2022 Strategic Budget



Estes Park • Fort Collins • Longmont • Loveland

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Platte River Power Authority | 2022 Strategic Budget



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Letter from the **board chair** and **general manager/CEO**

Platte River Power Authority is committed to collaboration and innovation as we continue to decarbonize our energy portfolio. As a public power provider, we take seriously our role to support the shared goals of our owner communities while maintaining safe and reliable generation and transmission of electricity. We are pleased to present the 2022 Strategic Budget, which reflects that commitment.

The 2022 budget illustrates how Platte River is taking the next steps to accomplish the boardadopted Resource Diversification Policy, which calls for achieving a 100% noncarbon energy mix by 2030, while maintaining our core pillars to safely provide reliable, environmentally responsible and financially sustainable energy and services to our owner communities. The budget is also guided by our board-adopted strategic plan.

Among our next steps, we will begin 2022 under an augmented organizational structure that features a new division dedicated to transitioning Platte River toward a noncarbon future. This division combines technology, resource planning/modeling and distributed energy resources (DER). While our future operations will require greater collaboration across the organization and among the owner communities, this new division centralizes the core elements to continue to progress in meeting our 2030 goal.

Nearly \$256.4 million in expenditures are planned with approximately 84% of operating and capital budgets allocated for core operations and 16% contributing to strategic initiatives. These investments will move us forward on critical projects and enable us to resume projects delayed in response to the COVID-19 pandemic. An average wholesale rate increase of 3.2% will resume the normal smoothing trajectory following an increase of 1.5% in 2021, and no rate increase in 2020 as the owner communities transitioned to our new rate structure.

The financial review reflects accelerated depreciation and decommissioning costs of our coal resources. We are also collaborating with our Trapper Mine partners to efficiently manage operations leading up to the 2028 closure date of



the mine, which supplies 100% of Platte River's fuel for Craig Unit 1 (closure by end of 2025) and Craig Unit 2 (closure in 2028).

Investments to improve operational flexibility at Rawhide Unit 1 will support existing and additional noncarbon resources and ensure reliable energy deliveries to our owner communities through the unit's retirement by the end of 2029. Our pursuit of additional noncarbon resources, storage, efficiency and system integration will continue in 2022. Implementation of new resource modeling software will expand and enhance modeling capabilities and assist in resource selection and optimization as we continue to diversify our energy portfolio.

Board adoption of the DER strategy was a significant milestone in 2021. The strategy will guide localized investments in our owner communities as we begin implementing DER programs. Ongoing investments in Efficiency Works[™] programs will support energy conservation goals and expand collaboration with our owner communities. These initiatives continue to play an important role in achieving our carbon reduction goal. As we gain valuable experience and realize significant benefits from the joint dispatch agreement, we will continue to evaluate entry into an organized energy market. Ongoing evaluation of regional transmission, noncarbon energy and storage projects with neighboring utilities will drive future opportunities to further diversify our resource portfolio while maintaining system reliability, environmental responsibility and financial sustainability.

Investment in enterprise resource planning (ERP) software will improve employee efficiency and reporting to support more timely and effective business decisions. Transitioning our resource portfolio and moving into an organized energy market will require the appropriate tools to better manage a more data-driven organization and enable us to take steps forward.

Together with our strategic plan, annual report and integrated resource plan, the strategic budget supports key investments required in the near term to accelerate the transition to a noncarbon portfolio.

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David Hornbacher Board Chair

Jason Frisbie General Manager/CEO

At a **glance**

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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.



2022 Strategic Budget

Deliveries of energy 5,053,855 MWh

Owner communities peak demand

Deliveries of energy to owner communities

3,218,455 MWh

Revenues

\$ 263.2 million

Operating expenses

\$ 209.7 million

Capital additions

\$ 28.9 million

Debt expenditures

\$17.8 million

Capacity and energy

Resource capacity

MW

Coal	4	31
Natural gas	388	
Hydropower	90	
Wind power ⁽¹⁾⁽²⁾	303	67
Solar ⁽¹⁾	52	22
Total	1,264	998

 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.

Noncarbon emitting resources will represent **36.3%** of Platte River's projected 2022 energy portfolio

2022 system total

- Coal **52.7%**
- Wind **24.9%**
- Other purchases 10.9%
- Hydropower 9.1%
- Solar 2.3%
- Natural gas 0.1%

Includes renewable energy credit allocations to carbon resources

2022 goals

Reliability

100%

No loss of load to Platte River's owner communities

Transmission



No unplanned communication outage to Platte River's owner communities

Fiber communications



Adjusted equivalent availability factor, no controllable trips

Rawhide Unit 1



Delivery reliability

Rawhide combustion turbines



The 2022 Strategic Budget illustrates how Platte River is taking the next steps to accomplish the board-adopted Resource Diversification Policy while maintaining our core pillars to safely provide reliable, environmentally responsible and financially sustainable energy and services to our owner communities.

Environmental responsibility



Financial sustainability



Vision, mission and values

Vision

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.

Mission

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

THE REAL PROPERTY.

Constitution of the local state

Values

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



Innovation

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



Respect

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



Safety

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



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.



Operational excellence

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



Service

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

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, Colorado.





Town of Estes Park

Estimated population*: 6,426

Utility: Estes Park Power and Communications, established in 1945

Annual retail customers: 10,773





City of Fort Collins

Estimated population*: 170,243 Utility: Fort Collins Utilities, established in 1938 Annual retail customers: 76,821





City of Longmont

Estimated population*: 97,261 Utility: Longmont Power & Communications, established in 1912 Annual retail customers: 42,047





City of Loveland

Estimated population*: 78,877 Utility: Loveland Water and Power, established in 1925

Annual retail customers: 38,284

2019 Population data from U.S. Censi

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 being represented by that director.



Wendy Koenig Vice chair Mayor Town of Estes Park



Reuben Bergsten Director of utilities Town of Estes Park



Jeni Arndt Mayor City of Fort Collins



Julie Pignataro City council member City of Fort Collins



Joan Peck Mayor City of Longmont



David Hornbacher Chair Executive director of Longmont Power & Communications



Jacki Marsh Mayor City of Loveland



Kevin Gertig Director of Loveland Water and Power

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 has substantial experience in the utility industry.



Jason Frisbie General manager/CEO



Sarah Leonard General counsel



David Smalley Chief financial officer/ deputy general manager



Melie Vincent Chief operating officer



Angela Walsh Board secretary Executive assistant to the general manager/CEO **Positions in recruitment** Chief strategy officer Chief transition and integration officer

Significant initiatives

Platte River maintains ongoing collaboration with its owner communities and key industry and stakeholder groups. The following noteworthy initiatives represent the strategic investment of resources for the long-term benefit of the organization and owner communities. Each aligns with the organization's vision, mission and values, which were born out of the spirit of collaboration that created Platte River in 1973.



Innovative energy solutions

- Demand response
- Distributed generation
- Distributed storage
- Efficiency Works
- Electric vehicles
- Integrated resource plan
- Renewable supply options



Community responsiveness

Community relations
 and communications

• Rates framework



Regional services

- Customer information system
- Disaster recover
- Distributed system maintenance
- Engineering services
- Environmental services
- Joint dispatch agreement
- NERC compliance
- SCADA services
- Substation security



Joint infrastructure

- Fiber optics
- Joint Technical Advisory
 Committee
- Regional water exchange and storage

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Organizational structure



Platte River's organizational structure consists of six divisions, each holding the departments needed to safely deliver reliable, environmentally responsible and financially sustainable energy and services to the owner communities. A brief description follows of each division and its respective departments, including 2022 objectives.



General manager/CEO

The general manager provides strategic leadership and direction for the safe, ethical and effective operation of Platte River. The general manager consults with, advises and makes recommendations to the board of directors concerning elements of Platte River's strategic direction and operations, based upon Platte River's foundational pillars of system reliability, environmental responsibility and financial sustainability. The general manager also provides oversight and direction for the board secretary and all centralized business and office management functions.

In addition to ongoing operational oversight in 2022, the general manager will continue to lead efforts to support the owner communities' energy and carbon reduction goals. Platte River will facilitate regional collaboration efforts for joint generation and storage projects and work with other utility leaders to evaluate joining an organized energy market, essential for achieving the board-adopted Resource Diversification Policy.

Following the completed construction of the Energy Engagement Center, administrative services will manage organization and owner community events within the new space.

General counsel

The general counsel division oversees Platte River's legal, environmental compliance, reliability compliance and fuels and water functions.

Legal provides a broad range of services to support Platte River operations, including transactional matters, legal and regulatory compliance activities, support and advice to senior leadership and the board of directors, risk management and dispute resolution, contract management, human resources and real estate transactions. The legal department also supervises relationships with retained counsel who assist in specialized areas such as water law, public finance, pension and Federal Energy Regulatory Commission (FERC) regulations. In 2022, the legal department will emphasize efforts to expand noncarbon energy resources; enter an organized energy market; manage federal and state regulatory work; continue to modernize Platte River's contracting documents and processes; and support the Chimney Hollow Reservoir project. The legal department will also continue to work with outside counsel in legal proceedings to protect Platte River's interests, as appropriate.

Environmental compliance oversees Platte River's adherence to federal, state and local environmental regulatory requirements governing Platte River's operations. The department's primary activities include obtaining and managing compliance with various permits; reporting key operational data to local, state and federal regulatory agencies; monitoring emissions; managing environmental projects; assessing emerging regulatory changes; and collaborating with trade groups and other utilities. Upgrades to the Rawhide Energy Station ash monofill, delayed from 2021, will incorporate elements to comply with new requirements and optimize use to align with the reduced life of Rawhide Unit 1. The department also anticipates managing compliance with revised regional ozone and greenhouse gas regulations.

Reliability compliance provides oversight and guidance for reliability standards of the North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) enforceable under the Energy Policy Act of 2005. Activities include compliance risk analysis and monitoring as well as compliance implementation guidance and support. In addition to providing a reasonable level of assurance to senior leadership that all NERC/WECC regulatory compliance obligations are being met, the department will complete any follow-up actions from the October 2021 reliability compliance audit conducted by WECC staff on both NERC and WECC reliability standards. The team will also strengthen and mature compliance-related risk analysis and internal controls documentation.

Fuels and water ensures the availability and delivery of critical resources necessary for the reliable and efficient operation of generation resources. Core activities include contract management, development of strategies to optimize coal and rail agreements, maintaining reliable water supply and accurately planning for future fuel and water needs. In 2022, the fuels and water group will support the Chimney Hollow Reservoir construction project while optimizing Platte River's water resources portfolio; engage with strategic planning efforts at the Trapper Mine to optimize coal inventory levels at the Craig Generating Station; begin the water rights diligence process; and continue contract negotiations for the Rawhide Energy Station coal and rail contracts that will expire at the end of 2022.

Financial services

As a service-providing division, financial services protects the short- and long-term financial sustainability of Platte River, manages the financial risk of the organization and supports organizational leadership through the following functional groups.

Accounting monitors and reports on Platte River's financial status, providing managers, directors, senior leaders and the board of directors with the tools and information needed to make informed decisions. Accounting manages metering, settlements and invoicing for the organization. The accounting team also coordinates Platte River's annual financial audit and leads the budget process in compliance with Colorado state budget law.

Internal audit provides independent, objective assurance and consulting services that focus on greater efficiencies and effectiveness, organizational objectives, asset protection and compliance with laws and policies. Internal audit helps management understand risks and controls, and provides recommendations for potential action plans that could be implemented by management to help mitigate risks.

Financial planning, rates and risk management develops financial models and establishes metrics to ensure the organization remains financially sustainable. In collaboration with senior leadership and the board of directors, this team establishes rate strategy and design, maintains the rate setting policy and sets Platte River's rate tariffs. Working with internal audit and other departments, this team also develops, supports and maintains the enterprise and energy risk management programs.

Treasury manages Platte River's cash, investments and debt to ensure the organization has sufficient financial resources to fund projects and initiatives while meeting the organization's financial targets. Treasury also manages the accounts payable, purchasing and contract administration functions of Platte River.

In addition to ongoing process improvements during 2022, the financial services department will participate in the implementation of a new ERP software and prepare for entrance into an organized energy market. Risk management efforts will continue to focus on communicating the program, performing risk assessments, analysis and mitigation plans as well as risk management training. The department will also contribute to future DER initiatives, including analysis of varying cost allocations, rate designs and strategies.

Generation and transmission

The generation and transmission division manages the core functions of Platte River – the generation of power and delivery of high-voltage electricity to the owner communities. This division is comprised of several departments and groups that collaborate to fulfill Platte River's commitment to safely

deliver reliable, environmentally responsible and financially sustainable energy and services to the owner communities.

Power generation

The power generation departments perform every job associated with the generation of electricity at the Rawhide Energy Station. These departments manage plant operation and maintenance; fuel handling; control systems; design and engineering; and building and property maintenance. Each group is described below, along with its 2022 objectives.

Power generation administration oversees the power generation, plant operations, maintenance, engineering, fuel handling and facilities maintenance at the Rawhide Energy Station. The group will devote efforts in 2022 to further adapt the Rawhide Energy Station to changing market conditions driven primarily by increased use of intermittent resources. The group also manages budgets for the Craig Generating Station projects.

Rawhide engineering supports operations and maintenance activities for all Rawhide Energy Station infrastructure related to power generation. Core functions include troubleshooting process issues, inspection and assessment of major plant equipment during outages, maintenance assistance and identification and implementation of capital projects. During 2022, the group will support the organization's evaluation of and planning for entrance into an organized energy market, continue to make reliability and availability improvements to combustion turbines and further prepare Rawhide Unit 1 to balance additional intermittent generation while maintaining reliability.

Mechanical maintenance ensures the safe and effective maintenance of all mechanical equipment and systems at the Rawhide Energy Station. The group additionally plans and executes all outages and collaborates with engineering for the planning and execution of capital projects. In 2022, resources will be devoted to a scheduled inspection of combustion turbine D and a Rawhide Unit 1 turbine valve screen replacement. The group will also prepare for further Rawhide Unit 1 maintenance activities as it operates flexibly to accommodate intermittent energy resources.

Instrumentation and electrical ensures the safe and effective maintenance of all low- and mediumvoltage electrical equipment, instrumentation and control systems at the Rawhide Energy Station. The group performs electrical, instrumentation and control system troubleshooting and repair services for Rawhide Unit 1 and all combustion turbines. During 2022, the group will perform preventative maintenance and prioritize corrective action to maintain generation reliability.

Fuel handling manages the coal supply to Rawhide Unit 1. The department is responsible for operating the rotary car dumping system, suppressing dust in all plant areas, maintaining the Rawhide short line railroad system and managing fly and bottom ash from Rawhide Unit 1. Significant objectives for 2022 will be to maintain a rolling 75-day supply of coal, support the Rawhide Unit 1 turbine screen outage and maintain dust suppression throughout the facility.

Plant operations manages and maintains all systems and components of Rawhide Unit 1 and the combustion turbines to ensure reliable electrical generation to meet load demand. In addition, the department supports operations of the water pump stations that serve the Rawhide Energy Station. The group will work in 2022 to maintain high reliability factors from Rawhide Unit 1 while emphasizing greater operational flexibility to more effectively meet evolving market demands. The group will initiate simulator upgrades and model training to provide a more accurate tool that incorporates major capital project improvements.

Rawhide facilities maintains all buildings and structures, roofing, roads, heating, ventilation and air conditioning (HVAC) systems, lighting, plumbing, elevators, doors, windows and floors for all 48

buildings at the Rawhide Energy Station. The group also manages the bison herds and maintains the grounds including landscaping, rangeland management, weed and pest control and fencing. During 2022, the group will assist with the turbine screen outage, remodel one of the maintenance kitchens, replace older HVAC units and repair or resurface plant site roads as needed.

Power markets

Power markets and generation dispatch plans and schedules generating resources to reliably meet energy requirements of the owner communities and other obligations. The department optimizes available resources using bilateral and joint dispatch energy markets to create the most cost-effective energy supply possible and to generate unit stability. During 2022, the department will continue efforts to evaluate and prepare for entrance into the best organized energy market that supports Platte River's strategic initiatives and the Resource Diversification Policy.

Power delivery

Power delivery manages the complex, real-time demands of Platte River's high-voltage transmission system that delivers energy to the owner communities. Staff leverage various tools to continually monitor thousands of system components yielding maximum performance and energy channeling efficiency. Large amounts of data and long-range plans are used to design and build transmission systems to meet future customer demand and optimize participation in an organized energy market. Power delivery will be a critical component in future work to better integrate Platte River's transmission system with the delivery systems of the owner communities.

Power delivery system engineering conducts long-range system planning, design and construction of safe, reliable and financially sustainable transmission lines and substations along with system relaying protection. The department also provides distribution design, construction and engineering services under intergovernmental agreements with Loveland and Estes Park, when requested. In 2022, the group will install new circuit switchers, replace a substation transformer and install additional transmission airflow spoilers. The team will also begin work on a new transmission substation necessary to place additional noncarbon resources onto Platte River's system. The group will additionally remove a section of 115 kV line and high voltage equipment from the Loveland West Substation.

System operations safely maintains and operates Platte River's transmission system service to its owner communities. The department conducts coordinated transmission operations with neighboring reliability operators while complying with all required NERC and WECC reliability standards and in accordance with Platte River's processes and procedures. During 2022, the group will select and implement a new energy management system to maintain safe and reliable service as the transmission system evolves for participation in an organized energy market and incorporation of more DERs.

System maintenance and facilities

System maintenance is responsible for building and maintaining electrical substation assets including those wholly owned by Platte River and some assets owned by the distribution utilities of the owner communities. Collaborating with internal and external groups, the department manages equipment installations and inspections for capital projects, provides ongoing maintenance and conducts testing for all substation equipment. During 2022, this group will perform transformer maintenance, battery maintenance and testing and substation breaker maintenance at Platte River substations. The group performs systemwide vegetation management and will oversee installation of additional airflow spoilers on transmission lines to further improve system reliability during adverse weather conditions.

Headquarters facilities is responsible for all building and grounds maintenance and repairs at the headquarters campus and substations as well as fleet vehicle purchases and maintenance.

Physical security designs, implements and maintains the physical access control systems, administers intrusion detection systems at substations, manages video surveillance systems and oversees security guard services at all Platte River facilities.

Staff will conclude assessment of the new headquarters in early 2022 for any outstanding warranty requests following the return of employees. Staff will begin to commission the Energy Engagement Center and target warranty items after the conclusion of its construction. Following a critical infrastructure protection internal audit in 2021, staff will evaluate results for process improvements.

Business strategies

In collaboration with the owner communities, this division manages relationships critical to Platte River's success, including with staff, elected officials, stakeholders and the public. It also supports DER and energy efficiency products and services.

Energy solutions manages Platte River's Efficiency Works programs, which provide technical and financial support to help customers use energy more wisely and better manage their electric loads. It is also instrumental in developing DER strategies. During 2022, the group will continue to expand programs to achieve 28,000 MWh of energy savings across the four owner communities and 4 MW of demand reduction. The group will also provide support to the newly created distributed energy resources department.

Communications and marketing develops and executes strategic plans to provide information about Platte River to staff, stakeholders and the public. The department also manages the marketing and promotional programs that support Efficiency Works and DER programs. During 2022, the department will deploy the second phase of the strategic Efficiency Works brand campaign and initiate other marketing efforts to support specific efficiency and DER programs. The department will also support the development of a new strategic plan and begin development of a mobile application.

Community and government affairs manages working relationships between Platte River and governmental agencies at all levels, elected officials, business/environmental stakeholders and other organizations vital to Platte River's mission. In 2022, the department will engage with legislators concerning key environmental issues and regulatory compliance. The department will also support planning of additional noncarbon resources.

Human resources proactively identifies staffing needs and attracts, develops and retains talent for the organization. It partners with operating departments to address personnel issues to support Platte River's strategic initiatives. In 2022, the department will administer changes to health care benefits that manage and minimize costs and risks in the wake of the COVID-19 pandemic while remaining attractive and competitive for staff. The department will continue with the fulfillment of a total rewards strategy and program, implement additional functionality within the new human resources information system and create a robust learning and development strategy.

Safety supports Platte River's core value of workforce safety by administering and managing policies that leverage employee training, education and safety culture development. During 2022, the department will facilitate planned training for all staff and specialized groups, and track safety certifications required for designated roles. The department will also conduct annual occupational health testing, evaluate and acquire personal protective equipment and systems as well as provide issue-specific safety training.

The **emergency response team**, certified by the state of Colorado, protects employees and infrastructure at the Rawhide Energy Station and provides mutual aid assistance to the four owner communities, the Nunn Fire Protection District and the Wellington Fire Protection District. In 2022, the team will secure outside professional services to complete required inspections and testing, per National Fire Protection Association standards, and conduct 10 training events.

Transition and integration services

The new transition and integration services division will combine existing and new functions to collaboratively drive Platte River's evolution toward a noncarbon energy future. The resource planning, distributed energy resources, information technology and operational technology groups will focus on achieving the Resource Diversification Policy goal.

Resource planning

Resource planning develops near- and long-term power supply plans to be used in budgeting and rate projections; develops integrated resource plans to meet the objectives of the Resource Diversification Policy; supports power transactions and power procurements; and supports the power markets department with data management, analysis tools and dashboards. The group also provides economic evaluation and physical integration of DER programs. During 2022, the group will begin developing tools and dashboards to optimize assets and integration into an organized energy market. Resource planning will also manage the DER evaluation framework tool, lead DER planning and support DER operation.

Distributed energy resources

Distributed energy resources leads the coordinated and collaborative effort between Platte River and the owner communities to integrate DERs to make them part of a reliable, financially sustainable and increasingly noncarbon electric system. This work will be guided by the DER strategy, which was completed in 2021, and performed in collaboration with cross-functional teams that include members from other Platte River divisions and from the owner communities.

Information technology

The information technology group works to enable stakeholder success through technology integration, optimization and facilitation. As a trusted business partner, information technology's interrelated departments collaborate to provide secure, reliable and effective technology solutions while delivering excellent service.

Service desk deploys, manages and supports end-user personal computers, non-enterprise software, audio/visual systems, printers, mobile devices, building support systems and all other technologies used by Platte River employees.

Enterprise applications manages the lifecycle of all corporate enterprise applications which includes the data center and cloud-based applications such as the financial, human resources and maintenance management systems.

Information and cyber governance develops and oversees the cybersecurity strategy and risk program. In addition to the asset management system, the team researches technical security controls, manages security systems, provides cybersecurity education, oversees the vulnerability management program and writes guidelines, procedures and policies.

Enterprise infrastructure manages the backend systems required to support enterprise applications, cybersecurity and desktop computing. It designs, implements and manages the wired and wireless enterprise networks, firewalls, servers, storage systems and backup and recovery solutions.

In 2022, information technology will complete hardware inventories, begin tracking and managing the organization's many software programs and implement the technologies and processes required for a disaster recovery and business continuity plan. The department will provide software systems support for staff engaging with integration of the ERP. Information technology will continue working its five-year project to implement more than 150 security controls to better safeguard hardware and software systems, including firewall replacement.

Operational technology

The operational technology group manages assets, systems and sophisticated software crucial to the reliable generation and transmission of power to Platte River's owner communities. Each department within this group manages technologies that maintain constant data communications between Platte River's generation and transmission assets and the professionals who operate them.

Supervisory control and data acquisition (SCADA) services maintains the reliability, security and regulatory compliance of the SCADA control system, which is used to control and monitor 263 miles of high-voltage transmission lines and 27 substations on Platte River's system. The group provides transmission system asset control and situational awareness and operations data exchange with critical partners. The department also supports the control system infrastructure and ensures NERC critical infrastructure protection compliance. To promote stability and reliability of SCADA in 2022, the group will upgrade the infrastructure and operating network that will connect Platte River to its energy trading partners and an organized energy market. The group will also work with system operations to select and implement an energy management system.

Telecommunications maintains the reliability and security of Platte River's wide-area communication network that drives and protects the transmission system's operation. Its infrastructure supports SCADA and other transmission system functions including real-time operations communication with interconnected utilities. During 2022, this group will complete replacement of the synchronous optical network system, which delivers real-time reliability data to electrical system operators. Replacement includes two networks, one dedicated to bulk electric system communication and the second to non-bulk electric system internal and external customers.

Fiber optics manages and maintains the fiber optic network that surrounds and connects each of the owner communities to provide high-speed, digital connectivity between Platte River's generating assets, its transmission system and community distribution systems. The group performs maintenance, management and documentation of the physical fiber optic infrastructure, new installation and relocation of existing cable. The department continues to evolve the process and criteria used to evaluate the condition of the fiber optic network and determine eventual cable replacements. In 2022, the department will implement technology to monitor the health of key network segments and replace patch panels and lateral fiber cables in other areas of the system to improve reliability and performance.

2022 Strategic Budget summary

The Platte River Power Authority 2022 Strategic Budget is produced in alignment with the long-range strategic plan, under the direction of the organization's leadership, to provide community leaders, stakeholders and the public with a transparent roadmap of Platte River's tactical, operational and capital plans for the coming year.

The foundation for Platte River's 2022 budget represents ongoing investments to transform the organization based upon its strategic plan and core operations. These are aligned with Platte River's core pillars of system reliability, environmental responsibility and financial sustainability. The pillars guide the decision-making process that directs the resource allocations, revenues and expenses detailed in the budget.

Expenses are managed from a broad perspective with the goal of operating the system in a safe, compliant and reliable manner while expanding environmental stewardship. Platte River communicates and collaborates with the owner communities to align processes and outcomes to the benefit of all customers.

Platte River's budget includes \$263.2 million in revenues and \$256.4 million in expenses consisting of operating, capital and debt. Of the \$238.6 million in operating expenses and capital additions, approximately 84% and 16% are allocated to activities supporting core operations and strategic initiatives, respectively.

Operating expenses and capital additions: \$238.6 million



Platte River's core pillars



Reliability



Environmental responsibility



Financial sustainability

Strategic initiatives

\$37.6 million 16% of operating and capital

- Enhanced customer experience, \$13.4 million, 6%
- Communications and community outreach, \$1.8 million, 1%
- Resource diversification and alignment, \$13.1 million, 5%
- Infrastructure advancement and technology development, \$9.3 million, 4%

Activities

- Energy efficiency, administration of audit and rebate programs
- Public engagement, electric vehicle microsite, effective internal and external communications, workforce development
- Creation of transition and integration services division, noncarbon resources, organized energy market evaluation and preparedness, operational flexibility, DER, coal optimization
- Controls systems, substation improvements, airflow spoilers, ERP, cybersecurity, Windy Gap Firming Project through construction of the Chimney Hollow Reservoir

Core operations

\$201 million 84% of operating and capital

- Generation including fuel, \$113.5 million, 48%
- Transmission, \$29.8 million, 12%
- Purchases including wind, hydropower and solar energy, \$57.7 million, 24%

Activities

- Rawhide Energy Station and Craig Generating Station preventive, proactive maintenance and capital improvements for reliability, efficiency and environmental compliance
- Full year of generation from solar resource added in 2021
- Proactive capital investments including environmental improvements, Hamilton Reservoir dam restoration, pipeline reroute, transmission line rebuild, switchgear and transformer upgrades, safety and HVAC projects
- Staffing additions to support organization changes and focus on strategic initiatives

Strategic initiatives

\$37.6 million, 16% of operating and capital

Platte River's 2018 Strategic Plan provides high-level direction for implementing its vision and mission, based on its foundational pillars to safely provide reliable, environmentally responsible and financially sustainable energy and services by focusing on organizational priorities over the next three to five years. Strategic initiatives are clear, actionable and adaptable, and guide transformative decision-making that aligns resources and investments to achieve strategic plan objectives. Additional information about strategic planning is available on Platte River's website at prpa.org/future-planning.

Platte River will develop a new strategic plan in 2022, with its strategic initiatives reflected in future budgets. The current strategic initiatives include:

- Enhanced customer experience
- Communications and community outreach
- Resource diversification and alignment
- Infrastructure advancement and technology development

The following information highlights key investments to be made during 2022 to support each strategic initiative.

Enhanced customer experience

\$13.4 million, 6%

As a leader in public power, Platte River commits to providing its owner communities and their customers solutions and programs to achieve their varied energy goals. Platte River will collaborate with its owner communities to support enhanced customer experience through programs and services that improve energy efficiency, promote demand response and encourage effective use of DERs. The 2022 budget supports the following initiatives.

Energy efficiency

Efficiency Works is a collaboration of common efficiency programs that supports environmentally responsible and financially sustainable use of electricity. In 2022, Platte River will invest \$10.7 million to offer efficiency programs to obtain approximately 4 MW of demand reduction and 28,000 MWh of energy savings through a range of programs that support energy efficiency in businesses and homes.

The energy solutions department also manages funding provided by the owner communities under an intergovernmental agreement, and owner communities may provide supplemental funding, which adds to Platte River's budget for programs it administers. Supplemental funding is used only after Platte River's budget is exhausted to ensure each community receives its load-ratio share of benefit.

Owner communities may also provide directive funding, which supports programs and services not funded by Platte River, such as the home audit and rebate program and nonelectric sustainability services like rebates for water efficiency improvements. The use of the full amount of the community supplemental and directive funds could contribute an additional 4,000 MWh of energy savings. Projects under approved agreements and rebate applications are completed on a timeline determined largely by program participants (customers and their contractors). As a result, some projects intended

for the current budget year could be moved into the next budget year if not completed. Conversely, a budget contingency may be required if more projects are completed earlier than planned.

Communications and community outreach

\$1.8 million, 1%

Platte River provides staff, the owner communities and key stakeholders with an accurate understanding of Platte River and its priorities to drive greater collaboration in support of achieving shared goals.

Community and government affairs

Platte River will continue expanding its stakeholder engagement with public policy, business, educational, environmental and nonprofit organizations during 2022 by strengthening relationships in support of Platte River's objectives.

Our focus in 2022 will be on planning for additional noncarbon resources, allowing Platte River to increase noncarbon energy delivered to the owner communities. As part of our engagement strategy, Platte River's contract lobbyist will stay abreast of state policies that could impact operations.

Communications and marketing

Following the expansion of communications channels since 2017 to reach broader audiences and solicit more public input, Platte River will focus on providing information to help individuals make energy decisions and offer more opportunities for people to directly engage with the region's energy future.

Platte River will build an electric vehicle education microsite to help advance beneficial electrification in the owner communities. In addition to comparing vehicles by range and price, the microsite will help customers evaluate the total cost of ownership and emissions reduction from electric vehicles as compared to traditional vehicles. The microsite will also position Platte River to promote grid benefit programs such as customer-managed charging in response to time-of-day rates, utility-managed charging and vehicle-to-grid technology when it becomes commercially viable. The group will also begin development of a mobile application to provide customers with real-time energy production and general Platte River information. The application will eventually be used to support additional DER programs and technologies as they become available. The second phase of a brand marketing campaign for Efficiency Works will also take place in 2022 to drive greater participation in energy efficiency rebate programs.

Initiated in 2021, Platte River will conclude the development of its next strategic plan. This process will include a survey of retail customers in all owner communities and public meetings to gather opinions about the direction Platte River should take to achieve its Resource Diversification Policy goal. An outside agency with strategic planning expertise will manage the process and deliver its findings to the Platte River Board of Directors for adoption.

Workforce development

To attract, develop and retain the best workforce possible, Platte River will continue designing new learning and development initiatives, with training modules that may be delivered virtually or in a classroom setting and will be aligned with the core operations of the organization and its strategic

initiatives. The modules will feature methods to ensure retention of lessons learned for practical, onthe-job use.

Resource diversification and alignment

\$13.1 million, 5%

Platte River's resource diversification and alignment efforts stem directly from the board-adopted Resource Diversification Policy that set a goal of achieving a 100% noncarbon energy mix by 2030 while maintaining the organization's core pillars of reliability, environmental responsibility and financial sustainability. Key advancements necessary for Platte River to achieve this goal as outlined in the Resource Diversification Policy include:

- An organized regional market must exist with Platte River as an active participant
- Battery storage performance must mature and the costs must decline
- Utilization of storage solutions to include thermal, heat, water and end user available storage
- Transmission and distribution infrastructure investment must be increased
- Transmission and distribution delivery systems must be more fully integrated
- Improved distributed generation resource performance
- Technology and capabilities of grid management systems must advance and improve
- Advanced capabilities and use of active end user management systems
- Generation, transmission and distribution rate structures must facilitate systems integration

Platte River made strides toward this objective in 2020 and 2021 by adopting the 2020 Integrated Resource Plan, which established a baseline for 90% noncarbon energy by 2030, announcing the early retirement of Rawhide Unit 1 and adding 22 MW of new solar capacity with energy storage capabilities. An augmented organizational structure will feature a new division dedicated to transitioning Platte River toward a noncarbon future.

Noncarbon resources

Noncarbon resources will represent 36.3% of Platte River's projected 2022 energy portfolio which includes renewable energy credit allocations to carbon resources. Platte River will continue to evaluate noncarbon resource options to further diversify its energy mix to reach its noncarbon goal. Deeper analysis of evolving storage technologies, along with real-time analysis of storage recently added to Platte River's system, will clarify costs and benefits of storage with different capacities and charge/discharge schedules to optimally align with noncarbon generating patterns and customer demand.

To facilitate additional noncarbon energy, Platte River will begin construction on a new 230 kV substation, which will be located near existing transmission line structures. Approximately \$6.4 million of the \$9.1 million, three-year project will be allocated in 2022 for groundwork, foundations, equipment installation and modifications to existing structures.

With the commercial operation of the Rawhide Prairie Solar project in 2021, an existing transformer will be replaced with a larger capacity unit at the Rawhide Substation. With \$0.1 million invested during 2022 on this \$2.1 million multiyear project, the new unit will operate at lower temperatures and internal gas pressures during warmer weather with peak solar output, ensuring safe and reliable delivery of the increased solar generation while minimizing ongoing maintenance costs.

Organized energy market

Platte River began preparations in 2020 to participate in the California Independent System Operator's energy imbalance market to help support reliability as Platte River diversifies its resource mix. The project was delayed due to unforeseen circumstances. Platte River will continue to pursue an organized energy market and all viable options will be evaluated. The 2022 budget includes approximately \$3.5 million towards this effort. During the evaluation period, expenses are uncertain, therefore, there may be additional expenses in 2022 as staff considers options and prepares to ensure successful market entrance and compliance with market participation rules.

Operational flexibility

To foster integration of additional noncarbon energy and optimize participation in an organized energy market, Rawhide Unit 1 needs to be flexible. Plant personnel successfully tested Rawhide Unit 1 systems under lower load conditions multiple times since 2019 and have identified opportunities for equipment investments that will improve performance and reduce maintenance expenses when Rawhide Unit 1 operates outside its historical load range.

Platte River will invest approximately \$0.1 million in 2022 to begin replacing the 12.47 kV switchgear located in the Rawhide Substation control building. The improvements will reconfigure the switchgear to enable switching to occur under load, eliminating the need for outages and therefore increasing unit availability. This \$1 million multiyear project will enable Rawhide Energy Station's generating units to meet fluctuating energy needs more efficiently.

To operate Rawhide Unit 1 more safely and efficiently and to better follow intermittent resources, as well as broader market demand, Platte River will install a coal feeder fire detection system at a budgeted cost of approximately \$0.1 million. The new system will closely monitor carbon monoxide levels and any potential combustion within the coal conveyor, from the coal feeders to the crushing mills. The system will give operations more flexibility and greater safety when starting and stopping mills, which feed the boiler, to meet changing load requirements.

The spray dry absorber, which removes sulfur dioxide from Rawhide Unit 1's flue gas stream, has operated well since the unit came online in 1984 but will be upgraded with a direct lime injection system. The new \$0.5 million system will respond more rapidly to changing flue gas flows and more efficiently remove sulfur dioxide as Rawhide Unit 1's load levels are reduced or elevated.

Distributed energy resources

After adopting a long-range DER strategy in 2021, Platte River will continue collaboration with the owner communities to begin implementation of the plan. A key element of the DER strategy is to plan, develop and implement DER programs to optimize the electric system and engage with customers regarding devices and systems that can be deployed to provide value to all customers. In 2022, Platte River will create a DER department within the new transition and integration services division, including one new position and \$0.5 million of funding, for staff to coordinate planning, program development and pilot program implementation with the owner communities.

Coal inventory optimization

Platte River will actively and strategically manage coal inventory at the Craig Energy Station, maintaining a gradual glide path to zero inventory for Craig Unit 2 when it retires in 2028. Platte River will continue to coordinate with the other Trapper Mine owners and mine management to efficiently manage mine operations. Intra-pile inventory sales will be made between owners to achieve inventory objectives while also supporting flexible operation at the Craig Generating Station. Coal inventory at the Rawhide Energy Station will also be monitored and managed in accordance to operational needs and contract compliance. Annual coal nominations are submitted for both coal and rail contracts, and near-term forecasts are submitted to contracted vendors monthly. Platte River will maintain a balance between coal burns and deliveries and will adjust as needed, with the goal of reaching zero inventory upon retirement of Rawhide Unit 1.

Infrastructure advancement and technology development

\$9.3 million, 4%

Platte River's generation, transmission and support assets continue to perform extremely well, largely due to effective management that includes timely investments and proactive maintenance. Platte River will continue to pursue infrastructure advancements and technologies to provide safe, reliable service to the owner communities and offer long-term strategic advantages for the owner communities and their customers.

Transmission, substations and plant operations

The last in a multiyear series of interrelated control systems will be installed at the Rawhide Energy Station during 2022. For an estimated \$0.6 million investment, the remaining systems will be converted to Ovation controls, enabling operators to balance Rawhide Unit 1, all five combustion turbines and plant equipment within one common controls platform, including programmable logic controllers at the Soldier Canyon Pump Station, which feeds cooling and process water to Hamilton Reservoir. The common platform will enable Platte River to more efficiently manage generating resources considering additional intermittent generation and changing needs of the marketplace.

To improve substation reliability and Fort Collins' compliance with NERC standards, teams will expend \$0.8 million to replace circuit switchers at the Harmony Substation. The replacement will improve circuit performance and create a cleaner separation point between the transmission and distribution systems better protecting both.

Platte River will continue a multiyear program to add airflow spoilers to its transmission system. Approximately \$0.6 million will be invested in 2022, the final year of a \$3.1 million installation program, to help prevent transmission lines from galloping during periods of icing and high winds, which might otherwise lead to system outages.

The current SCADA system will be replaced in 2022 at an approximate investment of \$2.5 million. The replacement system will include a new module to add required transmission management functionality. With this expandable, modular SCADA and energy management system, operators will analyze the electric system in real time, allowing for advanced applications and growth needed to facilitate and support future projects, such as participation in an organized energy market and DERs.

Enterprise resource planning

A number of software programs that enable Platte River's critical business functions have reached the end of their useful lives, with several having been maintained well beyond design functionality. Coordinating necessary functions between software programs is often managed manually, creating significant challenges as the scope and complexity of business operations grow. To upgrade systems, a multi-year implementation project will begin in 2022 that, when complete, will improve productivity, reporting functionality and align work products with organizational goals.

Once Platte River selects a vendor, a more definitive cost estimate will be provided for the project. Currently, an estimated \$0.9 million will be invested in 2022 of the total \$4.9 million needed to complete the multiyear transformational deployment of the selected solution. The project will fully integrate finance and accounting, cash management, procurement and contracts management, budgeting and forecasting inventory management, asset and maintenance management and fleet tracking. While the project is in the vendor selection and negotiation process, the final scope and budget needed for successful implementation remains uncertain.

Cybersecurity

The digital operating systems for business and power generation are increasingly sophisticated and efficiently manage more functions. Effective technologies must protect highly sensitive systems. Following the development of a cybersecurity risk management program in 2018, Platte River embarked on a five-year project to implement over 170 security controls adopted from federal and industry group principles.

Most 2022 cybersecurity objectives are associated with fully implementing the advanced security features in Microsoft 365 and Office 365, enhancing the organization's cybersecurity practices, implementing data classification processes and further developing asset management procedures.

Windy Gap Firming Project

Platte River will continue to collaborate with its partners through the construction of the Chimney Hollow Reservoir, the most significant component of the Windy Gap Firming Project, which broke ground in the fall of 2021 following issuance of a pooled financing arrangement for the project. The project is needed to support the long-term, dependable delivery of Platte River's Windy Gap water, which is essential for reliable operations and optimizes Platte River's water resource portfolio. Once the Chimney Hollow Reservoir is built, Platte River will store Windy Gap water in wet years for future use in dry years. This will significantly improve operational reliability and reduce cost risk by alleviating Platte River's current practice of leasing water from third parties, which is subject to supply and price volatility. In addition to the benefits to Platte River and the other participants funding the project, Larimer County will manage the Chimney Hollow Open Space Public Recreation Area and provide new recreational opportunities open to the public both on the new reservoir and in the surrounding 3,400 acres of open space.

Contractors expect construction to progress through 2025, at which point the new reservoir will be ready to be filled. The time needed to fill the reservoir will depend on water supply conditions. Capital expenditures for initial cost estimates and project funding during the entire construction period were planned and appropriated in previous budget years. Ongoing operating expenditures for the project, including Platte River's share of periodic payments to serve the pooled financing arrangement for project construction, will be managed through annual operations and maintenance budgets. At this time, total project costs are uncertain and future capital expenditures may be needed if project costs exceed the original budget.

Core **operations**

\$201 million, 84% of operating and capital

Continued investment in Platte River's core operations is necessary to safely ensure the reliable production and transmission of environmentally responsible and financially sustainable energy and services to the owner communities. To diversify Platte River's resource portfolio, power purchase agreements are in place for wind, hydropower and solar. With a focus on preventive and predictive maintenance strategies, core operations and maintenance expenses are relatively consistent from year to year.

Generation

For 2022, approximately 53% of Platte River's energy portfolio will be derived from owned baseload coal-fired and natural gas resources. Platte River is active in western energy markets and may choose to purchase power if prices are lower than the cost to generate, resulting in higher purchased power expense and lower fuel expense. The joint dispatch agreement, discussed later in the purchased power section, is an example of a market Platte River uses to purchase and sell energy. Additional general information about Platte River's generation and sources of electricity is available on Platte River's website at www.prpa.org/generation. Resource and load information, including resource mix, for the trailing 24-hour period is available at www.prpa.org/energy-production.

Rawhide Energy Station

Although Platte River continues to diversify its energy mix, Rawhide Unit 1 is the largest single source of the 2022 energy portfolio. Its ongoing performance, as well as that of the combustion turbine units, remains critical to overall system reliability and requires regular maintenance and upgrades. The energy generated before renewable energy credit allocations is 39.8% and 0.2% for Rawhide Unit 1 and the combustion turbines, respectively. While Rawhide Unit 1 has no scheduled maintenance outage in 2022, several strategic upgrades at the station are noted within previous sections. Additional core projects at the station include:

- Platte River will invest approximately \$2.8 million in 2022 to complete a multiyear, \$9.6 million project to upgrade the Rawhide monofill with a liner and leachate collection system. The system is needed to meet requirements jointly determined by Platte River and federal and state regulators. Platte River received design approval for the project in 2020, but construction was delayed in 2021 due to the COVID-19 pandemic. Project delays now allow for a redesign to further optimize the monofill to feature a smaller footprint that more accurately aligns with reduced space needs as a result of Rawhide Unit 1's planned closure by Dec. 2029.
- The generator breakers for combustion turbine units A-D will be replaced to address reliability and safety concerns with the existing breakers as the original manufacturer is no longer in business and supplying replacement parts. A \$2 million investment in 2022 will complete the procurement, installation, testing and commissioning of the new breakers, concluding this \$2.3 million multiyear project.
- The structural integrity of the Hamilton Reservoir dam will be strengthened by the replacement of a toe drain system, based on recommendations from the state dam inspector. The \$0.6 million project will include replacement of the drain and cleanouts and regrading for more efficient water flow.

- Staff will replace carbon dioxide as the fire suppression agent on combustion turbine Unit D with a new suppression agent, known as NOVEC 1230, per National Fire Protection Association standards. As part of the \$0.5 million project, a new building will be erected to enclose the new agent and conduit with controls connected to the plantwide detection and alarm system.
- The rotary car dumper's HVAC system has surpassed its life expectancy and \$0.3 million will be used to replace it. Crews will replace the condensing unit, coils and pipes with a chilled water system that will better maintain optimal temperature for both mechanical and electronic equipment operations.
- Growth in Larimer County leading to expanded roadways will soon compromise effective management of the 26-mile Soldier Canyon Pipeline, which feeds raw water from Horsetooth Reservoir to the Rawhide Energy Station. The water is treated to provide potable and demineralized process water for operations. Platte River will incur approximately \$0.3 million in 2022 for an engineering study to reroute a 1-mile portion of the pipeline that parallels County Road 70, from County Road 19 to County Road 17. The \$3.8 million, two-year project will upgrade and relocate the section of the pipeline from underneath these intersections to improve reliability and alleviate future maintenance road closures.

With a supply constraint and increased demand in the overall market for coal due to elevated natural gas pricing and other industry factors, significant increases in market pricing have occurred during the second half of 2021, which will contribute to an increase in Rawhide Unit 1's 2022 coal price. As a result, the 2022 budget includes a corresponding increase in coal price of 23.5%. Additional volatility in the market price is expected, and the final coal price will be determined at the end of the year.

Craig Generating Station

Continued operation of the Craig Generating Station's units 1 and 2 requires investments to maintain optimal performance and environmental compliance until they are retired in 2025 and 2028, respectively. Platte River's share of planned capital investments in 2022 is \$0.6 million. Upgrades will be completed by plant operator Tri-State Generation and Transmission Association, Inc. (Tri-State) and include concrete foundation repairs to transmission lines, repairing transformer barrier walls and switchyard bus support insulator remediation. The Craig units will provide 13.7% of Platte River's energy portfolio, and a portion of the energy is resold under two 25 MW long-term contracts.

Transmission and substations

Transmission and substations capital projects are determined through an annual 10-year load study that identifies areas that must be addressed to meet operational standards. Collaboration and coordination with owner communities is required to schedule future delivery points and other system betterments. More details on capital expenditures can be found in the capital additions section.

Approximately \$1.8 million will be used in 2022 to begin replacement of a 230-115 kV autotransformer at the Timberline Substation, which has reached the end of its useful life. The project will include replacement of three separate single-phase units with a single three-phase unit to conform to current design and construction standards. Crews will remove and replace foundations and firewalls from the existing unit, pour a new transformer pad and install 230 kV and 115 kV circuit switchers to isolate the unit per current design and construction standards. This project is expected to be completed in 2023 for a total project cost of \$2.9 million.
A three-year, \$1.9 million project to replace the 230-12.47 kV substation transformer in the Rawhide Substation, delayed from 2021 due to COVID-19 protocols, will resume in 2022 with \$0.4 million of current-year expenditure and be completed in 2023. This transformer is the station's oldest and is critical to support facilities for the startup of Rawhide Unit 1 and provides backup auxiliary power for the combustion turbines. Work in 2022 will include evaluation of oil containment and replacement of a motor-operated disconnect.

During 2019, transmission line inspectors found significant corrosion on the base plates, anchor bolts and pole base sections along a 2-mile section of the 115 kV transmission line paralleling Drake Avenue in Fort Collins. Corrosion stemmed from numerous road improvement projects that elevated the thoroughfare and buried the pole bases. In 2020, design and consultation work evaluated overhead and underground replacement alternatives and \$0.1 million will be spent in 2022 on engineering and design work to continue efforts to determine the best replacement option. Construction will begin in 2023 on this multiyear project to replace the overhead line. At this time, the total project is estimated to require a \$7 million investment, but modifications to the costs and schedule will occur when a final selection is made from the replacement alternatives.

Purchased power

The remainder of Platte River's energy portfolio, or 46%, is sourced from wind, hydropower, solar and battery storage, joint dispatch agreement and other purchases. For noncarbon power purchase agreements, resources are considered strategic in the first year of commercial operation but then become core operations in subsequent years.

From Dec. 1, 2021, through Sept. 30, 2025, an 8.1% rate increase and a 30.6% reduction in energy delivered will be implemented for the hydropower received from the Colorado River Storage Project (CRSP) due to increased rates from Western Area Power Administration (WAPA) caused by drought conditions. No other significant changes are anticipated for contracted purchases during 2022. More information on purchases is included in the operating expenses section.

Personnel

Approximately 23% of the operating expense budget relates to employee salaries and benefits, which include retirement, medical and dental. Combined, the expenses are expected to rise approximately 1.5% from 2021. For 2022, a 3% salary market adjustment is planned and step increases, where appropriate, will be awarded.

Benefits for employees are spread across all functional areas as a percentage of salaries. Platte River has undergone a comprehensive evaluation of benefits and changed its benefits broker to better align Platte River's strategy for competitive benefits with financial sustainability.

As timelines advance on strategic initiatives, additional staffing is required to fill new positions. A total of ten full-time employees will be added to Platte River staff, and three full-time employees were added in 2021 as out-of-budget hires, for a net total of 13 new positions in the 2022 budget. Of these positions, three serve in business strategies, two in financial services, one in generation and transmission and seven in transition and integration services. Below is a summary of budgeted full-time positions by division.

Positions by division	2020 actual	2021 budget	2021 estimate	2022 budget ⁽¹⁾
General manager/CEO	4	4	4	4
General counsel	11	11	11	13
Business strategies	29	29	29	32
Financial services	47	49	51	28
Generation and transmission	178	179	180	158
Transition and integration services				50
Total positions	269	272	275	285

(1) Effective 2022, 23 and 22 positions were re-organized from financial services and generation and transmission to transition and integration services, respectively, and two positions were re-organized from generation and transmission to general counsel. Previous years are not restated.

Revenues

Approximately \$263.2 million in revenue is anticipated during 2022. The majority of revenues, 79%, are derived from energy sales to the owner communities. The remainder are derived from sales for resale, wheeling, interest and other income. Owner communities' loads are forecasted to increase 3.9%. Revenues from sales for resale are 18% of revenues and are expected to increase by approximately \$8.7 million due to increases in both volume of energy sold and average market prices.

Platte River provides stable and financially sustainable wholesale rates — currently the lowest in Colorado. Platte River's rate philosophy includes implementing incremental increases to its owner communities to provide a more predictable path of smaller, more consistent annual rate increases. The 2022 budget includes a 3.2% average wholesale rate increase.

Platte River's rate structure provides unbundled transmission and generation rates, transparent fixed and variable costs, as well as dispatchable and intermittent resource pricing information for owner utilities to establish options, including noncarbon pricing options for their retail customers. The rate structure adds value to owner communities by offering a more desirable portfolio of services and rates that meet community needs, more accurately aligning wholesale time-of-use pricing signals with costs of service and sending clear pricing signals that lead to system benefits.

Additional information about rates is available on Platte River's website at www.prpa.org/rates-information.

Financial **review**

In addition to the budget items discussed, the financial results shown below are compared to the SFP metrics. In the years represented, all financial metrics were or are expected to be met.

Depreciation, amortization and accretion expense is a non-budgeted expense and is expected to increase in 2022 by \$2.3 million. Depreciation expense increased as a result of capital improvements placed into service at the Rawhide Energy Station during the 2021 scheduled maintenance outage. Amortization expense increased as a result of cost estimate changes and revisions for the Windy Gap Firming Project. Accretion expense will start in 2022 as a result of a board-approved accounting policy to recognize estimated decommissioning costs for the Craig Generating Station through Sept. 30, 2028, the estimated remaining life of the facility. When a formal decommissioning study is completed, cost estimates will be updated.

	Minimum SFP	2020		2021			2021	2022	
Key financial indicators	targets		actual		budget	e	estimate (1)	budget	
Net income (\$000)	3% of projected annual operating expenses	\$	21,991	\$	14,401	\$	31,112	\$ 13,747	
Fixed obligation charge									
coverage ratio	1.50 times		2.43x		2.00x		2.64x	2.03x	
Debt ratio	50% or lower		21%		21%		30%	28%	
Unrestricted days cash on									
hand	200		386		303		404	381	
Other selected data (\$000) except bond service co	vera	ige ratio)						
Accumulated net position		\$	615,594	\$	627,066	\$	646,706	\$ 660,453	
Dedicated reserves and availab	le funds	\$	200,158	\$	164,714	\$	219,985	\$ 226,541	
Long-term debt, net		\$	178,352	\$	166,084	\$	164,296	\$ 150,023	
Capital additions		\$	39,833	\$	127,423	\$	120,303	\$ 28,910	
Bond service coverage ratio (m	ninimum 1.1x)		3.29x		2.88x		3.91x	3.01x	

(1) 2021 estimate represents ten months actual and two months budget adjusted for revised projections on all budget schedules.

Statements of revenues,

expenses and changes in net	2020	2021	2021	2022
position	actual	budget	estimate	budget
Operating revenues				
Sales to owner communities	\$ 196,001,616	\$ 193,909,153	\$ 197,973,654	\$ 208,017,293
Sales for resale	38,571,558	39,570,011	57,229,134	48,244,228
Wheeling	 6,176,002	 6,323,622	 5,791,865	 5,929,826
Total operating revenues	240,749,176	239,802,786	260,994,653	262,191,347
Operating expenses				
Purchased power	48,029,302	57,192,689	53,050,046	57,733,218
Fuel	41,570,530	34,404,568	47,647,868	44,526,114
Operations and maintenance ⁽¹⁾	63,347,892	63,730,781	62,488,030	69,019,792
Administrative and general $^{(1)}$	20,604,591	22,419,009	21,575,296	26,020,323
Distributed energy resources $^{(1)}$	9,559,945	11,642,441	7,938,133	12,377,531
Depreciation, amortization and accretion ⁽¹⁾	 33,041,676	 33,260,793	 33,421,431	 35,583,223
Total operating expenses	 216,153,936	 222,650,281	 226,120,804	 245,260,201
Operating income	24,595,240	17,152,505	34,873,849	16,931,146
Nonoperating revenues (expenses)				
Interest income	2,478,818	1,414,723	1,334,398	624,913
Other income	820,630	373,237	799,666	370,329
Distribution to owner communities	(1,000,000)	-	-	-
Interest expense	(7,619,797)	(6,472,737)	(6,358,573)	(5,803,340)
Amortization of bond financing costs ⁽¹⁾	2,049,139	1,917,089	1,830,306	1,640,728
Net increase in fair value of investments ⁽¹⁾	 667,160	 16,294	 (1,367,689)	 (16,811)
Total nonoperating revenues (expenses)	 (2,604,050)	 (2,751,394)	 (3,761,892)	 (3,184,181)
Change in net position	21,991,190	14,401,111	31,111,957	13,746,965
Net position at beginning of period	 593,602,463	 612,664,948	 615,593,653	 646,705,610
Net position at end of period	\$ 615,593,653	\$ 627,066,059	\$ 646,705,610	\$ 660,452,575

(1) Actual and estimate include nonappropriated expenses of vacation accrual, depreciation expense, amortization of bond financing costs and unrealized investment holding gains and losses.

Consolidated **budget schedules**

		2020		2021		2021		2022
Source and use of funds		actual		budget		estimate		budget
Source of funds								
Operating revenues								
Sales to owner communities	\$	196,001,616	\$	193,909,153	\$	197,973,654	\$	208,017,293
Sales for resale - long-term		15,806,980		18,664,158		19,548,174		18,686,816
Sales for resale - short-term		22,764,578		20,905,853		37,680,960		29,557,412
Wheeling		6,176,002		6,323,622		5,791,865		5,929,826
Total operating revenues		240,749,176		239,802,786		260,994,653		262,191,347
Other revenues								
Interest income		2,501,410		1,431,017		1,348,412		608,102
Other income		820,630		373,237		799,666		370,329
Distribution to owner communities		(1,000,000)						
Total other revenues		2,322,040		1,804,254		2,148,078		978,431
Total revenues		243,071,216		241,607,040		263,142,731		263,169,778
Funds from prior reserves and		<i>/-·</i>						
financing		(2,665,613)	<u> </u>	121,318,281	<u> </u>	67,477,010	<u> </u>	17,204,746
Total sources	Ş	240,405,603	Ş	362,925,321	Ş	330,619,/41	Ş	280,374,524
Use of funds								
Operating expenses								
Purchased power	\$	48,029,302	\$	57,192,689	\$	53,050,046	\$	57,733,218
Fuel		41,570,530		34,404,568		47,647,868		44,526,114
Production		46,501,559		45,165,080		43,404,007		50,385,604
Transmission		16,448,533		18,565,701		18,948,258		18,634,188
Administrative and general		20,335,402		22,419,009		21,343,641		26,020,323
Distributed energy resources		9,462,840		11,642,441		7,926,164		12,377,531
Total operating expenses		182,348,166		189,389,488 ⁽¹⁾		192,319,984		209,676,978
Capital additions								
Production		8,465,667		112,845,771		107,013,687		9,345,888
Transmission		22,288,622		4,543,281		3,944,617		13,338,598
General		6,734,270		8,961,123		8,652,444		6,225,970
Asset retirement obligations		2,344,492		1,072,921		692,517		
Total capital additions		39,833,051		127,423,096 ⁽¹		120,303,265		28,910,456
Total operating expenses and								
capital additions		222,181,217		316,812,584		312,623,249		238,587,434
Debt service expenditures								
Principal		10,604,589		11,640,000		11,637,919		11,983,750
Interest expense		7,619,797		6,472,737		6,358,573		5,803,340
Total debt service		10 224 706		10 110 777		17,006,402		17 707 000
expenditures		10,224,300		10,112,/3/		17,990,492		17,787,090
i otal expenditures		240,405,603		354,925,521	L)	330,619,741		250,5/4,524
Contingency appropriation	ċ	240 405 607	ċ	26,000,000	ċ	770 610 741	ċ	24,000,000
l otal uses	Ş	240,405,603	Ş	302,923,321	Ş	330,019,/41	Ş	200,374,524

(1) Excludes projections for contingency transfers.





•	74%	Sales to owner communities	\$ 208,017,293
•	10%	Sales for resale - short-term	29,557,412
•	7%	Sales for resale - long-term	18,686,816
•	2%	Wheeling	5,929,826
•	1%	Interest and other income	 978,431
		Total revenues	 263,169,778
•	6%	Funds from prior reserves and financing	 17,204,746
		Total sources	\$ 280,374,524



	21%	Purchased power	\$ 57,733,218
	18%	Production	50,385,604
	16%	Fuel	44,526,114
	10%	Capital additions	28,910,456
•	9%	Administrative and general	26,020,323
	7%	Transmission	18,634,188
•	6%	Debt service expenditures	17,787,090
-	4%	Distributed energy resources	 12,377,531
		Total expenditures	 256,374,524
	9%	Board contingency	 24,000,000
		Total uses	\$ 280,374,524

Revenue and	2020	2021	2021	2022
expenditure detail	actual	budget	estimate	budget
Revenues				
Sales to owner communities	\$ 196,001,616	\$ 193,909,153	\$ 197,973,654	\$ 208,017,293
Sales for resale - long-term	15,806,980	18,664,158	19,548,174	18,686,816
Sales for resale - short-term	22,764,578	20,905,853	37,680,960	29,557,412
Wheeling	6,176,002	6,323,622	5,791,865	5,929,826
Interest income	2,501,410	1,431,017	1,348,412	608,102
Other income	820,630	373,237	799,666	370,329
Distribution to owner communities	 (1,000,000)	 -	 -	 -
Total revenues	243,071,216	241,607,040	263,142,731	263,169,778
Funds from prior reserves and financing	 (2,665,613)	 121,318,281	 67,477,010	 17,204,746
Total revenues and prior funds	\$ 240,405,603	\$ 362,925,321	\$ 330,619,741	\$ 280,374,524
Expenditures				
Personnel expenses				
Salaries				
Regular wages	\$ 30,209,380	\$ 31,093,615	\$ 30,858,264	\$ 34,159,788
Overtime wages	 2,596,373	 2,248,660	 2,842,519	 1,491,623
Total salaries	32,805,753	33,342,275	33,700,783	35,651,411
Benefits				
Pension - defined contribution	1,442,579	1,794,539	1,417,656	1,943,853
Pension - defined benefit	6,110,613	5,427,824	5,427,824	4,898,799
Social security	2,379,806	2,476,211	2,433,820	2,594,646
Long-term disability	115,633	120,000	113,976	120,000
Medical and dental	4,204,289	5,421,500	3,942,026	5,451,520
Recruiting	58,463	145,000	209,915	145,000
Life insurance	113,036	120,000	116,461	120,000
Accidental death	25,269	25,000	25,692	25,000
Workers' compensation	71,624	160,000	102,329	140,000
Unemployment compensation	3,666	15,000	17,141	15,000
Salary and pension services	 319,991	 410,617	 360,450	 342,500
Total benefits	14,844,969	16,115,691	14,167,290	15,796,318
Total personnel expenses	47,650,722	49,457,966	47,868,073	51,447,729
Less charged to capital and		4 075 000		
other	 1,/16,911	 1,975,299	 1,8/3,5//	 3,2/1,539
Total operating personnel expenses	45,933,811	47,482,667	45,994,496	48,176,190
Materials and other expenses				
Office expenses	(54,942)	47,925	23,253	18,525
Safety expenses	191,820	225,450	163,770	220,800
Furniture and equipment	51,501	54,600	50,695	31,200
Local business expense	155,441	436,341	232,125	396,156
Postage and deliveries	26,591	38,304	62,305	40,324

Revenue and expenditure	2020	2021	2021	2022
detail (continued)	actual	budget	estimate	budget
Materials and other expenses (continued)				
Rawhide O&M materials	\$ 4,361,489	\$ 6,298,012	\$ 6,073,717	\$ 3,768,676
Other O&M materials	524,738	541,348	684,790	567,781
Rawhide coal	24,967,756	24,254,054	23,161,775	33,202,774
Craig units 1 and 2 coal	10,502,663	8,622,960	11,703,512	10,048,159
Oil	91,082	194,000	186,717	42,000
Natural gas (Rawhide units A, B, C, D and F)	4,930,363	467,439	11,526,398	466,714
Natural gas (Craig units startup)	106,407	85,000	98,597	85,000
Gasoline and diesel	83,192	154,300	141,739	126,540
Tools, shop and garage equipment	70,728	134,600	62,839	114,004
Purchased power	47,185,064	58,620,212	54,477,569	57,513,000
Craig units 1 and 2 operating	0.058.070	0 1 / 1 555	9 715 161	9 012 974
Computer equipment	3,950,970	578 100	637 31/	0,912,054
	3 777 012	378,100 7 0 47 202	5 160 850	4 663 600
	5,162,046	(9,419,074)	(9 419 074)	3,516,180
Total materials and other	0,202,010	(07 120707 1)	(0) (20) (0) ()	
expenses	112,451,646	104,422,328	113,744,052	124,649,145
Contractual services				
Rawhide contracted services	3,791,827	11,318,326	11,318,971	4,645,764
Other contracted services	9,187,236	10,836,746	10,402,618	14,805,290
Insurance	1,716,386	1,982,800	1,960,217	2,751,200
Travel and training	372,043	842,293	358,701	971,447
Telephone services	187,348	196,719	172,172	194,182
Utilities	575,246	688,520	759,177	698,458
Dues, memberships and fees	676,144	750,126	729,604	822,964
Trustees fees	12,000	25,500	18,000	19,500
Water leases and rents	329,716	2,278,712	1,413,780	3,385,006
Other leases and rents	113,434	109,262	113,518	134,243
Economic development	100,000	100,000	100,000	100,000
Fiscal impact payment	36,217	36,217	36,217	36,217
Rebates/incentives for retail customers	6,287,836	7,763,250	4,756,343	7,665,750
Rebates/incentives to owner communities	172,935	169,422	110,610	169,422
Audits/assessments for retail customers	362,487	335,000	287,389	395,000
Other financing expenses	41,854	51,600	44,119	57,200
Total contractual services	23,962,709	37,484,493	32,581,436	36,851,643

Revenue and expenditure detail (continued)		2020 actual	2021 budget		2021 estimate	2022 budget
Capital additions						
Personnel expenses						
Regular wages	\$	734,366	\$ 911,185	\$	855,657	\$ 1,902,751
Overtime wages		120,264	159,681		135,034	134,636
Benefits allocation		369,390	 558,910		517,065	 966,209
Total personnel expenses		1,224,020	1,629,776		1,507,756	3,003,596
Capital expenditures		36,378,720	125,300,079		118,162,155	25,910,610
Capital reimbursements and trade-in value Asset retirement obligations		(114,181) 2,344,492	(579,680) 1,072,921		(59,163) 692,517	(3,750)
Total capital additions		39,833,051	 127,423,096	L)	120,303,265	 28,910,456
Debt service expenditures						
Principal		10,604,589	11,640,000		11,637,919	11,983,750
Interest expense		7,619,797	 6,472,737		6,358,573	 5,803,340
Total debt service expenditures		18,224,386	 18,112,737		17,996,492	 17,787,090
Total expenditures		240,405,603	 334,925,321		330,619,741	 256,374,524
Contingency appropriation		-	 28,000,000	L)	-	 24,000,000
Total expenditures and contingency	<u>\$</u>	240,405,603	\$ 362,925,321	\$	330,619,741	\$ 280,374,524

(1) Excludes projections for contingency transfers.

Resources



Deliveries

- Rawhide Unit 1 (2,014 GWh)
- Wind (1,209 GWh)
- Craig units 1 and 2 (691 GWh)
- Joint dispatch agreement purchases (494 GWh)
- Hydropower (458 GWh)
- Solar (114 GWh)
- Other purchases (40 GWh)
- Forced outage exchange (26 GWh)
- Combustion turbines (8 GWh)
- Total resources* = 5,054 GWh
- * Excludes renewable energy credit allocations to carbon resources



- Owner communities (3,218 GWh)
- Sales for resale (1,756 GWh)
- Losses and other (54 GWh)
- Forced outage exchange (26 GWh)
- Total deliveries = 5,054 GWh

Power operations resources	2020 actual	2021 budget	2021 estimate	2022 budget
Rawhide Unit 1 (280 MW)				
Generation (GWh)	1,887	1,811	1,719	2,014
Capacity factor	76.7%	73.8%	70.1%	82.1%
Fuel cost (\$/MWh)	\$ 13.7	\$ 13.7	\$ 14.0	\$ 16.7
O&M cost (\$/MWh)	 14.4	 22.0	 22.1	 15.1
Total Rawhide (\$/MWh)	\$ 28.1	\$ 35.7	\$ 36.1	\$ 31.8
Craig units 1 and 2 (151 MW) $^{(1)}$				
Generation (GWh)	498	547	684	691
Capacity factor	37.5%	41.3%	51.7%	52.3%
Fuel cost (\$/MWh)	\$ 21.6	\$ 16.5	\$ 17.7	\$ 15.0
O&M cost (\$/MWh)	 19.6	 15.8	 12.2	 12.3
Total Craig (\$/MWh)	\$ 41.2	\$ 32.3	\$ 29.9	\$ 27.3
Combustion turbines (388 MW) ⁽²⁾				
Generation (GWh)	146	10	189	8
Capacity factor	4.3%	0.3%	5.6%	0.2%
Fuel cost (\$/MWh)	\$ 33.9	\$ 45.6	\$ 61.1	\$ 60.8
O&M cost (\$/MWh)	 15.6	 167.0	 11.2	 338.6
Total combustion turbines (\$/MWh)	\$ 49.5	\$ 212.6	\$ 72.3	\$ 399.4

(1) Craig Unit 1 = 77 MW, Craig Unit 2 = 74 MW.

(2) Rawhide units A, B, C, D = 260 MW, Rawhide Unit F = 128 MW.



Generation output

Purchased power	2020	2021		2021		2022	
resources	actual		budget	estimate		budget	
Wind							
Roundhouse (225 MW)							
Generation (GWh)	513		910	767		910	
Capacity factor	51.7%		46.1%	38.9%		46.1%	
Total Roundhouse (\$/MWh) - delivered	\$ 12.1	\$	19.4	\$ 22.4	\$	21.5	
Spring Canyon II and III (60 MW) ⁽¹⁾							
Generation (GWh)	245		242	215		242	
Capacity factor	46.4%		46.0%	40.9%		46.0%	
Total Spring Canyon (\$/MWh) - delivered	\$ 45.3	\$	44.3	\$ 45.7	\$	45.1	
Concretion (C)M/b)	76		77	20		70	
Generation (GWN)	24.7%		37 75 5%	28		30 76 F%	
	34.3%		35.5%	20.9%		30.3%	
(\$/MWh) - delivered Medicine Bow (6 MW)	\$ 62.0	\$	63.6	\$ 63.6	\$	65.1	
Generation (GWh)	16		19	16		19	
Capacity factor	30.6%		37.2%	29.8%		37.2%	
Total Medicine Bow (\$/MWh) - delivered	\$ 46.1	\$	45.9	\$ 50.6	\$	49.0	
Total wind (303 MW)							
Generation (GWh)	810		1,208	1,026		1,209	
Capacity factor	48.3%		45.5%	38.6%		45.6%	
Total wind (\$/MWh)	\$ 25.0	\$	26.2	\$ 28.9	\$	28.1	
Hydropower							
WAPA-CRSP (106 MW-summer/ 136 MW-winter) ⁽³⁾							
Generation (GWh)	502		502	479		348	
Capacity factor	47.4%		47.4%	45.2%		32.9%	
Total WAPA-CRSP (\$/MWh)	\$ 26.7	\$	25.4	\$ 26.3	\$	34.2	
WAPA-LAP (30 MW-summer/ 32 MW-winter) ⁽⁴⁾							
Generation (GWh)	110		110	110		110	
Capacity factor	40.3%		40.3%	40.3%		40.3%	
Total WAPA-LAP (\$/MWh)	\$ 29.7	\$	29.7	\$ 29.7	\$	29.7	
Total hydropower (136 MW- summer/ 168 MW-winter)							
Generation (GWh)	612		612	589		458	
Capacity factor	46.0%		46.0%	44.2%		34.4%	
Total hydropower (\$/MWh)	\$ 27.2	\$	26.2	\$ 26.9	\$	33.1	

Purchased power		2020		2021		2021		2022
resources (continued)		actual		budget		estimate		budget
Solar								
Rawhide Flats Solar (30 MW)								
Generation (GWh)		63		61		63		61
Capacity factor		23.9%		23.4%		23.8%		23.2%
Total Rawhide Flats Solar (\$/MWh) - including ancillary services and maintenance	\$	54.6	\$	54.6	\$	53.7	\$	54.2
Rawhide Prairie Solar (22 MW)								
Generation (GWh)		6		54		42		53
Capacity factor		4.0%		27.9%		22.0%		27.7%
Total Rawhide Prairie Solar (\$/MWh) - including ancillary services, maintenance,								
interconnection and battery fee	\$	30.4	\$	33.6	\$	31.7	\$	33.3
Total solar (52 MW)								
Generation (GWh)		69		115		105		114
	ć	16.8%	ć	25.3%	Ċ	23.0%	ć	25.1%
I otal solar (\$/MWh)	\$	52.5	Ş	44.8	Ş	44.9	\$	44.4
purchases								
Energy (GWh)		581		461		429		494
Total joint dispatch agreement purchases (\$/MWh)	\$	11.7	\$	11.1	\$	9.2	\$	8.8
Other purchases								
Energy (GWh)		68		108		52		32
Total other purchases (\$/MWh)	\$	27.8	\$	22.3	\$	50.3	\$	34.0
Owner community solar programs (4.371 MW) ⁽⁵⁾								
Generation (GWh)		8		9		8		8
Capacity factor		20.8%		22.4%		20.7%		19.8%
Total owner community solar programs (\$/MWh)	\$	28.7	\$	19.4	\$	43.4	\$	23.2

(1) Effective June 2020, Spring Canyon II and III energy and renewable attributes have been sold to a third party. At the end of the 10-year sales contract, the energy and renewable attributes will return to Platte River.

(2) Effective October 2018, Silver Sage energy and the renewable attribute have been sold to a third party.

(3) WAPA-CRSP capacity amounts shown represent the contract rate of delivery. Actual capacity available varies by month. During the summer season, available capacity ranges from 51 MW to 60 MW. In the winter season, available capacity ranges from 72 MW to 85 MW.

(4) WAPA-LAP (Loveland Area Projects) actual capacity available varies by month. During the summer season, available capacity ranges from 23 MW to 30 MW. In the winter season, available capacity ranges from 26 MW to 32 MW.

(5) Owner community solar programs: Fort Collins = 4.022 MW, Loveland = 0.349 MW. The owner communities retain the renewable attribute.

Revenues

Operating revenues

Platte River's operating revenues consist of sales to owner communities, sales for resale and wheeling revenues. The production cost model determines the forecast of revenues for the budget; however, actual results are strongly impacted by weather and market conditions and can vary from budget.

Sales to owner communities

Budgeted revenues from sales to owner communities are based on Platte River's load forecast and wholesale rates. Rate increases, when applicable, support Platte River's core functions and strategic direction. Sales to the owner communities represent the largest source of revenue.

Sales for resale

Sales for resale can include long-term sales or short-term sales. Long-term sales are for a contracted term greater than one year. Short-term sales are for a term of one year or less and include seasonal, monthly, hourly spot market and joint dispatch agreement sales. Sales can also occur for excess capacity. The assumed spot market prices are based on current market projections. The production cost model determines the level of sales for resale for the budget.

Typically, sales are made when energy available exceeds requirements of the owner communities and prices are higher than the marginal cost resource. Due to the must-take nature of the noncarbon power purchase agreements, certain sales may reflect that it is more economical to sell energy at a low price than to curtail generation. These sales typically occur when the coal-fired facilities are operating at minimum allowable output levels. Platte River's future participation in an organized energy market will help further manage and dispatch the must-take energy on the system and allow more economic dispatch of resources.

Sales for resale provide additional revenue and help to keep rates low for the owner communities, help manage the variability and high noncarbon output during nonpeak load conditions and benefit the regional grid by providing additional stability and benefit to a larger geographic area due to the reliable, economic and environmental performance of Platte River's baseload resources. More information on the current joint dispatch agreement is included in the operating expenses section.

Wheeling

Wheeling revenues represent payments from other parties for the use of Platte River's transmission system. There is a limited amount of demand for usage of the system; thus, it represents a smaller portion of the budget. Platte River charges others for the use of its transmission system per the Wholesale Transmission Service tariff. The wheeling revenues include charges for network transmission service for delivery to various Public Service Company of Colorado and Tri-State substations over Platte River's transmission system. Also included is a long-term contract with PacifiCorp for 25 MW of capacity on the Craig-Bonanza transmission line. The transmission system usage rates are adjusted annually based on the prior year's actual transmission system costs and loads.

Other revenues

Interest and other income

Interest and other income represent a small portion of the revenue budget. Interest income fluctuates with cash balances and interest rates. Cash balances have been favorably impacted by the sale of Windy Gap water units over the past few years. Other income includes fiber and tower leases, fiber administration fees and other miscellaneous revenues.

Total revenues (\$000)	2020 actual	2021 budget		2021 estimate	2022 budget
Operating revenues					
Sales to owner communities	\$ 196,002	\$ 193,909	\$	197,974	\$ 208,017
Sales for resale - long-term	15,807	18,664		19,548	18,687
Sales for resale - short-term	22,764	20,906		37,681	29,557
Wheeling					
Craig-Bonanza	924	940		991	921
Network and other	 5,252	 5,384		4,801	 5,009
Total wheeling revenues	 6,176	 6,324		5,792	 5,930
Total operating revenues	240,749	239,803		260,995	262,191
Other revenues					
Interest income	2,501	1,431		1,348	608
Other income	821	373		800	371
Distribution to owner communities	 (1,000)	 -		-	 -
Total other revenues	 2,322	 1,804	_	2,148	 979
Total revenues	\$ 243,071	\$ 241,607	\$	263,143	\$ 263,170



Average owner community rate and sales for resale price





Owner	2020	2021	2021	2022
communities toads	actual	budget	estimate	budget
Summer peak demand (MW) $^{\scriptscriptstyle(1)}$	657	655	707	674
Nonsummer peak demand (MW) $^{(1)}$	491	483	501	491
Metered coincident demand (MW)	6,029	6,040	6,191	6,162
Billing determinants ⁽²⁾				
Noncoincident billing demand (MW)	6,501	6,474	6,682	6,522
Coincident billing demand (MW)	6,466	6,443	6,660	6,481
Energy (GWh)	3,166	3,097	3,218	3,218
Sales for resale				
Energy (GWh) ⁽³⁾	1,407	1,712	1,507	1,756
Capacity (MW-Mo)	583	780	780	780

(1) Summer season is June through September. The nonsummer season is January through May and October through December.(2) Billing demand is subject to a monthly minimum demand charge and excludes large customer service.

(3) Includes long-term and short-term sales.

	2020		2021	2021	2022
Sales to owner communities	actual		budget	estimate	budget
Fort Collins					
Owner community allocation	47.5%		47.5%	47.5%	47.6%
Noncoincident billing demand (MW)	2,982		2,983	3,063	2,965
Coincident billing demand (MW)	2,973		2,984	3,064	2,961
Energy (MWh)					
Dispatchable	1,305,594		970,450	1,092,500	1,026,479
Intermittent	105,582		498,789	415,889	497,176
Premium intermittent	 76,000		-	 -	 -
Total energy supplied	1,487,176		1,469,239	1,508,389	1,523,655
Owner community charge	\$ 5,683,240	\$	6,021,348	\$ 6,021,348	\$ 6,581,604
Demand charges					
Transmission demand	\$ 17,114,907	\$	18,316,336	\$ 18,807,247	\$ 19,630,782
Generation demand	 15,004,993	_	14,906,547	 15,370,669	 15,094,367
Total demand charges	\$ 32,119,900	\$	33,222,883	\$ 34,177,916	\$ 34,725,149
Energy charges					
Fixed cost energy	\$ 22,945,393	\$	21,480,265	\$ 22,052,641	\$ 23,951,853
Dispatchable variable cost energy	23,226,509		14,663,497	16,507,676	15,602,477
Intermittent energy	4,341,560		15,402,593	12,842,638	15,909,634
Premium intermittent energy	 3,252,040			 	 -
Total energy charges	\$ 53,765,502	\$	51,546,355	\$ 51,402,955	\$ 55,463,964
Total charges	\$ 91,568,642	\$	90,790,586	\$ 91,602,219	\$ 96,770,717
Longmont					
Owner community allocation	25.2%		25.2%	25.2%	25.4%
Noncoincident billing demand	1 803		1 774	1 848	1 811
Coincident billing demand (MW)	1,797		1,771	1,846	1,809
Energy (MWh)					
Dispatchable	753,397		517,470	607,496	558,224
Intermittent	59,077		264,375	231,259	268,262
Premium intermittent	 21,639		-	 -	 -
Total energy supplied	834,113		781,845	838,755	826,486

Sales to owner	2020	2021	2021	2022
communities (continued)	actual	budget	estimate	budget
Longmont (continued)				
Owner community charge	\$ 3,016,452	\$ 3,187,848	\$ 3,187,848	\$ 3,508,536
Demand charges				
Transmission demand	\$ 10,351,108	\$ 10,891,479	\$ 11,346,379	\$ 11,989,439
Generation demand	 9,129,634	 8,840,374	 9,282,361	 9,229,360
Total demand charges	\$ 19,480,742	\$ 19,731,853	\$ 20,628,740	\$ 21,218,799
Energy charges				
Fixed cost energy	\$ 12,878,698	\$ 11,430,572	\$ 12,262,594	\$ 12,992,359
Dispatchable variable cost energy	13,402,930	7,818,977	9,179,260	8,485,005
Intermittent energy	2,429,233	8,163,885	7,141,279	8,584,385
Premium intermittent energy	 925,933	 -	 -	 -
Total energy charges	\$ 29,636,794	\$ 27,413,434	\$ 28,583,133	\$ 30,061,749
Total charges	\$ 52,133,988	\$ 50,333,135	\$ 52,399,721	\$ 54,789,084
Loveland				
Owner community allocation	23.2%	23.2%	23.2%	22.9%
Noncoincident billing demand (MW)	1,460	1,463	1,510	1,480
Coincident billing demand (MW)	1,472	1,469	1,519	1,477
Energy (MWh)				
Dispatchable and large customer service	657,124	480,962	556,753	499,596
Intermittent	49,564	236,967	177,713	232,515
Premium intermittent	 5,500	 	 _	 -
Total energy supplied	712,188	717,929	734,466	732,111
Owner community charge	\$ 2,392,566	\$ 2,524,716	\$ 2,524,716	\$ 2,748,216
Demand charges				
Transmission demand	\$ 8,389,899	\$ 8,982,394	\$ 9,269,923	\$ 9,796,640
Generation demand	 7,456,783	 7,346,929	 7,637,504	 7,535,059
Total demand charges	\$ 15,846,682	\$ 16,329,323	\$ 16,907,427	\$ 17,331,699

Sales to owner		2020		2021		2021		2022
communities (continued)		actual		budget		estimate		budget
Loveland (continued)								
Energy charges								
Fixed cost energy	\$	9,638,601	\$	9,195,535	\$	9,423,317	\$	10,115,910
Dispatchable variable cost energy		44650407		40 570 074				44 400 054
and large customer service		14,652,107		10,538,871		11,/19,650		11,108,051
Intermittent energy		1,815,556		6,559,224		5,487,790		6,685,396
Premium intermittent energy		235,345		-		-		-
Total energy charges	<u>\$</u>	26,341,609	<u>Ş</u>	26,293,630	<u>Ş</u>	26,630,757	<u>Ş</u>	27,909,357
Total charges	Ş	44,580,857	Ş	45,147,669	\$	46,062,900	Ş	47,989,272
Estes Park								
Owner community allocation		4.1%		4.1%		4.1%		4.1%
Noncoincident billing demand		256		254		261		266
(MW)		250		254		201		200
Coincident billing demand (MW)		224		219		231		234
Energy (MWh)		400.057		07.004		00.045		00 545
Dispatchable		120,053		83,224		99,015		90,515
Intermittent		9,592		44,291		37,693		45,688
Premium intermittent		2,461		-		-		
Total energy supplied		132,106		127,515		136,708		136,203
Owner community charge	Ş	489,769	Ş	521,400	\$	521,400	Ş	570,936
Demand charges								
Transmission demand	\$	1,471,260	\$	1,557,784	\$	1,603,567	\$	1,761,182
Generation demand		1,091,540		1,069,077		1,125,084		1,157,140
Total demand charges	\$	2,562,800	\$	2,626,861	\$	2,728,651	\$	2,918,322
Energy charges								
Fixed cost energy	\$	2,030,092	\$	1,864,273	\$	1,998,679	\$	2,141,111
Dispatchable variable cost energy		2,135,744		1,257,522		1,496,127		1,375,821
Intermittent energy		394,418		1,367,707		1,163,957		1,462,030
Premium intermittent energy		105,306		-		-		-
Total energy charges	\$	4,665,560	\$	4,489,502	\$	4,658,763	\$	4,978,962
Total charges	\$	7,718,129	\$	7,637,763	\$	7,908,814	\$	8,468,220

Sales to owner		2020		2021		2021		2022
communities (continued)		actual		budget		estimate		budget
Total owner communities								
Owner community allocation		100.0%		100.0%		100.0%		100.0%
Noncoincident billing demand (MW)		6,501		6,474		6,682		6,522
Coincident billing demand (MW)		6,466		6,443		6,660		6,481
Energy (MWh)								
Dispatchable and large customer		2 076 160		2 052 106		2755764		2 174 014
Service		2,030,100		2,052,100		2,355,704		2,1/4,014
Dramium intermittent		223,815		1,044,422		802,554		1,043,641
Tabal as annu suggliad		103,000		7 000 520		7 210 710		
l otal energy supplied		3,165,583		3,096,528		5,218,518		3,218,455
	~	44 500 007	~	40.055.740	ć	40.055.740	~	17 100 000
Owner community charge	Ş	11,582,027	Ş	12,255,312	\$	12,255,312	\$	13,409,292
Demand charges								
Transmission demand	Ş	37,327,174	Ş	39,747,993	Ş	41,027,116	Ş	43,178,043
Generation demand		32,682,950		32,162,927		33,415,618		33,015,926
Total demand charges	\$	70,010,124	\$	71,910,920	\$	74,442,734	\$	76,193,969
Energy charges								
Fixed cost energy	\$	47,492,784	\$	43,970,645	\$	45,737,231	\$	49,201,233
Dispatchable variable cost energy								
and large customer service		53,417,290		34,278,867		38,902,713		36,571,354
Intermittent energy		8,980,767		31,493,409		26,635,664		32,641,445
Premium intermittent energy		4,518,624						
Total energy charges	\$	114,409,465	\$	109,742,921	\$	111,275,608	\$	118,414,032
Total charges	\$	196,001,616	\$	193,909,153	\$	197,973,654	\$	208,017,293

Operating **expenses**

Expenses incurred to perform the operations of generating and delivering electricity include purchased power, fuel, production, transmission and administrative and general. In addition, operating expenses include investments in DER. The production cost model determines the budgeted expense for purchased power and fuel, whereas expenses for production, transmission, administrative and general and DER are predominately determined by departmental budgets. Emphasis is placed on preventive and predictive maintenance resulting in the ability to control expenses.

Purchased power

Purchased power is the largest classification of operating expenses. Purchased power includes purchases made under long-term contracts for wind, hydropower and solar energy. Spot market purchases and joint dispatch agreement purchases supplement additional energy requirements. An accrual for estimated future replacement power costs during specified maintenance outages is also included. Purchased power fluctuates with outages and market conditions. When market prices are low, Platte River may decide, for economic reasons, to purchase rather than generate from a coal-fired or natural gas facility. Through the joint dispatch agreement, the lowest cost participating resource is dispatched and Platte River is able to take advantage of low-cost energy.

Platte River continues to diversify its resource portfolio by adding more noncarbon resources and by moving away from coal-fired resources through power purchase agreements. The current power purchase arrangements are listed below.

Wind

Wind generation includes 303 MW provided under long-term power purchase agreements. The agreements are for deliveries from the following facilities.

- Roundhouse Wind Energy Center (225 MW) in Wyoming; contract ends May 31, 2042.
- Spring Canyon Wind Energy Center Phase II and III (60 MW) in Colorado; contracts end Oct. 31, 2039, and Dec. 10, 2039, respectively. To accommodate additional wind energy available from the Roundhouse Wind Energy Center power purchase agreement and reduce ancillary services expense, the energy and renewable attribute from this site have been sold under a 10-year, long-term contract that began in 2020. Therefore, the energy is not delivered to the owner communities for the term of the sales contract. At the end of the sales contract, the energy will return to Platte River.
- Silver Sage Windpower Project (12 MW) in Wyoming; contract ends Sept. 30, 2029. To accommodate additional wind energy available from the Roundhouse Wind Energy Center power purchase agreement and to reduce transmission and ancillary services expenses, the energy and renewable attribute from this site have been sold under a long-term contract. Therefore, the energy is not delivered to the owner communities.
- Medicine Bow Wind Project (6 MW) in Wyoming; contract ends Dec. 30, 2033.

Hydropower

Hydropower is received under two long-term contracts with WAPA. The hydropower contracts are subject to annual price changes. The CRSP and LAP contracts end Sept. 30, 2057, and Sept. 30, 2054, respectively.

- CRSP contract rate of delivery amounts are 106 MW in the summer and 136 MW in the winter. Actual capacity available varies by month. During the summer season, available capacity ranges from 51 MW to 60 MW. In the winter season, available capacity ranges from 72 MW to 85 MW. Beginning Dec. 1, 2021, through Sept. 30, 2025, an 8.1% rate increase and a 30.6% reduction in energy delivered will be implemented due to increased rates from WAPA caused by drought conditions.
- LAP capacity is 30 MW in the summer and 32 MW in the winter. Similar to CRSP, the available capacity from LAP varies from 23 MW to 30 MW in the summer season, and 26 MW to 32 MW in the winter season.

Solar and battery storage

Solar generation includes 52 MW with 2 MWh of battery storage provided under long-term power purchase agreements. The agreements are for deliveries from the following facilities.

- Rawhide Flats Solar facility (30 MW) located at the Rawhide Energy Station; contract ends Dec. 14, 2041.
- Rawhide Prairie Solar facility (22 MW) located at the Rawhide Energy Station; contract ends March 18, 2041. A battery storage system of 2 MWh is integrated with this project, which can be discharged once daily at a rate up to 1 MW per hour.

Joint dispatch agreement

The joint dispatch agreement is between Public Service Company of Colorado, Black Hills Colorado Electric, Colorado Springs Utilities and Platte River and operates similarly to an energy imbalance market. This agreement provides access to lower cost resources and increases operational efficiencies while enhancing reliability. The agreement renews annually but may be modified in the future as participants, including Platte River, evaluate alternatives for participation in an organized energy market.

Other purchases

Spot market purchases provide energy to satisfy loads, replace power during outages and meet reserve requirements.

Capacity of approximately 4.022 MW and 0.349 MW is purchased from Fort Collins and Loveland community solar facilities, respectively. For these two facilities, the owner communities retain the renewable attribute and the facilities are not part of Platte River's noncarbon resource portfolio.

Forced outage exchange agreement

Platte River has a forced outage exchange agreement with Tri-State, whereby in the event that either Rawhide Unit 1 or Tri-State's Craig Unit 3 is out of service, the other utility will provide 100 MW of generation on a short-term basis. The agreement is in effect until March 31, 2024.

Maintenance outage accrual policy

This policy allows replacement power for Rawhide Unit 1 scheduled maintenance outage costs exceeding \$5 million to be spread over the interim period between outages to smooth rate impacts to the owner communities.

Fuel

Fuel expense is one of the largest operating expenses, although it has rapidly declined as a percentage of total operating expenses as fossil fuel generation becomes a smaller component of the resource portfolio with the influx of noncarbon resources. Fuel expense includes coal purchased for Rawhide Unit 1, Craig units 1 and 2 and natural gas expense for the combustion turbines. The production cost model determines the majority of fuel expense for the budget year and fluctuates with resource availability primarily due to outages and market conditions.

Rawhide Unit 1 (280 MW) is Platte River's largest baseload resource and has historically operated at a high capacity factor. As Platte River adds more noncarbon energy to the resource portfolio, Rawhide Unit 1 will operate at lower load levels to accommodate higher levels of noncarbon resources on the system. The full impact of this change in operations continues to be assessed.

Coal for Rawhide Unit 1 is purchased under a long-term contract to secure all of Rawhide Unit 1's coal needs through 2022. The coal price defaults to a market index unless Platte River chooses to utilize price lock provisions outlined in the contract. The 2022 budget includes a 23.5% price increase primarily due to the overall market for coal and other industry factors. The current Rawhide coal contract is with Navajo Transitional Energy Company, LLC for low-sulfur coal provided from Antelope Mine in the Powder River Basin in Wyoming. A long-term transportation agreement through 2022 with BNSF Railway establishes a base rate per ton, which is subject to an annual adjustment in accordance with specified indices and a fuel adjustment charge.

Platte River has 18% ownership in Craig units 1 and 2 (151 MW combined). Coal for the Craig units is purchased under the long-term contract with Trapper Mining, Inc. through 2025. Platte River's ownership share of the mine is 27.14%. Efforts will focus on structuring future fuel supply contracts and fuel inventory levels to align with operations and the planned closure timeline of the Craig units.

Natural gas-fired combustion turbines include five simple cycle combustion turbines, comprised of four GE 7EAs (Rawhide units A, B, C and D, 65 MW each) and one GE 7FA (Rawhide Unit F, 128 MW). The combustion turbines are used to meet peak load demand, provide reserves during outages of the coal-fired units and make sales for resale. Natural gas is purchased at market prices as needed. Natural gas needs fluctuate with load, market energy prices and the addition of noncarbon energy resources. The 2022 budget includes a 32% price increase due to an increase in market prices for natural gas.

Production

Production expenses include operations and maintenance expenses (excluding fuel) incurred at the Rawhide Energy Station, the Craig Generating Station and power operations. The Rawhide expenses are predominately determined by departmental budgets. The Craig expenses are determined by Tri-State, the operating agent, and approved by the engineering and operations committee of which Platte River is a member. An accrual for estimated future costs during specified Rawhide maintenance outages is also included. The 2022 budget for power operations includes over \$2 million for consulting services as Platte River prepares to enter an organized energy market.

Rawhide Energy Station

Rawhide Unit 1 is Platte River's largest resource and will be retired by Dec. 2029. Platte River plans continued investment in preventive and predictive maintenance to ensure the resource is reliable, safe and compliant through its remaining operating life. Through this proactive and planned approach, ongoing operations and maintenance expenses have been consistent from year to year. Regular outages are required to ensure the unit remains operable and reliable. An accrual for estimated future costs during specified maintenance outages of Rawhide Unit 1 is also included and smooths out the cost of those outages over a longer period. Rawhide Unit 1 major outages are performed every three years with a minor outage 18 months between major outages. Scheduled maintenance outages are also required for the combustion turbines, which are determined on the number of starts of the units. Personnel expenses that are charged to operations and maintenance can fluctuate with the amount of labor charged to capital projects in any given year.

Craig Generating Station

Routine operations and maintenance expenses for Craig units 1 and 2 have been decreasing slightly as participants are prudent about the amount of investment in the Craig units to ensure reliability until retirement. The scheduled maintenance outages, however, typically cause an increase in expenses. Based on the desire to limit reliance on coal-fired resources and avoid excessive capital costs to comply with upcoming environmental regulations, participants in Craig units 1 and 2 agreed to retire the facilities by Dec. 2025 and Sept. 2028, respectively.

Power operations

Power operations relates to managing resources to meet load and sales for resale obligations. The focus is to ensure the owner communities have a reliable energy supply, cost-effectively optimize resources and create additional value through the sale of available energy and capacity to third parties.

Transmission

Transmission maintenance is important to support the safe and reliable delivery of power across Platte River's regional transmission system. These expenses also include Platte River's share of operating and maintaining jointly owned transmission facilities, ancillary services for regulation of wind and solar, and wheeling expenses paid to WAPA and/or others for wind and a portion of Platte River's load. Transmission expenses are primarily developed through departmental budgets. Personnel expenses that are charged to operations and maintenance can fluctuate with the amount of labor charged to capital projects in any given year.

Administrative and general

Administrative and general expenses include all expenses incurred that are not directly allocated to capital or assignable to fuel, production or transmission. These expenses include those related to human resources, finance, communications, facilities, community and government affairs, information technology, general counsel and the general manager. The largest component of this expense is personnel which includes salaries and benefits. With the changing environment and continued focus on operational excellence, Platte River has made investments and will continue to invest in employees to ensure the strategic initiatives and goals can be achieved. Emphasis has been placed on resource planning, technology and communications.

Distributed energy resources

DER expenses include all expenses applicable to the administration and implementation of Platte River's DER programs. Energy efficiency and demand response programs, early forms of DER, began in 2002 with a budget of \$0.4 million. Energy efficiency investment continues due to its success and support for the enhanced customer experience strategic initiative. Development and testing continue with other DER and demand response programs as Platte River begins implementation of the longrange DER strategy in support of the resource diversification and alignment strategic initiative and the Resource Diversification Policy.

Operating expenses (\$000)	2020 actual	2021 budget	2021 estimate	2022 budget
Purchased power	\$ 48,029	\$ 57,193	\$ 53,050	\$ 57,733
Fuel	41,571	34,404	47,648	44,526
Production	46,502	45,165	43,404	50,386
Transmission	16,448	18,566	18,948	18,634
Administrative and general	20,335	22,419	21,344	26,020
Distributed energy resources	 9,463	 11,642	 7,926	 12,378
Total operating expenses	\$ 182,348	\$ 189,389	\$ 192,320	\$ 209,677



Operating expenses

		2020		2021		2021		2022
Purchased power		actual		budget		estimate		budget
Wind								
Roundhouse								
Energy (kWh)		513,260,372		909,604,558		766,704,284		909,604,558
Energy \$	\$	6,210,037	\$	15,736,160	\$	13,263,985	\$	15,736,160
Spring Canyon II ⁽¹⁾								
Energy (kWh)		131,805,381		130,916,662		115,381,078		130,929,461
Energy \$	\$	4,037,904	\$	4,110,592	\$	3,621,901	\$	4,214,672
Spring Canyon III (1)								
Energy (kWh)		112,782,103		110,775,635		99,668,378		110,786,465
Energy \$	\$	3,444,532	\$	3,471,463	\$	3,122,708	\$	3,559,446
Silver Sage ⁽²⁾								
Energy (kWh)		36,103,640		37,267,472		28,312,044		38,378,606
Energy \$	\$	2,239,667	\$	2,369,836	\$	1,801,481	\$	2,499,385
Medicine Bow								
Energy (kWh)		16,120,541		19,558,956		15,680,550		19,558,956
Energy \$	\$	660,942	\$	786,325	\$	631,588	\$	782,359
Total wind								
Energy (kWh)		810,072,037		1,208,123,283		1,025,746,334		1,209,258,046
Energy \$	\$	16,593,082	\$	26,474,376	\$	22,441,663	\$	26,792,022
Hydropower								
WAPA-CRSP								
Demand (kW-Mo)		1,450,002		1,450,002		1,450,002		1,450,002
Demand \$	\$	7,376,630	\$	7,032,510	\$	7,086,805	\$	7,612,512
Energy (kWh)		502,466,838		502,466,838		478,817,900		348,635,557
Energy \$	\$	6,014,361	\$	5,743,197	\$	5,498,464	\$	4,309,136
Total CRSP	\$	13,390,991	\$	12,775,707	\$	12,585,269	\$	11,921,648
WAPA-LAP								
Demand (kW-Mo)		372,606		372,606		372,606		372,606
Demand \$	\$	1,535,137	\$	1,535,136	\$	1,535,136	\$	1,535,136
Energy (kWh)		109,536,421		109,536,421		109,536,421		109,536,421
Energy \$	\$	1,721,913	\$	1,721,911	\$	1,721,911	\$	1,721,911
Total LAP	\$	3,257,050	\$	3,257,047	\$	3,257,047	\$	3,257,047
Total hydropower								
Demand (kW-Mo)		1,822,608		1,822,608		1,822,608		1,822,608
Demand \$	\$	8,911,767	\$	8,567,646	\$	8,621,941	\$	9,147,648
Energy (kWh)		612,003,259		612,003,259		588,354,321		458,171,978
Energy \$	\$	7,736,274	\$	7,465,108	\$	7,220,375	\$	6,031,047
Total \$	\$	16,648,041	\$	16,032,754	\$	15,842,316	\$	15,178,695
Solar								
Rawhide Flats Solar								
Energy (kWh)		62,952,042		61,506,383		62,584,185		61,042,876
Energy \$	\$	3,364,783	Ś	3,287,517	Ś	3,345,126	Ś	3,262,743
55	·							

	2020	2021	2021	2022
Purchased power (continued)	actual	budget	estimate	budget
Solar (continued)				
Rawhide Prairie Solar				
Energy (kWh)	5,768,139	53,751,166	42,376,329	53,435,261
Energy \$	\$ 175,566	\$ 1,764,312	\$ 1,303,767	\$ 1,755,104
Total solar				
Energy (kWh)	68,720,181	115,257,549	104,960,514	114,478,137
Energy \$	\$ 3,540,349	\$ 5,051,829	\$ 4,648,893	\$ 5,017,847
Joint dispatch agreement purchases				
Energy (kWh)	581,422,000	460,511,646	429,425,258	493,974,361
Energy \$	\$ 6,806,807	\$ 5,117,642	\$ 3,965,882	\$ 4,347,128
Other purchases				
Energy (kWh)	68,365,000	108,056,230	64,825,717	31,879,825
Energy \$	\$ 1,901,781	\$ 2,404,269	\$ 2,614,122	\$ 1,082,331
Reserves \$	\$ 1,512,665	\$ 2,818,146	\$ 4,979,142	\$ 4,363,685
Owner community solar programs (3)				
Energy (kWh)	8,236,057	8,811,274	8,158,358	7,798,850
Energy \$	\$ 235,967	\$ 171,216	\$ 353,690	\$ 181,312
Forced outage exchange	\$ (603,608)	\$ -	\$ (918,119)	\$ -
Renewable energy credits	\$ 549,980	\$ 549,980	\$ 549,980	\$ 549,980
Replacement power outage accrual	\$ 844,238	\$ (1,427,523)	\$ (1,427,523)	\$ 220,218
Total purchased power	\$ 48,029,302	\$ 57,192,689	\$ 53,050,046	\$ 57,733,218

(1) Effective June 2020, Spring Canyon II and III energy and renewable attributes have been sold to a third party.

(2) Effective October 2018, Silver Sage energy and the renewable attribute have been sold to a third party.

(3) The owner communities retain the renewable attribute.





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 2022 Strategic Budget

		2020	2021		2021	2022
Fuel		actual	budget		estimate	budget
Rawhide Unit 1						
Coal burned (MBtu)		19,165,965	18,374,244		17,580,253	20,354,430
\$/MBtu	\$	1.30	\$ 1.32	\$	1.32	\$ 1.63
Coal expense	\$	24,955,757	\$ 24,237,254	\$	23,142,594	\$ 33,189,074
Car lease and other		11,999	16,800		19,181	13,700
Oil		84,114	180,000		179,926	32,000
Fuel ash disposal		(60,947)	(55,000)		(73,410)	(75,000)
Fuel handling		872,667	473,785		724,870	488,090
Testing and analysis		42,486	 44,500		33,718	 42,500
Total Rawhide Unit 1	\$	25,906,076	\$ 24,897,339	\$	24,026,879	\$ 33,690,364
Craig units 1 and 2						
Coal burned (MBtu)		5,445,429	5,578,029		7,239,896	7,051,361
\$/MBtu	\$	1.93	\$ 1.55	\$	1.62	\$ 1.42
Coal expense	\$	10,502,663	\$ 8,622,960	\$	11,703,512	\$ 10,048,159
Oil		6,968	14,000		6,791	10,000
Natural gas		106,407	85,000		98,597	85,000
Fuel handling		118,053	 317,830		285,691	 225,877
Total Craig units 1 and 2	\$	10,734,091	\$ 9,039,790	\$	12,094,591	\$ 10,369,036
Rawhide units A, B, C, D and F						
(combustion turbines)						
Gas burned (MBtu)		1,787,928	139,981		2,297,544	104,036
\$/MBtu	\$	2.76	\$ 3.19	\$	5.01	\$ 4.21
Natural gas expense	\$	4,926,155	\$ 446,197	\$	11,514,141	\$ 438,176
Other gas expense		4,208	 21,242	_	12,257	 28,538
Total natural gas	<u>\$</u>	4,930,363	\$ 467,439	\$	11,526,398	\$ 466,714
Total fuel	\$	41,570,530	\$ 34,404,568	\$	47,647,868	\$ 44,526,114







Fuel unit cost per MBtu

Production actual budget estimate budget Rawhide Unit 1 Personnel expenses 5 10,023,585 \$ 10,407,907 \$ 9,980,820 \$ 10,406,92 Overtime wages 1,748,471 1,446,501 1,918,288 752,93 Benefits allocation 5,169,203 5,634,006 4,950,390 4,887,41 Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,27
Rawhide Unit 1 Personnel expenses Regular wages \$ 10,023,585 \$ 10,407,907 \$ 9,980,820 \$ 10,406,920 Overtime wages 1,748,471 1,446,501 1,918,288 752,933 Benefits allocation 5,169,203 5,634,006 4,950,390 4,887,414 Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,27
Personnel expenses Regular wages \$ 10,023,585 \$ 10,407,907 \$ 9,980,820 \$ 10,406,92 Overtime wages 1,748,471 1,446,501 1,918,288 752,93 Benefits allocation 5,169,203 5,634,006 4,950,390 4,887,41 Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,27
Regular wages \$ 10,023,585 \$ 10,407,907 \$ 9,980,820 \$ 10,406,927 Overtime wages 1,748,471 1,446,501 1,918,288 752,937 Benefits allocation 5,169,203 5,634,006 4,950,390 4,887,417 Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,277 Operations and maintenance V V V V V
Overtime wages 1,748,471 1,446,501 1,918,288 752,93 Benefits allocation 5,169,203 5,634,006 4,950,390 4,887,41 Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,27 Operations and maintenance V V V V V
Benefits allocation 5,169,203 5,634,006 4,950,390 4,887,41 Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,27 Operations and maintenance Visit Provide the second se
Total personnel expenses 16,941,259 17,488,414 16,849,498 16,047,27 Operations and maintenance 1<
Operations and maintenance
Office expenses 13,223 27,400 14,382 19,90
Safety expenses 117,854 115,000 86,656 112,25
Furniture and equipment 24,329 30,600 35,601 20,40
Local business expense 13,486 44,700 44,162 18,30
Postage and deliveries 18,695 12,800 49,031 9,80
O&M materials and supplies 4,609,346 6,541,811 6,347,278 4,070,63
Gasoline and diesel 51,592 98,500 91,482 72,84
Tools and shop equipment 42,485 82,800 30,278 70,00
Total operations and
maintenance 4,891,010 6,953,611 6,698,870 4,394,12
Contractual services
Contracted services 3,765,039 11,294,826 11,273,294 4,618,76
Insurance 690,341 786,500 782,755 1,103,90
Travel and training expenses 70,022 250,400 95,717 220,85
Telephone services 62,418 66,482 56,579 61,79
Utilities 374,891 487,120 583,572 444,04
Dues, memberships and fees 51,014 46,755 49,969 55,94
Outage accrual 4,317,808 (7,991,551) (7,991,551) 3,295,96
Total contractual services 9,331,533 4,940,532 4,850,335 9,801,26
Windy Gap
Rawhide water expenses 354,875 2,278,712 1,413,780 3,385,00
Total Rawhide Unit 1
production 31,518,677 31,661,269 29,812,483 33,627,66
Craig units 1 and 2
Operating expenses 9,691,001 8,592,051 8,290,717 8,437,82
Fiscal impact payment 36,217 36,217 36,217 36,217
Total Craig units 1 and 2
production 3,727,210 0,020,200 0,520,554 0,474,04 Tatal thermal analysis 41,245,005 40,200,573 30,470,413 42,401,74
Total thermal production 41,245,895 40,289,537 38,159,417 42,101,71 Dewikide write A. P. C. D. and F.
(combustion turbines)
Regular wages 440.493 425.108 432.991 627.26
Overtime wages 109.946 37.084 87.552 33.50
Benefits allocation 252 053 219 948 217 834 289 83
O&M materials and supplies 328,884 247,610 400,888 342,24

	2020	2021	2021	2022
Production (continued)	actual	budget	estimate	budget
Rawhide units A, B, C, D and F (combustion turbines) (continued)				
Tools and shop equipment	\$ 188	\$ -	\$ -	\$ -
Contracted services	792,597	354,865	579,583	812,575
Insurance	328,182	391,900	382,517	453,400
Travel and training expenses	23,910	23,800	12,000	28,900
Telephone services	574	600	488	600
Utilities	-	2,400	1,626	2,400
Dues, memberships and fees	 880	 6,500	 6,246	 6,500
Total Rawhide units A, B, C, D and F (combustion turbines)	2,277,707	1,709,815	2,121,725	2,597,225
Power operations				
Regular wages	1,758,784	1,611,419	1,652,104	1,972,326
Overtime wages	41,361	85,990	78,843	64,708
Benefits allocation	781,656	797,975	702,431	878,963
Local business expense	1,961	1,800	415	1,800
O&M materials and supplies	1,834	1,625	500	-
Craig units 1 and 2 operating expenses	28,629	37,776	30,524	40,392
Contracted services	333,687	558,352	653,317	2,679,304
Travel and training expenses	15,161	55,095	6,050	28,900
Telephone expenses	10,884	11,696	11,581	11,672
Dues, memberships and fees	 4,000	 4,000	 7,100	 8,600
Total power operations expenses	 2,977,957	 3,165,728	 3,142,865	 5,686,665
Total production	\$ 46,501,559	\$ 45,165,080	\$ 43,404,007	\$ 50,385,604



	2020	2021	2021	2022
Transmission	actual	budget	estimate	budget
Personnel expenses				
Regular wages	\$ 6,039,501	\$ 6,304,380	\$ 6,253,610	\$ 6,168,864
Overtime wages	349,456	433,492	407,423	432,484
Benefits allocation	2,819,780	3,186,070	2,698,266	2,874,503
Total personnel expenses	9,208,737	9,923,942	9,359,299	9,475,851
Materials and other expenses				
Office supplies	683	5,250	1,818	250
Safety expenses	4,921	17,450	12,380	15,490
Local business expense	2,847	11,466	2,118	9,966
Postage and deliveries	292	6,504	914	6,004
O&M materials and supplies	197,473	414,904	336,960	338,242
Gasoline and diesel	19,327	31,800	34,624	29,700
Tools and shop equipment	12,097	29,000	12,145	29,004
Computer equipment	21,058	28,100	20,973	87,978
Total materials and other				
expenses	258,698	544,474	421,932	516,634
Contractual services				
Contracted services	2,478,474	3,277,775	3,295,466	2,989,085
Travel and training expenses	42,597	39,683	26,693	131,534
Telephone services	52,383	53,220	40,585	51,037
Utilities	14,464	23,750	5,581	22,510
Dues, memberships and fees	350,871	420,358	403,663	431,250
Leases and rents	113,434	109,262	113,518	134,243
Craig units 1 and 2 transmission				
expenses	150,963	226,035	120,6/1	218,444
Total contractual services	3,203,186	4,150,083	4,006,177	3,978,103
Total operations and	12 670 621	14 619 400	17 797 109	17 070 599
maintenance	12,070,021	14,010,499	13,767,406	13,970,388
Transmission by others				
Wheeling expense	670 765	760 750	4 0 0 4 0 4 5	4 4 6 9 9 7 9
	638,365	/60,/52	1,991,915	1,468,872
Spring Canyon Wind Energy	3 116 910	3 133 002	7 128 <i>1</i> 78	3 136 752
Medicine Bow Wind	5,110,910	5,155,002	5,120,730	5,150,752
Project	22,637	53,448	40,497	57,976
Total wheeling expense	3,777,912	3,947,202	5,160,850	4,663,600
Total transmission	\$ 16,448,533	\$ 18,565,701	\$ 18,948,258	\$ 18,634,188


Administrative and	2020	2021	2021	2022	
general	actual	budget	estimate	budget	
Operations					
Personnel expenses					
Regular wages	\$ 9,321,101	\$ 9,694,422	\$ 9,787,048	\$ 11,044,020	
Overtime wages	143,357	59,100	146,567	45,900	
Benefits allocation	4,205,233	4,569,516	3,978,492	4,772,744	
Total personnel expenses	13,669,691	14,323,038	13,912,107	15,862,664	
Office operations and other expenses					
Office expenses	(73,936)	15,275	7,053	(1,625)	
Furniture and equipment	408	13,000	5,803	5,800	
Local business expense	30,477	157,630	74,850	168,240	
Postage and deliveries	7,469	18,000	12,110	23,520	
Gasoline and diesel	12,273	24,000	15,633	24,000	
Computer equipment	343,438	557,071	643,291	859,954	
Total office operations and other					
expenses	320,129	784,976	758,740	1,079,889	
Safety and training expenses					
Safety expenses	9,730	9,600	2,184	9,660	
Local business expense	-	3,000	500	3,000	
Contracted services	5,759	19,625	5,268	24,125	
Travel and training expenses	193,779	350,711	193,467	441,405	
Dues, memberships and fees	729	675	265	655	
Wellness and incentive program	96,801	141,100	91,796	145,100	
Total safety and training expenses	306,798	524,711	293,480	623,945	
Contractual services					
Contracted services	641,432	573,155	962,897	908,405	
Travel and training expenses	9,724	76,354	11,114	75,708	
Telephone services	39,425	42,871	41,047	45,953	
Utilities	185,891	175,250	168,398	229,500	
Dues, memberships and fees	82,635	84,013	77,977	112,598	
Other financing expenses	41,854	51,600	44,119	57,200	
Total contractual services	1,000,961	1,003,243	1,305,552	1,429,364	
Insurance	697,863	804,400	794,945	1,193,900	
Board and enterprise expenses					
Local business expense	7,880	9,000	4,932	9,000	
Contracted services	20,460	-	-	-	
Travel and training expenses	1,553	13,500	1,075	12,500	
Dues, memberships and fees	143,516	149,450	140,679	168,200	
Trustees fees	12,000	25,500	18,000	19,500	
Owner community economic development	100,000	100,000	100,000	100,000	
Total board and enterprise					
expenses	285,409	297,450	264,686	309,200	

Administrative and	2020	2021	2021	2022	
general (continued)	actual	budget	estimate	budget	
Operations (continued)					
Reporting and other expenses					
Office expenses	\$ 5,088	\$ -	\$ -	\$ -	
Local business expenses	71,753	179,445	79,089	156,550	
Contracted services	126,800	220,850	183,343	268,250	
Total reporting and other					
expenses	203,641	400,295	262,432	424,800	
Planning and customer service					
expenses					
Local business expenses	5,714	-	-	-	
Contracted services	337,295	524,123	298,290	436,500	
I ravel and training expenses	1,186	-	-	-	
Dues, memberships and fees	/,500		/,500		
lotal planning and customer	751 605	E24 127	705 700	476 500	
service expenses	331,093	524,125	305,790	430,500	
Compliance expenses		400	254	400	
Computer equipment	-	400	204	400	
Computer equipment	- 0.177	-	7 5 5 3 5	-	
Travel and training expenses	9,177	24,200	12 585	24,550	
Dues memberships and fees	195	32,730	375	31,030	
	23 483	57 725	20.821	56 975	
	23,103				
depend operations	16 859 670	18 719 961	17 918 553	21 417 237	
Maintenance	10,000,070	10,719,901	17,910,000	21, 117,237	
Building and grounds maintenance					
Furniture and equipment	14 331	6 0 0 0	6 000	-	
Materials and supplies	74 966	80,780	61.342	62,886	
	2 626	3 600	3 015	5 500	
Contracted services	595.897	315,849	373.811	322.024	
Total buildings and grounds					
maintenance	687,820	406,229	444,168	390,410	
Computer maintenance					
Contracted services	2,326,910	2,909,659	2,590,153	3,732,788	
Total computer maintenance	2.326.910	2,909,659	2.590.153	3.732.788	
	,	, ,	,,	-, - ,	
Postage and deliveries	135	1 000	250	1 000	
Telephone services	19.523	19.600	19.533	20.026	
Total office equipment					
maintenance	19,658	20,600	19,783	21,026	
Vehicle maintenance					
Materials and supplies	12,040	15,000	15,648	15,000	
Tools and shop equipment	9,807	16,800	14,709	6,000	
Contracted services	6,817	4,000	2,417	20,800	
Total vehicle maintenance	28,664	35,800	32,774	41,800	

Administrative and general (continued)	2020 actual		2021 budget		2021 estimate		2022 budget
Maintenance (continued)							
Security maintenance							
Materials and supplies	\$	32,279	\$	20,004	\$	30,114	\$ 28,962
Tools and shop equipment		3,525		2,400		2,692	3,500
Contracted services		376,876		304,356		305,404	 384,600
Total security maintenance		412,680		326,760		338,210	 417,062
Total administrative and general maintenance		3,475,732		3,699,048		3,425,088	 4,603,086
Total administrative and general	\$	20,335,402	\$	22,419,009	\$	21,343,641	\$ 26,020,323



Administrative and general

	2020		2021		2021		2022	
Distributed energy resources	actual			budget		estimate		budget
Personnel expenses								
Regular wages	\$ 1,070,54	46	\$	5 1,128,200	\$	1,129,726	\$	1,363,401
Benefits allocation	471,29	98		533,319		459,423		592,742
Total personnel expenses	1,541,84	44		1,661,519		1,589,149		1,956,143
Strategy								
Contracted services	150,75	58	_	200,000		145,058		500,000
Total strategy expenses	150,75	58		200,000		145,058		500,000
Energy efficiency								
Contracted services	870,60)4		1,205,000		927,785		1,276,276
Telephone services	2,08	85		1,750		2,275		2,600
Rebates/incentives for retail								
customers	6,287,83	36		7,763,250		4,756,343		7,665,750
Audits/assessments for retail	762 /	Q 7		335 000		287 780		305 000
customers		57		555,000		207,309		393,000
l otal energy efficiency expenses	7,523,0	12		9,305,000		5,973,792		9,339,626
General								
Contracted services		-		70,000		23,800		150,000
Telephone services	1	56		500		84		500
Dues, memberships and fees	34,80)4	_	38,000	_	35,830		38,840
Total general expenses	34,86	50		108,500		59,714		189,340
Demand response wholesale pilot								
Contracted services	25,00	00		35,000		5,830		35,000
Rebates/incentives to owner communities	172,93	<u>35</u>		169,422		110,610		169,422
Total demand response								
wholesale pilot expenses	197,93	35		204,422		116,440		204,422
Electric vehicles								
Contracted services	14,4	31		113,000	_	29,511		138,000
Total electric vehicles expenses	14,4	31		113,000		29,511		138,000
Smart thermostat								
Contracted services		-	_	50,000	_	12,500		50,000
Total smart thermostat expenses		-	_	50,000	_	12,500		50,000
Total distributed energy resources expenses	<u>\$ 9,462,84</u>	40	\$	5 11,642,441	\$	7,926,164	\$	12,377,531



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Capital additions

Capital projects are viewed strategically with a long-term outlook in support of Platte River's three pillars to safely provide reliable, environmentally responsible and financially sustainable energy and services to the owner communities, and in support of the strategic initiatives and core operations. Capital additions generally consist of projects aimed at ensuring and improving system reliability, replacing and upgrading aging infrastructure, implementing technology improvements, maintaining compliance, improving efficiency and completing replacements due to assets reaching the end of useful life.

Production capital additions include power plant upgrades, equipment purchases and replacements as well as compliance related projects at the Rawhide and Craig generating stations. Transmission capital additions include transmission lines, substations and supporting equipment. Projects are based on transmission studies and consultation with the owner communities' staff through the joint technical advisory committee. These projects will provide enhanced system reliability and add capacity to serve new and existing loads as well as allow additional future noncarbon projects. General plant capital additions include computer hardware and software, communication equipment, building modifications and other general plant equipment purchases. Asset retirement obligations include payments to satisfy legally enforceable liabilities associated with the retirement of a tangible capital asset such as an impoundment or electric generation facility.

The five-year capital forecast is developed to outline future investment in capital projects. Capital planning is an ongoing effort as needs change, thus the plan is reviewed and updated three times annually along with financial projections. The plan is the basis for each budget year. Production projects focus on plant equipment improvements, including equipment replacements or enhancements during scheduled maintenance outages, dust collection system replacements, breaker replacement, monofill upgrade, water pipeline replacements and fire protection system replacements. Transmission projects focus on a new substation for a new solar resource, transformer replacements, transmission line replacement and include coordinating and planning owner community requests for substation work. Future general plant projects include replacing information technology equipment, fiber optic cable and equipment replacements and implementing strategic software solutions including energy trading software and an ERP system that will benefit the entire organization.

Project management continues to be a focus. In the past few years, emphasis has been placed on resource availability, as well as improving project planning and execution. This process will continue to evolve, striving toward operational excellence. Projects typically experience schedule changes for various reasons; therefore, a portion of unspent 2021 budget capital additions will be requested to be carried over into the 2022 budget.

The next pages include brief project descriptions as well as estimated project cost and carryover amounts. The projects supporting the strategic initiatives of infrastructure advancement and technology development or resource diversification and alignment are also identified.

Capital additions (\$000)	2020 actual	2021 budget	2021 estimate	2022 budget
Production	\$ 8,466	\$ 112,846	\$ 107,014	\$ 9,346
Transmission	22,289	4,543	3,944	13,338
General plant	6,734	8,961	8,652	6,226
Asset retirement obligations	 2,344	 1,073	 693	
Total capital additions	\$ 39,833	\$ 127,423	\$ 120,303	\$ 28,910



Capital additions

2022 capital additions: \$28.9 million



- Strategic initiatives, 50%
- Core operations, 50%



- Other strategic projects*, 25%
- Solar substation 230 kV*, 22%
- Transmission and substation equipment, 17%
- Rawhide, 15%
- Monofill upgrade Rawhide, 10%
- Asset management and maintenance, 6%
- Enterprise resource planning software*, 3%
- Craig units 1 and 2, 2%

* Strategic projects

Capital five-year forecast 2022-2026 \$91.9 million



- Transmission and substations, 41%
- Rawhide, 25%
- Asset management and maintenance, 18%
- Compliance (monofill), 10%
- Rawhide outages, 4%
- Craig units 1 and 2, 2%



(1) Includes \$7.8 million in estimated carryover funds from 2021 budget to 2022 budget.

Production capital additions		2022 budget		Total cost estimate ⁽¹⁾
Rawhide projects		budget		cotimate
Monofill upgrade - Rawhide ⁽²⁾	Ś	2 765 456	Ś	9 631 000
52G breaker replacement - combustion turbine units A-D	Ŷ	2 017 696	Ŷ	2 283 000
Southern toe drain modifications - Rawhide		605 931		2,200,000
Controls upgrade to Ovation - Rawhide Pump Station and Soldier		000,901		
Canyon Pump Station		565,792		
 Spray dry absorber direct lime injection 		461,750		
Fire protection system upgrade - combustion turbine Unit D		458,855		
Control network replacement - Rawhide		445,738		
 Pipeline reroute - Soldier Canyon Pipeline 		309,315		3,809,000
HVAC replacement rotary car dumper building - Rawhide		303,609		
 12.47 kV switchgear replacement - Rawhide 		109,390		966,000
 Coal feeder fire detection - Rawhide Unit 1 		108,108		
Ash conveying improvements - Rawhide Unit 1		78,635		
Guard shack septic system integration - Rawhide		72,303		
Underground fire and service water piping replacement - water				
management		67,937		368,000
Domestic water line installation - Rawhide Pump Station		67,511		
Coal mill inert steam system modifications - Rawhide Unit 1 ⁽²⁾		54,087		228,000
 Automated dispatch signal to Ovation - Rawhide⁽²⁾ 		39,526		179,000
Station service battery bank replacement - combustion turbine Unit C		38,346		
Goose deterrent system - Rawhide		37,928		
HVAC replacement - elevator mechanical room - Rawhide		36,736		
On-line analyzer replacement - Rawhide Unit 1		17,462		87,000
Analyzer replacement cation conductivity Deltacon - Rawhide Unit 1		7,463		
Total Rawhide projects		8,669,574		
Rawhide purchases				
Mobile crane carry deck replacement		80,000		
Tire machine replacement		10,000		
Total Rawhide purchases		90,000		
Other production projects				
Craig units 1 and 2 projects		586,314		
Total production capital additions	\$	9,345,888		

	2022	Total cost
Transmission capital additions	budget	estimate ⁽¹⁾
Transmission projects		
 Solar substation 230 kV 	\$ 6,383,481	\$ 9,105,000
Transformer T3 replacement - Timberline Substation	1,787,191	2,921,000
 Circuit switcher (T2,T4) addition and relay upgrade - Harmony Substation 	787,774	872,000
Transmission line vault upgrades - Crossroads Substation	664,022	720,000
• Airflow spoilers	643,981	3,098,000
Oil circuit breaker replacement - Ault 2182 & 2186 WAPA	609,600	
115 kV transmission line modifications - Loveland West Substation	535,543	572,000
Station service 230-12.47 kV transformer replacement - Rawhide Substation	447,858	1,927,000
Capacitor coupled voltage transformer replacements - Dixon Creek		
Substation	272,944	
Transmission line vault upgrades - Rogers Road Substation	189,176	254,000
 Boundary metering - Foothills Substation 	166,928	199,000
Switch 169 and 469 replacement - Loveland East Substation	152,063	156,000
Relay upgrades and switch replacements - Timberline Substation	143,661	200,000
 Auto transfer switch (control building) - Rawhide Substation 	126,474	
Boundary metering remote terminal unit - disaster recovery center	91,018	
115kV transmission line replacement - Drake transmission line	64,194	6,984,000
Relay upgrades - Marys Lake Substation	53,167	
Relay upgrades transformer A2 - Airport Substation	51,663	
 Lab equipment - headquarters 	49,518	
 Transformer (Flats) replacement - Rawhide Substation 	45,424	2,105,000
HVAC unit replacements - substations	45,008	
Relay upgrades sync circuit - Airport Substation	16,660	130,000
HVAC unit replacement - LaPorte Substation (PSCo, Tri-State)	11,250	
Total transmission capital additions	\$ 13,338,598	

	2022	Total cost
General plant capital additions	budget	estimate ⁽¹⁾
General plant projects		
 SCADA and energy management system 	\$ 2,499,574	
Enterprise resource planning software	940,029	\$ 4,927,000
 Energy trading software⁽²⁾ 	686,212	1,759,000
SONET communication system replacement ⁽²⁾	516,522	1,901,000
Telecom PBX replacement - headquarters	363,262	
 Substation asset protection wall - Dixon Creek Substation 	259,556	309,000
Enterprise storage expansion	125,000	
Enterprise firewall replacement	115,000	
 Uninterruptible power supply system - headquarters warehouse 	65,038	
Server additions	60,000	
 Perimeter detection system - Longs Peak Substation 	57,890	
Transmission control disaster recovery center building modifications	54,296	
Telecom ICON lab	41,657	
Telecom 800 Mhz base station upgrade	36,657	
 Fiber optic monitoring tool - Boyd Substation 	33,681	
Fiber optic cable replacement - Rogers Road Substation	31,540	
Telecom servers for network management system	26,631	
Fiber optic patch panel replacement - Valley Substation	23,497	
Fiber optic patch panel replacement - Estes Park Substation Fiber optic patch panel and lateral replacement - Crossroads	20,497	
Substation	18,730	
Substation	17 001	
	 5 993 170	
General plant purchases	3,333,170	
Toolcat replacement - headquarters	65.000	
Vehicle fleet replacement	55,000	
Transmission system simulator software licensing	29,000	
Telecom testing tools	28,000	
Scissor lift - headquarters	16,800	
Fiber optic fusion splicer - headquarters	11,000	
Pallet shelving - headquarters warehouse	10,000	
Trailer replacement - headquarters	9,000	
Plotter replacement	9,000	
Total general plant purchases	 232,800	
Total general plant capital additions	 6,225,970	
Total capital additions	\$ 28,910,456	

• Project supports strategic initiative.

(1) If no amount is shown, the 2022 budget amount represents the total project cost estimate.

(2) Projects with estimated unspent 2021 funds that will be requested to be carried over to the 2022 budget.

Production capital additions Rawhide projects

Monofill upgrade - Rawhide

Project time frame:	2018-2022
Total cost estimate:	\$9,631,000
Carryover estimate:	\$6,100,000

Update and implement the monofill engineering design and operations plan to ensure compliance with Colorado Department of Public Health and Environment regulations and the Environmental Protection Agency coal combustion residuals rule. An engineering design and operations plan was submitted in 2019 to the Colorado Department of Public Health and Environment. The original construction was scheduled for 2021, however due to issues with product availability, cost, estimated time to complete work and the scheduled retirement of Rawhide Unit 1, the design is being revised to reduce scope and allow additional time to ensure product availability and quality of work. The monofill upgrade will include the design of the liner, leachate collection and cover system as well as geotechnical and geological investigations. The updated design will support only one phase since the monofill will only operate until Dec. 2029, the scheduled retirement of Rawhide Unit 1.

52G breaker replacement - combustion turbine units A-D

Project time frame:2021-2022Total cost estimate:\$2,283,000

Replace the generator breaker for each combustion turbine units A-D. The manufacturer of the existing breakers is no longer in business and it has become difficult to find replacement parts and vendors to perform repairs. Issues with the existing breakers cause failed starts and forced outages. Failed operation of the breakers also creates an unsafe situation for maintenance and operations responding to the issue. This project includes the design, contract, procurement, required cabinet modifications, installation, testing and commissioning of the new breakers. Replacing the generator breakers will increase the availability and start reliability of the combustion turbines and will also address known safety issues. Utilizing a stable, reputable manufacturer will ensure supportability with readily available spare parts and will minimize forced outage duration.

Southern toe drain modifications - Rawhide

Replace the original southern toe drain infrastructure with a polyvinyl chloride outlet pipe which will direct seepage water and storm water east of the lower dam road. The existing toe drain has been unable to properly drain due to build up of sediment as well as a lack of slope in the original design. This causes water to pool at the dam which could eventually compromise the structure. This project includes removal of the existing infrastructure, installation of the new toe drain and piping, installation of an outlet measuring weir box, grade modifications and placing fill over the new toe drain system and existing outlet channel. In addition, this project will include four monitoring piezometers which will measure and quantify seepage flow rates.

2.017.696

Controls upgrade to Ovation	
Rawhide Pump Station	\$ 311,896
Soldier Canyon Pump Station	253,896
	\$ 565,792

Replace the Allen Bradley programmable logic controllers at both pump stations. The new equipment will match the existing Emerson Ovation distributed control system platform. This is the last major replacement of several isolated systems remaining to be converted to Ovation controls, which is a continuation of a multiyear initiative to have Rawhide Unit 1, all five CTs and all other remaining plant equipment on one common platform. This project will allow both pump stations to communicate with Rawhide's control room at a higher speed, increasing reliability of the technology, as well as more troubleshooting visibility to plant personnel to address issues.

Spray dry absorber direct lime injection

Convert existing spray dry absorber lime slurry feed system to direct lime injection system. A key variable in proper spray dry absorber operation is monitoring the lime concentrations in the feed slurry, or the Allowable Lime to Solids Ratio (ALTW). When plant load is consistent, the ALTW can be controlled manually by operations based on the incoming flue gas sulfur dioxide concentration. With increasing fluctuations in load, this conversion to automated direct lime injection is needed to reduce the ALTW change lag time from approximately 90 minutes to less than one minute. This will greatly improve the sulfur dioxide removal control and supports operational flexibility of Rawhide Unit 1.

Fire protection system upgrade - combustion turbine Unit D

Update the Unit D fire suppression system. NOVEC 1230 will be replacing carbon dioxide as the fire suppression agent. As part of the project, a new climate controlled building will be used for the suppression system. Conduit and cable will be run to the packaged electrical equipment control component where a notifier control panel will be located. This control panel will be tied to the plantwide fire detection and alarm system. In addition, a suppression circuit will be added to the exciter compartment that is now unprotected. Currently, if there is a discharge of carbon dioxide, the concentration reaches 34% which creates a life safety hazard. By replacing the carbon dioxide agent with NOVEC 1230, the hazard will be eliminated.

Control network replacement - Rawhide

Replace the existing hardware that serves the control network, virtual infrastructure and data backup systems. The project includes installation of new hardware and VMware software in addition to migrating all necessary resources off of the existing system. The existing equipment will reach the end of its useful life in 2022. The control network infrastructure includes the environmental servers that collect and store emissions data for Rawhide Unit 1 and all combustion turbine units. It is critical the servers are online at all times as this data collection is required for the units to operate.

461,750

458,855

Pipeline reroute - Soldier Canyon Pipeline

Project time frame:2022-2023Total cost estimate:\$3,809,000

Reroute approximately four miles of the Soldier Canyon Pipeline to avoid being covered by public roadways. The Soldier Canyon Pipeline provides raw water to the Rawhide Energy Station from Horsetooth Reservoir. As roads have been widened and improved, portions of the pipeline were covered. If the pipeline leaks, road closures would be required for repairs and, if the leak were large enough, it could cause substantial damage to the road posing a public safety concern. Rerouting the pipeline will minimize this risk. This project includes an engineering study to determine the best reroute option, a design package and acquiring easements, rights-of-way and other permissions for the pipeline reroute.

HVAC replacement rotary car dumper building - Rawhide

Replace the direct expansion condenser cooling unit in the rotary car dumper building with an upgraded chilled water type cooling system. The current cooling system is past its useful life which could lead to significant down time, leaving the controls and electronic equipment in the building vulnerable to extreme temperature conditions. The new system will provide better temperature control and longer life expectancy of the equipment.

• 12.47 kV switchgear replacement - Rawhide

Project time frame:2022-2023Total cost estimate:\$966,000

Replace the existing 12.47 kV switchgear located in the substation control building to utilize power feeds from the station service transformer and the generation availability transformer as main power sources into the switchgear. A tie breaker will be used as an auto-transfer of power source to the construction management building, combustion turbine backup auxiliary power and auxiliary boiler 101 and 102 breakers. Currently, an outage is required on the 12.47 kV system to operate the existing switchgear, causing generating units to be unavailable. This replacement configuration will allow auto-transfer and manual switching to occur under load and increases unit availability.

Coal feeder fire detection - Rawhide Unit 1

Install a fire detection system on the coal feeders of the coal mills. This project includes installation of two fire detection field devices per mill, installation of field cable and conduit, integration of field devices with Ovation Digital Control System and control system logic and database modifications. Market conditions are requiring quicker start ups and stops of Rawhide Unit 1's coal mills. When a mill stops, an operator must arrive within minutes to remove excess coal from the feeder conveyer to avoid fire risk. When the mill needs to quickly restart, load targets may not be met as coal is not on the feeder conveyor. This project would allow operations to leave the feeder conveyor safely loaded, providing more operational flexibility with starting and stopping the coal mills.

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303,609

109,390

Domestic water line installation - Rawhide Pump Station

Install a permanent source of treated domestic water for the Rawhide Pump Station located at the Drake Water Reclamation Facility. The scope of this project includes discussions with the City of Fort Collins to determine if an easement on their property is needed for the water line or potentially bringing the water service to Platte River property for future maintenance. This project also includes tapping into the water main, installing a curb stop and meter pit for the water line, trenching the new line to the Rawhide Pump Station and installation of a backflow prevention device. Previously, Platte River has relied on a temporary treated water supply from the City of Fort Collins to the evaporative cooler which provides space conditioning in the Rawhide Pump Station building to avoid overheating the pump motor bearings.

Ash conveying improvements - Rawhide Unit 1

Improve the fly ash conveying to reduce plugging, which is when the flow of ash is inhibited. Plugging causes increased preventive maintenance costs and callouts to staff when the equipment fails. This project includes testing and verification of transport pickup velocity, installation of test ports and onsite testing and redesign of the existing Y-spool piece and valve to eliminate buildup. The project will also modify current logic to allow the transport vacuum to drop to empty hopper level, distinguish between ratholed or empty hopper and clear the transport pipe of deposited material before switching hoppers.

Guard shack septic system integration - Rawhide

Integrate the guard shack septic system into the plant sewage system. The existing drain field has become saturated and the septic holding tank must be pumped out frequently. This project includes design to establish drain piping route, potholing existing underground utilities, trenching new piping from the guard shack to lift station and demolition and repair of asphalt for piping installation. An alternative option of replacing the existing leach field exists if integration into the plant sewage system proves to be nonviable or impractical.

Underground fire and service water piping replacement - water management 67,937

Project time frame:2022-2023Total cost estimate:\$368,000

Replace the existing fire and service ductile iron water piping with corrosion-resistant polyethylene piping. This project includes replacement of fittings and valves, an instrument air line in close proximity of the pipes, demolition of a concrete slab, which is above a section of piping, and refilling and repaving the affected areas after installation. Significant corrosion damage has caused multiple failures in various locations. Existing hydrants and isolation valves are difficult to operate and require frequent maintenance.

72,303

67,511

78,635

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Coal mill inert steam system modifications - Rawhide Unit 1

Project time frame:	2021-2022
Total cost estimate:	\$228,000
Carryover estimate:	\$128,000

Modify the current coal mill inert steam system to become operational for mill fire protection. This project includes system review with partial redesign and replacement of the inert steam header control valves. The project may also include replacement of the inert steam header drain orifice plates, modification of the system prewarming line and control logic modifications. These modifications are needed as Rawhide Unit 1 operates flexibly which requires more mill cycles leading to stagnate coal that needs to be swept off the bowl to prevent fires. The current system is out of service as the inert steam header control valves cannot control header pressure.

Automated dispatch signal to Ovation - Rawhide

Project time frame:	2021-2022
Total cost estimate:	\$179,000
Carryover estimate:	\$74,000

Integration of the automated dispatch signal (ADS) into Ovation which will allow Rawhide units to follow a setpoint generated by an organized energy market and monitored by Platte River dispatch center. The signal will be for both Rawhide Unit 1 and the CTs. This project includes controls design, implementation, testing and commissioning. Participation in an organized energy market requires units to respond to five minute dispatch signals for generation output as well as unit commitment signals for startup and shutdown. Automation of this process will allow plant operations to support all dispatch and commitment schedules, reduce operations workload and will increase the likelihood of achieving dispatch setpoints over a manual process therefore avoiding significant financial risk.

Station service battery bank replacement - combustion turbine Unit C

Replace the station service battery bank for combustion turbine Unit C. This project will include the disposal of the existing battery units, installation and load testing to verify the batteries are performing as requested. The current battery units are at the end of their useful lives. Direct current power from the battery bank is vital for safety relaying and operation of the circuit breaker. When the unit trips, the battery bank is the energy source to operate the oil pumps and other protective equipment to keep the unit safe until another source of power is restored or the unit is able to be brought offline in a controlled manner.

Goose deterrent system - Rawhide

Install two laser devices and associated electric power on the Rawhide administration roof. This is an automated laser system to keep geese and other birds off the lawns and sidewalks in front of the Rawhide administration building to address property damage, sanitation and safety concerns.

54,087

39,526

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37,928

\$

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\$

HVAC replacement - elevator mechanical room - Rawhide Ś 36.736 Replace the roof top HVAC unit on the main plant elevator mechanical room. The current unit is at the end of its useful life. The new unit will increase air quality and is expected to improve equipment efficiency. The space conditioning in the elevator mechanical room is vital to the continuous operation of the main plant elevator.

Project time frame:	2022-2030					
Total cost estimate:	\$87,000					
Replace five on-line	analyzers for Raw	vhide Unit 1. T	This project in	cludes two di	ssolved oxygen	
analyzers, two silica their useful lives. The needed to monitor b	analyzers and one ese instruments m poiler and steam c	e phosphate a nonitor poten quality to prot	analyzer. The tial contamina ect metallurg	current analy ants in cycle o y.	zers are at the e chemistry and ar	nd of re
		tivity Dalta aa		lusit 1		7 4 6 7
Analyzer replaceme	nt cation conduct	civity Deltaco	n - Rawnide (Juit T		7,465
Replace the cation of reaching the end of	onductivity Delta its useful life and	con analyzer is essential fo	for Rawhide l or monitoring	Jnit 1. The cur potential con	rrent analyzer is taminates in cyc	le

for its userul life and is essential for monitoring potential contaminates in cycle chemistry. Contaminants in cycle chemistry can damage Rawhide Unit 1 equipment and adversely affect reliability.

Total Rawhide projects

Rawhide purchases

Mobile crane carry deck replacement

On-line analyzer replacement - Rawhide Unit 1

Replace the mobile crane carry deck to create a safer environment for the crane operator and riggers. The current mobile crane carry deck hydraulics that control the load do not respond in a timely manner when operated and the carry deck is at the end of its useful life. The carry deck is used for various lifts at Rawhide and is small enough to get inside buildings where other rigging techniques cannot be used.

Tire machine replacement

Replace the tire changing and tire balancing machines at Rawhide. The current machines are past their useful lives and no longer work correctly. The new tire changing machine will also be able to change larger tires as it will have double the horsepower capacity of the existing machine. With this new equipment, an employee will no longer need to drive for repairs at a tire shop and impacted equipment will have higher availability.

Total Rawhide purchases

80,000

8,669,574

17.462

10,000

Other production projects

Craig units 1 and 2 projects

\$ 586,314 The engineering and operating committee approved capital projects for plant improvements and additions at the Craig Generating Station. The budget includes expenses for various projects for Craig units 1 and 2 with significant projects being concrete foundation repairs to transmission lines, transformer barrier walls and switchyard bus support insulator remediation. The amount shown represents Platte River's ownership share responsibility.

Total production capital additions

9,345,888

\$

Transmission capital additions

Transmission projects

Solar substation 230 kV

Project time frame: 2021-2023

Total cost estimate: \$9,105,000

Construct a 230 kV substation to connect additional noncarbon resources to the Front Range transmission system. As part of the project, existing transmission line structures will be modified to route the lines into the new substation.

Transformer T3 replacement - Timberline Substation 1,787,191

Project time frame:2021-2023Total cost estimate:\$2,921,000

Replace 230-115 kV autotransformer T3 at Timberline Substation. This project will replace three single-phase units with a single three-phase unit to conform to current design and construction standards. In addition, this project will remove and replace existing foundations and firewalls from the existing unit, pour a new transformer pad and place oil containment for the new unit. Installation of 230 kV and 115 kV circuit switchers to isolate the unit per current design and construction standards and the replacement of hand operated disconnects 2063, 1063 and 1069 will be included in the scope of the project. The equipment being replaced has reached the end of its useful life.

• Circuit switcher (T2,T4) addition and relay upgrade - Harmony Substation 787,774

Project time frame: 2021-2022 Total cost estimate: \$872,000

Replace the existing T2 and T4 motor operated disconnect switch with a circuit switcher and add dual winding slipover bushing current transformers to transformer T2 and T4. Circuit switcher failure protections, T2 and T4 overcurrent relaying and T2 and T4 bus protection will also be installed. Replacing the motor operated disconnect switch with a circuit switcher will provide a separation point between the City of Fort Collins and Platte River while also addressing NERC compliance standards for the City of Fort Collins and providing equipment maintenance benefits for Platte River. Dual winding slipover bushing current transformers need to be added to transformer T2 and T4 for the relaying and protection upgrades to be complete. The relay and protection replacement associated with this project will add reliability to the system by upgrading outdated protection elements and adding secondary relaying to important substation components.

\$ 6,383,481

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Transmission line vault upgrades - Crossroads Substation

Project time frame:2021-2022Total cost estimate:\$720,000

Upgrade five vaults to separate the existing 115 kV underground transmission line circuits. Currently, two 115 kV circuits reside in common vaults which requires both circuits to be de-energized when performing any maintenance on the lines. Separating the underground 115 kV circuits will allow vault maintenance activities to occur while maintaining one energized circuit. In the near future, de-energizing both circuits will not be an option due to increasing loads at the Crossroads Substation.

Airflow spoilers

Project time frame:2017-2022Total cost estimate:\$3,098,000

Install new airflow spoilers on a double 230 kV circuit between the Longs Peak Substation and the Ft. Saint Vrain Substation. The new airflow spoilers will minimize conductor icing thus reducing galloping. Installation of the airflow spoilers will increase transmission system reliability by preventing system faults and will reduce maintenance costs.

Oil circuit breaker replacement - Ault 2182 & 2186 WAPA

Replace two 230 kV oil circuit breakers with sulphur hexafluoride breakers. This project includes replacement of foundations, disconnect switches, control panels, power and control cables, current transformers and capacitor coupled voltage transformers. Platte River is a party to contract 87-LAO-285 which states Platte River's ownership and financial obligation to the Ault facilities. Platte River is responsible for 40% of the total project cost.

115 kV transmission lir	ne modifications - Loveland West Substation	535,543
Project time frame:	2021-2022	

Total cost estimate: \$572,000

Decommission the Loveland West Substation and modify the transmission line. Once the substation is out of service, the transmission line will be modified to bypass the substation site as the City of Loveland no longer requires the Loveland West Substation to serve city load. The project includes the removal of approximately 3,000 feet of 115 kV transmission line that routes west from the Loveland West Substation, four transmission poles and associated transmission line conductors. The foundations will be demolished just below the surface level and backfilled. In addition, high voltage equipment including breakers, switches, relay panels, meters, substation structures and SCADA system equipment will be removed from the substation.

664,022

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609,600

Station service 230-12.47 kV transformer replacement - Rawhide Substation \$ 447,858

Project time frame: 2021-2023 Total cost estimate: \$1,927,000

Replace existing 230-12.47 kV transformer at Rawhide Substation, evaluate oil containment and replace existing motor operated disconnect 253. The current 230-12.47 kV transformer is reaching the end of its useful life. The current unit is the oldest transformer at Rawhide and is critical to support facilities for the startup of Rawhide Unit 1 and provides backup auxiliary power for the combustion turbines.

Capacitor coupled voltage transformer replacements - Dixon Creek Substation 272,944 Replace the existing 115 kV capacitor coupled voltage transformers at the Dixon Creek Substation on the Drake 115 kV line terminal and the Poudre 115 kV line terminal. This project includes engineering design, material procurement, structure analysis, 115 kV bus work, removal and disposal of the existing capacitor coupled voltage transformers, removal of the existing cabling, installation of a new conduit system and installation of new cable. During routine maintenance activities, crews found insulating oil leaking from the capacitor coupled voltage transformers that was determined to be unrepairable. The units are a critical part of the monitoring and control systems that operate the transmission system. Replacing the units will ensure the transmission system continues to operate in a safe and reliable manner.

Transmission line vault upgrades - Rogers Road Substation

189,176

166,928

Project time frame:	2017-2022
Total cost estimate:	\$254,000

Upgrade two vaults to separate the existing 115 kV underground transmission line circuits. Currently, two 115 kV circuits reside in common vaults which requires both circuits to be deenergized to perform any maintenance on the lines. Separating the underground 115 kV circuits will allow vault maintenance activities to occur while maintaining one energized circuit. In the near future, de-energizing both circuits will not be an option due to increasing loads at the Rogers Road Substation.

Boundary metering - Foothills Substation

Project time frame:2021-2022Total cost estimate:\$199,000

Design and install a 115 kV boundary metering system at the Foothills Substation on the Valley/Flatirons line terminal. The boundary metering system includes high voltage current and potential transformer units, structural steel, a revenue class meter, panel wiring, conduit installation, instrument cabling, SCADA programming, remote terminal unit programming and communication line connections. The 115 kV boundary metering system on the Valley/Flatirons at the Loveland West Substation is being decommissioned in conjunction with the substation decommissioning. The new location of the 115 kV boundary metering system is at the Foothills Substation. The boundary metering system is necessary to record all energy imported and exported from the Platte River region and provide real-time values to the SCADA system and balancing authority agency.

Switch 169 and 469 replacement - Loveland East Substation

Project time frame:2021-2022Total cost estimate:\$156,000

Replace switch 169 and 469 at Loveland East Substation. The current hand operated disconnect switches were converted from a motor operated disconnect switch. The switches do not stay aligned, are difficult to adjust and have difficulty opening and closing. Spare parts are also no longer available.

Relay upgrades and switch replacements - Timberline Substation

Project time frame:2021-2022Total cost estimate:\$200,000

Design and install new breaker relays at the Timberline Substation for breakers 2186 and 2082. Replacement of a 230 kV group-oriented disconnect switch is included in this project. Public Service Company of Colorado is constructing a new substation on the transmission line that connects to breakers 2186 and 2082 at the Timberline Substation. The necessary line relay upgrades at Timberline Substation to accommodate the new substation will be upgraded and paid for by Public Service Company of Colorado. With the replacement of the line relays, Platte River will have the opportunity to replace the breaker relays per current design standards. Rated at 1600 amps, a 230 kV group operated disconnect switch located on the transmission line is the limiting element of this transmission facility. The switch will be upgraded to a rating of 2000 amps which will increase the overall rating of this facility and match the transmission line conductor rating.

Auto transfer switch (control building) - Rawhide Substation

Install an auto transfer low voltage switch at the Rawhide Substation on the control building service voltage entrance. The project also includes modifying the service voltage cabling and new conduit work. The auto transfer switch will provide an increase in the reliability of the control building service. In the event service voltage is lost, the auto transfer switch will immediately operate to the alternative power source.

Boundary metering remote terminal unit - disaster recovery center

Install a metering remote terminal unit in Platte River's disaster recovery center dedicated to the use of collecting and exchanging real-time data from boundary meters located throughout the Platte River SCADA system. Currently, the boundary metering information is collected and exchanged with Platte River's SCADA system via a single remote terminal unit located at headquarters and shared with the balancing authority agency. If this remote terminal unit fails, data cannot be collected or exchanged between the field boundary meters and Platte River's SCADA system until staff responds, diagnoses the problem and completes repairs.



143,661

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126,474

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115 kV	transmission	line rep	lacement -	Drake	transmission	line
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Project time frame:2022-2025Total cost estimate:\$6,984,000

Evaluate project alternatives and determine the best approach to rebuild two miles of the Drake transmission line. Funds budgeted in 2022 will be used for preliminary design work and project evaluation. Inspections completed in 2019 on the 115 kV transmission line located along Drake Road in the city of Fort Collins between the Drake Substation and the Power Trail noted significant corrosion on the base plates, anchor bolts and pole base sections. Rebuilding is necessary to continue safe and reliable operation of the transmission line.

Relay upgrades - Marys Lake Substation

Install and design bus differential micro-processor relays to replace existing relays at Marys Lake Substation. The existing relays are no longer supported by the manufacturer and replacements are not available. Replacing the relays will increase reliability of the system in the event of a relay failure. Currently, if a relay failure were to occur the bus would have to remain out of service for several days until the relay was replaced.

Relay upgrades transformer A2 - Airport Substation

Install and design bus differential relay and circuit switcher failure relay at the Airport Substation in conjunction with the City of Loveland's transformer A2 replacement project. The bus relay and circuit switcher relays will be replaced with today's standard micro-processor relays. The micro-processor relays are more capable in programming features and fault event recording.

Lab equipment - headquarters

Purchase and install micro-processor protection relays, micro-processor revenue meter, microprocessor substation meter, real-time automation controller and a remote terminal unit inside the lab at the headquarters facility. The lab equipment will allow system engineering to evaluate advanced features on equipment, test integrating automated fault event information collections and experiment with vendor software applications. In addition, fault simulations can be completed to better understand how advanced programming features can be utilized to improve protection systems.

51.663

53,167

49,518

64,194

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Transformer (Flats) replacement - Rawhide Substation

Project time frame: 2022-2023 Total cost estimate: \$2,105,000

Replace the existing Flats transformer at the Rawhide Substation with a larger capacity unit. The scope of the project includes completing a transformer specification and formal bid award process; evaluation of existing foundation and oil containment systems and modification to accommodate the new unit as necessary; modification of the existing high voltage and low voltage connections; and modification to the existing sensing and monitoring systems such that they will connect to the new unit. The existing unit will be removed and stored for future application. With the commercial operation of the Rawhide Prairie Solar project in 2021, the transformer is loaded beyond its nameplate capacity causing it to operate at high temperatures and higher internal gas pressures that exceed standard operating levels. Replacing the unit will ensure the transformer will operate safely and reliably during all operating conditions and eliminate the need to curtail solar generation.

HVAC unit replacements - substations

Install HVAC units at Countyline, Airport and Dixon substations. The units are at the end of their useful lives and/or have recurring maintenance issues. These replacements are part of a multiyear initiative to replace all units at all substation and auxiliary buildings.

Relay upgrades sync circuit - Airport Substation

Project time frame: 2021-2023

\$130,000 Total cost estimate:

Upgrade existing control schemes at Airport Substation to current Platte River standards. This project includes removing WAPA's sync circuit and updating it to include Platte River's standard circuit. Modern schemes are more efficient and reliable.

HVAC unit replacement - LaPorte Substation (PSCo, Tri-State) Install two HVAC units at LaPorte Substation. The units are at the end of their useful life. The project will be billed in accordance with the LaPorte 115 kV Substation Participation Agreement. The 2022 budgeted amount reflects Platte River's portion of the overall project.

Total transmission capital additions

45,008

16,660

11,250

13,338,598

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45.424

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General plant capital additions General plant projects

SCADA and energy management system

Replace the current SCADA system. The new SCADA system will add required transmission management functionality and is modular, allowing it to grow with Platte River's future energy management needs. Initial functionality will include the ability to control and monitor bulk electric system elements and a transmission management system. The transmission management system includes advanced applications such as contingency analysis, transient stability analysis, voltage stability analysis, power flow, state estimator and a training simulator. As NERC standards and their requirements for transmission operators have evolved, so too have the demands placed on Platte River's SCADA system to provide advanced applications. The current SCADA system is unable to provide the advanced applications necessary for power system operators to analyze the bulk electric system in real time. Modern SCADA and energy management systems provide this functionality natively and allow for growth as needs change. The modular architecture provides the ability to add functionality in the future.

Enterprise resource planning software

Project time frame:2022-2025Total cost estimate:\$4,927,000

Replace multiple systems that have reached the end of their useful life. The scope of applications to be replaced includes the general ledger, accounting, fixed assets, cash management, purchasing, budgeting, forecasting and reporting systems for financial services, and the materials/maintenance management and fleet tracking systems for facilities and fleet. The new software will allow employees to work more efficiently with access to real-time data needed to make business decisions. In addition, new functionality within the selected system will offer modernized features to employees, improving reporting functionality and better aligning work products with organizational goals.

Energy trading	software
Lifergy trading	Solution

Project time frame:	2021-2022
Total cost estimate:	\$1,759,000
Carryover estimate:	\$110,000

Obtain software to optimize Platte River's participation in an organized energy market. Software applications include a bid to bill software package, metering, settlement statements and invoices, managing dispute resolution, creating settlement reports, computing revenues, production cost, and profit and loss analysis.

940,029

2,499,574

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SONET communications system replacement

Project time frame:	2016-2022
Total cost estimate:	\$1,901,000
Carryover estimate:	\$86,000

Replace obsolete fiber optic SONET equipment with Schweitzer ICON for bulk electric and dense wave division multiplexing equipment for the customer data network. Current equipment has reached the end of its useful life and is no longer supported by the manufacturer. The scope of this project includes a dense wave division multiplexing scheme where Platte River is facing fiber availability constraints. This scheme allows customers use of individual wavelengths thereby conserving fiber optic strands, while also making resources available to potential clients. The new network system also allows transport of existing legacy circuits if needed and where applicable.

Telecom PBX replacement - headquarters

Replace the current PBX phone system for the headquarters building. The existing phone system is nearing the end of its useful life and the options to extend useful life are becoming more difficult.

Substation asset pr	otection wall - I	Dixon Creek Substation	259,556
Project time frame:	2021-2022		
Total cost estimate:	\$309,000		
Construct a retainir	ng wall with a ve	hicle tracking pad within the landscaping	of the Dixon Creek

Substation. This project will help protect substation and transmission structures from potential vehicle damage.

Enterprise storage expansion

Purchase additional storage assets to accommodate the growth of storage utilization across the organization. End users are consuming storage at an increasing rate as more data is being used and stored electronically and files are increasing in size. Historical growth data is used to predict future storage requirements and according to Platte River's trends, this expansion is estimated to provide sufficient storage through 2024. As growth does not always follow a linear trend, storage requirements are evaluated on an annual basis.

Enterprise firewall replacement

Replace the current firewall equipment. The current firewall equipment will reach the end of its useful life. Firewall equipment needs to be replaced approximately every five years for compatibility, security, reliability and supportability reasons. After five years, reliability of equipment decreases, annual maintenance costs from the vendor increase and the availability of security patches becomes uncertain.

115,000

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363,262

• Uninterruptible power supply system - headquarters warehouse Ś 65,038

Install a new Powerwall 40.5 kWh battery system at the headquarters warehouse. Installation will include three Powerwalls, one backup gateway, all network cabling and electrical requirements. This system will allow better use of the solar array on the roof of the headquarters warehouse and provide backup power to the critical system in the event of power loss. Several security systems, including the entry gates, are being fed from the headquarters warehouse leaving them inoperative if Platte River loses power to the building. This project is also a demonstration of Platte River's effort to utilize all available space and store renewable energy sources wherever possible.

Server additions

Purchase additional servers required to support new business applications and initiatives. End users are using computing resources at an increasing rate and, based on current capacity and trends, Platte River expects to need additional servers by mid-2022.

Perimeter detection system - Longs Peak Substation

Install forward looking infrared thermal cameras to detect any perimeter breach into the Longs Peak Substation. The project will include infrastructure on perimeter walls for mounting cameras and electronics. The cameras will be positioned on the perimeter wall and send alerts to Platte River security if the perimeter is breached. This system provides thermal alarm triggering which will add another layer of protection against vandalism, theft and malicious threats.

Transmission control disaster recovery center building modifications

Construct a physical wall between the transmission control room area and the server room area. Project scope includes installation of wall displays and furniture for operator desks. This project will create a more conducive work environment for operators.

Telecom ICON lab

Purchase and install a three node lab for the ICON network allowing Platte River to test and validate hardware, software and configurations. The ICON network is the next generation network supporting the bulk electric system. The ability to test on a lab network installed at headquarters that will not impact the production bulk electric system network will greatly reduce the risk of a service disruption within the bulk electric system when hardware, software or configuration changes are required.

Telecom 800 Mhz base station upgrade

Purchase two new 800 Mhz radio base stations for the disaster recovery center and headquarters locations. The existing 800 Mhz base stations and supporting software are at the end of their useful life and need to be upgraded. This upgrade will provide simultaneous radio and foot pedal capabilities to operators.

41.657

60,000

57,890

54.296

Fiber optic monitoring tool - Boyd Substation

Purchase and install a new fiber optic monitoring tool used to continuously monitor and record the health and connectivity of individual fiber strands on multiple fiber cables. Currently, there is no way to monitor, record and report on the degradation of or damage to Platte River's fiber optic cables. This device will be installed at the Boyd Substation on multiple long-haul fiber optic cables to help determine the health and integrity of the cables and will also assist in forecasting cable replacement needs as degradation over time will be measured.

Fiber optic cable replacement - Rogers Road Substation

Replace a section of fiber optic cable south of the Rogers Road Substation in Longmont. Currently, there is no slack on the Longmont backbone cable between two splice points east and south of the Rogers Road Substation, preventing any proper future repairs of this section of the backbone in the event of any new damage.

Telecom servers for network management system

Purchase and install two servers to support the management, control and planning software platform for the non-bulk electric system network. These servers are required to visually manage and troubleshoot the non-bulk electric system network platform provided by the vendor with their element management system and network management system platform.

Fiber optic patch panel replacement - Valley Substation

Replace the existing straight tip patch panels at Valley Substation with new lucent connector patch panels. The existing straight tip patch panels are no longer industry standard and have significant signal loss due to age. Replacement of these types of panels will reduce the number of different types of fiber patch cables needed on hand in inventory, ultimately reducing inventory costs for fiber optic patch cables.

Fiber optic patch panel replacement - Estes Park Substation

Replace the existing straight tip patch panels at Estes Park Substation with new lucent connector patch panels. The existing straight tip patch panels are no longer industry standard and have significant signal loss due to age. Replacement of these types of panels will reduce the number of different types of fiber patch cables needed on hand in inventory, ultimately reducing inventory costs for fiber optic patch cables.

20,497

31,540

26,631

23,497

33,681

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Fiber optic patch panel and lateral replacement - Crossroads Substation\$ 18,730Replace the lateral cable and existing straight tip patch panels at Crossroads Substation with new
lucent connector patch panels. The existing straight tip patch panels are no longer industry
standard and have significant signal loss due to age. Replacement of these types of panels will
reduce the number of different types of fiber patch cables needed on hand in inventory, ultimately
reducing inventory costs for fiber optic patch cables.

Fiber optic patch panel and lateral replacement - Loveland East Substation17,901Replace the lateral cable and existing straight tip patch panels at Loveland East Substation with new
lucent connector patch panels. The existing straight tip patch panels are no longer industry
standard and have significant signal loss due to age. Replacement of these types of panels will
reduce the number of different types of fiber patch cables needed on hand in inventory, ultimately
reducing inventory costs for fiber optic patch cables.

Total general plant projects

General plant purchases

Toolcat replacement - headquarters\$65,000Replace the existing 2011 Cat 299C with a new Toolcat. The 2011 Cat 299C's repair and
maintenance expenses have increased in recent years and would continue to increase as the
machine ages. The current machine has limited visibility which leads to safety issues during snow
removal operations and fueling the machine, especially in windy conditions, creating a potential
hazard. The new Toolcat has significantly improved visibility making it easier to drive and safer.
Minimal training will be needed to operate the Toolcat making it more accessible to staff.

Vehicle fleet replacement

Replace the current electric vehicle with a newer electric vehicle that has an extended range of travel.

Transmission system simulator software licensing

Purchase a software license for an advanced system modeling application designed to more accurately model solar and wind generation resources. The application accurately analyzes how inverter based generation resources, such as wind and solar, react during transient events and impacts the stability of the transmission network. The software will better support the compliance requirements for system dynamic modeling validation.

Telecom testing tools

Purchase two test devices that allow testing of communications networks and equipment. These test devices are needed to verify and troubleshoot communications between devices in addition to testing across and between devices on the bulk electric system and non-bulk electric system networks.

\$

5,993,170

55,000

29,000

Purchase new pallet racking and shelving for the headquarters warehouse. Additional storage is needed as the mezzanine area previously used to store warehouse materials is being repurposed. Trailer replacement - headquarters 9,000 Purchase a new fleet trailer for headquarters facilities. The new trailer will replace the existing fleet trailer that has reached the end of its useful life. Plotter replacement 9,000 Purchase a new plotter for systems engineering. This purchase will replace the existing unit which is experiencing issues and currently out of warranty. Replacing the existing unit will reduce the risk of disruption on projects that require plotting.

Total general plant purchases	\$ 232,800
Total general plant capital additions	\$ 6,225,970
Total 2022 capital additions	\$ 28,910,456

preventive maintenance on equipment in the outbuildings.

11.000 Purchase a new fusion splicer for the fiber optic technicians. The new fiber splicer will replace the

Purchase a new scissor lift at headquarters. A scissor lift is a safe, efficient and effective way to work from heights. At the headquarters campus, there are many tasks that require working from heights including working on inside and outside lights, changing filters in the energy recovery ventilator and

existing splicer that has reached the end of its useful life.

Scissor lift - headquarters

Fiber optic fusion splicer - headquarters

Pallet shelving - headquarters warehouse

10,000

16,800

Ś

Debt service expenditures

Long-term financial projections in line with SFP metrics determine the need and timing of debt financings. Platte River's SFP debt ratio target is 50% or lower with an expected 2022 debt ratio of 28%. Debt proceeds historically have been used to finance production and transmission assets. Outstanding long-term debt consists of fixed-rate debt issued under Platte River's general power bond resolution. The debt service expenditures include principal repayments and interest expense based on scheduled debt payments. Of the \$138.1 million debt outstanding at the end of 2022, approximately 84% and 16% relate to transmission and Rawhide projects, respectively. The weighted average cost of debt during 2022 is forecast to be approximately 2.9%.

Platte River is legally required to maintain a power revenue bond service coverage ratio of 1.10 times. To aid in achieving strong long-term financial sustainability, Platte River also maintains a 1.50 times fixed obligation charge coverage ratio as an SFP metric and expects a 2022 fixed obligation charge coverage ratio of 2.03 times. This metric reclassifies debt-like obligations as fixed obligation charges either related to the ownership of resource assets through take-or-pay contracts or off-balance-sheet financings. A minimum 1.50 times ratio provides sufficient annual cash flows to meet the legal minimum 1.10 times bond service coverage ratio requirement, partially fund future capital additions and maintain favorable credit ratings. Platte River is not legally restricted as to the amount of debt that can be issued.

Credit ratings for power revenue bonds

Platte River is committed to maintaining a strong credit rating, which is a significant factor in determining cost of debt. The senior lien debt credit is rated AA by all three credit rating agencies: Moody's Investor Service (Moody's), Fitch Ratings (Fitch) and S&P Global Ratings (S&P). The key factors in determining these ratings are the diversity and economic strengths of the owner communities, Platte River's financial position, management expertise and overall competitive position.

Bond issue	Moody's	Fitch	S&P
Series II	Aa2	AA	AA
Series JJ	- (1)	AA	AA
Series KK - taxable	Aa2	AA	- (2)

 A credit rating was not obtained from Moody's for the Series JJ debt issuance.
 A credit rating was not obtained from S&P for the Series KK - taxable debt issuance.

Debt service expenditures (\$000)	2020 actual	2021 budget	2021 estimate	2022 budget
Principal	\$ 10,604	\$ 11,640	\$ 11,638	\$ 11,984
Interest expense	 7,620	 6,473	 6,358	 5,803
Total debt service expenditures	\$ 18,224	\$ 18,113	\$ 17,996	\$ 17,787



Power revenue bond service

Long-term debt outstanding	2020 actual	2021 budget	2021 estimate	2022 budget
Power revenue bonds				
Series II	\$ 1,410,000	\$ 720,000	\$ 720,000	\$ - (1)
Series JJ	134,250,000	124,125,000	124,125,000	113,490,000 (2)
Series KK - taxable	 25,230,000	 25,110,000	 24,900,000	 24,595,000 (3)
Total power revenue bonds	 160,890,000	 149,955,000	 149,745,000	 138,085,000
Unamortized bond premium	 17,462,480	 16,129,301	 14,551,407	 11,938,371
Total net long-term debt	\$ 178,352,480	\$ 166,084,301	\$ 164,296,407	\$ 150,023,371

(1) Series II remaining amount outstanding relates to transmission assets and matures June 1, 2022.

(2) Series JJ remaining amount outstanding relates to transmission assets and Rawhide assets of \$91 million (80%) and \$22.5 million (20%), respectively, and matures each year through June 1, 2036.

(3) Series KK - taxable remaining amount outstanding relates to transmission assets and matures each year through June 1, 2037.

Bond service funding	Principal		Interest	Total		
Deposits in 2021 for 2022 payment	\$	6,801,667	\$ 511,083	\$	7,312,750	
2022		11,983,750	5,803,341		17,787,091	
2023		12,550,417	5,232,937		17,783,354	
2024		13,145,833	4,642,298		17,788,131	
2025		13,729,583	4,022,514		17,752,097	
2026		14,312,083	3,449,143		17,761,226	
2027-2031		47,555,417	9,303,598		56,859,015	
2032-2036		28,503,750	3,005,560		31,509,310	
2037		1,162,500	 21,507		1,184,007	
Total bond service funding	\$	149,745,000	\$ 35,991,981	\$	185,736,981	

Platte River is a participant in a pooled financing arrangement that closed in 2021 to fund the Windy Gap Firming Project which includes construction of the Chimney Hollow Reservoir. Due to alternate accounting treatment, the debt service payments under the pooled financing will be included in operations and maintenance and not accounted for as debt service. The payments are considered fixed obligation charges. The related pooled financing liability is included in the debt ratio.

Pooled financing estimated		Estimated net				Total
	ć	principut	ć		Ċ	2 615 250
2022	\$	-	Ş	2,615,250	\$	2,615,250
2023		-		2,888,007		2,888,007
2024		-		2,888,007		2,888,007
2025		-		2,888,007		2,888,007
2026		2,935,487		3,561,085		6,496,572
2027-2031		16,654,236		15,830,100		32,484,336
2032-2036		20,552,327		11,932,348		32,484,675
2037-2041		25,210,682		7,274,730		32,485,412
2042-2046		8,177,103		2,887,958		11,065,061
2047-2051		9,477,956		1,586,759		11,064,715
2052-2055		5,551,523		291,650		5,843,173
Total estimated funding	\$	88,559,314	\$	54,643,901	\$	143,203,215

(1) Applied estimated unused bond service reserves in 2041 and 2051.

Rond service coverage		2020		2021 budget		2021		2022 budget	
Not revenues		actual		budget		estimate		budget	
	ć	240 740 170	Ċ	270 002 700	Ċ	260 004 657	Ċ	262 101 7 17	
Operating evenues	Ş	240,749,176	\$	239,802,786	\$	260,994,653	Ş	262,191,347	
depreciation, amortization and		(183 112 260)		(180 380 488)		(102 600 373)		(200 676 078)	
accretion		(103,112,200)		(109,309,400)		(192,099,373)		(209,070,970)	
Net operating revenues		57,636,916		50,413,298		68,295,280		52,514,369	
Plus interest and other income		2,322,040		1,804,254		2,148,078		978,431	
Net revenues before rate stabilization		59,958,956		52,217,552		70,443,358		53,492,800	
Rate stabilization									
Deposits		-		-		-		-	
Withdrawals		-		-		-		_	
Total net revenues	\$	59,958,956	\$	52,217,552	\$	70,443,358	\$	53,492,800	
Bond service									
Power revenue bonds	\$	18,224,386	\$	18,112,737	\$	17,996,492	\$	17,787,090	
Coverage									
Power revenue bond coverage ratio		3.29x		2.88x		3.91x		3.01x	
Fixed obligation charge coverage									
Total net revenues, above	\$	59,958,956	\$	52,217,552	\$	70,443,358	\$	53,492,800	
Fixed obligation charges included in		11,034,442		16,072,361		13,930,085		16,979,039	
Adjusted net revenues before fixed									
obligation charges	\$	70,993,398	\$	68,289,913	\$	84,373,443	\$	70,471,839	
Fixed obligation charges									
Power revenue bonds, above	\$	18,224,386	\$	18,112,737	\$	17,996,492	\$	17,787,090	
Fixed obligation charges		11,034,442		16,072,361		13,930,085		16,979,039	
Total fixed obligation charges	\$	29,258,828	\$	34,185,098	\$	31,926,577	\$	34,766,129	
Coverage									
Fixed obligation charge coverage ratio		2.43x		2.00x		2.64x		2.03x	
(4) Einer die blimetiene einer einer in die die blit die		and a second state of the	- 4 -	the design of the	- 6				

(1) 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 and amounts due under pooled financing arrangements to be fixed obligation charges for this purpose.
Budget **process**

Platte River is a political subdivision of the state of Colorado and is subject to the Local Government Budget Law, C.R.S § 29-1-101, *et seq.* Platte River is not subject to Colorado's Taxpayer's Bill of Rights provisions because it operates as an enterprise. Colorado law and Platte River financial policy require an annual budget that is balanced, in that it has sufficient projected revenues and available resources to equal anticipated expenditures. Throughout the budget development process, anticipated revenues and expenditures are monitored to ensure the budget is balanced.

The statutory deadline for submission of Platte River's annual budget to its board of directors is Oct. 15 of each year. By that date, a notice is published in newspapers of general circulation stating that the annual budget is available for inspection by the public. The date and time for the public hearing is also published. The budget document can be found on Platte River's website at www.prpa.org/financial-information and at Platte River's headquarters at 2000 East Horsetooth Road, Fort Collins, Colorado.

The budget was developed in alignment with the strategic initiatives and in compliance with the financial framework described in the financial governance section. The budget was also developed with an adaptive strategy to effectively maintain system reliability, ensure environmental responsibility and regulatory compliance, as well as manage risk. Below explains how the budget is developed, reviewed and approved.

Owner communities load forecast

Platte River's long-range load forecast is developed using an econometric model that incorporates independent variables including population, distributed solar, electric vehicles usage and weather. The forecast also includes a trend for demand and energy changes anticipated from energy efficiency programs. The budgeted monthly demand and energy load projections were based on the 10-year official load forecast.

Production cost model

The major revenue and expense categories (sales for resale, purchased power and fuel) are developed from the results of an hourly production cost simulation model. Generation by resource is determined using assumptions for resource availability and performance, fuel and transportation contract costs, power purchase contract terms and market prices for sales for resale, supplemental purchased power and natural gas.

Personnel budget

The salaries budget is developed in accordance with the board policy on employee total compensation. A market adjustment is typically included in regular wages based on data from a variety of published sources, both regional general industry and from other utilities. Position step increases, where applicable, are also included in the budget. New positions are requested by department managers who submit a position description and justification. The senior leadership team reviews the requests and decides the positions for the upcoming year based on the greatest need and value to Platte River. As positions become vacant, they are evaluated to determine if replacement is required or if the position can be allocated to another area. Incremental headcount is approved by the board of directors through the budget process. Overtime and capital labor are budgeted by the individual departments as a component of total salaries. The remaining operating salaries are

allocated to the functional accounts based on recent historical data. Medical and dental expenses are based on a mid-year projection provided by third-party consultants using historical claims and industry cost projections. All projected benefit costs are applied to the budgeted labor charges.

Departmental budgets

Each department must submit a budget on an account-by-account basis along with justifications, explanations and statistical information supporting the budget. Department managers develop internal goals and work plans and align their activities with Platte River's strategic initiatives. Through internal work sessions, the department budgets are reviewed and approved by division managers and senior leadership.

Craig units 1 and 2 budget

The participation agreement provides for the joint ownership of Craig units 1 and 2, of which Platte River owns 18%. Tri-State, as the operating agent of the Craig Generating Station, is responsible for the daily management, administration, operation and maintenance of Craig units 1 and 2 and related transmission facilities. All costs of operation and maintenance, other than fuel costs, are shared on a pro rata ownership basis. Participants are obligated to advance funds to the operating agent as required to make payments of operations and maintenance costs when due. The engineering and operating committee works closely with Tri-State staff to develop capital and operations and maintenance budgets to ensure future plant reliability through the life of the units.

Joint transmission

Platte River's share of joint ownership projects include costs for the Ault-Fort St. Vrain, Craig-Bonanza, Hayden-Blue River and Craig-Ault transmission lines, as well as Craig units 1 and 2 transmission costs. The joint ownership project budgets are developed by the operating agents and approved by the participants through the engineering and operating committees.

Billable projects

Platte River performs services on behalf of its owner communities. The services are structured under intergovernmental agreements and are billed directly to each owner community. Examples of services provided include customer information systems, distribution, SCADA, substation security and fiber management. These activities are shown in the significant initiatives section.

Capital budget

Capital projects are developed based on a five- to 10-year planning horizon. With each budget cycle, projects are submitted with a project description and justification. Projects are planned based on resource availability and are categorized, ranked, prioritized and strategic projects are identified. A long-term capital forecast is also prepared, reviewed and updated three times a year. The long-term capital forecast is used for long-range financial planning to determine rates, cash flows and the timing of debt financings.

Budget contingency

The budget contingency can be used to meet unexpected expenditures that could not be foreseen at the time the budget was prepared. Events that may require the use of the contingency include unplanned generation or transmission outages, significant increases in power market or natural gas prices, unplanned expenses to maintain power supply to the owner communities or the adoption of an accounting policy which impacts expenditures. It may also be used for existing capital projects that require expenditures above those budgeted as the result of scheduling changes, payment timing differences, changes in work scope, price fluctuations or new projects the board deems important to start before the next budget year. A contingency transfer is not unusual for capital projects. Prior to transferring contingency to an expense category, staff must notify the board of the need for the transfer and present a resolution proposed for adoption. The budget contingency appropriation amount represents approximately 10% of the operating expenses and capital additions to align with fluctuations in the budget.

Year	Contingency appropriation budget (\$000) ⁽¹⁾	Appropriated amount (\$000)	%	Purpose of transfer
2012	\$20,000	-	-	
2013	\$20,000	-	-	
2014	\$20,000	-	-	
2015	\$20,000	\$6,640	33%	Additional expenditures for several capital projects including the Craig Unit 2 nitrogen oxide removal, the fiber route to Estes Park, and the control room for the digital control system, as well as ancillary services related to additional wind generation.
2016	\$20,000	\$1,200	6%	Additional expenditures for the initial progress payments for the generator rotor replacement project and the generator stator rewind project completed during the 2018 planned maintenance outage.
2017	\$20,000	\$1,100	6%	Additional expenditures for the initial progress payments for the bottom ash and reclaim pond project completed during the 2018 planned maintenance outage.
2018	\$23,000	-	-	
2019	\$23,000	\$1,779	8%	Additional expenditures for several capital projects including the Energy Engagement Center, Rawhide variable frequency drive, circuit switcher addition and breaker replacements at Harmony Substation, air compliance database software and vehicle fleet replacements.
2020	\$26,000	\$1,282	5%	Additional expenditures for bottom ash transfer
2021	\$28.000	_ (2)	-	

(1) Prior to 2018, the budgeted contingency was a fixed amount.

(2) A contingency transfer for capital projects and operating expenses is planned to be requested at the December 2021 board of directors meeting.

Management review

Financial statements, budget summary, budget detail and division/department budget reports are prepared and analyzed for management review. A proposed budget work session with the managers and the general manager/CEO is held to provide discussion and analysis of the budget and to ensure that expenditures for the budget year are consistent with goals, objectives, strategic initiatives, rate projections and meet SFP metrics. This discussion and analysis may result in revisions, deletions, reductions or additions of budget items. The budget is revised accordingly, and the reports are revised and distributed to management for further review.

Budget document

The strategic budget document is a comprehensive document used by Platte River's management as a planning tool and a means of communicating to the board of directors and the public. The budget document is prepared in compliance with the Local Government Budget Law of Colorado and is submitted to the state no later than 30 days following the beginning of the fiscal year of the adopted budget. The budget document must show all proposed expenditures as well as all sources of anticipated income; estimated beginning and ending fund balances; the corresponding actual figures for the prior fiscal year and estimated figures projected through the end of the current fiscal year; a written budget message; and explanatory schedules or statements. Certain budget amounts for the current fiscal year may be reclassified for consistency with the upcoming budget year presentation. These reclassifications have no impact on budgeted amounts and results.

Board review and adoption

The proposed budget is distributed to the board of directors in September and a budget work session is scheduled at the September board meeting. Legal notices are published in the owner communities' newspapers stating the budget has been delivered to the board of directors; it is available for public inspection; the date and time of a public hearing which is scheduled at the October board meeting; and that the adoption of the proposed budget will be considered at the December board meeting. Revisions to the budget during the board of directors work session or other revisions arising from unanticipated changes are reviewed with the board of directors at the October board meeting. Final adjustments to the proposed budget may be made before board adoption on Dec. 9, 2021.

Revisions between the proposed and adopted budget typically include those based on a revised production cost model run and refinements to operations and maintenance expenses and capital projects. Revisions can include changes to sales for resale market assumptions, fuel costs, ancillary service and wheeling rates, personnel costs, other various departmental expenses and any other change that is determined to be necessary to ensure an accurate and complete budget for board adoption. The following table summarizes the changes between the proposed budget and the adopted budget.

		2022	2022		Change from	
Summary of changes		posed budget	adopted budget	proposed budget		
Revenues						
Sales to owner communities	\$	207,977,183	\$ 208,017,293	\$	40,110	
Sales for resale - long-term		18,686,816	18,686,816		-	
Sales for resale - short-term		27,143,534	29,557,412		2,413,878	
Wheeling		5,912,439	5,929,826		17,387	
Interest income		608,102	608,102		-	
Other income		370,226	 370,329		103	
Total revenues	\$	260,698,300	\$ 263,169,778	\$	2,471,478	
Operating expenses						
Purchased power	\$	58,119,372	\$ 57,733,218	\$	(386,154)	
Fuel		39,334,515	44,526,114		5,191,599	
Production		47,738,340	50,385,604		2,647,264	
Transmission		18,814,173	18,634,188		(179,985)	
Administrative and general		25,624,212	26,020,323		396,111	
Distributed energy resources		12,345,407	 12,377,531		32,124	
Total operating expenses		201,976,019	209,676,978		7,700,959	
Capital additions						
Production		9,093,408	9,345,888		252,480	
Transmission		14,498,285	13,338,598		(1,159,687)	
General		4,909,280	 6,225,970		1,316,690	
Total capital additions		28,500,973	 28,910,456		409,483	
Total operating expenses and capital additions		230,476,992	238,587,434		8,110,442	
Debt service expenditures						
Principal		11,983,750	11,983,750		-	
Interest expense		5,803,340	 5,803,340		-	
Total debt service expenditures		17,787,090	 17,787,090		-	
Total expenditures		248,264,082	256,374,524		8,110,442	
Contingency appropriation		23,000,000	 24,000,000		1,000,000	
Total expenditures and contingency	\$	271,264,082	\$ 280,374,524	\$	9,110,442	

Budget amendments

If total revenues or total expenditures deviate from an adopted budget, after considering any resolution for contingency use, a budget amendment may be necessary. Under Colorado law, budget amendments must follow the same annual budget process regarding board meeting notice and public hearing and board adoption.

Budget schedule



Financial governance

The Local Government Budget Law of Colorado, in addition to the policies listed below, provides the framework for Platte River's financial activities and budget development.

Fiscal resolution

The resolution is adopted as a requirement of the Organic Contract that governs the financial transactions of Platte River.

Strategic financial plan

Platte River Power Authority's SFP provides direction to create long-term financial sustainability, manage financial risk and support Platte River's vision, mission and values. 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. To achieve long-term financial sustainability and the lowest practical cost of debt necessary to finance Platte River's long-term capital program, financial metrics have been established in consideration of rating agency guidelines. Additionally, to manage financial assets and risk, staff will continue to implement and maintain prudent business practices in the management of reserves, maintain the enterprise risk management program and comply with financial policies and procedures. Staff reviews the SFP annually and makes recommendations to the board as necessary.

Rate requirements and practices

The general powers of Platte River, as stated by C.R.S § 29-1-204(3)(j), "include the right to fix, maintain, and revise fees, rates, and charges for functions, services, or facilities provided." The board of directors has the exclusive authority to establish electric rates.

The power supply agreements with the owner communities require the board of directors to review rates at least once each calendar year. The agreements also require that rates be sufficient to cover all operations and maintenance expenses, purchased power costs, debt service expenses and to provide reasonable reserves and adequate earnings margins so Platte River may obtain favorable debt financing.

The general power bond resolution requires rates be sufficient to generate net revenues that cover debt service expense at a minimum 1.10 times. The general power bond resolution also requires Platte River to review rates and charges as necessary, no less than once each calendar year.

Platte River strives to maintain long-term competitive rates relative to regional peer wholesale electric providers. Competitive wholesale rates provide the owner communities an economic advantage for their residential, commercial and industrial customers.

Platte River's board-adopted rate setting policy and accompanying rate setting reference document describes an approach to rate making including objectives to be achieved both in the near-term and over the long-term planning horizons.

It is the policy of Platte River to establish service offerings and supporting rate structures that complement the strategic objectives, underlying policies and values of the organization. Platte River has identified the following goals important to the rate setting process. These goals are as follows:

• Improve value added of Platte River in support of owner communities

- Offer a desirable portfolio of services and rates that meet owner communities' needs
- Better align wholesale time-of-use pricing signals with cost of service and owner community retail pricing signals
- Send pricing signals that result in system benefits

Platte River's tariffs and charges will be established to achieve SFP targeted financial metrics. Multiyear rate smoothing strategies will also be utilized, as deemed appropriate, to avoid greater single year rate impacts or to accomplish specified financial objectives.

Additional information about rates is available on Platte River's website at www.prpa.org/rates-information/.

Financial metrics

The financial metrics outlined below aid in achieving long-term financial sustainability (liquidity, leverage, cash flow, earnings). Additionally, achieving strong financial metrics provides Platte River the flexibility to implement necessary rate changes and to change rates over longer periods of time to minimize short-term rate impacts. While the financial metrics are established and evaluated on an annual basis, multiyear performance is considered during the evaluation of rate action and decision making.

- Generate minimum 1.50 times fixed obligation charge coverage ratio
- Generate minimum net income equal to 3% of projected annual operating expenses
- Target debt ratio less than 50%
- Target minimum 200 days unrestricted cash on hand

The fixed obligation charge coverage ratio incorporates debt-like obligations either related to the ownership of resource assets through take-or-pay contracts or off-balance-sheet financings. Consistent with credit rating agency methodology, Platte River considers 30% of energy purchased under hydropower, solar and wind power purchase agreements to be fixed obligation charges for this purpose.

Integrated resource plan

Critical to the budgeting and rate projection process, an IRP establishes a short-term action plan and long-term resource acquisition trajectory for meeting future electric load. Plans are modeled using a combination of supply-side generation resources and DER. Platte River's IRP uses sophisticated modeling of Platte River's unique resources, available technologies and specific constraints, all studied by industry experts using best industry practices to develop supply portfolio options covering a 20-year planning period. The resource portfolio includes capital, operational, fuel and environmental costs. Community engagement is a significant element within the IRP development process, and Platte River engages with the owner communities on multiple levels to gain public input from as many retail customers as possible on the proposed long-term supply portfolios.

Decisions to invest in and maintain generating resources are significant and complex, with long-range financial and environmental implications that vary widely depending on the resource mix within the selected portfolio. As such, the results of an IRP can have significant impacts on rate requirements as selected resources are factored into rate projections. An IRP is required every five years, with the most recent being submitted in 2020 and covering the planning period from 2020 to 2040. Additional information about the IRP is available on Platte River's website at www.prpa.org/irp.

Financial projections and cost of service

Platte River's financial model is designed to provide projections coinciding with resource planning models and the IRP. While the planning horizon typically extends 10 years, functionality exists to evaluate scenarios out 25 years. Key metrics typically identified and reported by the financial model include average rate projections (including annual rate increases) and the SFP metrics. By utilizing the financial model, Platte River obtains forward-looking insight into the impact of IRP portfolios and the possible need to adjust long-term financial plans including debt financing and rate adjustments to ensure objectives of the SFP are met.

The cost of service model determines specific rates charged for the upcoming year's budget. It incorporates budgeted expenses by FERC functional area and determines which specific rate(s) should be used for cost recovery of each expense. The cost of service model is a tool to ensure unbundled transmission and generation rates, including noncarbon pricing, are transparent and aligned with underlying cost structures, leading to system benefits.

Rate stabilization account

Under the general power bond resolution, Platte River has established a rate stabilization reserve account. Deposits to this account are a reduction to current net revenues for purposes of computing bond service coverage. Future withdrawals will increase net revenues for purposes of computing bond service coverage and could assist Platte River, at such time, in meeting its wholesale rate covenant. Withdrawals from the reserve account have not occurred to meet bond service coverage in Platte River's history and the current rate stabilization reserve account is a balance sheet item of \$20 million. Risk analysis is performed annually to determine the appropriate level to maintain in the account.

Power supply agreements

The power supply agreements define the terms and conditions for the sale and purchase of electricity by Platte River to its owner communities. Currently all four power supply agreements run through 2060.

General power bond resolution

The general power bond resolution allows bonds to be issued and sold for a specific purpose and establishes the rights and responsibilities of each party in a bond contract (the issuer and the bondholder). The bonds represent money loaned and entitle the holder to interest payments and the return of principal.

Bond service coverage

Bond service coverage is a key indicator of financial strength and is reviewed by the credit rating agencies when assessing Platte River's credit quality. Bond service coverage is a measure of Platte River's ability to generate cash to pay bondholders. Under the general power bond resolution, Platte River is required to charge wholesale electric energy rates to the owner communities that are reasonably expected to yield net revenues for the forthcoming 12-month period that are at least equal to 1.10 times total power bond service requirements.

Use of restricted and unrestricted resources

The use of restricted and unrestricted resources is based on the intended purposes as indicated in the bond resolutions.

Investments

Platte River's investment policy provides a framework for managing its investments. Platte River shall invest and manage assets as a prudent investor would, by considering the purposes, cash requirements and terms of the various funds. In satisfying this standard, the chief financial officer shall exercise reasonable care, skill and caution. Investment and management decisions will be evaluated not in isolation but in the context of the portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to Platte River. The primary objectives of investment activities shall be safety, liquidity and yield. Platte River only invests in obligations of the United States government and its agencies and other investments permitted under Colorado law.

Risk management

Platte River is committed to enterprise risk management, the process to identify potential events that may affect the ability to meet strategic objectives and manage identified risks appropriately. The risk oversight committee, consisting of the general manager/CEO and the senior leadership team, monitor the risk environment and provide direction for the activities to eliminate, mitigate or transfer, to an acceptable level, the risks that may adversely affect Platte River's ability to achieve its goals. Additionally, the risk oversight committee supports organization-wide efforts to identify, monitor, evaluate and report risks and risk mitigation strategies. An energy risk management framework, a subset of enterprise risk management, was also established to develop processes to identify, measure, monitor, report and mitigate energy related risks. The enterprise risk management program is continually evolving to incorporate best industry practices.

Platte River maintains several different types of insurance including auto liability, commercial crime, cyber liability, directors and officer's liability, fiduciary liability, excess liability, medical professional, property, employee health and workers' compensation. The aggregate property casualty limits are \$200 million. Platte River self-insures the first \$1 million of general liability exposure with an excess liability policy of \$35 million per occurrence and \$70 million aggregate. Platte River carries directors and officers liability insurance of \$10 million and the cyber liability limit is \$50 million. A stop loss insurance policy covers medical claims in excess of \$175,000 per participant, limiting Platte River's exposure to significant claims in any given year; however, exceptions can and may be applied by the insurance carrier.

Basis of accounting

Platte River accounts for its financial operations as a proprietary fund and uses the modified accrual basis of accounting for budgetary reporting purposes. Under the modified accrual basis of accounting, certain non-cash items such as depreciation expense for fixed assets, amortization for asset retirement obligations, accretion expense for Craig units decommissioning costs, accrued compensated absences, amortization of bond financing costs and unrealized gains or losses are excluded from budget appropriation. Debt principal is included in the budget under the modified accrual basis of accounting. For financial statement reporting purposes, Platte River uses the full accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America. Platte River's accounts are maintained in accordance with the Uniform System of Accounts as prescribed by FERC.

As a board-regulated entity, Platte River is subject to the provisions of Governmental Accounting Standards Board Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, Regulated Operations, paragraphs 476–500, which requires the effects of the rate making process to be recorded in the financial statements. Accordingly, certain expenses and revenues normally reflected in the statements of revenues, expenses and changes in net position as incurred are recognized when they are included in Platte River's wholesale rates. Below is a list of Platte River Board-approved accounting policies for specific activities following this standard:

- Additional pension funding expense recognition
- Pension contribution expense recognition
- Debt issuance expense recognition
- Maintenance outage expense accrual
- Change in depreciation method
- Windy Gap Firming Project
- Craig units 1 and 2 decommissioning accrual

Operating revenues and expenses

Operating revenues and expenses consist of those revenues and costs directly related to the generation, purchase and transmission of electricity. Operating revenues are billed and recorded at the end of each month for all electricity delivered. Revenues and expenses related to financing, investing and other activities are considered to be nonoperating.

Capital

Capital additions include expenditures of \$5,000 or more for property, equipment or construction projects with an estimated useful life greater than two years. Expenditures less than \$5,000 are reflected within the operations and maintenance expense budget. The Craig units 1 and 2 capital budget was prepared by the operating agent, Tri-State, and has been approved by the engineering and operating committee of which Platte River is a member. Depreciation is recorded using the straight-line method over the estimated useful lives of the various classes of plant in service. For budgetary reporting, capital additions also include appropriations for asset retirement obligations, discussed further in this section.

Platte River management has placed an emphasis on project management, specifically reviewing resource availability, as well as improving project planning and execution. This process will continue to evolve, striving toward operational excellence.

Capital projects can be delayed for various reasons. The previous year unexpended amounts may be due to construction delays, change in scope or payment timing differences and will be determined after the Dec. 31 year-end closing. Budget law allows Platte River to carry over into the next year any unexpended balance of funds appropriated for the previous year expenditures. The amounts required in the next year to complete the previous year projects will then be transferred to the appropriate budget categories in the next year. This is termed the carryover process and is preferred versus rebudgeting the funds. The capital additions will be funded either from current operations and/or proceeds from debt financings.

As unplanned projects come up throughout the course of the year, project managers follow the internal out-of-budget or over budget process to submit the project for consideration. Each project is described, justified and other impacts are evaluated. The project is then reviewed on merit by the general manager/CEO. If the project is approved, overall project schedules may change to accommodate the new or revised project. Given the amount of variability and uncertainty with projects, funding is tracked closely, and the carryover process is implemented if a project cannot be completed in the given year. If additional funds are required, a contingency transfer will be requested of the board to move funds into the capital budget.

Asset retirement obligations

Asset retirement obligations originate when a legally enforceable liability associated with the retirement of a tangible capital asset exists and is reasonably estimable. Following Platte River's adoption of Governmental Accounting Standards Board Statement No. 83, Certain Asset Retirement Obligations, effective for the period ending Dec. 31, 2019, asset retirement obligations are appropriated for budgetary purposes on a cash basis method aligned with when liabilities are anticipated to be settled as retirement activities commence. For financial reporting purposes, the expense of the liabilities is recognized in the period during which the underlying capital asset is being used. This is achieved by recording a deferred outflow of resources equal to the liability which is subsequently recognized as amortization expense during the pre-retirement period. The liability and associated deferred outflow of resources are evaluated annually for an inflationary adjustment and changes in estimated costs and adjusted when necessary. Prior to the adoption of this statement, identified asset retirement obligations were appropriated through operations and maintenance expense with no differences in budgetary and financial reporting.

The following table summarizes anticipated asset retirement obligations for financial reporting purposes at the end of 2021, including the periods in which amortization is expected to be recognized. Budget appropriation will occur when actual retirement activities commence.

Asset retirement obligations	li D	Estimated ability as of ec. 31, 2021	ו de of ו	Estimated unamortized ferred outflow resources as of Dec. 31, 2021	2(ar)22 budget nortization	Amortization period end date
Rawhide Unit 1 impoundments	\$	6,203,213	\$	4,691,540	\$	586,452	2029
Rawhide Energy Station decommissioning		15,834,610		14,265,168		419,568	2055
Craig Energy Station impoundments		1,883,303		1,345,510		199,332	2028
Trapper Mine post-mining reclamation		5,665,491		2,226,309		575,116	2025
Total asset retirement obligations	\$	29,586,617	\$	22,528,527	\$	1,780,468	

Acronyms and terms

2021 estimate	Current estimate of revenues and expenditures to reflect actual revenues and expenditures (January through October) and budget revenues and expenditures (November and December). Some modifications were made to reflect more accurate projections.				
A&G	Administrative and general.				
Accretion	Gradual recognition of an expense related to a long-term liabil				
Accrual	An expense is recognized when incurred, before cash is paid out.				
Amortization	Gradual reduction of book value for a non-depreciable asset.				
Balanced budget	A budget that has sufficient projected revenues and available resources to equal anticipated expenditures.				
Bond service	See debt service.				
Bond service coverage	Net revenues divided by debt service.				
Capacity factor	The ratio of the average load on a generator for a given period of time to the capacity rating of the generator.				
Capital and debt management fund	A dedicated fund authorized by Platte River's SFP to be used in managing debt and to provide reserves for future capital additions.				
Capital expenditure	Expenditures of \$5,000 or more for property, equipment or construction projects with an estimated useful life greater than two years.				
Contingency	An appropriation of funds to cover unforeseen expenditures which may occur during the budget year.				
COVID-19	COVID-19 is an illness caused by a novel coronavirus initially identified on Jan. 7, 2020, and later characterized as a pandemic by the World Health Organization on March 11, 2020, followed by a declaration as a national emergency on March 13, 2020.				
CRSP	Colorado River Storage Project – division of Western Area Power Administration.				

Debt ratio	Long-term debt, net plus pooled financing liability divided by total electric utility plant plus net working capital.				
Debt service	Bond interest and principal. Also referred to as bond service.				
Depreciation	The portion of the cost of a fixed asset expensed to operations to allow for lost usefulness.				
DER	Distributed energy resources.				
EEC	Energy Engagement Center.				
Enterprise resource planning	Enterprise resource planning (ERP) is the integrated management of main business processes, often in real time and mediated by software and technology. Many ERP software applications exist to help organizations implement resource planning by integrating all of the processes needed to run an organization with a single system.				
FERC	Federal Energy Regulatory Commission.				
Fiscal resolution	A resolution that governs the financial transactions of Platte River.				
Fixed asset	See capital expenditure.				
Fixed obligation charge coverage ratio	The fixed obligation charge coverage ratio (FOCCR) is a measurement of cash flows and the ability to repay annual debt service costs from recurring revenues net of recurring expenses excluding one-time revenues or extraordinary charges. FOCCR also incorporates debt-like obligations either related to the ownership of resource assets through take-or-pay contracts or off-balance-sheet financings. A minimum 1.50 times FOCCR provides sufficient annual cash flows to meet the legal minimum 1.10 times bond service coverage ratio requirement, partially fund future capital additions and maintain favorable credit ratings.				
General power bond resolution	A resolution for providing the issuance of power revenue bonds.				
GW	Gigawatt, one thousand megawatts; one million kilowatts.				
GWh	One gigawatt of power delivered steadily for one hour.				

HVAC	Heating, ventilation and air conditioning.	
IRP	Integrated resource plan.	
kW	Kilowatt; one thousand watts.	
kW-Mo	The maximum kW reached during a calendar month used for billing demand.	
kWh	One kilowatt of power delivered steadily for one hour.	
kV	Kilovolt; one thousand volts.	
LAP	Loveland Area Projects – division of the Western Area Power Administration.	
MBtu	One million Btu. A Btu is a British thermal unit and is the standard unit for measuring quantity of heat energy and represents the amount of heat energy necessary to raise the temperature of one pound of water one degree Fahrenheit.	
MW	Megawatt; one thousand kilowatts.	
MWh	One megawatt of power delivered steadily for one hour.	
NERC	North American Electric Reliability Corporation.	
Net income	Revenues less operating costs, depreciation, amortization, accretion and interest expense.	
Net position	Difference between total assets plus deferred outflows of resources and total liabilities plus deferred inflows of resources.	
Net revenue	Total revenues less operation and maintenance expenses during a period.	
О&М	Operations and maintenance.	
Organized energy market	A system in which participants submit offers to buy or sell wholesale energy as a commodity. Utilizing pricing signals to leverage the lowest-cost resources to serve load, market operators efficiently dispatch resources across participating	

	utilities, reducing fuel and maintenance costs while increasing reliability and integration of renewable resources.
Owner communities	Estes Park, Fort Collins, Longmont and Loveland are the four owner communities of Platte River.
Projected	Estimate of revenues and expenditures based on past trends, current economic conditions and future financial forecasts.
Rate stabilization fund	An account provided for by Platte River's general power bond resolution and funded or utilized in accordance with Platte River's SFP.
Restricted assets	Cash and investment accounts restricted to use by bond covenants or laws and regulations.
Sales for resale – long-term	Sales of energy set forth by a contract with duration greater than one year.
Sales for resale – short-term	Sales of electric energy for a period of one year or less.
SCADA	Supervisory control and data acquisition.
SFP	Strategic financial plan.
WAPA	Western Area Power Administration.
WECC	Western Electricity Coordinating Council.
Wheeling	Use of transmission facilities of other utilities.

