

**Glen Canyon Dam Adaptive Management Work Group**  
**Agenda Item Information**  
**August 26-27, 2015**

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Agenda Item

Colorado River Storage Project (CRSP) Rates, Revenue, and Basin Fund Overview

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Action Requested

Information item only. We will answer questions; no action is requested.

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Presenter

Lynn Jeka, Senior VP and Colorado River Storage Project Manager, Western Area Power Administration,  
Department of Energy

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Previous Action Taken

N/A

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Relevant Science

N/A

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Summary of Presentation and Background Information

Congress created the Colorado River Storage Project (CRSP) through the CRSP Act of 1956 (Act of April 11, 1956, ch. 203, 70 Stat. 105). The Act authorized the Secretary of the Interior to construct, operate, and maintain the Colorado River Storage Project and participating projects. In the same Act, Congress authorized a separate fund in the Treasury of the United States to be known as the Upper Colorado River Basin Fund (referred to as the Basin Fund). Fifty-nine years later the Western Area Power Administration's CRSP Management Center works collaboratively in partnership with the Bureau of Reclamation (Reclamation) to generate and market power from the Colorado River Storage Project, Collbran, Seedskadee, Dolores and Rio Grande projects (marketed together as the Salt Lake City Area Integrated Projects) and deliver it to Firm Electric Service customers. With a total investment of \$2.375 billion, 11 power plants, 24 generating units, and 2,325 miles of transmission lines CRSP and the Bureau of Reclamation provide clean, reliable, wholesale electric service to 130 wholesale customers in the west including 53 Native American tribes. Our service territory spans Arizona, New Mexico, Nevada, Colorado, Utah, Texas and Wyoming.

This informational presentation will provide an overview of CRSP. You will have an opportunity to learn about how we establish the rates our customers pay for the power they receive, how the resulting revenues are used, and how the approximately \$20 million per year for environmental programs are funded. In addition, you'll learn how the Basin Fund is operated and why it is critical to CRSP, Reclamation, the seven Basin States, the Upper Colorado and San Juan River Recovery Implementation Programs, and the Glen Canyon Adaptive Management Program.

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# CRSP Rates, Revenue, and Basin Fund Overview

Lynn C. Jeka  
Senior VP & CRSP Manager  
August 27, 2015



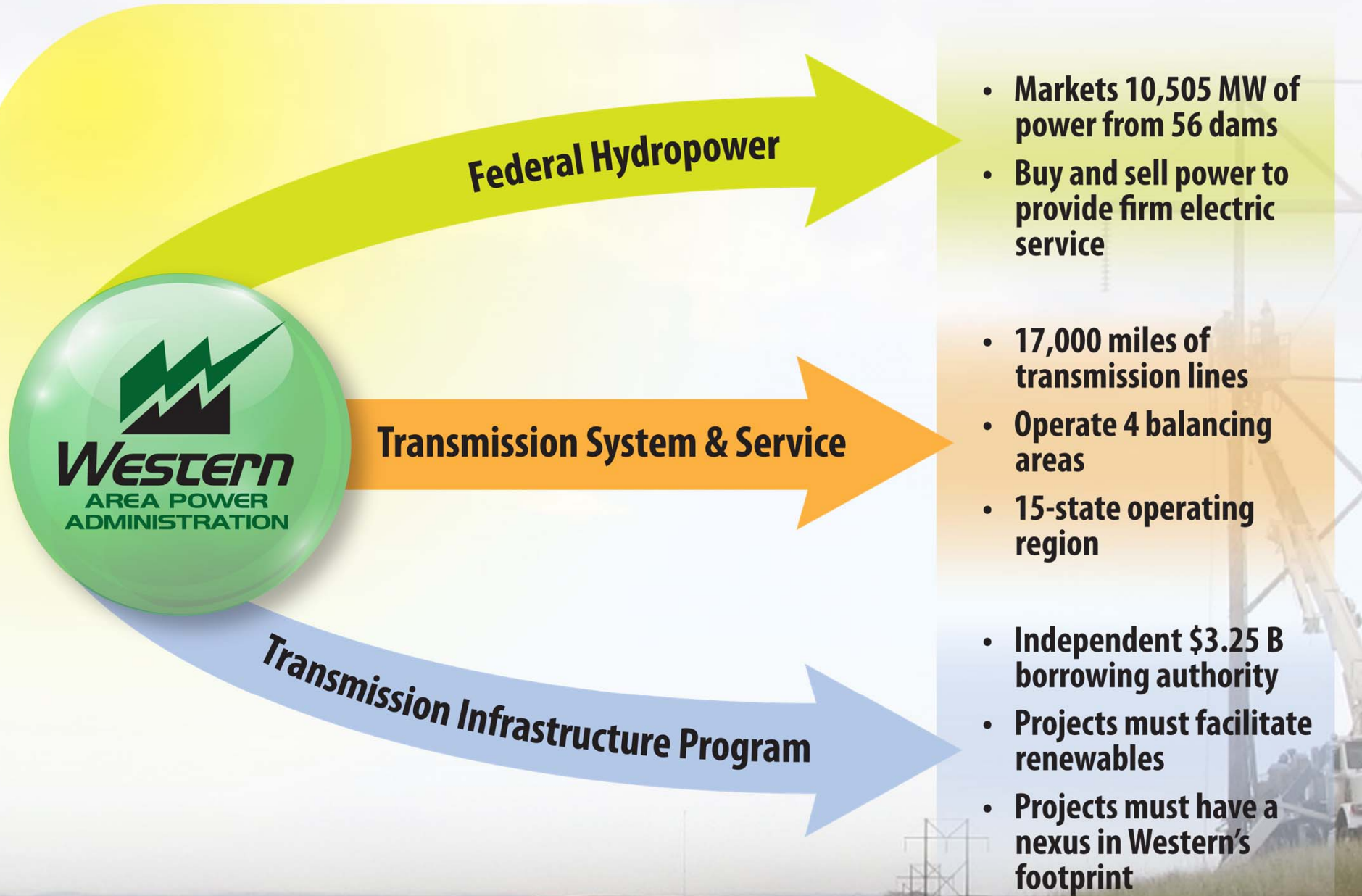
# Overview

- Western's Mission
- History of CRSP: Western & Reclamation
- Where does the Revenue come from?
- Where does the Revenue go?
- Basin Fund
- Funding Environmental Programs

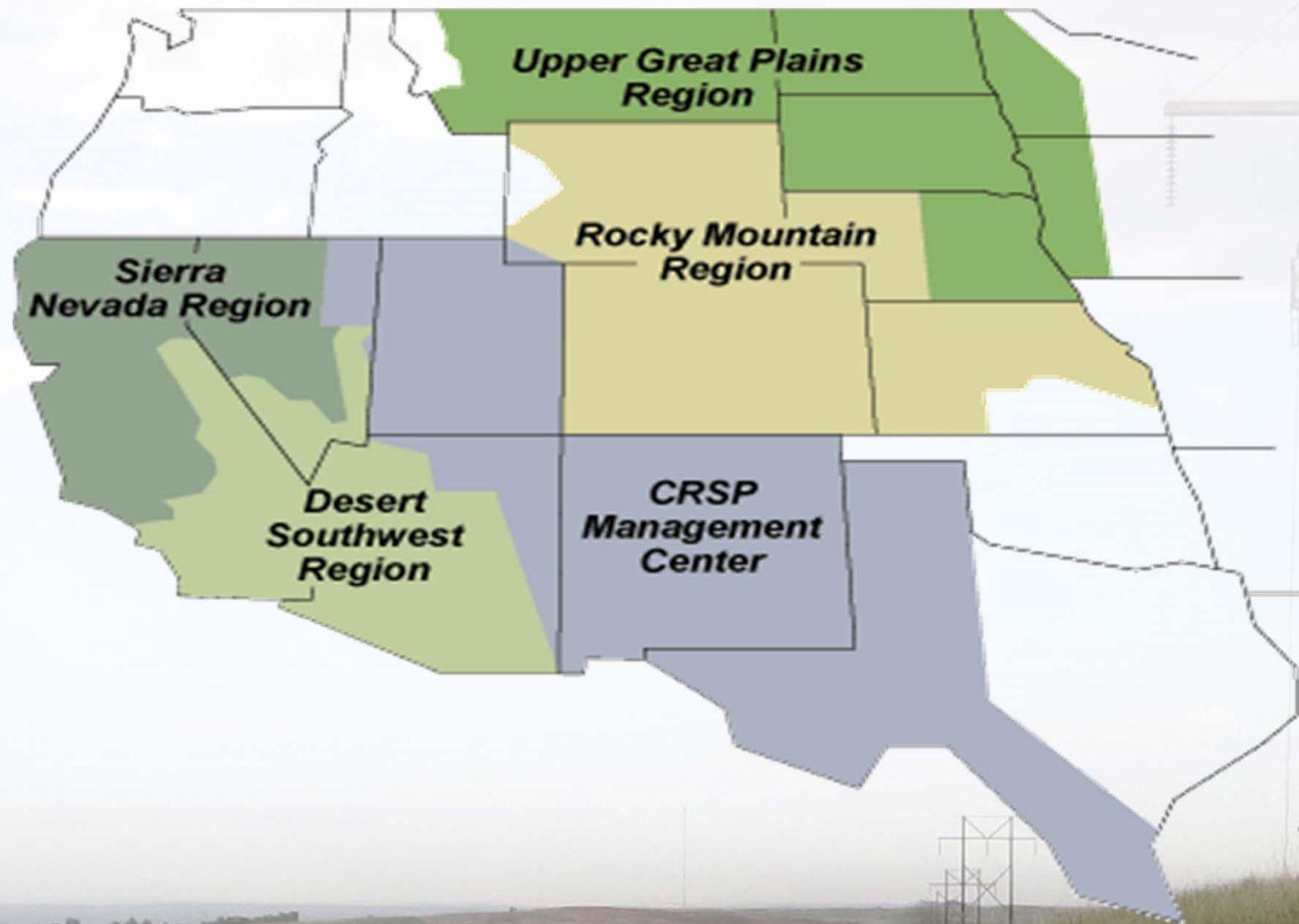
# Western's Mission and Focus



## Western's Three Lines of Business



# Western's service territory



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# The CRSP Act

- Enacted by Congress April 11, 1956 (ch. 203, 70 Stat. 105)
- **Section 1:**
  - Intended to initiate comprehensive development of the water resources of the Upper Colorado River basin for multiple purposes including hydropower generation.
  - Authorized the construction of Glen Canyon and other dams (Flaming Gorge, Blue Mesa, Fontenelle) for multiple purposes.
  - Authorized construction of transmission infrastructure to deliver the hydropower generation.

# The CRSP Act

- **Section 7:**
  - The hydroelectric power plants and transmission lines authorized by this Act to be constructed, operated, and maintained by the Secretary shall be operated in conjunction with other Federal power plants, present and potential,
  - **So as to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates**

# Dept. of Energy Organization Act

- Enacted by Congress on August 4, 1977  
( 91 Stat. 565; 42 U.S.C. 7101)
- **Section 302:**
  - Authorized creation of Western Area Power Administration.
  - Transferred power marketing and transmission from Interior to Energy.
  - In essence created partnership between Western (marketing & transmission) and Reclamation (generation) to work together implementing CRSP Act requirements.

# March 26, 1980 Agreement

- Defined transfer of functions, property from Reclamation to Western
- Reclamation responsible for
  - planning, design, construction, operation, and maintenance of electrical **power generation**, including water release scheduling and operation of generation units, and providing generator operative parameters so as to allow Western to optimize the utilization of power resources.
- Western responsible for:
  - planning, design, construction, operation and maintenance of the **transmission system; marketing** the power and **setting rates**; power dispatch; and providing project use power as required by Reclamation.

# Responsibilities

## Reclamation

- Owns, operates, and maintains dams and power plants
- Water management (reservoir management, irrigation, flood control, and water compact deliveries)
- Generates power which is delivered to Western at the plant transformers

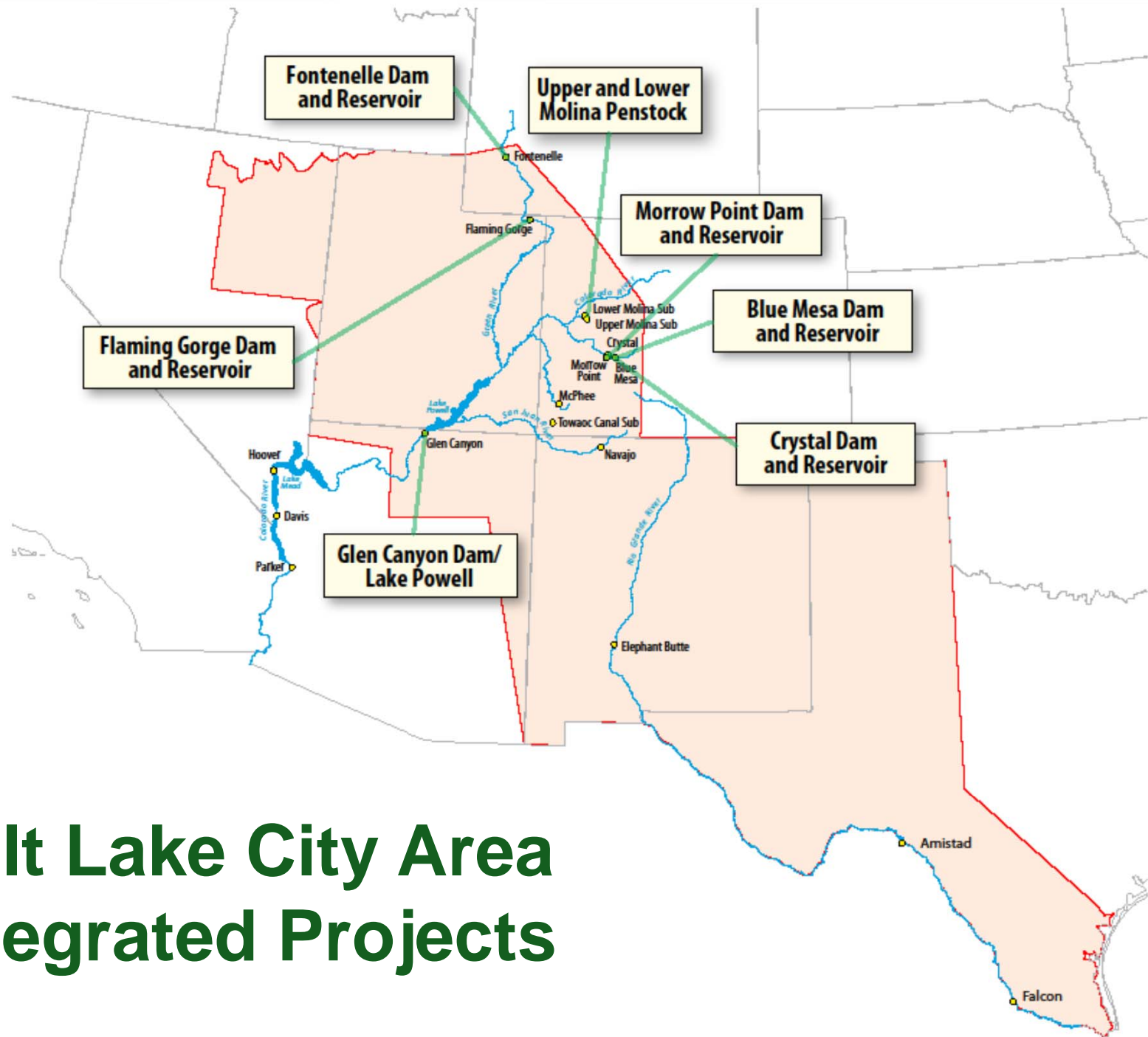
## Western

- Owns and operates the transmission system infrastructure
- Supports grid reliability (regulation and reserve capacity)
- Western markets, schedules and delivers energy to long term firm electric service customers
- Rate setting and repayment of project debt to U.S. Treasury from revenue

**Joint responsibility for support for environmental activities related to CRSP and participating projects.**

# CRSP Staffing

- CRSP Manager
  - Executive Administrative Assistant
- Administrative Officer
  - Finance Team including Asset Management (4 FTE)
  - Environmental Team (4 FTE)
- Power Marketing Manager
  - Contracts Team (4 FTE)
  - Rates Team (3 FTE)
- Energy Management & Marketing Office Manager
  - Power Scheduling & Settlements (7 FTE)
  - Real Time (15 FTE)
  - Water Planning/Scheduling (3 FTE)



# Salt Lake City Area Integrated Projects

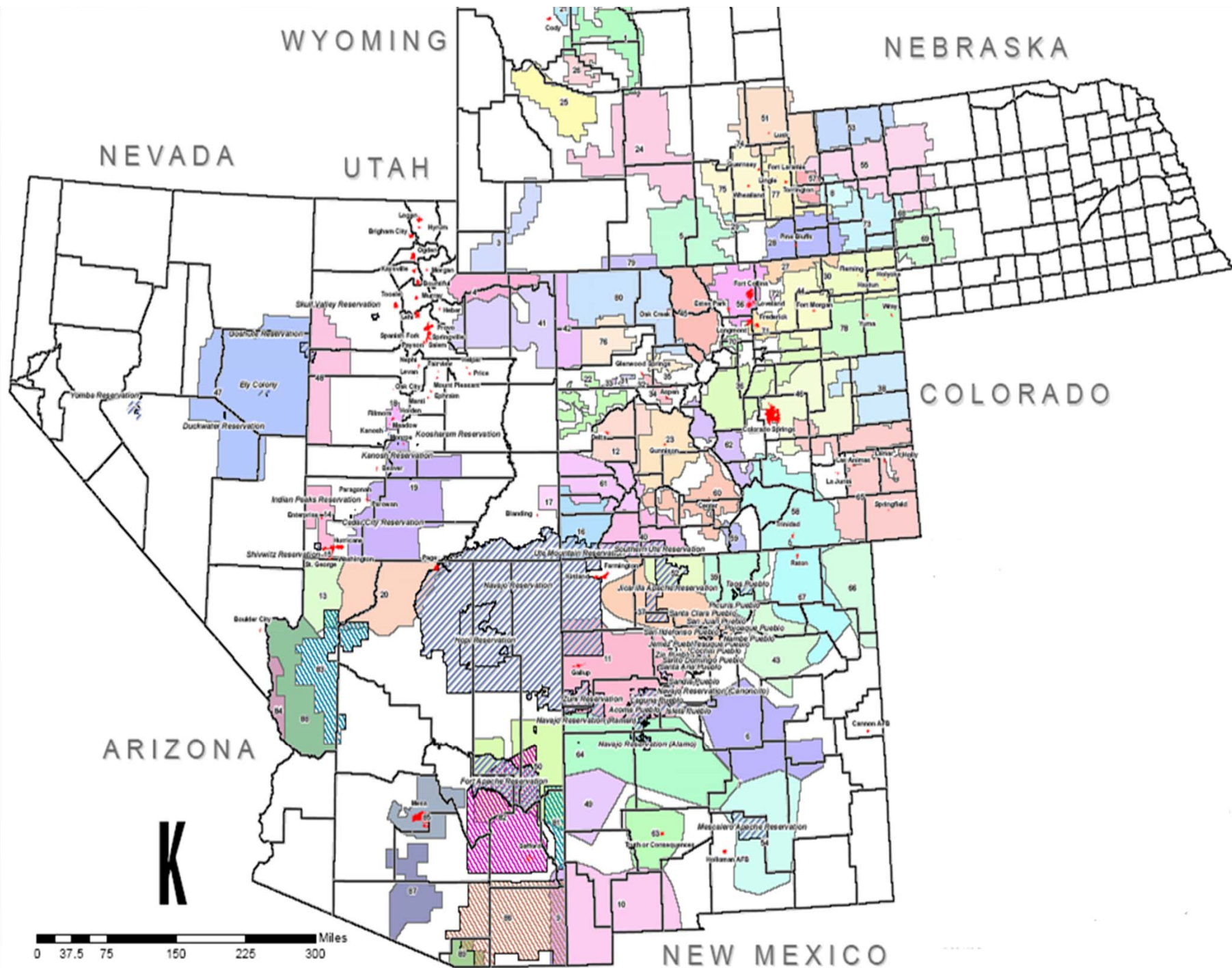
# Salt Lake City Area Integrated Projects

- 11 power plants
- 24 generating units
- 1,816 MW total installed capacity (73% from Glen Canyon)
- 4,198 GWh Net Generation (74% from Glen Canyon)
- 2,325 circuit miles (Arizona, Colorado, New Mexico, Utah, Wyoming)



# CRSP Customers

- 135 long-term customers
  - 54 Native American tribes
  - 64 Municipalities, cooperatives, irrigation districts
  - 17 Other
- Top 5 long-term energy sales customers
  - Deseret Generation & Transmission
  - Platte River Power Authority
  - Salt River Project
  - Tri-State Generation & Transmission Association
  - Utah Associated Municipal Power Systems



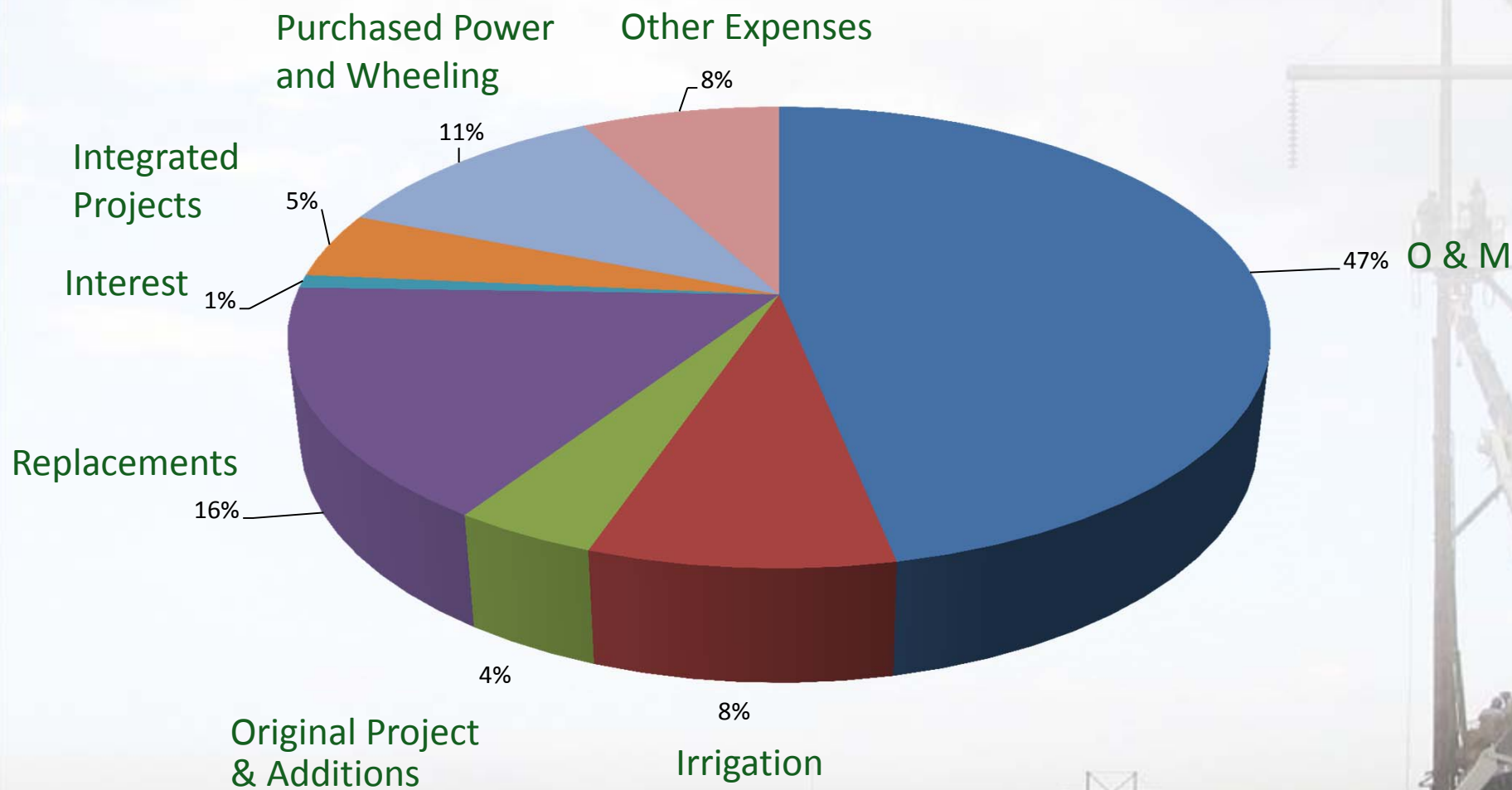
# Rate setting responsibility

- Rates are set using forecasts for a set of future years
- Annual rate calculation
- Reimbursable expenses/costs -- items the power customers are legally required to pay
  - Operations & maintenance
  - Required principal & interest payments
  - Amortized capital replacements (Western & BOR)
  - Purchase power to “firm” contractual commitments
  - Irrigation assistance for participating projects
  - Salinity Control Program – reduce salt in Colorado River water

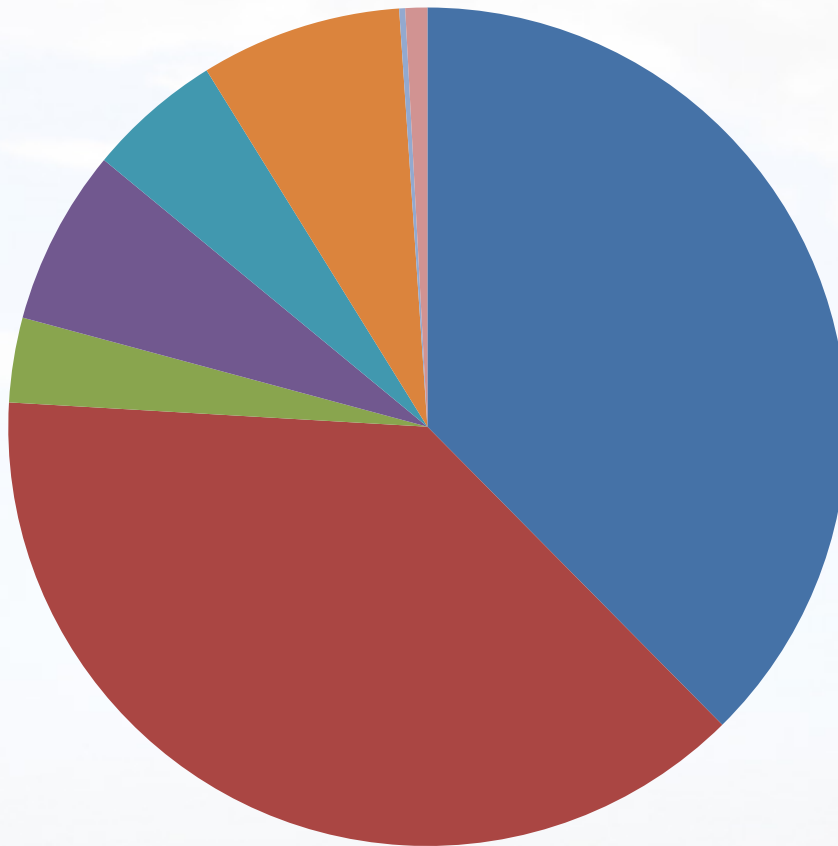
# Annual rate calculation

- Revenue requirement = the sum of all reimbursable expenses
- Rate = revenue requirement/projected energy sales
- Example:
  - \$200 required revenue to cover reimbursable costs
  - Contracts = 200 KWh of energy delivery
  - Rate = \$1.00/KWh
- Rate change is done *only* if projected revenue is insufficient to meet future projected expenses
- Basin Fund cash balance is not a component of the rate

# What's in the SLCA/IP Rate



# Revenue Sources

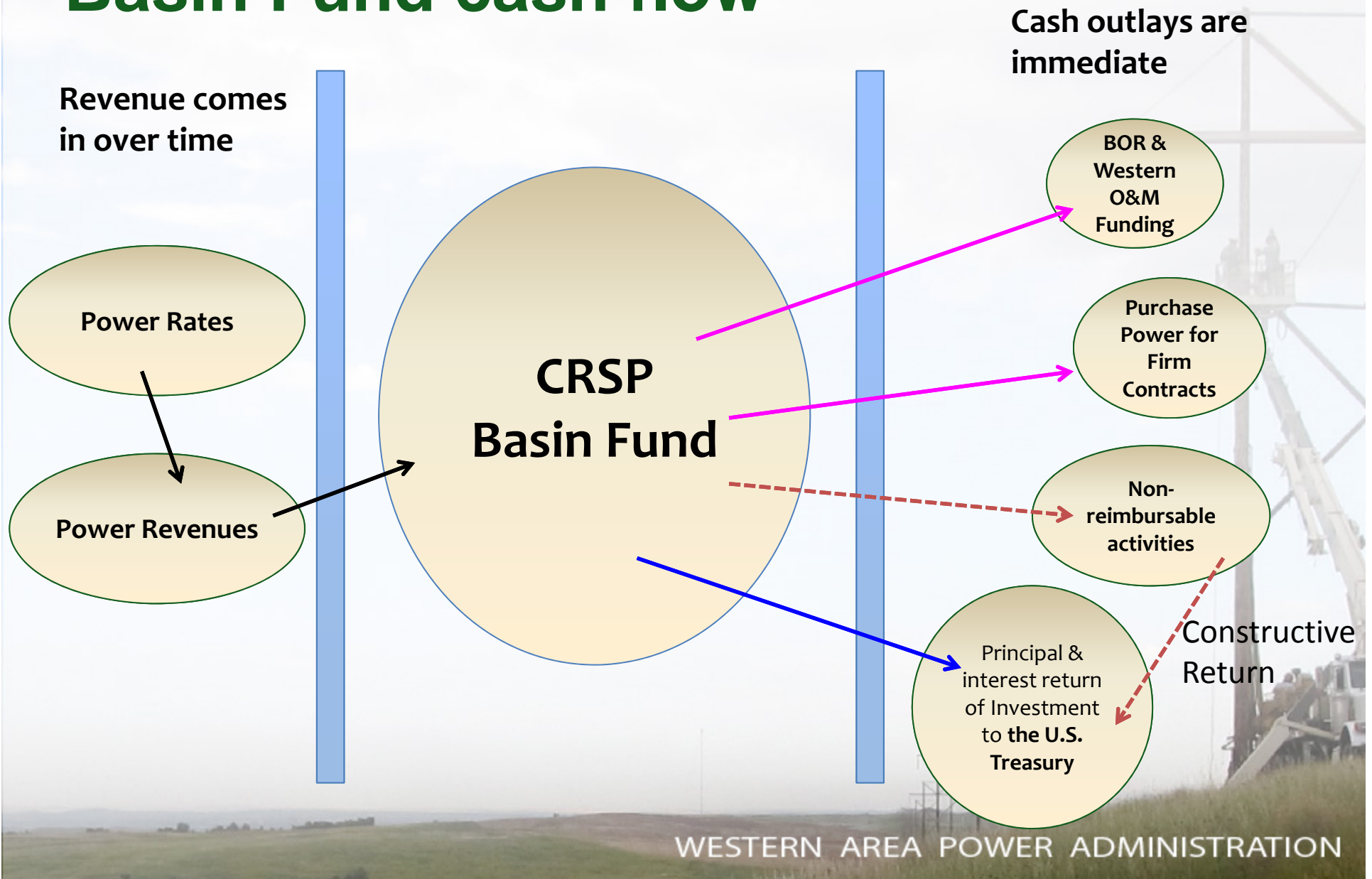


- Municipalities
- Cooperatives
- Federal Agencies
- State Agencies
- Irrigation Districts
- Native American Tribes
- Project Use
- Other

# CRSP profile for FY2014

- Total investment \$2.5 billion
- Repaid investment \$1.2 billion
- Total operating revenues of \$207.1 million
- Total Long-term energy Sales of \$148.8 million (5,226,157MWh)

# Basin Fund cash flow



# Basin Fund

- **Section 5** of the 1956 CRSP Act authorized a separate fund in the Treasury of the United States to be known as the **Upper Colorado River Basin Fund** ... for carrying out provisions of this Act.
- The fund is commonly known as the “**The Basin Fund.**”

# Basin Fund

- The Basin Fund is a **Revolving Fund**
- Is replenished by revenue receipts.
- Receives no federal appropriations for annual operating expenses
- Rarely receive appropriations for specific replacement projects

# Where did the FY 2014 Revenue go?

Total Operating Revenue	<b>\$207.1 million</b>
Operations & Maintenance	\$101.4 million
Purchase Power & Wheeling	\$ 85.2 million
States' MOA funds	\$ 11.5 million
Salinity Program	\$ 2.3 million
Repayment of Investment	\$ 4.2 million
Interest on Investment	\$ 2.5 million
Total Costs	<b>\$ 207.1 million</b>

# Funding Environmental Programs

## **Non-reimbursable expenses paid from the Basin Fund**

- Glen Canyon Dam Adaptive Management Program
  - Environmental program in the Grand Canyon
  - GCMRC research & monitoring activities
  - Legislation authorized \$7.85 million annually
  - With CPI increases now at \$10.8 million
- Upper Colorado River Endangered Fish Recovery Program
  - Endangered fish and critical habitat
  - Legislation authorized \$4.0 million annually
  - With CPI increases now at \$5.5 million

# Funding Environmental Programs

## Non-reimbursable expenses paid from the Basin Fund

- San Juan River Recovery Program
  - endangered fish species program
  - Legislation authorized \$2.0 million annually
  - with CPI increases now at \$2.7 million, annually
- Experimental Flows
  - High Flow Experiments (HFE) impact on power sales
  - HFE average \$1.2 million
  - March – September 2000 Low Summer Steady Flow (\$25 million)
  - Cost driven by market prices, volume, duration
- Quality of Water & Consumptive Use Studies
  - Averages \$1 million annually

# Environmental Funding Sources

- Cash used to fund the environmental programs comes from revenue collected that would otherwise have been returned to the US Treasury for:
  - Interest
  - Original Project costs
  - Aid to Irrigation and Participating Projects
- As the revenue from these items decrease it impacts our ability to fund the environmental programs

# QUESTIONS ?

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# Contact information

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