



Upper Colorado River Commission Federal Funding to Improving Water Management in the Upper Division States

DECEMBER 05, 2024

Upper Division States Implementing Conservation Programs and World Class Water Use Observing Network

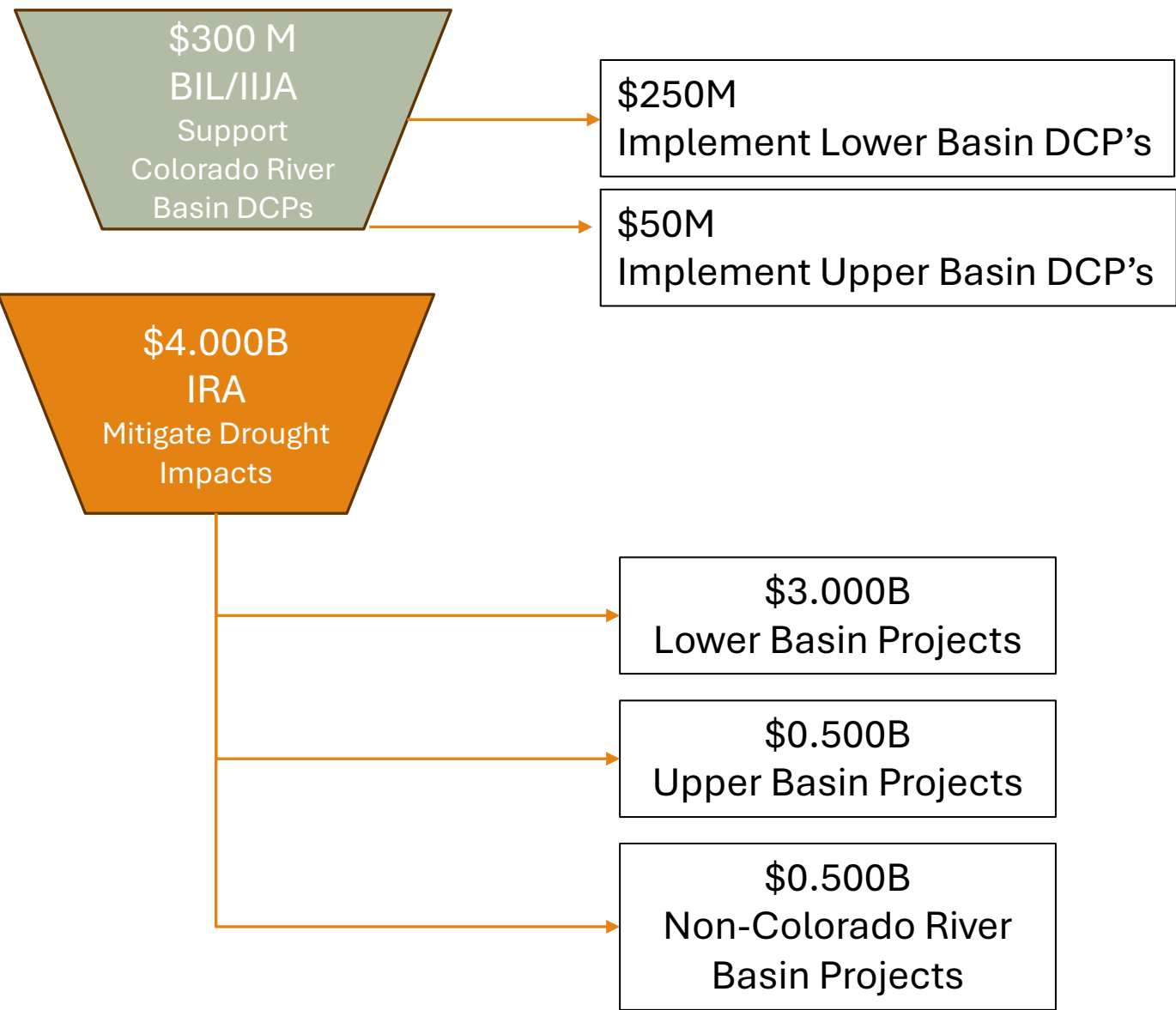
Conservation Programs

- Funding an exploration of the impacts and feasibility of water conservation programs to mitigate the impacts of drought in the Upper Basin
- Studying the impacts of water conservation programs on sustainability of irrigated agriculture
- Developing tools for local drought resiliency

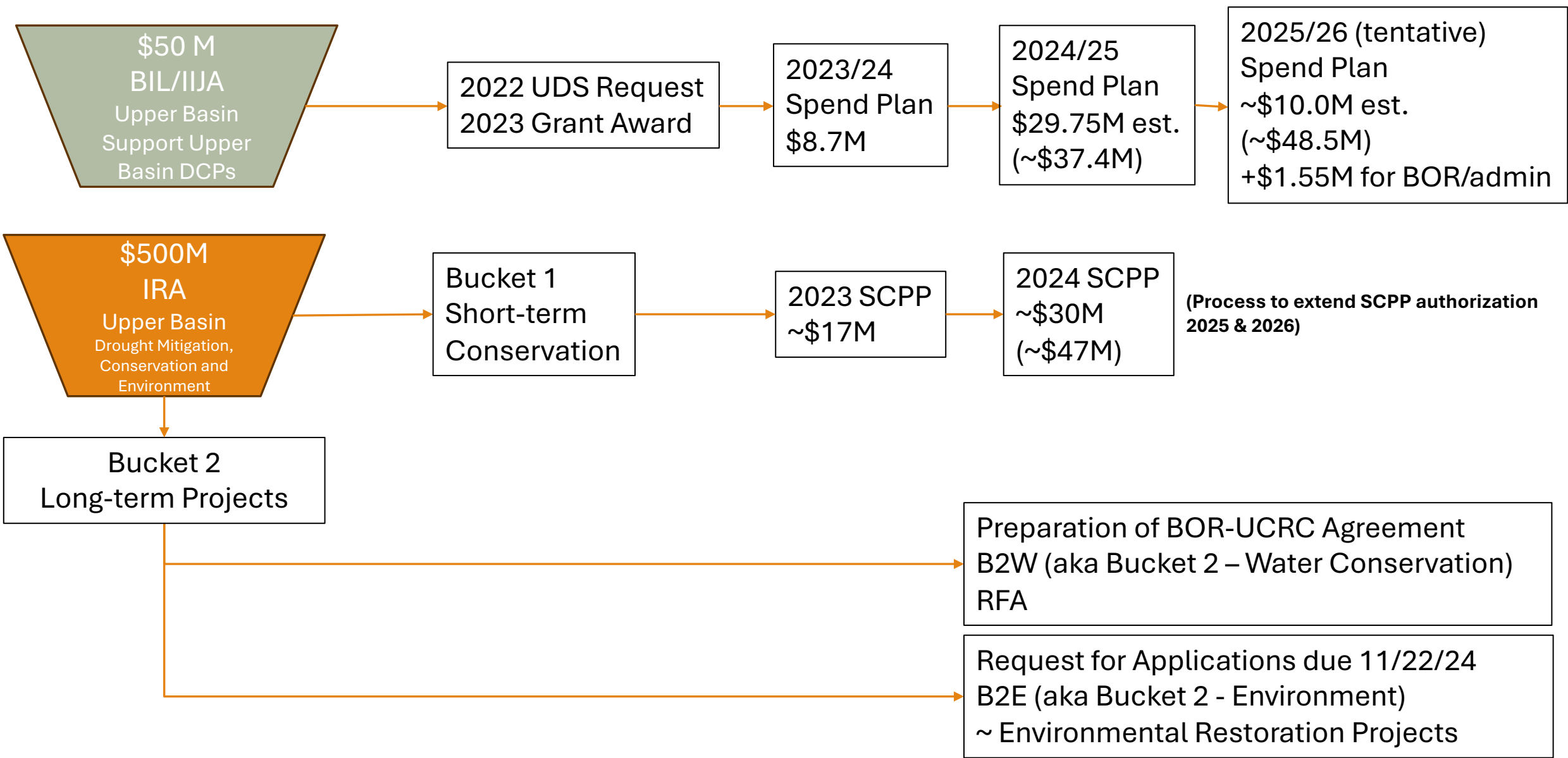
Water Use Observing Network

- Install new observing network to improve accuracy of water use estimates
- Improve performance of OpenET tools used by Reclamation and the UCRC

Colorado River Basin - Federal Grants



Upper Basin - UCRC Federal Grants



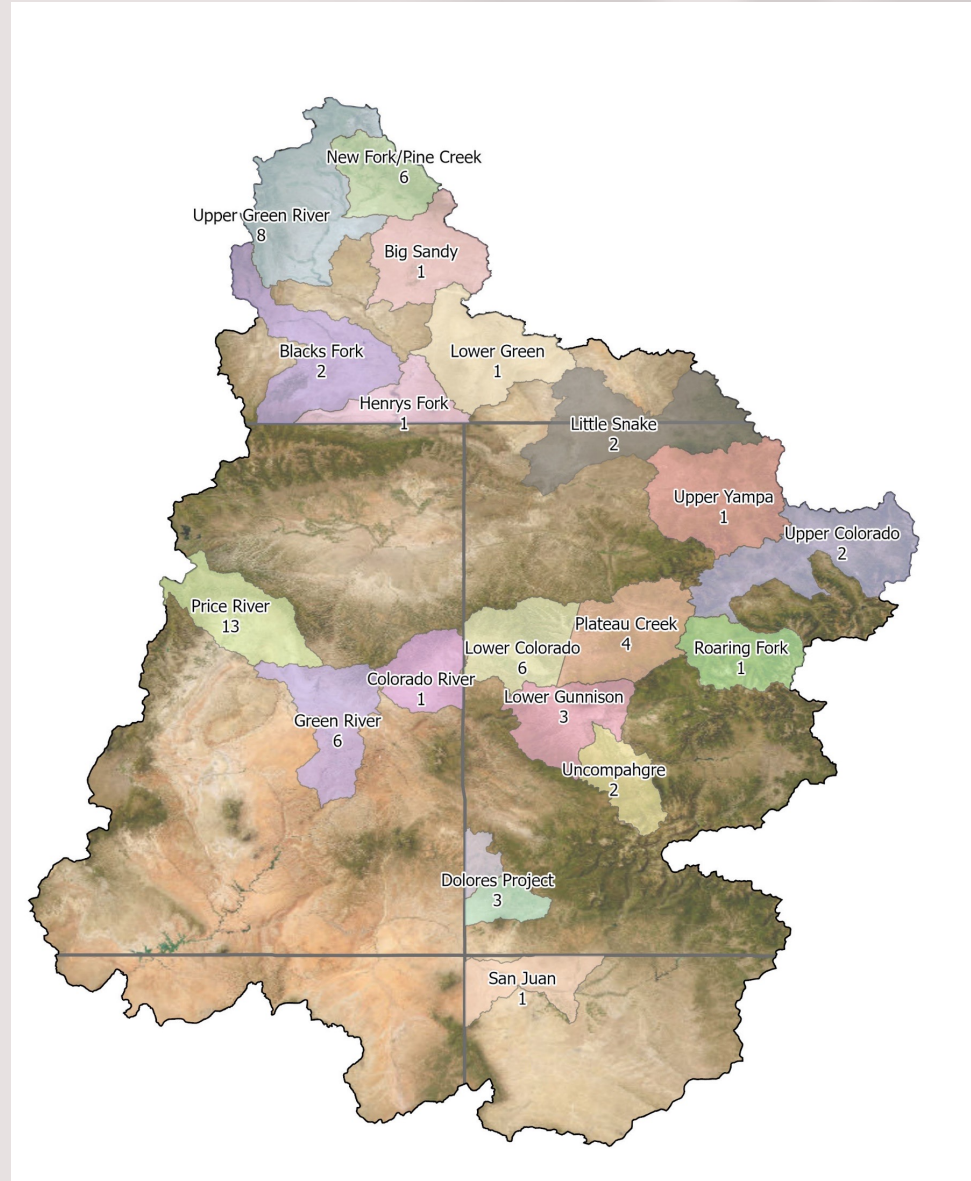
2023 SCPP

Project Types Funded in 2023:

- Municipal
- Industrial
- Agricultural
- Storage Forbearance

State	Number of Projects Funded	Estimated Water Conserved (ac-ft)	Dollar Amount for Funded Projects
CO	22	2,517	\$991,929
NM	1	4,633	\$1,205,182
UT	20	15,091	\$5,437,255
WY	20	11,338	\$5,749,557
CO/WY	1	4,231	\$2,585,110
Total	64	37,810	\$15,969,035

Average Price per ac-ft = \$422



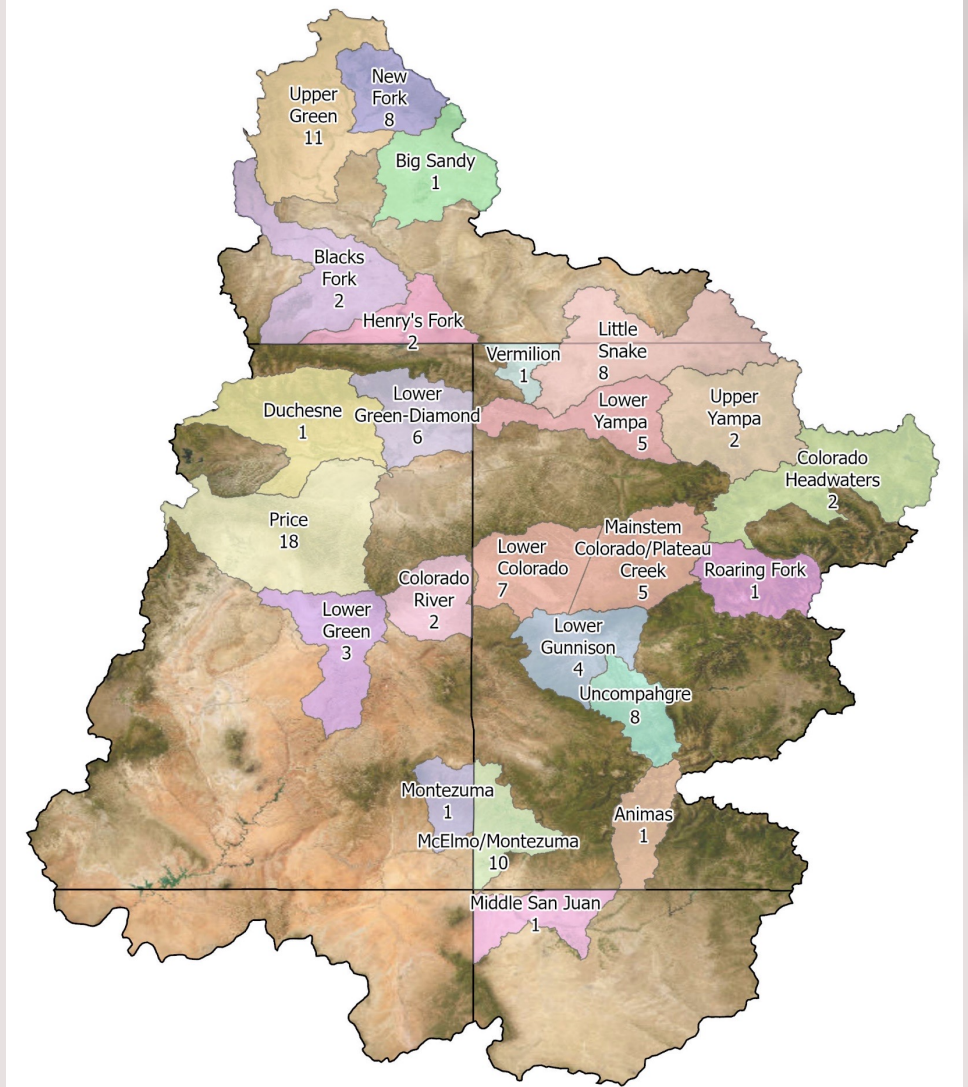
2024 SCPP

Project Types Funded in 2023:

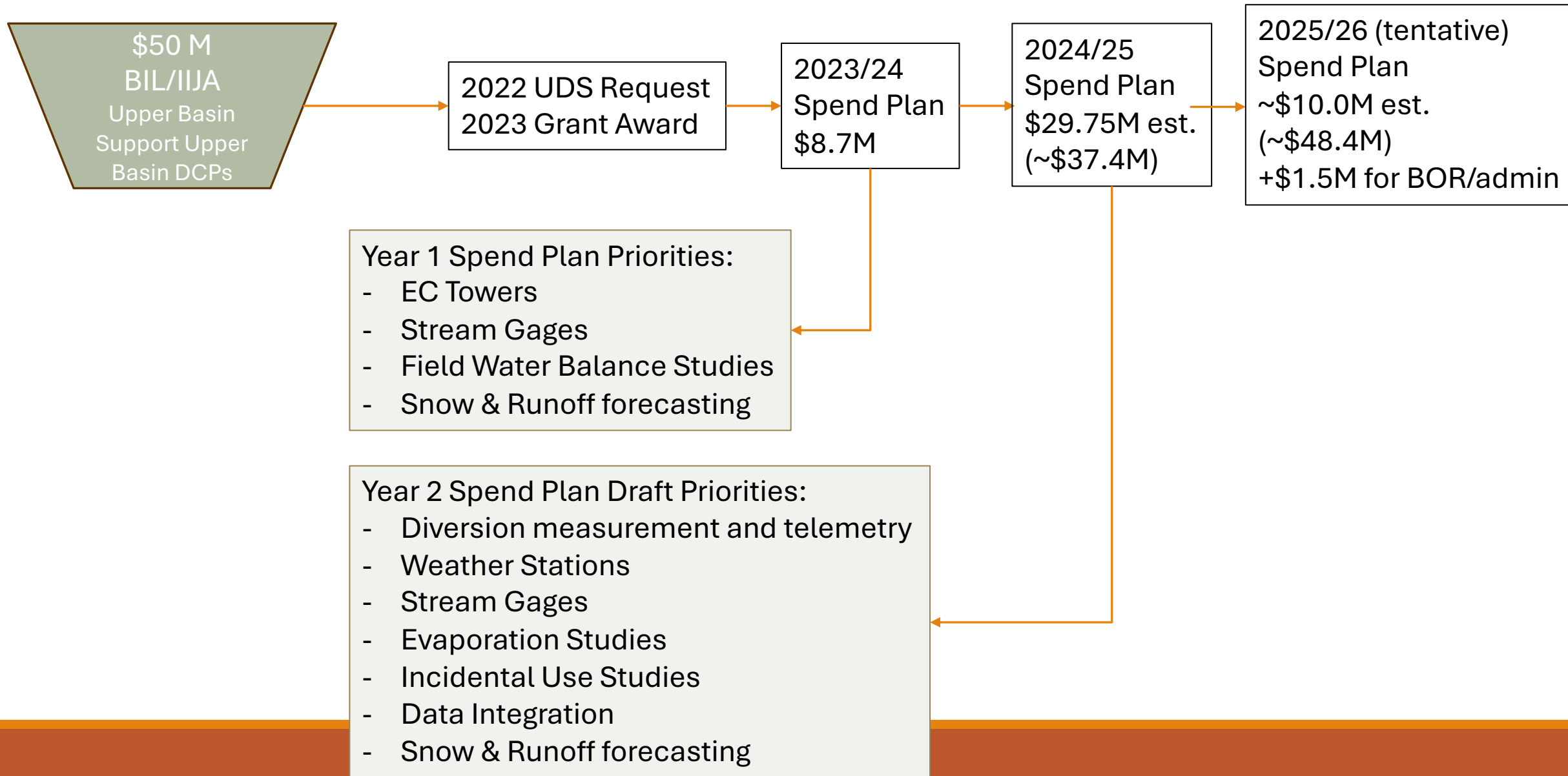
- Municipal
- Agricultural
- Storage Forbearance

State	Number of Projects Funded	Estimated Water Conserved (ac-ft)	Dollar Amount for Funded Projects
CO	46	14,239	\$7,204,730
UT	31	22,351	\$9,954,819
NM	1	4,933	\$1,479,900
WY	26	19,209	\$8,493,429
CO/WY	6	2,899	\$1,475,392
Total	110	63,631	\$28,608,270

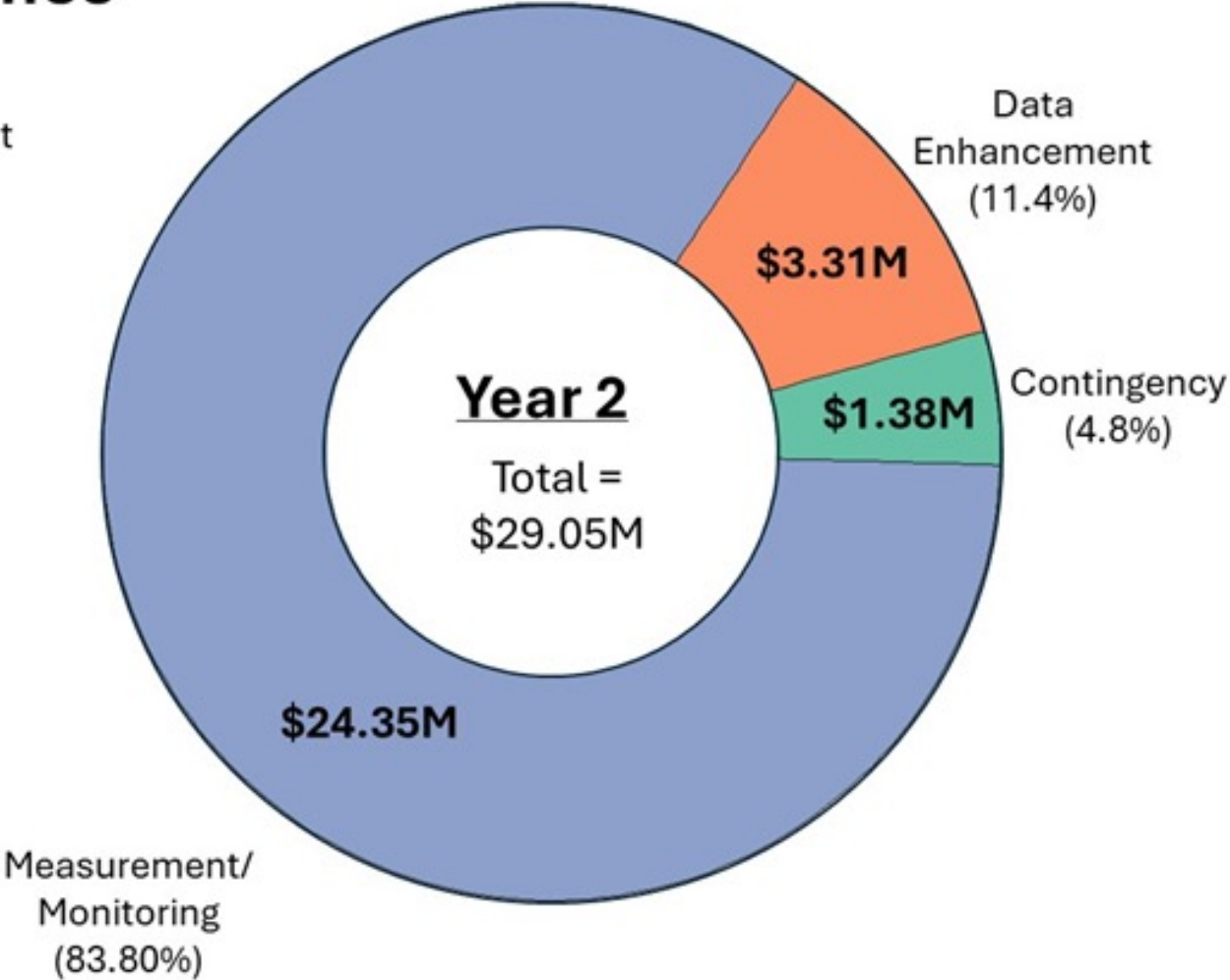
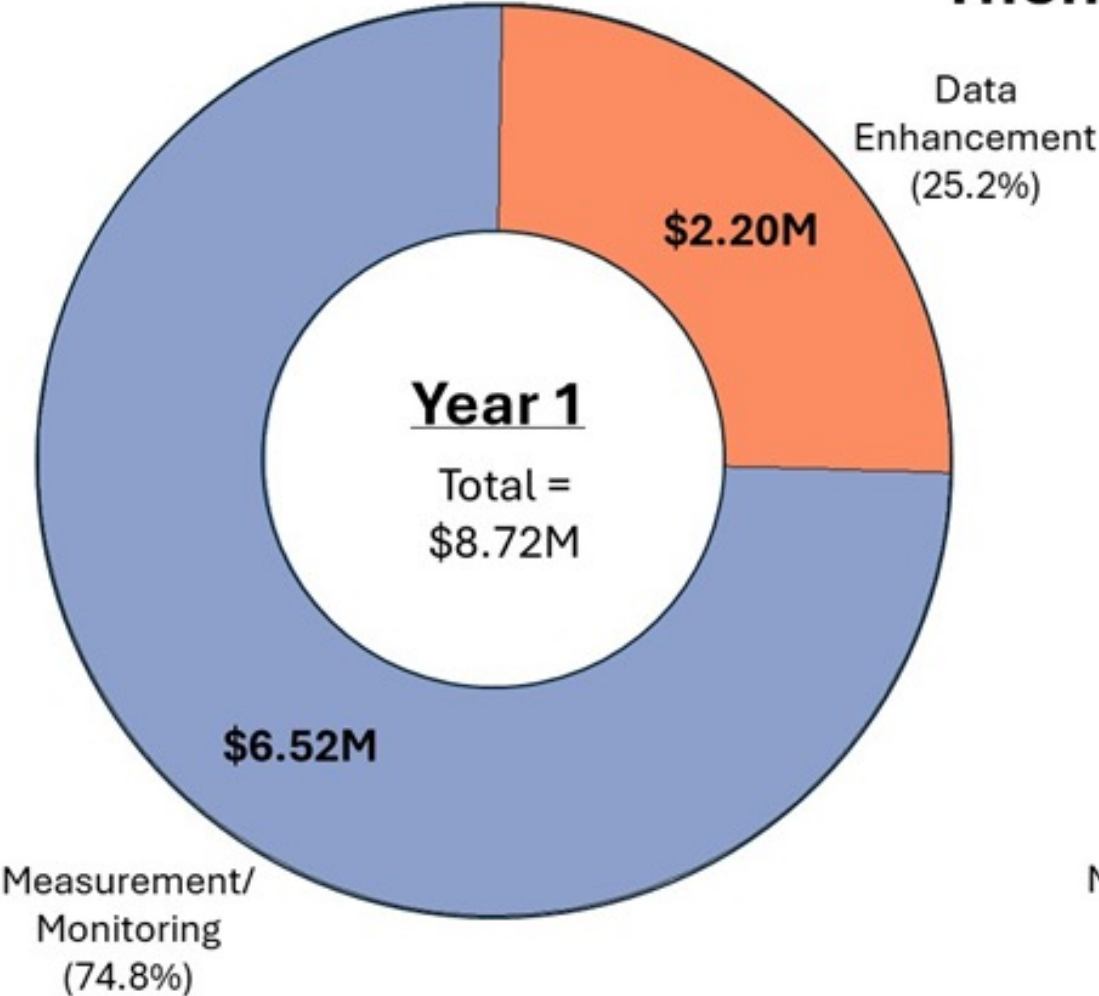
Average Price per ac-ft = \$449



BIL/IIJA Federally Funded Activities



UCRC BIL/IIJA Spending Themes



BIL DCP Year 1 Accomplishments

EC Towers

- 9 Installed
- 2 Funded (CWCB – Kremmling & UGS – Green River)
- 1 Spring 2025 Installation

Stream Gages

- 31 Installed, Re-installed or funded

Airborne Snow Observation

- Expansion of CWCB Program

Field Water Balance Studies

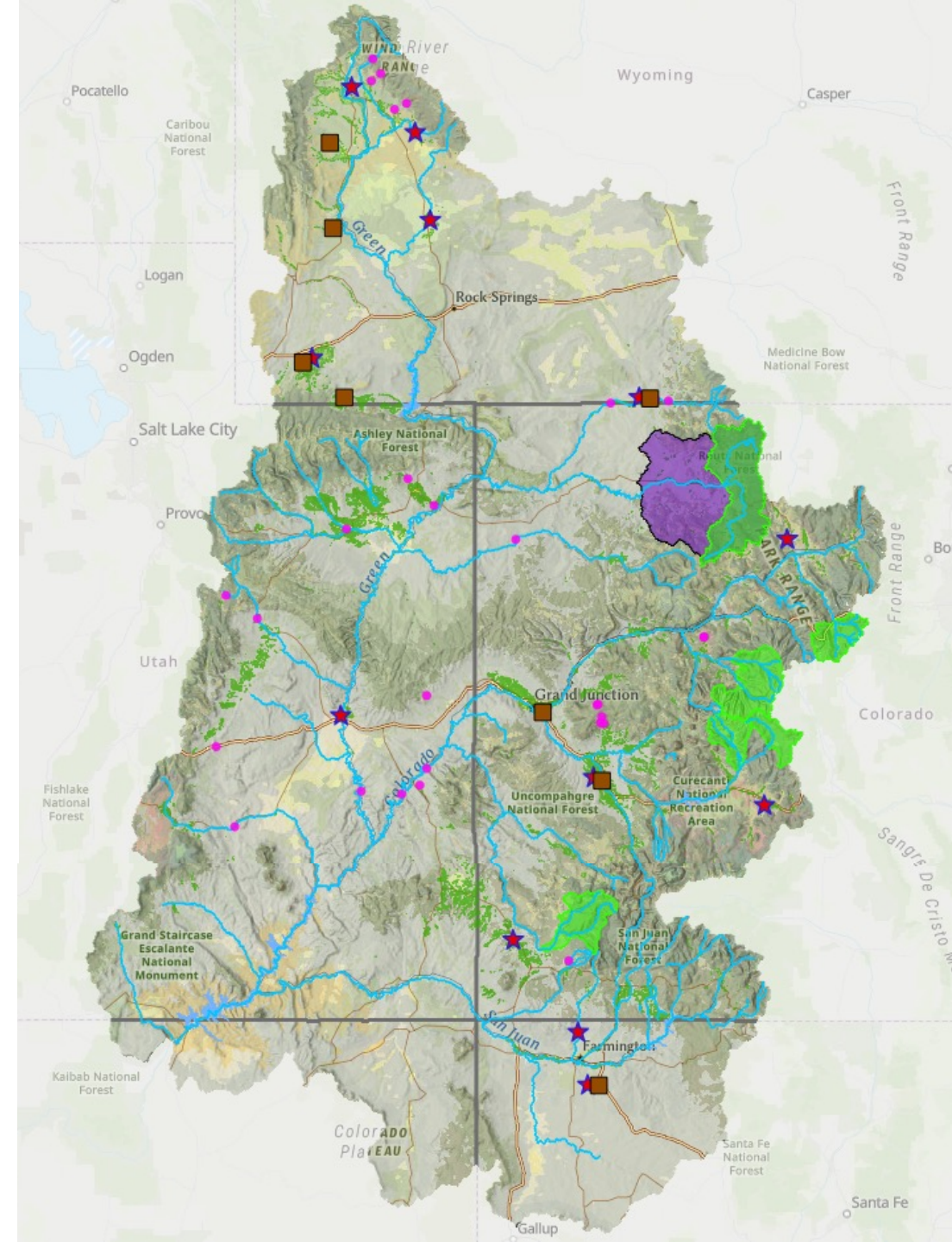
- 5 On-going
- 3 Planning

Soil Moisture Study

Weather Stations (moved to 2025 Installations)

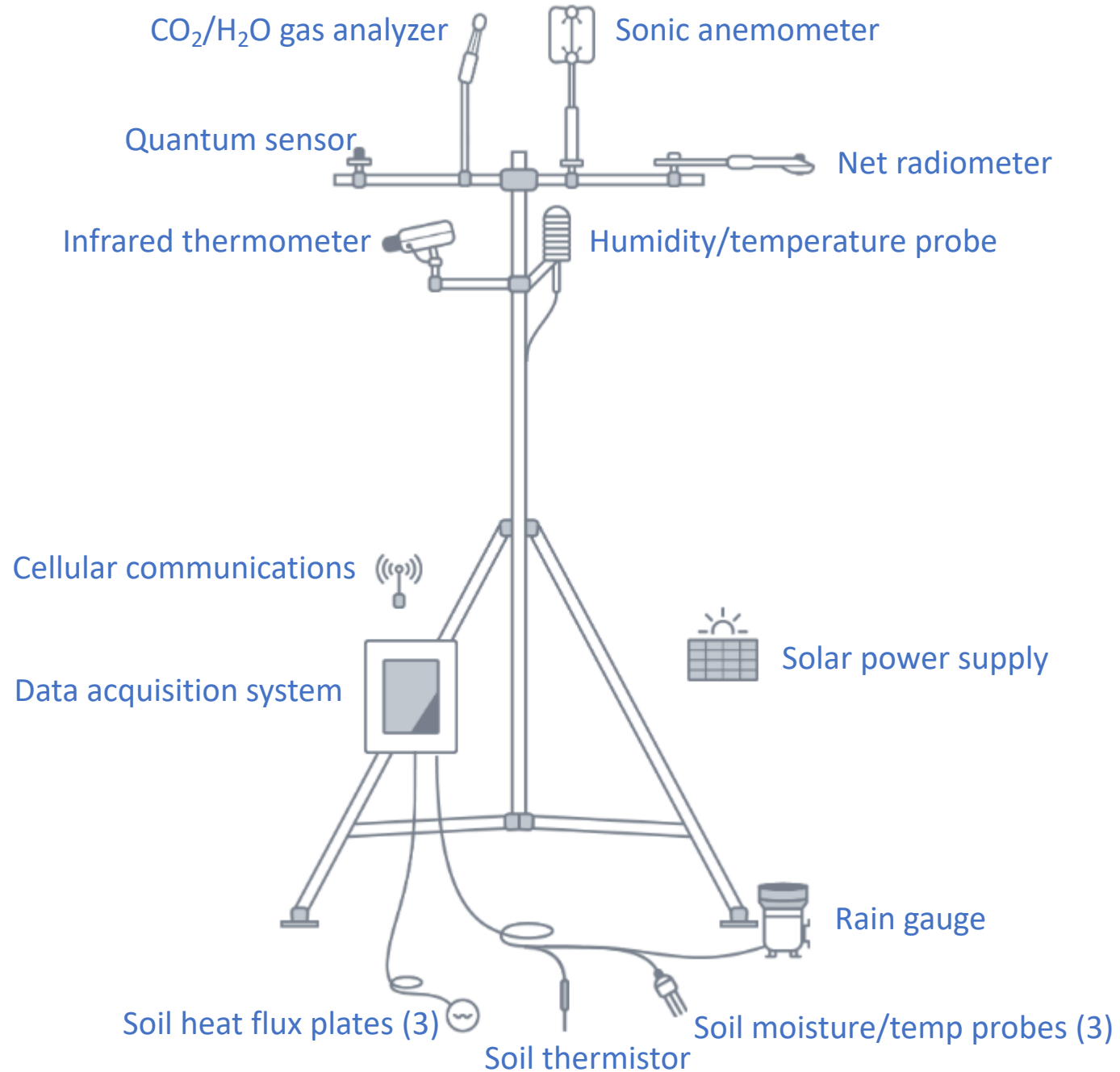
Legend

- ★ Eddy Covariance Towers (12)
- Streamgages (31)
- Studies (8)
- ASO Investigations
- Soil Moisture Study



Eddy Covariance Tower

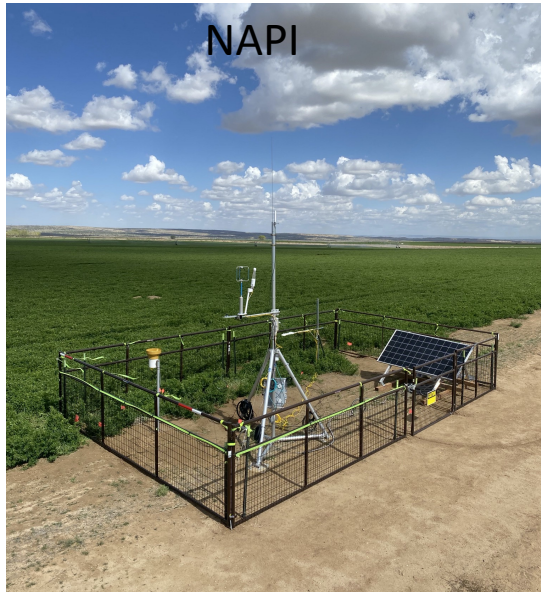
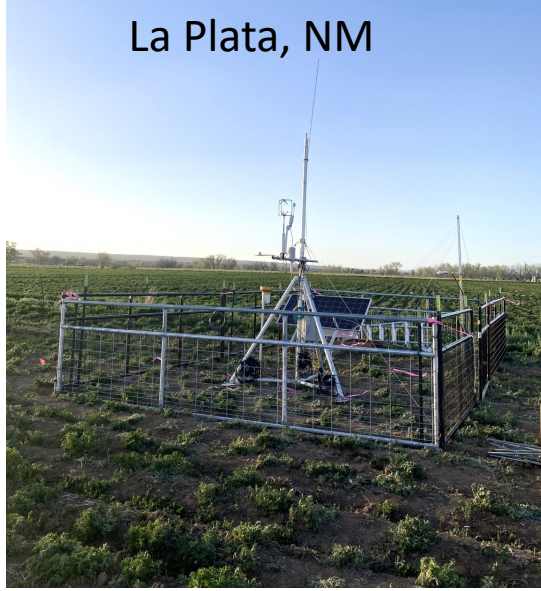
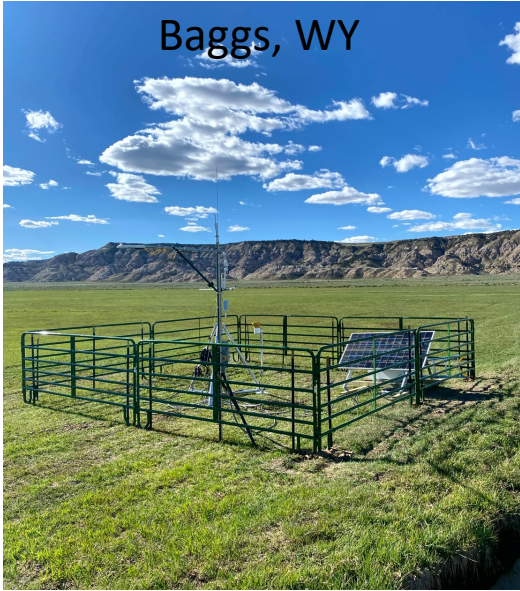
- EddyFlux System
 - LI-7500DS CO₂/H₂O Analyzer
 - Gill® Windmaster
 - SmartFlux System
- Premium Biomet Package
 - LI-COR Data Acquisition System with programs
 - LI-COR Data Retention Module with back-up battery
 - A preconfigured enclosure
 - Vaisala HMP155 Humidity and Temperature Probe with RM Young Radiation Shield
 - Texas Electronics TR-525M Tipping Bucket Rain Gauge
 - LI-190R Quantum Sensor
 - Stevens Hydra Probe II Soil Probes (3)
 - Kipp & Zonen CNR4 Net Radiometer with optional CNF 4 Ventilation Unit
 - HukseFlux HFP01SC Self-calibrating Soil Heat Flux Plates (3)
 - Add Data Retention Module
- Cellular Communications Package
- Solar Power Supply
- Heavy Duty Adjustable Tripod
- EddyPro 7
- FluxSuite



EC Tower Installations



EC Tower Installations



BIL DCP Year 2 Plans (cumulative)

EC Towers

- 9 Installed
- 2 Funded (CWCB – Kremmling & UGS – Green River)
- 1 Spring 2025 Installation

Stream Gages

- 31 Installed, Re-installed or funded
- **61 Additional Installations**

Airborne Snow Observation

- **Expansion of CWCB Program**
- New Target Area in Wind River Range

Field Water Balance Studies

- 5 On-going
- 3 Planning
- **5 Additional Studies (Incidental Use, Evaporation, etc)**

Soil Moisture Study

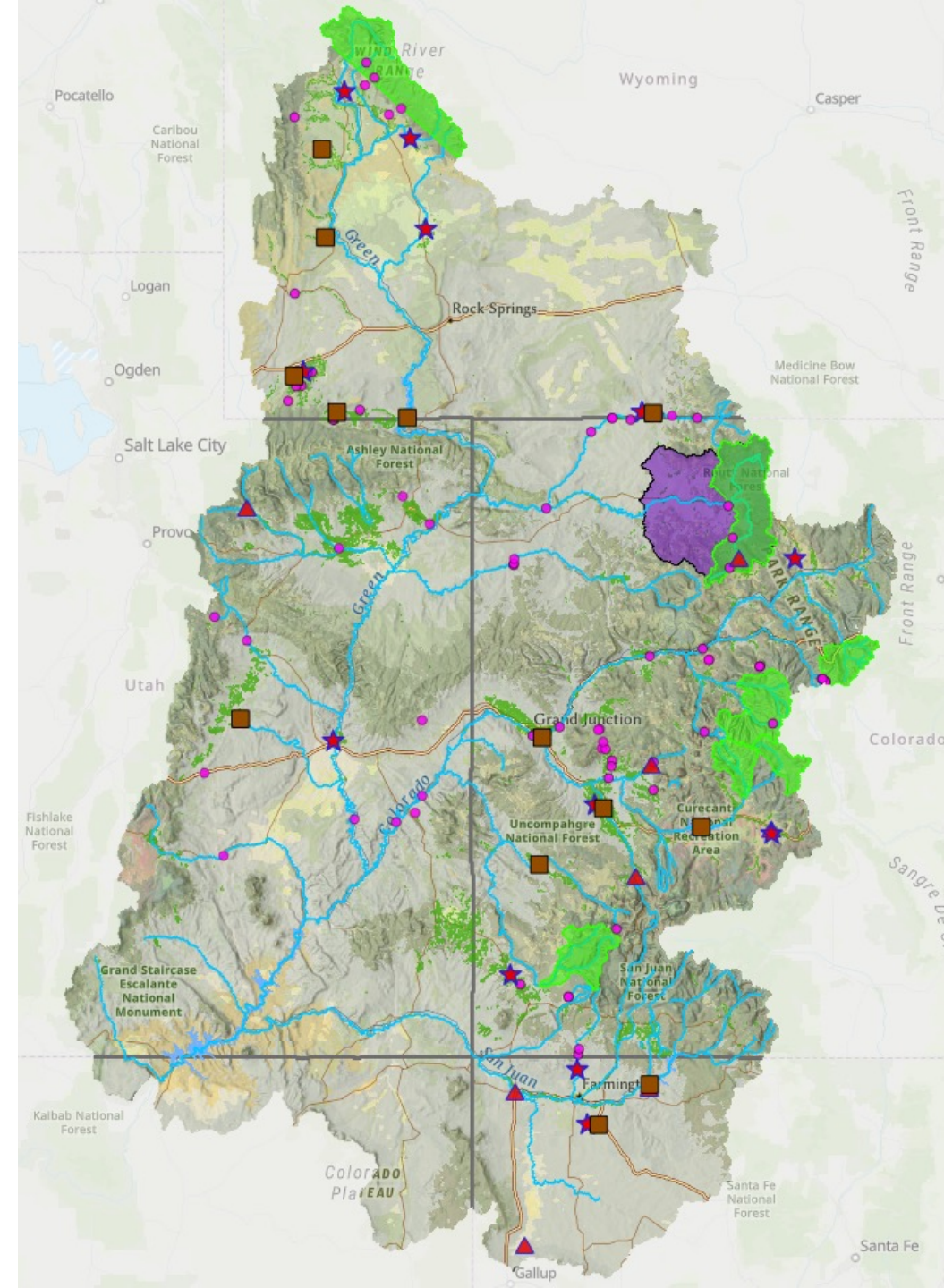
Weather Stations

- **8+ New Weather Stations**

Diversion Measurement and Telemetry

Legend

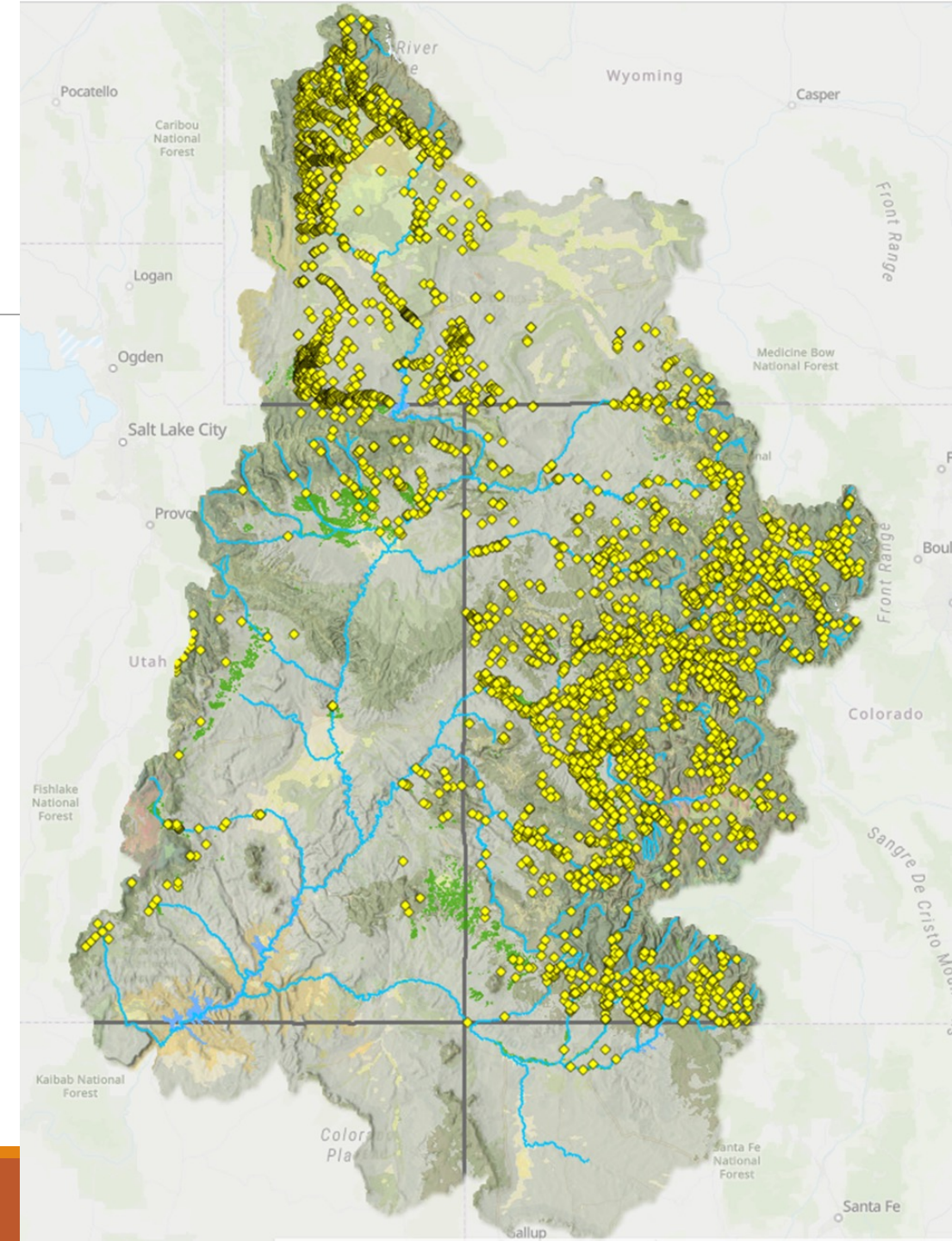
- ★ Eddy Covariance Towers (12)
- Streamgages (92)
- Studies (13)
- ASO Investigations
- Soil Moisture Study
- ▲ Weather Stations (8+)



BIL/IIJA Year 2 Diversion & Telemetry Funding

State	Funding Availability (Up to)	Potential Need
Colorado	\$7.0 M	~2,800
New Mexico	\$0.1 M	~ 6
Utah	\$2.9 M	~ 180
Wyoming	\$6.0 M	~2,100

- Programs to start as soon as possible
- Report on progress at June 2025 UCRC Meeting
- Report on progress at 2025 CRWUA UCRC Meeting, potential to revisit funding distribution



Consumptive Use Sectors

The BIG 3:

63.4% Irrigated Agriculture

16.5% Trans-Basin Diversions

12.2% Major Reservoir Evap

92.1% of Consumptive Use Sectors

Use Sectors Cont.

- 3% Thermal Power
- 2.1% Municipal & Industrial
- 1.9% Minor Reservoir Evap.
- 0.5% Stock Ponds
- 0.2% Livestock
- 0.2% Minerals
- 100% Total UB from 2018 CU&L Report-Reclamation