

American  
Conservation  
Coalition

# RESTORING THE GREAT SALT LAKE

*How Congress and the Administration Can  
Accelerate Utah's State-Led Recovery Strategy*



# TABLE OF CONTENTS

|    |                                                          |
|----|----------------------------------------------------------|
| 03 | .....EXECUTIVE SUMMARY                                   |
| 06 | .....PART I: WHY GREAT SALT LAKE MATTERS                 |
| 09 | .....PART II: GUIDING PRINCIPLES FOR FEDERAL ENGAGEMENT  |
| 11 | .....PART III: OPPORTUNITIES TO SUPPORT LAKE RECOVERY    |
| 26 | .....PART IV: PRIORITIZING AN INITIAL FEDERAL INVESTMENT |
| 28 | .....PART V: FEDERAL FUNDING AND GOVERNANCE OPTIONS      |
| 32 | .....CONCLUSION                                          |



## AUTHORED BY



**Shawn Regan**

Senior Fellow at the Manhattan Institute,  
American Conservation Coalition Advisor

**Shawn Regan** is a senior fellow at the Manhattan Institute and a senior advisor at American Conservation Coalition. He has over 16 years of experience in Western natural resource policy, including research and writing on the Great Salt Lake in the Manhattan Institute's *City Journal* and in *The Washington Post*. His writing has also appeared in *The New York Times*, *The Wall Street Journal*, *The Los Angeles Times*, *National Review*, *Reason*, *High Country News*, and more. His research has been published in journals such as *Science*, *Natural Resources Journal*, *Utah Law Review*, and other academic publications.

Before joining MI, Regan was the vice president of research at the Property and Environment Research Center, where he also served as executive editor of *PERC Reports*. He has testified before both houses of Congress and has appeared on national radio outlets such as *NPR* and *Marketplace*. He holds a M.S. in applied economics from Montana State University and degrees in economics and environmental science from Berry College. He is also a former backcountry ranger for the National Park Service.

*This report was compiled with contributions from Isaiah Menning, External Affairs Director at the American Conservation Coalition.*



## EXECUTIVE SUMMARY

America has the chance to do what no country has done before: restore a declining saline lake before it's too late. The Great Salt Lake, the largest saltwater lake in the Western Hemisphere, is slowly drying. Its collapse would be an ecological, economic, and public-health disaster. More than a local environmental issue, the lake supports major national and even international industries, provides critical habitat for millions of migratory birds, and helps shape the climate and air quality of the broader region. Whether it recovers or continues to decline will have consequences far beyond Utah's borders.

Around the world, saline-lake decline has often followed a grim pattern. The Aral Sea was devastated by Soviet planners who diverted the rivers that fed it, leaving behind ecological ruin, economic losses, and severe dust pollution. Lake Urmia in Iran has nearly vanished after decades of water withdrawals and mismanagement, threatening local ecosystems and livelihoods. In California, Owens Lake declined so severely after Los Angeles diverted its tributary streams that its dry lakebed became one of the nation's worst sources of particulate dust pollution.

The Great Salt Lake is on a similar trajectory. Decades of drought and upstream water diversions have pushed it to dangerously low levels. In 2022, Great Salt Lake reached a historic low, shrinking to about half its typical size. After another warm and dry winter, it is again at risk of falling toward record lows. As the lake recedes, exposed lakebed sends dust carrying arsenic, mercury, lead, and other contaminants toward nearby communities, while also reducing lake-effect snow, damaging wetlands, and putting migratory birds, brine shrimp production, mineral industries, recreation, and the broader regional economy at risk.



Utah is determined to be the exception to this trend. The state has responded with an ambitious and increasingly sophisticated recovery strategy built around voluntary, market-based conservation strategies. It has modernized its water laws, created new institutions to coordinate lake-recovery efforts, invested significant public resources, and drawn in major private, philanthropic, and nonprofit partnerships. Rather than defaulting to a top-down regulatory model, Utah has built the tools needed to be the first to restore a drying saline lake—and do it while respecting the rights of existing water users, working with local communities, and relying on voluntary, market-based approaches.

Now America has a chance to help scale that approach to match the size of the problem. In its latest budget request, the Trump administration proposed a \$1 billion federal investment to recover the Great Salt Lake, reflecting the lake's regional and national significance. That investment would come at a pivotal moment. Utah has already built much of the institutional foundation for recovery, but the scale of the crisis exceeds what the state can accomplish on its own. The Great Salt Lake watershed crosses state lines, federal agencies manage important lands and resources in the basin, and the lake's decline implicates national interests in air quality, migratory birds, and mineral production.



This report offers a roadmap for how Congress and the administration can help accelerate Utah's state-led recovery strategy. It argues that federal engagement should enable Utah's recovery strategy, not replace or duplicate it. Washington cannot save the lake by federalizing its management. Instead, Congress and the administration should provide targeted support that scales the tools most likely to put more water in the lake, makes those gains measurable and durable, and fills gaps that Utah cannot address on its own.

An initial federal investment should meet the following criteria:

- First, does it deliver measurable water to the lake? The first test of any investment should be whether it helps deliver real water to Great Salt Lake—not merely theoretical savings on paper.
- If not, does it improve the “institutional plumbing” needed for sustained recovery? Water measurement, metering, and depletion accounting may not raise lake levels directly, but they help determine whether conservation investments can be trusted, scaled, and sustained.
- Overall, does it reinforce Utah’s voluntary, state-led, market-based approach? Federal dollars should expand the reach of Utah’s existing strategy, not substitute it for a more centralized regime.

Agriculture is the dominant human use of water in the Great Salt Lake basin, which means no serious recovery strategy can succeed without agricultural producers as partners. Utah has made significant progress developing voluntary agricultural leasing programs in recent years. Such programs respect existing water rights, compensate willing participants, allow farmers to retain their underlying rights, and dedicate conserved water to the lake. Federal funding could help Utah scale these transactions and extend voluntary conservation into the Idaho and Wyoming portions of the Great Salt Lake basin, where Utah cannot act on its own.

Utah has also invested heavily in helping farmers modernize irrigation systems, improve delivery infrastructure, and use water more efficiently. Federal support could expand these programs, but it should be tied wherever possible to measurable reductions in consumptive use or legally protected water deliveries to the lake. Efficiency improvements are valuable, but they matter most for lake recovery when they translate into actual water reaching Great Salt Lake.

Municipal and industrial conservation should also play a meaningful supporting role. Recent state analyses show that municipal and industrial uses account for a larger share of basinwide depletion than previously understood. Utah has already invested in secondary water metering, turf replacement, and water-wise landscaping. Federal resources could help accelerate these efforts, especially in fast-growing communities where outdoor water demand is rising.

The report also identifies several supporting investments that can make the broader recovery effort more effective. Water measurement, accounting, and verification should be treated as core infrastructure for every major investment. Without accurate water measurement, it is difficult or impossible to know whether conserved water is reaching the lake. A relatively modest investment in this backbone would multiply the effectiveness of water leasing, agricultural optimization, municipal conservation, and interstate coordination.

Federal investment should also help remove avoidable flow impediments, including invasive phragmites. Phragmites consumes more water than native vegetation and has spread across tens of thousands of acres around the lake and its tributary wetlands. Removing it can reduce water losses, improve wetland hydrology, restore habitat, and help more water reach the lake. Because federal agencies manage important lands in the ecosystem, including the Bear River Migratory Bird Refuge, federal funding is especially well suited to scaling treatment and long-term maintenance.

Supply augmentation can also help. Utah’s long-running cloud-seeding program offers one promising tool, especially as technology improves monitoring and verification. Federal funding could help expand

operations in the Great Salt Lake basin and upper Bear River watershed while supporting better evaluation of how much additional precipitation ultimately reaches the lake. Another potential opportunity is the Newfoundland Basin, where infrastructure originally built to pump excess lake water into the desert during the 1980s flood years may now be modified to recapture and redirect water toward the lake.

As a general guide, Congress should consider allocating an initial federal investment across three broad buckets:

- 50 to 60 percent for voluntary water conservation and transactions, including water leasing, agricultural optimization tied to lake benefits, municipal conservation, secondary metering, turf conversion, and targeted industrial water transactions.
- 15 to 25 percent for measurement, accounting, delivery, and implementation infrastructure, including meters, stream gauges, telemetry, evapotranspiration accounting, transaction verification, and delivery systems.
- 15 to 25 percent for supporting restoration, interstate coordination, and supply augmentation, including phragmites removal, federal land restoration, voluntary conservation in Idaho and Wyoming, upper Bear River coordination, cloud-seeding expansion, and feasibility work for projects such as Newfoundland Basin water recapture.

For the initial federal investment, this report recommends a state-led implementation model supported by targeted federal funding. The bulk of federal funds should flow through Utah-led channels, likely through the Bureau of Reclamation, to scale voluntary leasing, agricultural optimization, municipal conservation, measurement, and restoration projects already aligned with the state's Great Salt Lake Strategic Plan. A smaller share should be reserved for needs Utah cannot meet on its own, including interstate Bear River coordination, federal land restoration, basinwide monitoring, and targeted infrastructure or supply-augmentation efforts.

Over time, Congress may choose to formalize its support through a dedicated federal-state partnership or Great Salt Lake-specific authorization. But the immediate priority should be implementation. Utah has already built the institutions and political foundation needed to act. Federal policymakers should use the proposed investment to accelerate that work, test what delivers the greatest lake benefits, and build a record of results before creating a formal federal program.

The story of saline lakes has, until now, been a story of loss. The federal government now has an opportunity to partner with Utah in restoring Great Salt Lake—and in doing so, to help write a different ending. With targeted support that builds on Utah's successful state-led strategy, Congress and the administration can prove that a great saline lake can be saved—and make America the first to do it.

## PART I: WHY GREAT SALT LAKE MATTERS

---

The Great Salt Lake is a defining feature of the American West: a vast inland sea that shapes the region's climate, sustains critical ecosystems, supports globally important industries, and serves as an anchor for surrounding communities. At its historical average, it covers roughly 1,700 square miles across northern Utah—an area larger than Rhode Island—making it the largest saline lake in the Western Hemisphere and the largest lake in the United States west of the Mississippi River.<sup>1</sup>

---

<sup>1</sup> Restoring the Great Salt Lake Ecosystem, Congressional Research Service, R48928, April 30, 2026.

But today the Great Salt Lake is in crisis. Its water levels have fallen sharply over the past several decades, driven by sustained upstream diversions, prolonged drought, and rising temperatures. In 2022, the lake reached a historic low, shrinking to just 890 square miles.<sup>2</sup> Now, after an abnormally dry and warm winter, the lake is once again headed toward a new record low.

The lake is of enormous importance not just to Utah, but to the surrounding region and beyond. It is responsible for nearly half of the region's precipitation, feeding the mountain snowpack that supplies water to downstream farms and cities and sustains nearby world-renowned ski resorts.<sup>3</sup> It produces approximately 40 percent of the world's brine shrimp eggs, a critical input for the global aquaculture industry, and supports mineral extraction activities. It supports mineral extraction activities, including production of sulfate of potash—a fertilizer relied upon by farmers across the country and around the world—and other minerals of growing strategic importance. And it serves as an important stopover for more than 10 million migratory birds along the Pacific Flyway, which stretches from Arctic Alaska to the tip of South America.



*Figure 1: The Shrinking of Great Salt Lake (June 1985 - July 2022); Source: [NASA](#)*

As the lake shrinks, those contributions are increasingly at risk, and the damage extends well beyond its shoreline. Winds lift dust and toxic sediments from the exposed lakebed, reaching 2.5 million people who live downwind. The sediments carry heavy metals such as arsenic, mercury, and lead, which pose serious public health risks and have been linked to elevated rates of cardiovascular and respiratory disease. These dust plumes can cross state lines within hours and travel thousands of miles.<sup>4</sup> A shrinking lake also means less lake-effect moisture—and less of the snow that defines the region's identity and supplies its water.

Utah has not stood idly by as the lake has declined. The state is leading an ambitious effort to do what no country has done before: restore a declining saline lake.<sup>5</sup> And it is doing so with a bold strategy built around voluntary cooperation, water transactions, water addition technology, and incentive-based conservation rather than mandates and top-down restrictions.<sup>6</sup> Utah has overhauled its state water law, created new state institutions dedicated to lake recovery, committed substantial public resources, and drawn in major nonprofit, philanthropic, religious, and private-sector partners aligned behind this common goal. If successful, the result may become one of the world's most significant ecosystem-scale, market-based conservation efforts.

<sup>1</sup> Restoring the Great Salt Lake Ecosystem, Congressional Research Service, R48928, April 30, 2026.

<sup>2</sup> Congressional Research Service, Restoring the Great Salt Lake Ecosystem.

<sup>3</sup> Gu, H., W. Zhang, and R. Gillies, 2024: The Shrinking Great Salt Lake May Exacerbate Droughts by Reducing Local Precipitation: A Case Study. *J. Hydrometeorol.*, 25, 1099–1109, <https://doi.org/10.1175/JHM-D-23-0189.1>.

<sup>4</sup> Great Salt Lake Strike Team, *Great Salt Lake Data and Insights Summary: A synthesized resource document for the 2025 General Legislative Session*, January 17, 2025.

<sup>5</sup> Leila Larsen, "The Great Salt Lake Is Drying, Can Utah Save It?" *New York Times* (May 5, 2025).

<sup>6</sup> Shawn Regan, "Can Utah Save the Great Salt Lake?" *City Journal* (Spring 2026); Katherine Wright, "Utah's Moonshot: How Voluntary Water Leasing Can Help Restore the Great Salt Lake," *PERC* (March 27, 2025).

While Utah has made steady progress, much work remains. To build on its momentum, Utah leaders and stakeholders have set an ambitious target to restore the lake by 2034, when Salt Lake City will host the Winter Olympics. The Great Salt Lake 2034 Charter, signed in September 2025, crystallized that effort, aligning public and private stakeholders behind the goal.<sup>7</sup> Recovering the lake on this timeline, however, will not be easy. Scientists estimate that achieving it will require delivering far more water to the lake each year than it currently receives. But the state has already built a serious foundation for recovery. The question now is whether that momentum can be translated into action at the scale the crisis demands.

### **An Opportunity for Federal Support**

In a relatively short period of time, Utah has built a sophisticated institutional infrastructure for lake recovery, backed by significant state and private funding. Since the lake reached its historic low in 2022, the state has modernized its water law, established an Office of the Great Salt Lake Commissioner to coordinate restoration efforts. It has developed a Great Salt Lake Strategic Plan to guide basinwide recovery, created a water trust and related programs to fund voluntary water leasing, and launched the Great Salt Lake Basin Integrated Plan, a collaborative effort with the Bureau of Reclamation to develop management strategies at the watershed scale.<sup>8</sup>

The state and its partners have also devoted significant funding to the effort. Altogether, the Utah legislature has committed more than \$1 billion in public resources to water conservation, infrastructure, and Great Salt Lake-related efforts in recent years, including tens of millions of dollars for voluntary water conservation and related projects.<sup>9</sup> In recent months, private and philanthropic partners have pledged more than \$200 million in additional support.<sup>10</sup>

While Utah has built an impressive foundation, the scale of the challenge exceeds what the state can reasonably do on its own. Recognizing that reality, in 2026 the Utah Legislature passed H.C.R. 9, a concurrent resolution calling on the federal government to partner with Utah in restoring the Great Salt Lake.<sup>11</sup> In April, the Trump administration released its FY2027 budget request, which includes \$1 billion for Great Salt Lake recovery and proposes a new federal restoration program to help ensure the lake's long-term sustainability.<sup>12</sup>

Great Salt Lake recovery is not a problem Utah can solve entirely on its own. The watershed spans multiple states. The Bear River—the lake's largest tributary, responsible for roughly 64 percent of its inflows—runs through Wyoming and Idaho. Roughly 37 percent of the irrigated agricultural land in the basin lies outside Utah's borders.<sup>13</sup> Utah can reform its own laws, fund its own water transactions, and compensate its own water users, but it cannot, on its own, build a basin-wide strategy for upstream conservation, coordination, and water leasing across state lines.

The federal government is also already deeply implicated in the future of the lake. The Bureau of Land Management, the U.S. Forest Service, and the U.S. Fish and Wildlife Service control significant acreage in the basin, and the decisions those agencies make affect how much water reaches the lake. The Fish and Wildlife Service, for example, manages the Bear River Migratory Bird Refuge on the northeastern shores of the lake. The U.S. Geological Survey tracks lake levels and basin hydrology. And the Bureau of Reclamation has already supported Great Salt Lake recovery through basin planning and targeted funding.<sup>14</sup>

<sup>7</sup> Office of Utah Governor Spencer J. Cox, "Gov. Cox and Utah Leaders Sign Great Salt Lake 2034 Charter with \$200 Million in Private Sector Commitments," September 24, 2025.

<sup>8</sup> Brian Steed, The Great Salt Lake Strategic Plan, Office of the Great Salt Lake Commissioner, January 15, 2024, <https://greatsaltlake.utah.gov/wp-content/uploads/Great-Salt-Lake-Strategic-Plan-1.pdf>; Utah Division of Water Resources and U.S. Bureau of Reclamation, Work Plan for the Great Salt Lake Basin Integrated Plan, April 8, 2024.

<sup>9</sup> Utah Senate, "Utah's Legislature Continues to Protect, Conserve, and Invest in Statewide Water Resources," February 16, 2024; Utah House of Representatives, "Utah's 2026 Great Salt Lake Laws: Water Rights, US Magnesium, and Federal Funds," March 30, 2026.

<sup>10</sup> Leila Larsen, "Utah business leaders put up \$30M in race to save the Great Salt Lake before the Olympics," Salt Lake Tribune (April 13, 2026)

<sup>11</sup> Utah Legislature, H.C.R. 9: Concurrent Resolution Addressing the Great Salt Lake, 2026 General Session, <https://le.utah.gov/-/2026/bills/static/HCR009.html>

<sup>12</sup> Office of Management and Budget, Budget of the U.S. Government, Fiscal Year 2027 (Washington, DC: U.S. Government Publishing Office, 2026).

<sup>13</sup> Congressional Research Service, *Restoring the Great Salt Lake Ecosystem*.

<sup>14</sup> Congressional Research Service, *Restoring the Great Salt Lake Ecosystem*.



The question, then, is not whether the federal government should be involved—but whether that involvement will remain fragmented and piecemeal, or whether it will be aligned with Utah’s recovery strategy and scaled to the magnitude of the challenge.

The federal stake extends well beyond watershed governance. The millions of migratory birds that stop at the lake each year are protected under federal law, reflecting the lake’s ecological significance across an entire hemisphere. The lake also supports domestic mineral production and contains brine with lithium and other mineral concentrations of growing strategic importance. And the heavy-metal-laden dust produced by the exposed lakebed creates a direct federal air-quality concern. Utah currently remains in attainment with national particulate-matter standards, but continued lakebed exposure raises the prospect of future nonattainment and the regulatory and economic consequences that would follow.

Moreover, there is ample precedent for this kind of federal engagement in large-scale ecosystem restoration. The Everglades, the Great Lakes, the Chesapeake Bay, Puget Sound, and the Platte River have all received sustained federal investment due to a combination of national ecological significance, interstate reach, federal land and resource interests, and a scale that exceeded what any single state could address.<sup>15</sup> The Great Salt Lake is one of the few watersheds of national significance without a dedicated federal restoration initiative.

## PART II: GUIDING PRINCIPLES FOR FEDERAL ENGAGEMENT

---

There are many ways the federal government could support Great Salt Lake recovery. The purpose of this report is to identify the most promising ones: the categories of federal investment, appropriations mechanisms, and policy tools most likely to help move more water to the lake, strengthen the institutional foundation for sustained recovery, and reinforce Utah’s state-led lake-recovery strategy.

The success of any federal role, however, will ultimately depend on how that role is structured. Federal investment designed in the wrong way—one that sidelines state leadership, creates competing bureaucracies, or funds programs disconnected from the lake’s actual water needs—would squander the momentum Utah has built. The principles below are intended to ensure that federal engagement amplifies what Utah has already accomplished and channels new resources toward the uses most likely to matter.

**Federal government as enabler, not director:** Wherever possible, the federal government’s role should be to fund and accelerate Utah’s existing lake recovery strategy, not to create a parallel structure that duplicates or displaces it. Utah has already built the institutions, developed the strategy, and established many of the partnerships needed to lead this effort.<sup>16</sup> Standing up a separate Washington-directed one would likely be slower, more cumbersome, and less effective than reinforcing what already exists. Great Salt Lake recovery will work best if federal support strengthens the institutions, priorities, and tools Utah has already put in place.

<sup>15</sup> Congressional Research Service, *Restoring the Great Salt Lake Ecosystem*.

<sup>16</sup> Steed, *The Great Salt Lake Strategic Plan*.

**A state-led approach:** Federal support should flow through Utah-led channels wherever possible. This approach respects Utah's knowledge of its watershed and water users, keeps decisions close to the problem, and avoids the overhead that comes with a large new federal implementation apparatus. Federal agencies should act as partners, funders, and technical supporters, not as the primary drivers of strategy.

**Voluntary and market-based:** Federal investment should reinforce Utah's foundational commitment to nonregulatory, incentive-based conservation. That means supporting tools that compensate willing sellers, reward voluntary conservation, and give farmers, water districts, and communities meaningful incentives to participate.<sup>17</sup> Federal policy should expand the reach and credibility of those tools, not undermine them with a more centralized or coercive framework likely to generate resistance, litigation, or political backlash.

**Multi-state coordination where needed:** A state-led model does not mean an Utah-only model. The upper Bear River basin in Idaho and Wyoming is a gap Utah cannot fill on its own. Federal agencies have the authorities and relationships to work across those boundaries in ways Utah cannot.<sup>18</sup> Federal involvement is especially valuable where interstate coordination, federal land management, or shared basin planning is necessary to complement Utah's own efforts. This means giving other states the opportunity to collaborate on their own terms, but still in a way that works to the benefit of the Great Salt Lake.



**Increase flows to the lake:** The first and most important test of any proposed federal investment is whether it increases the amount of water reaching the lake. Great Salt Lake recovery ultimately depends on getting more water into the lake. Not every federal dollar must produce an immediate acre-foot of additional inflow, but the overall portfolio must remain anchored to that fundamental objective. Direct, verifiable water delivery is the highest priority.

**Improve the institutional plumbing for sustained recovery:** Some investments will not directly raise lake levels in the near term but are still essential because they strengthen the systems needed for long-term recovery and ensure public and private funds are delivering results. Water measurement, metering, depletion accounting, transaction verification, delivery infrastructure, and basin coordination all fall into this category. These are the institutional and physical foundations that make voluntary conservation credible, measurable, and durable. They should be prioritized even when they do not themselves produce an immediately measurable change in lake elevation.



**Favor feasibility, speed, and measurability:** Great Salt Lake recovery is urgent, and federal dollars should be directed toward interventions that can be deployed in a reasonable timeframe and evaluated with some confidence. Some ideas may be promising in theory but too speculative, too slow, or too difficult to verify to justify priority treatment. Others may have more modest potential but be ready to implement quickly and at scale. The most compelling options are those that combine practical feasibility with measurable benefit.

<sup>17</sup> Steed, *The Great Salt Lake Strategic Plan*; Great Salt Lake Strike Team, *Great Salt Lake Data and Insights Summary: A Synthesized Resource Document for the 2026 General Legislative Session*, Version 1.0, January 7, 2026.

<sup>18</sup> Congressional Research Service, *Restoring the Great Salt Lake Ecosystem*.

# PART III: OPPORTUNITIES TO SUPPORT LAKE RECOVERY

## *How should an initial federal investment be spent?*

This section identifies the most promising uses for an initial federal investment in Great Salt Lake recovery. In light of the Administration's proposed \$1 billion commitment, Congress and federal agencies should prioritize investments that can deliver measurable lake benefits, scale Utah's existing voluntary programs, and build the practical infrastructure needed for sustained recovery.

The focus here is the near-term investment portfolio: the categories of spending most likely to increase flows to the lake, make those gains measurable and durable, and extend Utah's state-led, market-based approach. The longer-term question of whether Congress should create a standing federal authorization or governance structure is addressed in Part V.

No single intervention will restore Great Salt Lake on its own. The most effective federal package would combine direct water-saving tools with supporting investments that make conservation measurable, enforceable, and scalable. The options below are organized around four broad themes:

1. **Accelerating voluntary conservation** by reducing upstream water consumption and dedicating saved water to the lake;
2. **Removing flow impediments** and improving basin hydrology
3. **Building the infrastructure** and accounting systems needed to deliver and verify conserved water; and,
4. **Expanding the total water supply** available to the system.

The options were selected and evaluated according to three priorities:

1. ***Does it put measurable water in the lake?*** Investments that deliver water to the lake—measured in actual acre-feet arriving, not water theoretically conserved on paper—are the highest priority.
2. ***If not, does it improve the institutional plumbing for sustained recovery?*** Some investments, like water measurement infrastructure, do not immediately move water but are essential to making the water-savings investments work reliably over time.
3. ***Does it leverage, not replace, Utah's voluntary, state-led, market-based approach?*** Federal dollars should extend the reach and scale of Utah's existing programs—not substitute or redirect them.



## A: ACCELERATING VOLUNTARY CONSERVATION

### 1. VOLUNTARY AGRICULTURAL WATER LEASING TRANSACTIONS

Agriculture is the dominant human use of water in the Great Salt Lake basin.<sup>19</sup> Any serious lake-restoration strategy therefore must work in collaboration with the basin's agricultural producers as partners in finding ways to allow more water to flow downstream to the lake while sustaining the region's rich agricultural heritage and economy.

Voluntary water leasing is the clearest and most reliable tool available for doing that. It respects the property rights of agricultural water users, compensates them for reducing consumptive use, and dedicates the conserved water to the lake. When designed properly, leasing can produce direct, measurable, and legally protected flow benefits without requiring farmers to permanently relinquish their water rights. Lease payments can also be reinvested locally by water users.

That makes voluntary leasing especially well suited for federal investment. An infusion of federal funding can expand the number and size of transactions, expand the market, and build the institutional capacity needed for a more durable water market over time.

### WHAT IT INCLUDES

- **Split-season leases:** Farmers do not need to stop irrigating entirely to participate in leasing programs. Split-season leases allow producers to irrigate during part of the growing season while leasing the remaining portion of their water to the lake. A farmer might, for example, harvest one or two cuttings of alfalfa and then lease the water that otherwise would have supported later-season irrigation. This structure lowers the barrier to participation and can generate meaningful late-season flows.
- **Full-season leases:** Annual leases allow irrigators to reduce or forgo diversions for a full season in exchange for compensation. This gives farmers flexibility to participate when hydrologic, financial, or operational conditions make sense without making a permanent commitment. Multi-year agreements can also provide producers with greater income certainty while delivering sustained flow benefits to the lake over several seasons.
- **Irrigation company leases:** Most of the water diverted in the basin is held or managed by irrigation companies or other collective water-delivery entities.<sup>20</sup> A single agreement with a canal company or district can cover a significant volume of water, offering a more efficient path to scale than negotiating with hundreds of individual water users. These arrangements require careful legal and governance work because canal companies have obligations to shareholders and members, but they may offer some of the best opportunities for larger transactions.

### WHAT UTAH HAS ALREADY DONE

Utah has already made important progress in developing the legal and institutional foundation for agricultural water leasing.<sup>21</sup> The state has reformed its water laws to allow water rights to be voluntarily leased and dedicated to Great Salt Lake restoration.<sup>22</sup> These reforms allow irrigators to participate in voluntary conservation transactions while retaining their underlying water rights, reducing one of the major barriers to participation.

<sup>19</sup> The agricultural sector and the municipal and industrial sector accounted for the bulk of human water depletion in the Great Salt Lake between 2020 and 2025 (65 percent and 27 percent, respectively). Lake-related mineral extraction (5.7 percent), incidental loss (1.4 percent), and reservoir evaporation made up smaller amounts of total basin-wide depletion. Great Salt Lake Strike Team, "Great Salt Lake Data and Insights Summary: A Synthesized Resource Document for the 2026 General Legislative Session," Version 1.0, January 7, 2026.

<sup>20</sup> Great Salt Lake Strike Team, "Great Salt Lake Data and Insights Summary: A Synthesized Resource Document for the 2026 General Legislative Session," Version 1.0, January 7, 2026.

<sup>21</sup> Wright, *Utah's Moonshot*.

<sup>22</sup> Great Salt Lake Strike Team, "Great Salt Lake Data and Insights Summary: A Synthesized Resource Document for the 2026 General Legislative Session," Version 1.0, January 7, 2026; Utah Legislature, H.B. 410: Water Leasing Amendments, 2026 General Session, <https://le.utah.gov/~2026/bills/static/HB0410.html>



The state has also created institutions to support these transactions, including the Great Salt Lake Watershed Enhancement Trust and leasing-related efforts through the Office of the Great Salt Lake Commissioner.<sup>23</sup> These entities are beginning to develop the market infrastructure, technical capacity, and stakeholder relationships needed to scale voluntary transactions.

But the current effort remains far short of the scale needed for lake recovery. Additional funding could help expand the number and size of transactions, increase compensation enough to attract willing participants, reduce transaction costs, and build more durable market infrastructure for long-term recovery.

## FEDERAL VALUE-ADD

Federal investment could add value in two distinct ways. First, federal dollars could help Utah scale its in-state leasing program. A larger and more reliable funding source would allow Utah to pursue more transactions, offer competitive compensation to producers, and support the administrative, legal, and technical work necessary to ensure that leased water is protected and delivered to the lake.

Second, federal involvement could help extend voluntary conservation into the Idaho and Wyoming portions of the watershed, especially the upper Bear River. Utah can operate programs for Utah water rights, but it cannot lease water, acquire rights, or run conservation incentives in neighboring states. Because the Bear River is the lake's largest tributary and flows through Idaho and Wyoming before reaching Utah, a purely Utah-based leasing strategy will necessarily leave some upstream opportunities beyond the state's reach.

To do so, Reclamation, USDA, or other federal agencies could help support voluntary transactions, conservation pilots, or partnership agreements in Idaho and Wyoming that are tied to downstream Great Salt Lake flow objectives. Such efforts would need to be developed carefully and collaboratively with state agencies, water users, irrigation districts, and existing interstate institutions such as the Bear River Commission. The goal should not be to impose a federal basin regime, but to identify voluntary opportunities where federal resources can support cross-state cooperation that Utah cannot accomplish on its own.

## POTENTIAL FEDERAL MECHANISMS

- **Direct Reclamation pass-through to Utah:** The most efficient model for the Utah portion of the program would be a direct Reclamation appropriation to Utah, administered in coordination with the Office of the Great Salt Lake Commissioner and related state entities. This would formalize and scale the recent Reclamation funding award for Great Salt Lake while keeping Utah in control of transaction design, targeting, and execution.<sup>24</sup> For purposes of an initial federal investment, this is likely the most straightforward and politically workable mechanism.

<sup>23</sup> Great Salt Lake Watershed Enhancement Trust, <https://www.gslwatertrust.org/>

<sup>24</sup> In 2025, Reclamation provided \$50 million for a Great Salt Lake water delivery program using funds from the Inflation Reduction Act (P.L. 117-169).

- **Interstate Bear River conservation support:** For Idaho and Wyoming, federal funds could support voluntary leasing pilots or other conservation transactions through Reclamation or USDA voluntary conservation programs such as the Environmental Quality Incentives Program (EQIP). This could be done through grants to eligible water entities, cooperative agreements, or a more formal interstate component tied to Great Salt Lake recovery. Such funding should be designed as a complement to Utah-led implementation, not as a competing governance structure.
- **Great Salt Lake-specific Reclamation authorization:** If Congress chooses to formalize this work beyond the initial appropriation, it could create a more durable basin-specific authority for Reclamation to provide grants or cooperative agreements for voluntary water transactions, system conservation, and related delivery infrastructure. This would give leasing and related water-conservation tools a clearer long-term federal home without creating a full federal restoration bureaucracy. Part V discusses this longer-term governance option in more detail.

## BOTTOM LINE

Voluntary agricultural water leasing should be the first place federal policymakers look if the goal is to move measurable water to Great Salt Lake. When done effectively, it directly and verifiably puts water in the lake. It also builds the market infrastructure, pricing mechanisms, and transaction capacity that serve as critical institutional plumbing for long-term recovery. And it is entirely consistent with Utah's voluntary, market-based approach. If the initial federal investment is to be prioritized by expected lake benefit, voluntary water leasing belongs at the top of the portfolio.

## 2. AGRICULTURAL WATER OPTIMIZATION

Agricultural optimization projects can help farmers modernize irrigation infrastructure, improve farm operations, and reduce water losses while maintaining productivity. Because agriculture is the largest human use of water in the Great Salt Lake basin, even incremental improvements in agricultural water management can contribute meaningfully to lake recovery.

Utah has already recognized this opportunity. In 2023, the Utah legislature allocated \$200 million for agricultural water optimization and related infrastructure improvements.<sup>25</sup> Demand for these programs has consistently exceeded available funding.

For an initial federal investment, agricultural optimization is attractive because it builds on an existing state-led program rather than creating a new federal initiative from scratch. It can also generate benefits over many years: while a grant may be awarded once, improved irrigation infrastructure can continue reducing losses and improving water management season after season.

At the same time, optimization should be designed with care. Irrigation efficiency improvements do not automatically translate into more water reaching the lake. In some cases, efficiency improvements may improve farm operations without producing a corresponding increase in downstream flows to the lake.<sup>26</sup> For that reason, federal support should help Utah and its agricultural partners strengthen the measurement, accounting, and delivery systems needed to ensure that optimization investments contribute to lake recovery where feasible.

<sup>25</sup> Utah Department of Agriculture and Food, "Agricultural Water Optimization Program," <https://ag.utah.gov/conservation-division/agricultural-water-optimization/>; Yost, M., Anderson, C., Barker, B., Clawson, J., Taylor, K., & Pace, M. (2025). *Utah surface irrigation water optimization opportunities and barriers*. Utah State University Extension.

<sup>26</sup> R. Q. Grafton et al., "The Paradox of Irrigation Efficiency," *Science* 361, no. 6404 (2018): 748–50; and Lisa Pfeiffer and C.-Y. Cynthia Lin, "Does Efficient Irrigation Technology Lead to Reduced Groundwater Extraction? Empirical Evidence," *Journal of Environmental Economics and Management* 67, no. 2 (2014): 189–208.



## WHAT IT INCLUDES

- **On-farm irrigation system upgrades:** Older irrigation systems can lose substantial water to evaporation, wind drift, poor timing, and uneven application. Upgrading from older sprinkler systems to more precise technologies—such as low-elevation spray application, low-elevation precision application, or drip irrigation—can reduce non-beneficial losses and improve control over when and how water is applied.
- **On-farm conveyance improvements:** Many producers lose water before it reaches the field through leaky ditches, inefficient laterals, or operational spills. Lining or piping on-farm ditches can reduce seepage and delivery losses, allowing farmers to divert less water to accomplish the same production goal.
- **Irrigation-company and system-level improvements:** Some of the most important opportunities may be at the canal-company, irrigation-district, or delivery-system scale. Canal lining, piping, automation, and improved control structures can reduce operational losses while also making it easier to manage, measure, and account for conserved water.
- **Water measurement and metering:** Measurement is the foundation of any credible optimization program. Without metering, ET accounting, or other reliable methods of measuring consumptive use and delivery, it is difficult to know whether public dollars are producing real water savings. Federal investment in measurement infrastructure should therefore be treated as a necessary companion to optimization funding.

## WHAT UTAH HAS ALREADY DONE

Utah has already invested heavily in agricultural water optimization. The state's Agricultural Water Optimization Program has helped establish a working framework for funding voluntary producer-led projects, and the Utah legislature's large appropriations toward this effort reflects the state's commitment to this approach.

That foundation is important because it means that federal funding would not need to create a new program from scratch. Instead, federal investment could expand, refine, and sharpen an existing state-led effort.

A federal Great Salt Lake-specific funding stream could help the state enroll more producers, support more irrigation companies, and pair optimization projects with the measurement and delivery systems needed to connect conservation investments more directly to lake recovery. The aim should be to build on Utah's existing approach, not to replace it with a rigid federal program.

## FEDERAL VALUE-ADD

Federal investment could add value in three main ways. First, federal dollars could help Utah scale an oversubscribed program. Demand for agricultural optimization funding has exceeded available resources, and additional funding could allow more producers and irrigation companies to participate.<sup>27</sup>

<sup>27</sup> Carter Williams, "How Much Water Are Utah's Agriculture Optimization Projects Saving?" KSL.com, (June 25, 2025).

Second, federal funding could support the measurement and accounting systems needed to make optimization credible as a lake-recovery tool. This includes metering, ET accounting, stream measurement, canal measurement, and verification systems that can distinguish between nominal efficiency gains and real reductions in consumptive use.

Third, federal agencies can reach parts of the watershed that Utah cannot. USDA conservation programs, in particular, can support producers in Idaho and Wyoming portions of the Bear River basin, where Utah has no direct programmatic authority. Federal resources can help extend voluntary conservation incentives into the broader watershed while respecting state water law and local producer decision-making.

## POTENTIAL FEDERAL MECHANISMS

- **Direct Reclamation appropriation to Utah:** The strongest appropriations option would be a direct Reclamation appropriation to Utah, administered through or in close coordination with the Office of the Great Salt Lake Commissioner, Utah Department of Agriculture and Food (UDAF), and other relevant state water agencies. This funding could expand Utah's optimization program while adding Great Salt Lake-specific conditions, including measured consumptive-use reductions, leasing and dedication of conserved water, and verification of delivery where feasible.
- **Measurement and accounting support:** Federal funding for metering, ET accounting, canal measurement, and verification systems could be bundled with optimization funding to help confirm that conservation investments produce real water benefits.
- **USDA EQIP watershed priority:** NRCS could designate a Great Salt Lake or Bear River basin priority area within EQIP and target funding toward agricultural conservation practices that reduce consumptive use. To be useful for lake recovery, however, EQIP support should prioritize projects with measurable water savings, delivery commitments, or integration with state-approved lake-recovery programs. NRCS recently received a large infusion of conservation funding through the One Big Beautiful Bill Act, a portion
- **Great Salt Lake-specific Reclamation authorization:** If Congress chooses to formalize this work beyond the initial appropriation, it could authorize Reclamation to provide grants or cooperative agreements for Great Salt Lake agricultural conservation, system conservation, water measurement, and delivery infrastructure. Part V discusses this longer-term governance option in more detail.



## BOTTOM LINE

Agricultural water optimization should be an important part of the federal Great Salt Lake portfolio. Utah has already made major investments in this approach, and producers across the basin have shown strong interest in voluntary, incentive-based improvements. Federal resources could help expand enrollment, support more producers and irrigation systems, and strengthen the measurement, accounting, and delivery tools needed to ensure that optimization investments contribute meaningfully to lake recovery. Done well, agricultural optimization can improve farm operations while helping advance the broader goal of getting more water to Great Salt Lake.

### 3. MUNICIPAL AND INDUSTRIAL WATER CONSERVATION

Recent state analyses suggest that municipal and industrial uses account for a larger share of basin-wide water depletion (27 percent) than previously understood.<sup>28</sup> Urban, suburban, and industrial conservation should therefore be treated as a meaningful complement to agricultural conservation.

Utah has already invested heavily in this area, including funding for secondary water metering and support for turf-replacement and other water-wise landscaping programs. Federal funding could help scale these efforts, especially where local conservation can be translated into measurable reductions in depletion to benefit the Great Salt Lake. Such investments are increasingly important as population growth places more pressure on the basin's water supply.

#### WHAT IT INCLUDES

- **Landscape conversion incentives:** Outdoor irrigation is a major driver of municipal water use. Federal funds could help expand incentives for homeowners, businesses, institutions, and local governments to replace nonfunctional turf with drought-tolerant landscaping, xeriscape, native plants, and other lower-water alternatives. These programs can reduce consumptive outdoor use while giving households and businesses a practical way to participate in lake recovery.
- **Secondary water metering:** Many Utah homes receive untreated secondary water for outdoor irrigation. When these systems are unmetered, users often have little information about how much water they consume and little incentive to conserve. Installing meters is a prerequisite for meaningful pricing, tracking, and conservation. Because metering has already shown strong conservation potential in Utah, this is one of the most practical municipal investments available.
- **Industrial water use:** Some industrial users hold significant water rights or operate facilities that affect lake inflows, salinity, or shoreline conditions. Where voluntary changes to those rights or operations could produce measurable lake benefits, federal funding could help support transactions, infrastructure changes, or transition costs. Utah's recent acquisition of U.S. Magnesium underscores the relevance of industrial water rights to lake recovery, but this category should be evaluated project by project rather than treated as a broad conservation program.

#### WHAT UTAH HAS ALREADY DONE

In 2022, the Utah legislature allocated \$250 million to help secondary water providers accelerate meter installation, and the Utah Division of Water Resources notes that areas with secondary meters have seen water-use reductions of roughly 20 to 30 percent.<sup>29</sup> In addition, the legislature required that all secondary pressurized connections be metered by 2030.<sup>30</sup> The state has also supported turf-replacement and water-wise landscaping programs, including incentives to replace grass with more drought-tolerant landscaping. These efforts create an existing platform that federal dollars could expand rather than replace.

#### FEDERAL VALUE-ADD

Federal investment could add value in three main ways. First, federal dollars could help Utah and local water providers scale secondary metering and outdoor conservation programs faster than state and local resources alone would allow. This is especially relevant for fast-growing communities where outdoor demand could otherwise continue rising.

<sup>28</sup> Great Salt Lake Strike Team, Great Salt Lake Data and Insights Summary: A Synthesized Resource Document for the 2026 General Legislative Session, Version 1.0, January 7, 2026, <https://d36oiwf741rqp.cloudfront.net/wp-content/uploads/2026/01/GSL-Jan2026.pdf>

<sup>29</sup> Utah Division of Water Resources, "\$250 Million for the Installation of Secondary Meters Will Fast-Track Water Conservation Efforts," April 5, 2022, <https://water.utah.gov/250-million-for-the-installation-of-secondary-meters-will-fast-track-water-conservation-efforts/>

<sup>30</sup> Steed, *The Great Salt Lake Strategic Plan*.

Second, federal funding could help improve the connection between municipal conservation and lake outcomes. This could include measurement systems, provider-level accounting, conservation plans that identify lake benefits, and legal tools that allow saved water to be committed to Great Salt Lake where feasible.

Third, federal resources could support targeted industrial conservation or water-right transactions where they produce clear lake benefits. This should be approached selectively. The strongest candidates would be projects where water savings are measurable, rights are legally available, and the lake benefit is direct.<sup>31</sup>

## POTENTIAL FEDERAL MECHANISMS

- **Direct pass-through to Utah for municipal conservation incentives:** Federal funds could flow through Utah's existing programs to expand secondary-metering, turf-conversion incentives, and related conservation programs. This would keep implementation aligned with state priorities and existing program design, while also allowing for tailored conservation projects with industrial water users to benefit the lake.
- **Reclamation WaterSMART grants:** Reclamation could support municipal water providers, conservancy districts, and local governments through WaterSMART grants for water-efficiency projects, metering, system improvements, and conservation planning.

## BOTTOM LINE

Municipal and industrial conservation should be an important supporting piece of the initial federal investment portfolio. It can meaningfully reduce basinwide depletion, broaden participation in lake recovery, and strengthen the water-management infrastructure needed for long-term success. Federal resources could help Utah scale secondary metering, turf replacement, and industrial-use water conservation to bolster Great Salt Lake recovery.

## B: REMOVING FLOW IMPEDIMENTS

### 1. Invasive Phragmites Removal and Native Vegetation Restoration

Phragmites (*Phragmites australis*) is a thirsty, invasive common reed that has spread across tens of thousands of acres around Great Salt Lake and its tributary wetlands. Phragmites consumes significantly more water than native wetland vegetation.<sup>32</sup> Removing it can reduce consumptive use, improve wetland hydrology, and help more water reach the lake.

This makes phragmites removal both a habitat restoration project as well as a practical way to get more water to the Great Salt Lake. Federal investment could help scale existing state and local efforts, support treatment on federal lands, and fund the multi-year maintenance needed to prevent reinvasion. For an initial federal investment, phragmites removal is attractive because it is concrete, targeted, and closely tied to lake recovery. The federal government also manages large portions of lakeshore in need of phragmites removal and ongoing management.

<sup>31</sup> Utah House of Representatives, "Utah's 2026 Great Salt Lake Laws: Water Rights, US Magnesium, and Federal Funds," March 30, 2026, <https://house.utleg.gov/utahs-effort-to-save-the-great-salt-lake-historic-water-law-major-acquisitions-and-a-federal-partnership/>.

<sup>32</sup> Every acre of phragmites uses about 3.5 to 5 acre-feet per year of water—a significantly higher depletion rate than native vegetation, or even the thirstiest of crops. Claire Spangenberg Kellner and Paul Inkenbrandt, U.S. Geological Survey, "How Much Water Does Phragmites Use? Phragmites Effects on Hydrology," presentation to the Great Salt Lake Advisory Council, September 2025.

## WHAT IT INCLUDES

- **Initial treatment:** Phragmites control typically requires a combination of herbicide treatment, mowing, prescribed fire where appropriate, grazing or mechanical removal. The right approach will vary by site.
- **Native vegetation restoration:** Removal alone is not enough. Treated areas need to be revegetated with native wetland and riparian species where feasible. Native restoration helps prevent recolonization, stabilize soils, and improve habitat.
- **Multi-year maintenance:** Phragmites removal is not a one-time intervention. Treated areas often require follow-up treatment over several years to prevent reestablishment.
- **Coordination across federal, state, and private lands:** Phragmites occurs across a mix of ownerships, including state lands, private lands, wetlands, tributary corridors, and federal lands such as the Bear River Migratory Bird Refuge and BLM-managed areas. A successful program will need to coordinate across these ownership boundaries.

## WHAT UTAH IS ALREADY DOING

Utah has already begun addressing invasive phragmites through state agencies, local partners, conservation organizations, and land managers. Importantly, the state has demonstrated that large-scale phragmites control is possible. Managers have reduced phragmites cover at Utah Lake by roughly 88 percent, and they have developed a treatment protocol that combines herbicide, mowing, burning, grazing, and native revegetation.

Great Salt Lake presents a much larger challenge. Scientists estimate that phragmites still covers roughly 20,000 to 30,000 acres around the lake, and managers are now developing improved mapping tools to identify where phragmites and other high-water-use invasive plants occur across the watershed.<sup>33</sup> The challenge is scaling treatment across tens of thousands of acres and maintaining those gains over time.



## FEDERAL VALUE-ADD

Federal investment could add value in three ways. First, federal funding could help scale treatment to match the size of the problem. Effective treatment will require a program larger than current state and local efforts can likely support on their own.

Second, federal agencies manage important lands within the Great Salt Lake ecosystem. USFWS, BLM, and other agencies can treat phragmites on lands they own or manage, while coordinating with Utah and local partners to avoid fragmented treatment.

Third, federal resources could support the multi-year maintenance and native revegetation that are essential to durable results. A short-term treatment plan without follow-up risks wasting money if treated areas are quickly recolonized.

<sup>33</sup> Congressional Research Service, Restoring the Great Salt Lake Ecosystem.

## POTENTIAL FEDERAL MECHANISMS

- **USFWS appropriations for Bear River Migratory Bird Refuge:** The Bear River Migratory Bird Refuge is one of the most important federal landholdings in the Great Salt Lake ecosystem. Dedicated USFWS funding could expand phragmites treatment, maintenance, and native restoration on refuge lands.
- **BLM appropriations for lakebed and adjacent lands:** Where BLM-managed lands contain phragmites or related invasive vegetation issues, targeted appropriations could support treatment and restoration aligned with Utah's lake-recovery goals.
- **Reclamation aquatic ecosystem restoration authority:** Reclamation could support phragmites removal where treatment improves hydrologic function, reduces consumptive losses, or supports water delivery to the lake.
- **Direct pass-through to Utah for nonfederal lands:** For state, local, or private lands, federal funds could flow through Utah or Utah-directed entities to support coordinated, voluntary treatment and maintenance programs.

## BOTTOM LINE

Phragmites removal should be a high-priority supporting investment in the initial federal Great Salt Lake portfolio. It can reduce avoidable water losses, improve basin hydrology, and restore wetland function in ways that support lake recovery. Federal resources are especially well suited to scaling treatment across large areas, addressing federal lands, and funding the multi-year maintenance needed for durable results.

## C: INFRASTRUCTURE IMPROVEMENT

### 1. Water Measurement, Accounting, and Verification

Water measurement, accounting, and verification should be treated as a required component of any major federal investment in Great Salt Lake recovery. Without reliable measurement at farms, canals, diversion points, and key locations, policymakers cannot know whether conservation investments are actually delivering water to the lake.<sup>34</sup>

This is especially important because the highest-priority investments in the federal portfolio—water leasing, agricultural optimization, and municipal conservation—depend on credible accounting. If public dollars pay for conserved water, there must be a way to track that water from the point of conservation to the lake. Otherwise, water intended for Great Salt Lake could be lost to unmonitored diversions, absorbed by system inefficiencies, or counted as saved without producing a real lake benefit.

Measurement does not, by itself, get more water to the lake. But it is the foundation that makes the rest of the portfolio work. It allows leases to be verified, optimization projects to generate real savings, and conserved water to be protected. For that reason, Congress should treat measurement, accounting, and verification as core implementation infrastructure for the initial federal investment.

### WHAT IT INCLUDES:

- **Farm-level metering:** Installing and maintaining meters at diversion points, turnout locations, and individual irrigation systems is the most direct way to measure water use and verify reductions.

---

<sup>34</sup> Wright, Utah's Moonshot; Congressional Research Service, *Restoring the Great Salt Lake Ecosystem*.

- **Canal and conveyance metering:** Many water savings occur—or are lost—within irrigation delivery systems. Measuring diversions, deliveries, and conveyance losses at the canal-company or irrigation-district level can help identify where conserved water is being generated and whether it is moving downstream as intended.
- **Evapotranspiration and depletion accounting:** Remote sensing and modeling tools can estimate field-level consumptive use and help verify whether conservation projects reduce depletion. ET-based tools are especially valuable because consumptive use, not merely diversion volume, is what matters most for determining whether additional water is available for the lake. These tools can complement physical metering and provide a scalable way to evaluate conservation across large areas.
- **Stream gauging and tributary monitoring:** Real-time stream gauges and telemetry-enabled monitoring stations are needed at key points throughout the basin. Better tributary monitoring would help track whether conserved water is moving through the system and where losses or unmeasured diversions may occur.

## WHAT UTAH HAS ALREADY DONE

Utah has already begun building the legal and institutional foundation for voluntary water transactions, agricultural optimization, and lake-focused conservation. But as those programs scale, the need for better measurement and verification becomes more urgent.

The state's emerging water-market and conservation programs will be more credible—and more attractive to federal funders—if they are supported by a stronger measurement backbone. Federal resources could help Utah accelerate the installation of meters, gauges, telemetry systems, ET-accounting tools, and transaction-verification systems that make water savings measurable and defensible. Better measurement makes Utah's voluntary programs more effective and gives Congress confidence that federal dollars are producing real lake benefits.

## FEDERAL VALUE-ADD

Federal investment could add value in two main ways. First, federal dollars could help pay for the physical infrastructure needed to measure water use and delivery. Meters, stream gauges, telemetry systems, and canal-monitoring equipment can be expensive, especially when deployed across a large watershed. A relatively modest share of the initial federal investment could substantially improve the transparency and effectiveness of the entire portfolio.

Second, federal agencies can provide technical expertise and data infrastructure. USGS, Reclamation, NRCS, and other agencies already have experience with hydrologic monitoring, stream gauging, remote sensing, and water-accounting systems. Federal support could help integrate these tools into Utah's lake-recovery programs.

## POTENTIAL FEDERAL MECHANISMS

- **USGS stream gauging and water-monitoring appropriations:** Congress could direct funding to expand stream gauging, tributary monitoring, and real-time data collection in the Great Salt Lake basin. This could be done through existing USGS water-monitoring programs.

- **USGS stream gauging and water-monitoring appropriations:** Congress could direct funding to expand stream gauging, tributary monitoring, and real-time data collection in the Great Salt Lake basin. This could be done through existing USGS water-monitoring programs.
- **Reclamation pass-through funding with measurement as an eligible use:** Any direct Reclamation appropriation to Utah should explicitly include measurement, accounting, metering, telemetry, and verification systems as eligible uses. This would ensure that water-leasing and conservation funds are supported by the infrastructure needed to prove results.
- **NRCS technical assistance and EQIP support:** NRCS could support farm-level metering, irrigation-management tools, and technical assistance through EQIP or related conservation programs, particularly where projects are tied to measurable reductions in consumptive use.

## BOTTOM LINE

Water measurement, accounting, and verification should be a required component of the initial federal investment in Great Salt Lake recovery. These tools may not move water on their own, but they determine whether the rest of the portfolio succeeds. A relatively modest investment in meters, gauges, ET accounting, telemetry, and transaction-verification systems would multiply the effectiveness of water leasing, agricultural optimization, municipal conservation, and interstate coordination.

## D: AUGMENTING SUPPLY

Supply augmentation options generally have longer time horizons and greater uncertainty than demand-side interventions and flow-barrier interventions. They can, however, be important components of a balanced long-term portfolio but should generally be pursued in parallel with (not instead of) the higher-certainty demand-side and barrier-removal investments.

### 1. Precipitation Enhancement with Cloud Seeding

Cloud seeding is a water supply augmentation tool that can increase snowfall over watersheds and river basins. The technique involves releasing small particles—usually silver iodide—into winter storm clouds. These particles give supercooled water vapor something to freeze onto, facilitating the formation of ice crystals that can grow into snowflakes. Utah has been using cloud seeding since the 1970s.

Unlike conservation programs, which reduce the amount of water consumed before it reaches the lake, cloud seeding increases the total amount of water entering the system. Based on the state's analysis, modern cloud seeding represents a cost-effective way to augment water supply in the Great Salt Lake Basin. Using target and control analysis over decades, the Utah Division of Water Resources estimates that cloud seeding has produced about a 7 percent increase in precipitation on average in the areas where it is deployed.<sup>35</sup> The state estimates that cloud seeding can create water at costs of approximately \$10-15 per acre foot.<sup>36</sup> For reference, desalination can cost more than \$2,000 per acre foot.<sup>37</sup>

While this historical analysis is valuable, it is limited in verification power. In recent years, the private sector is deploying novel ways to demonstrate a direct relationship between cloud seeding activity and additional precipitation.

<sup>35</sup> Cole Osborne, Annual Cloud Seeding Report: Northern Utah Program, 2024–2025 Winter Season, prepared by North American Weather Consultants, Inc., for Bear River Water Conservancy District, Box Elder County, Cache County, and Utah Division of Water Resources, June 2025, <https://water.utah.gov/wp-content/uploads/2025/09/Northern-Utah-Seasonal-Report-2024-2025.pdf>

<sup>36</sup> Utah Division of Water Resources, "Utah Holds Its First Cloud Seeding Symposium," October 9, 2025, <https://water.utah.gov/utah-holds-its-first-cloud-seeding-symposium/>. Cloud seeding estimates reflect the modeled or measured cost of additional precipitation, not necessarily water delivered to the lake.

<sup>37</sup> California Department of Water Resources, The Economy of the State Water Project: Clean, Reliable, and Affordable Water for California, December 2023, <https://water.ca.gov/-/media/DWR-Website/Web-Pages/News/Files/FINAL-12-14-2023---The-Economy-of-the-State-Water-Project.pdf>

Rainmaker Technology Corporation, Utah's primary cloud seeding contractor, reported that it found 82 "seeding signatures"—unambiguous evidence of an effective operation—over the course of the 2025-2026 season using radar analysis of drone-based cloud seeding.<sup>38</sup> These results are awaiting peer review, but they underscore the potential opportunity to use a modern technology stack to validate precipitation enhancement programs.

By increasing snowpack in the Great Salt Lake watershed, cloud seeding could increase runoff, reduce pressure on existing supplies, and make the broader recovery portfolio easier to achieve. Expanding the program and improving verification are the primary points of leverage.

## WHAT IT INCLUDES

- **Aerial and drone-based seeding:** Traditional cloud seeding programs use ground-based generators to release silver iodide into suitable winter storm systems. Today, aerial seeding can target storms where ground generators are less effective, though airplane operations can be expensive and limited by weather and icing conditions. Utah and Idaho are using drone-based cloud seeding, which makes operations more flexible, safe, and cost-effective.
- **Expansion into the upper Bear River watershed:** One of the strongest federal value-adds would be assistance in expanding existing cloud-seeding operations in the Idaho and Wyoming portions of the Bear River watershed. Federal involvement can help coordinate and finance work across state lines where added snowpack could benefit the lake's largest tributary. This could be accomplished through funding to Utah to pay for programs operated by adjacent states or through federal contracting with Idaho and Wyoming.
- **Improved monitoring and verification:** Federal funds should support better monitoring of seeded storms, precipitation effects, snowpack changes, runoff, and downstream flows. Improved radar, modeling, and field measurement can help further sharpen estimates of how much water cloud seeding adds and how much of that water may ultimately benefit the lake.

## WHAT UTAH HAS ALREADY DONE

Utah has operated cloud-seeding programs for decades and has recently expanded its investment substantially. The Great Salt Lake Strategic Plan includes cloud seeding as part of its strategy, and from 2022 to 2025, the state expanded its cloud seeding program from \$200,000 to nearly \$16 million.<sup>39</sup> Utah now has one of the country's most developed cloud seeding programs, with a growing network of generators, aerial operations, and research partnerships.

## FEDERAL VALUE-ADD

Federal investment could add value in three ways. First, federal dollars could help expand cloud-seeding operations in the Great Salt Lake basin and upper Bear River watershed. This could include additional drone operations, generators, and equipment upgrades in priority mountain ranges.

Second, federal funding could support better measurement and evaluation. Because cloud seeding's main limitation is attribution, federal support should help improve precipitation monitoring, snowpack measurement, radar analysis, and hydrologic modeling to better estimate how much added precipitation reaches rivers and, ultimately, the Great Salt Lake.

<sup>38</sup> Kyle Dunphy, "Rainmaker Announces Major Breakthrough in Cloud-Seeding Validation," Deseret News, April 27, 2026, <https://www.deseret.com/environment/2026/04/27/rainmaker-cloud-seeding-validation/>

<sup>39</sup> Steed, *The Great Salt Lake Strategic Plan*.

Third, federal involvement could support interstate coordination. The Bear River basin spans Utah, Idaho, and Wyoming, and cloud-seeding opportunities in those states may affect water available to Great Salt Lake. A federal role could help coordinate investments across state lines without creating a top-down federal water-management regime.

## POTENTIAL FEDERAL MECHANISMS

- **Direct pass-through to Utah for basin expansion:** Federal funds could flow through Utah to expand operations and monitoring within the Great Salt Lake watershed.
- **Interstate Bear River cloud seeding support:** A smaller interstate component could fund cloud-seeding operations in the Idaho portions of the Bear River watershed, in coordination with state agencies, water users, and existing basin institutions.
- **NOAA or federal research support:** Federal research funding could support improved attribution, radar-based monitoring, modeling, and evaluation of precipitation enhancement. Any federal cloud-seeding investment should include resources for measuring precipitation, snowpack, runoff, and downstream effects.

## BOTTOM LINE

Cloud seeding should be included as a cost-effective tool to increase water supply in the initial federal Great Salt Lake portfolio. Utah's long-running experience with the technology, relatively low estimated cost per acre-foot, and recent technological improvements make precipitation enhancement a useful complement to conservation. Federal funding could help expand operations in the Great Salt Lake basin, extend efforts into the upper Bear River watershed, and improve the monitoring needed to better understand how much added precipitation ultimately benefits the lake.

### 2. Newfoundland Basin Water Recapture and Infrastructure

In the 1980s, when Great Salt Lake reached record-high levels, Utah constructed the West Desert Pumping Project to move excess lake water westward into the Newfoundland Evaporation Basin, a shallow desert basin where the water could evaporate. Today, however, the problem has reversed: the lake needs more water, not less. Infrastructure associated with that earlier flood-control effort may now be preventing some water that collects in the Newfoundland Basin from reaching Great Salt Lake.

Utah is evaluating whether that infrastructure could be modified to capture freshwater or lower-salinity flows that currently drain westward into the basin and evaporate, and redirect some of that water toward the lake. If feasible, such a project could provide roughly 20,000 to 50,000 acre-feet of additional water for the lake each year—a meaningful contribution as part of a broader restoration portfolio.<sup>40</sup>

## WHAT IT INCLUDES

- **Feasibility and engineering analysis:** The near-term priority should be a federal feasibility study. Before construction funds are committed, policymakers need a clearer understanding of recoverable water volumes, pumping requirements, infrastructure conditions, costs, and operational constraints. The goal should be to determine whether water can be recovered in a way that improves lake inflows without creating new water-quality or salinity problems.

<sup>40</sup> Great Salt Lake Strike Team, Great Salt Lake Data and Insights Summary: A Synthesized Resource Document for the 2026 General Legislative Session, Version 1.0, January 7, 2026, <https://d36oiwf74r1rap.cloudfront.net/wp-content/uploads/2026/01/GSL-Jan2026.pdf>

- **Infrastructure modification or rehabilitation:** If feasibility analysis supports moving forward, federal funds could help modify or rehabilitate existing infrastructure, construct new conveyance facilities, or support pumping and operational systems needed to move more water to the lake.
- **State-federal cost sharing:** Because the infrastructure was built for a state flood-control project and any future use would serve both state and federal restoration interests, implementation would likely be best structured as a federal-state cost-share or cooperative agreement.

## WHAT UTAH HAS ALREADY DONE

Utah already has the basic historical and physical foundation for evaluating this opportunity. The existing corridor may provide a starting point for a lower-cost supply-recapture strategy than building entirely new infrastructure from scratch.

But the opportunity remains uncertain. The state will need stronger technical analysis before determining whether Newfoundland Basin recapture is practical, cost-effective, and environmentally sound. That makes this an ideal candidate for near-term federal feasibility funding rather than immediate full-scale construction.

## FEDERAL VALUE-ADD

Federal investment could add value in three main ways. First, federal funding could support the technical work needed to determine whether the project is actually viable. A feasibility study is a relatively modest investment compared with construction, but it would answer important questions about potential benefits, costs, and implementation.

Second, federal agencies have relevant expertise. Reclamation is well suited to evaluate water-supply infrastructure, conveyance, pumping, and basin hydrology. The Army Corps could also be relevant if the project is framed through water-resources infrastructure or feasibility-study authorities.

Third, if the project proves feasible, federal funding could help convert an old flood-control system into a water-supply and lake-recovery asset. That would be a tangible example of using existing infrastructure to address today's very different hydrologic conditions.

## POTENTIAL FEDERAL MECHANISMS

- **Reclamation feasibility funding:** Congress could direct Reclamation to evaluate the Newfoundland Basin opportunity using appropriated funds, potentially in partnership with Utah. This is likely the most straightforward near-term mechanism.
- **Reclamation infrastructure cost-share:** If feasibility analysis supports construction, Reclamation could help fund infrastructure modification, conveyance, or pumping improvements through a federal-state cost-share.

## BOTTOM LINE

Newfoundland Basin water recapture could become a meaningful supply-side addition to the Great Salt Lake recovery portfolio, but important technical and environmental questions remain unresolved. For an initial federal investment, funding should be used to assess these unknowns and, if appropriate, proceed with plans to modify the basin to be a source, rather than a drain, of water for the Great Salt Lake.



## PART IV: PRIORITIZING AN INITIAL FEDERAL INVESTMENT

### *How should federal dollars be allocated across the recovery portfolio?*

Funding from Congress should be allocated according to the report's core priorities: first, investments that put measurable water in the lake; second, investments that make those water gains verifiable and durable; and third, targeted support for projects that may improve hydrology, restore habitat, or expand water supply over time.

As a general framework, Congress should consider allocating an initial federal investment as follows:

- **50 to 60 percent for direct water conservation and transactions.** This should include voluntary agricultural water leasing, agricultural optimization projects tied to measurable lake benefits, municipal conservation, secondary metering, turf conversion, and targeted industrial water transactions. Within this category, voluntary water leasing should receive the highest priority because it is the clearest tool for delivering measurable, legally protected water to the lake.
- **15 to 25 percent for measurement, accounting, delivery, and implementation infrastructure.** This should include metering, stream gauges, evapotranspiration accounting, depletion measurement, transaction verification, and delivery infrastructure needed to ensure that conserved water actually reaches the Great Salt Lake. These investments may not always produce water directly, but they are essential to making the rest of the portfolio credible.
- **15 to 25 percent for supporting restoration, interstate coordination, and supply augmentation.** This should include phragmites removal, native vegetation restoration, federal land management, voluntary conservation opportunities in Idaho and Wyoming, upper Bear River coordination, cloud-seeding expansion and verification, and feasibility work for projects such as the Newfoundland Basin water recapture project.

These ranges are not intended as a rigid formula. Actual allocations should depend on project readiness, hydrologic conditions, transaction availability, matching funds, and Utah's implementation priorities. But the framework helps ensure that federal dollars remain anchored to the central objective: getting more water to the lake in ways that can be measured, protected, and sustained. This framework can be scaled to the size of the appropriation. If Congress provides less than the proposed \$1 billion, the same hierarchy could apply. A more detailed illustrative allocation framework is provided in the table below:

## AN ILLUSTRATIVE ALLOCATION FRAMEWORK

| INVESTMENT CATEGORY                                                | ILLUSTRATIVE SHARE OF INITIAL FEDERAL INVESTMENT | PRIORITY                                |
|--------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------|
| Voluntary water leasing and transactions                           | 35 - 45%                                         | Highest priority                        |
| Agricultural optimization tied to measurable lake benefits         | 15 - 25%                                         | High priority                           |
| Measurement, accounting, verification, and delivery infrastructure | 10 - 15%                                         | Essential implementation infrastructure |
| Municipal and industrial conservation                              | 10 - 15%                                         | Supporting priority                     |
| Phragmites removal and wetland/hydrologic restoration              | 5 - 10%                                          | Supporting priority                     |
| Supply augmentation and feasibility work                           | 5 - 10%                                          | Complementary priority                  |
| Interstate and federal-land coordination reserve                   | 5 - 10%                                          | Targeted federal role                   |



## PART V: FEDERAL FUNDING AND GOVERNANCE OPTIONS

### *Through which funding structures should federal investment flow? What longer-term framework should Congress authorize?*

---

The investment categories described in Part III identify the most promising near-term uses of federal funds. But Congress and the administration must decide not only what to fund, but how those funds should flow, who should direct them, and whether Great Salt Lake recovery requires a new federal authorization or other related federal policy reforms.

The challenge is to design a structure that provides federal resources, accountability, and coordination without displacing Utah's state-led approach. The best federal role is not to federalize lake management, but to reinforce the state's voluntary, market-based recovery strategy.

Three broad options are available: a full federal restoration initiative, a formal federal-state partnership with Utah as the primary nonfederal partner, or a state-led initiative supported in part by federal funding. Each offers a different mix of federal involvement, state leadership, administrative capacity, and long-term durability.

#### **OPTION 1: CREATE A FULL FEDERAL RESTORATION INITIATIVE**

The most formal approach would be for Congress to authorize a dedicated federal restoration initiative for Great Salt Lake. This model would create a new federal program, likely housed within the Department of the Interior or another lead agency, with dedicated funding, planning responsibilities, interagency coordination, and implementation authority.

Such a model has precedent in other large-scale ecosystem restoration efforts.<sup>41</sup> Congress has created or supported federal restoration frameworks for major watersheds and aquatic ecosystems such as the Great Lakes or Chesapeake Bay. These initiatives vary significantly in structure, but they generally provide a federal organizing framework for funding, coordination, planning, and accountability across agencies and jurisdictions.

A Great Salt Lake version could take several forms. Congress could designate a lead federal agency, authorize appropriations for restoration activities, establish an interagency task force, create a federal program office, direct federal agencies to develop or implement a restoration plan, and/or require periodic reporting to Congress. A federal initiative could also provide a way to coordinate work across multiple relevant federal agencies.

Another option would be to use an intermediary organization, such as the congressionally chartered National Fish and Wildlife Foundation, to help administer appropriated federal funds according to a shared restoration plan while leveraging nonfederal contributions, as other federal watershed restoration initiatives have done. This approach has proven effective where a lead federal agency lacks the necessary capacity to administer a watershed-scale program on its own. It can also diversify funding options beyond the Congressional appropriations cycle by leveraging state and philanthropic support.

---

<sup>41</sup> Congressional Research Service, Restoring the Great Salt Lake Ecosystem.

The advantages of these approaches is that it would create a visible federal commitment and give Congress a defined vehicle for continued appropriations and oversight. But it also carries drawbacks as well. A fully federal initiative would require additional authorizations from Congress and could take time to design and implement. More importantly, it would be the least consistent with Utah's political and institutional context. Utah has already created the Office of the Great Salt Lake Commissioner, adopted a Great Salt Lake Strategic Plan, launched a Basin Integrated Plan, established water transaction mechanisms, and invested significant state resources in lake recovery. A new federal program that appears to duplicate or replace those efforts could generate resistance and ultimately slow recovery progress.

For these reasons, a full federal restoration initiative may not be the best near-term model for Great Salt Lake. It may be useful as a longer-term strategy. But unless carefully constructed to avoid duplication and additional bureaucracy, it risks replacing Utah's state-led recovery strategy with a separate federal structure.

## **OPTION 2: ESTABLISH A FORMAL FEDERAL-STATE PARTNERSHIP**

A second option would be for Congress to authorize a formal federal-state partnership for Great Salt Lake recovery, with Utah designated as the primary nonfederal partner. Under this model, Congress could direct one or more federal agencies to collaborate with Utah to implement lake-recovery projects. The partnership could authorize cost-sharing arrangements, grants or cooperative agreements, implementation plans, reporting requirements, and federal support for priority projects identified through Utah's existing restoration framework. Utah, through the Office of the Great Salt Lake Commissioner or another designated state entity, would serve as the primary state counterpart.

This approach has precedent in other large-scale restoration contexts. The Everglades offers one model: Under the Comprehensive Everglades Restoration Program, the primary nonfederal partner is the South Florida Water Management District, a regional state agency that helps implement, study, construct, manage, and monitor restoration projects. Lake Tahoe offers another: Congress has authorized federal funding to support restoration activities carried out in coordination with a regional, nonfederal governance structure, the Tahoe Regional Planning Agency, as well as state, local, tribal, and private partners. The Tahoe example is also unique in that the agency was established by California and Nevada with the consent of Congress through a bi-state compact and is the nation's first natural resource agency with land-use authority crossing state lines. This approach could be useful for considering engagement with Idaho and Wyoming water users to achieve collaborative lake restoration efforts across state lines.

A Great Salt Lake version of this model could be designed to preserve Utah's leadership role while providing a more durable federal structure for funding and coordination. Congress could require federal activities to be consistent with Utah's Strategy Plan and Basin Integrated Plan, identify the Office of the Great Salt Lake Commissioner as the principal state partner, and authorize federal agencies to support the kinds of investments described in Part III.

A formal federal-state partnership could provide a more stable framework for multiyear implementation than annual appropriations or *ad hoc* agency grants. It could also help coordinate the many federal agencies with relevant responsibilities, while giving Utah a clear institutional role in project selection and implementation.

Compared with a full federal restoration initiative, this model is more compatible with Utah's preference for state leadership. It could also help address interstate and federal land issues that Utah cannot address on its own.

Such a model, however, has drawbacks as well. It would likely require a new authorization from Congress, which could take time to negotiate and implement. This approach is also reliant on the annual Congressional appropriations process (absent the development of a new payment source and/or accessing mandatory funding). For these reasons, a formal federal-state partnership may be better suited as a longer-term strategy than as the immediate vehicle for an initial federal investment. Further, if this approach is pursued, Utah should consider structuring the program to allow for a diversity of funding options and the integration of conservation opportunities in Idaho and Wyoming. If federal involvement continues beyond a first major appropriation, Congress could use this model to provide a durable structure for cost-sharing, accountability, and coordination.

### **OPTION 3: SUPPORT A STATE-LED INITIATIVE THROUGH ALIGNED FEDERAL FUNDING**

A third option is for Congress to support Great Salt Lake recovery through a state-led initiative backed in part by aligned federal funding, either through a direct appropriation or working with federal agencies to allocate previously appropriated funds to a special Great Salt Lake initiative. Under this approach, Utah would remain the strategic lead, while federal agencies would provide funding, technical support, and targeted coordination in key areas.

Under a direct appropriations approach like this, Congress can increase spending authority through the Bureau of Reclamation or other federal agencies toward a specific purpose via report and/or bill language. For example, Congress frequently directs the Bureau of Land Management to set aside a portion of funding made available through its Wildlife Habitat and Aquatic Management Program for sage grouse conservation and salinity control activities. Using a similar approach, Congress could increase spending with corresponding direction to federal agencies to direct those funds directly to Great Salt Lake recovery and require that a large share be made available to Utah through grants, cooperative agreements, or other pass-through mechanisms to implement strategies consistent with the state's Great Salt Lake Strategic Plan.

The direct appropriations approach is less formal than a full federal restoration initiative or Congressionally authorized federal-state partnership. That is both a strength and a limitation. It can move faster, builds on existing institutions, and avoids unnecessary bureaucracy. On the other hand, it lacks the durability of a Congressionally authorized federal restoration initiative or formal federal-state partnership for sustained federal investment. These latter issues could present challenges for securing federal funds beyond an initial appropriation.

Another approach is to utilize previously appropriated Congressional funds to create a special program or initiative via a federal agency administrative process. This model builds most directly on the recent federal funding for Great Salt Lake. In 2025, Reclamation provided \$50 million to Utah for voluntary water transactions, water conservation, and ecosystem restoration to benefit the lake. These funds were previously appropriated by Congress through the Inflation Reduction Act for drought mitigation measures with language granting Reclamation broad authority to administer these funds, including through large, direct financial agreements with states.

The primary advantage of this approach is that it can be set up administratively using already-appropriated funds for a larger federal program (e.g., USDA conservation programs, drought-mitigation funding within Reclamation) while also building on the progress and institutions Utah has already created. The Office of the Great Salt Lake Commissioner, the Strategic Plan, the Basin Integrated Plan, and the Watershed Enhancement Trust already provide a framework for identifying priorities and implementing projects. Rather than building a parallel federal program, federal agencies could set aside funds to support and accelerate those existing efforts.

For an initial federal investment, these approaches are likely the best fit. It provides federal support without displacing Utah's leadership, and it can support the highest-return investments described in Part III quickly in ways that a longer-term restoration program cannot. This approach could also serve as a practical test case for a longer-term federal role. Congress could use the initial appropriation to scale Utah-led implementation, evaluate which investments deliver the greatest lake benefits, and build public and stakeholder confidence in a federal role that supports rather than supplants the state. If the model proves successful, Congress could then formalize it through a Great Salt Lake-specific authorization, a federal-state partnership, or a more durable Reclamation-based program.

## **THE PREFERRED APPROACH: STATE-LED IMPLEMENTATION WITH TARGETED FEDERAL SUPPORT**

Of the three options, the most promising near-term approach is a state-led model supported by targeted federal funding through the FY27 appropriations process and/or working directly with federal agencies to set aside previously appropriated funds. This structure would allow Congress and the White House to deploy the initial federal investment quickly and effectively while preserving Utah's leadership and avoiding the delays and political risks associated with creating a new federal restoration bureaucracy. It would also create a practical test case for a longer-term federal role. The near-term priority, however, should be implementation: get resources to the institutions already positioned to act, fill the gaps only the federal government can fill, and build a record of results before creating a permanent federal program.

### **A. A Large Utah-Led Implementation Component**

The bulk of the initial federal investment should flow through Utah-led channels to support projects and priorities that are ready to scale, as identified in Part III. The most straightforward mechanism would be a direct appropriation through Reclamation, likely through the bureau's Water and Related Resources account, with funds made available to Utah through grants, cooperative agreements, or other pass-through mechanisms. This would build on the recent Reclamation funding model while scaling it to meet the size of the current opportunity.

Congress should structure the appropriation broadly enough to cover the full implementation portfolio described in Part III and consistent with Utah's Great Salt Lake Strategic Plan, including water measurement, accounting, monitoring, and verification. The recent \$50 million Reclamation allocation provides a useful precedent, but future funding should avoid overly narrow eligibility rules that prevent investment in essential implementation tools. Some of those tools may not produce water directly (e.g., measurement and monitoring infrastructure), but they are necessary to ensure that leasing, conservation, and infrastructure investments deliver measurable benefits to the lake.

The purpose of this component would be to help Utah scale what is ready to go. Utah has made substantial investments in water leasing, agricultural optimization, secondary metering, conservation planning, and restoration. A large federal implementation component would allow Utah to move from early-stage programs and pilot projects toward implementation at a scale more commensurate with the problem.

### **B. Targeted Support for Needs Beyond Utah's Reach**

A smaller share of federal funding should support work that Utah cannot accomplish on its own. The Great Salt Lake watershed extends into Idaho and Wyoming, and federal agencies control significant amounts of land and infrastructure in the basin. This component could address specific gaps that Utah cannot fill on its own.

Funding could include voluntary conservation projects in Idaho and Wyoming that generate measurable water savings, shared stream gauging and depletion accounting, and upper Bear River cloud seeding expansion. Federal funds could also support coordination with the Bear River Commission and relevant state agencies. This component could also include federal land management, such as the need for USFWS and BLM to remove phragmites and restore habitat on lands those agencies manage in the basin.

The key is that these federal and interstate activities should remain tied to Utah's broader recovery framework. They should fill gaps, extend the reach of voluntary conservation, and support basinwide coordination where necessary.

### **C. Potential Longer-Term Authorization**

This layered model could also provide the foundation for a more durable federal framework. Rather than creating a permanent program before the initial appropriation is deployed, Congress could use the initial funding to scale Utah-led implementation, clarify agency roles, and identify which funding channels are best suited to different parts of the portfolio.

Over time, Congress could formalize this approach through a federal-state partnership with Utah as the primary nonfederal partner or similar structure that builds on the initial funding model. The immediate priority, however, should be to deploy federal resources through existing state-led channels that are already well-positioned to conserve, dedicate, and deliver water to the Great Salt Lake.

## **CONCLUSION**

---

Great Salt Lake recovery is one of the most important water and restoration challenges facing the American West. It is also one of the most promising. Utah has already built the institutions, political support, and policy architecture needed for action. The federal government should now help scale that effort.

The best federal role is not to create a new bureaucracy for its own sake. It is to accelerate the tools most likely to put additional water in the lake, make those gains measurable and durable, and support cooperation where Utah cannot act alone. Done well, federal investment can help restore Great Salt Lake while showing how state leadership, voluntary conservation, and targeted federal support can work together to solve one of the West's defining environmental challenges.