

# FRIENDS of *Great Salt Lake*

150 South 600 East, Ste. 5D, Salt Lake City, UT 84102

[www.fogsl.org](http://www.fogsl.org)

Volume 30 Number 1

Winter 2025

---



*"Wilson's Phalarope"*  
*mixed media by Tom Judd*

---

The mission of FRIENDS of Great Salt Lake is to preserve and protect the Great Salt Lake ecosystem and to increase public awareness and appreciation of the Lake through education, research, advocacy, and the arts.

[www.fogsl.org](http://www.fogsl.org)

# EXECUTIVE DIRECTOR'S MESSAGE

---

## A CALL TO BINOCULARS 30 YEARS LATER

*"I have to confess. I am hopeful this night will be viewed as a major historical milestone for Great Salt Lake. I am hopeful that ten or twenty years from now, we will look back on this night as a beginning of a more organized public effort to preserve and enhance the wetlands ecosystem."*

—Wayne Martinson, Utah Wetlands Coordinator, National Audubon, 1994

In 1994, the Utah Museum of Natural History at the University of Utah sponsored a Winter Lecture Series that focused on the beauty and mystery of Great Salt Lake. The goal of the four-part series was to "celebrate the inherent values of this predominant and priceless feature of the landscape by drawing on local scholars with national acclaim to further instill a sense of community pride in Great Salt Lake, and provide an opportunity for the community to discover it as an ally."

The timing of the lecture series was opportune. In 1986, Great Salt Lake had achieved a new historic high elevation of 4211.85' ASL. That elevation woke up the surrounding political and population landscape to the fact that this saline system was inherently "problematic." The flooding and property damage on and around the Lake required costly and extraordinary responses to address them. Six years later, the Bear River Development Act was passed to address the future water demand of northern Utah's growing population. The Act authorizes the development of 220,000 acre-feet of the surface water and tributaries of the Bear River, diverting its inflows via reservoirs, pipelines and pump stations to municipal water conservancy districts along the Wasatch Front. These are the very inflows that provide the lion's share of water to Great Salt Lake. That same year, due to its importance to migratory phalaropes, Great Salt Lake was designated as a Hemispheric Site of importance within the Western Hemisphere Shorebird Reserve Network. And the beat goes on.

Relevant, inspiring, and critical for the Lake, the 1994 lecture series inspired participants to experience a sense of wonder, awareness, and responsibility as Lake stakeholders. The series helped them better understand its personality as a complex and critical saline system with incredible ecological values and economic benefits. It offered a unique invitation to learn how and why the Great Salt Lake ecosystem is a place that reflects the dynamics of change; geologically, culturally, and environmentally. A place of regional, hemispheric, and global significance for millions of migratory birds that rely on the Lake for resting, staging, and nesting. And how, as a public trust resource for Utah, it is an extraordinary gift that relies on its ever growing and informed community as an ally to preserve and protect it in perpetuity.

"Under certain conditions, a place becomes part of us: we own it. We absorb it into our lives, it cannot be taken from us. It is ours, and without title or deed. We are associated with a certain spot of earth: we have our lives shaped by it; or

if that be not the case, we stamp the place with our individuality."

—Alfred Lambourne, English-born American artist and author

Contributing to this insightful depth of field about the Lake were four notable scholars:

Don Currey's presentation *Air, Earth, Fire and Water: The Alchemy of the Great Salt Lake* provided a geologic and geographic rundown of the Lake. As a beloved scholar of Lake Bonneville sediments and landforms, Currey, a University of Utah Professor of Geography, saw them as the key to unraveling the detailed history of climate change of western, continental, North America.

"Don valued field work and field experience and made the Great Basin and western United States his students' outdoor laboratory. A cause that absorbed much of his attention was to protect critical landforms, primarily Lake Bonneville features, that preserve important Earth systems information but are threatened by destruction mining and urban sprawl. He was a skilled observer with outstanding ability to spot and identify natural features. He thought in four dimensions always, everywhere (latitude, longitude, elevation, and time). Don and graduate students working with him made tremendous contributions to the public's and decision maker's understanding of Great Salt Lake."

—Genevieve Atwood, former State Geologist

Joseph R. Jehl, was a research associate and Director of the Hubbs-Sea World Research Institute in the 1970s and 80s. An ornithologist with a lifetime of experience focusing on migratory bird species, Jehl was an early voice declaring and describing the importance of saline lakes to many nesting and migratory birds. His presentation *The Living Dead Sea* helped extend the reach of the audience into the hemisphere.

"His research on species that rely on saline lake environments as a key part of their migratory cycle began at Mono Lake. What was the relationship between the Lake's macro invertebrates and the most prominent species at the lake, California Gull, Eared Grebe, Wilson's and Red-necked Phalaropes?

Investigating the significance of Mono Lake to the conservation of these species naturally led to questions about what other saline lakes were important to these birds. The Great Salt Lake (GSL) is the largest of the salt lakes in the Great Basin, thus an obvi-



ous place to look. Contracting with the Utah Division of Wildlife Resources (DWR), Dr. Jehl looked into Great Salt Lake's importance to the four species.

Great Salt Lake was identified as the most significant saline migratory habitat for both Wilson's and Red-necked Phalarope. The annual migratory population size of Wilson's phalarope exceeded 500,000 during the 1980 survey years. The GSL was thus designated as a Hemispheric Site of importance within the Western Hemisphere Shorebird Reserve Network due to its importance to migratory phalaropes."

– Don Paul, retired wildlife biologist, Utah Division of Wildlife Resources

Dean L. May, Professor of History at the University of Utah, discussed the history and impact of human activities around the Lake from Archaic to modern cultures. His lecture was titled *Bayous, Beaches and Breaches*.

"The Great Salt Lake, a "vast inland sea," is perhaps the most distinctive of all Utah's natural features. Though locals relegate it to a position on their list of Utah's wonders approximating its elevation in the landscape about it, the lake has a way of making its presence known."

– Dean May, Utah: A People's History (basis of the award winning television series)

Terry Tempest Williams gave the final lecture, titled *The Truth About the Liquid Lie*. A steadfast advocate for the Lake, Tempest Williams's 1991 book *Refuge: An Unnatural History of Family and Place* brought Great Salt Lake into the hearts and minds of countless readers.

"The Greater Wasatch Front has roughly 400,000 more people that it did ten years ago, over two-thirds of this population increase comes from our own internal birth-rate. The capacity for Great Salt Lake to breathe, to move in and out according to yearly fluctuations, has been reduced by development closer to the shoreline. We are losing critical buffer lands such as farms and open space necessary for the birds as amnesia plagues city and county officials who refuse to make tough planning and zoning decisions. And of course, water is perhaps the most critical of all."

–Terry Tempest Williams

Wayne Martinson, Utah Wetlands Coordinator for National Audubon Society, then invited the audience to respond to a *Call to Binoculars*. Wayne's aim was to extend the reach of this deep and briny drink of information into a commitment by Great Salt Lake's community to take action to preserve and protect it in perpetuity as a public trust. He celebrated the Lake's wildlife and beauty and emphasized the dangers it faces from past and present development on and around it. This is development that brings pollution, impacts water inflows, wildlife and their habitats. Characterizing these pressures as "a death by a thousand cuts," he noted the timely and highly

consequential creation of the Mono Lake Committee in 1978 to help protect Mono Lake's public trust values. He proposed that an organized effort be made to help people understand the values of Great Salt Lake, help promote research and education about the Lake, and advocate for the Lake. With that, he invited people to sign up on clipboards to help organize this new group. The takeaway was the creation of FRIENDS of Great Salt Lake.

In 1996, FRIENDS hosted its first biennial Great Salt Lake Issues Forum. Policymakers, researchers, resource managers, planners, environmental advocates, and citizens representing federal, state, and local agencies, organizations, and private interests participated. Attendance of 150 people made this all-day event enlightening and engaging. Issues addressed at the forum included water and air quality, the health, resiliency, and productivity of the brine shrimp population, and the need for more research on the brine shrimp ecology to aid in making policy decisions. Effects of current and proposed dikes and causeways, the global significance of the lake's wetlands and wildlife habitat, and underscored threats posed by population growth and encroachment were also discussed. It was evident that more educational programs were needed to help the public better understand, access, and enjoy the Lake. And the Forum helped FRIENDS realize the level of concern there is about the future of the Lake and how real the threats to it are, and the work that needs to be done.

In 1997, the Utah Chapter of the Wildlife Society presented their annual Conservation Achievement Award to FRIENDS for their efforts to bring Great Salt Lake and its many values into public focus.

And the rest is history.

In 2024, FRIENDS hosted its 14th biennial Great Salt Lake Issues Forum.

Over the past 20 years, we've taken more than 35,000 4th grade students to the Lake through our Lakeside Learning Field Trip program. Since 2003, we've awarded the Doyle W. Stephens Scholarship to graduate and undergraduate students for their research in the watershed. And because our Lake is a rich source for artistic inspiration, we have recognized that powerful expression through our Alfred Lambourne Arts Program since 2014. At the end of the day, though, it's always our job to advocate for the Lake, whatever that entails. With sound science as its guide, public process, and the law, we use all of the tools at our disposal—including seemingly countless legal actions—to stand up for the Lake.

On October 3, 2024, FRIENDS celebrated its 30th Anniversary of working to preserve and protect the Great Salt Lake ecosystem in perpetuity. And the briny beat goes on.

WE GO!

In saline and solidarity,  
Lynn de Freitas  
Executive Director



# FRIENDS' ORGANIZATIONAL STATEMENT

Founded in 1994, FRIENDS of Great Salt Lake is a membership-based nonprofit 501c3 with the mission to preserve and protect Great Salt Lake ecosystems and increase public awareness and appreciation of the Lake through education, research, advocacy, and the arts. The long-term vision of FRIENDS is to achieve comprehensive watershed-based restoration and protection for the Great Salt Lake ecosystem.

FRIENDS of Great Salt Lake sponsors programs related to our mission statement: Lakeside Learning, the Doyle W. Stephens Scholarship, the Great Salt Lake Issues Forum, and the Alfred Lambourne Prize.

Lakeside Learning Field facilitates 2.5 hour inquiry-based educational field trips for 4th grade students. The trips combine informal environmental education strategies while incorporating science, technology, engineering, art and math (STEAM) to reinforce the Utah Common Core State Science Standards. Lakeside Learning emphasizes learning through participation.

Within the research component of our mission, we sponsor the Doyle W. Stephens Scholarship for undergraduate or graduate research on Great Salt Lake ecosystems. Established in 2002, the scholarship supports students in new or on-going research focused within the Great Salt Lake watershed. Recent project winners span the effects of changing salinity on microbialites to the impacts low water levels in Great Salt Lake have on Utah's air quality.

FRIENDS is actively involved in advocating for Great Salt Lake. Every two years, FRIENDS hosts the Great Salt Lake Issues Forum to provide focused discussions about the Lake for a variety of stakeholders including policy makers, researchers, and industry leaders. Each Forum engages the community in constructive dialogue regarding the future of Great Salt Lake.

In 2014, FRIENDS established the annual Alfred Lambourne Prize for creative expressions of our Inland Sea in the categories of visual art, literary art, sound, and movement. FRIENDS celebrates the relationship between local artists and one of Utah's most precious natural resources, Great Salt Lake. Through artistic expressions, we enhance our capacity to build awareness about the Lake and our need to preserve and protect it for the future.

FRIENDS maintains a Board of Directors and Advisory Board composed of professionals within the scientific, academic, planning, legal, arts, and education communities. Staff members include: Lynn de Freitas, Executive Director; Rob Dubuc, General Counsel; Holly Simonsen, Membership & Programs Director; and Katie Newburn, Education & Outreach Director. Photo: *Great Blue Heron*, courtesy of Steve Earley.



## On The Cover: *Wilson's Phalarope*, mixed media by Tom Judd courtesy of Modern West Fine Art

In the fall of 2023, I came up with an idea with the folks at Modern West Fine Art Gallery to have a group exhibit that would bring attention to the crisis of Great Salt Lake. As the Lake continues to shrink, the birds and the wildlife are trying to tell us something and we are barely listening. The way they are communicating with us is with their deaths. Tens of thousands of birds have died in the last few years on the Lake.

The painting “Wilson’s Phalarope” was one of my “Portraits” of birds whose survival depends on the Lake’s ecosystem. As with much of my work, I collaged different materials and imagery to create the painting. I used a vintage photo of Black Rock with a dock and boat from an old postcard as a background. I wanted to portray the bird interacting with icons of the Lake’s history, living together, side by side.





*The Milky Way*  
photograph  
by Kelly Hannah  
First Place/Landscape category  
15th International Conference on Salt Lake Research,  
November 04-08, 2024  
Antalya, Türkiye

# THE INVALUABLE GREAT SALT LAKE

Did you know that the original name of Salt Lake City was “Great Salt Lake City”? That Great name reflected how much our relationship is defined by this natural wonder.

The Wasatch Front’s remarkable natural, unique setting has two bookends: the Wasatch Mountains and Great Salt Lake. Because of the dramatic escarpment, my personal adventures and work experiences have focused more on the Wasatch. My attention only slowly became focused on the more internationally valuable Great Salt Lake.

When I first arrived in Salt Lake 50 years ago, I was immediately captivated by the Wasatch Mountains. Coming from the Grand Canyon where I had immersed myself in that geologic and scenic wonder, the Wasatch Mountains represented the inverse of the Grand Canyon: rather than hiking down a steep one-mile hole into a desert canyon, I could hike up a steep mile into the alpine mountains. Having become an amateur student of geologic phenomena, the contrasts from the Valley to mountain peaks so accessible to our urban environment thrilled me.

Great Salt Lake grew on me more gradually. I’d go out to the islands, hunt waterfowl along the shores and marshes, and marvel at this inland sea. I began to learn the ecological value of its sanctuaries and flyways.

And, as my public service and education grew, I learned more about how little value or understanding we placed on the vicissitudes of Great Salt Lake. People like Don Curry, Genevieve Atwood, and Ty Harrison patiently educated me. At the same time, Terry Tempest Williams through her writings, especially *Refuge*, imbued me with Great Salt Lake’s immeasurable values.

My public service career helped me appreciate the enormous vacuum in State elected leadership regarding Great Salt Lake. Because of the sovereign rights doctrine in U.S. law, the State has lead responsibility for the Lake over all other jurisdictions. While I was on the Salt Lake City Planning Commission in the late 80’s to mid-90’s, Salt Lake City was developing its first plan for the south shore of Great Salt Lake. Despite the perception that there are large acreages of “unused” land, the fact is that most of the extensive shoreline is valuable wetlands. Over the years it had been

studied and protected through the Audubon Society, FRIENDS of Great Salt Lake, and contributions from Rio Tinto (then Kennecott Copper), the LDS Church, and the airport as mitigation for impacts of encroach-



*Salt Lake City Skyline* by Thomas Hawk

ment on wetlands. (Thanks to the federal Clean Water Act, wetlands cannot be eliminated without compensation for equivalent acreage protected.) We struggled to find any private land development that was compatible with wetlands and values of the Lake. At the end of the day, a Plan was developed that provided for some development along I-80 while protecting the lower elevation wetland areas identified by students of Great Salt Lake. During these years, I had more opportunities to visit and understand better the immense value of Great Salt Lake. There wasn’t immediate pressure to develop, so the plan sat for many years.

Over time, the attractiveness of all the private land stirred development proposals. While I was Salt Lake City Mayor, the State of Utah, looking to find a replacement site for the State Penitentiary in Draper, looked at a site north of I-80 along the uplands of the Great Salt Lake shore. (Ironically, the original state penitentiary was in Sugar House, Salt Lake City.) With Salt Lake City elected officials and residents, we mounted a vigorous campaign to avoid the Great Salt Lake site. State of Utah officials mistakenly believed that a prison site close to the urban area with easy access to facilities, services, and volunteers would override the challenges of developing any site near Great Salt Lake. They picked that site estimating it would cost \$500 million to develop the new prison. The Great Salt Lake State Penitentiary ended up costing \$1 billion. Like other mistakes of the State, they simply came up





*A New Reflection*, photograph by Charles Uibel

with more money. As mitigation to Salt Lake City, the State authorized a 1% sales tax option increase to help address increased costs to whichever community was selected for the prison site. That sales tax option has since been exercised. (I should note that when I was told the Legislature may provide that sales tax option, which I had advocated for early in my mayoral years to offset the impacts of a doubling of our daytime population by commuters, I told the legislative leadership that it wouldn't affect my opposition to the prison in Salt Lake City.)

There's a reason the shores of Great Salt Lake have been largely undeveloped for the 150+ years since the Salt Lake Valley was settled: it's relatively inhospitable for humans and a risky proposition. When we were fighting the site, I pointed out publicly that a historical tsunami flooded these lands in the early 1900's, according to analysis by University of Utah geomorphologists. I also pointed out that massive bug infestations made it nasty for human habitation. And, we would risk adversely impacting the millions of birds who depend on Great Salt Lake. My and others' comments led by FRIENDS of Great Salt Lake, were scoffed at and ignored by the State. Today we are paying an enormous price and will pay more in the future.

With persistent droughts, overuse of the water previously going to Great Salt Lake, and the effects of climate change, we now face the ecological loss of Great Salt Lake and economic devastation for the Wasatch Front.

It's an unfortunate opportunity that the catastrophic consequences of the lowering level of the Lake have finally gotten the State's attention. Maybe not so surprising is that Utah's political leadership has now responded only when the toxic effects on our human population from neglect of this invaluable resource have taken hold. We are seeing changes in our laws and actions that were inconceivable before the raising of State leaders' consciousness.

For me, I hope that Utahns can improve our appreciation for our incredible natural resources in their undeveloped condition. As our population booms and economic pressures grow, we need to protect our unparalleled natural resources. Our failure to preserve will lead to destruction of the phalarope that lays the golden egg.

Thanks to education of our populace and elected leaders from Great Salt Lake experts, advocacy groups like FRIENDS of Great Salt Lake, the media's attention, and businesses dependent on Great Salt Lake, I'm more optimistic that the powers of this State (and yes, especially the Church of Jesus Christ of Latter Day Saints) will continue on a path to save Great Salt Lake. Maybe one day we will again call our capital city "Great Salt Lake City."

Ralph Becker was Mayor of Salt Lake City from 2008 to 2016



# CONCERNS WITH HABITAT DESTRUCTION OF THE WILSON'S PHALAROPE

## PROMPTS ENDANGERED SPECIES ACT PETITION FILING

In March of 2024, a diverse coalition of scientists, community members, and conservation groups submitted a petition to the U.S. Fish and Wildlife Service (“the Service”) to protect Wilson’s phalarope (*Phalaropus tricolor*) under the Endangered Species Act (“the Act”). This petition sets in motion a series of regulatory evaluations by the Service to evaluate whether the bird qualifies for protection under the

Great Salt Lake faces significant peril, as water diversions threaten to dry up the Lake, or render it so saline as to be uninhabitable for the microbes and invertebrates that comprise the food web. Lake Abert in Oregon has already dried up on two occasions recently, and water diversions threaten to dry it up again each year. Mono Lake in California is in a slightly better place, thanks to a 1994 ruling that mandates flow lev-



Wilson's Phalarope, photograph courtesy of Max Malmquist

Act and what protections must be put in place. Wilson’s phalarope is an inland shorebird which has a transcontinental migration, spending winters in South America. A key stopover on its migratory journey is Great Salt Lake. While here, hundreds of thousands of phalaropes do a complete molt of their feathers and fatten up on the abundant brine flies and brine shrimp in the Lake. Ninety percent of adult phalaropes will stage at either Great Salt Lake, Lake Abert in Oregon or Mono Lake in California. These staging sites are essential—without the abundant food sources and ability to rest while molting, these birds would not have the energy reserves for their 4,000-mile journey to South America.

els to sustain the lake; but it is still well below its target management level. If these lakes collapse, Wilson’s phalarope has no other options for staging before the migration and would be on a pathway to extinction.

The Endangered Species Act is one of the most successful conservation laws in the world. It is 99% successful in its stated aim—to prevent extinction. Almost every species that has become “listed” under the Act is still with us today.

How does it do this? There are two primary mechanisms through which an Endangered Species Act listing would prevent extinction.



First, Section 7 of the Act requires that all federal agencies undertaking any activity ensure that their actions do not jeopardize the continued existence of a listed species, or cause destruction to or adverse modification of their critical habitats. This is determined through a process with the Service called “consultation,” where federal agencies consult with the Service to ensure they do not harm listed species. Because so many activities have some federal nexus—be it permitting or funding—this provides a powerful check against new developments and harm to critical habitat.

Second, Section 9 of the Act prohibits the taking of listed animals. Taking is defined as, “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” This has been more broadly defined to include degrading or destroying habitat. Anyone, agencies, or private entities, are prohibited from causing take of a listed species without a permit.

How could these tools apply to Wilson’s phalarope and Great Salt Lake?

The federal government already plays a substantial role in the management of Great Salt Lake. Numerous agencies including the Bureau of Reclamation, Army Corps of Engineers, National Surface Transportation Board and Environmental Protection Agency undertake activities which affect Great Salt Lake and by extension Wilson’s phalarope habitat. They will need to consult with the Service to ensure their actions do not harm Great Salt Lake such that it jeopardizes the continued existence of Wilson’s phalarope.

Applying the take prohibition to Wilson’s phalarope is a complicated and hypothetical question. If the destruction of habitat qualifies as a take and is prohibited, does that mean everyone withdrawing water from the Lake is liable for violating the Act? That seems far-fetched. But what about state agencies? If they are permitting activities, such as water withdrawals, that eventually cause take of Wilson’s phalarope, are they liable? Perhaps. A similar case in Nevada found that yes, the state of Nevada is responsible for ensuring water permits they issue do not cause take of listed species.

The petition will kick off a review period by the Service for a 90-day finding. The 90-day finding, which frequently takes a year or more, will evaluate whether

the petition presents substantial scientific or commercial evidence that listing may be warranted. If we pass that threshold, then the Service will initiate a more in-depth review for a 12-month finding. The 12-month finding is where the Service decides if a species should be listed. The average time to listing following a petition is 11 years.



ESA 2024 rally poster, courtesy of Deeda Seed

In the meantime, if the State of Utah and others want to avert a listing of Wilson’s phalarope, the solution is clear: they need to ensure an additional million more acre-feet per year of water flowing into Great Salt Lake. Short of that, the Lake will continue to decline, and Wilson’s phalarope will be at ever-increasing risk of extinction. And because the health of our community on the Wasatch Front is tied to the water level of Great Salt Lake, our fates are intertwined with that of Wilson’s phalarope.

Deeda Seed is a Senior Campaigner with the Center for Biological Diversity.



# WE ARE NOT THE FIRST. PART 1

---

**R**eally. It isn't the first time in human history that a major water body of significant resources and beauty is alarmingly altered in a relatively short period of time. For some, it's the viewshed, space, solitude, wildlife, a way of life and cultural heritage. Others see opportunity, and why not? And, so it goes for many decades, quietly, as if the world rushed past with fast-moving intention, never looking in the rear view. But we humans never seem to pre-emptively curtail our collective desire and impact. Somehow, a quiet existence inevitably changes in an almost tangible moment, tied to an event or condition that exerts a threshold. Economic growth is often the major driver that quickly changes one's perspective on something forgotten or not known (or something not understood at all) to the very thing that draws people to it. The value of a natural resource is inherently defined by such states of change. What does this have to do with the Lake? Everything.

Our Lake and its surrounding landscape have become the obvious center of such a shift in perspective. A good thing for some, but at what cost? One of the most difficult values to assess are monetary valuation of ecosystem services. Aside from resources that are market driven, such as minerals and land (things that are consumable or provide a function for human use), it is inherently difficult if not impossible to place a fair value on wildlife and the places they need to thrive. How much should water purification cost as surface water flows through upland soils and vegetation before draining into or resupplying groundwater that sustains the standing pool of the Lake? How much should dampening artificial sound and light from sheltering and nesting birds cost? Is it clear what amount of land should be left in its native state to provide sufficient haven for a designated hemispherically important place for birds? What happens when there are conflicting needs and interests between humankind and nature? What if we could start changing the answer to that one? If we knew why we need to protect the surrounding shoreline and a portion of the connected uplands to help secure the well-being of bird populations at risk, birds specifically dependent upon the Lake and its wetlands, would that change how we value the Lake and its environs?

As is often the case throughout the United States, land use zoning and entitlement are in place long before the need for conservation actions are taken

seriously. But when thresholds of population sustaining natural conditions have been surpassed to the point which quality of life and habitat are compromised for wildlife populations that are in decline, specifically shorebirds, one third of the breeding waterbird species, grassland birds, songbirds, and the insects and / or native plants they depend upon, is it time to reconsider how we protect our natural resources of Great Salt Lake?

Aquatic avian game species and many of the waterbirds are well protected through successful management and conservation efforts for waterfowl. That is a well-established fact illustrated in *The State of the Birds, United States of America, 2022* (StateoftheBirds.org) where wading birds, waterfowl including ducks, geese and swan, are the only avian groups of breeding species showing population gains in the U.S. as a result of decades of habitat conservation, illustrating the potential for the other bird groups to rebound. But there is a point at which seemingly well conserved bird habitat needs additional protection because "their world" is closing in on them from the expanding human footprint and infrastructure needed to support it. Water quality, protected shelter, plentiful forage, and habitat quality are at increasing risk of degradation with rapidly increasing strides of development toward the Lake.

Shorebirds and other non-game species are showing a sobering downward trend and are not faring well. Habitat loss paired with hardships related to a changing climate are simultaneously placing considerable and concerning threats on the vast majority of birds at hemispheric proportions. Thus, if you haven't already, it's time to admit that "our Lake" and fringing wetlands, home to many millions of migrating birds every spring and fall, is their Lake too.

Thankfully, in response to dire changes that came with the exposed landscape of a greatly receded Lake during the height of the extreme drought in 2022, humankind responded and continues to work collaboratively toward water and habitat security for the Lake and its inhabitants. It's taken at least thirty years of focused research and discussions across political geographies to bring to light the ecological significance of the Lake and its supported biota beyond economic





Great Salt Lake shoreline, photograph courtesy of Heidi Hoven

interests. A collective of individual and organizational voices set the foundation for meaningful platforms from which we have seen a tremendous swell of support and protections for the Lake, its wetlands and the birds that depend upon its natural resources. We are thankful, yet we are not done; our work is incomplete, and we know it. The level of commitment is sincere; we've reached a point in our history, as has preceded us in other saline lake ecosystems around the planet, where human health and hemispheric biodiversity are at serious risk. Sadly, that's what it takes to leverage the level of change needed to protect something we've almost lost for good. Through all this; however, there is an important stakeholder that has been largely overlooked and generally dismissed. Who or what is it? Uplands.

Uplands have an overarching prospect as being "developable." However, upland resources are finite, and we rarely consider the cost of losing upland services from the surrounding ecosystem forever. Just as wetlands were once considered wastelands when we had little understanding of the ecosystem services they provided, uplands adjacent to wetlands are equally misunderstood. When it comes to Great Salt Lake, uplands have been providing silent and unseen support for wet-

lands, wildlife, and the Lake. It isn't until recent human history that the intrinsic connection between upland functions and healthy wetlands is broadly apparent around Great Salt Lake. We've already witnessed a threshold where excessive heat, extreme drought, and water use left little water for the Lake posing ecologic collapse and escalated risk to human health. However, we haven't accounted for additional upland losses slipping out of sight and the cascading effects of discontinuity of uplands and the wetland fringe with respect to added strain on ecosystem integrity including water connectivity to the shoreline.

The second part of this article will appear in the next issue of the newsletter. It will present successful examples of regulatory and other guiding framework across the U.S. that have been established to preserve and protect coastal and other large water body areas and the urgency to establish a protective Shoreline Heritage Area around Great Salt Lake while we have the opportunity. Stay tuned!

Heidi Hoven, Ph.D., Sr. Manager,  
Gillmor Sanctuary, Audubon Rockies



# THE GREAT SALT LAKE SENTINEL LANDSCAPE: HOW IT WILL OPEN DOORS FOR GREAT SALT LAKE

The Great Salt Lake Sentinel Landscape, or “GSLSL,” is another acronym to add to the growing Great Salt Lake vernacular. The GSLSL represents a novel convergence of conservation, working lands, and national defense interests. Centered around resilience, the unique framework of the GSLSL unifies military operations with the protection of critical landscapes. The GSLSL is more than just a designation—it is an opportunity to align natural resource conservation efforts to protect our environment, benefitting our military installations, communities, and the Great Salt Lake ecosystem.

## *Defining the Sentinel Landscape Concept*

The concept of a Sentinel Landscape may be unfamiliar, but it carries profound implications. “Sentinel” directly translates to a watchful guardian, often associated with military readiness and vigilance. Aptly, the Sentinel Landscapes Partnership program was born in 2013 with a mission to do just that—watch over and protect military installations while simultaneously advancing environmental conservation, climate change resilience, and the health of working lands. The backbone of the partnership is comprised of the Department of Defense (DoD), the Department of the Interior (DoI), the U.S. Department of Agriculture (USDA), and the Federal Emergency Management Agency (FEMA). Together, these federal agencies work to ensure that landscapes supporting military operations remain viable for defense, environmental health, and sustainability.

The goal of the Sentinel Landscapes Partnership is to enhance the resilience of military installations by preserving the natural environments that surround them. This includes everything from wildlife habitat and water quality to agriculture and recreation space. The unique nature of the Sentinel Landscapes Partnership lies in its holistic approach, balancing military readiness with the long-term health of the ecosystems on which these installations rely. With open land for new military operations increasingly scarce, the preservation and enhancement of existing installations become a critical priority.

## *The GSLSL's Unique Role in Protecting the Great Salt Lake Ecosystem*

Joining seventeen other Sentinel Landscapes across the nation, the GSLSL was designated in 2024 and spans over 2.7 million acres in Northern Utah. The GSLSL boundary includes four military installations (Hill Air Force Base, Camp Williams, Tooele Army Depot, and the Air Force Little Mountain Test Facility) that, with their surrounding lands, form the core of designation. The most ecologically significant feature of the GSLSL is the South Arm of Great Salt Lake. Great Salt Lake existing within a Sentinel Landscape boundary adds a novel and powerful tool to Great Salt Lake's growing conservation toolbox.

The inclusion of Great Salt Lake in the Sentinel Landscape is significant for its longevity, but why? Under the designation, the vitality of the Lake is recognized as imperative

to the resilience of the four military installations listed above. The GSLSL brings heightened attention to decreasing water levels in Great Salt Lake, recognizing the Lake's role not only in supporting the local ecosystem, but also in ensuring the resilience of its surrounding military installations.

By including Great Salt Lake in the Sentinel Landscapes Partnership, the U.S. government underscores the importance of the Lake's vitality for military readiness. This recognition opens the door to increased funding and support for conservation initiatives aimed at preserving and restoring the Lake's health. Funding could be directed towards projects that enhance water management, protect critical wildlife habitat, and reduce dust pollution. Such efforts are important not only for the health of Great Salt Lake but also for the continued viability of the surrounding landscapes, which play a role in supporting military operations and readiness.

## *Opportunities for GSLSL Partners*

The GSLSL designation offers numerous opportunities to enhance the intersection of military readiness and Great Salt Lake conservation. By aligning the priorities of installations with those of lake-facing stakeholders, the GSLSL provides a platform for collaboration and creative problem-solving to water challenges in the Great Salt Lake Basin. Often, military bases are seen as isolated entities, but the GSLSL highlights how these installations rely on the health of Great Salt Lake and are importantly integrated. Through this partnership, the military will play an active role in preserving natural resources that are essential not only for national defense but also for the longevity of Great Salt Lake.

## *The Future of the GSLSL and Great Salt Lake*

As the GSLSL continues to evolve, its potential to protect and enhance the Great Salt Lake ecosystem grows. The Sentinel Landscape Partnership's unique intersection of national defense, conservation, and community interests presents a promising model to bolster resilience work in the region. With continued investment in the health of the Great Salt Lake and its surrounding environments, the GSLSL can serve as a blueprint for future collaborations that balance military readiness with the preservation of natural resources.

In conclusion, the GSLSL designation is a critical step in protecting Great Salt Lake and its surrounding ecosystem. By aligning military interests with conservation efforts, the GSLSL helps ensure that the Lake and its critical resources remain resilient in the face of climate change, urban development, and environmental degradation. Through continued collaboration between military, government, and community stakeholders, the GSLSL offers a pathway to a more sustainable and secure future for our state, country, and hemisphere.

Marisa Weinberg, Program Manager/Coordinator



# GREAT SALT LAKE MAP



Basemap: USGS. Water level shown depicts approx. 4189'. For reference only.

Great Salt Lake historic average elevation 4,200' (1847-1986).
  Approximate average elevation Fall, 2022 4,189'.

This map shows the contrast between the historic elevation average of 4,200' (1847-1986) and the current elevation of 4,189' (Fall 2022). It shows that islands, bays, habitat values, navigation and open water have been lost/compromised due to a declining elevation.



# HOW I LEARNED TO LOVE THE LAKE:

## A 30 YEAR DROUGHT

What do you think of when you consider the question “Have you ever swum in Great Salt Lake?” I’m willing to guess it’s a mixture of shock and disgust that someone would even consider it. And yet, until relatively recently, the Lake was a destination for swimmers from all over the world. There’s actually a rich history of recreation in and around Great Salt Lake, one that is carried on to this day, but I bet you didn’t know it. I certainly didn’t.

It’s interesting to me that having been born and raised in Salt Lake City, I have no memory of visiting the Lake until three years ago when I turned 30. **I spent the entirety of my adolescence and teen years never more than 45 minutes from its shores, and yet, I don’t think it ever occurred to me to visit the namesake of the city in which I lived.** I don’t think it occurred to anyone, really. None of my family, friends, or peers seemed to have any interest in the Lake. If you’re from Salt Lake City, this probably isn’t a huge surprise. In fact, there seemed to be an unspoken agreement that the Lake was a brackish cesspool guarded by a wall of detestable insects, and anyone who thought of visiting, much less going IN the water, was worthy of our disgust.

Even today, I’ve noticed that attitude really hasn’t changed much. And so it was in 2022 that I found myself with self-conscious astonishment and not a small amount of reluctance, standing on a remote precipice at Antelope Island surveying the lowest water level ever recorded at the Lake since records began in the 1840s.

I can’t express definitively why I was suddenly drawn to its briny shores after all these years; maybe it had something to do with the ringing alarm bells of climate catastrophe and my natural morbid curiosity that drove me there. But what I discovered was a confusing and exhilarating amalgamation of awe and wonder, anxiety bordering on panic, and a growing frustration, not just for the arrogance of my youth, but the glaring missed opportunity for exploration of an incomprehensibly big body of water right at our doorstep. **In a region that prides itself on having more state and national parks than it knows what to do with, why is this one, so close to home, over looked?** So, I began exploring, and what I’ve found

along the way has changed my perspective and my understanding of community dramatically.

### Birds, Boats & Beyond

After reading the infamous NYT article about our state’s impending “Environmental Nuclear Bomb,” I felt compelled to develop my own way of advo-



Open water swimming in Great Salt Lake, photograph courtesy of Seth Ian Mower

cating for the Lake. I had to find another approach with a more human-focused perspective. As a photographer, I wanted to use my tools to communicate what I saw along the way. I started talking to people, learning about what makes the Lake special to them, and capturing their unique experiences. It was a way to redefine our society’s attitude toward the Lake by changing our relationship to it. And what better way to attract a Utahn’s attention than through outdoor recreation?

This project began in earnest after a fortuitous conversation with a total stranger. She was from the East Coast and was talking about her own search for a rowing team she’d heard about on Great Salt Lake.

“There’s rowing on Great Salt Lake?”

Yes, as it turns out, damn good rowing too. In fact, as I spoke with more and more people, I learned that there’s good sailing, paddleboarding, swimming, hiking, biking, birding, horseback riding, hunting, running, parasailing, painting, writing, crafting, and photography too. (Have I missed anything?) **Where else in the world can you find in one place such a**





Rowing in Great Salt Lake, photograph courtesy of Seth Ian Mower

**plethora of opportunities to do so much in nature?** Yet few people seem to know about what exists out there. My project is an attempt to change that.

### **Salty Solicitations**

What I've started to understand about the Lake (uppercase) is that it is so much more than just a lake (lowercase). It's a vibrant and expansive ecosystem of colorful personalities buzzing with life, activity, and adventure. If you dare to put aside your preconceptions, you will find something truly spectacular that will humble you and keep you coming back for more.

So far, the Lake and the communities surrounding it have welcomed my exploration with open arms, encouraging me along the way to bring more people into the conversation. If you've ever depended on the generosity of others to do your job, you know how rare this kind of community is! Away from the Lake, people I talk to about this project understand that the Lake is significant, either in relation to the superb lake-effect snow we get, or more recently, the toxic dust bowl looming in our near future. But beyond that, few people truly see the full picture of just how special it is or why. Regardless, we're all waking up to how much is at stake. **I hope that this project can show people why they should care about the Lake, in a more relatable and personal way.**



Sailing at Great Salt Lake, photograph courtesy of Seth Ian Mower

As I continue this journey, I invite others to join me. If you have a passion for the Lake, I would love to collaborate. I want to hear from you and learn about your unique experience and share it with others. Together, we can evangelize the beauty and significance of Great Salt Lake, inspiring more people to appreciate and protect this precious resource. This is also an invitation to find your own way to celebrate the Lake, and an open-ended opportunity to build your own relationship and to fight for it.

Seth Ian Mower is a photographer and Budding Great Salt Lake Evangelist. [photo@subtlebuffalo.io](mailto:photo@subtlebuffalo.io)



# PAYING ATTENTION TO LAND USE ON THE LAKESHORE, AND NEXT DOOR

The news over last year for Great Salt Lake wetlands couldn't be much worse. Luckily, two wet years in a row have tapped the brakes on what is likely the Lake's imminent ecosystem collapse.

Utah lawmakers gestured a bit during the 2024 session in the direction of cutting agricultural water use so that more water gets to the Lake—only little nudges when actual movement is required to make a difference.

Meanwhile, the Utah Inland Port Authority continues to collect land for warehouse and trucking ghettos (sorry, "logistics parks") on the shoreline of not only Great Salt Lake, but Utah Lake as well. Thanks to its ever-expanding hardscape footprint outside of Salt Lake City's Northwest Quadrant, 50,000 acres of wetlands, playa, and uplands are currently threatened with light-industrial development (StopThePollutingPort.org).

This, despite our ever-growing knowledge of the sensitivity and value of the Lake's ecosystem.

Our Governor, an alfalfa farmer, scoffs at the dire warnings from scientists and bristles at the notion that his "rural Utah way of life" is a main reason the Lake is starved for water (agriculture uses 85% of water statewide, with alfalfa and hay consuming 68% of the water diverted from the Lake).

Yet not all news is bad. Political organizing to resist warehouse expansion and wetlands destruction is strong in Salt Lake City, and seems to be spreading to Weber and Utah county.

Rethinking land-use away from the Lake is also taking root. Salt Lake City has made zoning reforms so housing isn't limited to single-family detached homes. State legislators (many of whom are also real estate investors) have gotten on the transit-oriented development train, and have ordered localities to adopt new master plans around passenger rail stations.

Land uses already mentioned here (warehouses/trucking and agricultural) sit clearly adjacent to Great Salt Lake and each other on the Wasatch Front. We've heard some discussion about curtailing the production of feed crops like alfalfa and hay given their outsized consumption of water that hurts the Lake.

Yet another land use, much of it far from the Lake—housing—also has a major impact on resource use af-

fecting the Lake's health. Let's take a closer look.

## The Inland Port Authority threatens tens of thousands of acres of shoreline wetlands

Since its creation in 2018, the Inland Port Authority has expanded from its initial 16,000 acres in the Northwest Quadrant of Salt Lake City to include seven areas statewide. Three of those are on wetlands (broadly defined to include playas and uplands): two



Proposed Project Area in Weber County, photograph courtesy of L. de Freitas

in Tooele County, and one in Spanish Fork bordering Utah Lake. Another 9,000-acre zone in Weber County on the eastern shore of the Lake and the Weber River is currently on the UIPA's docket to adopt.

All-told, currently 50,000 acres of wetlands are threatened by the UIPA, and the numbers keep growing.

The tax-increment financing zones allow the Inland Port Authority to issue tax-exempt bonds to spend on pretty much anything within a Public Infrastructure District, including infrastructure, administrative costs, and private construction projects, like warehouses. Most of the land inside inland port boundaries is privately owned, and importantly, entitled to certain development rights thanks to antiquated local land-use policies and ordinances.

Thanks to upzoning and development, higher property values create increased property-tax revenue that would be going to the city, county, school district, and other taxing entities, but thanks to the new taxing district created by the Inland Port Authority, the grand majority of the increment is instead siphoned for use in the Inland Port zone.

Grassroots political opposition has been, in some



instances, fierce. Opponents rallied by the Stop the Polluting Port Coalition have packed Salt Lake City Council meetings over the Northpoint Area master plan and upzone requests for industrial development in the 2200 North and 2200 - 3300 West area.

City Hall has been responsive, creating design standards for light industrial development that include increased buffering from sensitive areas and clustering development. Attempting to dissuade additional warehouse development in the area just east of the SLC Airport, city hall is working on a transfer of development rights ordinance that would minimize construction west of 2200 West.



Playa in Project Area, photograph courtesy of L. de Freitas

Opponents in Weber County are ramped up for the UIPA meeting in May, where the West Industrial District proposal, already rubber-stamped by Weber County government, was scheduled to be approved.

Loss of vegetated wetlands, not surprisingly, is a nationwide epidemic. The recently-released US Fish & Wildlife Service's Wetlands Report to Congress, covering 2009-2019, is bleak. In those ten years, wetlands loss increased 50%, with many vegetated wetlands turning into sand bars, ponds, and mudflats, while uplands are being drained and filled for development.

### Land use policy next door

In the midst of Utah's housing crisis, Governor Cox announced this past legislative session the goal of building 35,000 "new starter homes" in the next five years.

While not stipulating that the new housing will be suburban in size and development pattern, the imagery and rhetoric around the initiative all point toward

new-build, single-family detached homes.

Given the high land cost of vacant lots in cities, the initiative (limited to homes costing \$450,000 or less) will likely spur greenfield rather than infill development. The loss of more open space, some of it wetlands, is virtually guaranteed.

It's widely acknowledged that city dwellers drive less, use less energy in their homes, and consume less water than people living in the development pattern of single-family homes on large lots that the suburbs made common.

This is why environmentalists, if not the type who root for human extinction, should also be urbanists. It's not just that cities provide humanity with richly nutritious wetlands for culture, but that urban development patterns are the most efficient ways to live, thus lowering the environmental footprint of each and all.

That's easier to say than do. It means that it's not getting easier to park your car on the street. That's usually the sign of a vibrant city. No great cities are known for their ease of parking. (As an editor at BuildingSaltLake.com, I have come to understand that what seems like 99% of land-use policy is driven by parking. It's the "tail wagging the dog," as we say).

If we supporters of the Lake can swallow the pill that increased density means smarter living, then there's more evidence-based housing policy coming from the civic physicians at Salt Lake City Hall that we might be interested in.

Aimed at alleviating the housing shortage, accessory dwelling units were made legal city-wide. In addition, nearly every residential zone allows up to four dwelling units if one of them is income-restricted. A common zone, RMF-30, has been rewritten so that lot size and setback requirements no longer make the economics of building housing there impossible.

The area of Salt Lake City, of course, covers only 15% of the county it sits in. Its leadership on these issues will need to produce proof of concept that will influence policy makers in other localities to adopt similar pro-housing strategies.

Keeping our wild places depends on efficient living—the opposite of suburban sprawl. Don't be a NIMBY when land-use change comes to your neighborhood.

Luke Garrott is an editor at BuildingSaltLake.com. He is a former Salt Lake City Council member, a retired professor of political science at the University of Utah, and is on FRIENDS Advisory Board.





HOW TO REACH US  
FRIENDS of Great Salt Lake  
150 South 600 East Suite 5D  
Salt Lake City, UT 84102  
website: [www.fogsl.org](http://www.fogsl.org)

BOARD OF DIRECTORS  
President: Rose Smith  
Vice President: R. Jefre Hicks  
Secretary: Gen Green  
Molly Blakowski  
Kristen Bonner  
Kelly Hannah  
Coryna Hebert  
Heather Holmes  
Mary Anne Karren  
Sarah Stevens  
Glenda Woodring

STAFF  
Executive Director:  
Lynn de Freitas  
[ldfreitas@xmission.com](mailto:ldfreitas@xmission.com)  
General Counsel:  
Rob Dubuc  
Membership & Programs Director:  
Holly Simonsen  
[snowyegret@fogsl.org](mailto:snowyegret@fogsl.org)  
Education & Outreach Director:  
Katie Newburn  
[pelican@fogsl.org](mailto:pelican@fogsl.org)  
ADVISORY BOARD  
Robert Adler  
Genevieve Atwood  
Jim Carter  
Luke Garrott  
Steve Simms  
Ella Sorensen  
Terry Tempest Williams  
Wayne Wurtsbaugh

Submission Deadlines:  
Sept. 16 (Fall)  
Dec. 16 (Winter)  
Mar. 16 (Spring)  
June 16 (Summer)  
Submit articles and  
images for consideration  
to Lynn de Freitas at  
[ldfreitas@xmission.com](mailto:ldfreitas@xmission.com)

LAKE FACT:  
Q: To date, how many acre feet  
of water have been donated to  
Great Salt Lake through the GSL  
Watershed Enhancement Trust?

A: Approximately 69,000 acre feet

## THANKS FOR MAKING A DIFFERENCE

Memberships and Donations received between  
November 1, 2024-January 9, 2025

Jackson Adams	Trudy de Goede	Kim & Patty Kimball	Katie Rockwood
William Adams	Craig Denton	Scott Klepper	Cricket & Tom Rollins
Donna Adler	Krysta Dimick	Rick Knuth	Richard Salas
Robert Adler & Michelle Straube	David & Lisa Edwards	Kit Kobe	Hanna Saltzman
Sally Aerts	Brandon Evans	Michelle Koeppel	Ken Sassen
Kent Alderman & Karen McCreary	Camille Fletcher	Gerald Lazar	Jack Schmidt
Elizabeth Allen	Preston Fletcher & Erin Parker	Preston Lear	Jacob Schmidt
Debra Amundsen	Alan & Jacqueline Fogel	Pam & Willy Littig	Harold Sears
Kathleen Anderson	Aaron Fogelson & Deborah Feder	Dave & Rebecca Livermore	Chip & Mandy Self
Morgan Anderson	Jeff Foot	Tracy Llanos	Jake & Rosie Serago
Anonymous	Richard Ford	Hikmet Loe	Nia Sherar
Lisa Arnette	Joan Gallegos	Susan Loffler	Joel & Alice Sherry
Genevieve Atwood	Janice Gardner	Krista Maack	Marcelle Shoop
James Bach	Lydia Garvey	Mike Malmquist	Steven Simms
John Ballard & Karen Miller	Linda George	Michelle Marthia	Duane Smith
Joel Ban	Steven Glaser & Camille Pierce	Susan & Spencer Martin	Lindsey Smith
Sabine Barcatta	Greg & Caitlin Gochnour	Wayne Martinson & Deb Sawyer	Sharyl Smith
Christine Barker	Maud Goldfield	Terry Massoth & Lyle Wilson	Gregory & Ginger Smoak
Margaret Battin	Laurie Goldner & Corey Sheffield	Andrew McCrady	Jennifer Speers
Bonnie Baxter & Don Clark	Hank Goodman	Ruby Mabel McMaster	Melissa Stamp & John Neill
Daniel Bedford	Raymond & Susan Grant	Geoff McQuilkin	Melanie Steiner
David Bennett	Laura Gray	George & Nancy Melling	Sean Strasburg
Erica Bennion	Sylvia & William Gray	Miranda Menzies	Mikell Stringham
Tom & Lydia Berggren	Travis & Lorraine Gregory	Richard Middleton	Emily Stromness
Therese Berry	Steve Grizzell	Kay Millar	Brianna Taylor
Sabrina Beynon	Jen Guillory	Karen Morgan	Peter Templin
Klaus Bielefeldt	Octavia Haines	Kristen Morley	Bryan Thompson & Molly Barth
Molly Blakowski	Brian Hall	Richard Mueller & Susan Durham	Braxton Thornley
Sarah & Micheal Blomgren	Bruce Hamilton	Dee Munson & David Baldrige	Carla & Charlie Trentelman
Daniel Boyes	Bill Hanewinkel	Kaye Murdock & Maurine Haltiner	Bill Trevithick
Hilda Bravo	Carol Hannah	Caroline Nebhan	Stephen Trimble & Joanne Slotnik
Janice Brittain	Kelly Hannah & Andrea Brickey	Kaye Nelson	Edith Trimmer & Thomas Brill
Dustin Brown	David Hanson	Judith Neugebauer	Cary Tucker
Tim Brown & Angela Dean	Dale Hartog	Rosalie Niemann	David & Liz Turner
Yaeko Bryner	Jill Haslam	David Nimkin	Sarah Uram
Alex Butwinski	Sierra Hastings	Ann O'Connell	Maria Vachlon
Greg Carling	Coryna Hebert	Stewart Olsen & Dani Eyer	Denise Vilven
Lynn Carroll	Jill Heersink	Lenora Olson & Jim Brandi	Lorna Vogt
Mary Carrol-Egelston & David Egelston	Scarlet Hedges	Trevor Ortman	Matthew Waibel
Jim Carter & Jane Harrison	Marta Heilbrun	Fred & Linda Oswald	Kirsten Walker
Barbara Chavira	Joseph Hicks	Ashley Patterson & Tom Diegel	Kody Wallace
Carlynn Christian	R. Jefre Hicks	John Patton	Suzanne & Lynn Wawrinofsky
Alison & Ron Christiansen	Laura Hoopes	Jessica Perri	Carol & Ronald Werner
Micheal & Kristina Christopherson	Laurie Howell	Kevin & Elise Perry	Andrew & Leslie White
Jeff & Bonnie Clay	Robert & Rosemary Huebner	Alexa Peseri	Jeff Williams
Jess Cleaves & Tim Dwyer	Eric Huefner	Bill Petersen	Mary Williams
Richard Clegg	Robert & Dixie Huefner	Cory Pike	Terry Tempest Williams
Adam & Kali Cohen	Elliot Jagniecki	Emily Potts	Park & Stephen Willis
Beverly Cooper	Leo Janas	Craig Provost	Norma Walls
Rhea Cone	Evan Johnson	Randi Pyper	Alan Wilson
Gwen Crist	Diana Johnson	Cynthia Quisenberry	Jean Witmer
Geof Crowl	Judith Jorgensen	James & Karla Rafferty	Joe & Ellen Wixom
Dawn & Roger Crus	John Kase	Deborah Read & Mark Doherty	Jeff Wolfe & Azure Webster
Tom & Candace Dee	Emily Kay	Julia Reid & Jim Lunbeck	Jamie Woolf & Sharon Emerson
Graham & Leanne de Freitas	Shannon Kelliher	Laurie Rich & Leonard Coulson	Amanda Wyrick
	Nikhil Khaturia	Ken Rockwell	Natalie Young

### Corporate, Foundation, and Grant Support from:

American Online Giving Foundation, Big D Construction,  
the estate of Gail Blattenberger, Cargill, Community Foundation of Utah,  
Community Foundation of Utah at the recommendation of Sallie Shatz Fund,  
Crest Realty, Daffy Charitable Fund, David Kelby Johnson Memorial Foundation,  
Discover Davis, Eightline Real Estate, Fanwood Foundation, Glass Family Fund,  
Grandeur Peak Global Advisors, Great Salt Lake Audubon,  
Great Salt Lake Brine Shrimp Cooperative Inc., Laird Norton Family Foundation,  
Maud & Burton Goldfield Family Foundation, Network for Good, Patagonia,  
Salt Lake County ZAP, SmartGo Foundation, South Davis Sewer District,  
Steel Encounters, Taos Community Foundation, Uintah,  
Underfoot Floors, Wasatch Global, Willard Eccles Charitable Foundation



# MAKING A DIFFERENCE

## HOW WE DO OUR WORK—THANKS TO YOU

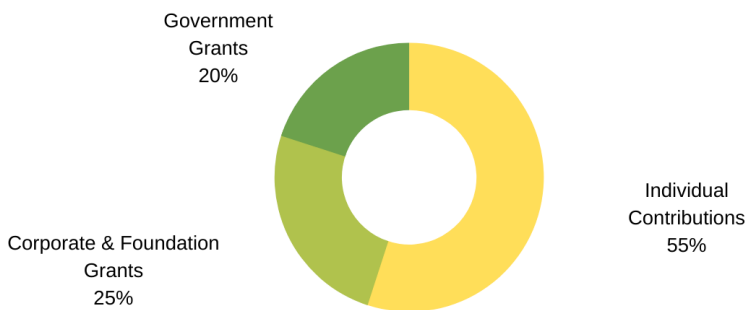
### Our Funding

As a 501(c)(3) nonprofit, FRIENDS of Great Salt Lake relies upon the generosity of our members, individual donations, foundations, and grants. Individual memberships and donations provide the bulk of our funding at approximately 55% of our annual revenue. Foundation donations and corporate grants generate 25%, and government grants generate 20%.

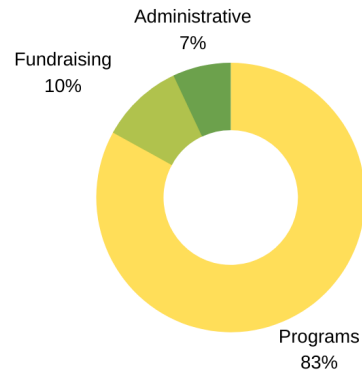
With an annual operating budget of under \$400,000, FRIENDS of Great Salt Lake spends a majority of funds on Programming (83%), including our Education Programs, The Doyle Stephens Research Program, Advocacy Programs, and the Alfred Lambourne Arts Program. Fundraising costs average 10%, and administrative expenses 7%.

FRIENDS of Great Salt Lake is a member of Utah Nonprofits Association (UNA). We operate with a Donor Bill of Rights, a Conflict of Interest Policy, a Gift Acceptance Policy, and adhere to UNA's Standards of Ethics. Access our IRS form 990 and our Annual Reports on our website.

Income



Expenses



Due March 15, 2025  
Apply Today at  
[fogsl.org](http://fogsl.org)

## DOYLE W. STEPHENS SCHOLARSHIP FOR GREAT SALT LAKE RESEARCH

\$2000 awards for undergraduate & graduate  
GSL research in any academic field

### Call for Proposals!

FRIENDS of Great Salt Lake's Doyle W. Stephens Research Program is accepting submissions for our 2025 scholarships. \$2,000 scholarships will be awarded to undergraduate and graduate students whose research is focused on Great Salt Lake. Applicants from any academic field are accepted. Winners will be announced during our annual event on May 15, 2025 at Wasatch Community Gardens.





Presorted First Class  
 US Postage Paid  
 Salt Lake City, UT  
 Permit # 15

FRIENDS of  
 Great Salt Lake  
 150 South 600 East  
 Suite 5D  
 Salt Lake City, UT  
 84102  
 www.fogsl.org

## PLEASE SUPPORT FRIENDS of GREAT SALT LAKE

Yes! I want to purchase a membership to  
 FRIENDS of *Great Salt Lake*

- \$30 Household   
 \$20 Senior

I would also like to make additional donations to:

Send payment to:  
 FRIENDS of Great Salt Lake  
 150 S. 600 E., Ste. 5D  
 Salt Lake City, UT 84102

- |                |                      |
|----------------|----------------------|
| Unrestricted   | <input type="text"/> |
| Education      | <input type="text"/> |
| Research       | <input type="text"/> |
| Advocacy       | <input type="text"/> |
| Arts           | <input type="text"/> |
| Total Donation | <input type="text"/> |

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Total Membership Fees and Donations \$ \_\_\_\_\_

I do NOT wish to receive a paper newsletter  
 (Our newsletter is available for download at [www.fogsl.org](http://www.fogsl.org))

Remember, all membership fees and donations are  
 tax-deductible to the extent allowed by law.-



*Antelope Island Bison Posing for a Petroglyph - Thursday November 28, 2024, photograph by Kelly Hannah*