2 INTEGRATING PARTNERS AND ACTIVITIES

The water resource management challenges we face today require an integrated approach that considers the entire water cycle and treats GSL watershed as a single and connected system – a system of systems. Sustainable and resilient solutions will require the GSLBIP to integrate not just surface and groundwater supplies, but also the social, legal, economic, and political structures; local and regional water infrastructure and operations; and environmental requirements of the entire watershed (Figure 2-1). To do so, the GSLBIP must begin with and be founded upon trust and partnership, and it must integrate the goals, objectives, and work of partners and participants to boost connection and alignment, minimize duplication of effort, leverage available expertise and funding, and achieve the best result.

Figure 2-1. Elements to be Integrated as Part of the Great Salt Lake Basin Integrated Plan

To learn more, contact Laura Vernon/WRe at gslbasinplanning@utah.gov.

PARTNERS AND PARTICIPANTS

WRe and Reclamation have developed a growing list of partners who have already formally committed time, information, and resources to GSLBIP development (Table 2-1). WRe and Reclamation are committed to bolstering these existing partnerships as well as forging new ones. Each partner will become involved with and participate in tasks depending upon their unique interests, mission, expertise, and mandate. An ebb and flow of participation among partners is expected throughout the GSLBIP development.

Numerous entities and individuals also are already involved in some way or have or may indicate their desire to participate. These include local water management agencies, irrigation companies, tribes, municipalities, educational institutions and organizations, nongovernmental organizations, community organizations and individuals. Some participants may participate in executing tasks, while others may simply observe and be informed of study activities. All stakeholders throughout the watershed will be invited and given the opportunity to participate and share their insights related to the GSLBIP.

Table 2-1. Growing Partnership Committed to the Great Salt Lake Basin Integrated Plan

Great Salt Lake Basin Integrated Plan Partners	
Academic and Advisory	
Agricultural Water Optimization Committee	Growing Smart Initiative
Bear River Watershed Council	Jordan River Watershed Council
Great Salt Lake Advisory Council	University of Utah
Great Salt Lake Ecosystem Program	Utah Lake Watershed Council
Great Salt Lake Salinity Advisory Committee	Utah State University
Great Salt Lake Strike Team	Utah Water Ways
Great Salt Lake Technical Team	Weber River Watershed Council
Great Salt Lake Watershed Enhancement Trust	West Desert Watershed Council
Environmental and Conservation	
FRIENDS of Great Salt Lake	The Nature Conservancy
National Audubon Society	
Federal Agencies	
U.S. Army Corps of Engineers	U.S. Fish and Wildlife Service
U.S. Bureau of Reclamation	U.S. Forest Service
U.S. Bureau of Land Management	U.S. Geological Survey
U.S. Environmental Protection Agency	
State Agencies	
Idaho Department of Water Resources	Utah Division of Water Resources
Utah Division of Air Quality	Utah Division of Water Rights
Utah Division of Conservation	Utah Division of Wildlife Resources
Utah Division of Forestry, Fire & State Lands	Utah Geological Survey
Utah Division of Indian Affairs	Utah Division of State Parks
Utah Division of Water Quality	Wyoming Office of the State Engineer
Water Suppliers	
Bear River Canal Company	Metropolitan Water District of Salt Lake and Sandy
Bear River Water Conservancy District	Ogden River Water Users Association
Cache Water District	Provo River Water Users Association
Central Utah Water Conservancy District	Salt Lake City Department of Public Utilities
Jordan Valley Water Conservancy District	Weber Basin Water Conservancy District

ONGOING ACTIVITIES TO BE INTEGRATED INTO THE GREAT SALT LAKE BASIN INTEGRATED PLAN

Water planning is not something new in Utah. The water plans of our predecessors are what enabled the growth and development of the communities and economy we enjoy today; those plans left an incredible water legacy. The partners listed in Table 2-1—plus numerous more—continue that important planning legacy. The GSLBIP must capitalize upon this wealth of information, knowledge, and experience; integrate past and ongoing efforts; and identify opportunities to bring them into alignment.

WRe's first task related to H.B. 429, as described in Section 1, was to partner with Reclamation to capitalize upon its expertise in water planning, development, conservation, and management and the regional water infrastructure it has had a significant role in developing and operating throughout the GSL watershed. The result is the development of this Work Plan for the GSLBIP. Many previous and ongoing activities were identified as part of situational and gap assessments completed for this Work Plan. Many activities are already under way or beginning soon that will be important to integrate with the GSLBIP; some activities are summarized in Table 2-2.

FUNDING SOURCES

Primary funding for the Work Plan and also GSLBIP development will come from $5 million appropriated by the 2022 Utah Legislature and $3.17 million in matching funds from a WaterSMART grant provided by Reclamation. Reclamation's funding may be via in-kind services or direct funding to WRe. WRe is actively working with the GSL Strike Team, other state agencies at the Utah Department of Natural Resources, Utah Department of Agriculture and Food, and Utah Department of Environmental Quality, and other federal agencies at the United States Department of Interior and United States Department of Agriculture to leverage existing and identify new sources of funding for additional work. Reclamation is also assisting with investigating potential additional funding sources.

Table 2-2. Critical Activities to be Integrated into the Great Salt Lake Basin Integrated Plan Development

Plan	Description	Details
Great Salt Lake Stormwater Study	H.B. 429 funded an independent evaluation of how low-impact development best management practices associated with post-construction stormwater permit requirements may impact the water budget of GSL.	This study has been completed in coordination with WRe and DWQ and will be presented to the Legislature in November 2023.
USGS Saline Lakes Ecosystems IWAA[1]	Authorized by the 2022 Saline Lake Ecosystems in the Great Basin States Program Act, the Saline Lakes IWAA includes numerous studies to collect data and investigate the interplay between saline lake hydrology and ecology to inform water management in the western United States. USGS has 11 active studies as part of this IWAA that include GSL and its watershed.	The Saline Lakes Ecosystems IWAA is currently funded through October 2024 and includes the following: • Water quality and quantity monitoring • Avian movement and habitat monitoring • Remote sensing analyses of habitat, hydrology, and water quality • Aquatic ecology monitoring • Water budget development • Analyses of watershed land use changes • Communications • Database development
GSL Watershed Enhancement Trust[2]	The GSL Watershed Enhancement Program Act (H.B. 410) in 2022 provided $40 million for a water trust to enhance GSL water quantity and quality and GSL wetlands and restore and protect wetlands and habitat in the surrounding GSL ecosystem to benefit lake hydrology. The Trust has already facilitated or funded several temporary and permanent water transactions and wetlands projects and is conducting assessments and studies to preserve essential habitats and hydrology that can be protected, enhanced, and restored.	This Trust, established and co-led by National Audubon Society and The Nature Conservancy received a $40 million grant from the state to achieve the GSL Watershed Enhancement Program Act goals. The Trust Advisory Council advises on matters related to the mission of the Trust and major project proposals.
USGS and UGS GSL Basin Groundwater Model	This effort was funded by the 2021 Utah Legislature to develop a groundwater model of the GSL Basin to better quantify the groundwater contribution to GSL and its wetlands. The goal is to help with future planning and water management decisions affecting the lake, its wetlands, and surrounding areas.	This collaborative effort is scheduled to be completed in 2025.

Plan	Description	Details
GSL Tech Team Hot Topics Research Grants	FFSL has been funding novel research of GSL since 2009 via its Hot Topics research grant program. The GSL Tech Team recommends key topics of interest that will further knowledge of GSL. FFSL solicits and funds proposals annually. Results are published to the community.	FFSL has funded approximately $200,000 in grants annually through fiscal year 2023. FFSL intends to increase this amount to $500,000 with a renewed focus upon research that informs and improves management of GSL.
GSL Strike Team	This team was originally formed in 2022 to bring together researchers at the University of Utah, Utah State University, and state agencies to provide data and answers to key questions needed for saving GSL. The GSL Strike Team is currently assisting the GSL Commissioner develop his strategy.	This team published its *Great Salt Lake Policy Assessment*[3] on February 9, 2023, for the 2023 General Legislative Session.
GSLAC, GSL Technical Team, GSLEP Technical Advisory Group, and GSL SAC	These groups comprise stakeholders and scientists completing ongoing studies to identify risks and opportunities and recommend studies and management strategies. Each group has a different point of focus.	Information about these groups is available online.[4, 5, 6, 7]
Water Suppliers And Managers	Numerous irrigation companies and municipal wholesale and retail water suppliers operate in the GSL watershed. All perform water planning at some level, provide expertise and data, and are important partners for the GSLBIP.	Example water-planning documents they maintain include 40-year water requirement plans, water conservation plans, annual water use plans and reporting, and system water master plans.
Agricultural Water Optimization Program	UDAF was appropriated $200 million in 2023 to invest in helping agriculture optimize water use while maintaining or improving agriculture production.	Applications for projects must demonstrate water savings. Also, all projects require using flowmeters and demonstrating improved and protected surface and groundwater quality by reducing overwatering of crops.
GSL Inflow Monitoring	WRi is working with Utah State University to complete a gap analysis of flow measurement infrastructure in the GSL watershed to identify priority locations for the installation of new flow measurement infrastructure.	A total of $5 million was appropriated to WRi for this program, but it expires on June 30, 2024.

Plan	Description	Details
GSL Recovery Program	Funding was identified in the 2022 GSL Recovery Program Act for the USACE to study drought conditions and protect the long-term health of GSL. WRe is currently coordinating with the USACE.	WRe has signed a Memorandum of Agreement with the USACE to begin an initial assessment of project needs. This assessment will begin in 2023 and likely conclude in 2025.
GSL Comprehensive Management Plan	FFSL intends to begin updating its *Final Great Salt Lake Comprehensive Management Plan and Record of Decision*[8] in 2023. This plan is intended to identify potential issues and strategies to manage GSL resources at different lake levels.	This important effort, which will help determine whether developing safe operating water levels for GSL is feasible, will begin during late 2023 and likely conclude in 2025.
Utah Wildlife Action Plan	This plan is an Endangered Species Act listing prevention plan that provides a roadmap on what species need conservation attention in Utah, what habitats they rely upon, what stressors they face, and important conservation actions.	The Utah Wildlife Action Plan is required to be revised every 10 years, and the DWR and partners are currently revising the plan with a timeline for completion being fall 2025. For this revised plan, Utah conservation partners have placed more emphasis on the GSL ecosystem, including saline lakes habitat and expansion of the species that need conservation attention, which comprise species that rely on GSL (for example, brine flies and birds reliant on GSL are being considered for inclusion).

[1] More information is available at https://www.usgs.gov/special-topics/saline-lakes-ecosystems-integrated-water-availability-assessment

[2] More information is available at https://www.gslwatertrust.org/

[3] *The Great Salt Lake Policy Assessment* can be accessed at https://gardner.utah.edu/great-salt-lake-strike-team/

[4] More information is available at https://deq.utah.gov/great-salt-lake-advisory-council/great-salt-lake-advisory-council

[5] More information is available at https://ffsl.utah.gov/state-lands/great-salt-lake/great-salt-lake-technical-team/

[6] More information is available at https://wildlife.utah.gov/gslep.html

[7] More information is available at https://ffsl.utah.gov/state-lands/great-salt-lake/great-salt-lake-salinity-advisory-committee/

[8] More information is available at https://ffsl.utah.gov/wp-content/uploads/OnlineGSL-CMPandROD-March2013.pdf

Notes:

$ = United States 2023 dollars
DWR = Division of Wildlife Resources
WRe = Utah Division of Water Resources
WRi = Utah Division of Water Rights
FFSL = Utah Division of Forestry, Fire and State Lands
GSL = Great Salt Lake
GSLAC = Great Salt Lake Advisory Council
GSLEP = Great Salt Lake Ecosystem Program
H.B. = House Bill
IWAA = Integrated Water Availability Assessment
SAC = Salinity Advisory Committee
Trust = GSL Watershed Enhancement Trust
UDAF = Utah Department of Agriculture and Food
USACE = United States Army Corps of Engineers
USGS = United States Geological Survey