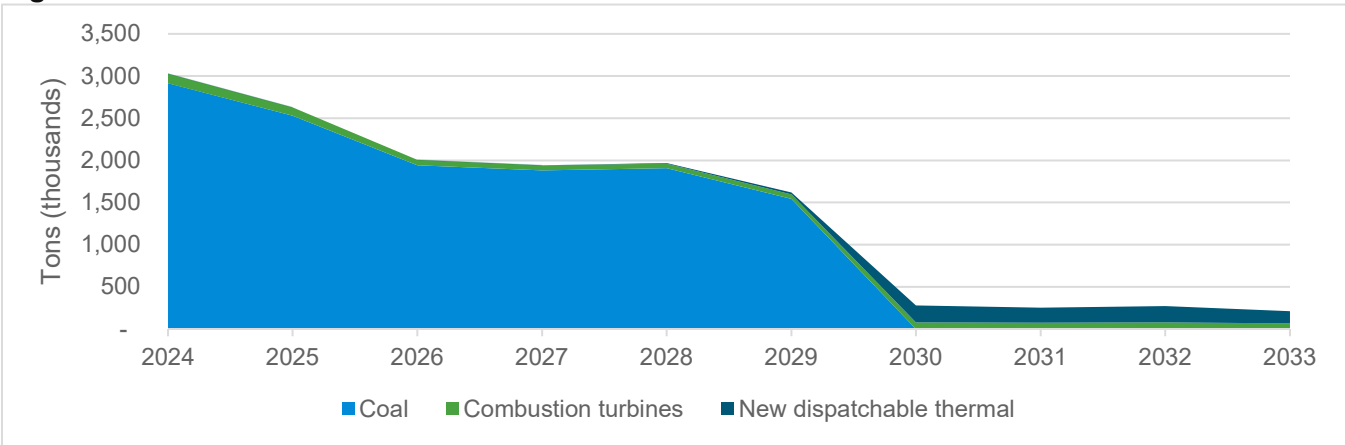


Resource and financial planning updates

The 2020 Integrated Resource Plan (IRP) contains power supply portfolio 2 (P2), which the board adopted in October 2020. The P2 scenario has since served as the planning basis for budgetary, financial planning and ratemaking purposes, as Platte River pursues the goals outlined in the RDP. The

P2 scenario has since been refined to include changes in the quantity and timing of wind and solar resources and incorporate the latest load, market, wind and solar power purchase agreements, resource dispatch, and financial projections. Based on the retirement of all coal-fired generation by the end of 2029, the current resource planning case assumes procurement of new noncarbon and dispatchable thermal resources by Jan. 1, 2028, to ensure operational reliability. In 2033, carbon emissions are projected to decrease approximately 3.6 million tons relative to 2005. The 2024 IRP process is currently underway and those results will modify future projections.

Figure 3: Tons of carbon emitted



The decrease in emissions results from generation portfolio changes. Highlighting this change, Figure 4 displays the noncarbon and lower carbon emitting dispatchable thermal resources replacing the same quantity of energy from current dispatchable thermal resources. Figure 5 shows the cost to replace the current dispatchable resources, an approximate \$100 million increase in 2030 based on current, uncertain, future resource cost assumptions.

Figure 4: Resource asset transition GWh

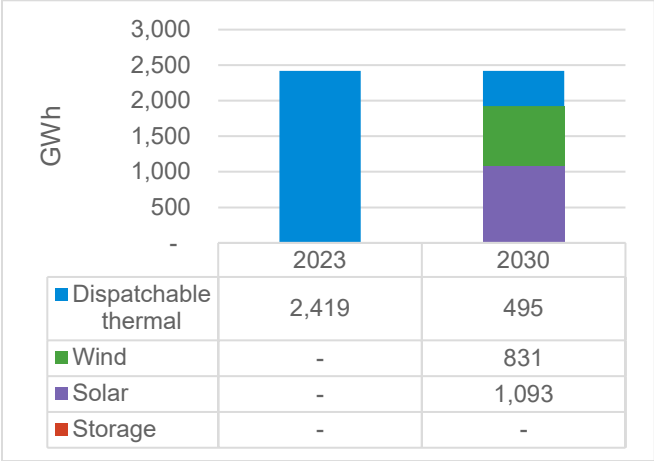
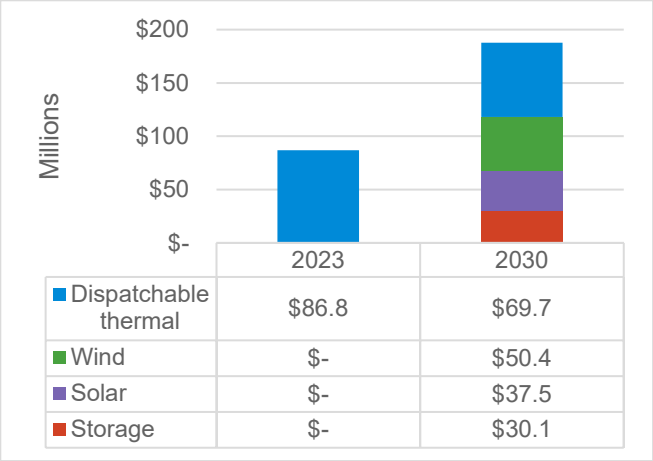
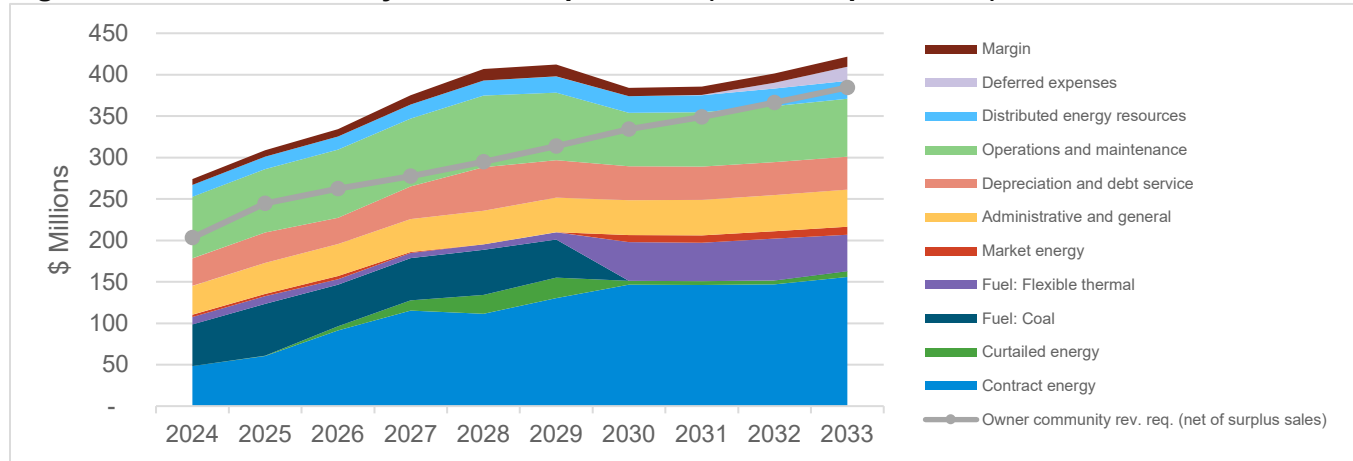


Figure 5: Resource asset transition expense



As the resource portfolio transitions, operating costs continue to increase throughout the planning horizon (Figure 6). The owner community revenue requirement (net of surplus sales) is projected to increase \$181 million, or 89% from 2024 to 2033.

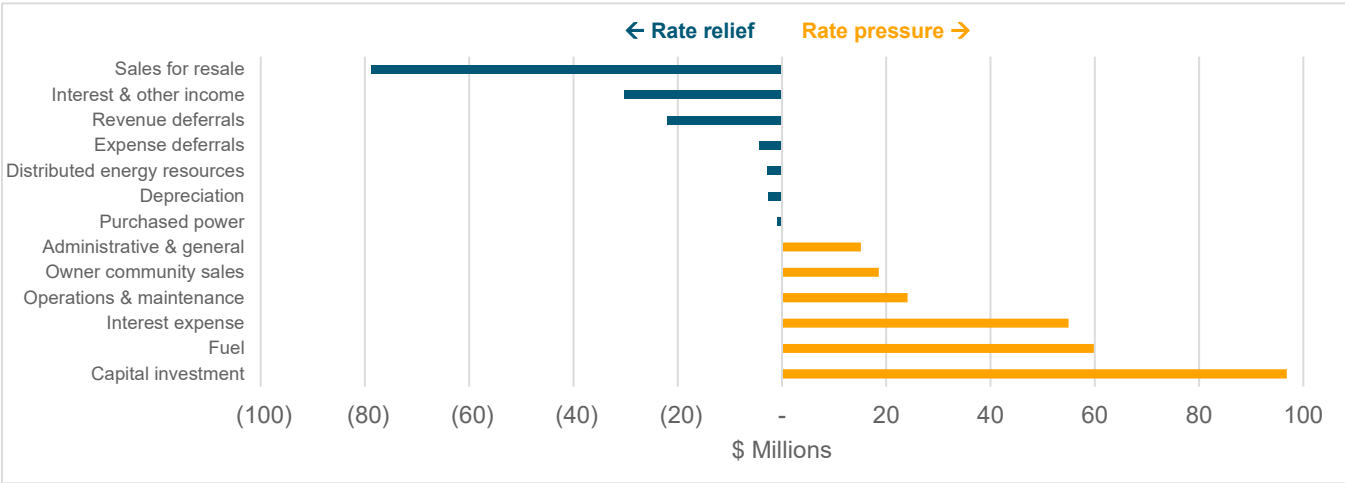
Figure 6: Owner community revenue requirement (net of surplus sales)



Relative to projections shared with the board in 2022, revenues and expenses are increasing \$128 million due to many factors but primarily driven by the following:

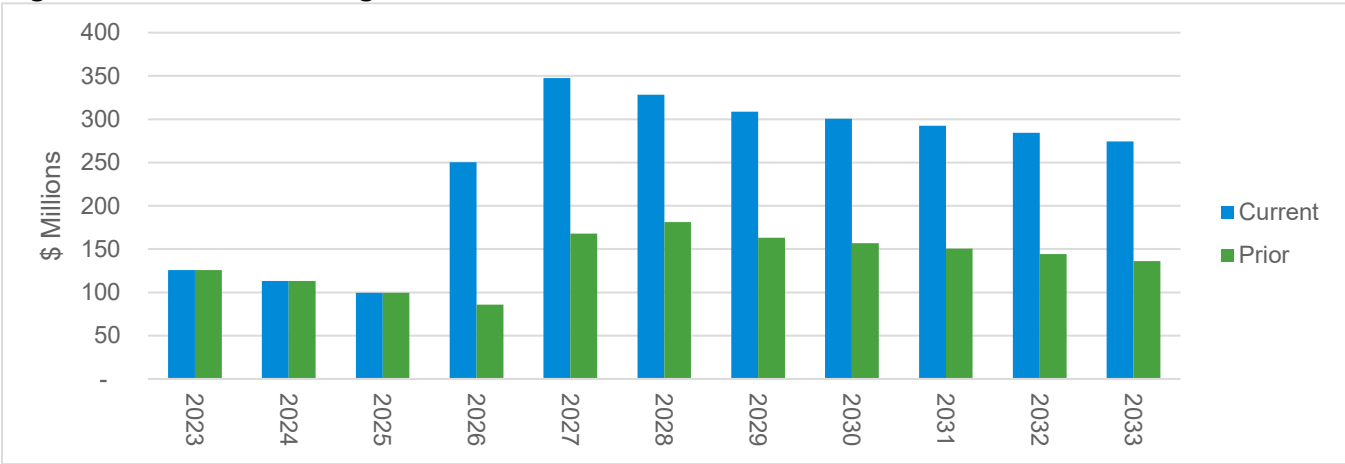
- **Lower owner community load forecast:** Platte River recently contracted with a third party to revise Platte River's load forecast. The resulting forecast, integrated into the latest resource and financial plans, projects 5.1% lower loads in 2033 relative to the previous load forecast. The impact is a 3.1% reduction in energy sold, resulting in a \$91.5 million decrease in owner community revenues over this period. Partially offsetting the lower loads is a \$72.9 million increase in owner community revenues due to higher projected rate increases beyond 2029. The net impact is an \$18.6 million decrease in owner community revenues. Lower revenues from the owner communities result in less cash accumulated to fund capital investments.
- **Increased capital investment:** Capital investment increases are primarily for wind resource integration expense for transmission lines and substation interconnections, dispatchable capacity interconnection and Windy Gap Firing Project (Chimney Hollow Reservoir) cost increases.
- **Increased fuel expenses:** Fuel price forecasts have increased as well as surplus sales prices. Sales are from the natural gas combustion turbines.
- **Increased surplus sales revenue** due to prices and higher investment rates of return partially offset the increased expenses.

Figure 7: Case comparison of total revenue and expense, 2023 – 2033



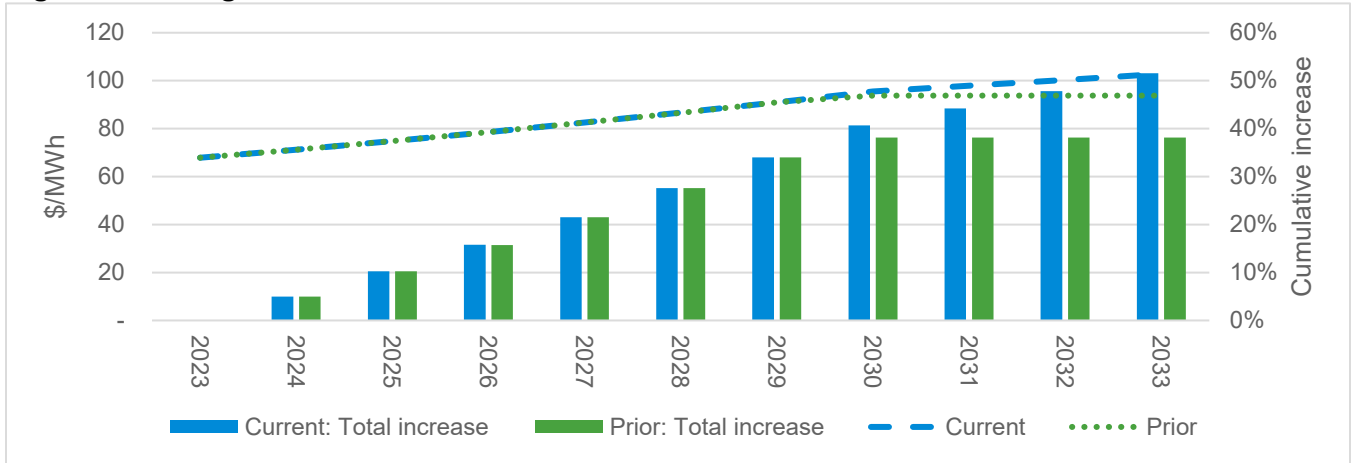
Lower revenue and increased expenses result in lower future cash projections to fund capital investment. Combined with increased capital investment, debt issuance projections (Figure 8) have increased \$150 million, adding rate pressure in the form of interest and principal repayments.

Figure 8: Debt outstanding



Before 2030, long-term rate projections are currently able to remain consistent with prior communications: 5.0% average wholesale rate increases annually from 2024 through 2029. However, rate pressure is increasing beyond 2029 as shown in Figure 9.

Figure 9: Average wholesale rate increase



Increased use of the deferred revenue and expense accounting policy helps alleviate pressure to increase rates more than 5.0% before 2029. Because Platte River is transitioning its resource portfolio by retiring coal-fired units and replacing those units with noncarbon and new dispatchable thermal resources, in 2022, the board adopted the deferred revenue and expense accounting policy. The purpose of the policy is to help reduce rate pressure and achieve rate smoothing by establishing a mechanism to defer revenues earned and expenses incurred in one period to be recognized in one or more future periods.

Platte River anticipates deferring revenues of approximately \$75 million from 2022 to 2025 to be later recognized (between 2026 and 2030). In 2022, Platte River deferred \$21.6 million in revenues to recognize during the transition. While no expenses are deferred currently, the forecast projects deferring approximately \$39 million of expenses in 2028 and 2029 to be recognized, in accordance with policy, before 2035. The deferred expenses increase rate pressure in 2029 and beyond. Expenses are deferred to maintain stable rates but as those expenses are recognized, they create pressure in future years if revenues are insufficient to absorb higher expenses. Thus, the increased rate pressure beyond 2029 indicates the flexibility deferred revenues and expenses provide is limited. Actual deferred amounts will be determined annually at year end. The long-term projections will be updated to reflect actual deferred revenue and expenses; future estimates will be updated as well.

Figure 10: Deferred revenues

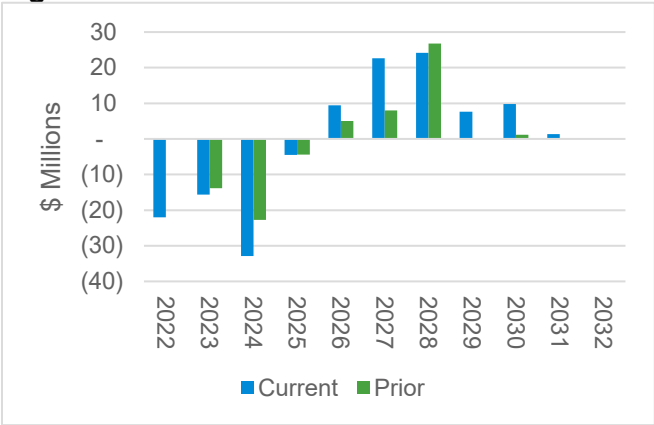
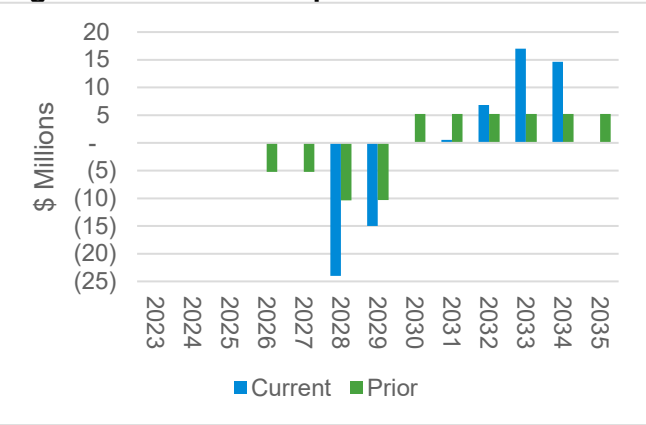


Figure 11: Deferred expenses



2024 rate tariff schedules

The 2024 proposed Firm Power Service tariff charges and the Standard Offer Energy Purchase tariff avoided energy rate for large facilities are described in this white paper. Changes to the Wholesale Transmission Service tariff (Tariff WT-24) will be recommended for adoption through a separate action at the May board meeting. The Large Customer Service charges are established under a separate contract.

Firm Power Service (Tariff FP-24)

The Firm Power Service tariff charges reflect cost of service, based on 2024 budget estimates, and incorporate Platte River's recommended 5.0% average wholesale rate increase. Staff accelerated development of the charges from August to support owner community budget preparation and rates development schedules.

Before 2022, Platte River provided unbundled variable energy charges for dispatchable and noncarbon intermittent resources. While the variable revenue requirement is now collected through a single variable energy charge, the owner communities continue to receive their load ratio allocations of delivered hydropower, wind and solar energy.

The changes to the individual Firm Power Service tariff charges will have varying impacts to each owner community due to each owner community's unique load characteristics. Staff has provided the projected overall impacts of the forecasted average rate, load growth and total revenues collected to the utility directors and owner community rate staffs based on Platte River's load estimates. Appendix C contains more detailed analysis of owner community impacts of the average wholesale rate change, as well as analysis of the change to the Firm Power Service tariff charges.

Platte River's revenue requirement and charges are unbundled into Platte River's business functions: owner community services, transmission and generation. Charges have been unbundled further by fixed and variable costs, collected through either direct allocation, demand or energy charges.

The individual charges are changing due to the proposed average wholesale rate increase, updated cost of service estimates among the different charges and changes to projected energy and demand loads. Because Platte River's 2024 budget is not yet developed, changes from 2023 to 2024 include general inflationary increases and known budget estimates including the latest load forecast.

Pending board direction and barring any significant unanticipated events, the recommended charges will remain unchanged and will be Platte River's recommendation for the October adoption of the tariff schedules, to be effective Jan. 1, 2024. Appendix B includes an overview of the Firm Power Service charges.

Figure 12: Firm Power Service tariff (Tariff FP-24) charges

	Tariff FP-23	Tariff FP-24 recommendation	\$ change	% change
Owner community charge	\$13,229	\$13,059	(\$170)	-1.3%
Demand charges				
Transmission	\$6.72	\$6.68	(\$0.04)	-0.6%
Generation: summer	\$6.15	\$6.61	\$0.46	7.5%
Generation: nonsummer	\$4.60	\$4.92	\$0.32	7.0%
Energy charges				
Fixed cost	\$0.01586	\$0.01681	\$0.00095	6.0%
Variable cost	\$0.02273	\$0.02427	\$0.00154	6.8%

As shown in Figure 13, the 2024 average wholesale increase is 5.0% to \$71.26/MWh from \$67.88/MWh in the 2023 Strategic Budget. Also shown is the isolated 4.7% impact of the change in charges and the 0.3% change due to projected load increases

Figure 13: Impact of Firm Power Service tariff charge changes

Load year	2023 Budget	2024 budget estimate	2024 budget estimate
Tariff charges*	Tariff FP-23	Tariff FP-23	Tariff FP-24 recommendation
Revenues (millions)	\$224.1	\$225.5	\$236.2
MWh	3,301,376	3,314,141	3,314,141
\$/MWh	\$67.88	\$68.05	\$71.26
Change due to load		0.3%	-
Change due to charges		-	4.7%
\$/MWh change			5.0%

Standard Offer Energy Purchase (Tariff SO-24)

The Standard Offer Energy Purchase tariff rate applies to the purchase of available electricity from power production facilities that have registered with the Federal Energy Regulatory Commission as Qualifying Facilities under the Public Utility Regulatory Policies Act and are electrically connected to Platte River’s transmission system or the distribution system of one of Platte River’s owner communities. No customers currently receive service under this tariff.

The avoided energy rate is based on an hourly resource model marginal cost analysis of coal-fired generation, natural gas-fired generation and market purchases to serve the balance of load after ‘must-take’ energy projections, including hydropower and renewables. The avoided energy rate is in Figure 14. The rate increased primarily due to the increased frequency of natural gas generation and market purchases as the marginal resource.

Figure 14: Standard offer energy purchase (Tariff SO-24) avoided energy rate

Standard Offer Energy Purchase	2023	2024 recommendation	\$ change	% change
Avoided energy rate	\$0.02033	\$0.02191	\$0.00158	7.8%

Wholesale Transmission Service (Tariff WT-24)

The Wholesale Transmission Service tariff under which Platte River offers transmission service to third parties is reviewed and updated on an annual basis in the second quarter after the audited year-end financial results are available. This ensures the rate reflects the most recent costs of operation and maintenance and actual transmission usage. Revisions to the Wholesale Transmission Service tariff (Tariff WT-24) are proposed for adoption at the May 2023 board meeting. This tariff is effective June of each year.

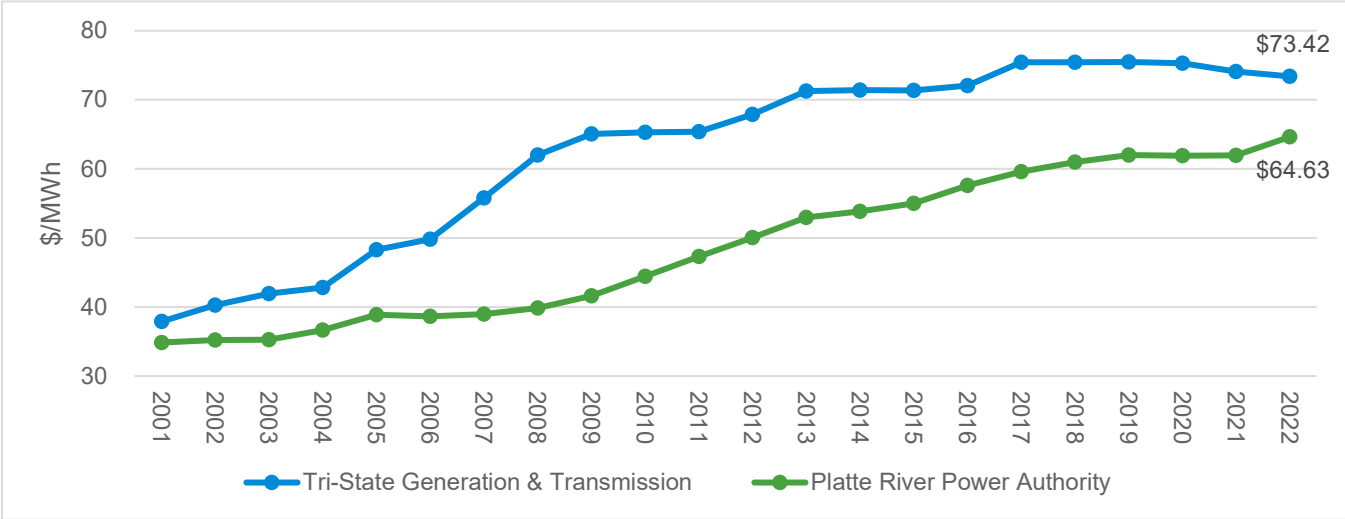
Large Customer Service (Tariff LC-24)

Charges under this tariff are established through a separate contract.

Rate competitiveness

The direction provided by the board and the SFP position Platte River to offer competitive rates. Wholesale rates for energy provided to Platte River’s owner communities was 12% lower than Tri-State Generation and Transmission Association (Tri-State) in 2022. Platte River and Tri-State organization goals will impact rate differentials. Platte River will continue to pursue to the RDP goals while prioritizing the foundational pillars.

Figure 15: Member average rate comparison (\$/MWh)



Schedule

Staff will present the information detailed in this white paper at the May board meeting. Staff also requests board direction to implement a 5.0% average wholesale rate increase in 2024 to \$71.26/MWh from \$67.88/MWh in the 2023 Strategic Budget and the individual charges as calculated.

In September, staff will provide the draft 2024 rate tariff schedules. In October, staff will ask the board to approve the 2024 rate tariff schedules with a Jan. 1, 2024, effective date.

Staff encourages and is available to support wholesale rate communications to stakeholders as requested by the owner communities.

APPENDIX A

Modeling assumption uncertainties

Significant uncertainty exists with key assumptions. Potential assumption changes include, but are not limited to, the items detailed below.

Category	Explanation
Asset integration schedule	<p>Modeling assumptions include the following capacity additions. Changes to asset integration schedule will impact future results.</p> <ul style="list-style-type: none"> • Wind: 200 MW (2026), 100 MW (2029) and 60 MW (2030 – Spring Canyon reverts to Platte River), 100 MW (2033) • Solar: 150 MW (2025), 150 MW (2026) and 150 MW (2027) • Battery storage: 100 MW (2026) and 100 MW (2028) • Dispatchable thermal units: 166 MW (2028)
Asset sales	To maximize the value of assets, coal inventory sales opportunities and Windy Gap water units will be considered.
Capital investment forecast	<p>The model incorporates the most recent long-term capital forecast including investment in a new dispatchable resource and transmission and interconnection projects to integrate wind. Interconnection feasibility studies will be completed as part of the analysis to determine size and location of wind and solar resource additions. Technology costs for owner assets, including dispatchable thermal generating resources, is uncertain and subject to change.</p> <p>Cost estimate accuracy will become more certain as projects and locations are finalized. Revisions to the capital forecast are integrated as available.</p>
Coal inventory sales	To maximize the value of assets, coal inventory sales opportunities will be considered as coal-unit retirements near.
Commodity prices	Platte River's Power Supply Plan, which includes the hourly dispatch modeling and associated costs, is updated throughout the year. Updates include Rawhide Unit 1 and the Craig units fuel assumptions, as well as market prices for electricity and natural gas. Updates change economic

Category	Explanation
	dispatch impacting fuel, variable operations and maintenance, purchased power and surplus sales.
Debt issuance costs	Debt structure and issuance costs vary and are updated throughout the year.
Decommissioning	<p>Craig decommissioning expenses are based on a budgetary estimate and will be refined later.</p> <p>While Rawhide Unit 1 is projected to retire by 2030, assumptions include decommissioning the entire Rawhide Energy Station in 2055 and associated decommissioning expenses accrued through 2055. If the decommissioning date shifts, expenses will be revised accordingly.</p>
Deferred revenue and expenses	The amount of deferred revenues and expenses depend on actual results and projections. Limited flexibility remains to defer expenses without creating additional future rate pressure.
Distributed energy resources and strategy	The collaborative distributed energy resource (DER) process among the owner communities and Platte River is increasingly important to Platte River and its owner communities' ability to achieve noncarbon goals. Wide-spread adoption of DER is expected to provide benefits for the electric system and retail customers. As specific DER programs become established and evolve, rate strategies to incorporate DER will be analyzed.
Economic externalities	Inflation, supply chain constraints and interest rate volatility will continue to impact financial results. Modeling assumptions are revised accordingly, reflecting current conditions.
Emissions expense	Rate projections assume the implementation of the Clean Power Plan (or similar form of regulation) beginning in 2025. However, due to political uncertainty and the multi-year timeframe required to pass and implement legislation, this assumption will be delayed later this year to 2027. There is significant uncertainty about implementation of emission regulations and the associated future costs. Modeling assumptions include a tax applied to 100% of carbon emissions.

Category	Explanation
Federal hydropower allocations	Persistent drought conditions throughout the western United States have constrained hydropower resources, resulting in reduced energy allocations and increased prices. Staff continues to monitor federal developments and adjust model assumptions accordingly.
Integrated resource plan	The next IRP is planned for completion in 2024 with analysis beginning in 2023. The board will provide direction throughout the IRP process. Resource modeling assumption revisions will impact future rate projections.
Load forecast	The load forecast is updated at least annually. The latest forecast, completed by a third party, projects energy growth lower than previous forecasts. Growth attributed to projected building electrification efforts and electric vehicles is reflected.
Noncarbon energy curtailments	As Platte River transitions to a more noncarbon based resource portfolio, the ability to sell surplus energy significantly impacts wholesale rate projections. At times, renewable energy cannot be consumed or sold but there is an associated cost.
Organized energy markets	Platte River joined the Southwest Power Pool (SPP) Western Energy Imbalance Service market in April 2023. As staff becomes more familiar with Energy Imbalance Service market and collects more data, modeling will be refined. Platte River intends to enter the SPP Regional Transmission Organization to be created for the West. Currently, projections do not include long-term costs and benefits associated with participation in that market due to lack of data.
Regulations	Platte River faces rising compliance-related risks resulting from aggressive and changing regulatory requirements that are difficult to predict and scope.
Resource Diversification Policy	In December 2018 the board adopted a policy with a goal for Platte River to reach a 100% noncarbon resource mix by 2030, provided Platte River can maintain its three pillars of providing reliable, environmentally

Category	Explanation
	responsible and financially sustainable electricity and services. Future decisions to achieve this goal will impact results.
Staffing	Modeling contains estimates for future staffing additions, including salary and benefits expenses, through 2029. Staff is also working through the Rawhide Unit 1 closure transition plan. These assumptions will be further analyzed and revised accordingly.
Surplus sales prices and volumes	<p>In addition to electricity market commodity price risk, hourly dispatch modeling market depth assumptions (ability to sell excess, must-take generation) are reviewed and updated regularly throughout the year.</p> <p>Negative pricing has not been factored into model assumptions but there will be instances when energy supply exceeds demand based on renewable energy production resulting in negative energy prices.</p>

APPENDIX B

Rate tariff schedule charges

Owner charge

The owner charge is a monthly flat rate multiplied by each owner's share of Platte River's owner community kilowatt hour sales based on the six most recent year-end values. The owner charge is intended to recover fixed costs for distributed energy resources, which are long-term behavioral shifting programs. The six-year period allows owner communities to see change over time, without dramatically impacting year-to-year changes. This is a fixed amount invoiced each month with no variability.

Demand charges

The demand charges are unbundled between transmission and generation and employ minimum billing demands designed to address owner community demand fluctuations to provide greater monthly invoice stability for each owner community as well as revenue certainty for Platte River. The minimum billing demands also emphasize the efficient use of infrastructure to maximize short-term marginal cost savings (avoiding expensive purchases or generation at time of peak) and long-term marginal cost savings (delaying or avoiding future capital investment, such as new generation or transmission resources). The minimum billing demands concentrate the signal to reduce consumption at time of peak, giving the owner communities a greater financial incentive to lower peaks during months with high demands, with less financial incentives to lower peaks during nonpeak months. Because of the minimum billing demand, approximately 90% of projected demand revenues are certain. Only the revenues based on loads above minimum billing demands vary by consumption.

Energy charges

The energy charges are unbundled into fixed and variable components. The fixed energy charge is a transparent mechanism to highlight the cost of firm-energy service. Variable costs, including wind and solar, are recovered through the variable cost energy charge. Platte River assumes the risk of intermittent generation variances and associated costs, not the owner communities. Monthly invoices display load share intermittent energy delivered for flexible service offerings to retail customers. The energy charges provide the least revenue certainty as the revenues vary based on consumption.

Figure 16 includes a high-level summary of the cost components of each charge.

Figure 16: Firm Power Service cost components

	Owner community	Transmission demand	Generation demand	Fixed energy	Variable energy
Costs					
Purchased power: Renewables, market					✓
Purchased power: Hydro demand			✓	✓	
Purchased power: Hydro energy					✓
Purchased reserves			✓	✓	
Fuel: Coal and natural gas					✓
Operations and maintenance: Fixed baseload			✓	✓	
Operations and maintenance: Fixed combustion turbines			✓		
Operations and maintenance: Fixed transmission		✓			
Operations and maintenance: Variable					✓
Administrative and general	✓	✓	✓	✓	
Distributed energy resources	✓				
Debt service expense		✓	✓	✓	
Margin	✓	✓	✓	✓	
Credits					
Surplus sales: Margin		✓	✓	✓	
Surplus sales: Cost of generation credit					✓
Surplus sales: Cost of transmission credit		✓			
Interest income and other credits	✓	✓	✓	✓	✓

APPENDIX C

Owner community impacts

The impact of the recommended 5.0% average wholesale rate increase budget to budget and the recommended charges vary among the owner communities based on their unique load characteristics, including projected load growth among the owner communities. Platte River forecasts load at the system level and establishes the Firm Power Service tariff charges based on the system-level load forecast. Platte River derives owner community loads from the system-level forecasts for budget detail reporting. The projected impact of the Firm Power Service tariff charges will differ among varying forecasts.

Additionally, the change in the total amount billed to each owner community will not be the same as the average rate increase. Forecasted demand and energy growth will increase the projected invoice total more than the average rate increase. Figure 16 below shows the 2024 estimated impact of the rate changes relative to the 2023 Strategic Budget.

Following are the significant drivers of the varying owner community rate impacts:

- Transmission and generation minimum billing demand
- Energy consumption
- Load factors

The minimum billing demands concentrate the signal to avoid consumption at time of peak, which is the summer season peak for generation, and the annual peak for transmission regardless of season. The lower annual coincident and noncoincident peak demand results in lower annual billing demands. Improvements in billing demand, relative to the other owner communities, can also lower an owner community's rate increase relative to the average. As individual owner communities lower billing demands, the associated cost recovery will shift proportionally.

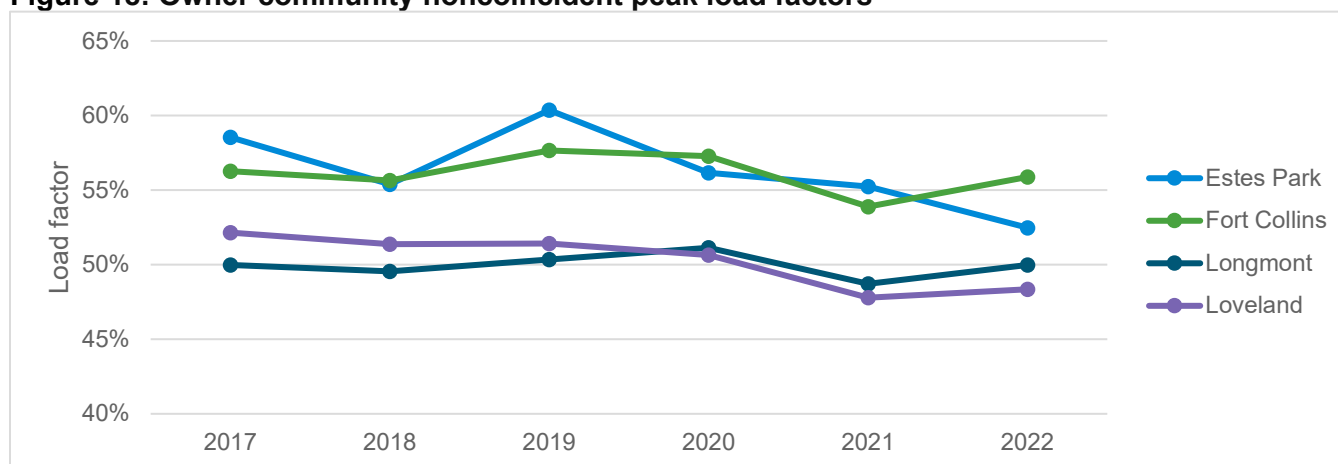
Total energy consumption increases can create downward pressure on the average rate by spreading fixed costs over more energy. Inversely, energy consumption increases will increase the amount billed.

The owner communities with the lowest average rate (Figure 17) also have the highest load factors (Figure 18). Load factor is a measure of electric system efficiency.

Figure 17: Owner community impact

		Estes Park	Fort Collins	Longmont	Loveland*	Platte River
2023	Average rate (\$/MWh)	\$64.91	\$66.60	\$69.47	\$69.26	\$67.88
	Energy sales (GWh)	139.9	1,558.1	852.0	751.4	3,301.4
	Revenues (millions)	\$9.1	\$103.8	\$59.2	\$52.0	\$224.1
2024	Average rate (\$/MWh)	\$67.50	\$70.29	\$72.37	\$72.64	\$71.26
	Energy sales (GWh)	143.5	1,531.3	871.0	768.4	3,314.1
	Revenues (millions)	\$9.7	\$107.6	\$63.0	\$55.8	\$236.2
	Average \$/MWh change	4.0%	5.5%	4.2%	4.9%	5.0%

*Loveland includes large customer.

Figure 18: Owner community noncoincident peak load factors

It is also important to recognize the 5.0% average wholesale rate increase is the net impact of projected changing loads and changing charges. Figure 19 is an analysis of 2022 actual loads applied to the Firm Power Service tariff charges, owner allocations and demand minimums from FP-23 and FP-24. This analysis isolates the impact of changes to charges.

Figure 19: Charge change impact: 2022 actual loads at Firm Power Service tariff charges

2022 actual loads	Tariff FP-23	Tariff FP-24	% Change
Platte River	\$68.73	\$72.05	4.8%
Estes Park	\$64.91	\$68.24	5.1%
Fort Collins	\$67.66	\$70.84	4.7%
Longmont	\$69.86	\$73.28	4.9%
Loveland	\$70.34	\$73.82	5.0%



Memorandum

Date: 5/17/2023

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Melie Vincent, chief operating officer
Heather Banks, fuels and water manager

Subject: **Water Resources Reference Document**

The Platte River Power Authority (Platte River) Water Resources Reference Document provides background on Platte River's water resources, including the history behind Platte River's need for water, a list of various assets and operating agreements, a summary of current water-related operations and projects at Platte River, and estimates of Platte River's future water demands and operations. The document is updated annually to include the most current operational data and reflect any changes in Platte River's water policy or asset ownership.

Platte River's 2023 Water Resources Reference Document, seventh edition, includes activities through 2022. The changes in this edition are minor. Highlights include the following:

- Updated operational activities and data through the 2022 water year
- Updated activities on the Windy Gap Firming Project/Chimney Hollow Reservoir Project
- Addition of a water exchange agreement with the City of Greeley
- Description of a water court diligence process in 2022 to relinquish conditional exchanges on the 24-inch pipeline that were not needed for operations
- Minor formatting and language edits for better consistency and readability

Following the review process, staff determined the reference document should shift away from reporting annual operations data and toward a high-level overview of Platte River's water resources. Over the next year, staff will develop a refreshed and condensed version to be presented in 2024 and updated every three years, concurrent with the Water Policy review schedule.

The May board packet contains a copy of the document. A printed version is available upon request. Staff will present an overview at the May board meeting and will be available to answer any questions the board may have. This item does not require any board action.

Attachment

- Water Resources Reference Document (updated version)



Platte River
Power Authority

Estes Park • Fort Collins • Longmont • Loveland

2023

Platte River Power Authority
Water Resources Reference Document

Seventh edition

Published: May 25, 2023

A report outlining Platte River Power Authority's water supply, background, activity, agreements and operational historical performance.





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Platte River Water Resources Reference Document

Introduction

The Platte River Power Authority (Platte River) Water Resources Reference Document (Document) was originally drafted in 2016 as part of an overall assessment of Platte River's water resource assets and to support development of an official water resources policy. This Document provides a brief background on water resources at Platte River, including the history behind Platte River's assets and operating agreements, a summary of current water-related operations and projects at Platte River, and estimates of Platte River's future water demands and operations. This Document is updated regularly to include the most current operational data and reflect any changes in Platte River's water policy or asset ownership. While this Document is intended to distill a large volume of information, readers should refer to the underlying reports and agreements for comprehensive details.

Section I – Background and history

1. Why Platte River needs water

Water and energy systems are intrinsically linked. Water is required throughout energy production and conversion processes including fuel extraction and processing (fossil and nuclear fuels as well as biofuels), site operations such as dust suppression, fire water and potable water needs, and electricity generation (thermoelectric, hydropower and renewable technologies). This Document focuses on Platte River's water needs for reliable operations.

The Rawhide Energy Station (Rawhide) includes coal, natural gas and solar generation resources. Currently the primary need for water is to support Rawhide Unit 1, a coal-fired unit which uses steam to generate power. Coal-fired electric generation requires a reliable supply of water for two main purposes – cooling water and process water. Before returning to the boiler, steam must be cooled to liquid form in a condenser using cooling water. At Rawhide, cooling water is stored in Hamilton Reservoir – a reservoir that covers 500 surface acres, has a capacity of 16,000 acre-feet (af),¹ and consumes an average of three million gallons of water per day (approximately nine acre-feet/day) as evaporation into the atmosphere. Based on pumping data collected over the past 10 years, Platte River needs an average of 3,300 acre-feet of water annually to maintain the reservoir level. However, the annual amount of water pumped can range from 2,500 to 4,500 acre-feet of water. The pumping needed to replenish the water can vary, depending on many conditions including the evaporation rate (affected by air temperature, wind conditions, humidity, reservoir temperature, and similar factors), precipitation and plant performance. The evaporation rate of a cooling reservoir is higher than the natural evaporation rate in a regular lake or reservoir due to the increased water temperature. The annual average

¹ An acre-foot is 325,851 gallons, or the volume of water that would cover one acre of land to a depth of one foot.



temperature of Hamilton Reservoir is 70 degrees. The generally windy conditions at Rawhide also contribute to increased evaporation from Hamilton Reservoir. The water stored in Hamilton Reservoir is treated reusable effluent pumped from the City of Fort Collins' Drake Water Reclamation Facility via a 24-inch pipeline to Rawhide.

In addition to the water used for cooling, a separate water supply is needed when treated reusable effluent is unsuitable, such as for boiler water makeup, site service water, fire water and drinking water. This water is called process water and is pumped to Rawhide in a separate 10-inch pipeline directly from Horsetooth Reservoir in an amount of approximately 400 acre-feet per year. In the past, this amount had varied up to 950 acre-feet per year, but conservation efforts and equipment upgrades over the past several years reduced the amount of process water needed at Rawhide.

Water conservation is a key element of plant operations. All water used on-site is recycled as much as possible and used in other plant processes. The entire Rawhide site is a zero-discharge facility, meaning that the effluent and other plant water is used to extinction. The water that can be used at Rawhide needs to be fully consumable and reusable, which is a very specific type of water under Colorado water law.

2. Water supply sources

Windy Gap Project

Platte River is a participant in the Windy Gap Project, which delivers water from Colorado's Western Slope to the Front Range. Platte River originally owned a contract allocation of 160 units (out of a total of 480 units) of the Windy Gap Project and currently owns 110 units. One unit yields 100 acre-feet of water during years of full Windy Gap Project production. Platte River acquired its original allocation of Windy Gap water from three of its owner communities in 1974. These allocations included 40 units from the Town of Estes Park, 80 units from the City of Fort Collins and 40 units from the City of Loveland. The Windy Gap Project was constructed in the early 1980s and began delivering water in 1985.

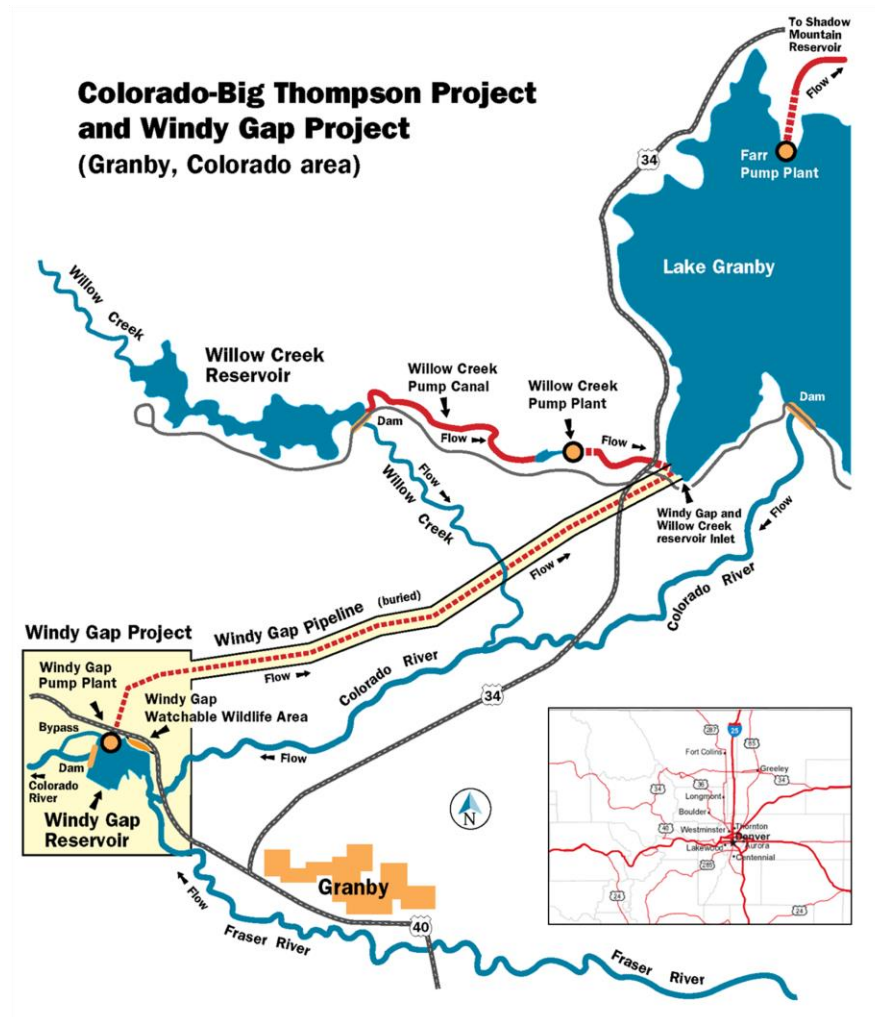
The Windy Gap Project consists of a diversion dam on the Colorado River, a 445 acre-foot reservoir, a pumping plant and a six-mile pipeline to Lake Granby. Windy Gap water is pumped to Lake Granby during high flow months, typically April-July. The water is stored in Lake Granby until needed and is subsequently delivered beneath the Continental Divide through the Adams Tunnel under a carriage contract with the U.S. Bureau of Reclamation (Reclamation) for delivery through the Colorado-Big Thompson (C-BT) Project's facilities, including Carter Lake and Horsetooth Reservoir. The Northern Colorado Water Conservancy District (Northern Water) and Reclamation jointly operate and maintain the C-BT Project (maps shown in Appendix A). Northern Water's Municipal Subdistrict (Municipal Subdistrict) is a separate conservancy district which was formed by several municipalities to build and operate the Windy Gap Project. The current Windy Gap Project participants are listed below, with a project map following.



Platte River

Power Authority

Windy Gap Project participants	Units	Acre-feet (max)	Percentage
Platte River Power Authority	110	11,000	22.9%
City of Longmont	80	8,000	16.7%
City and County of Broomfield	56	5,600	11.7%
City of Greeley	49	4,900	10.2%
City of Loveland	40	4,000	8.3%
City of Boulder	37	3,700	7.7%
Town of Erie	20	2,000	4.2%
Little Thompson Water District	19	1,900	4.0%
Superior Metropolitan District No. 1	15	1,500	3.1%
City of Fort Lupton	13	1,300	2.7%
City of Louisville	9	900	1.9%
Town of Berthoud	8	800	1.7%
Town of Frederick	7	700	1.5%
Town of Firestone	5	500	1.0%
City of Dacono	5	500	1.0%
Town of Estes Park	3	300	0.6%
City of Lafayette	3	300	0.6%
Central Weld County Water District	1	100	0.2%
Total	480	48,000	100%



Northern Colorado Water Conservancy District
<http://www.northernwater.org/waterprojects/CBTWindyGapmaps.aspx>

Windy Gap water is provided as a “contract allotment” from the Municipal Subdistrict. This means that Platte River does not own Windy Gap water rights but has a contractual right to require the Municipal Subdistrict to deliver Windy Gap water to the extent that it is available. For example, during full production years, Platte River’s 110 units can produce up to 11,000 acre-feet of Windy Gap water per year. But during years with less production the actual yield will be less. Annual yields may range anywhere from zero acre-feet per unit to 100 acre-feet per unit.

A benefit to Municipal Subdistrict allottees is that allotment contract holders are granted total consumptive use of their Windy Gap water. Allottees can use and reuse Windy Gap water



because it is imported water, not native to the South Platte Basin. After first use within subdistrict boundaries, participants may use, lease, transfer or sell the reuse or successive use rights for the use of return flows within or outside of subdistrict boundaries. This is the type of fully consumable water needed at Rawhide because it is a zero-discharge facility.

Typically, Platte River places an annual Windy Gap order of 5,000 to 6,000 acre-feet, of which 4,200 acre-feet is provided to the City of Fort Collins in exchange for reusable effluent pumped to Rawhide for cooling purposes. Platte River uses the remaining water for Rawhide's process water needs, augmentation requirements, contingency and evaporative losses in Lake Granby.

Cache la Poudre River decrees

In addition to its Windy Gap allotment, Platte River historically held two junior water rights on the Cache La Poudre River which, when in priority, allow Platte River to pump Poudre River water credits to Rawhide in its 24-inch pipeline, via exchange. Below are the specifics of the rights.

Flow rate (cubic feet per second, cfs) ²	Flow rate conversion to acre-feet (af)/day	Date of adjudication
1.60 cfs	≈ 3.17 af/day	Dec. 31, 1982
15.19 cfs	≈ 30.08 af/day	Dec. 1, 1977

Because these rights are junior (recent) in priority, the water is not available every year and cannot be counted on as a firm, reliable supply. In recent history, the Poudre River decrees have yielded anywhere between 0 and 2,800 acre-feet of water per year and have averaged 1,417 acre-feet over the past 10 years. In 2022, Platte River entered into an agreement with the City of Greeley to lease C-BT rental water from the 2023 water year through the 2030 water year in exchange for Platte River's transfer of its Poudre River rights. Platte River also retains use of the Poudre River rights until 2030.

3. Water agreements

Along with the contract allotments for Windy Gap water, Platte River is party to other agreements and decrees that are instrumental to the exchange, receipt and storage of cooling water. There are four key agreements that are fundamental to Platte River's water operations.

Reuse agreement

Platte River knew as it planned Rawhide that the generation station would require water for cooling and other purposes. Platte River recognized that the Front Range of Colorado is an arid region and from day one, a primary objective was to use water in a responsible and sustainable

² One cubic foot per second (cfs) equals 1.98 acre-feet/day.



way. In 1978, an innovative agreement was developed in which fully consumable and reusable water would first be used by the City of Fort Collins and the reusable return flows, in the form of treated effluent, would be pumped to Hamilton Reservoir at the plant and used for cooling purposes. This arrangement was intended to ensure that Rawhide's use of the water would have no detrimental effect on any existing water user or upon existing water supplies. This innovative use of reusable effluent was incorporated into the original plant design.

The Agreement for the Reuse of Water for Energy Generation (Reuse Agreement) is a three-way agreement between the City of Fort Collins (Fort Collins), Water Supply and Storage Company (WSSC) and Platte River. The Reuse Agreement and associated Decree W-9322-78 are based on a series of exchanges that use "new foreign water"³ supplied by Fort Collins and WSSC to produce 4,200 acre-feet of reusable effluent for Platte River's use each year. Under this arrangement, WSSC commits an estimated 4,581 acre-feet of its new foreign water and Fort Collins commits an estimated 3,055 acre-feet of its new foreign water to create a supply of new foreign water of up to 7,636 acre-feet annually for the agreement. The new foreign water is used by Fort Collins to generate reusable effluent return flows of 4,200 acre-feet that are provided to Platte River. To compensate Fort Collins and WSSC for this reusable effluent, Platte River transfers a total of 4,200 acre-feet of Windy Gap water to Fort Collins annually, and subsequently Fort Collins transfers 1,890 acre-feet of C-BT water from the Fort Collins C-BT account to WSSC. Included in WSSC's compensation is a 25% "processing charge" assessed on WSSC by Fort Collins for processing the water contributed by WSSC. In addition, there is an obligation to preserve the historic regimen of the Poudre River by assuring continued water flows equal to historic return flows. As described in Decree W-9322-78, one method to meet this obligation is to release 550 acre-feet, annually, to the Poudre River. This obligation is split between Fort Collins (467 acre-feet) and Platte River (83 acre-feet).

In addition to the 4,200 acre-feet of effluent provided from the Reuse Agreement, Platte River is also entitled to the return flows from the Windy Gap water supplied to Fort Collins. The estimated return flows from the use of the Windy Gap water are approximately 2,310 acre-feet, or an average of 55%. Consequently, the total water available to Platte River under the Reuse Agreement, prior to the Memorandum of Understanding (MOU) as described below, includes 4,200 acre-feet of reusable effluent plus approximately 2,310 acre-feet of Windy Gap return flows, for a total of 6,510 acre-feet.

Memorandum of understanding

When Anheuser-Busch, Inc., now Anheuser-Busch InBev (AB InBev), came to Fort Collins, it needed approximately 4,200 acre-feet of fully consumable water annually. This was, coincidentally, the same amount of water provided in the Reuse Agreement. Platte River and Fort Collins entered into an MOU with AB InBev in 1988. The MOU allows Fort Collins to

³ New Foreign Water is water introduced into the Cache La Poudre Basin from the Colorado and Michigan River Basins and whose return flows historically have not been used by others, as defined in the agreement.



designate up to 4,200 acre-feet of the Windy Gap water owed to Fort Collins under the Reuse Agreement for use by the AB InBev brewery. AB InBev uses a land application process to treat brewery waste and, therefore, does not send as much wastewater to Fort Collins' Drake Water Reclamation Facility as would an average Fort Collins customer. So, when Windy Gap water is designated to support AB InBev's treated water use, less effluent is produced for Platte River. Under the MOU, Platte River agreed to accept less Windy Gap return flows, approximately 800 acre-feet instead of the approximately 2,310 acre-feet of effluent expected under the Reuse Agreement. In return, AB InBev agreed to pay Platte River's annual variable operating costs on 4,200 acre-feet of Windy Gap water and other responsibilities if Windy Gap water is in short supply. AB InBev may also provide a substitute supply of reusable water instead of Windy Gap effluent. When AB InBev uses all of the 4,200 acre-feet of Windy Gap water, the net result is that under the Reuse Agreement and MOU Platte River receives approximately 4,200 acre-feet of reusable water plus 800 acre-feet of return flows from AB InBev, annually. When AB InBev does not use the full 4,200 acre-feet of Windy Gap water, AB InBev can proportionally reduce their 800 acre-foot return flow obligation. The remaining Windy Gap water not used by AB InBev is used by other Fort Collins customers and Platte River receives the generated return flows. Independent of the amount of Windy Gap water actually used by AB InBev under normal reuse operations, AB InBev is still responsible for paying the operating costs on the full 4,200 acre-feet of Windy Gap water. In most years, the total amount of reusable effluent available to Platte River is approximately 5,400 acre-feet per year, as shown in the table below. This meets Platte River's current cooling water needs for Rawhide with some reserve water available for future generation or other uses.

Average annual reusable effluent water available to Platte River

Reusable effluent water sources	Annual quantity (af)	Comments
Reuse agreement exchange	4,200	Contractual quantity
MOU: Windy Gap return flows	1,200	Estimate
Total reusable effluent available	5,400	Estimate

North Poudre storage agreement

Platte River has an agreement with the North Poudre Irrigation Company (North Poudre) that allows Platte River to use North Poudre's Fossil Creek Reservoir Inlet Ditch and temporarily store reusable effluent in Fossil Creek Reservoir when space is available and the use would cause no injury to North Poudre. This agreement, which expires in 2024, is necessary to avoid loss of the treated effluent when it cannot be pumped to Rawhide at the same rate that effluent is delivered by Fort Collins to the Drake Water Reclamation Facility. This agreement allows Platte River to store and withdraw treated effluent from Fossil Creek Reservoir. Upon the expiration of this agreement, Platte River would no longer be able to store and withdraw treated



effluent from Fossil Creek Reservoir, but would maintain the perpetual right to use the Fossil Creek Inlet Ditch. Platte River will seek to negotiate terms for a new storage agreement.

The water held by Platte River in Fossil Creek Reservoir is subject to loss when the reservoir spills which typically happens annually. To avoid uncompensated loss of this water, the Platte River board authorized the lease of unpumped reusable effluent, beginning in 1994. When Platte River leases water out of Fossil Creek Reservoir, a percentage of the proceeds are shared with North Poudre.

Soldier Canyon outlet agreement

Platte River has an agreement with Fort Collins for a portion of the capacity of the Soldier Canyon outlet from Horsetooth Reservoir. This agreement was entered into in 1981 for three cubic feet per second (cfs) of capacity to pump process water from Horsetooth Reservoir to Rawhide via the 10-inch pipeline. The agreement allows Platte River to connect to and operate a tap from the existing Fort Collins raw water delivery system, at a point on the system below where the system connects to the Soldier Canyon outlet from Horsetooth Reservoir. From that point, the water is pumped via Platte River's 10-inch pipeline from the tap to Rawhide.

Other water-related agreements

There are currently two additional water agreements of significance to Platte River.

Larimer County agreement – Strang Gravel Pit augmentation

The Larimer County agreement was entered into in 1993 and allows the county to receive up to 100 acre-feet of reusable effluent provided by Platte River under the MOU for augmentation of the county's Strang Gravel Pit, annually. The county notifies Platte River each year of the actual quantity of water needed for the augmentation requirement. While the request from the county in the agreement is for 100 acre-feet, the actual augmentation needs have typically been less than 12 acre-feet per year.

Carter Lake outlet agreement

The Carter Lake outlet agreement is part of the Southern Water Supply Project and is an allotment contract executed in 1994 that provides Platte River with a delivery capacity of up to 10 cfs⁴ from the Carter Lake outlet. In 2001, there was an additional allotment contract of 8 cfs of capacity, bringing the total capacity allotment to 18 cfs⁵. After assessing the potential water needs associated with a future generation resource on the southern end of the Platte River system, 13 cfs of outlet capacity was sold to other

⁴ The capacity of ten cfs would equate to 19.8 acre-feet/day.

⁵ The capacity of 18 cfs would equate to 35.7 acre-feet/day.



project participants and 5 cfs⁶ of capacity was retained. This capacity is not in use at this time but could be of value for either delivering water to a future generation resource on the southern end of Platte River's system or for leased Windy Gap water to be delivered out of Carter Lake in the future.

Water decrees

There are also several water rights and decrees that support how Platte River exchanges, delivers and stores water. Two of these are the Reuse Decree, which authorizes the exchanges necessary for the Reuse Agreement, and the Hamilton Reservoir Storage Decree, which allows the storage and operation of the 16,000 acre-foot cooling reservoir at the Rawhide Energy Station. The 24-inch pipeline that supplies water to Hamilton Reservoir has several associated exchange decrees which provide flexibility in pumping water through the pipeline. A complete list of agreements, rights and decrees is shown in Appendix B-1.

4. Current annual water use

Cooling water

Platte River currently uses an annual average of approximately 3,300 acre-feet of reusable effluent for cooling purposes. However, cooling water use at Rawhide can vary from 2,500 to 4,500 acre-feet, annually, depending on weather and operating conditions. Once the effluent is pumped to Rawhide it is further treated in a phosphorus removal facility at the plant before entering the cooling reservoir.

Augmentation water

Each year, approximately 200 acre-feet of additional reusable effluent is provided to Fort Collins and the Cache La Poudre River to meet augmentation requirements related to the Reuse Agreement, the Rawhide Energy Station property (Rawhide Creek), Platte River's headquarters property (headquarters well), and the Larimer County Augmentation Agreement.

Process water

Platte River pumps an average of 400 acre-feet of Windy Gap water directly from Horsetooth Reservoir to Rawhide via the 10-inch pipeline from the Soldier Canyon outlet. This water is used for process water at the plant (boiler water, site service water, fire water and drinking water). The treatment system for this water is considered a non-transient, non-community public water supply and is regulated by the Colorado Department of Public Health and Environment

⁶ The capacity of five cfs would equate to 9.9 acre-feet/day.



(CDPHE) under PWSID CO0235668. It is operated by certified Class A and B water treatment and Class 1 distribution system operators.

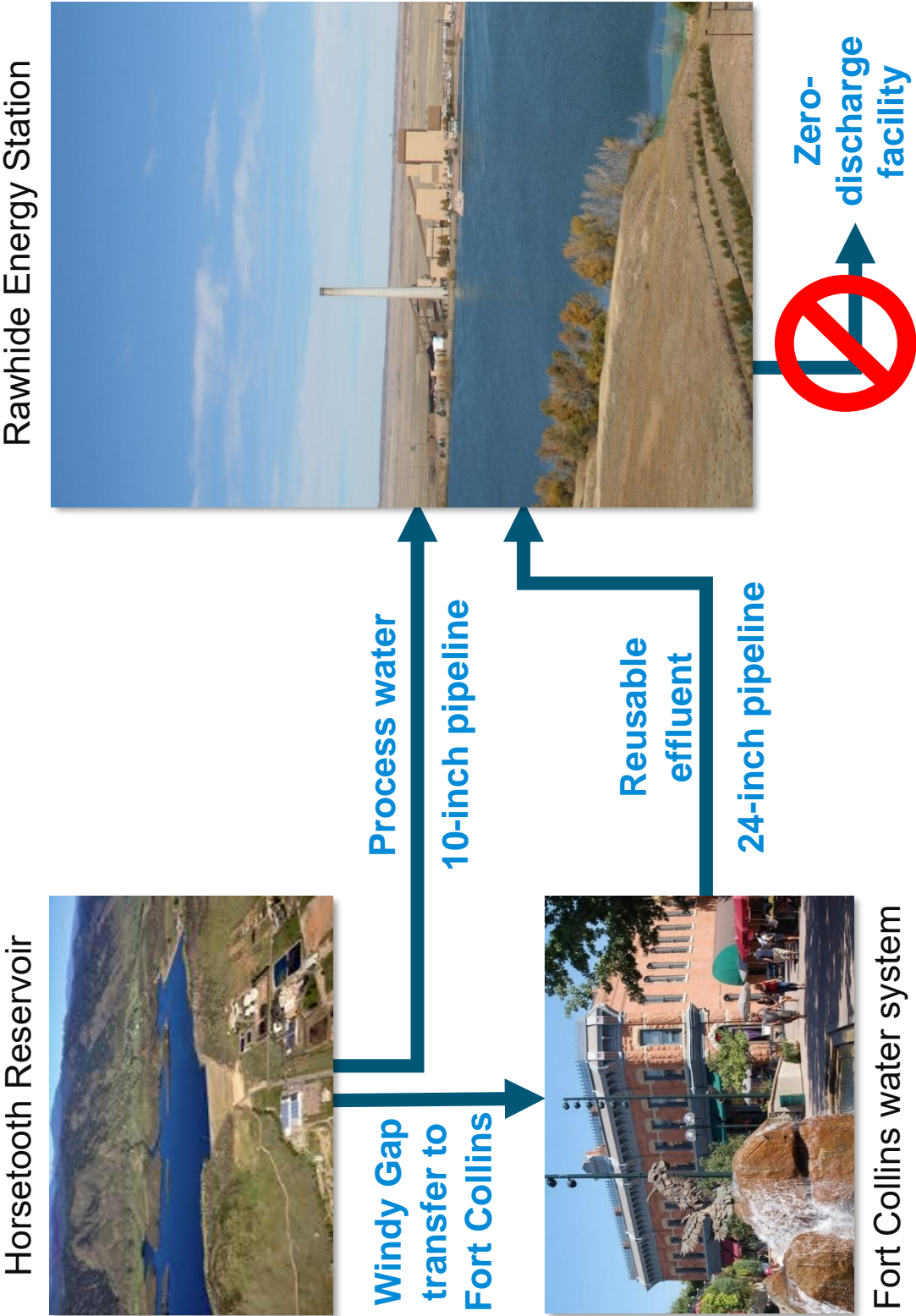
Platte River's water use summary

Platte River water use	Average annual quantity (af)	Type of water	Comments
Rawhide cooling water: 24-inch pipeline	3,300	Reusable effluent	Estimate based on a 10-year average – includes some 10-inch line water from Horsetooth Reservoir that spilled to reservoir
Augmentation requirements <ul style="list-style-type: none"> • Reuse Agreement (83 af) • Rawhide Creek (100 af) • HQ well (26 af) • Larimer County Agreement (≈12 af) 	200	Reusable effluent	Can vary up to 309 af. The quantity of 203 af is based on the 10-year average amount needed for the HQ well and Larimer County agreement.
Rawhide process water: 10-inch pipeline	400	Windy Gap	10-year average is 410 af (process water only) – does not include any water spilled to the reservoir
Total use	3,900		Total annual average

A diagram showing the general arrangement for Rawhide water supply and use follows.



Rawhide Energy Station water supply





5. Water costs – capital and operating expenses

The following table summarizes Platte River's average annual water costs. These figures do not include pumping costs through the 24-inch and 10-inch pipelines to Rawhide or the costs to treat water at Rawhide. The amounts shown are Platte River's typical costs, excluding the amounts allocated and charged to AB InBev.

Platte River's net annual water cost summary

Operating costs*	Typical annual amount	Comments
Windy Gap pumping cost	\$15k	Windy Gap project pumping costs
Windy Gap carriage costs	\$55k	Carriage costs for use of C-BT system to convey Windy Gap water to Horsetooth Reservoir
Windy Gap assessment costs (operations and maintenance expenses)	\$250k	Annual charges based on Windy Gap unit ownership
Windy Gap excess capacity charge/in-lieu borrowing charge	\$20k	Assessed on water delivered or exchanged to East Slope
Windy Gap indirect cost allocation	\$50k	Assessed annually based on Windy Gap unit ownership
Chimney Hollow reservoir indirect cost allocation	\$80k	Assessed annually based on Chimney Hollow capacity
Typical annual costs	\$470k	

* Platte River's net costs are shown, excluding the charges covered by AB InBev through the MOU.

Windy Gap Firming Project/Chimney Hollow Reservoir

In addition to operating costs, Platte River makes annual debt service payments for its share of Chimney Hollow reservoir. Payments averaging \$4.26M/year began in 2023 and are scheduled to continue through 2055, totaling \$140.6M over the course of the repayment period. The project was financed through a pooled financing arrangement with other project participants. The payment amounts could change based on final construction costs and the ability of other participants to meet their financing obligations.



Section II – Current activity

1. The critical nature of water supply to generation operations and Windy Gap Project performance

Platte River requires a minimum of 4,200 acre-feet of Windy Gap water per year to complete the water exchanges contemplated under the Reuse Agreement and MOU. Without Windy Gap water to exchange, Platte River receives a significantly reduced amount of reusable treated effluent from the Reuse Agreement and MOU. Platte River also needs approximately 400 to 600 acre-feet of Windy Gap water each year for direct pumping to Rawhide as service and process water. Both of these water sources are critical to the reliable operation of Rawhide. Historically, Platte River's annual Windy Gap order has been approximately 5,100 acre-feet, based on the following breakdown.

Platte River's average annual water requirements and contractual obligations

Windy Gap Project order components	Average annual quantity (af)
Reuse Plan, contractual requirement	4,200
Process water, 10-inch pipeline pumped to Rawhide	600
Windy Gap Project shrink (a 10% shrink factor is applied to Windy Gap balances in Lake Granby on March 31)	300
Total average annual order	5,100

Windy Gap water is the primary water source held by Platte River and needed every year. Although Platte River has always depended heavily on Windy Gap deliveries, during the early years of operation, the volumes delivered to the other project participants were relatively small. Platte River's annual Windy Gap water order of approximately 5,100 acre-feet was the largest order for many of those early years. As the Windy Gap Project began to be more fully used, delivery issues emerged. These issues arose not only from the junior nature of the Windy Gap water rights but also from limitations inherent in the C-BT Project through which Windy Gap water is stored and delivered.

There are two primary reasons that Windy Gap Project participants have not been able to rely on Windy Gap water deliveries. In dry years, the Windy Gap water decrees are not in priority and, thus, the Windy Gap Project will not pump. Counterintuitively, the Windy Gap Project also faces issues during wet years. There have been several years when the Windy Gap Project was in priority to pump but could not due to a lack of storage. Currently, Lake Granby is the only storage available for Windy Gap Project water. However, water conveyed and stored for the C-BT Project has priority over water conveyed and stored for the Windy Gap Project. Therefore, in wet years, when the C-BT system is full, there is no conveyance or storage capacity for Windy



Gap Project water. This prevents the Windy Gap Project from storing water in wet years that could be used in subsequent dry years. This lack of storage space during wet periods has occurred numerous times over the life span of the Windy Gap Project and as recently as 2015, 2016, 2017, 2019 and 2020. In addition, if Lake Granby spills due to wet year inflows and there is Windy Gap Project water in storage, it is the first to spill from the reservoir. This happened several times in the late 1990s, in 2011 and 2014, and, most recently, in 2019 when approximately 11,789 acre-feet of stored Windy Gap water spilled because the C-BT system filled and overflowed. It is likely that stored Windy Gap water will spill again in 2023.

Because the Windy Gap Project is unable to provide reliable yields in both wet and dry years, the project's current firm yield is zero. Firm yield is typically defined as the amount of water that can be delivered on a reliable basis, in all years, and is typically determined by yield in a critical drought period.

To address the issue of sporadic deliveries, the "Criteria for Integrated Operations of the Colorado-Big Thompson and Windy Gap Projects" (Integrated Operations), was developed in 1991. Through Integrated Operations, C-BT Project water may be delivered to Windy Gap participants in lieu of Windy Gap water. Replacement of C-BT Project water attributable to such in-lieu deliveries is required from Windy Gap water, pumped in subsequent periods. Windy Gap Project participants who request in-lieu deliveries may be required to incur additional expenses or to make other water available, if needed, to assure that C-BT Project beneficiaries are not injured by in-lieu deliveries.

In extremely dry years, even Integrated Operations may not allow the use of in-lieu Windy Gap water. This situation occurred during the 2002-2003 water year, when the C-BT system did not have enough unallocated reserve water in storage to support the in-lieu program. During that period Platte River had to look elsewhere for water and leased reusable water from a Front Range municipality. This water was used for the critical process water needs and enabled Rawhide Unit 1 to continue operations. Fortunately, a large snowfall in March 2003 provided enough water to enable the Windy Gap Project to pump and Windy Gap water became available. Had this snow event not occurred, it is uncertain how water would have been obtained for Rawhide operations.

The 2012-2013 water year was similar to the extreme dry year of 2002-2003, with no Windy Gap water available in the C-BT system but Platte River was able to obtain water using the in-lieu process. Had the reserves in the C-BT system been depleted, or if C-BT water was unavailable on the rental market, Integrated Operations would not have been an option. In 2012-2013, 2015-2017, 2019-2022 and again in 2023, Platte River and the City of Fort Collins were able to work out a special arrangement, during these Windy Gap short periods, to provide water for the MOU and cooling water. The 2012-2013 drought period would have been much more costly to Platte River had this agreement not been in place and had the Windy Gap Project not pumped in the late spring of 2013. This enabled Platte River to revert to normal



operations halfway through the year. But acquiring reusable water through the rental market can be uncertain, unreliable and, at times, very expensive.

Although rental water is easier to acquire in wet years, availability and pricing is subject to market volatility. Rental water is first sought from the owner communities. If water is not available from the owner communities, Platte River will reach out to others for leasing C-BT water. Recently, Platte River secured long-term C-BT lease agreements and rights of first refusal to lease C-BT water when available from other municipalities. These resources provide additional security for the process water needs at Rawhide.

The following table lists the amount of C-BT water that was used in lieu of Windy Gap water from 2013 through 2022.

Water leased for Platte River use 2013-2022

Water year	Total C-BT collateral water provided (acre-feet)
2013*	1,970
2014	1,071
2015*	1,162
2016*	2,196
2017*	2,114
2018	500
2019*	1,195
2020*	1,775
2021*	605
2022*	500

* Water short years which also included a special arrangement with Fort Collins for the Reuse Agreement.

During its lifetime, the Windy Gap water supply has proven to be less reliable than initially anticipated. Weather conditions such as severe drought or extreme snowpack limit Windy Gap water availability. Although Rawhide has never been curtailed due to a lack of water supply, continued dependence on weather events to secure Platte River's water supply is not a reliable long-term strategy.

In the original Windy Gap Project Environmental Impact Statement (EIS), the Windy Gap Project was estimated to yield 48,000 acre-feet per year. Because each unit of Windy Gap water is entitled to 1/480th of the annual yield of the project, a unit was expected to produce a yield of up to 100 acre-feet per year. The actual Windy Gap yield between 1985 and 2020 averaged approximately 13,200 acre-feet per year, versus 48,000 acre-feet per year, which is an average

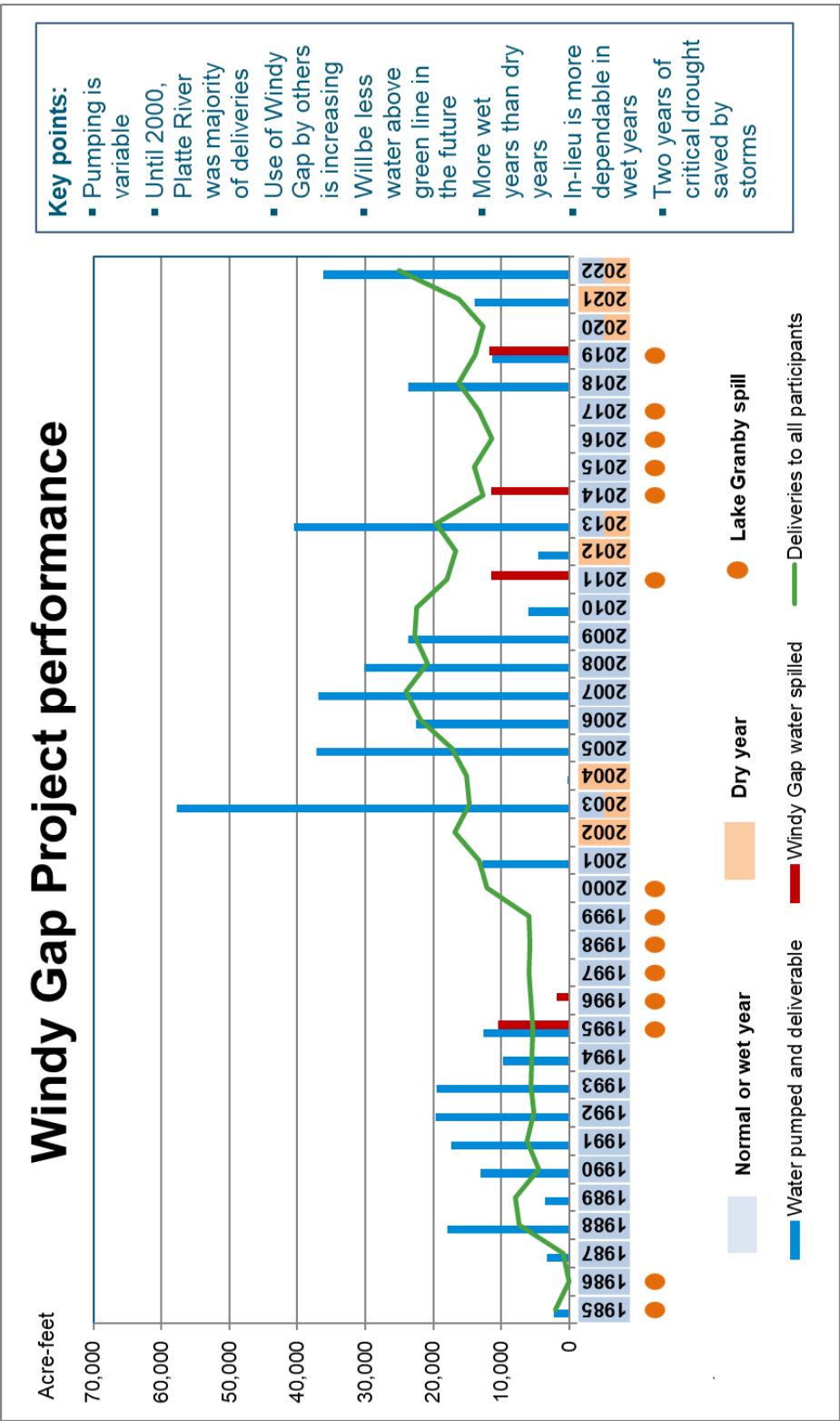


annual yield to the project participants of approximately 25 acre-feet per year for each unit, or 25% of the projected yield of 100 acre-feet per year. However, this actual average yield is somewhat limited because the participants' demand was less than available in supply in some years. Because of this, and as stated in the EIS for the Firming Project, a study was conducted to see what the average yield of the Windy Gap Project would have been if Windy Gap unit holders used all available Windy Gap water. In this scenario, it was calculated that the average long-term yield (using hydrology from 1950 to 1996) would have been approximately 55 to 60 acre-feet per unit. It is important to note, however, as stated above, that the firm yield of the project is still considered to be zero.

The chart on the following page shows the historical Windy Gap Project performance and the associated impacts of both wet and dry years, as discussed above.



Platte River Power Authority





2. History and status of the Windy Gap Firming Project/Chimney Hollow Reservoir Project

The Windy Gap Project was completed in 1985, and, as noted above, deliverability issues led to the adoption of the Integrated Operations protocols six years later. Participants recognized that Integrated Operations could provide relief, under certain conditions, but would be ineffective during periods of extreme weather. Participants began to discuss a firming project in the mid-1990s.

At that time, Platte River commissioned a study of water supply alternatives that confirmed that participation in the Firming Project was the most effective means to further secure Platte River's water supply. The Firming Project is a new reservoir, named the Chimney Hollow Reservoir, into which Windy Gap water would be pumped in wet years and stored for use in dry years when the Windy Gap Project does not pump. Such a storage arrangement would significantly improve operational reliability and reduce water cost volatility. In July 2000, Platte River signed an interim agreement with Northern Water and the Municipal Subdistrict to continue its participation in studies of the Firming Project.

Project milestones

2003: A total of 13 Windy Gap water participants began the federal permitting process for the Firming Project. Reclamation produced a report that compared 170 potential firming options.

2005: Reclamation, the lead agency for the project, published the "Purpose, Need and Alternatives" report. As part of the National Environmental Policy Act (NEPA) process, the Municipal Subdistrict engaged in a collaborative negotiation with west slope entities to develop mitigation and enhancement measures that would offset the environmental impacts of the Firming Project.

2008: Reclamation issued a draft EIS. This report outlined the purpose and need of the project, environmental impacts and proposed mitigation measures.

2009: The Municipal Subdistrict offered benefits to the west slope to facilitate project implementation.

2011: The mitigation and added enhancement measures were reviewed by the Colorado Wildlife Commission as well as the Colorado Water Conservation Board and were unanimously accepted. Following this, in November 2011, Reclamation published the final EIS.

2012: A 1041 land use permit was filed with Grand County. Grand County (west slope) and the Municipal Subdistrict's Board of Directors approved agreements to create improvements to the Colorado River. This 1041 permit was approved by Grand County on Nov. 20, 2012. The



Northern Water board and Municipal Subdistrict board accepted the permit, in principle, on Nov. 26, 2012. This permit includes an intergovernmental agreement (IGA) that ensures enhancements agreed to during the EIS process will be implemented.

2014: Reclamation issued its Record of Decision (ROD) and signed a carriage contract to transport water to Chimney Hollow Reservoir. Negotiations on the carriage contract, which is an agreement that outlines the terms and conditions for Windy Gap water to be transported through the C-BT system and stored in Chimney Hollow Reservoir, began in late 2013. On Dec. 19, 2014, officials from Northern Water, Northern Water's Municipal Subdistrict and Reclamation signed a new carriage contract and the ROD. The ROD identifies and confirms Chimney Hollow Reservoir as the Firming Project's preferred alternative. The new carriage contract will apply to all Windy Gap water, including the proposed Firming Project water, and the term of the contract has been extended to 2054 which was previously set to expire in 2025. This adds a level of certainty to the entire project for years to come. The ROD was the final approval needed for the NEPA process. The signing of the ROD and the new carriage contract were major milestones for the Firming Project.

2016: The Municipal Subdistrict submitted the application for the 401 water quality certification to the State Water Quality Control Division in late 2015, and the final 401 Certification (certification that the project will comply with applicable water quality standards) was awarded on March 28, 2016.

2017: The U.S. Army Corps of Engineers approved a Section 404 (wetlands mitigation) permit for the project in May 2017. This was the last major federal permit required for construction. In October of 2017, a lawsuit was filed in the U.S. District Court challenging the adequacy of the environmental reviews and approvals issued by Reclamation and the Army Corps of Engineers. While not named in the original lawsuit as a respondent, the Municipal Subdistrict intervened in the case to be directly involved.

2019: Final project design and the associated design review were completed in February. In general, the review team was highly complimentary of the design and offered only minor comments during the review process. After a thorough selection process, a general contractor was selected for construction of the Chimney Hollow Reservoir Project and pre-construction activities began.

2020: In February 2020 the Colorado Division of Water Resources Dam Safety Division issued the final construction approvals for construction for both the main dam and the saddle dam. In August 2020 the water rights decree was formally stipulated by the Division 5 (Colorado River Basin) water court.

To incorporate the Firming Project into the operations of the Windy Gap system, the original water right decree for the Windy Gap Project required an amendment. As part of the process to amend the water right, objectors were given the opportunity to raise any issues or concerns that



they had with the project from a water rights perspective. The IGA that the Municipal Subdistrict and several west slope parties agreed to as part of the 1041 permit process helped ensure fewer objectors to the application. Within the IGA, the parties agreed to incorporate several mitigation and enhancement projects into the overall Firming Project. In exchange, the west slope entities agreed to support the proposed project and the amendment to the water rights. After incorporating input from the west slope parties and navigating the legal process, the water rights amendment was completed in mid-2020.

The Municipal Subdistrict contracted PFM Financial (PFM) to provide municipal advisor (MA) services and investigate the various financing options available for the project. In addition to acting as MA for the overall project, PFM also provided MA services to individual project participants, including Platte River, although these services are provided through a different office than those of the overall project MA team. The primary options that PFM investigated include individual and group financing.

In November 2020, allotment contracts between Northern Water and the project participants were finalized and signed. As part of the contract, each participant was asked to indicate a preliminary plan for project financing. However, given the uncertainty of the project schedule at the time, the contract stipulated that participants would be allowed to make changes to their designations during the final project financing process. Based on the information received from PFM and an internal staff analysis, Platte River initially elected to finance its portion of the project through \$27 million of cash contributions and the remainder through the group financing option.

In December 2020, the court dismissed the 2017 federal lawsuit. The court concluded that Reclamation and the Army Corps of Engineers complied with federal law with respect to the project EIS and the associated ROD.

Throughout 2020, the project construction team worked to complete as many pre-construction activities as possible in advance of full project construction. These activities focused on value engineering initiatives, material submittals and approvals, and the fabrication of long-lead items for construction.

2021: In February 2021, the plaintiffs appealed the federal court ruling that affirmed the adequacy of the project EIS. In March 2021, a court-ordered mediation session took place to discuss a potential settlement that would allow the project to move forward. Ultimately project participants agreed to a settlement that included a \$15 million payment in exchange for the plaintiffs dismissing the appeal and ending all legal action against the Firming Project. The payment is held by a local foundation in Grand County in a donor-advised fund and can be used only for projects to improve aquatic habitat, riparian habitat, and water quality in the Three Lakes system and the upper Colorado river basin.



Once the federal lawsuit ended, focus shifted toward starting construction as soon as possible. After Northern Water negotiated a final contract extension with the general contractor, project participants were asked to finalize their project financing plans. Platte River considered cash payments, self financing, and group financing options and combinations of these options. Ultimately, Platte River chose to finance 100% of its project share through the group financing managed by the Municipal Subdistrict. This included a low-cost loan from the Colorado Water Conservation Board and a tax-free municipal bond sale, which was completed in August 2021.

In August 2021 project participants and the Municipal Subdistrict held a formal groundbreaking event to commemorate the start of construction and issued a notice to proceed to the contractor on August 16. The contractor made significant progress throughout the project site during the remainder of 2021. The ground at the main dam core was excavated to bedrock and foundation preparation activities began. The contractor began to excavate saddle dam site and build the saddle dam access road, including culvert installation and grading. Development of the on-site project quarry included regular blasting and overburden clearing as the contractor worked to expose the higher-quality rock needed for main dam construction. At the end of 2021 the project was on schedule, with the most significant cost impacts due to litigation delays.

2022: In 2022, construction activity focused on the main dam site. Across the footprint of the dam, the contractor excavated native soil to expose bedrock and removed rock along the dam centerline until reaching material suitable for construction of the dam core. Upward progress of the dam started with the placement of a concrete plinth that is anchored to the bedrock. As the plinth was completed, the contractor drilled a network of holes deep into the bedrock and injected them with grout. The resulting grout curtain will seal the reservoir against subsurface leakage beneath the dam. On top of the plinth, placement of the asphalt core and rockfill embankment were started toward the end of 2022. In the east abutment, significant progress was made in the inlet/outlet tunnel where the downstream portal, downstream tunnel and valve chamber were excavated. Excavation for the Carter Lake interconnection, where the Chimney Hollow Reservoir system ties into the Carter Lake system, also began in 2022. Finally, the contractor placed the initial sections of the main dam spillway.

Elsewhere on the site, access roads for the saddle dam and Larimer County open space areas were completed, including placement of a new bridge over the C-BT penstocks. Further up the C-BT system, a new valve was placed in the Bald Mountain tunnel that will divert water from the C-BT pipeline and into the Chimney Hollow conduit – a 72-inch pipeline that will be used to fill Chimney Hollow Reservoir. Approximately 30% of the pipeline was completed in 2022.

3. Next steps for the Firming Project/Chimney Hollow Reservoir Project

In 2023, anticipated project milestones include:

- Complete main dam foundation (plinth and grout curtain)
- Build main dam embankment to approximately 180 feet tall



- Complete spillway except stilling basin and outlet channel
- Complete tunneling excavations, ground support and downstream lining
- Complete saddle dam foundation, grouting and test fill
- Continue installation of Chimney Hollow conduit
- Complete valve house foundation

4. Firming Project/Chimney Hollow Reservoir Project schedule

Chimney Hollow Reservoir construction is anticipated to last four years. The reservoir is expected to be complete by the fall of 2025 with initial filling in the spring of 2026.

5. Determination of firming storage requirements

The Municipal Subdistrict conducted studies in conjunction with Boyle Engineering, based on each participant's Windy Gap Project allocation, projected Windy Gap water use, the historical hydrology of the C-BT system and Windy Gap Project supply over the past 46 years. In addition, Platte River contracted Ecological Resource Consultants, Inc., to identify Platte River's optimal firming level. This study revealed that 13,000 acre-feet of firming storage would provide the necessary ratio of storage-to-demand to meet the annual requirement of Windy Gap water in a reliable manner for a typical year. After further internal evaluation, Platte River staff recommended a reduction in Firming Project participation. On April 16, 2008, Platte River staff recommended to the board of directors that the Firming Project storage level be reduced to 12,000 acre-feet. This level of firming was thought to provide a balanced approach to meeting operational needs while still positioning Platte River to fulfill contractual obligations at reduced costs, based on historical hydrology. The board of directors accepted this recommendation and Platte River's share of the firming storage level was reduced to a participation level of 12,000 acre-feet, providing a firm supply of approximately one-third that amount.

In August 2014, Ecological Resource Consultants evaluated four different levels of storage, ranging from 13,000 acre-feet up to 16,000 acre-feet, as only data for 12,000 acre-feet had previously been modeled. Four levels of Windy Gap ownership were also evaluated including 100, 120, 140 and 160 units. Additionally, a separate analysis was conducted outside of the Firming Project model to determine the demand that could be met under a synthetic two-year and three-year drought, assuming that no Windy Gap water would be pumped for two and three years in a row, respectively. Probability plotting was used to estimate the frequency of these synthetic droughts.

Based on the model results, as well as internal staff research, it became apparent that a participation level of 12,000 acre-feet would not have met the 5,100 acre-feet/year current water resource needs/obligations (listed in § II.1). In July 2016, staff recommended increasing Firming Project participation to a minimum of 14,000 acre-feet, up to an optimal level of 16,000 acre-



feet. The board of directors approved participation in the Firming Project up to 16,000 acre-feet. In 2017, Platte River's participation increased to 14,136 acre-feet and, in March 2018, Platte River reached a final participation level of 16,000 acre-feet.

In 2020, Platte River updated the model following the announcement of the planned 2030 Rawhide Unit 1 retirement, and in light of changes in the overall distribution of Windy Gap unit ownership and Firming Project storage levels. This updated model analysis also incorporates updated operational parameters of the Firming Project which have evolved since the 2014 analyses. The highlights of the model analyses are shown below.

Between the initial study and the update, Platte River completed a series of transactions that decreased its overall Windy Gap ownership from 160 units to 120 units. Consequently, the revised study included ownership levels ranging from 120 units down to 60 units and included Firming Project storage levels between 8,000 acre-feet and 16,000 acre-feet. Hydrologic scenarios included the historical data from the Windy Gap Project site as well as drought conditions where water does not pump for two and three consecutive years. For each modeled combination of unit ownership, storage and drought conditions, the annual firm yield was determined. For drought scenarios, the firm yield represents the amount of water available in each year of the drought period.

Model results indicate that Platte River's current Firming Project participation level of 16,000 acre-feet provides a firm supply for current operations at Windy Gap unit ownership levels of 80 units and above for historic hydrologic conditions as well as for the one in-57-year drought (two consecutive years of no Windy Gap pumping). The one-in-250-year drought (three consecutive years of no Windy Gap pumping) would result in reduced firm yields and would likely require modified water operations, which could include less pumping to Hamilton Reservoir or leasing additional effluent for pumping. The complete model analysis summary memo and the entire table which shows all the scenarios of firmed water at various storage levels and various ownership units is provided in Appendix B-3.



Firming Project model analysis (based on 60-120 units)*

Firming Project storage (af)	Windy Gap unit ownership level	Annual firming Windy Gap (af) <i>Historic hydrology: 1 in 50 years</i>	Annual firming Windy Gap (af) with two years of no pumping <i>Occurrence interval: 1 in 57 years</i>	Annual firming Windy Gap (af) with three years of no pumping <i>Occurrence interval: 1 in 250 years</i>
8,000	60 - 100	3,050 - 3,415	2,875 - 2,985	2,060 - 2,140
10,000	60 - 100	3,545 - 4,150	3,365 - 3,735	2,410 - 2,675
12,000	60 - 100	3,955 - 4,750	3,910 - 4,445	2,800 - 3,180
14,000	100 - 120	5,265 - 5,595	4,970 - 5,230	3,560 - 3,745
16,000	60 - 120	4,410 - 6,110	4,410 - 5,755	3,575 - 4,120

* All scenarios are based on the provisions of the updated carriage contract that includes prepositioning, diversion shrink, carryover shrink and environmental impact mitigation measures.

Looking forward, Platte River has begun to assess the water needs associated with its future energy generation mix. Upon the retirement of Rawhide Unit 1, the total water needs at the Rawhide site will likely change. However, the magnitude and direction of that change will be unclear until a future generation mix is established. As shown in Appendix B-2, potential water demands for future generation can vary significantly depending on the generation type. As Platte River moves toward implementing a new resource mix, the Firming Project will ensure that water supply will not be a limiting factor in its planning. Ultimately, Chimney Hollow Reservoir will change the total Windy Gap Project's reliable annual total yield from 0 acre-feet of water to about 30,000 acre-feet, thus improving the reliability of water deliveries to participating entities. There is a significant value to a firm and reliable water supply, whether it is for immediate needs or future needs.



6. Firming Project participants

Firming Project participants	WG units	Storage (af)	Percentage of project	Ratio of volume/units Years to fill*
Broomfield	56	26,464	29.4%	4.7
Platte River Power Authority	110	16,000	17.8%	1.5
City of Loveland	40	10,000	11.1%	2.5
City of Greeley	49	9,189	10.2%	1.9
City of Longmont	80	7,500	8.3%	0.9
Town of Erie	20	6,000	6.7%	3.0
Little Thompson Water District	19	4,850	5.4%	2.6
Superior Metropolitan District No. 1	15	4,726	5.2%	3.2
City of Fort Lupton	13	1,190	1.3%	0.9
City of Louisville	9	2,835	3.1%	3.2
City of Lafayette	3	900	1.0%	3.0
Central Weld County Water District	1	346	0.4%	3.5
Total	415	90,000	100%	Avg = 2.56

* Based on the assumption of full Windy Gap Project pumping and allocation.

7. Firming Project costs

At the time of project financing the Municipal Subdistrict estimated the overall Firming Project costs at \$692.3 million, which can be separated into two main parts – Chimney Hollow Reservoir construction and owner's costs. This is referred to as the Initial Costs and Expenses (C&E) estimate. Chimney Hollow Reservoir construction costs, including additional costs for delays, are estimated at \$508.5 million. The remaining \$183.8 million in owner's costs include planning and design, construction management and engineering, cost contingencies, and mitigation and enhancements, which at \$43.2 million were the largest owner's expense. Platte River's share of the Initial C&E costs, based on 16,000 acre-feet of storage, is estimated at \$123.1 million, or 17.8% of the total project cost.

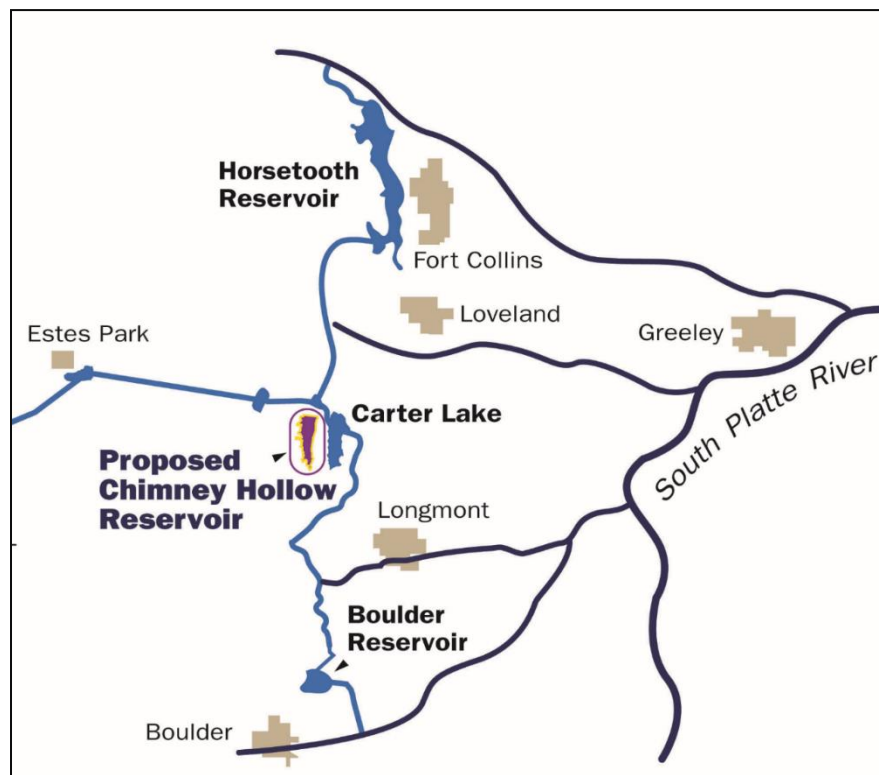
With the project approaching the halfway point of the construction timeline, Northern Water staff members are developing estimates for Completion Costs and Expenses (Completion C&E), a component of the allotment contract related to project completion. While the final estimate remains uncertain, initial indications are that additional funding will be needed for final construction costs as well as required environmental mitigation and enhancement projects. For the participants, formal notification of Completion C&E is anticipated in mid-2024, with funds



secured by early 2025. Financing options will be similar to those included for the initial project costs and could include either self-funding or group financing. Staff will work closely with Northern Water to update the board as the cost estimates become more certain.

8. Operation of the firming reservoir

Before completion of Chimney Hollow Reservoir, the Municipal Subdistrict and participants will develop a set of operating guidelines. The Municipal Subdistrict and participants currently expect Chimney Hollow Reservoir to fill and discharge water via gravity flow. However, a pumping scenario that includes Flatiron Reservoir has been considered as well. The operating guidelines will cover routine operation, scheduling water in and out of Chimney Hollow Reservoir, and evaporation/seepage loss calculation methodology. A general map of the proposed Chimney Hollow Reservoir follows with a more detailed map shown in Appendix A-6.



Northern Colorado Water Conservancy District
<http://www.northernwater.org/waterprojects/CBTWindyGapmaps.aspx>



Section III – Water policy and operations

Platte River operated without a formal water policy in place until 2017. Instead, water management was guided by a series of board resolutions that laid out a general approach for securing water resources, future planning and conducting water transactions.

The Platte River board provided direction on issues through adopting resolutions regarding water leases or leasing Windy Gap units and periodically approving continued participation in the Firming Project. In general, three important principles were evident from board action. These principles included: (a) securing and protecting a water supply sufficient for Platte River's current operational needs, (b) planning for Platte River's future water supply needs while contemplating the future needs of the owner communities, and (c) leveraging the value of water resources through leasing unpumped reusable effluent water and leasing Windy Gap units.

1. Background

a. Securing and protecting a water supply for Platte River's operational needs

As described in § II.1, Platte River currently needs approximately 5,100 acre-feet of water per year. This water supply meets operational needs when water and weather conditions are normal. In years with extreme wet or dry conditions, the water supply needs have been met either through the leverage achieved from the Windy Gap units (because Platte River's pro-rata allocation is higher based on contract allotment ownership level) or through alternative arrangements. Participation in the Firming Project will provide additional supply security.

b. Planning for Platte River's future water supply needs

The primary future consideration for water at Platte River is the water needed for future generation resources and what the resource plans forecast for an overall generation portfolio. Platte River also considers future uncertainties such as climate impacts, future legislation and environmental regulation.

Water requirements for future generation resources.

A wide variety of power generation methods, ranging from emerging technologies to mature processes, could satisfy Platte River's strategic initiatives and future load growth. Over the past decade, several shifts in the energy industry have arisen that could influence the mix of future resources used by electric utilities to produce power. These include:

- Potential federal regulation of greenhouse gases
- Decreases in the price of solar generation and wind resources
- Sustained low natural gas prices



- Advancements in energy storage
- Growth of distributed energy resources

Platte River has considered a variety of generation technologies in recent planning efforts and through work on its integrated resource plans. In general, most future generation sources would require considerably less water than traditional coal-fired units. More specific research on future resource water requirements will be conducted but the identified reserve of approximately 4,060 acre-feet is expected to be more than adequate to meet the needs of any future resource that Platte River might consider.

General reference data for water consumption for various types of generation is shown in Appendix B-2.

Water for future uncertainties. Many potential uncertainties face Platte River in the future, such as new legislative or regulatory impacts, climate impacts, new water agreements or changes to existing water agreements, water usage, water rights appropriation and others. Looking forward, regional water partnerships, resiliency and the concept of a firm water supply become even more important. Platte River's participation in the Firming Project and the water exchange agreement with the City of Greeley are both prime examples of working toward a sustainable water supply and resilient infrastructure.

c. Leveraging the value of water resources through leasing

It has been the practice of Platte River to maximize the value of water resources through leasing activities within limits defined by the board.

Unpumped reusable effluent water. The most frequent type of water lease Platte River enters into is for unpumped reusable effluent generated under the Reuse Agreement and MOU. The amount of unpumped reusable effluent can vary but averages approximately 1,900 acre-feet annually, based on a typical supply of 5,400 acre-feet and a typical use of 3,500 acre-feet of effluent pumped to Rawhide plus augmentation requirements. Platte River does not deliberately accumulate unpumped water but there is inevitably some water accumulated each year that either cannot be pumped or does not need to be pumped, except in water-short years. Variations in unpumped reusable effluent occur based on the availability of water under the Reuse Agreement, the amount of return flows from Fort Collins and AB InBev and the amount of water needed at Rawhide to maintain the level in the reservoir. The unpumped effluent is stored in Fossil Creek Reservoir, when space is available, and can be stored to pump later. Platte River may also lease available portions of the reusable effluent.



Summary of Platte River's reusable effluent supply and use

Water supply and use – reusable effluent	Annual quantity available (af)	Annual quantity used (af)	Total (af)
Supply			
Reuse Agreement	4,200		
Windy Gap return flows	1,200		
Total supply	5,400		
Use			
Pump to Rawhide		3,300	
Augmentations		200	
Total use		3,500	
Approximate unpumped reusable effluent (annual)			1,900

*This table reflects normal water use and availability.

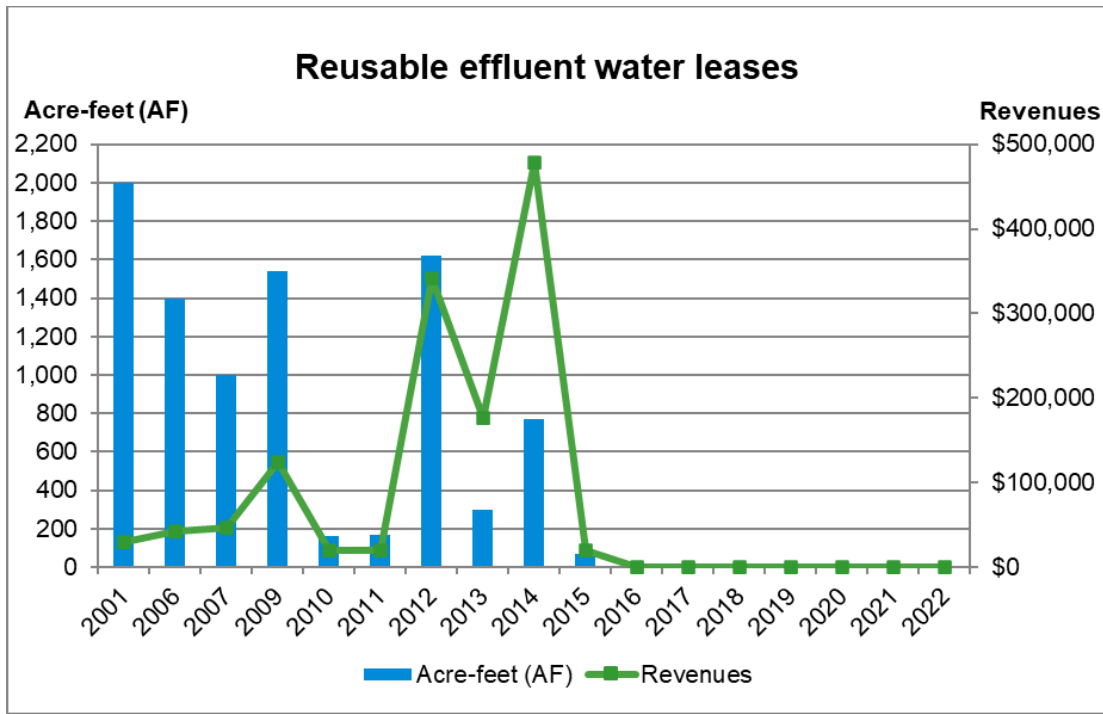
Historically, reusable effluent has only had a few markets with modest value, mainly agriculture and industrial augmentation, and for a period, this water gained value for use by the oil and gas industry. Recently, the oil and gas lease market slowed down and lease opportunities have again been focused on more traditional entities.

Platte River has leased reusable effluent to several entities within the northern Front Range of Colorado and actively pursues lease opportunities when unpumped effluent is available. Since 1997, Platte River has leased almost 9,000 acre-feet of unpumped reusable effluent. Due to the extreme drought conditions in early 2013, Platte River temporarily ceased leasing reusable effluent to others but did trade reusable effluent for C-BT water that was used to produce in-lieu Windy Gap water to be pumped to Rawhide as process water. Leasing unpumped effluent resumed in 2014 but stopped again beginning in 2016 due to a lack of Windy Gap water. The following table provides a history of the leases and their associated revenues. One note of significance is the period when there was a high demand in the region for reusable water for use by the oil and gas industry, during the 2012 to 2014 water years. In 2012, Platte River was approached by an oil and gas water provider and was presented with a leasing opportunity. With board approval, Platte River successfully entered into four leases of unpumped reusable effluent water for oil and gas development. The revenues from leasing unpumped effluent for all markets are itemized in the following table and chart.



Platte River's reusable effluent water leases to others – all markets

Windy Gap year	Volume (af)	Unit price (\$/af)	Total revenues	Comments	Total annual volume (af)	Total annual revenues
1997	9	\$30	\$270		9	\$270
2001	2,000	\$15	\$30,000		2,000	\$30,000
2006	1,400	\$30	\$ 42,000		1,400	\$42,000
2007	1,000	\$47	\$ 47,000		1,000	\$47,000
2009	1,538	\$81	\$124,578		1,538	\$124,578
2010	163	\$119	\$19,397		163	\$19,397
2011	167	\$119	\$19,873		167	\$19,873
2012	121	\$251	\$30,371		1,621	\$341,771
2012	840	\$300	\$252,000	Oil & gas		
2012	660	\$90	\$59,400	Ag/oil & gas partnership		
2013	97	\$252	\$24,444		297	\$176,844
2013	200	\$762	\$152,400	Oil & gas		
2014	61	\$300	\$18,300		631	\$452,640
2014	570	\$762	\$434,340	Oil & gas		
2015	67	\$300	\$20,100		67	\$20,100
2016-2022	0	n/a	\$0		0	\$0
Totals					8,893	\$1,274,473



Lease of Windy Gap units. The second and less frequent type of lease is the lease of Windy Gap units. This type of lease involves first-use Windy Gap water that would not otherwise be used for Platte River operations. The amount of water that each unit produces varies from year to year depending on conditions. It could range anywhere from 0 acre-feet up to the full yield of 100 acre-feet per unit.

Operationally, the Windy Gap units are useful to Platte River from a leverage perspective. Without the Firming Project, the firm yield of Windy Gap water is considered to be zero. But because Platte River owns 110 units of Windy Gap out of a project total of 480 units, it is entitled to 23% of all Windy Gap water available annually, up to the amount of the Platte River order. In years when Windy Gap water is in short supply, this “leverage” helps Platte River meet its annual order.

Despite the benefits of leverage, there is a cost associated with the ownership of the Windy Gap units. Therefore Platte River tries to lease these units to help offset the operational costs of the units and future water related capital costs. Depending on the number of units leased, there is some loss of leverage to consider when deciding whether to lease Windy Gap units.

With the approval of the board, Platte River leased 10 Windy Gap units to a Front Range municipality from 2013 - 2017.



Section IV – Current water policy

First developed in December 2016 and updated in February 2020, Platte River's board-approved Water Resources Policy directs and authorizes the general manager/CEO to:

1. Maintain adequate water supplies for all existing and projected future operations.

- a. Maintain Platte River's participation level in the Windy Gap Firming Project at a storage level of 16,000 acre-feet.
- b. Lease water required for Platte River operations and contractual commitments when needed.
- c. Participate in resource planning efforts to incorporate planning for future water needs, with considerations for type and location of future generation resources.
- d. Continue to research and explore alternative water supply opportunities.
- e. Review and modify existing water agreements and pursue new agreements to improve operations, increase reliability and maximize the value of water resource assets.

2. Manage water as an asset.

- a. Lease water to others when available (effluent or Windy Gap units).
- b. Sell Windy Gap units (maintain a minimum level of 100 units) – compensation may be monetary, may involve storage rights, or may involve some other consideration that provides value to Platte River.
- c. Maintain a minimum of five cfs of Carter Lake Outlet Capacity (may lease as long as five cfs can be made available for operational needs when required).

The complete Water Resources Policy document is included in Appendix C for reference.

This Water Resources Policy positions Platte River to pursue activities that will increase the reliability of water deliveries to meet contractual commitments as well as the operational need of the organization. In addition, it enables Platte River to maximize the operational and economic value of its water resources.

In late 2017, Platte River completed a series of transactions that increased its Firming Project capacity from 12,000 acre-feet to 14,136 acre-feet; sold 23 Windy Gap units; secured short-term C-BT lease water options; and generated total income revenue of approximately \$39 million. In



early 2018, Platte River was able to acquire additional storage which resulted in a total and final participation level of 16,000 acre-feet.

In 2019, Platte River sold 17 additional Windy Gap units and 13 cfs of surplus Carter Lake outlet capacity. These agreements generated additional revenue of approximately \$37 million, which helped offset future project costs, secure C-BT water lease options, and provide added water security until the Firming Project is complete.

In 2020, Platte River completed two transactions, each of which included the sale of five Windy Gap units at a price of \$13.5 million. The combined total of \$27 million of revenue was earmarked as the cash contribution toward the Firming Project.

Altogether, these water transactions have provided Platte River with the additional storage capacity needed to reduce operational risks during periods of drought. They have generated revenue of approximately \$103 million to offset project costs and strengthened relationships and partnerships that Platte River has within the Northern Colorado water community.

As part of the water supply planning process, Platte River began working with the Burns & McDonnell engineering firm in late 2018 to explore options for additional raw (untreated) process water storage at Rawhide. Recent maintenance operations at the Soldier Canyon outlet and aging infrastructure highlighted Platte River's need for extra on-site storage. The study and the project alternatives report were completed in early 2020. But with the announcement of the retirement of Rawhide Unit 1 by 2030, Platte River might not need this project. We will retain the report in case Platte River needs additional on-site water storage in the future.

In 2022, Platte River completed a transaction with the City of Greeley to lease C-BT rental water from the 2023 water year through the 2030 water year in exchange for Platte River's transfer of its Poudre River rights. Platte River also retains use of the Poudre River rights through 2030. For Platte River, the C-BT lease water secures its estimated process water needs through the retirement of Rawhide Unit 1. The agreement is a notable example of a mutually-beneficial regional water partnership.

As part of the water court diligence process in 2022, Platte River relinquished its remaining conditional exchanges associated with the 24-inch pipeline. These exchanges were contemplated as contract exchanges of water between Platte River and entities owning structures that intersect the 24-inch pipeline, but they have never been used. A study was conducted by an outside consultant, and with further review from Platte River staff, it was determined that these potential exchanges were not needed for current or future Platte River operations. Should a future opportunity be identified, exchanges of this type can be accomplished through mutual agreement.



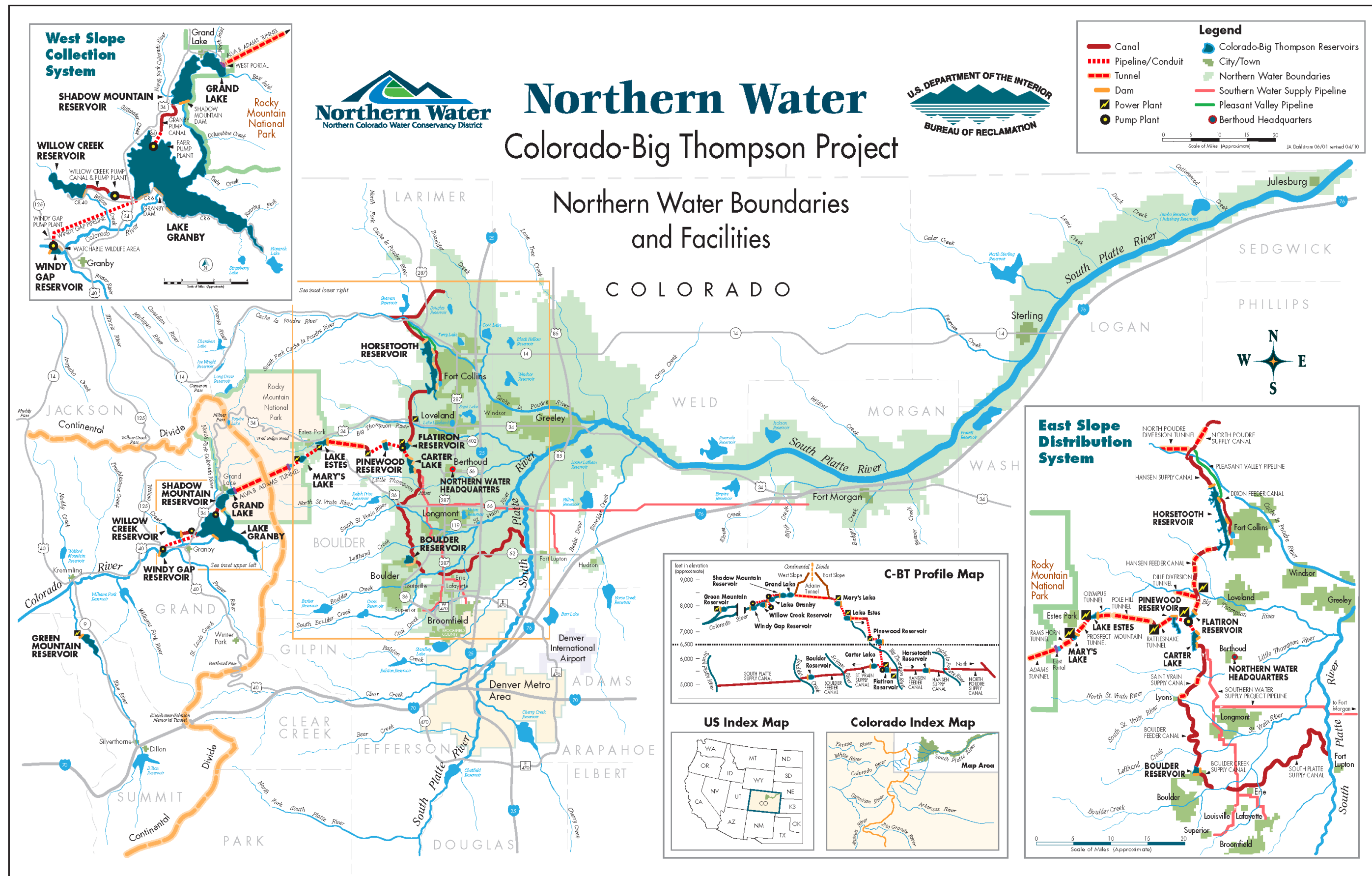
Section V – Going forward

Since developing the original Water Resources Reference Document in 2016, Platte River has actively assessed, managed and optimized its water resources portfolio. The most notable result of this effort was the development and adoption of the Water Resources Policy and the resulting series of transactions that included the sale of Windy Gap units and the acquisition of additional storage in Chimney Hollow Reservoir to reach a final participation level of 16,000 acre-feet. This combination of assets gives Platte River a more balanced and firm water resources portfolio necessary for reliable operations.

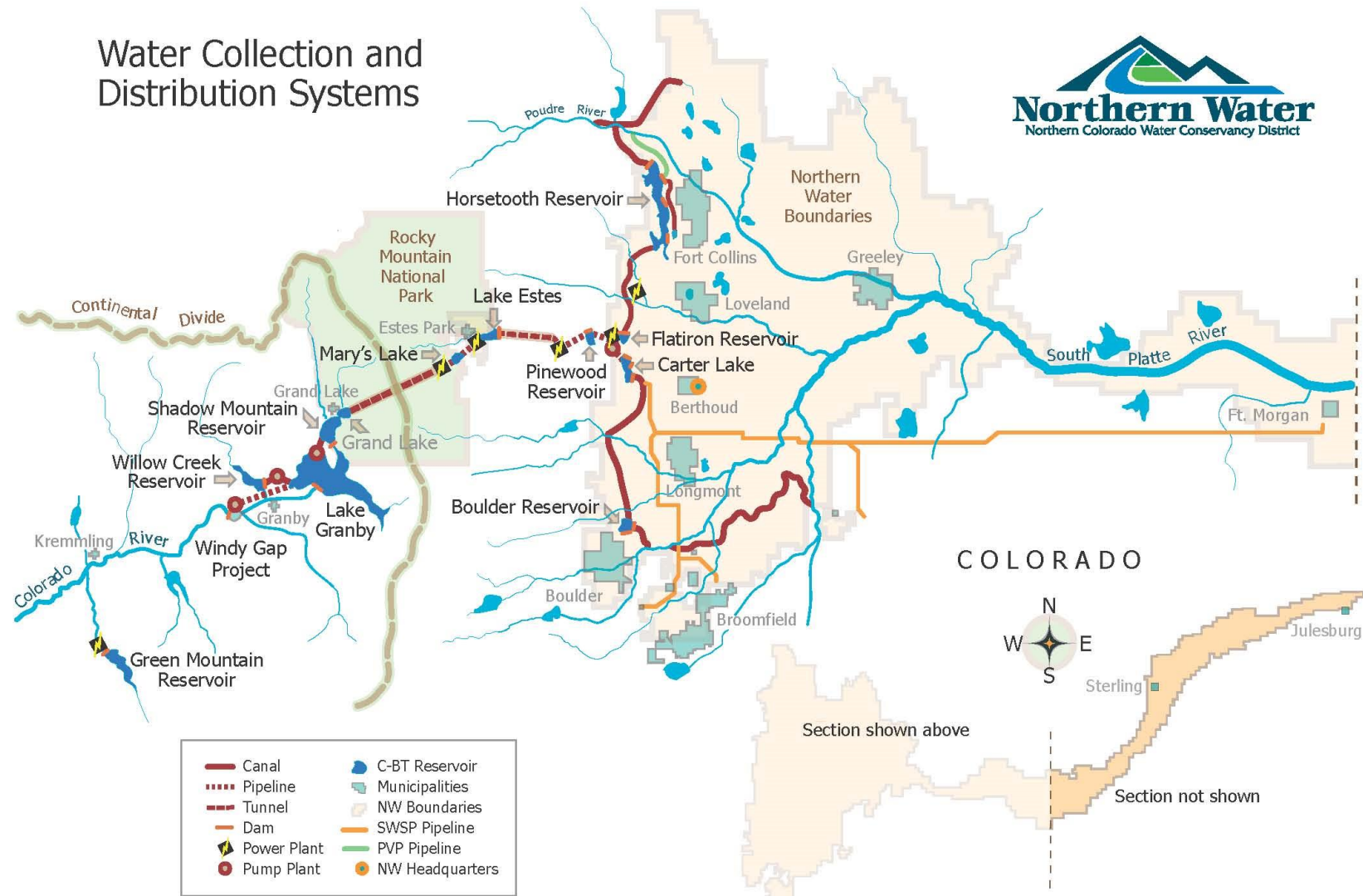
Aside from the Windy Gap Project and the Firming Project, Platte River will continue to assess the various aspects of its water resources portfolio, and seek opportunities to manage water as an asset.



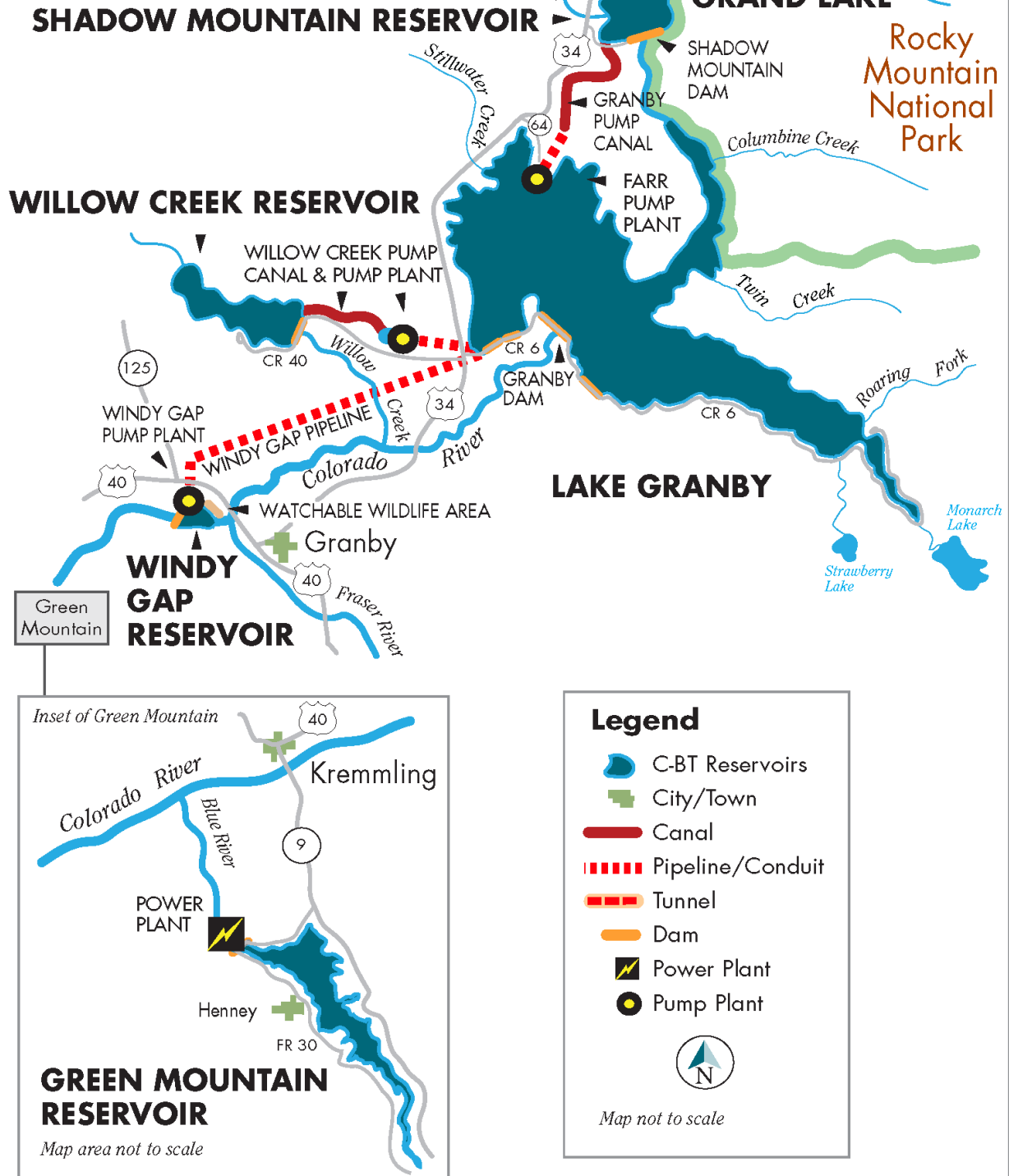
Appendix A – Maps

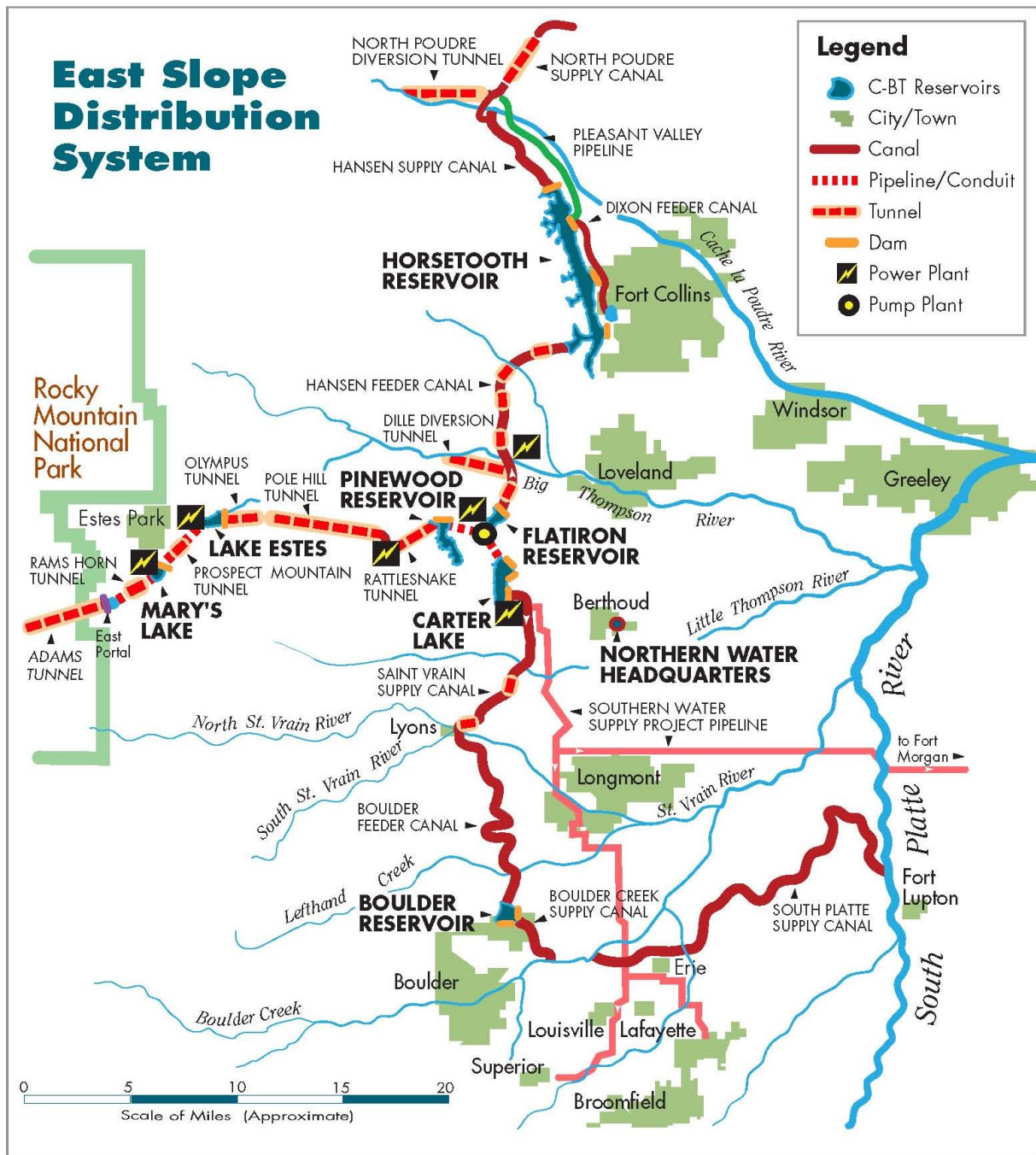


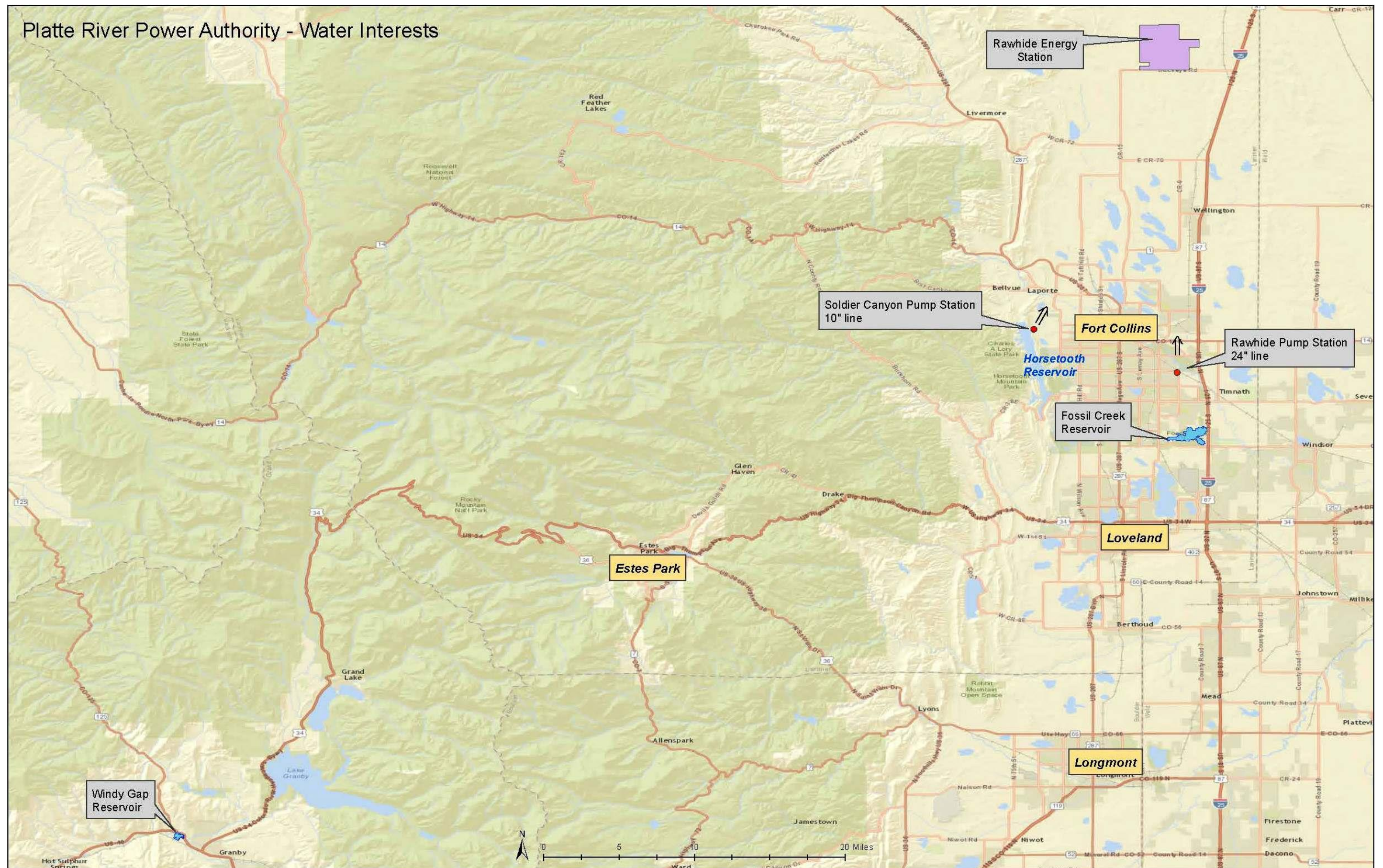
Water Collection and Distribution Systems

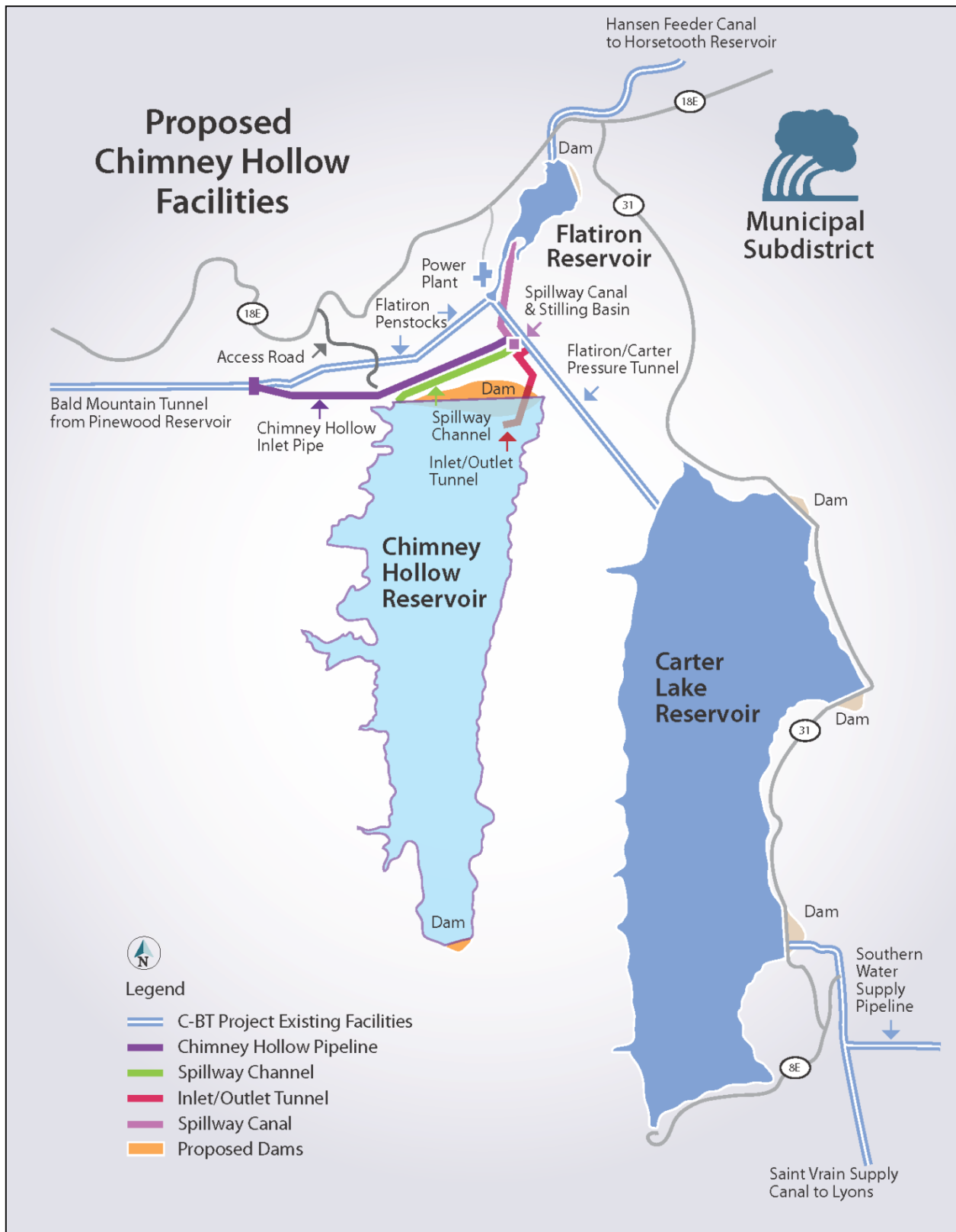


West Slope Collection System











Appendix B – Reference materials

Platte River Power Authority water agreements

Agreement	Parties	Description	Starting date	Ending date
Reuse Agreement	Platte River, City of Fort Collins, Water Supply and Storage Company	Agreement is based on a series of exchanges in which Platte River supplies 4,200 af of Windy Gap water in exchange for 4,200 af of effluent (produced by the City of Fort Collins from new foreign water source), plus return flows of the Windy Gap water.	August 1978	In effect as long as water is required for electric generation (either at Rawhide or another location that return flows can be delivered to by Fort Collins).
Memorandum of Understanding (MOU)	Platte River, City of Fort Collins, Anheuser-Busch (AB InBev)	AB InBev can use up to 4,200 af of the Windy Gap water supplied to Fort Collins from Platte River. Platte River will receive the return flows from that use and will be compensated by AB InBev for the variable operation and maintenance costs.	April 1988	In effect as long as the AB InBev Fort Collins brewery and Rawhide Energy Station are operative.
North Poudre Storage Agreement	Platte River, North Poudre Irrigation Company	Allows Platte River to temporarily store reusable effluent in Fossil Creek Reservoir. There has been one amendment to this agreement to facilitate leases and specify accounting of Platte River's water balance in the event of a reservoir spill.	November 1979 1 st Amendment: September 2009	Dec. 31, 2024
Soldier Canyon Outlet Capacity	Platte River, City of Fort Collins	Provides Platte River with a 3 cfs tap from the Fort Collins raw water delivery system below the Soldier Canyon outlet from Horsetooth Reservoir.	February 1981	Perpetual so long as water is needed for power generation or related purpose.
Larimer County Augmentation Agreement	Platte River, Larimer County	Larimer County receives up to 100 af of reusable effluent from the MOU annually for augmentation of the County's Strang Gravel pit.	October 1993	Perpetual so long as Platte River's Rawhide Energy Station and the Strang Pit operate.
Carter Lake Outlet Agreement	Platte River, Northern Water	Provides Platte River with the delivery capacity of up to 10 cfs from Carter Lake outlet.	August 1993	Perpetual
Allotment Contract for Additional Carter Lake Outlet Capacity	Platte River, Northern Water	Provides Platte River with an additional 8 cfs capacity from Carter Lake outlet for a total of 18 cfs.	September 2001	Perpetual
Amendment to Allotment Contract for Carter Lake Outlet Capacity	Platte River, Northern Water	Amends the allotment contract to reflect the transfer of 13 cfs capacity to other entities. Platte River's final allocation is 5 cfs in total.	September 2018	Perpetual
Fort Collins Windy Gap Assignment Agreement	Platte River, City of Fort Collins	Assigns Fort Collins 1/6 share of Windy Gap to Platte River	July 1974	Perpetual
Estes Park Windy Gap Assignment Agreement	Platte River, Town of Estes Park	Assigns half of Estes Park 1/6 share of Windy Gap to Platte River	1974	Perpetual
Loveland Windy Gap Assignment Agreement	Platte River, City of Loveland	Assigns half of Loveland's 1/6 share of Windy Gap to Platte River	July 1974	Perpetual
Warren Lake	Platte River, Warren Lake Reservoir Co.	Fractional share as headquarters well back up		

Platte River Power Authority water rights/decrees

Decree	Description of water rights	Uses	Date of appropriation	Volume/flow rate	Outcome of original water court case	Absolute?
W-9322-78	Reuse component	"All domestic, municipal, irrigation, and industrial purposes associated with the operation of a power plant and the development and maintenance of lands surrounding the power plan" & "fully consumable" See Page 9	December 1977	FC/WSSC - 7636 (average) af of NFW PRPA - 4200 af of effluent	Approved	Absolute
	Rawhide Pipeline	Rawhide Pipeline is also referred to as the 24-inch pipeline		15.19 cfs	Conditional	Yes(82CW318)
	Rawhide Reservoir	Rawhide Reservoir is also referred to as Hamilton Reservoir		13,600 af	Conditional	Yes (83CW126; 87CW078)
	Exchanges <i>*Number correlates with number from pages 30-31 of decree</i>	For use in the reuse plan (which Court calls an "augmentation plan")				
	-1					
	Long Draw to Joe Wright				Conditional	Yes (83CW126)
	Joe Wright to Long Draw				Conditional	Yes (83CW126)
	-2					
	Long Draw to Horsetooth Reservoir				Conditional	Yes (83CW126)
	Joe Wright to Horsetooth Reservoir				Conditional	Yes (83CW126)
	Horsetooth to Long Draw				Conditional	Yes (83CW126)
	Horsetooth to Joe Wright				Conditional	Yes (83CW126)

Platte River Power Authority water rights/decrees

Decree	Description of water rights	Uses	Date of appropriation	Volume/flow rate	Outcome of original water court case	Absolute?
-3						
Joe Wright and:						
	<i>North Poudre Munroe Canal</i>				Conditional	Yes (83CW126)
	<i>Main Canal of North Poudre</i>			50 cfs	Conditional	Yes (03CW324)
	<i>Larimer and Weld Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Larimer County Canal</i>			50 cfs	Conditional	Yes (03CW324)
	<i>Lake Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Greeley No. 2 Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Timnath Reservoir</i>				Conditional	Relinquished (2015CW3053)
Long Draw and:						
	<i>North Poudre Munroe Canal</i>				Conditional	Yes (83CW126)
	<i>Main Canal of North Poudre</i>			50 cfs	Conditional	Yes (03CW324)
	<i>Larimer and Weld Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Larimer County Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Lake Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Greeley No. 2 Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Timnath Reservoir</i>				Conditional	Relinquished (2015CW3053)
Horsetooth and:						
	<i>North Poudre Munroe Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Main Canal of North Poudre</i>				Conditional	Relinquished (2015CW3053)
	<i>Larimer and Weld Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Larimer County Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Lake Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Greeley No. 2 Canal</i>				Conditional	Relinquished (2015CW3053)
	<i>Timnath Reservoir</i>				Conditional	Relinquished (2015CW3053)
-4						
	All structures above and Rockwell Reservoir				Conditional	Relinquished (2015CW3053)
-5						
	All structures above and Milton Seaman				Conditional	Relinquished (2015CW3053)
	All structures above and Barnes Meadow				Conditional	Relinquished (2015CW3053)

Platte River Power Authority water rights/decrees

Decree	Description of water rights	Uses	Date of appropriation	Volume/flow rate	Outcome of original water court case	Absolute?
-6						
	Rawhide Pipeline and Fossil Creek Reservoir				Conditional	Yes (83CW126)
	Rawhide Pipeline and North Poudre No. 5				Conditional	Relinquished (2015CW3053)
	Rawhide Pipeline and North Poudre No. 6				Conditional	Relinquished (2015CW3053)
	Fossil Creek Reservoir to Rawhide Pipeline				Conditional	Yes (83CW126)
	North Poudre No. 5 to Rawhide Pipeline				Conditional	Relinquished (2015CW3053)
	North Poudre No. 6 to Rawhide Pipeline				Conditional	Relinquished (2015CW3053)
	Fossil Creek Reservoir to North Poudre No. 5			25 cfs	Conditional	Yes (03CW324)
	Fossil Creek Reservoir to North Poudre No. 6			25 cfs	Conditional	Yes (03CW324)
	North Poudre No. 5 to Fossil Creek Reservoir			25 cfs	Conditional	Yes (03CW324)
	North Poudre No. 6 to Fossil Creek Reservoir			25 cfs	Conditional	Yes (03CW324)
-7						
	Intake of Rawhide Pipeline to:					
	Lake Canal				Conditional	Relinquished (2015CW3053)
	Larimer and Weld Canal				Conditional	Relinquished (2015CW3053)
	Timnath Reservoir Inlet				Conditional	Relinquished (2015CW3053)
	Larimer County Canal				Conditional	Relinquished (2015CW3053)
	North Poudre Canal				Conditional	Relinquished (2015CW3053)
	North Poudre No. 6 to:					
	Lake Canal				Conditional	Relinquished (2015CW3053)
	Larimer and Weld Canal				Conditional	Relinquished (2015CW3053)
	Timnath Reservoir Inlet				Conditional	Relinquished (2015CW3053)
	Larimer County Canal				Conditional	Relinquished (2015CW3053)
	North Poudre Canal				Conditional	Relinquished (2015CW3053)

Platte River Power Authority water rights/decrees

Decree	Description of Water rights	Uses	Date of appropriation	Volume/flow rate	Outcome of original water court case	Absolute?
79CW158	Rawhide Reservoir, first enlargement	Same as W-9322-78	Jan. 31, 1979	4200 af (enlarge from 13,600 af to 17,800)	Conditional	Yes (89CW144, 1,498 abandoned)
82CW318	Rawhide Pipeline – sold to Greeley in 2022 (Platte River leaseback through WY2030)	Cooling water and sluice water, stockwater, irrigation and dust suppression	Dec. 31, 1977	15.19 (Absolute)	Absolute	Yes
82CW319	Rawhide Pipeline enlargement – sold to Greeley in 2022 (Platte River leaseback through WY2030)		June 22, 1982	1.6	Absolute (decree unclear, but application claims absolute)	Yes
83CW126	Long Draw Reservoir enlargement	storage for domestic, municipal, irrigation and industrial	Aug. 31, 1965	6,600 af Absolute	6,600 af absolute	Yes (89CW144)
	Rawhide Reservoir (under original W-9322-78 Decree)	Same as W-9322-78	Dec. 31, 1977	4,436 Absolute 9,164 Conditional	4,436 absolute 9,164 conditional	Yes (83CW126; 87CW078)
	Exchanges <i>*Number correlates with number from pages 30-31 of decree</i>					
	-1					
	Long Draw to Joe Wright				Absolute	Yes
	Joe Wright to Long Draw				Absolute	Yes
	-2					
	Long Draw to Horsetooth Reservoir				Absolute	Yes
	Joe Wright to Horsetooth Reservoir				Absolute	Yes
	Horsetooth to Long Draw				Absolute	Yes
	Horsetooth to Joe Wright				Absolute	Yes
	-3					
	Long Draw to North Poudre Munroe Canal				Absolute	Yes
	Joe Wright and North Poudre Munroe Canal				Absolute	Yes

Platte River Power Authority water rights/decrees

Decree	Description of water rights	Uses	Date of appropriation	Volume/flow rate	Outcome of original water court case	Absolute?
	-6					
	Rawhide Pipeline and Fossil Creek Reservoir				Absolute	Yes
	Fossil Creek Reservoir and Rawhide Pipeline				Absolute	Yes
85CW219	Rawhide Reservoir, first enlargement				2,798 af conditional 1,498 abandoned	Yes (89CW144, 1,498 abandoned)
87CW078	Rawhide Reservoir (under W-9322-78)				9,164 af absolute	Yes
	All remaining conditional exchanges				Conditional - finding of diligence	
89CW144	Rawhide Reservoir, first enlargement				2,708 absolute	Yes
95CW116	All remaining conditional exchanges				Conditional - finding of diligence	
03CW324	Certain exchanges					
	-2					
	Joe Wright and:					
	Main Canal of North Poudre			50 cfs	Absolute	Yes
	Larimer County Canal			50 cfs	Absolute	Yes
	Long Draw and:					
	Main Canal of North Poudre			50 cfs	Absolute	Yes
	-6					
	Fossil Creek Reservoir to North Poudre No. 5			25 cfs	Absolute	Yes
	Fossil Creek Reservoir to North Poudre No. 6			25 cfs	Absolute	Yes
	North Poudre No. 5 to Fossil Creek Reservoir			25 cfs	Absolute	Yes
	North Poudre No. 6 to Fossil Creek Reservoir			25 cfs	Absolute	Yes
	All other conditional exchanges				Conditional finding of diligence	

2030 Water consumption projections

The following chart includes three potential options for Platte River's resource mix based on 2019/2020 modeling by Platte River staff. These options were developed for planning purposes and are meant to be representative of potential generation resources and are not intended to be comprehensive in any way.

	Water consumption rate gal/MWh	Installed capacity MW	Annual capacity factor	Annual generation MWh	Annual water needs for generation (million gallons)	Annual water needs for generation acre-feet	Annual site needs and obligations acre-feet	Total annual water demand acre-feet
	<u>Option 1: LMS 100 GT and LM6000 CCGT</u>							
Existing CT units	26	388	10%	339,888	9	27		
LMS 100, GT	189	96	10%	84,271	16	49		
LM6000 2X1, CCGT	531	96	70%	589,898	313	961		
Total		580			338	1,037	1,800	2,837
	<u>Option 2: 7F CCGT</u>							
Existing CT units	26	388	5%	169,944	4	14		
GE 7F CCGT	530	226	60%	1,187,856	630	1,932		
GE 7F CCGT with duct firing	1,251		10%	197,976	248	760		
Total		614			882	2,706	1,800	4,506
	<u>Option 3: Nuclear</u>							
Existing CT units	26	388	10%	339,888	9	27		
Nuclear	830	200	60%	1,051,200	872	2,678		
Total		588			881	2,705	1,800	4,505

* Annual site needs and obligations include 1,800 acre-feet of water for Reuse Plan obligations, potable/process water at Rawhide and maintenance of Rawhide reservoir.



Ecological Resource Consultants, Inc.

225 Union Blvd, Suite 325 ~ Lakewood, CO ~ 80228 ~ (303) 679-4820

Technical Memorandum

Date: September 2, 2020

To: Heather Banks, Chris Fields

From: Heather Thompson

Re: WGFP Model Analyses

The following memorandum summarizes additional Windy Gap Firming Project (WGFP) Model analyses that were conducted to evaluate different levels of Windy Gap unit ownership and storage in Chimney Hollow for Platte River Power Authority (Platte River). Five different levels of storage in the proposed Chimney Hollow Reservoir were analyzed for Platte River including 8,000 ac-ft, 10,000 ac-ft, 12,000 ac-ft, 14,000 ac-ft, and 16,000 ac-ft. For each storage amount, ERC analyzed three levels of Windy Gap ownership (i.e. number of Windy Gap units owned by Platte River) including 60 units, 80 units, and 100 units. In addition, an ownership level of 120 units was evaluated for a storage level of 14,000 ac-ft and 16,000 ac-ft since that is Platte River's current Windy Gap unit ownership and subscription to storage in Chimney Hollow. For each combination of storage and ownership, ERC determined Platte River's firm yield, which is the demand that could be met without any shortages throughout the model study period.

WGFP Model Scenario and Assumptions

A detailed description of the WGFP Model is provided in the Windy Gap Firming Project Modeling Report (Boyle 2003) and the Addendum to the WGFP Modeling Report (Boyle 2006). The WGFP Model was relied on to provide hydrologic data and information on firm yield for alternatives analyzed in the WGFP EIS. The model operates on a monthly time step for a study period that extends from 1950 through 1996.

The WGFP Model scenario that was used for this analysis is Chimney Hollow Reservoir with prepositioning under future conditions, which includes reasonably foreseeable future actions. ERC evaluated several storage and ownership levels for Platte River using a similar WGFP Model scenario in 2014. However, since that time there have been several modifications to Windy Gap operating agreements and other participants' Windy Gap ownership and storage levels in Chimney Hollow. The most notable changes that affect the WGFP model are listed below:

- The 1990 Windy Gap Carriage Contract was renegotiated and delivery charges as well as carryover charges for Windy Gap water remaining in Lake Granby each March 31 changed.
- The City of Evans is no longer a participant in the WGFP.
- Several WGFP participants have modified their Windy Gap unit ownership and the storage they have subscribed to in Chimney Hollow.



- Agreements were reached with Grand County and Middle Park Water Conservancy District regarding storage and firming of their Windy Gap water and temperature mitigation.

Key model assumptions that are pertinent to the changes listed above and Platte River's operations are described below.

1. Platte River Demand

Platte River's annual demand was distributed monthly based on Windy Gap delivery data from 2009 through 2011. This data was relied on for modeling completed previously for Platte River in 2014 and the demand distribution was not updated for this effort. It was assumed that 10% of Platte River's annual demand would be delivered each month from March through September and 6% of Platte River's annual demand would be delivered each month during the remaining five months.

2. Platte River's Windy Gap Unit Ownership

Platte River currently owns 120 units Windy Gap units, which entitles Platte River to one-quarter of the Windy Gap water supply. Platte River requested that ERC analyze three different levels of Windy Gap ownership including 100 units, 80 units, and 60 units. For ownership levels less than 120 units, it was assumed that Windy Gap units not used by Platte River were used partially by another entity participating in the firming project and partially by an entity that is not participating in the WGFP. As Platte River's storage was decreased, it was assumed that storage was acquired by another participant so the total size of Chimney Hollow did not change. Approximately 7 of Platte River's Windy Gap units were reallocated to another participant for every 2,000 ac-ft (~300 ac-ft per Windy Gap unit) of firming storage that was reallocated from Platte River to another participant. **Table 1** summarizes the reallocation of Platte River's storage and Wind Gap units to other participants and non-participants for each scenario analyzed.

3. Prepositioning

The WGFP scenario that was evaluated includes prepositioning since the renegotiated Carriage Contract allows for that operating program. With prepositioning, Windy Gap water is not physically delivered through the Adams Tunnel. Instead, C-BT water is delivered into Chimney Hollow Reservoir primarily during the fall and winter to occupy storage space that is not occupied by Windy Gap water. This creates space for Windy Gap water in Granby Reservoir. When Windy Gap water is delivered into Granby Reservoir, the C-BT water in Chimney Hollow Reservoir is exchanged for a like amount of Windy Gap water in Granby Reservoir.

4. Diversion Shrink

Windy Gap Project water is diverted from the Colorado River just downstream of the confluence of the Colorado and Fraser Rivers at Windy Gap Reservoir. In the model, Windy Gap diversions are subject to a 10% "diversion shrink" when water is delivered into Granby Reservoir. The WGFP Model includes the 10%



diversion shrink for all scenarios evaluated. The 10% diversion shrink in the model is similar to the renegotiated Carriage Contract, which includes a 5% diversion shrink on water delivered into Granby Reservoir and another 5% shrink when Windy Gap water is delivered to the East Slope either physically or by exchange via prepositioning. The WGFP model does not have the ability to split losses between water delivered into Granby and water delivered to the East Slope; however, the total loss applied is correct when water is delivered to the East Slope.

5. Carryover Shrink

The previous 1990 Carriage Contract included a 10% carryover shrink assessed on any Windy Gap water remaining in Granby Reservoir on March 31 with the shrink amount credited to the C-BT Project. The renegotiated Carriage Contract reduced the carryover shrink from 10% to 5%. Therefore, the WGFP Model was revised and the carryover shrink was reduced to 5% for all scenarios evaluated.

6. Reintroduction Shrink

In addition to diversion and carryover shrink, the renegotiated Carriage Contract includes reintroduction shrink that is assessed on water that is *physically* delivered from Chimney Hollow when Windy Gap water is reintroduced into the C-BT system after it has been stored in Chimney Hollow. Platte River anticipates taking delivery of their Windy Gap water stored in Chimney Hollow via exchanges whereby C-BT water is released from Horsetooth Reservoir and an equivalent amount of Windy Gap water is booked over from the PRPA's account to the C-BT account in Chimney Hollow Reservoir. The WGFP Model was previously configured so that all deliveries from Chimney Hollow Reservoir to Platte River are physically released from the reservoir. While it is difficult to accurately predict when Windy Gap water would be delivered via exchange versus directly from Chimney Hollow Reservoir, the model was revised so that reintroduction shrink is not charged on deliveries from Chimney Hollow Reservoir since it is anticipated that deliveries to most participants will occur primarily via exchanges.

7. Mitigation Measures

Several mitigation measures have been established to offset or minimize impacts from implementation of the WGFP. The *Fish and Wildlife Mitigation Plan* (FWMP) that was developed by the Subdistrict in cooperation with the Colorado Division of Parks and Wildlife (CDPW) was adopted by the Colorado Wildlife Commission on June 9, 2011 and by the Colorado Water Conservation Board on July 13, 2011. The principal mitigation measure that has the potential to affect Platte River's firm yield is the curtailment of WGFP diversions after July 15 when temperatures in the Colorado River below Windy Gap Reservoir and above the Williams Fork River exceed the chronic or acute temperature standard. To reflect the potential impact of this mitigation measure in the model, each scenario was simulated with Windy Gap pumping curtailed in August. Potential reductions in Windy Gap pumping in July as a result of temperature mitigation would likely be small and infrequent; therefore, no changes were made to reflect temperature mitigation in July in the model.

8. Agreements with Middle Park Water Conservancy District and Grand County

The Participants have negotiated an agreement with Middle Park Water Conservancy District (MPWCD) and Grand County that would provide firm annual and variable yield to both MPWCD and Grand County. MPWCD's firm annual yield would consist of a combination of 850 ac-ft/yr and 1,450 ac-ft/yr for a total of 2,300 ac-ft/yr. In addition, the agreement allows MPWCD and Grand County to receive "variable yield", defined as a portion of the amount pumped by the WGFP participants. This agreement was not incorporated in the model due to the complexities of the various conditions of the agreement and limitations with the current operating rules available in the model. The model reflects that MPWCD's firm yield is generated by the first 3,000 ac-ft/yr of Windy Gap water pumped. In other words, that yield is not derived from the participant's Windy Gap supplies. This configuration provides a reasonable approximation of the potential impacts on the participant's firm yield since the first 3,000 ac-ft of Windy Gap water pumped is not available to the participants and is used to generate firm yield for MPWCD. Previous analyses conducted for NCWCD to evaluate the effects of this agreement show that Platte River's firm yield is not affected by reductions in their supply associated with variable yield provided to MPWCD and Grand County. Because Platte River has such a large portion of the Windy Gap supply in relation to their firming storage and demand, Platte River is still able to fill their Chimney Hollow Reservoir account in most average and wet years despite potential reductions in their supply associated with this agreement. While previous modeling showed there was no reduction in Platte River's firm yield associated with this agreement at an ownership level of 160 units, the risk of a reduction in firm yield increases at lower ownership levels.

Model Results Summary

Table 2 provides a summary of the results for the model scenarios evaluated. The results presented in **Table 2** are based on a 47-year study period from 1950 through 1996. The critical period for Platte River typically extends from the fall of 1953 when Platte River's account fills through the spring of 1956 when it empties. During this drought, which occurs once in the 47 year study period, model results show there would be no pumping in 1954 and approximately 7,600 ac-ft pumped in 1955.

Model Results for Storage of 16,000 ac-ft

Because several participants' Windy Gap unit ownership and storage levels have changed since modeling work was previously done for Platte River in 2014, ERC completed a revised model run that includes each participant's current Windy Gap ownership and storage levels in Chimney Hollow. The results of this run are shown in **Table 3**.

Platte River's firm yield at its current ownership and storage level is 6,110 ac-ft/yr. Platte River's firm yield at this ownership and storage level was previously estimated to be 5,645 ac-ft/yr in 2014. The increase in firm yield is primarily because a reintroduction shrink of 5% is not charged on Platte River's deliveries in the current version of the model since Platte River anticipates taking delivery of its Windy Gap water



mainly via exchanges, which do not incur a loss. There is also an impact on Platte River's yield due to changes in other non-participants' and participants' Windy Gap ownership levels, storage in Chimney Hollow, and demands. These changes impact each entity's Windy Gap supplies, storage levels in Granby Reservoir and Chimney Hollow, and bookovers that occur among participants and non-participants when Granby Reservoir fills. In addition, C-BT storage contents are different because modifications were made to carryover shrink and reintroduction shrink. Changes in C-BT contents affect the timing and magnitude of spills at Granby Reservoir, which can impact the timing and magnitude of Windy Gap bookovers among participants and non-participants when spills occur. Finally, previous model results at 120 units were interpolated because model runs in 2014 were completed at ownership levels of 100 units and 160 units and the results for intermediate ownership levels were interpolated. Current results at an ownership level of 120 units are more accurate because they are based on a model run as opposed to interpolation.

At lower Windy Gap ownership levels and 16,000 ac-ft of storage, Platte River's firm yield ranges from 4,410 ac-ft/yr at an ownership level of 60 units up to 5,775 ac-ft/yr at an ownership level of 100 units. The firm yield decreases at a higher rate as ownership levels of 100 units and less. At an ownership level of 100 units, the Windy Gap supply is not sufficient to fill Platte River's account at the start of the critical period and as a result the additional storage operates less efficiently. At 16,000 ac-ft of storage, Platte River is supply limited if it reduces the number of units owned to 100 units or less. When Platte River decreases its ownership to 80 units or less, the critical period changes from the 1950's drought to the period from 1961 through 1968, which is a more prolonged dry period with below average Windy Gap diversions. With fewer Windy Gap units, Platte River would be more vulnerable to reductions in firm yield that could potentially occur due to climate change and operations such as those related to the MPWCD and Grand County agreement that are difficult to predict.

Model Results for Storage Level of 14,000 ac-ft

Windy Gap ownership levels of 100 and 120 units were analyzed at 14,000 ac-ft of storage. Platte River's firm yield ranges from 5,265 ac-ft/yr at an ownership level of 100 units up to 5,595 ac-ft/yr at an ownership level of 120 units. At an ownership level of 100 units, the Windy Gap supply is not sufficient to fill Platte River's account at the start of the critical period. At 14,000 ac-ft of storage, Platte River is supply limited if it reduces the number of units owned to 100 units or less.

Model Results for Storage Level of 12,000 ac-ft

At 12,000 ac-ft of storage, Platte River's firm yield ranges from 3,955 ac-ft/yr at an ownership level of 60 units up to 4,750 ac-ft/yr at an ownership level of 100 units. The firm yield decreases substantially as ownership levels are decreased below 100 units. For example, the decrease in yield between 100 units and 80 units is 325 ac-ft/yr whereas the decrease in yield between 80 units and 60 units is 470 ac-ft/yr. At ownership levels of less than 100 units, Platte River is supply limited because its Windy Gap supply is not sufficient to fill its Chimney Hollow account at the start of the critical period and as a result the storage operates less efficiently. When Platte River decreases its ownership to 60 units, the critical period changes from the 1950's drought to the period from 1961 through 1968.



The increase in yield for each additional 20 Windy Gap units is fairly small at ownership levels of about 100 units or higher. That is because Platte River's 12,000 acre-foot storage account is full prior to the critical period at ownership levels greater than 100 units, in which case, Platte River is storage limited and there is little additional Windy Gap supply provided by additional units during the critical period.

Model Results for Storage Level of 10,000 ac-ft

At 10,000 ac-ft of storage, Platte River's firm yield ranges from 3,545 ac-ft/yr at an ownership level of 60 units up to 4,150 ac-ft/yr at an ownership level of 100 units. The firm yield decreases substantially as ownership levels are decreased below 80 units. For example, the decrease in yield between 100 units and 80 units is 250 ac-ft/yr whereas the decrease in yield between 80 units and 60 units is 355 ac-ft/yr. At ownership levels less than 80 units, Platte River is supply limited because its Windy Gap supply is not sufficient to fill their Chimney Hollow account at the start of the critical period. At 80 units, Platte River's account in Chimney Hollow fills at the start of the critical period in 1953; however, it fills one month earlier than it would if Platte River owned 100 units. There would be little incremental yield at ownership levels greater than 100 units.

Model Results for Storage Level of 8,000 ac-ft

At 8,000 ac-ft of storage, Platte River's firm yield ranges from 3,050 ac-ft/yr at an ownership level of 60 units up to 3,415 ac-ft/yr at an ownership level of 100 units. The firm yield decreases substantially as ownership levels are decreased below 80 units. For example, the decrease in yield between 100 units and 80 units is only 75 ac-ft/yr whereas the decrease in yield between 80 units and 60 units is 290 ac-ft/yr. That is because Platte River's account fills at the start of the critical period at ownership levels of 80 and 100 units in which case it is storage limited. However, at an ownership level of 60 units, Platte River's Windy Gap supply is not sufficient to fill its Chimney Hollow account at the start of the critical period.

In summary, given the trade-offs between supply and storage, ERC recommends maintaining a Windy Gap ownership level of 120 units at 14,000 ac-ft or 16,000 ac-ft of storage, 100 to 120 units at 12,000 ac-ft of storage, 80 to 100 units at 10,000 ac-ft of storage and 60 to 80 units at 8,000 ac-ft of storage. The risk of incurring shortages during short, severe droughts is higher if Platte River reduces the number of Windy Gap units it owns. This also applies to potential impacts associated with the agreement with MPWCD and Grand County. The risk of a reduction in firm yield associated with that agreement increases at lower ownership levels.

Synthetic Drought Analysis

A separate analysis was conducted outside of the WGFP Model to determine the demand that could be met under a synthetic two-year and three-year drought assuming that no Windy Gap Water is pumped for two and three years in a row, respectively. While the model shows there are five years during the study period when little to no Windy Gap water was pumped, there are no sequences of back to back years with no Windy Gap pumping. A 2-year period of no Windy Gap pumping has a recurrence interval



of about 1 in 57 years whereas a 3-year period of no pumping has a recurrence interval of about 1 in 250 years.

The firm yield was determined using the modeled contents of Platte River's storage account in July 1953 for each storage and Windy Gap ownership level as the contents at the start of the synthetic drought. This differs from the analysis that was completed in 2014, which assumed that Platte River's account was full at the start of the synthetic drought. This change was made current modeling shows that Platte River's account was often not full at the start of the critical period at lower Windy Gap ownership levels. Another difference with the previous analysis is that the current analysis does not include reintroduction shrink on deliveries out of Platte River's account in Chimney Hollow.

The results of this analysis are presented in **Table 2**. Under a 2-year drought, the firm yield would range from 2,875 ac-ft at a storage level of 8,000 ac-ft up to 5,755 ac-ft at a storage level of 16,000 ac-ft. Under a 3-year drought, the firm yield would range from 2,060 ac-ft at a storage level of 8,000 ac-ft up to 4,120 ac-ft at a storage level of 16,000 ac-ft. At each storage level, the firm yield increases at higher ownership levels because the contents in PRPA's account were higher at the start of the synthetic drought.

**Table 1: Distribution of Platte River's Windy Gap Units and Storage**

Platte River Storage	Platte River WG Units	Platte River Storage Reallocated to Participants	Platte River WG Units Reallocated to Non-Participants	Platte River WG Units Reallocated to Participants
16,000	120	0	0	0
16,000	100	0	20	0
16,000	80	0	40	0
16,000	60	0	60	0
14,000	120	2,000	0	0 ¹
14,000	100	2,000	7	13
12,000	100	4,000	7	13
12,000	80	4,000	27	13
12,000	60	4,000	47	13
10,000	100	6,000	0	20
10,000	80	6,000	20	20
10,000	60	6,000	40	20
8,000	100	8,000	0	20
8,000	80	8,000	13	27
8,000	60	8,000	33	27

Notes:

1: 7 units owned by non-participants were reallocated to a participant to accompany the 2,000 ac-ft of storage that was reallocated from PRPA to another participant.


Table 2: Summary of Windy Gap Firming Project Model Results

Platte River Windy Gap Units	Demand (af)	No Reintroduction Shrink & Temperature Mitigation ¹		No Reintroduction Shrink & 2-yr Drought with No WG Pumping ²		No Reintroduction Shrink & 3-yr Drought with No WG Pumping ³	
		Storage	S:FY Ratio	Storage	S:FY Ratio	Storage	S:FY Ratio
120	6,110	16,000	2.62				
100	5,775	16,000	2.77				
80	5,280	16,000	3.03				
60	4,410	16,000	3.63				
120	5,755			16,000	2.78		
100	5,480			16,000	2.92		
80	5,225			16,000	3.06		
60	4,410 ⁴			16,000	3.63		
120	4,120					16,000	3.88
100	3,925					16,000	4.08
80	3,740					16,000	4.28
60	3,565					16,000	4.49
120	5,595	14,000	2.50				
100	5,265	14,000	2.66				
120	5,230			14,000	2.68		
100	4,970			14,000	2.82		
120	3,745					14,000	3.74
100	3,560					14,000	3.93
100	4,750	12,000	2.53				
80	4,425	12,000	2.71				
60	3,955	12,000	3.03				
100	4,445			12,000	2.70		
80	4,180			12,000	2.87		
60	3,910			12,000	3.07		
100	3,180					12,000	3.77
80	2,995					12,000	4.01
60	2,800					12,000	4.29
100	4,150	10,000	2.41				
80	3,900	10,000	2.56				
60	3,545	10,000	2.82				
100	3,735			10,000	2.68		
80	3,660			10,000	2.73		
60	3,365			10,000	2.97		
100	2,675					10,000	3.74



Platte River Windy Gap Units	Demand (af)	No Reintroduction Shrink & Temperature Mitigation ¹		No Reintroduction Shrink & 2-yr Drought with No WG Pumping ²		No Reintroduction Shrink & 3-yr Drought with No WG Pumping ³	
		Storage	S:FY Ratio	Storage	S:FY Ratio	Storage	S:FY Ratio
80	2,620					10,000	3.82
60	2,410					10,000	4.15
100	3,415	8,000	2.34				
80	3,340	8,000	2.40				
60	3,050	8,000	2.62				
100	2,985			8,000	2.68		
80	2,985			8,000	2.68		
60	2,875			8,000	2.78		
100	2,140					8,000	3.74
80	2,140					8,000	3.74
60	2,060					8,000	3.88

Notes:


- 1: No Windy Gap pumping was allowed in August to reflect potential mitigation for temperature standard exceedances.
- 2: These results were calculated assuming a 2-year drought with no Windy Gap pumping.
- 3: These results were calculated assuming a 3-year drought with no Windy Gap pumping.
- 4: The critical period shifts to 1961-1968 when Platte River's ownership drops to 60 units with 16,000 ac-ft of storage, therefore, the firm yield is not impacted if there is no pumping in 1954 and 1955.

Table 3: Model Results for Current Windy Gap Unit Ownership and Storage Levels in Chimney Hollow

Participant	WG Units	Storage (ac-ft)	Storage/WG Unit (ac-ft/unit)	Firm Yield (ac-ft)	S:FY Ratio
Loveland	40	9,587	240	2,820	3.40
Superior	15	4,726	315	1,205	3.92
Greeley	49	9,189	188	2,910	3.16
Longmont	80	8,000	100	3,165	2.53
Broomfield	56	26,464	473	5,455	4.85
Louisville	9	2,835	315	720	3.94
Platte River	120	16,000	133	6,110	2.62
Erie	20	6,000	300	1,575	3.81
CWCWD	1	346	346	83	4.17
Little Thompson	19	4,850	255	1,380	3.51
Ft. Lupton	13	1,103	85	475	2.32
Lafayette	3	900	300	228	3.95
Total	425	90,000		26,126	3.44



Appendix C – Water Resources Policy document

 Platte River Power Authority	<h1>Policy</h1>	Version #: 1.2 Effective date: 05/10/2023 Next review date: 05/10/2026
	TITLE: Water Resources Policy	Page 1 of 3

Purpose:

This policy provides direction to the Platte River General Manager/CEO on activities related to securing a reliable source of water for operations and the management of water rights and resources as an asset of the organization.

Policy:

Water is critical to the reliable operation of the Rawhide Energy Station (Rawhide) and may be necessary for the reliable operation of future generation resources. Platte River's initial ownership of 160 units of the Windy Gap Project (one third of the total project) was anticipated to be sufficient supply for the initial and future needs of the organization. Based on this assumption, and in an effort to make the most efficient and responsible use of water, Platte River entered into several significant water agreements, including but not limited to the Reuse Agreement, the Memorandum of Understanding, the North Poudre Storage Agreement, the Soldier Canyon Outlet Agreement and the Carter Lake Outlet Agreement. These agreements are discussed in detail in the **Platte River Power Authority Water Resources Reference Document**.

Operational history has revealed the limitations of the Windy Gap Project; it is often constrained by the junior priority of its water rights as well as by the project's dependence on the use of Colorado-Big Thompson infrastructure for storage and delivery of water. While ownership of a significant number of Windy Gap units proved advantageous during periods in which the Windy Gap Project failed to fully deliver water, the Windy Gap Firming Project (of which Chimney Hollow Reservoir is the primary component) will offer greater reliability than unit ownership alone. Moreover, growth in the Northern Colorado region has placed increased pressure on water resources and necessitates more active management of the Platte River water resources as an asset of the organization and member communities. By participating in the Windy Gap Firming Project, Platte River will reduce its overall need for Windy Gap Project units and gain flexibility to manage the units as an asset in future water resources operations.

It is the intent of the board that this policy will position Platte River to pursue activities that will: increase the reliability of water deliveries to meet contractual commitments and the operational needs of the organization; and, maximize the operational and economic value of its water resources, which include but are not limited to Windy Gap units, outlet capacity, storage allocations in the Windy Gap Firming Project, and treated effluent received through the operation of water exchanges.

Consequently, the General Manager/CEO is instructed to:

1. Maintain adequate water supplies for all existing and projected future operations. To do so, the General Manager/CEO is authorized to:

 Platte River Power Authority	<h1 style="text-align: center;">Policy</h1>	Version #: 1.2 Effective date: 05/10/2023 Next review date: 05/10/2026
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- a. Maintain Platte River's participation level in the Windy Gap Firing Project (Chimney Hollow Reservoir) at a storage level of 16,000 acre feet.
- b. Lease water required for Platte River operations and contractual commitments as needed.
- c. Participate in Platte River's resource planning efforts to incorporate planning for future water needs, with considerations for type and location of future generation resources.
- d. Continue to research and explore alternative water supply opportunities.
- e. Review and modify existing water agreements and pursue new agreements to improve operations, increase reliability, and maximize the value of water resources assets.

2. Manage water as an asset. To do so, the General Manager/CEO is authorized to:

- a. Lease water:
 - i. Lease reusable effluent
 - o Water that cannot be pumped or exchanged from Fossil Creek Reservoir is at risk of uncompensated loss. Pumping activity should be managed to minimize storage of effluent, but Platte River will also be proactive in the markets through which any at-risk water may be leased.
 - ii. Lease of Windy Gap units
 - o Leases of Windy Gap units can be of any duration and/or quantity, so long as Platte River maintains control of a minimum of one hundred (100) units.
 - iii. The General Manager/CEO will inform the board of leasing activity.
- b. Sell Windy Gap Units:
 - i. Platte River may sell Windy Gap units, so long as Platte River maintains control of a minimum of one hundred (100) units.
 - ii. Compensation may be monetary, may involve water storage rights, or may involve other forms of consideration that provide value.
 - iii. The General Manager/CEO will inform the board of any sale of Windy Gap units.
- c. Sell/Lease Carter Lake outlet capacity
 - i. Maintain a minimum of five (5) cfs of Carter Lake outlet capacity.
 - ii. Platte River may lease Carter Lake outlet capacity, so long as five (5) cfs can be made available for operational needs when required.
 - iii. The General Manager/CEO will inform the board of the sale or lease of Carter Lake outlet capacity.

 Platte River Power Authority	<h1>Policy</h1>		Version #: 1.2 Effective date: 05/10/2023 Next review date: 05/10/2026
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Document owner: Fuels and Water Manager		Effective date: 05/10/2023
Authority: Board of Directors		Review frequency: Every 3 years
Counsel review: General Counsel		Review date: 05/10/2026
Implementing parties and assigned responsibilities:		
The General Manager/CEO will have primary responsibility for implementation.		
Associated Items (if applicable):		
Platte River has prepared, and annually updates, the Platte River Power Authority Water Resources Reference Document . This reference provides a detailed explanation of Platte River's water resources and infrastructure, the operational uses of water, and the underlying agreements that support our water portfolio and define the rights and obligations associated with our water assets. The Water Resources Reference Document forms the underpinnings for this policy.		
Definitions (if applicable):		

Version	Date	Action	Author	Change tracking (new, review, revision)
Original	12/08/2016	Original policy by Board Resolution 24-16	Heather Banks	Original
1.1	02/27/2020	Updated to AP style and revised to account for current asset ownership	Heather Banks	Revision
1.2	05/10/2023	Updated to incorporate "Chimney Hollow Reservoir" reference	Heather Banks	Revision



Appendix D – Glossary

Glossary of water terms

for Platte River Water Resources Reference Document

A

Acre-foot: The volume of water that would cover one acre of land to a depth of one foot.

Augmentation: A requirement to put water into the stream to prevent reductions in streamflow caused by pumping a well (or some other water use) from affecting the amount of water available to water rights on that stream and the remainder of the stream system.

C

C-BT: Colorado-Big Thompson Project. The Colorado-Big Thompson Project collects water from the upper Colorado River basin on the West Slope and delivers the water beneath the Continental Divide to Colorado's East Slope. The C-BT Project uses a complex system of reservoirs, pump plants, tunnels, pipelines and power plants and relies on two basic forces of nature: melting snow and gravity. After flowing through the power generation facilities, water is stored in three East Slope terminal reservoirs: Horsetooth Reservoir west of Fort Collins; Carter Lake southwest of Berthoud; and Boulder Reservoir northeast of Boulder.

cfs: Cubic feet per second. One cfs equals 1.98 acre-feet per day.

Chimney Hollow Reservoir Project: The central component of the Windy Gap Firming Project, Chimney Hollow Reservoir is the result of a collaborative effort by 12 project participants to improve the reliability of the Windy Gap Project. The reservoir will be located just west of Carter Lake in Larimer County. Its 90,000 acre-feet of dedicated storage capacity will supply a reliable 30,000 acre-feet of water each year to project participants. This project will not take water away from irrigated agriculture or other users but will utilize the existing water rights currently associated with the Windy Gap Project.

Colorado Water Division 1: One of seven water divisions in the state of Colorado. Division 1 includes the South Platte River Basin, the Republican River Basin and the Laramie River Basin. Geographically, Division 1 is located in the northeast quadrant of Colorado.

Cooling water: Reusable effluent water stored in Hamilton Reservoir and used to cool Rawhide Unit 1.

E

EIS: Environmental Impact Statement—a document prepared to describe the effects on the environment due to a proposed action. It also describes impacts of alternatives as well as plans to mitigate the consequences.

F

Firm water: Firm water can be relied upon and is available even during a drought.

Fully consumable water: Water that can be used and reused to extinction. Imported, non-native water in which the return flows have not been historically relied upon.

I

Integrated Operations: A protocol in which C-BT Project water may be delivered to Windy Gap participants in-lieu of Windy Gap water when it isn't available. Replacement of C-BT water is required from Windy Gap water pumped in subsequent periods.

M

Municipal Subdistrict: It is a separate conservancy district within the Northern Colorado Water Conservancy District, formed by several municipalities to build and operate the Windy Gap Project.

N

New foreign water: Water introduced into the Cache La Poudre Basin from the Colorado and Michigan River Basins and whose return flows historically have not been used by others.

Northern Water: Northern Colorado Water Conservancy District. Along with the USBR, jointly operates and maintains the C-BT Project.

P

Process water: Reusable Windy Gap water used at Rawhide for service water, boiler water, fire water and other plant processes as appropriate.

R

Reclamation: United States Bureau of Reclamation

Return flows: As pertaining to the Reuse Agreement, wastewater collection and return flow includes wastewater collected from domestic, commercial and industrial users, treated at wastewater-treatment facilities, and returned to the hydrologic system or released for reuse as reclaimed wastewater (reusable effluent). This is typically an average of 55% of the original quantity of water first used by the municipality.

Reusable effluent: Fully consumable water that has been used by a municipality and then treated in a water reclamation facility. This water can be used to extinction.

W

Windy Gap Firming Project: A water reservoir project in the Front Range designed to store “firm” the supply of Windy Gap water. The Firming Project (of which Chimney Hollow Reservoir is the major component), was reviewed and approved under the National Environmental Policy Act, state and local approvals and requirements, plus substantial negotiations, and will result in robust mitigation, enhancements and protection for fish, wildlife and the environment, to address the project’s impacts. Windy Gap water will be pumped into Chimney Hollow Reservoir in wet years and stored for use in dry years when the Windy Gap Project does not pump.

Windy Gap Project: The Windy Gap Project consists of a diversion dam on the Colorado River, a 445-acre-foot reservoir, a pumping plant, and a six-mile pipeline to Lake Granby. Windy Gap water is pumped and stored in Lake Granby before delivery to water users via the Colorado-Big Thompson Project’s East Slope distribution system.

Windy Gap unit: A Windy Gap unit is equivalent to 100 acre-feet of water during years of full Windy Gap production.

WSSC: Water Supply and Storage Company



Legal, environmental and compliance report

April 2023





Overview of recent developments

Legal matters

Western Area Power Administration process to evaluate joining the Southwest Power Pool's western regional transmission organization

Over the past year or so, Platte River has collaborated with other regional utilities, as well as the Southwest Power Pool (SPP), to explore the potential for SPP to expand its current 14-state regional transmission organization (RTO) into the Western Interconnection. One of Platte River's fellow participants has been the Western Area Power Administration (WAPA). As SPP prepares to develop western RTO operations capabilities, WAPA has recommended entering into final negotiations to join as a transmission-owning member. On April 28, 2023, WAPA initiated a public comment process seeking input on this recommendation. Comments are due June 12, 2023. The full report is on page 2 of this document.

Environmental matters

There are no new environmental matters to report.

Compliance matters

There are no new compliance matters to report.

Grant opportunities

There are no new developments on grant opportunities to report.

Monitoring—status unchanged

Page 3 of this document provides a list of matters previously reported but unchanged since our last report.

Recently concluded matters

Page 5 of this document provides a list of matters that have concluded within the last three months.



Active matters

Legal matters

Western Area Power Administration process to evaluate joining the Southwest Power Pool's western regional transmission organization

Over the past year or so, Platte River has collaborated with other regional utilities, as well as the Southwest Power Pool (SPP), to explore the potential for SPP to expand its current 14-state regional transmission organization (RTO) into the Western Interconnection. The participants refer to this proposed market expansion as "RTO West."

The Western Area Power Administration (WAPA) has actively participated in RTO West discussions. WAPA has been considering whether its Rocky Mountain Region should join RTO West as a transmission-owning member. The Rocky Mountain Region includes WAPA's Loveland Area Projects and its Colorado River Storage Project and their associated transmission facilities.

Platte River has announced its plans to join RTO West (which currently has a target start-up date of April 1, 2026). Platte River is also a WAPA customer and purchases power from the Loveland Area Projects and the Colorado River Storage Project. For these reasons, Platte River is keenly interested in whether WAPA joins RTO West.

On April 28, 2023, WAPA issued a notice in the Federal Register announcing its recommendation that WAPA's Rocky Mountain Region "pursue final negotiations regarding transmission owning membership" in SPP (and that WAPA's Upper Great Plains Region, which already has facilities in SPP's Eastern Interconnection RTO footprint, expand its participation to encompass facilities in the Western Interconnection). WAPA's Federal Register notice invites public comment on its recommendation. Comments are due June 12, 2023, and Platte River intends to submit written comments supporting WAPA's recommendation.

Environmental matters

There are no active environmental matters to report.

Compliance matters

There are no active compliance related matters to report.

Grant opportunities

There are no active grant opportunities to report.



Monitoring—status unchanged

Legal matters

Proposed Revisions to Regulation No. 3 for Sources in Disproportionately Impacted Communities

On May 16 - 19, 2023, the Colorado Air Quality Control Commission will hold a hearing on proposed rules affecting air permitting for stationary sources and air pollution emission notice requirements in disproportionately impacted communities.

Save the Colorado v. Bureau of Reclamation (Glen Canyon Dam)

On Dec. 23, 2022, the Court granted the Bureau's motion for summary judgment and denied the plaintiffs' motion. This was a favorable decision for Colorado River Storage Project and Platte River's hydropower interests. But on Feb. 16, 2023, the plaintiffs appealed the decision to the Ninth Circuit Court of Appeals, where it will now be under review. Platte River will continue to update the board as the appeal develops.

El Paso Electric Co. v. Federal Energy Regulatory Commission

On Dec. 15, 2022, the Federal Energy Regulatory Commission rejected the parties' proposed settlement agreement for the contested issues related to cost allocation in the WestConnect regional planning process. The Fifth Circuit Court of Appeals scheduled oral argument for April 3, 2023. The court will decide the case after argument, but it may be weeks or months before a decision.

Inflation Reduction Act direct pay provisions

Platte River staff is working with our trade associations to better understand the Inflation Reduction Act and how we can benefit from the direct pay provisions.

Western wholesale market activities

Platte River entered the SPP Western Energy Imbalance Service market on March 31, 2023. There are no new developments in the Colorado Public Utilities Commission's rulemaking on the Colorado Transmission Coordination Act since the last report. The Colorado Public Utilities Commission issued a decision in a separate proceeding to allow certain jurisdictional utilities to enter into the Western Energy Imbalance Service market while this rulemaking is pending.

Federal Energy Regulatory Commission Notices of Proposed Rulemaking – Regional Transmission Planning and Generator Interconnection Reform

There are no new developments in this matter.



Platte River
Power Authority

Environmental matters

Groundwater and waste management

Platte River continues to monitor groundwater and has nearly completed lining and improvements at the monofil. There have been no new developments since our last report.

Compliance matters

There are no compliance-related matters in monitored status this month.

Grant opportunities

There are no grant related opportunities being monitored this month.



Recently concluded matters (last three months)

Legal matters

There are no recently concluded legal matters.

Environmental matters

There are no recently concluded environmental matters.

Compliance matters

There are no recently concluded compliance matters.

Grant opportunities

There are no recently concluded grant opportunities.



Resource diversification report

April 2023



Resource integration

Platte River recently finalized the interconnection agreement with 174 Power Global that will allow the Black Hollow Sun (BHS) Solar project to interconnect to Platte River's transmission system. Platte River and 174 Power Global have both started ordering equipment to allow construction of the 150 MW BHS Solar project to begin in the fourth quarter of 2023, with an expected commercial operation date of late 2024.

Platte River has recently finalized a term sheet with a developer to purchase additional solar capacity that is expected to begin commercial operation in early 2026. Staff is currently drafting a power purchase agreement consistent with the term sheet with a goal to sign it later this year.

Platte River staff will soon issue a "reverse" request for proposals (RFP) to sell some or all of its excess capacity in 2024 and 2025 and to determine if a market exists for Platte River's excess energy during times of non-peak load during 2024 and 2025.

We expect to issue this reverse RFP in early June with responses due in mid-July. Its purpose is to determine if we can rely on one-to-two-year sales to reduce our exposure to required hourly energy sales during times of high intermittent energy output.

Platte River staff also plans to issue an RFP this summer to purchase additional wind capacity that would be commercially operative in 2027 and another possible RFP this fall to purchase a utility-scale battery project that could begin commercial operations in late 2026.

The table below summarizes Platte River's most recent plan for additional resources to meet our power supply objectives.

	2023	2024	2025	2026	2027	2028	2029	2030
<u>Existing Resources</u>								
Rawhide 1	278	278	278	278	278	278	278	
Craig 1 & 2	151	151	151	151	74	74		
Peaking capacity	388	388	388	388	388	388	388	388
Wind	231	231	231	231	231	231	231	285
Solar	52	52	52	52	52	52	52	52
<u>New Resources (*)</u>								
Solar			150	150		150		
Wind					200			100
Storage				50	50	100		
Dispatchable capacity						166		

(*) In-service year for new resources is based on first year such resource is available during the summer months.

Integrated resource planning 2024

The resource planning team spent most of the month of April preparing for the 2024 Integrated Resource Plan (IRP).

The current activities and studies being undertaken by team are as follows:

- Finalizing the Resource Adequacy study to determine the future Planning Reserve Margin and estimate the Effective Load Carrying Capability of renewable generation and storage. The draft report is under review.
- Managing the dispatchable capacity selection study, which involves evaluating different options for dispatchable technologies to integrate additional renewable generation and enhance supply reliability after coal generation retirements. Different versions of the Levelized Cost of Electricity have been reviewed, and these options are being tested in the dispatch model.
- Working on two additional studies: low or no carbon generation technology screening and independent assessment of dispatchable capacity needs.
 - The first study will include an assessment of both mature and emerging generation technologies, such as long-duration energy storage, low-carbon and no-carbon fuels (such as biodiesel and hydrogen), and carbon sequestration. This study will provide recommendations for suitable generation technologies for commercial operation during the 20-year planning horizon of the 2024 IRP (years 2024-2043).
 - The second study will offer an independent assessment of Platte River's need for dispatchable capacity to integrate renewable resources and maintain reliable supplies within Platte River's deeply decarbonized supply portfolio after coal retirements.
- Continuing the Location Marginal Prices (LMP) study to estimate LMPs in and around Platte River's territory, identifying potential transmission constraints and suitable locations for new renewable generation.
- Continuously assessing the frequency, depth, and duration of extreme weather events and their impact on load, market prices, and power supply reliability. The results will be used for power supply risk analysis in the 2024 IRP.

DER System Integration

Platte River and its owner communities are working together to integrate distributed energy resources (DERs), whether owned by customers or the utility, into the electric system operated by the owner communities and Platte River to provide value to all customers. This work is taking place through the DER Advisory Committee, DER Planning and Programs Teams, and other working groups that include staff from Platte River and each owner community.

The DER planning forecast in the table below shows how selected DERs are expected to grow over time. Platte River has commissioned Dunskey Energy + Climate Advisors to perform a DER forecast and

potential study that will update and expand this forecast. The expansion will add distributed storage and a fleet of electric vehicles, which are currently not included.

DER planning forecast (noncoincident MW)

	2023	2024	2025	2026	2027	2028	2029	2030
Distributed Generation	-38	-46	-55	-64	-72	-79	-85	-90
Electric vehicles	10	12	16	21	27	35	44	55
Building electrification (winter)	0	1	1	3	5	8	13	20
Demand response	0	-2	-5	-10	-15	-23	-30	-30

*Positive values indicate increases to loads. Negative values indicate reductions in load or the addition of generation.

The DER gap assessment and roadmap project is focused on identifying technologies needed by Platte River and the owner communities to effectively integrate DERs.

Platte River organized a daylong workshop titled "DER Functions and Capabilities" in collaboration with the project consultant, Utilicast, and staff from the owner communities. The primary focus of this workshop was to delve into the essential functions and capabilities needed for the successful implementation of a DER Management System (DERMS). Additionally, the team explored various owner-community "DERMS-adjacent" systems that play a crucial role in supporting the functionality of DERMS.

Several examples of DERMS-adjacent systems were discussed during the workshop. These systems play a vital role in supporting the functionality of the DERMS. Some notable examples include:

- **Customer Information Systems:** These systems are designed to support customer enrollment in programs managed by the DERMS. They provide necessary information and tools to facilitate customer engagement, facilitating effective participation in DER programs and initiatives.
- **Geographic Information Systems:** Geographic Information Systems (GIS) are used to locate and map DERs within the distribution system. GIS enables accurate geospatial representation of DERs, allowing for efficient planning, monitoring, and optimization of their integration into the existing infrastructure.
- **Advanced Distribution Management Systems:** Eventually, the implementation of advanced distribution management systems becomes crucial. These systems enable comprehensive management of DERs specifically for distribution system benefits. They incorporate advanced monitoring, control, and optimization capabilities to enhance grid reliability, efficiency, and resilience.

Utilicast offered a preliminary timeline during the workshop, outlining the integration of systems for the group's consideration. According to the proposed timeline, it is anticipated that a DERMS with the

capability to dispatch aggregated DERs, support reliability, and economic dispatch, could be ready by 2026.

The DER department manager actively participated in the Virtual Power Plant Partnership (VP3) member meeting organized by the Rocky Mountain Institute (RMI). RMI, as an independent nonprofit organization, is dedicated to expediting the transition to clean energy. VP3, an initiative housed within RMI, focuses on driving industry transformation and policy support to scale virtual power plants (VPPs). The overarching goal of VP3 is to facilitate the affordable, reliable decarbonization of the electric sector by overcoming barriers to VPP market growth. Initially funded by General Motors and Google Nest, VP3 has now grown to include approximately 20 different DER vendors and aggregators. Notably, utilities are not included as members of VP3, as it primarily serves the needs of DER vendors and aggregators.

Despite this, Platte River, Holy Cross, and a former Colorado Public Utilities commissioner were invited to the VP3 meeting to provide utility perspectives on VPPs and engage in relevant activities during a designated half-day session of the three-day event. The meeting comprised breakout sessions where participants identified challenges and opportunities associated with expanding the VPP market. Four primary areas of focus emerged from these discussions: communicating the VPP story, regulatory and legislative strategies, working with utilities to advance VPPs, and data communications and interoperability.

This meeting offered valuable insights into how non-utility members of the growing VPP industry are striving to offer and enhance services that bring value to the electric system and customers. One notable observation from the meeting, consistent with previous discussions between staff and DER and VPP vendors, was the challenge vendors face in aligning their services with the diverse needs of utilities. These needs vary depending on the utility type (investor-owned utility, cooperative utility, municipal utility, or joint action agency), resource mix, market environment, DER penetration, existing DER-enabling information technology infrastructure, and regulatory or policy landscape.

The recurring question raised during the meeting was "What does a VPP mean to your utility?" This underscores the significance of the ongoing DER gap assessment and roadmap project undertaken by Platte River and the owner communities. The aim is to address this question comprehensively and obtain the most relevant services from vendors based on the unique requirements of each utility.



Operating report

April 2023



Executive summary

Owner community load

Owner community demand and energy came in near budget for the month of April, and year to date. The overall net variable cost to serve owner community load was significantly above budget due to surplus sales being significantly below budget for the month. Year to date, net variable cost to serve owner community load is above budget.

Thermal resources

Rawhide Unit 1 had an extended curtailment due to induced draft fan bearing issues resulting in equivalent availability factor coming in below budget. Net capacity factor was significantly below budget for the month due to purchasing energy through WEIS at below generation cost. Equivalent availability factor was below budget and net capacity factor was below budget, year to date.

Craig Unit 1 was curtailed a few times early in the month for various reasons relating to poor coal quality, as well as mill and scrubber issues. The last week of the month they came offline for mercury emissions and remained offline through the remainder of the month. Craig Unit 2 was offline the entire month on outage. As a result, Craig equivalent availability factor and net capacity factor were significantly below budget, both for the month and year to date. In addition, shaft share was delivered for two separate Craig Unit 3 outage events.

Gas generation was above budget. The combustion units ran throughout the month to facilitate sales, replace generation during curtailments, and serve shaft share obligations. Combustion turbine equivalent availability factor and net capacity factor came in above budget for the month. Year to date, equivalent availability factor was below budget and net capacity factor was above budget.

Renewable resources

For April, wind generation was slightly below budget and solar generation came in above budget. Year to date, net capacity factor for wind is near budget and solar is slightly above budget. The battery associated with the Rawhide Prairie Solar farm was charged and discharged 28 times throughout the month.

Surplus sales

In the bilateral market surplus sales volume was significantly below budget due to lack of resource availability and shaft share obligations. The average surplus sales price for the month was slightly below budget due to mild seasonal temperatures and lower natural gas pricing. Surplus sales volume is well below budget and average sales price is above budget, year to date.

WEIS market sales and pricing came in below budget during our first month of participation.

Purchased power

Overall purchased power volume in the bilateral market was significantly above budget for the month. Purchases were made primarily to cover obligations due to unit outages and curtailments, as well as shaft share. Overall average purchase power price came in significantly above budget. Purchased power volume is significantly above budget and average purchase price is above budget, year to date.

WEIS market purchases and pricing came in above budget. Overall average pricing was below our generating costs.

Total resources

Total blended resource costs came in above budget for the month due to hydropower, solar, coal and purchase costs coming in above budget. While natural gas costs came in below budget, the costs were still considerably above the blended budget costs contributing to the higher costs for the month. Year to date, resource costs are above budget.

Variances

Category	April variance		YTD variance	
Owner community demand	0.9%	◆	1.8%	◆
Owner community energy	(1.8%)	◆	(0.4%)	◆
Wind generation	(0.7%)	◆	(0.6%)	◆
Solar generation	10.8%	●	5.2%	●
Net variable cost to serve owner community load	26.1%	■	27.8%	■

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

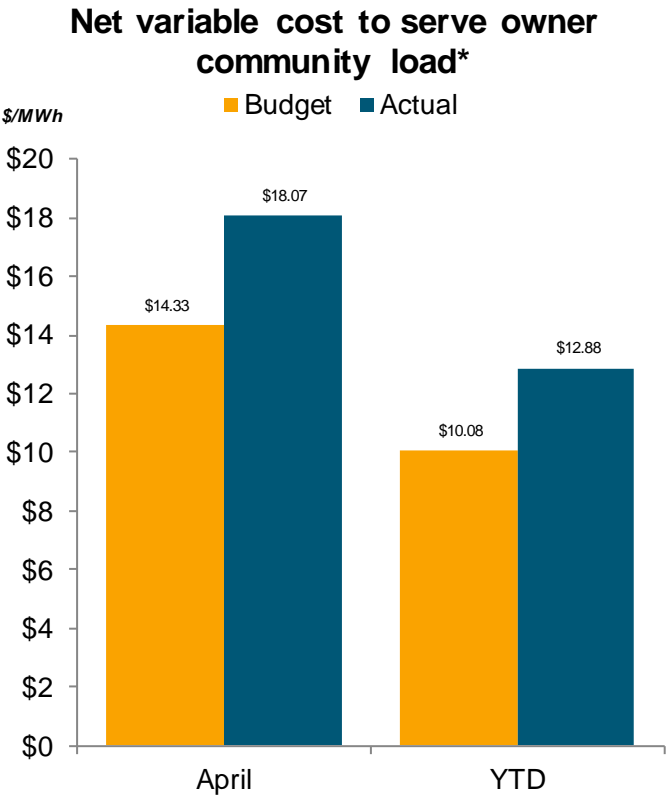
Loss of load

System disturbances

There were no system disturbances resulting in loss of load during the month of April.

2023 goal	April actual	YTD total
0 ●	0 ●	1 ■

Net variable cost to serve owner community load



* The net variable operating cost to serve owner community load is equal to the sum of fuel, renewable purchases, energy purchases less surplus energy sales. The net variable cost is divided by total owner community load to determine average net variable cost to serve owner community load.

Events of significance

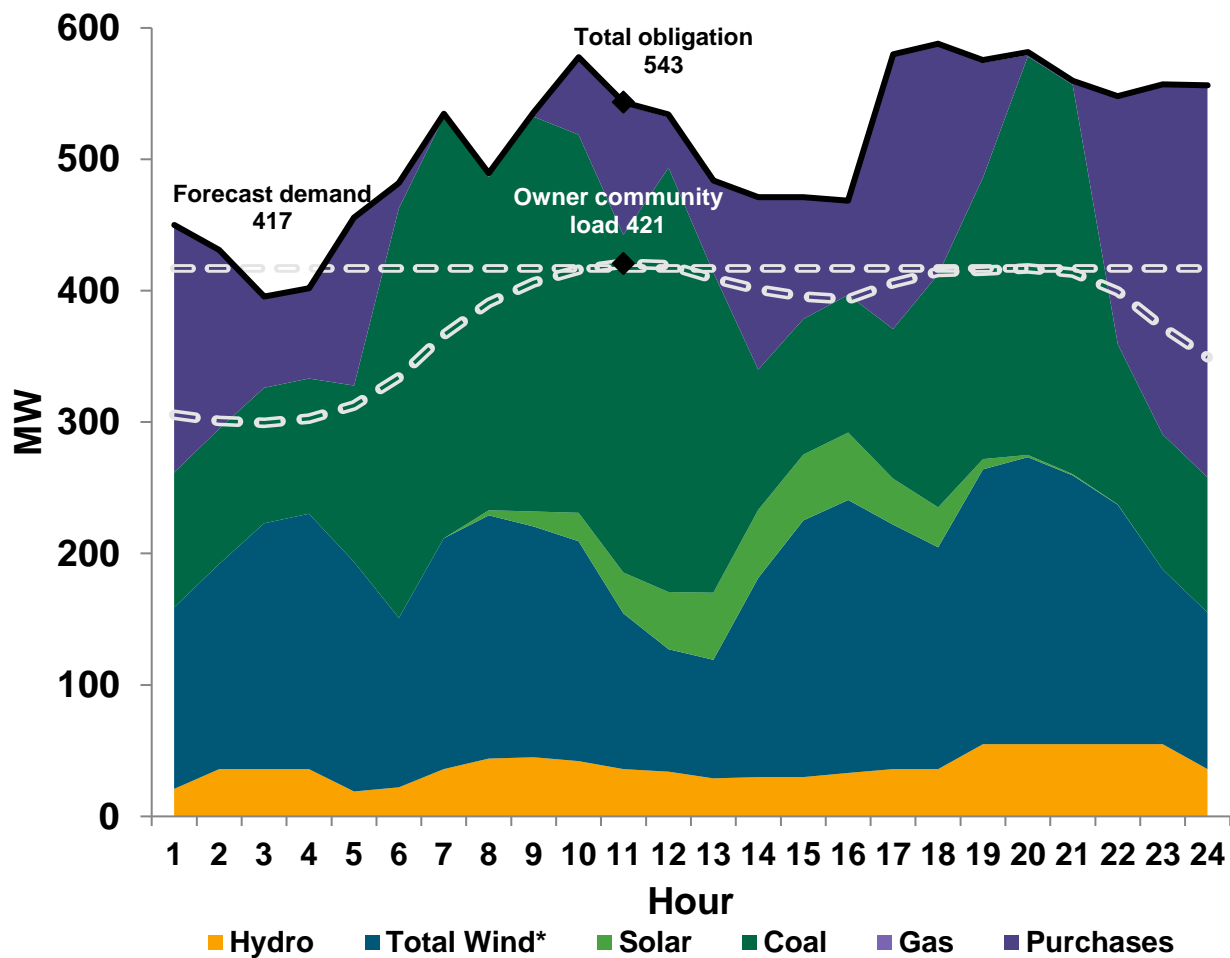
- There was no load lost due to Platte River personnel or equipment.
- Completed annual PM's on CT-D and CT-F.
- Replaced one transformer bushing on Rawhide CT-A.
- Replaced one transformer bushing on Rawhide CT-B.
- Completed transformer testing and maintenance on Rawhide CT-F.
- PSO-Transmission participated in 1,585 phone and radio communications.
- PSO-Transmission participated in 96 switching events; 67 were completed, 11 were cancelled, 18 remain active.
- On April 27, staff met with Larimer County Emergency Operations personnel to discuss blackouts and restoration.
- Completed underground cable replacement and termination repair on the Fordham-Fort St.Vrain transmission line, energized and placed in service.
- Had two inboard bearing failures on induced draft fan 102. Unit 1 has been curtailed to 165 MW since the second failure on April 20. Troubleshooting is ongoing.
- Completed first month operating in the SPP Western Energy Imbalance Services market. The larger footprint coupled with more renewables led to lower thermal resource output. Rawhide Unit 1 was dispatched down to the minimum output of 80 megawatts for much of the month. In addition, the larger volume of renewables resulted in more wind and solar curtailments than previously experienced.

Peak day

Peak day obligation

Peak demand for the month was 421 megawatts which occurred on April 4, 2023, at hour ending 11:00 and was 4 megawatts above budget. Platte River's obligation at the time of the peak totaled 543 megawatts. Demand response was not called upon at the time of peak.

Peak day obligation: April 4, 2023



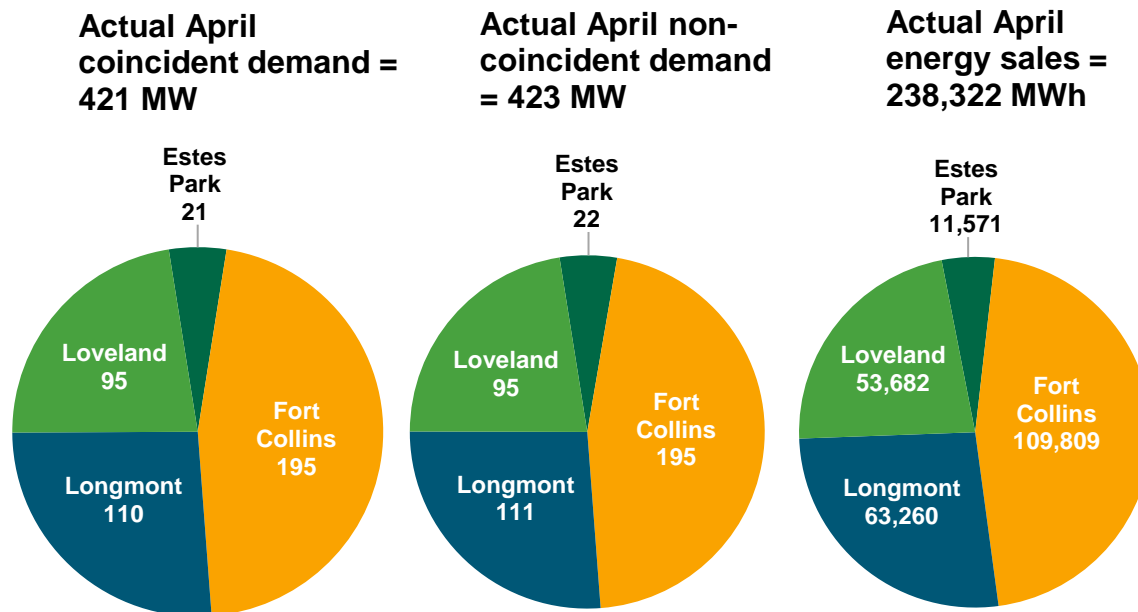
*Some off-system wind renewable energy credits and associated energy have been sold to another utility and, therefore, cannot be claimed as a renewable resource by Platte River or its owner communities.

Owner community loads

	April budget	April actual	Minimum	Actual variance	
Coincident demand (MW)	417	421	500	1.0%	◆
Estes Park	20	21	13	5.0%	●
Fort Collins	197	195	229	(1.0%)	◆
Longmont	106	110	142	3.8%	●
Loveland	94	95	116	1.1%	◆
Non-coincident demand (MW)	421	423	508	0.5%	◆
Estes Park	20	22	20	10.0%	●
Fort Collins	197	195	229	(1.0%)	◆
Longmont	108	111	142	2.8%	●
Loveland	96	95	117	(1.0%)	◆
Energy sales (MWh)	242,580	238,322		(1.8%)	◆
Estes Park	10,949	11,571		5.7%	●
Fort Collins	115,176	109,809		(4.7%)	■
Longmont	62,033	63,260		2.0%	◆
Loveland	54,422	53,682		(1.4%)	◆

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

Note: The bolded values above were those billed to the owner communities, based on the maximum of either the actual metered demand or the annual minimum ratchet.

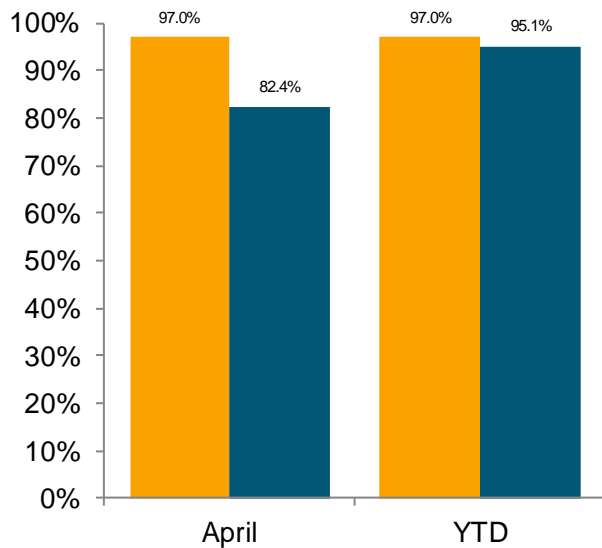


Thermal resources

Power generation - Rawhide

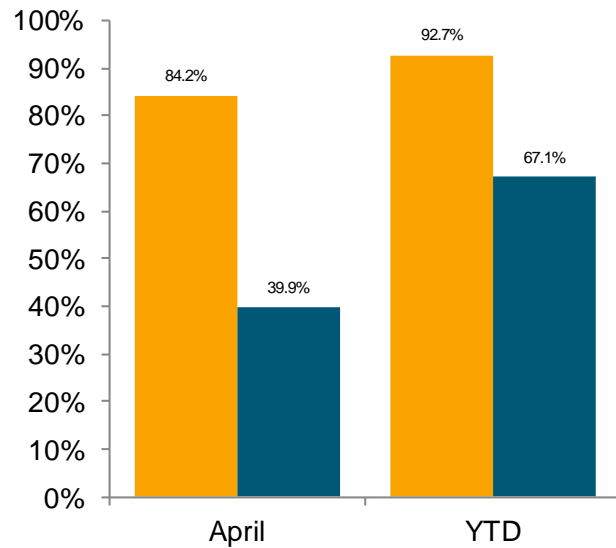
Equivalent availability factor

■ Budget ■ Actual



Net capacity factor

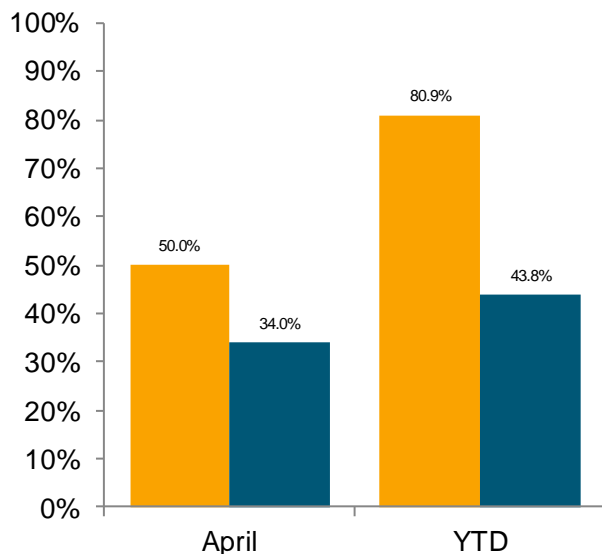
■ Budget ■ Actual



Power generation – Craig

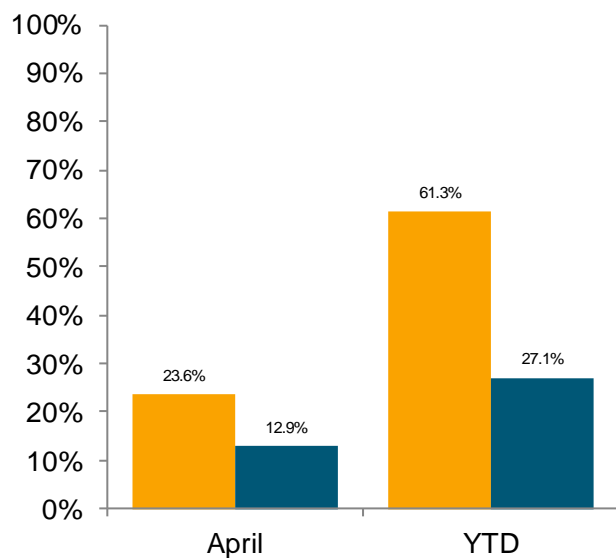
Equivalent availability factor*

■ Budget ■ Actual



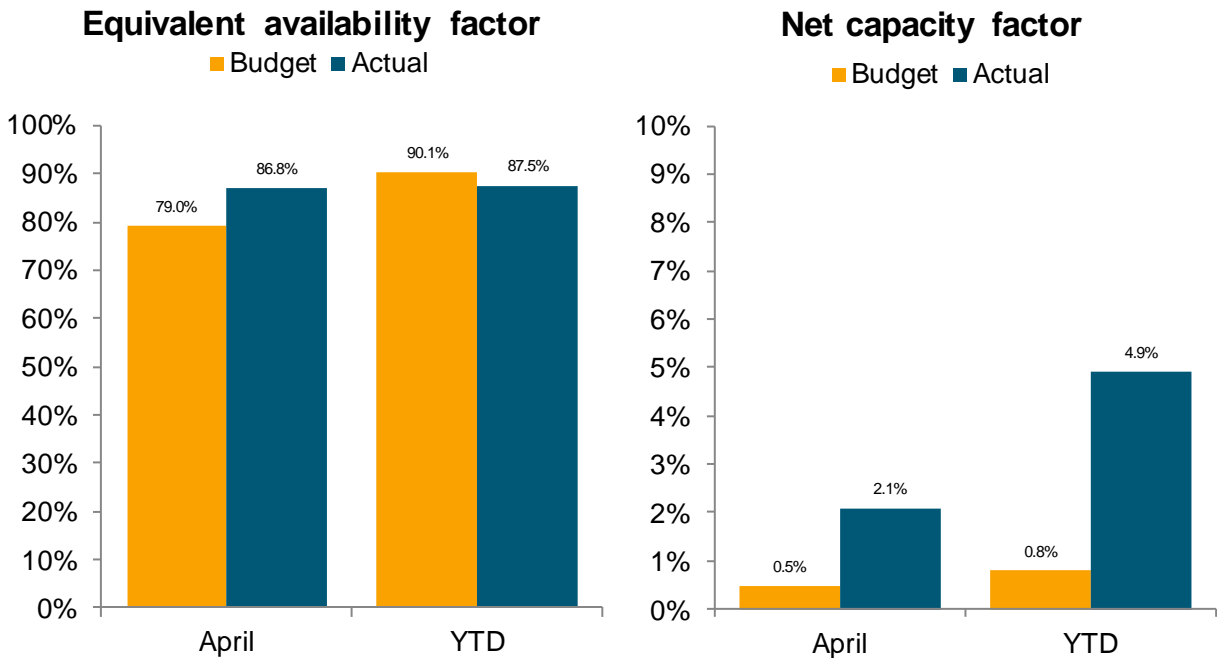
Net capacity factor

■ Budget ■ Actual



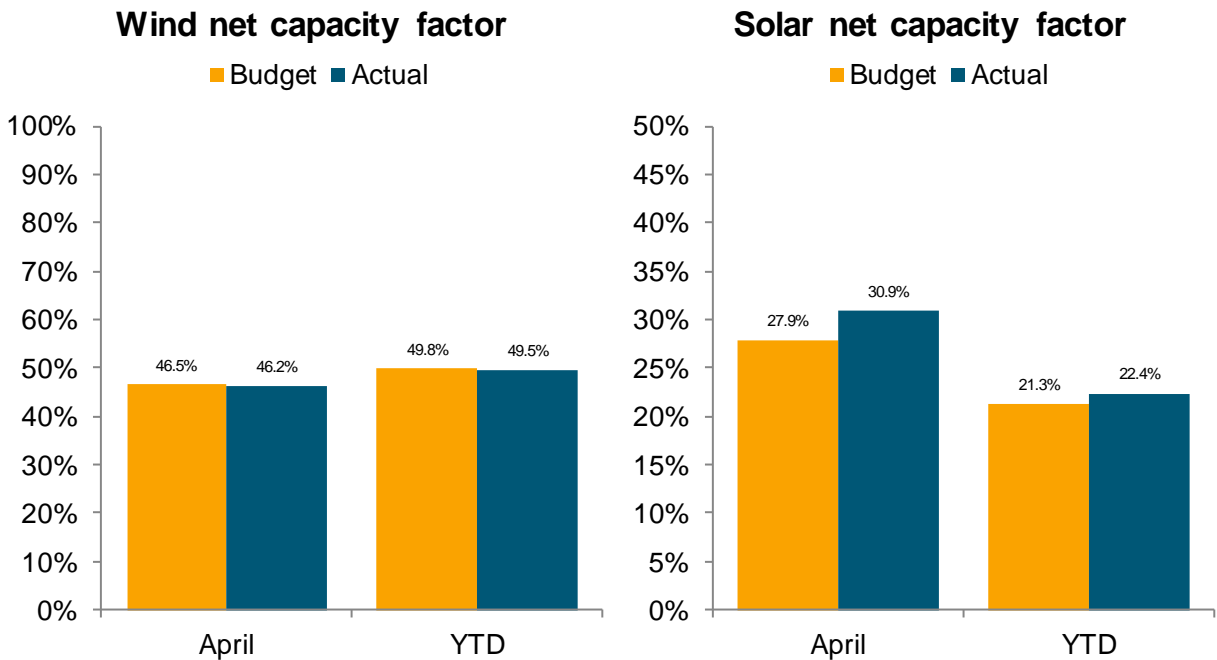
*Estimated due to a delay

Power generation – combustion turbines

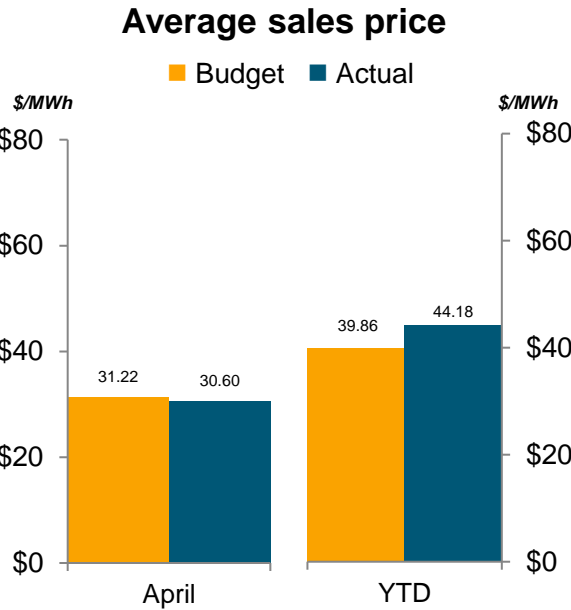
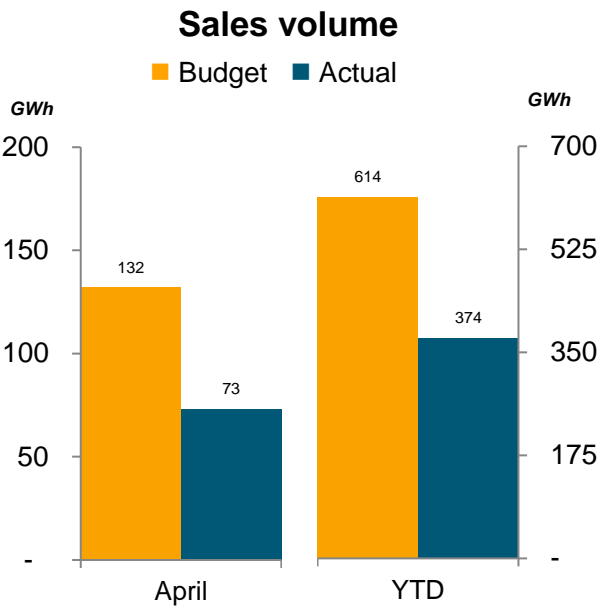


Renewable resources

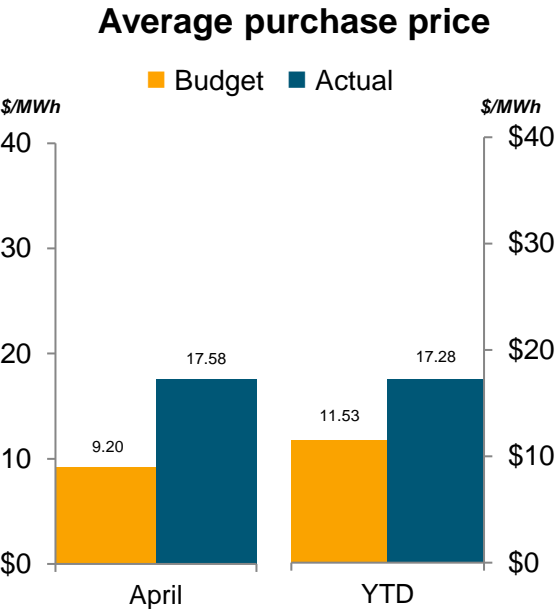
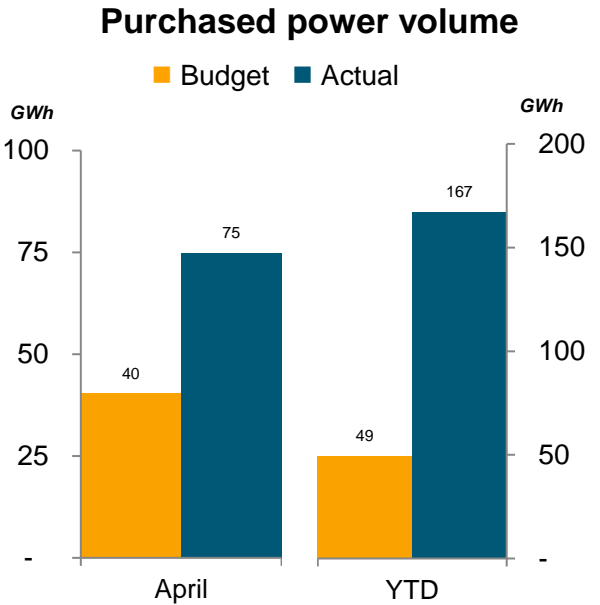
Power generation – wind and solar production



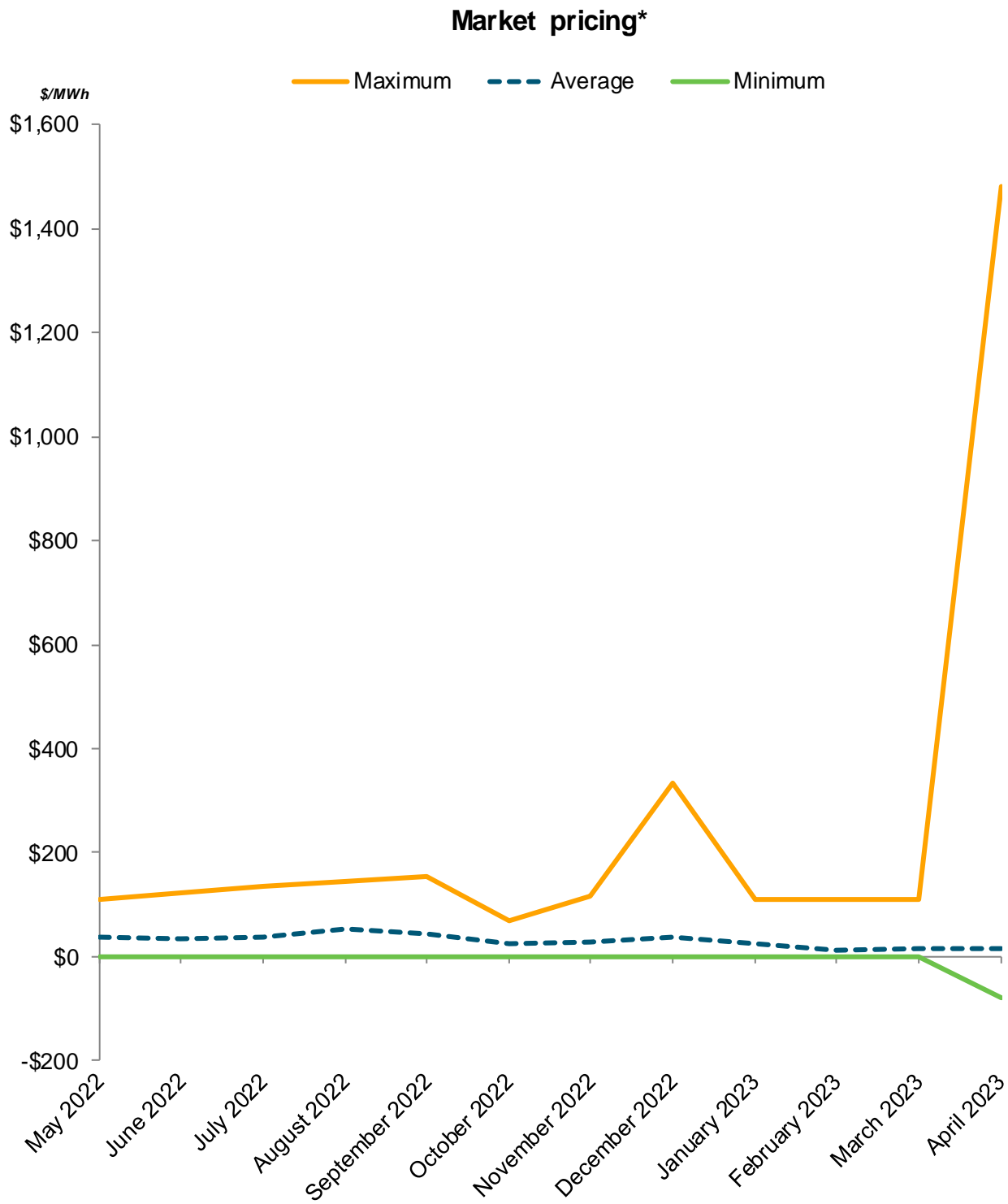
Surplus sales



Purchased power

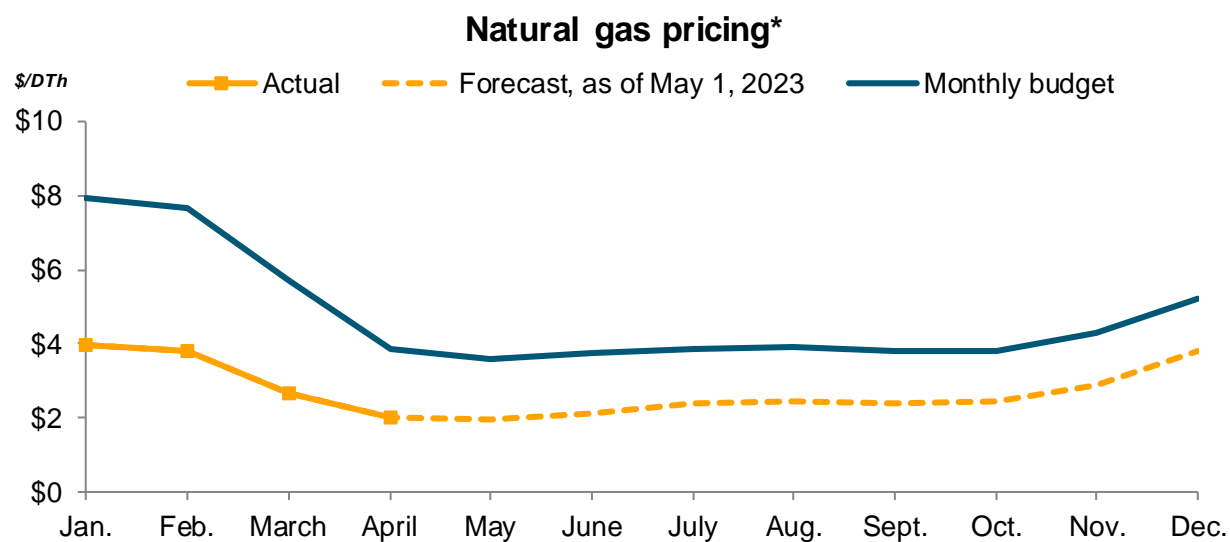


Market pricing



*WEIS Operations started April 1.

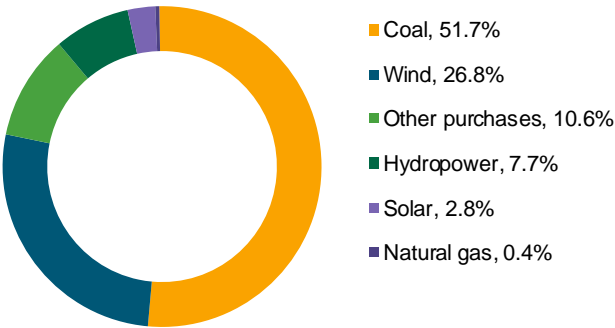
Natural gas pricing



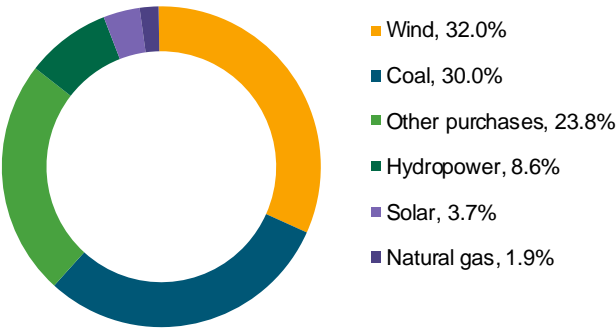
*Forecast based on Argus North American Natural Gas forward curves. Pricing does not include transport.

Total resources

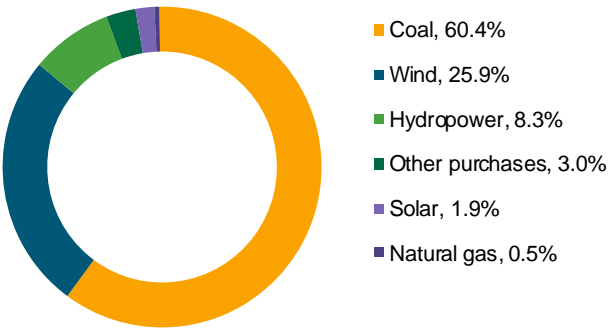
April generation budget



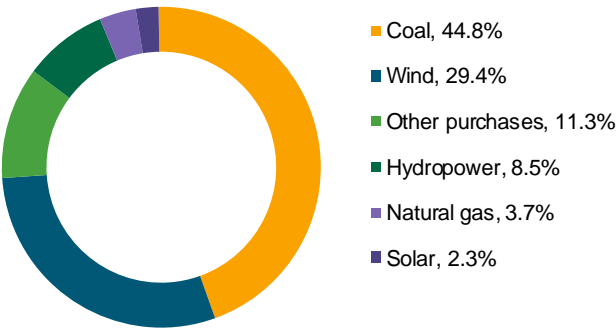
April generation actual

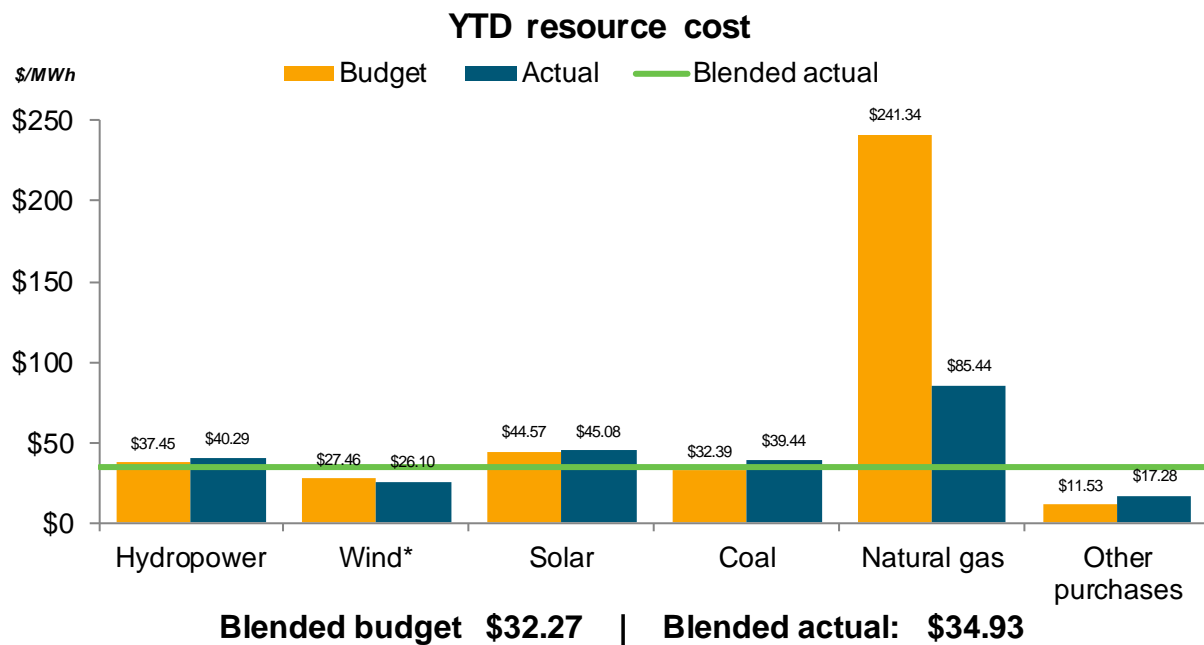
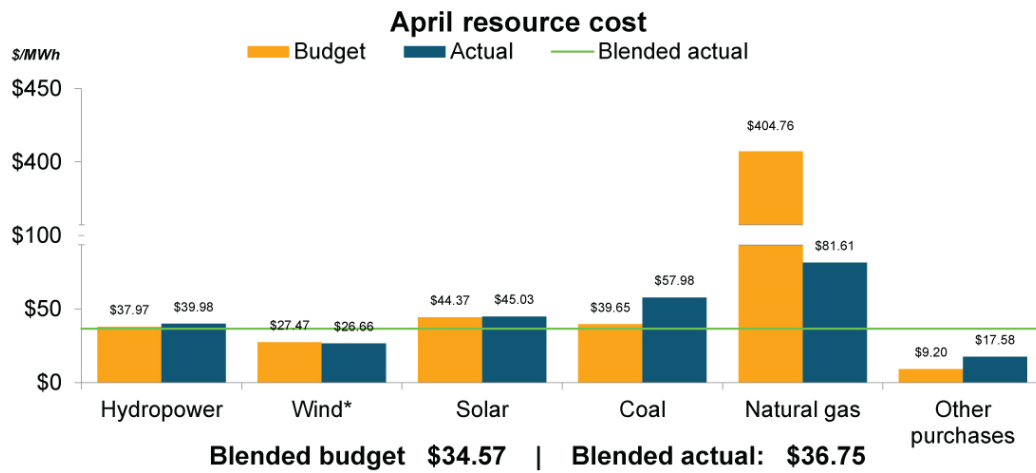


YTD budget



YTD actual





*Some off-system wind RECs and associated energy have been sold to another utility and, therefore, cannot be claimed as a renewable resource by Platte River or its owner communities.



Financial report

April 2023



Financial highlights year to date

Platte River reported favorable results year to date. Change in net position of \$10.7 million was favorable by \$5.3 million compared to budget due to below-budget operating expenses and above-budget unrealized gains on investments, partially offset by below-budget revenues.

Key financial results (\$ millions)	April		Favorable		Year to date		Favorable		Annual budget		
	Budget	Actual		(unfavorable)	Budget	Actual		(unfavorable)			
Change in net position ⁽¹⁾	\$ (1.2)	\$ -	●	\$ 1.2	100.0%	\$ 5.4	\$ 10.7	●	\$ 5.3	98.1%	\$ 22.4
Fixed obligation charge coverage	1.42x	1.66x	●	.24x	16.9%	2.20x	2.43x	●	.23x	10.5%	2.43x

>2% ● Favorable | 2% to -2% ◆ At or near budget | <-2% ■ Unfavorable

(1) See deferred revenue and expense accounting policy in the other financial information section.

The current estimate for year-end change in net position ranges from \$25 million to \$35 million. The expected projection includes overall lower operating revenues primarily due to lower sales for resale. Sales have been lower than anticipated because of resource availability and market prices. Purchases are anticipated to be above budget at the end of the year as baseload generation is replaced. Baseload generation is also expected to be lower because of reduced sales for resale volumes, which results in lower fuel expense. Other operating expenses are anticipated to end the year below budget primarily due to distributed energy resources discussed in the key variances of this report. Depreciation, amortization and accretion will end the year above budget as asset retirement obligation costs were updated and deferred losses will be recognized. Total operating expenses are projected to be below budget, however a high degree of uncertainty exists primarily due to uncertainty of the bilateral sales market and energy imbalance market. Staff will continue to monitor assumptions, estimates and forecasts to ensure appropriate funding.

Budgetary highlights year to date

The following budgetary highlights are presented on a non-GAAP budgetary basis.

Key financial results (\$ millions)	April		Favorable		Year to date		Favorable		Annual budget		
	Budget	Actual		(unfavorable)	Budget	Actual		(unfavorable)			
Total revenues	\$ 21.8	\$ 20.2	■	\$ (1.6)	(7.3%)	\$ 98.3	\$ 92.1	■	\$ (6.2)	(6.3%)	\$ 305.0
Sales to owner communities	16.5	16.4	◆	(0.1)	(0.6%)	69.2	69.2	◆	0.0	0.0%	224.1
Sales for resale - long-term	1.2	0.9	■	(0.3)	(25.0%)	4.6	4.9	●	0.3	6.5%	14.9
Sales for resale - short-term	3.1	1.5	■	(1.6)	(51.6%)	20.5	12.3	■	(8.2)	(40.0%)	53.6
Wheeling	0.5	0.8	●	0.3	60.0%	2.0	3.3	●	1.3	65.0%	6.1
Interest and other income	0.5	0.6	●	0.1	20.0%	2.0	2.4	●	0.4	20.0%	6.3
Total operating expenses	\$ 19.0	\$ 16.6	●	\$ 2.4	12.6%	\$ 78.1	\$ 68.9	●	\$ 9.2	11.8%	\$ 238.1
Purchased power	4.5	5.0	■	(0.5)	(11.1%)	18.7	17.2	●	1.5	8.0%	55.1
Fuel	3.6	2.1	●	1.5	41.7%	19.1	15.6	●	3.5	18.3%	62.7
Production	5.5	4.4	●	1.1	20.0%	18.7	17.4	●	1.3	7.0%	54.8
Transmission	1.6	1.8	■	(0.2)	(12.5%)	6.9	7.1	■	(0.2)	(2.9%)	20.2
Administrative and general	2.7	2.6	●	0.1	3.7%	10.8	9.6	●	1.2	11.1%	31.5
Distributed energy resources	1.1	0.7	●	0.4	36.4%	3.9	2.0	●	1.9	48.7%	13.8
Capital additions	\$ 3.3	\$ 3.2	●	\$ 0.1	3.0%	\$ 15.9	\$ 6.4	●	\$ 9.5	59.7%	\$ 42.7
Debt service expenditures	\$ 1.5	\$ 1.5	◆	\$ -	0.0%	\$ 5.9	\$ 5.9	◆	\$ -	0.0%	\$ 17.8

>2% ● Favorable | 2% to -2% ◆ At or near budget | <-2% ■ Unfavorable

Total revenues, \$6.2 million below budget

Key variances greater than 2% or less than (2%)

- **Sales for resale - long-term** were above budget \$0.3 million due to calls on a capacity contract, partially offset by below-budget resold wind generation and lower available baseload generation that serves a contract.
- **Sales for resale - short-term** were below budget \$8.2 million as energy volume was 48.9% below budget, partially offset by 17.3% above-budget average prices. Western Energy Imbalance Service (WEIS) operations started April 1.
- **Wheeling** was above budget \$1.3 million due to unplanned point-to-point transmission sales.
- **Interest and other income** was above budget \$0.4 million primarily due to higher interest income earned on investments.

Total operating expenses, \$9.2 million below budget

Key variances greater than 2% or less than (2%)

- **Fuel** was \$3.5 million below budget.
 - Coal - Rawhide Unit 1** 91% of the overall variance, \$3.2 million below budget. Generation was below budget due to an unplanned outage, curtailments and lower dispatch instructions due to WEIS market conditions.
 - Coal - Craig units** 80% of the overall variance, \$2.8 million below budget. Generation was below budget due to unplanned outages, curtailments, the early start to the Craig Unit 2 scheduled maintenance outage and lower dispatch instructions due to WEIS market conditions. Price was below budget due to an updated price from Trapper Mine.
 - Natural Gas** (71%) of the overall variance, \$2.5 million above budget. The combustion turbine units were used predominantly to make sales. Further, non-generation gas expense was above budget due to losses on price-locked gas that wasn't burned, as prices had fallen. Price was below budget due to lower market prices.
- **Production, transmission, and administrative and general** were \$2.3 million below budget. Projects were either completed below budget or expenses not required. The below-budget expenses include: 1) Rawhide non-routine projects, 2) personnel, 3) software and technology hardware, 4) digital and communications consulting services, 5) transmission non-routine projects, 6) market services and 7) general facility maintenance. The above-budget expenses include: 1) SCADA and energy management, 2) Fordham to Fort St. Vrain termination repair and 3) Craig operating expenses. Of the net below-budget variance, at least \$2.2 million is expected to be spent by the end of the year.
- **Distributed energy resources** were \$1.9 million below budget due to the unpredictability of the completion of customers' energy efficiency projects, below-budget personnel expenses and consulting services. The energy efficiency rebates and incentives will finish the year below budget primarily due to slow participation in small and medium businesses, which is driven by continued effects of the COVID-19 pandemic and economic recovery challenges.

- **Purchased power** was \$1.5 million below budget. The below-budget expenses include: 1) net energy provided to Tri-State Generation and Transmission Association, Inc. (Tri-State) under the forced outage assistance agreement, 2) wind generation and 3) hydropower purchases due to drought conditions. The above-budget expenses include: 1) market and bilateral purchases to replace baseload generation during outages and curtailments, and to take advantage of lower cost energy under WEIS. A forced outage of Craig Unit 2 led to an early start to the scheduled maintenance outage. 2) solar generation and 3) purchased reserves due to holding fewer reserves on the coal units.

Capital additions (year-end estimates as of April 2023)

The projects listed below are projected to end the year with a budget variance of more than \$100,000. In addition, the amounts below are costs for 2023 and may not represent the total cost of the project. Further changes to capital projections are anticipated and staff will continue to monitor spending estimates to ensure capital projects are appropriately funded.

Project (\$ in thousands)	2023 budget	Estimate	Favorable (unfavorable)	Carryover request
Below budget projects				
** Solar substation 230 kV - Severance Substation - This project will be below budget due to supply chain issues. Material and equipment lead times are longer than anticipated and are not expected to be received until 2024. This delay is not expected to impact the revised overall project schedule. <i>The below-budget funds will be requested to be carried over into 2024.</i>	\$ 6,368	\$ 1,750	\$ 4,618	\$ 4,618
** Relay panel and breaker replacements - Airport Substation - This project will be below budget due to third-party delays. The number of participants in the project adds complexity which requires additional time to evaluate the overall project plan. <i>The below-budget funds will be requested to be carried over into 2024.</i>	\$ 1,829	\$ 15	\$ 1,814	\$ 1,814
Market software - PCI GenManager - This project will be below budget due to vendor project costs being lower than originally anticipated and contingency funds being not needed.	\$ 459	\$ 259	\$ 200	\$ -
** 115 kV transmission line replacement - Drake transmission line - This project will be below budget as a portion of the design budgeted for 2023 will be delayed to better align with the overall project schedule. <i>The below-budget funds will be requested to be carried over into 2024.</i>	\$ 225	\$ 100	\$ 125	\$ 125
Above budget projects				
* Relay upgrades - (T1 and T2 bays) Dixon Creek Substation - This project will be above budget for the construction of relay upgrades which will improve the transformer bus protection and modernize the existing relay protection package. Project design began in late 2022 and funds could not be budgeted timely for 2023.	\$ 17	\$ 224	\$ (207)	\$ -

Project (\$ in thousands)	2023 budget	Estimate	Favorable (unfavorable)	Carryover request
* Transmission line vault upgrades - Crossroads Substation - This project will be above budget due to increased contractor labor rates, project duration extending by one week and material costs being higher than originally anticipated.				
	\$ 994	\$ 1,144	\$ (150)	\$ -
Out-of-budget projects				
** Reactors replacement KW1A and KW1B - Ault Substation WAPA - This project will replace two oil filled 13.8-kV 25MVAR reactors at the Ault KU1A transformer tertiary.				
	\$ -	\$ 346	\$ (346)	\$ -
Switch and capacitor voltage transformer (CVT) replacements - Timberline Substation - This project will replace inoperable and unreliable disconnect switches and will replace the CVT which is at the end of its useful life. Equipment replacements will be combined to reduce costs and outage scheduling.				
	\$ -	\$ 217	\$ (217)	\$ -
Perimeter detection system - Horseshoe Substation - This project will install forward-looking infrared thermal cameras to detect and monitor breaches of the substation. In addition, perimeter lighting will be installed to act as a deterrent and to aid in investigation if there was a breach. This project was escalated due to recent physical security events at substations across the country.				
	\$ -	\$ 164	\$ (164)	\$ -
Canceled projects				
Subscription based information technology arrangements - Due to the implementation of GASB 96 <i>Subscription-Based Information Technology Arrangements</i> , a right-to-use subscription asset was budgeted as capital for a variety of subscription software. After further analysis, it was determined that appropriated funds for this standard should not be attributed to capital additions. Rather, the related expenditures will be classified as financing arrangements and reported as debt service for budgetary purposes.				
	\$ 1,160	\$ -	\$ 1,160	\$ -
Transformer (Flats) replacement - Rawhide Substation - This project was canceled and will be evaluated with future generation resources to ensure construction and system impacts at the Rawhide Energy Station are optimized.				
	\$ 949	\$ -	\$ 949	\$ -
Real time tools - This project was canceled as a capital addition. COVID-19 restrictions delayed the project leading to an estimated remaining useful life of less than two years and a replacement asset was in progress. Therefore, it did not meet capitalization criteria when completed and the expenditures were reclassified as operating expenses.				
	\$ -	\$ (561)	\$ 561	\$ -
Control enclosure and relay upgrades - Valley Substation - This project was canceled and will be rebudgeted in a future year to align with City of Loveland projects. This will minimize outages and gain efficiencies.				
	\$ 453	\$ -	\$ 453	\$ -

* Project details or amounts have changed since last report.

** Project is new to the report.

Debt service expenditures

The outstanding principal for Series JJ and KK represents debt associated with transmission assets (\$115.6 million) and the Rawhide Energy Station (\$22.5 million). Principal and interest payments are made June 1 and interest only payments are made Dec. 1. The table below shows current debt outstanding.

Series	Debt outstanding \$/thousands	Par issued \$/thousands	True interest cost	Maturity date	Callable date	Purpose
Series JJ - April 2016	\$ 113,490	\$ 147,230	2.2%	6/1/2036	6/1/2026	\$60M new money for Rawhide & transmission projects & refund portion of Series HH (\$13.7M NPV/12.9% savings)
Series KK - December 2020	24,595	\$ 25,230	1.6%	6/1/2037	N/A*	Refund a portion of Series II (\$6.5M NPV/27.6% savings)
Total par outstanding	138,085					
Unamortized bond premium	11,159					
Total revenue bonds outstanding	149,244					
Less: due within one year	(12,215)					
Total long-term debt, net	\$ 137,029					

Fixed rate bond premium costs are amortized over the terms of the related bond issues.

*Series KK is subject to prior redemption, in whole or in part as selected by Platte River, on any date.

As discussed in the capital additions section, Platte River is subject to the subscription reporting model applicable under GASB 96 *Subscription-Based Information Technology Arrangements*. Payments for right-to-use subscription assets will be presented as debt service expenditures rather than capital additions. Because these were budgeted as capital additions, an appropriation for debt service expenditures was not approved for these transactions. Therefore, staff will request a contingency transfer appropriation and will continue to evaluate subscriptions. The results presented may not represent the full implementation of the standard until the end of 2023.

Other financial information

- **Deferred revenue and expense accounting policy** - This policy allows deferring revenues and expenses to reduce rate pressure and achieve rate smoothing during the portfolio transition to meet the Resource Diversification Policy goal. Staff will evaluate the financial statements at the end of the year and apply the policy accordingly, which would impact the change in net position.
- **Forced outage assistance agreement** - This agreement, which involves Platte River's Rawhide Unit 1 and Tri-State's Craig Unit 3, provides that each party supply replacement energy to the other party during a forced outage of either unit. The Energy Account Balance Limit, defined in the agreement, was exceeded in February and Tri-State was invoiced \$2.4 million. Pursuant to the terms of the agreement, this payment buys down the energy balance to half of the contract limit.

Budget schedules

Schedule of revenues and expenditures, budget to actual

April 2023

Non-GAAP budgetary basis (in thousands)

	Month of April		Favorable
	Budget	Actual	(unfavorable)
Revenues			
<i>Operating revenues</i>			
Sales to owner communities	\$ 16,502	\$ 16,365	\$ (137)
Sales for resale - long-term	1,170	866	(304)
Sales for resale - short-term	3,110	1,535	(1,575)
Wheeling	502	865	363
Total operating revenues	21,284	19,631	(1,653)
<i>Other revenues</i>			
Interest income ⁽¹⁾	456	556	100
Other income	13	1	(12)
Total other revenues	469	557	88
Total revenues	\$ 21,753	\$ 20,188	\$ (1,565)
Expenditures			
<i>Operating expenses</i>			
Purchased power	\$ 4,538	\$ 5,035	\$ (497)
Fuel	3,562	2,079	1,483
Production	5,494	4,352	1,142
Transmission	1,586	1,814	(228)
Administrative and general	2,753	2,607	146
Distributed energy resources	1,118	745	373
Total operating expenses	19,051	16,632	2,419
<i>Capital additions</i>			
Production	1,435	1,186	249
Transmission	912	1,526	(614)
General	985	458	527
Total capital additions	3,332	3,170	162
<i>Debt service expenditures</i>			
Principal	1,018	1,018	-
Interest expense	464	464	-
Total debt service expenditures	1,482	1,482	-
Total expenditures	\$ 23,865	\$ 21,284	\$ 2,581
Revenues less expenditures	\$ (2,112)	\$ (1,096)	\$ 1,016

⁽¹⁾ Excludes unrealized holding gains and losses on investments.

Schedule of revenues and expenditures, budget to actual

April 2023 year-to-date

Non-GAAP budgetary basis (in thousands)

	April year to date		Favorable	Annual
	Budget	Actual	(unfavorable)	budget
Revenues				
<i>Operating revenues</i>				
Sales to owner communities	\$ 69,240	\$ 69,225	\$ (15)	\$ 224,082
Sales for resale - long-term	4,558	4,861	303	14,889
Sales for resale - short-term	20,566	12,324	(8,242)	53,584
Wheeling	2,001	3,349	1,348	6,165
Total operating revenues	96,365	89,759	(6,606)	298,720
<i>Other revenues</i>				
Interest income ⁽¹⁾	1,702	2,122	420	5,978
Other income	240	246	6	301
Total other revenues	1,942	2,368	426	6,279
Total revenues	\$ 98,307	\$ 92,127	\$ (6,180)	\$ 304,999
Expenditures				
<i>Operating expenses</i>				
Purchased power	\$ 18,644	\$ 17,195	\$ 1,449	\$ 55,115
Fuel	19,162	15,622	3,540	62,676
Production	18,672	17,401	1,271	54,770
Transmission	6,923	7,075	(152)	20,254
Administrative and general	10,816	9,637	1,179	31,508
Distributed energy resources	3,916	1,972	1,944	13,789
Total operating expenses	78,133	68,902	9,231	238,112
<i>Capital additions</i>				
Production	4,352	2,180	2,172	14,668
Transmission	6,454	2,564	3,890	14,953
General	5,142	1,633	3,509	13,048
Asset retirement obligations	-	-	-	52
Total capital additions	15,948	6,377	9,571	42,721
<i>Debt service expenditures</i>				
Principal	4,072	4,072	-	12,550
Interest expense	1,856	1,856	-	5,233
Total debt service expenditures	5,928	5,928	-	17,783
Total expenditures	\$ 100,009	\$ 81,207	\$ 18,802	\$ 298,616
Contingency reserved to board	-	-	-	52,000
Total expenditures and contingency	\$ 100,009	\$ 81,207	\$ 18,802	\$ 350,616
Revenues less expenditures and contingency	\$ (1,702)	\$ 10,920	\$ 12,622	\$ (45,617)

⁽¹⁾ Excludes unrealized holding gains and losses on investments.

Financial statements

Statements of net position

Unaudited (in thousands)

	April 30	
	2023	2022
Assets		
<i>Electric utility plant, at original cost</i>		
Land and land rights	\$ 19,446	\$ 19,446
Plant and equipment in service	1,465,544	1,452,700
Less: accumulated depreciation and amortization	(948,671)	(912,025)
Plant in service, net	536,319	560,121
Construction work in progress	28,590	19,765
Total electric utility plant	564,909	579,886
<i>Special funds and investments</i>		
Restricted funds and investments	25,588	25,220
Dedicated funds and investments	163,800	131,918
Total special funds and investments	189,388	157,138
<i>Current assets</i>		
Cash and cash equivalents	38,973	51,240
Other temporary investments	49,037	40,366
Accounts receivable - owner communities	16,344	15,983
Accounts receivable - other	8,636	9,003
Fuel inventory, at last-in, first-out cost	11,355	7,845
Materials and supplies inventory, at average cost	16,729	15,739
Prepayments and other assets	9,961	5,908
Total current assets	151,035	146,084
<i>Noncurrent assets</i>		
Regulatory assets	128,320	125,884
Other long-term assets	7,123	6,015
Total noncurrent assets	135,443	131,899
Total assets	1,040,775	1,015,007
<i>Deferred outflows of resources</i>		
Deferred loss on debt refundings	2,810	3,674
Pension deferrals	14,849	2,116
Asset retirement obligations	24,401	24,084
Total deferred outflows of resources	42,060	29,874
Liabilities		
<i>Noncurrent liabilities</i>		
Long-term debt, net	137,029	151,765
Other long-term obligations	94,295	94,295
Net pension liability	30,520	7,770
Asset retirement obligations	31,639	29,771
Other liabilities and credits	7,619	7,587
Total noncurrent liabilities	301,102	291,188
<i>Current liabilities</i>		
Current maturities of long-term debt	12,215	11,660
Current portion of other long-term obligations	889	889
Current portion of asset retirement obligations	1,547	1,706
Accounts payable	16,543	16,753
Accrued interest	2,320	2,555
Accrued liabilities and other	4,213	2,430
Total current liabilities	37,727	35,993
Total liabilities	338,829	327,181
<i>Deferred inflows of resources</i>		
Deferred gain on debt refundings	122	135
Regulatory credits	74,120	55,573
Pension deferrals	287	6,024
Lease deferrals	852	999
Total deferred inflows of resources	75,381	62,731
Net position		
Net investment in capital assets	399,409	393,459
Restricted	23,269	22,665
Unrestricted	245,947	238,845
Total net position	\$ 668,625	\$ 654,969

Note: Certain prior year line items have changed due to the restatement of financial statements.

Statements of revenues, expenses and changes in net position

Unaudited (in thousands)

	Month of	April year to date		Twelve months ended	
	April			April 30	
		2023	2022	2023	2022
Operating revenues					
Sales to owner communities	\$ 16,365	\$ 69,225	\$ 66,845	\$ 214,699	\$ 204,011
Sales for resale	2,401	17,185	18,618	72,006	62,969
Wheeling	865	3,349	2,215	8,772	5,924
Deferred regulatory revenues	-	-	-	(21,602)	-
Total operating revenues	<u>19,631</u>	<u>89,759</u>	<u>87,678</u>	<u>273,875</u>	<u>272,904</u>
Operating expenses					
Purchased power	5,035	17,195	20,950	49,625	57,229
Fuel	2,079	15,622	14,727	67,351	49,912
Operations and maintenance	6,266	24,793	21,707	70,568	61,403
Administrative and general	2,698	9,987	8,126	27,876	22,619
Distributed energy resources	754	2,009	2,208	8,285	7,045
Depreciation, amortization and accretion	<u>3,226</u>	<u>12,793</u>	<u>11,669</u>	<u>37,253</u>	<u>35,668</u>
Total operating expenses	<u>20,058</u>	<u>82,399</u>	<u>79,387</u>	<u>260,958</u>	<u>233,876</u>
Operating income	<u>(427)</u>	<u>7,360</u>	<u>8,291</u>	<u>12,917</u>	<u>39,028</u>
Nonoperating revenues (expenses)					
Interest income	553	2,114	389	4,638	1,209
Other income	1	246	400	276	956
Interest expense	(464)	(1,856)	(2,044)	(5,615)	(6,178)
Amortization of bond financing costs	123	492	547	1,586	1,767
Net increase/(decrease) in fair value of investments	<u>227</u>	<u>2,328</u>	<u>(3,901)</u>	<u>(146)</u>	<u>(5,310)</u>
Total nonoperating revenues (expenses)	<u>440</u>	<u>3,324</u>	<u>(4,609)</u>	<u>739</u>	<u>(7,556)</u>
Change in net position	<u>13</u>	<u>10,684</u>	<u>3,682</u>	<u>13,656</u>	<u>31,472</u>
Net position at beginning of period, as previously reported	<u>668,612</u>	<u>657,941</u>	<u>651,287</u>	<u>654,969</u>	<u>623,497</u>
Net position at end of period	\$ 668,625	\$ 668,625	\$ 654,969	\$ 668,625	\$ 654,969

Statements of cash flows

Unaudited (in thousands)

	Month of	April year to date		Twelve months ended	
	April	2023	2022	April 30	
				2023	2022
Cash flows from operating activities					
Receipts from customers	\$ 21,937	\$ 96,321	\$ 89,371	\$ 297,730	\$ 270,129
Payments for operating goods and services	(14,509)	(59,972)	(48,896)	(178,801)	(151,017)
Payments for employee services	(4,009)	(16,942)	(15,826)	(48,638)	(46,437)
Net cash provided by operating activities	3,419	19,407	24,649	70,291	72,675
Cash flows from capital and related financing activities					
activities					
Additions to electric utility plant	(2,150)	(5,496)	(2,956)	(24,174)	(23,849)
Payments from accounts payable incurred for electric utility plant additions	(1,110)	(3,493)	(1,581)	(608)	(579)
Proceeds from disposal of electric utility plant	-	-	16	58	242
Principal payments on long-term debt	-	-	-	(11,660)	(11,145)
Interest payments on long-term debt	-	-	-	(5,850)	(6,371)
Payments related to other long-term obligations	-	(4,145)	(3,809)	(4,145)	(3,809)
Payments from lease receivables	-	-	-	148	-
Payments on lease liabilities	-	-	-	(14)	-
Net cash used in capital and related financing activities	(3,260)	(13,134)	(8,330)	(46,245)	(45,511)
Cash flows from investing activities					
Purchases and sales of temporary and restricted investments, net	(4,109)	(17,669)	(6,227)	(41,084)	(32,904)
Interest and other income, including realized gains and losses	553	2,352	741	4,771	2,079
Net cash used in investing activities	(3,556)	(15,317)	(5,486)	(36,313)	(30,825)
(Decrease)/increase in cash and cash equivalents	(3,397)	(9,044)	10,833	(12,267)	(3,661)
Balance at beginning of period in cash and cash equivalents	42,370	48,017	40,407	51,240	54,901
Balance at end of period in cash and cash equivalents	\$ 38,973	\$ 38,973	\$ 51,240	\$ 38,973	\$ 51,240
Reconciliation of net operating income to net cash provided by operating activities					
Operating income	\$ (427)	\$ 7,360	\$ 8,291	\$ 12,917	\$ 39,028
Adjustments to reconcile operating income to net cash provided by operating activities					
Depreciation	3,322	13,256	12,703	39,786	37,600
Amortization	(444)	(1,853)	(2,065)	(6,423)	(3,740)
Changes in assets and liabilities that provided/(used) cash					
Accounts receivable	1,866	5,847	1,716	6	(3,098)
Fuel and materials and supplies inventories	(731)	(2,151)	2,276	(4,499)	6,045
Prepayments and other assets	(78)	(2,859)	(2,329)	(2,969)	(785)
Regulatory assets	(156)	377	344	(3,214)	1,002
Deferred outflows of resources	229	916	(1,636)	(13,051)	(913)
Accounts payable	(1,282)	(5,434)	677	(736)	4,105
Net pension liability	-	-	-	22,750	(7,834)
Asset retirement obligations	(3)	(99)	2,221	1,709	1,247
Other liabilities	773	2,532	1,017	3,687	1,886
Deferred inflows of resources	350	1,515	1,434	20,328	(1,868)
Net cash provided by operating activities	\$ 3,419	\$ 19,407	\$ 24,649	\$ 70,291	\$ 72,675
Noncash capital and related financing activities					
Additions of electric utility plant through incurrence of accounts payable	1,093	1,093	608	1,093	608
Additions of electric utility plant through leasing	-	-	-	-	134
Additions to regulatory assets and other assets through incurrence of other long-term obligations	-	-	-	-	96,073
Amortization of regulatory asset (debt issuance costs)	7	27	29	85	94
Amortization of bond premiums, deferred loss and deferred gain on refundings	(130)	(519)	(576)	(1,671)	(1,861)

Note: Certain previously stated line items have been updated and reclassified to reflect audited financial statement presentation.

Schedule of net revenues for bond service and fixed obligations

Unaudited (in thousands)

	Month of April	April year to date		Twelve months ended April 30	
		2023	2022	2023	2022
Bond service coverage					
Net revenues					
Operating revenues	\$ 19,631	\$ 89,759	\$ 87,678	\$ 273,875	\$ 272,904
Operations and maintenance expenses, excluding depreciation, amortization and accretion	16,832	69,606	67,718	223,705	198,208
Net operating revenues	2,799	20,153	19,960	50,170	74,696
Plus interest income on bond accounts and other income ⁽¹⁾	557	2,368	763	4,931	2,145
Net revenues before rate stabilization	3,356	22,521	20,723	55,101	76,841
Rate stabilization					
Deposits	-	-	-	-	-
Withdrawals	-	-	-	-	-
Total net revenues	\$ 3,356	\$ 22,521	\$ 20,723	\$ 55,101	\$ 76,841
Bond service					
Power revenue bonds	\$ 1,482	\$ 5,928	\$ 5,931	\$ 17,784	\$ 17,834
Coverage					
Bond service coverage ratio	2.26	3.80	3.49	3.10	4.31
Fixed obligation charge coverage					
Total net revenues, above	\$ 3,356	\$ 22,521	\$ 20,723	\$ 55,101	\$ 76,841
Fixed obligation charges included in operating expenses ⁽²⁾	1,373	5,691	6,350	16,370	16,205
Adjusted net revenues before fixed obligation charges	\$ 4,729	\$ 28,212	\$ 27,073	\$ 71,471	\$ 93,046
Fixed obligation charges					
Power revenue bonds, above	\$ 1,482	\$ 5,928	\$ 5,931	\$ 17,784	\$ 17,834
Fixed obligation charges	1,373	5,691	6,350	16,370	16,205
Total fixed obligation charges	\$ 2,855	\$ 11,619	\$ 12,281	\$ 34,154	\$ 34,039
Coverage					
Fixed obligation charge coverage ratio	1.66	2.43	2.20	2.09	2.73

⁽¹⁾ Excludes unrealized holding gains and losses on investments.

⁽²⁾ Fixed obligation charges include debt-like obligations either related to the ownership of resource assets or off-balance-sheet financings. Platte River considers 30% of amounts due for energy under hydropower, solar and wind power purchase agreements to be fixed obligation charges for this purpose.



General management report

April 2023



Business strategies

Communications, marketing and external affairs

During April, the communications, marketing and external affairs staff:

- Met with Senator Faith Winter, Matthew Gerhart, Sierra Club Environmental Law Program attorney and Anna McDevitt, Southwest Deputy Director with the Sierra Club Beyond Coal Campaign.
- Conducted interviews with multiple candidates to fill the senior communications and marketing specialist position.
- Kicked off a request for proposals process to select a new full-service marketing agency.
- Hosted a Bring Your Child to Work Day event at the Rawhide Energy Station.
- Attended the United Power Annual Meeting in Brighton, Colo.
- Attended Northwest Chamber Alliance Day at the Capitol in Denver, Colo.
- Attended Fort Collins Area Chamber of Commerce 2023 Annual Celebration.
- Completed the 2022 Annual Report.
- Presented to Renewables Now Loveland, in coordination with the distributed energy resources (DER) department, on DER and DER management systems development and strategy.
- Welcomed She's in Power Executive Director Lucinda Kerschensteiner to share benefits and opportunities of the program designed to support women in clean energy with Platte River employees during the monthly all-staff business meeting.

Efficiency Works™ marketing staff:

- Continued a radio and social media advertising campaign, including more than 2,000 individual runs of an advertisement on radio stations throughout northern Colorado.
- Developed and deployed outreach plans for Efficiency Works Business programs, including social media campaigns, letters to prospective participants and informational resource sheets for small and medium businesses and multifamily properties.
- Developed and deployed outreach plans for Efficiency Works Homes programs in collaboration with the owner communities.
- Conducted a social media campaign for Earth Day, highlighting the refrigerator and freezer recycling program bonus rebate period and other Efficiency Works offerings.
- In partnership with Platte River, attended and hosted a booth at Sustainable Resilient Longmont's Earth Day celebration, speaking to homeowners and other residents about Platte River's Resource Diversification Policy and Efficiency Works programs.

Human resources

As part of the ongoing review of the total rewards strategy, human resources assembled a cross-functional team to evaluate its medical and dental third-party administrator. The review included the incumbent provider along with two other previously vetted organizations.

Human resources and internal legal staff reviewed initial findings from the pay equity analysis conducted by outside counsel.

Safety

Platte River achieved third place in Group F in American Public Power Association 2022 Safety Awards of Excellence.

Safety staff hosted an external presenter to conduct snake awareness safety training at Rawhide and headquarters. An outside vendor was brought in to conduct substation grounding training at headquarters.

One member of the safety team was recertified in maintaining fall protection competent person and equipment inspector status.

The safety team has been collaborating with all departments at Rawhide to prepare for the minor outage scheduled for May.

Injury statistics	2021 year end	2022 year end	YTD through April 2022	YTD through April 2023
Recordable injury rate	1.67	1.25	2.44	2.33
DART	0.00	0.83	1.22	0.00
Lost time rate	0.00	0.00	0.00	0.00

Platte River had zero recordable or lost time injuries in April.

Emergency response team

The safety manager and talent acquisition specialist conducted several phone screens to narrow down the list of applicants for the emergency services specialist opening. In-person interviews with the selected candidates were scheduled for early May.

Emergency response and safety participated in Bring Your Child to Work Day by displaying emergency response apparatus and explaining the functions of the equipment to the attendees.

Financial

2024 budget update

Platte River’s 2024 budget process is well underway. We continually look for ways to improve the existing process and to improve work planning and budgeting by better aligning scope, schedules and available resources. Staff submitted initial department budgets; the next steps include management review over the next few months.

Below is a condensed schedule of the overall budget process.

March to May	Kickoff presentations and preparation of budget details by departments
June	Data compilation, division budget reviews and reporting
July	Senior leadership and GM/CEO budget review
August	Refine budget and document preparation
September	Budget work session with board
October	Public hearing and board review of budget modifications
November	Prepare final budget document
December	Final budget review with board and request adoption

S&P Global Ratings credit opinion

S&P Global Ratings conducted a credit review of Platte River. Based on the review, the rating agency affirmed Platte River’s AA rating with a stable outlook. The report highlighted Platte River’s sound financial management, consistently healthy financial performance, efficient low-cost generating resources and strong credit quality of the owner communities. Platte River’s AA credit rating is beneficial to achieving long-term goals and an indicator of Platte River’s solid financial position.

Credit rating agencies update

In an annual letter to the credit rating agencies, Platte River provided a financial summary and significant events for 2022. The report also included environmental, social and governance factors and performance indicators specific to Platte River. Rating agencies use the information to conduct their annual surveillance of Platte River. No rating actions or changes are expected as a result of the surveillance.

Financial audit report filing

In April Platte River filed an electronic copy of its audited financial report for Dec. 31, 2022, with Colorado’s Office of the State Auditor as required by the Local Government Audit Law.

Form EIA-861 filing

Platte River updated Form EIA-861, Annual Electric Power Industry Report, for the reporting year 2022 and submitted it to the Energy Information Administration, a division of the U.S. Department of Energy. The form collects information such as peak load, generation, electric purchases, sales, revenues, customer counts and demand-side management programs, green pricing and net metering programs, and distributed generation capacity. The form is required reporting and Platte River completed its submission for the April 2023 deadline.

FERC Form No. 714 filing

Platte River submitted FERC Form No. 714 filing, Annual Electric Balancing Authority Area and Planning Area Report, for the reporting year 2022. Because Platte River is an electric utility that constitutes a planning area and has a peak load greater than 200 megawatts based on net energy for load for the reporting year, it must complete applicable schedules in FERC Form No. 714. Platte River completed its submission for the June 2023 deadline.

Continuing disclosure filing

Pursuant to the continuing disclosure certificates executed by Platte River in issuing its Series JJ and KK bonds, Platte River filed its audited financial report and annual report for Dec. 31, 2022, with the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access dataport.

Certificate of no default filing

As required by Platte River's General Power Bond Resolution No. 5-87, Platte River filed a certificate of no default, a certificate of insurance compliance and 2022 audited financial statements with Platte River's bond trustee, Computershare Corporate Trust.

Post-closure reclamation liability filing

Platte River is required to file a solid waste facilities closure estimate and proof of financial assurance annual report with the state of Colorado. The report estimates the current closure and post-closure care costs for the Rawhide ash disposal facility and the post-closure costs of other impoundments on-site and demonstrates Platte River's ability to pay the future costs. The report, filed in April, estimated closure costs of \$13,950,789.

Transition and integration

Energy solutions

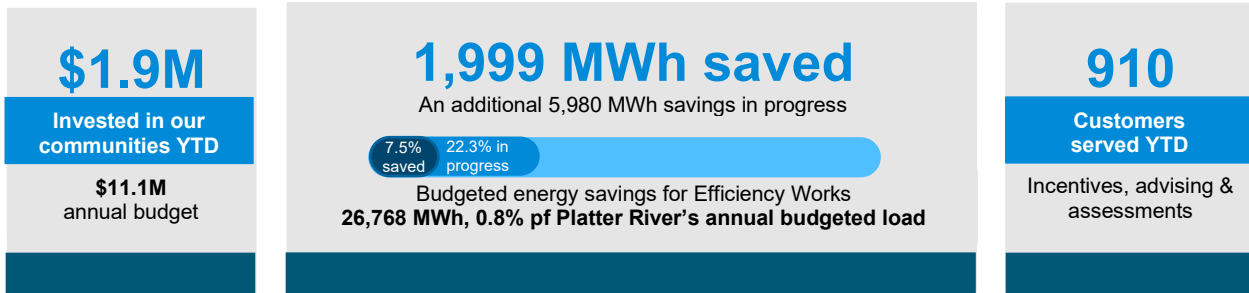
In April, Energy Solutions staff began to see a significant transition from the traditional energy efficiency programs into finding the full customer energy potential. This includes distributed energy solutions (DES) with the launch of building electrification initiatives, development of infrastructure incentives for electric vehicle public chargers, and conversations beginning on battery storage programming

models. The new DES initiatives will likely be administrated and implemented under the Efficiency Works™ brand. Key department achievements in April include the following:

- The consumer engagement team began work to identify more opportunities to provide programs in additional languages to further support equity initiatives.
- Efficiency Works Homes successfully began to offer electrification incentives to area residents completing 10 electrification upgrades and 91 efficiency upgrades in the first month.
- Efficiency Works Business continued to see success with a government building efficiency rebate bonus to help drive projects that support the broader community with 18 upgrade projects in process since the beginning of 2023.
- Efficiency Works business launched a 50% rebate bonus on April 15, 2023, to drive additional participation with local businesses for energy efficiency upgrades.
- Department staff coordinated with other departments and owner community staff to prepare for the launch of Level 2 Public Charger Infrastructure incentives anticipated to begin on June 1, 2023, to be offered through Efficiency Works Business.
- Staff collected customer programming data from the owner communities and internally to support the integrated resource plan update submitted annually to the Western Area Power Administration.

Through April 2023, Efficiency Works programs have achieved:

- 1,999 MWh of energy savings completed with an additional 5,980 MWh savings in progress
- 223 KW summer peak reduction completed with an additional 627 KW peak reduction in progress
- 735 residential and 175 business customers interactions with program offerings
- \$1.9 million invested in our communities including incentives and administrative costs spent



Platte River has budgeted \$11.1 million for efficiency programs and administration with a goal to achieve 26,768 MWh of energy savings. Owner communities may provide as much as \$2.7 million in additional directive funding.

Digital departments

Digital is a large department spanning many different areas including enterprise infrastructure, enterprise applications, operational technology, telecommunications & fiber optics, client technology & security, and information and cyber governance.

The following are some of the key department initiatives and activities completed or underway.

- Oracle Cloud Fusion enterprise resource planning system implementation
 - The Digital departments are working with the business units to complete the first “conference room pilot” of the Oracle implementation. After the first conference room pilot, Platte River learned that there was still a significant amount of design work needed for the Oracle solution. Platte River is currently working with the solution integrator to address the gaps in the solution presented during this conference room pilot. The largest gaps involved maintenance areas. Platte River has decided to request a demonstration of another Oracle maintenance solution to determine if this will be a better fit for Platte River.
 - Platte River staff is working to implement and automate payment cards and Automated Clearing House payments for vendors when the Oracle solution goes live. This is still in the design phase, and it is a partnership between our bank, the system integrator, and Platte River.
 - With the departure of the dedicated project manager for this project, Platte River has been working diligently to onboard a new project manager with Oracle implementation experience. Platte River identified a suitable candidate in the Denver area. Once he becomes familiar with Platte River and the project, it appears he will be a good addition to the team.
- Data science projects
 - The Digital departments are working with Resource Planning to analyze various graphical displays that have been developed over the years. The goal is to provide a consistent and reliable data model for all displays. The vendor we selected is working with the applications staff to first review and design a new model that has consistent and reliable data feeds. After the data model is sound and data feeds have been redeveloped providing a solid data foundation, we will work with the business units to define requirements and recreate the visualizations needed to assist the operations.
- OSI Energy Management System implementation (phase 1)
 - The system engineering and operational technology teams are continuing to work on the deployment of the new energy management system. After the completion of the “automated dispatch signaling” environment required for the Western Energy Imbalance Service (WEIS) market, they have switched their focus to the rest of the environments. This includes the deployment of the operator training system, the development environment, the user acceptance testing and quality assurance environment, and the full production environment. All these environments have multiple servers, workstations, different connectivity requirements, and different compliance requirements so extensive

work remains. The goal is to have all of these environments ready by the third quarter of 2023.

- Microsoft 365 tenant migration
 - The team completed the migration of our Microsoft 365 tenant. While the project did not go well, the client technology, cyber security, and system engineering teams worked together to resolve the issues that were impacting the end users. While it is unlikely Platte River will ever have to do this again, we will document the lessons learned from this project and share them with management to understand what went wrong and what we could have done to prevent some of the issues. The positive result of this work is that now we can implement some of the advanced security features in Microsoft 365 that were not available pre-migration.

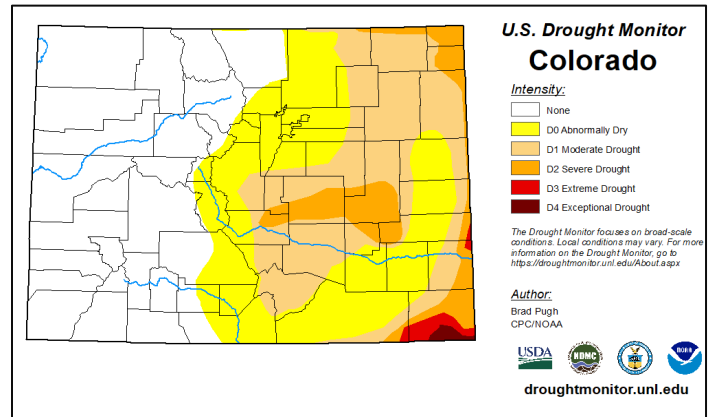
Market Analysis

- The team has initiated the creation of a Market Analysis report that examines Locational Marginal Prices, forecasted and actual generation, and load data from the past week in the WEIS market. Although the current version of the report is a prototype in Excel, the ultimate goal is to automate it within a dashboard for easier access and use.
- A prototype dashboard has been launched, showcasing Platte River's internal forecasts and WEIS forecasts of renewables and loads. This dashboard aims to help plant operators anticipate potential future dispatch directions, enabling them to make informed decisions.
- The resource planning team is currently working with data science consultants to enhance the underlying data architecture and perform data cleaning tasks to optimize the effectiveness and efficiency of the data science program. This preparation phase will lay the foundation for the development of visuals and other analytical components. These ongoing initiatives highlight Platte River's commitment to leveraging data analytics and visualization tools to improve operational efficiency, market analysis, and forecasting accuracy.
- Staff is working to assess surplus energy and capacity ahead of coal retirements. This assessment will play a crucial role in designing products that can be offered for sale to manage risk of excess energy and capacity.

Operations

Fuels and water

Moving from spring into summer, drought conditions in Colorado are generally split across the continental divide, evidence of the above-average snowpack in the mountains this winter (see graphic). Despite ample supply in the mountains and enhanced demand on the east slope due to drought conditions, the Windy Gap project will not be able to pump this year. According to the most recent modeling from the Northern Colorado Water Conservancy District, Granby reservoir is expected to completely fill with Colorado-Big Thompson (C-BT) project water by late June or early July, leaving no storage space for Windy Gap water. This is another example of the need for Chimney Hollow reservoir, which will allow the Windy Gap project to benefit in years with ample available water. This year, with no storage at Granby, Platte River operations will shift from using pumped Windy Gap water remaining from last year to relying on in-lieu operations and leased C-BT water. Staff is working to secure sufficient C-BT supplies to satisfy Platte River's obligations under the Reuse Plan through the remainder of the 2023 water year.



At Chimney Hollow reservoir, the contractor is making significant schedule gains due to improved weather conditions and switching to round-the-clock operations. Crushing operations at the project quarry are now operating for 16 hours per day to supply the 100,000 cubic yards of rockfill for the dam embankment each week. Through April, the dam height has reached 75 feet (which brings the height back to original surface grade) and is rising approximately 4.5 feet each week (see image). As previously detailed, subsurface grouting has been an area of concern for the project schedule. After increasing the number of shifts per day, the subcontractor is now expected to remain ahead of the critical path through the remainder of the project. Across the rest of the project site, significant progress continues on the inlet/outlet tunnel, the inflow pipeline, the main dam spillway, and the saddle dam. The project is currently 32% complete; while it is lagging an estimated eight days behind original schedule, the contractor is expected to make up the difference by the end of summer.



Chimney Hollow asphalt core construction