

Utah Department of Natural Resources

Annual Report 2025

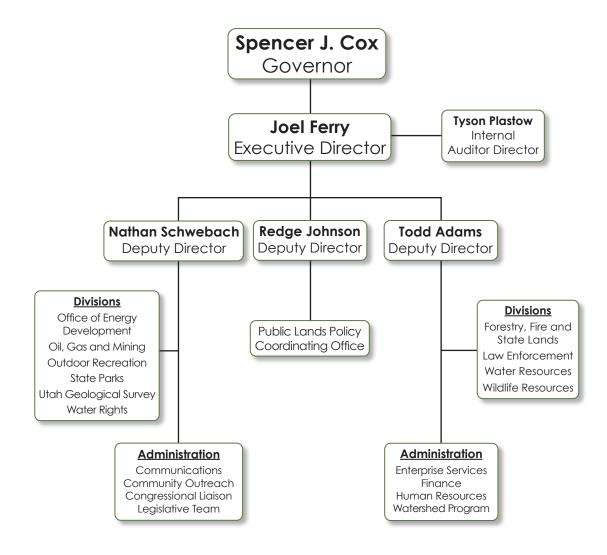
Naturally Utah

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Front cover: Black-necked stilt stops at the Great Salt Lake during migration. *Back cover:* Heart Lake at Duchesne Ridge.

ORGANIZATIONAL CHART



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Mission Statement

The Utah Department of Natural Resources helps ensure the quality of life of Utah residents by managing and protecting the state's natural resources by:

- Enhancing the certainty and security of Utah's water
- Improving the health and resilience of our lands, resources, watersheds and wildlife
- Advancing the stewardship of our public lands and natural history
- Elevating outdoor recreation
- Expanding Utah's energy and minerals portfolio



DEPARTMENT UPDATE



Gooseneck Overlook on the Potash Road. Photo courtesy of Roger Lewis.

Executive Director's Commitment

Over the past year, the Department of Natural Resources has dedicated its efforts to innovating, researching and investing in protecting Utah's natural resources. Our state's water supply has experienced significant improvement due to consecutive years of above-normal snowfall and increased conservation. Notably, the Great Salt Lake rose 6.5 feet from its historic low in 2022 before falling due to evaporation and use, and salinity levels are now in the healthy range. It will take time for the lake to return to healthy levels, and we remain committed to working closely with the office of the Great Salt Lake Commissioner and stakeholders to ensure its preservation. We will also continue strategically investing in water conservation to improve water security.

Maintaining adequate, reliable and affordable energy remains a top priority. As an "any of the above state," we are committed to expanding our traditional resources and diversifying our energy portfolio to meet future demands. A Utah delegation, led by DNR officials, representatives from the governor's office and state legislators, traveled to Iceland to explore geothermal potential. The insights from this trip have elevated our understanding of how geothermal energy can contribute more significantly to our state's energy landscape. It also provided insight into the development of Operation Gigawatt, an initiative to double Utah's energy capacity within the next decade.

In a landmark move, the state of Utah filed a lawsuit asking the U.S. Supreme Court to rule on whether the federal government can hold 18.5 million acres of unappropriated lands within Utah indefinitely. Our state has a proven track record of active public land management. If Utah acquires these lands, the state will keep them public and manage them for multiple uses: to balance recreation, wildlife habitat and conservation with other responsible uses such as energy production, livestock grazing and sustainable resource development.

How we manage and protect our natural resources significantly influences the quality of life we enjoy. The Division of Wildlife Resources continues to work with partners to secure new wildlife properties and manage existing lands to benefit fish and wildlife populations. The Division of Forestry, Fire and State Lands has encouraged Utahns to use good Fire Sense, which has reduced human-caused wildfires to around 50%. This is below the national average of 80%.

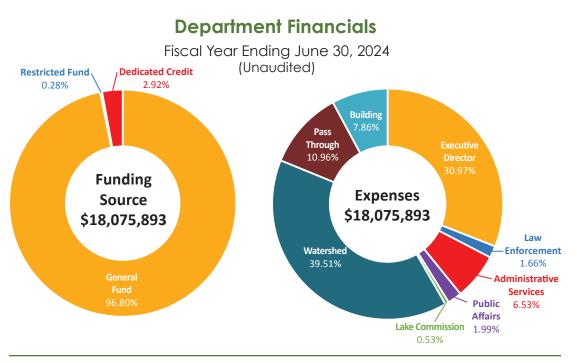
As executive director of Utah's Department of Natural Resources, I am grateful to our staff who work tirelessly to engage with the public, address conservation issues, collect better data, encourage active and safe lifestyles, solve complex challenges and anticipate and meet future needs. I am committed to fostering collaboration with our state and federal partners, driving



innovation and addressing resource management to ensure a sustainable future for all Utahns.

Joel Ferry DNR Executive Director





Department Case Study

WRI Project Improves Watershed Health and Restores Aspen Ecosystem

Problem: Aspen canopy cover on Monroe Mountain has decreased by over 70%, or 40,000 acres, in the past 200 years. Restoring aspen ecosystems on Monroe Mountain is critically important and will have lasting beneficial effects. Aspen restoration at this scale will help improve and maintain population viability for wildlife species (elk, deer, raptors, migratory birds, small game, insects, etc.), and promote a fire-resilient ecosystem across Monroe Mountain.

Solution: Watershed scale restoration, including stand replacement prescribed fire, mechanical thinning, timber harvest and re-seeding.

Outcome: Over the past several years, partners have worked together through Utah's Watershed Restoration Initiative (WRI) to complete important restoration projects on Monroe Mountain in Piute and Sevier counties. The Monroe Mountain Aspen Ecosystems Restoration WRI project is an ongoing landscape-scale effort located on Fishlake National Forest and private lands that aims to restore the health of the aspen ecosystem. The goal is to improve forest health and resilience by reintroducing disturbance using methods such as prescribed fire, mechanical removal and timber sales.



Looking Ahead to FY 2024-2025

Active management of resources like watersheds, wildlife, water, minerals, oil and gas allows the state to forecast challenges, solve complex challenges and anticipate and meet future needs. Here are some of the focus areas for the upcoming year:

- The Division of Forestry, Fire and State Lands is addressing forest health issues, wildfire risk and issues that face our state sovereign lands.
- The Office of Energy Development is crafting and implementing evidence-based policy that supports the responsible development of Utah's diverse and rich natural resources, including traditional and new energy resources and technologies.
- The Division of Oil, Gas and Mining is encouraging responsible development while enforcing regulations to protect public health, safety and the environment.
- The Division of Outdoor Recreation is working to ensure every Utahn can live a healthy and active lifestyle through outdoor recreation and access to natural space.
- The Division of State Parks is expanding and improving infrastructure to meet growing demand and will remain focused on creating safe, enjoyable experiences and well-maintained facilities for exploring state parks.
- The Public Lands Policy Coordinating Office is building relationships, using the tools at our disposal to ensure consistency with state and local planning documents and protecting access to our public lands that need to be actively managed, as highlighted by the Stand For Our Land public education campaign.
- The Utah Geological Survey continues to study, disseminate and promote information about Utah's geologic resources, energy and minerals, groundwater, wetlands, paleon-tology and geologic hazards, as well as the unique geologic features that attract people to our state.
- The Division of Water Resources is monitoring drought conditions and impacts on the water supply and looking for ways to stretch this finite resource. Continued conservation is needed across all sectors to protect our quality of life and provide water security for future generations.
- The Division of Water Rights is administering the measurement, appropriation, apportionment and distribution of the state's valuable resources while improving operations, increasing efficiency and building the water rights network with enhanced data and transparency.
- The Division of Wildlife Resources is working with its partners and stakeholders on projects to benefit species in need of conservation and to prevent those species from being listed as endangered or threatened. We will also be proposing updates to Utah's deer management plan in the coming year and taking those recommendations to the public for feedback.
- The Division of Law Enforcement is working in collaboration with DWR, State Parks, Outdoor Recreation and FFSL to implement the new Division of Law Enforcement on Jan. 1, 2025. We'll continue to work on educating the public and getting voluntary compliance with Utah's natural resource laws and regulations throughout this transition.

DIVISION UPDATES



FORESTRY



OIL, GAS & MINING





WILDLIFE RESOURCES

UTA



WATER RIGHTS



UTAH-

POLICY COORDINATING OFFICE



GEOLOGICAL SURVEY

— UTAH OFFICE OF — ENERGY DEVELOPMENT



Book Cliffs. Photo courtesy of Jordan Lewis.

Utah Division of Forestry, Fire and State Lands

Mission Statement

The Division of Forestry, Fire and State Lands manages, sustains and strengthens Utah's forests, rangelands, sovereign lands and watersheds for its citizens and visitors.

Director's Commitment

2024 is a memorable year for the Division of Forestry, Fire and State Lands (FFSL). Several accomplishments from the sovereign lands program include lithium extraction rules, voluntary agreements with the mineral industries, and investments in sovereign lands that will serve the public for years. Our first-ever Helitack Crew, Diamond Fork, was engaged in multiple suppression efforts demonstrating their capabilities. Forestry has received millions of dollars from our federal partners to benefit Utahns and improve forest health.

Increased interest in resources, tourism and population growth have impacted Utah land, and our sovereign lands staff are working diligently to manage them. We invested millions of dollars into wetland enhancement projects, removal of invasive species and policy that addresses mineral extraction and innovation on the Great Salt Lake. We continue to strengthen relationships with stakeholders to address the issues impacting sovereign lands, including updating the Comprehensive Management Plans for Utah Lake and the Great Salt Lake.

The extra moisture from the past two years increased the fuel load and fire behavior. Utahns did their part by using good Fire Sense and kept human-caused starts to 50% of all wildfires in the state. Firefighters kept 93% of all wildfire starts to 10 acres or less.

The Forestry program remains diligent in its work with private and federal partners to address forest health needs. The Forest Legacy program received \$40 million for the Wasatch Back Forest Conservation Project conserving 8,588 acres just 25 miles from Salt Lake City. The Urban & Community Forestry program has also seen an influx of federal funding aimed at helping build community forestry initiatives in rural and underserved communities.

Our staff continues to use best management practices to achieve the division's mission and goals. It is an honor to lead a passionate and proud group of individuals dedicated to serving the state of Utah.

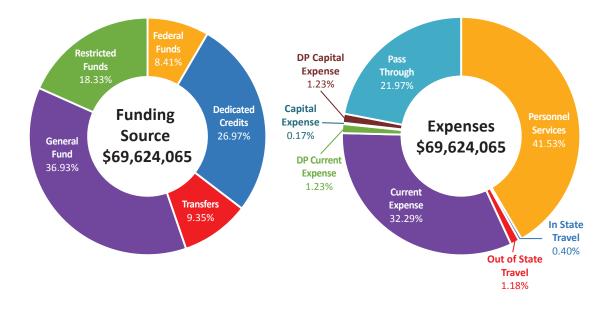


Jamie Barnes Director/State Forester



Financials

Fiscal Year Ending June 30, 2024 (Unaudited)



Key Services

Forestry – Manage the state's cooperative forestry programs, including Shared Stewardship, Forest Health, Forest Legacy and Urban & Community Forestry.

Wildland Fire – Responsible for wildfire management and suppression on Utah's state and private lands in partnership with county and municipal governments.

Lone Peak Conservation Center – Provide the state's wildland fire resources, including highly trained crews to fight wildfires and undertake fuel reduction projects.

Sovereign Lands – Administer public, private and commercial uses of state-owned lakebed and riverbed lands under the public trust doctrine and principles of multiple use and sustained yield.

Case Studies

Protecting Open Space Through Forest Legacy

Problem: The availability of open space is decreasing yearly due to the continued population growth the state is experiencing along the Wasatch Front and surrounding areas.

Solution: Working with Summit County, the Forest Legacy program leveraged federal funds through the Bipartisan Infrastructure Law to purchase a parcel of land that will be preserved as open space for public use.

Outcome: The Forest Legacy program and Summit County worked together to purchase the 910 Ranch using funds offered through the Bipartisan Infrastructure Law and money provided by Summit County.

Summit County raised \$15 million for the land purchase, with the remaining \$40 million coming from an award by the U.S. Forest Service as part of the Forest Legacy program.

The 910 Ranch is 8,588 acres of privately owned forested property within the Wasatch Mountains, the largest remaining parcel of this size. The purchase of this land will connect a 52,000-acre corridor of protected land that consists of other Forest Legacy projects, conservation easements, state parks and national forest lands.

This purchase will permanently secure public access across the site for recreation, education and research. The successful funding of this project will significantly benefit forests, watersheds and wildlife habitat in the area.

Summit County will retain ownership of the property, while FFSL will hold the conservation easement. This easement will protect the land for future public use.



Sovereign Lands

Problem: Persistent drought and increased water diversions led to historic low lake levels in 2022. These low inflows and resulting low lake levels also caused salinity concentrations to spike on the South Arm of GSL where several species are reliant on a specific salinity range.

Solution: FFSL, the Office of the Great Salt Lake Commissioner and the Great Salt Lake Water Trust have actively pursued water rights for the benefit of the Great Salt Lake. FFSL used the recently passed statute from HB 453 to work with mineral extraction companies to voluntarily reduce water use.

Outcome: The first voluntary agreement was announced on Sept. 3, 2024, between Compass Minerals and Forestry, Fire and State Lands. This agreement establishes over 200,000 acre-feet of water rights for the direct benefit of the lake, a reduction schedule for remaining water rights based on lake levels, and a voluntary reduction in leased acres related to Compass' mineral leases. While this water right donation is unlikely to bring new water to the GSL due to the low priority date, the water rights will ensure the water that is conserved upstream and makes it to the GSL, will stay in the GSL. This agreement demonstrates a sense of corporate responsibility



from Compass Minerals. Compass also agreed to reduce water use based on lake levels. Essentially, when the lake is healthy, Compass will be able to divert the entirety of its remaining water rights. When the lake begins to drop, Compass will reduce its use and suspend operations if the lake drops below 4,190. In addition to the water rights, Compass voluntarily agreed to relinquish nearly 65,000 acres of leased land back to FFSL. With Compass' leadership, it is expected that other mineral companies will follow suit.

Central Area Wildfire Hazard Mitigation

Problem: As wildfires continue to threaten the West, a collaborative effort is required to address and identify the fuel hazards, wildfire risk and vulnerabilities around Utah communities.

Solution: The Central Area, as part of their Community Wildfire Defense Grant (CWDG), began using a new method called Hazardous Mitigation Methodology (HMM), which was developed to help identify wildfire risks and vulnerabilities within the six counties of Central Utah.

HMM considers the spatial relationships between fuels, exposures and hardening at the structure and parcel levels. It also demonstrates the complexity of structure hardening and why hazards associated with fire and ember exposures must be mitigated. The HMM addresses housing density, structure separation distance and parcel layouts.

Outcome: This project analyzed different hazards in central Utah and developed homeowner reports to display the different levels of hazards to participating HOAs and communities. The areas that were analyzed fell within a Fire Weather Zone with a history of high wind and wildfire events that, when combined, can lead to structure damage or loss.

The project analyzed the following data to provide background on communities' wildfire hazards:

- Wildfire Hazard Potential
- Rate of Fire Spread
- Flame Length
- Suppression Difficulty Index
- Risk to Potential Structures
- Potential for Ember Spread

This list of hazards was developed using data from the <u>Utah Wildfire Risk Assessment Portal</u>, a free tool from FFSL that allows homeowners to identify their wildfire risk.



Office of Energy Development

Mission Statement

Advancing Utah's energy and mineral economies to create affordable, reliable and sustainable outcomes that provide significant and lasting value to the state.

Director's Commitment

It was an honor to accept the role of Director of the Utah Office of Energy Development (OED) this fall. I was impressed with the significant progress OED staff has made over the past six months, positioning the office as an energy leader in policy, research, program development and outreach. I look forward to bringing my 25-plus years of experience in project development and regulatory affairs to the office so we can continue building on these solid foundations.

As I take on this new role, I recognize that now is the time for Utah to lead the nation in energy policy and development. Operation Gigawatt, a collaborative initiative between Gov. Cox and OED, is a crucial step that will see Utah double its energy-generating capacity over the next decade to meet rising energy demands in every sector. But this is no easy lift. Securing an additional 4 MW will require evidence-based decision-making, prudent energy policies, and thoughtful, future-oriented approaches to resource development.

This critical work has already begun with a suite of energy bills that put consumers first and the creation of a comprehensive, holistic pathway for nuclear deployment. Engaging federal policymakers and regulators will be crucial, and I'm eager to lead this effort, advocating for Utah's energy interests at every level. Throughout my career, I've seen firsthand the power of partnerships. I am eager to engage with state agencies, the private sector, local communities and our federal partners to harness the full potential of Utah's abundant and diverse natural resources as we work to secure our energy future.

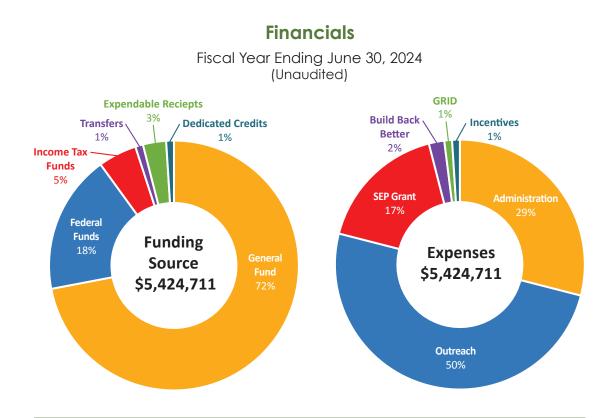
Utah has a long history as an energy leader and is already pioneering innovative approaches in policy and research. Together, we will continue to foster collaboration and drive forward policies that ensure reliable, affordable, adequate and secure energy development for all of Utah.



Emy Lesofski Director/Energy Advisor to the Governor



ENERGY DEVELOPMENT



Key Services

Tax Credits – We award tax credits to new energy development projects, including the Renewable Energy Systems Tax Credit, High-Cost Infrastructure Tax Credit, Alternative Energy Development Incentive, Productions Tax Credit and Well Recompletion.

Programs – The U.S. Department of Energy provides funding for most of the programs housed in the office with matching funds from the state. Programs surround public education, energy efficiency, energy security, infrastructure upgrades and more. We also develop and maintain energy and minerals curriculum for elementary, middle and secondary school teachers.

Outreach – We engage with industry stakeholders in a variety of mediums, including co-producing the One Utah Summit, seeking out innovations in the energy industry and encouraging the development of energy projects in the state from workforce education to energy diversification.

Research – We ensure that research projects carried out by the Utah San Rafael Energy Lab align with Utah's energy priorities. We also develop and maintain energy modeling software based on best practices for determining long-term planning.

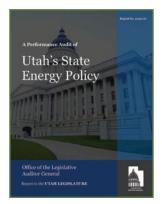
Case Studies

Moving Forward

Problem: The transition of reporting responsibilities from the governor's office to DNR resulted in a re-imagining of OED and its roles and responsibilities and led to an audit of our office.

Solution: The audit helped identify key focus areas for optimal efficiency and furthered the work OED was already undertaking to orient its goals, priorities and duties around policy and policy-related activities.

Outcome: OED has implemented nearly all of the audit's recommendations.



San Rafael Energy Lab

Problem: Among all states Utah's energy priorities are unique, and as other states pursue their own agendas, it has been shown to unduly influence Utah's energy resources and prices. As such, we must invest in the development of new energy technologies that are both clean and baseload so we can lead out on energy development in a way that satisfies our energy needs, including maintaining energy prices and reliability.

Solution: Securing ownership of the San Rafael Energy Lab gives the state a platform to assist in the development of new energy technologies and pursue research that aligns with the state's priorities. Additionally, it will give us front-row insight into the promising technologies the industry is pursuing.

Outcome: Already recognized as a leader in energy research, the lab is a major asset. Utah will be at the forefront of developing innovative technologies that maximize natural resources while minimizing environmental impact. The lab also acts as a pipeline to move emerging technologies from research and development to market adoption.

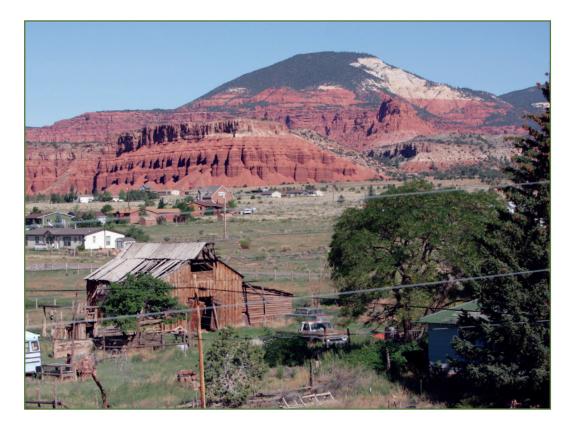


Leveraging Federal Grants to Turn Energy Challenges into Opportunities

Problem: The energy sector is experiencing the emergence of new or updated technologies, but those technologies can be unattainable for some families and disruptive to energy-producing rural communities.

Solution: OED applied for several federal energy-related grants.

Outcome: A prudent leveraging of grants allows Utah to advance the state's energy goals of reliability, affordability and sustainability in alignment with our human-focused energy policy. Our upcoming incentive programs will benefit Utahns most in need of help, mid- to lower-income families, increasing their access to energy without the financial strain.



Utah Division of Oil, Gas and Mining

Mission Statement

The Division of Oil, Gas and Mining regulates and ensures industry compliance and site restoration while facilitating oil, gas and mining activities.

Director's Commitment

Utah's oil, gas and mining industries substantially contribute to the state's economy, driving job growth and revenue. These industries consistently innovate and improve efficiency, and the division has committed to providing thoughtful, modern regulations that protect Utah's citizens and environment while encouraging industry growth.

This collaborative approach has yielded excellent results for our state and nation, garnering attention on a global scale. For calendar year 2023, the Fraser Institute, an independent, non-partisan research and educational organization based in Canada, ranked Utah first out of 86 jurisdictions worldwide for investment attractiveness. Key factors in this ranking included long-term resource potential, regulatory stability, existing infrastructure and the availability of skilled labor.

Utah's oil and gas industry also showed impressive growth, with crude production increasing by 16% yearly, reaching 52.5 million barrels in 2023. During the 2024 legislative session, the Legislature, industry stakeholders, non-governmental organizations and division staff collaborated to pass bills that modernized water recycling guidelines and incentivized solarpowered pollution control monitoring systems.

In addition to hydrocarbon development and hard rock mining, the division is collaborating with sister divisions and agencies to develop a modern regulatory system for subsurface brine mining in southern Utah, geothermal assessment statewide and support of a new hydrogen storage facility in Delta.

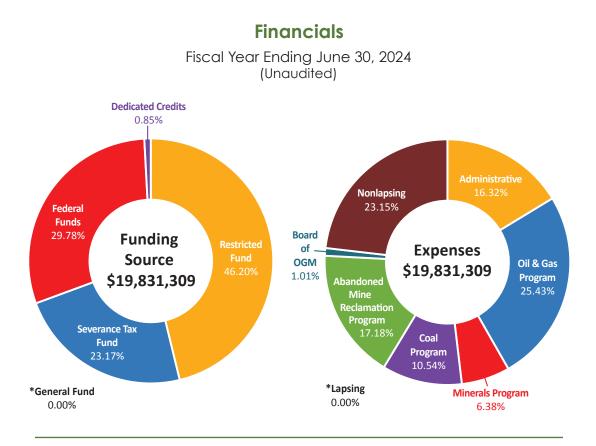
Utah remains dedicated to enhancing quality of life while advancing energy development. The Division of Oil, Gas and Mining is committed to protecting citizens, promoting industry growth and safeguarding the state's natural resources for future generations. Naturally



Utah embodies this dedication, balancing resource preservation with economic development and energy independence.

Mick Thomas Director





Key Services

Oil and Gas – Permits, inspects and monitors oil and gas wells statewide. Staff maintains a database of information regarding ownership, production, disposition and status of oil and gas exploration, production wells and facilities.

Coal and Mineral Permitting – Issues permits and monitors coal and mineral mining operations statewide to ensure compliance with state and federal laws and regulations.

Abandoned Mine Reclamation – Identifies abandoned mines and permanently seals off access to reduce accidents and hidden hazards. Division staff also provide outreach programs to schools and communities, educating the public about the dangers of abandoned mines.

Case Studies

Waste Management Rules and Responsibilities

Problem: The Division of Oil, Gas and Mining's Oil and Gas Program staff and Waste Management and Radiation Control (WMRC) staff have been discussing converting regulatory authority of exploration and production (E&P) waste facilities in Utah for several years. In the 2019 legislative session, House Bill 310 modified the definitions of solid waste, moving E&P waste regulating authority from OGM to WMRC. In the 2024 legislative session, House Bill 295 addressed the Board of Oil, Gas and Mining regulation and water rights for produced water.

Solution: A joint outline was drafted, establishing clear boundaries on each agency's responsibility for waste disposal. OGM staff drafted new rule changes outlining new requirements for recycling facilities, which are currently in the rulemaking process and expected to be finalized in December 2024.

Outcome: The Division of Waste Management and Radiation Control will regulate the disposal of solid and hazardous E&P Waste (land farms, landfills and evaporation ponds). OGM will regulate the Class II Underground Injection Control Program, recycling facilities for produced water or other oil and gas-derived materials and reserve pit operation and closure.



Brine Bill

Problem: Utah has an extensive history of recovering minerals from underground brines. With the growing demand for lithium batteries, Utah's potential resources have become targets for lithium exploration. Current exploration is focused on brines in the Great Salt Lake Desert (Bonneville Salt Flats and Pilot Valley), the Paradox Basin and the Great Salt Lake. Recent exploration has also occurred near Green River, Utah.

As the demand for lithium and other saleable products from brine increases, new issues have arisen, particularly regarding mineral ownership. Conflicts can occur when one operator has a lease to recover leasable minerals, such as potash, and another has a claim to recover locatable minerals, such as lithium.

Solution: In 2024, the Utah Legislature passed House Bill 433 to address brine mining, which involves extracting valuable compounds or elements from groundwater. HB 433 mandates the Division of Oil, Gas and Mining to conduct a study and make recommendations to the legislature on multiple mineral development of brines, excluding those in the Great Salt Lake, and solution mining of salt to create subterranean cavern space for storing liquids or gas.

Outcome: Division staff are developing recommendations on new laws that would give the Board of Oil, Gas and Mining the tools to manage and create various concurrent surface and subsurface brine resources. These laws would enable the Board to adjudicate and resolve multiple mineral development conflicts among brine operators, helping to protect correlative rights. The House Natural Resources, Agriculture, and Environment Committee reviewed the recommendations.



Utah Division of Outdoor Recreation

Mission Statement

The Division of Outdoor Recreation is committed to ensure health, safety, enjoyment, and economic benefit through life-enriching, high quality outdoor recreation for all of Utah's residents and visitors.

Director's Commitment

As Utah's love for the outdoors grows, so do our responsibilities to ensure our natural spaces remain accessible, sustainable and safe for everyone. The division is at the heart of these goals, working around the state to meet the needs of the expanding demand for fun in the outdoors. This past year has been amazing, marked by significant strides in trail development, infrastructure enhancement and community engagement. Our focus is on expanding opportunities and building a legacy of public lands stewardship and sustainability that will endure for generations.

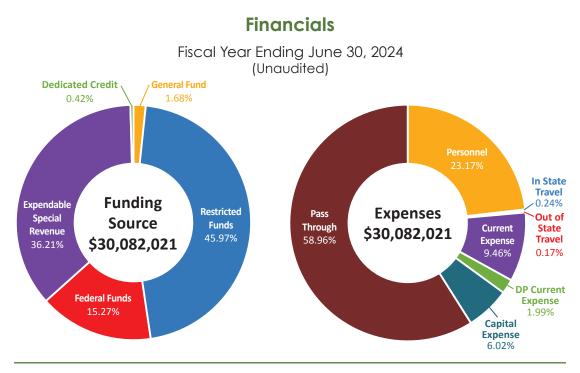
One of our most exciting developments this year has been expanding our Statewide Trail Crew program. With crews now operating across the state, we are better equipped than ever to maintain and improve Utah's vast network of trails. This regional approach allows us to address the unique needs of each area, ensuring every community benefits from our efforts. But this isn't just about the here and now — it's about empowering local communities to actively manage and sustain their recreation assets. By fostering a culture of stewardship, we are helping to ensure Utah's trails remain a treasure for future generations.

Partnerships continue to be the backbone of our success. The challenges we face — whether related to land management, safety or infrastructure — are complex and multifaceted. Yet, time and again, we see the power of collaboration in overcoming these challenges. Whether working with local governments, federal agencies or nonprofit organizations, our approach is always rooted in cooperation and shared vision.

Looking forward, our mission remains clear: to ensure health, safety, enjoyment and economic benefit through life-enriching, high-quality outdoor recreation for all of Utah's residents and visitors. As we continue to innovate and expand, our commitment to safe and responsible recreation, stewardship and community empowerment will guide us every step of the way.







Key Services

Grants Program – The Division of Outdoor Recreation administers the state's recreation grant programs that total more than \$40 million per year. Programs include the Utah Outdoor Recreation Grant, Recreation Restoration Infrastructure Grant, Recreational Trails Program Utah Children's Outdoor Recreation & Education Grant, Recreational Trail Program Grant, OHV Recreation Grant, the federal Land and Water Conservation Fund and others.

Utah's Off-Highway Vehicle (OHV) Program – Working with the OHV community and other partnering agencies, the state's OHV Program advocates for recreation users and offers recreational opportunities, safety and education resources for OHV use on over 80,000 miles of trails throughout the state.

Utah's Boating Program – Preserves and maintains high-quality and safe boating experiences on Utah's waterways. The program embraces passionate boating enthusiasts as team members to coordinate and enhance safety, education and facilities to protect waters for future boating generations. Utah's Boating Program also oversees commercial boating licensing and regulation.

Recreation Law Enforcement Program – This program has 15 law enforcement rangers stationed across the state. Their primary focus is improving the safety of boating and OHV users' experience on Utah's vast public lands. They provide education and enforcement of Utah's boating and OHV laws and rules and train other state and county agencies on boat and OHV patrol tactics, field sobriety tests and understanding laws to provide consistent and effective enforcement efforts. **Planning & Trails Program** – Provides state leadership to Utah's professional trail-building community through technical training and conferences. The planning arm of the program leads statewide strategic planning efforts to support the Outdoor Recreation Initiative, stewards a GIS recreation asset database and provides technical planning assistance for smaller communities through the Outdoor Recreation Planning Assistance program.

Utah's Statewide Trail Crews – Dedicated to the long-term sustainability of outdoor recreation infrastructure across Utah. The program focuses on maintaining, enhancing and ensuring the resilience of recreational assets across all of Utah's public land jurisdictions. The trail crew operates across four regions in Utah – northern, central, southwest and southeast – each with its unique geographical features and recreational needs.

Case Studies

Leading the Way in Responsible and Safe Recreation Education

Problem: With the rising popularity of outdoor recreation in Utah, ensuring participants are educated on safe and responsible practices has become more critical than ever. The division's challenge was to effectively reach a diverse audience across multiple activities with impactful training and educational opportunities that promote safety and stewardship.

Solution: The DOR responded by hosting and participating in key events and launching new educational programs. In addition to hosting its 11th annual Outdoor Recreation Summit, DOR hosted the first-ever Mountain West Trails Conference, drawing hundreds of attendees from eight Mountain West states. This event set a new standard for trail development and stewardship, fostering collaboration and innovation among trail professionals. Additionally, the DOR launched the Hands-On Youth ATV Course, which combines classroom learning with practical exercises to teach essential OHV safety skills. It also introduced a new, affordable youth online OHV course and a digital wallet feature for adult OHV certificates, enhancing convenience for OHV users.

Outcome: Through these efforts, DOR has become a national leader in promoting safe and responsible outdoor recreation. The Mountain West Trails Conference and Summit strengthened partnerships and set new standards in the field. Community engagement efforts successfully reached thousands of Utahns, spreading the safety messages. The new courses provide essential education to young riders, while the adult OHV course has now achieved over 300,000 completions, supported by a modernized certification process.



Expanding Outdoor Recreation Access and Economic Growth through Strategic Grant Funding

Problem: Utah has cemented itself as a national and international outdoor recreation destination that has led to increased demand for expanded infrastructure and facilities. To accommodate the rising number of residents and visitors, projects that enhance existing recreational opportunities and create new ones are needed.

Solution: The division continues to address this ongoing challenge by utilizing the Utah Outdoor Recreation Grant (UORG) and Off-Highway Vehicle Recreation (OHVR) Grant programs to fund vital outdoor recreation projects statewide.

Outcome: In 2024, the DOR awarded more than \$18.2 million in grants to enhance outdoor recreation across Utah. This included more than \$15 million through UORG for 100 infrastructure projects and nearly \$3.2 million through the OHVR Grant for 30 projects. Notably, every county in Utah received grant funding, with a strong focus on benefiting rural areas.

By continuing ongoing investment in these projects, the DOR not only enhances recreational access and the quality of life for Utahns but also stimulates economic growth, particularly in rural communities.

Expansion of Utah's Statewide Trail Crew: A Commitment to Sustainable Recreation

Problem: Utah's extensive network of over 90,000 miles of trails, spanning motorized and non-motorized routes, is integral to the state's outdoor recreation. With growing use and the expansion of recreational activities, as well as nearly 70% of the state being federally managed and their capacities for sustaining and maintaining trails shrinking, the challenge is maintaining and sustaining this vast trail system to ensure continued access and enjoyment for all.

Solution: In response, and thanks to appropriations from the Legislature, the division launched a Statewide Trail Crew program, expanding from one trail crew to four regional teams based in Cedar City, Moab, Richfield and Salt Lake City. This strategic expansion was designed to address the unique geographical and recreational needs of Utah's diverse landscapes. The crew is ded-

icated to the long-term sustainability of Utah's outdoor recreation infrastructure and focuses on maintaining, enhancing and ensuring the resilience of recreational assets throughout all of Utah's communities.

Outcome: Utah's newly established Statewide Trail Crew program has already made significant strides in maintaining and enhancing the state's trail systems. Since January 2024, the crews completed 70 projects on Utah's public lands. They have logged 1,968.5 hours in the field and engaged 390 volunteer hours. They maintained and improved 245 miles of trails and camped for 22 nights to accomplish these tasks. By focusing on long-term sustainability and community collaboration, the program ensures that Utah's trails remain accessible and well-maintained for OHV users, hikers, bikers, equestrians and others.



Public Lands Policy Coordinating Office

Mission Statement

To coordinate, promote and implement Utah's public land priorities.

Director's Commitment

The Public Lands Policy Coordinating Office (PLPCO) is steadfast in its commitment to preserving Utah's public lands and natural resources. We continue to cultivate strong relationships with state and federal agencies, tribal governments, local governments and various stakeholders invested in Utah's land and resources. These connections enable us to present a unified stance on public land and natural resource management, safeguarding the state's interests. We are committed to helping the state speak with one voice across all agencies.

Our active engagement in land management activities, planning and policy discussions empowers us to protect state interests from federal actions that could adversely affect Utah or its citizens. We rigorously uphold the state code and the goals, objectives and policies in the state and county resource management plans. These efforts ensure that the principles of coordination, collaboration, consultation and consistency are applied in our work with state and federal agencies.

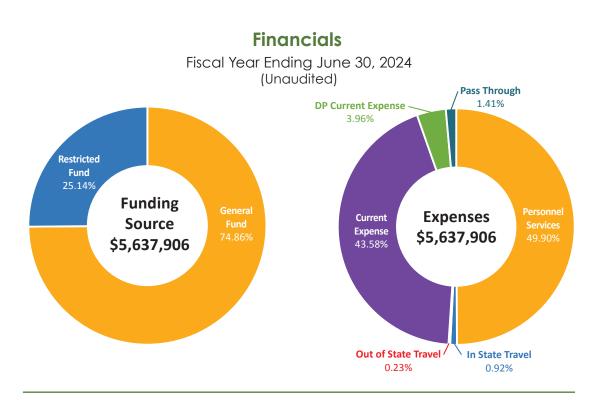
The federal government controls two-thirds of Utah. PLPCO, in partnership with the Office of the Attorney General, is pursuing over 70 lawsuits defending access to and the use of our public lands according to the principles of multiple-use and sustained yield. Recent examples include the litigation against the Bureau of Land Management's Public Lands Rule and various travel management plans. Additionally, after decades of research, the state filed a landmark lawsuit asking the U.S. Supreme Court to determine the constitutionality of the federal government retaining unappropriated public lands in Utah indefinitely without a congressionally approved mandate.

As the director of PLPCO, my team and I are dedicated to leveraging every available tool to coordinate, advocate for and implement Utah's public land priorities. We remain unwavering in our goal of enhancing Utah's stewardship of our public lands and natural resources to benefit present and future generations.



Redge Johnson Director





Key Services

R.S. 2477 – Revised Statute 2477 is a federal law that authorized the construction of roads across federal public lands. PLPCO and the Attorney General's office are working to confirm the state and counties as owners of the R.S. 2477 rights-of-way to ensure public access to federal public lands for multiple-use and sustained yield.

Resource Development Coordinating Committee (RDCC) – The RDCC reviews and coordinates technical and policy actions that may affect the physical resources of the state and facilitates the exchange of information on those actions among state agencies and other levels of government. Hundreds of comment letters are submitted to the federal government annually.

Resource Management Planning – The state and each of its counties have adopted local resource management plans that address topics ranging from agriculture and livestock grazing to wildlife and everything in between.

Public Lands Education – PLPCO seeks to educate the Utah public about public lands issues through the <u>Stand For Our Land</u> education campaign and media to improve public awareness of the issues facing Utah.

Archeology – PLPCO has a unique role of issuing permits for professional archeology work in Utah to regulate proper survey and excavation of archaeological resources.

Litigation – A full section of the Natural Resources Division of the Utah Attorney General's Office is housed full-time with PLPCO and is engaged in a tremendous amount of public lands litigation (more than 70 cases).

Governor's Consistency Review – The Federal Land Policy and Management Act (FLPMA) affords governors "60 days in which to identify inconsistencies and provide recommendations in writing to the State Director." Federal decisions can't become final decisions or be implemented until after the review and attempt to resolve inconsistencies.

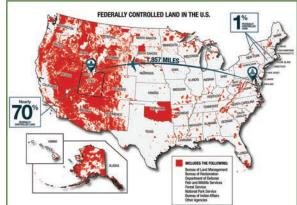
Case Studies

Challenging the Federal Land Policy and Management Act

Problem: The federal government controls nearly 70% of the land in Utah. Some of this land has been designated as national parks, national forests, or national monuments. However, half of these lands are "unappropriated" and are held by the federal government without a designated purpose.

Solution: On Aug. 20, 2024, the state of Utah filed a landmark public lands lawsuit asking the U.S. Supreme Court to address whether the federal government can simply hold unappropriated lands within a state indefinitely over the state's objections. The unappropriated land in question amounts to millions of acres, or roughly a third of the land in Utah, and is controlled by the Bureau of Land Management (BLM).

Outcome: We are looking forward to making our case to the U.S. Supreme Court. Learn more at standforourland.utah.gov.



Travel Management Planning

Problem: As a result of a 2017 settlement agreement, the Bureau of Land Management (BLM) agreed to complete Travel Management Plans (TMPs) for 11 areas in Utah. Whenever a TMP is created it limits multiple-use and sustained yield activities on public lands.

Solution: The state has filed litigation opposing two finalized plans and has created a comment letter generator tool to help the public craft substantive comment letters during public comment periods.

Outcome: The public response during the comment period for the San Rafael Swell was so overwhelming that the BLM adjusted its anticipated timelines for all of the remaining TMPs. Learn more at publiclands.utah.gov/tmp.

Protecting Access to Public Lands

Problem: R.S. 2477 (Section 701) of the Federal Land Policy and Management Act (FLPMA) preserved all R.S. 2477 rights-of-way that existed at the time FLPMA was passed in October 1976. Today, the state and counties rely on R.S. 2477 to establish ownership and management authority over 12,326 road rights-of-way across BLM-controlled lands.

Solution: The Utah Attorney General's Office and PLPCO are actively addressing these rightsof-way through litigation, preserving witness testimony, creating a virtual platform for remote road assessments and extensive data collection.

Outcome: A "Bellwether" process has been implemented to expedite legal resolutions. The Court has confirmed the state and county are "holders" of vested title to R.S. 2477 rights-of-way. A vested title holder has the right to conduct "maintenance" on the rights-of-way, but must consult BLM to construct "improvements." A holder also has the right to assert police power, conduct search and rescue, and provide signage on the R.S. 2477 rights-of-way. Perfected title and the implications for public access and transportation networks remain unresolved.

The Public Lands Rule

Problem: In 1976, Congress declared that the BLM must manage its lands "on the basis of multiple use and sustained yield." However, on April 18, 2024, the Bureau of Land Management released the final version of the Public Lands Rule, and field staff received implementation guidance from Washington, D.C. in August 2024. The Rule will fundamentally alter the future management of BLM lands to the detriment of wildfire mitigation, watershed restoration, invasive species removal, recreation, livestock grazing, mineral extraction, energy production, and other congressionally approved uses on BLM lands.

- 1. The rule provides a very narrow definition of conservation and prioritizes conservation over other congressionally mandated uses outlined in FLPMA.
- 2. The rule paves the way for the BLM to adopt a museum management approach, "just look, don't touch," which is inconsistent with FLPMA's mandate.
- 3. The rule allows for restoration and mitigation leases, a land use authorization that the BLM can utilize to limit approved uses and activities that legally occur on our public lands if they are incompatible with the lease terms.
- 4. As an executive rule, the Public Lands Rule circumvents (or violates) existing law and established processes set forth under FLPMA.

Solution: On June 20, 2024, the state of Utah joined and filed with the state of Wyoming a lawsuit to prevent implementing the Public Lands Rule due to NEPA inadequacies.

Outcome: The litigation has been filed, and we eagerly await the opportunity to present our complaints to the courts. Learn more by visiting <u>publiclands.utah.gov/plr</u>.

Utah Division of State Parks

Mission Statement

The Division of State Parks preserves and provides natural, cultural and recreational resources for the enjoyment, education and inspiration of this and future generations.

Director's Commitment

From the breathtaking vistas of Dead Horse Point State Park to the cool waters of East Canyon State Park, Utahns and visitors alike continue to flock to our state parks. It is our mission to provide opportunities for guests to experience first-class facilities and unmatched customer service while relaxing and recreating at any of our locations.

State park visitation continues to increase, and we are seeing our parks grow and expand. Over this past year, we have hosted ribbon cuttings and groundbreakings for new campgrounds, beaches, day-use areas, visitor centers, theaters and more.

We continue to see how vital the role of state parks is to the well-being of visitors and local communities. When you visit a state park, your direct contributions to the local economy extend beyond the park gates. Purchases such as groceries, fuel, hotel stays and guide services all have a cumulative impact. This positive effect generates employment opportunities, catalyzes growth and cultivates thriving communities.

We want to express our heartfelt gratitude to our visitors who conscientiously adhere to safety regulations and explore these outdoor spaces with responsibility and respect. Utah's state parks serve diverse interests. We aim to provide opportunities for visitors to enjoy, discover, learn, connect and find inspiration through the lasting memories they create while spending time with family and friends.

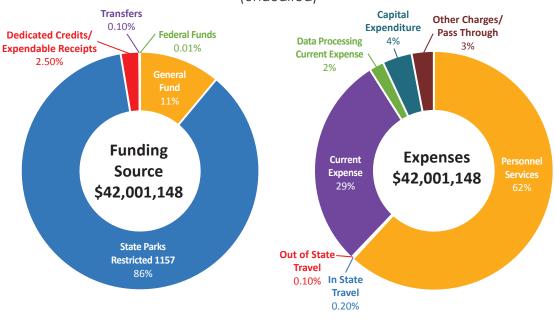


Scott Strong Director



Financials

Fiscal Year Ending June 30, 2024 (Unaudited)



Key Services

46 State Parks – The Division of State Parks manages Utah's state park system, which includes operations, planning, administration and protection of 46 state parks and museums, five state monuments and a handful of undeveloped areas. Services at these parks include day-use, reservoir access, camping, overnight lodging, educational programs, museum tours, community events and more.

Heritage Program – This program provides expertise and resources to our historical, archeological and paleontological properties within the state park system, working with heritage entities around the state to preserve our shared cultural resources.

Law Enforcement Program – This program provides public safety services through law enforcement, safety, education and outreach for visitors to our 46 state parks. They also provide services to 80,000 miles of off-highway vehicle trails and 668 square miles of freshwater lakes and reservoirs through partnerships with other agencies.

Strategic Planning – The division works to develop and enhance facilities to meet guest needs and expectations. This provides guidance for both short- and long-term site management strategies for the protection and interpretation of each park's natural and cultural resources. Planning works to ensure safe and enjoyable visitor experiences while providing new opportunities for visitors.

Publications – The division oversees the design and compilation of dozens of publications, including park brochures, signage, merchandise and a statewide field guide. The purpose is to adequately inform and prepare our constituents for the conditions and opportunities for our parks and programs while also providing them with ways to remember their experience when they return home.

Online Customer Service – The division provides an abundance of online information, tools and services. Customers can look up recent park conditions, facility information and upcoming events. They can also reserve a campsite, purchase an annual or day-use pass and engage directly with park staff and other visitors on social media.

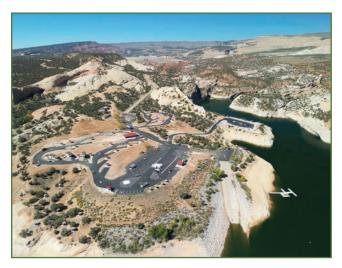
Case Studies

Park Improvements, Expansion & Visitation

Problem: Utah's 46 state parks continue to see an increase in visitation. This adds strain on the available amenities at state parks. With year-over-year visitation growth, state parks must continue expanding infrastructure to accommodate this trend.

Solution: In recent years, millions of dollars has been directed to continue improving and expanding parks. This money has gone directly toward the design and construction of new state parks and park redesigns, and improving existing park infrastructure. These improved amenities will help us better meet this increase in demand.

Outcome: Out of \$250 million in combined general fund and State Parks restricted funds, \$36.5 million was allocated for the creation of two new state parks: Utahraptor State Park and Lost Creek State Park. Planning and construction for these parks have already begun, and



both parks are open to the public for day-use and primitive camping while additional infrastructure building continues. Many additional projects have broken ground or have already been completed and opened to the public. These projects include new campgrounds, day-use areas, parking lots, bathrooms and beach areas. While these funds have gone a long way, it remains essential that the Division of State Parks continues to expand and grow our infrastructure to meet visitor demands.

Utilizing Technology to Improve Park Access

Problem: The Utah State Parks annual day-use pass is a great way for Utahns to access state parks. In recent years, annual passes expired at the end of the calendar year, regardless of when they were purchased. This better allowed staff to identify expired passes and prevent fraudulent

entry. Park visitors expressed their desire to return to the traditional calendar year pass while also sharing their desire to make it easier to carry with them.

Solution: The Division of State Parks collaborated with ParksPass to introduce a new and innovative Utah State Parks mobile application. This mobile app allows users to register their annual pass online using their smartphone upon purchasing it. This then allows their annual pass to be tracked and extended to a true 12-month pass that expires one year from their month of purchase. This mobile application also allows visitors to carry their annual pass on their phone, removing the requirement for them to consistently have the physical annual pass with them to enter a state park.

Outcome: The solution was well received, with over 37,000 annual passes being registered through the online mobile application within the first eight months of the program. The mobile application also allows for parks to better track if passes have been used and how many purchased passes are registered. Utah State Parks hopes to continue collecting this data to better understand our customers and their evolving needs.



Investing in Our Employees: Mentorship & Peer Support

Problem: Utah State Parks staff work hard to address the needs of visitors and the natural resources we manage. The majority of parks staff have been with the division for 10 years or less, and are looking for continued ways to learn and grow. Occasionally, staff is required to respond to potentially stressful situations. These include search and rescues, drownings and more. Responders to these include both law enforcement and non-law enforcement staff.

Solution: Division leadership has approved an employee mentorship program and an internal peer support program. The division controls these internal programs in a way that allows staff to interact directly with others who have been in similar situations and circumstances.

Outcome: The mentorship program allows knowledge and skills to be passed down to new employees while allowing the more experienced employees a new way to grow. The peer support program allows our staff who are placed in stressful or potentially dangerous situations to share their thoughts and feelings with their peers. This program is in addition to the current support offerings through Blomquist Hale. Both programs have been in operation throughout this ongoing year and have received positive feedback and results. It is our hope to continue growing these programs into something that our employees value and actively engage in as needed.

Utah Geological Survey

Mission Statement

The Utah Geological Survey provides timely scientific information about Utah's geologic environment, resources, and hazards.

Director's Commitment

When formed in 1949, an original, statutory requirement tasked the UGS to collect and distribute "reliable information regarding the mineral resources of the state" with "special reference to their economic contents." Over time our mission and commitment have evolved. Today we seek to deliver the state and its residents information about energy and mineral resources, groundwater, wetlands and geologic hazards.

This past year the UGS, in collaboration with the Office of Energy Development, developed and released <u>Utah's Energy Resources</u> website. All things related to energy, including solar, wind, geothermal and hydrocarbons, are now located in one, easy-to-use web experience.

As solar and wind energy production expands in our state, so does the interest in expanding our geothermal energy production. All three are considered renewable sources of energy. What sets geothermal apart is that it is available 24 hours a day, seven days a week, 365 days a year. It's also quiet and clean and runs at about 80% of installed capacity. Utah's abundant geothermal resources are largely untapped. Currently, about 73 megawatts (MW) of electricity is produced in Utah from geothermal resources: that amount is 0.1% of the total undeveloped geothermal resource potential in Utah, estimated at 49,400 MW. The opportunity to significantly expand our in-state domestic energy production is real.

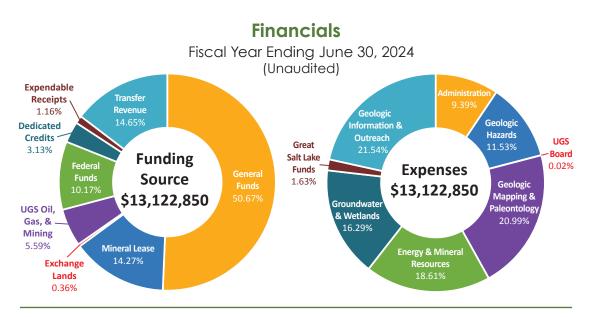
The UGS continues to be a leader in groundwater research and quantification in the state. Continued population growth puts increasing pressure on a declining resource of water. We recently released the <u>Utah Groundwater Data Hub</u>, a new website that hosts scientific data that the public and private sectors can use to make informed decisions for the benefit of all.

At the UGS, we are the stewards of Utah's geologic resources and resolve to deliver relevant, timely information to the public.



Bill Keach Director/State Geologist





Energy and Mineral Evaluations – Geologists specializing in Utah's various energy resources and minerals investigate and provide energy and mineral resource information, including geothermal resources, on county, state and federal lands to local, state and federal agencies.

Geologic Mapping – Improves coverage and availability of detailed geologic mapping to meet regional land management, resource exploration, scientific research and other needs.

Geologic-Hazard Assistance – Assists local governments in response to geologic-hazard emergencies, reviews geologic-hazard reports for school districts, investigates geologic hazards and prepares geologic-hazard maps for local governments, consultants and the public.

Groundwater and Wetlands – Assesses and quantifies Utah's wetland and groundwater resources, measures hydrologic processes in watersheds and consumptive use of vegetation, and communicates our data and their implications to the public and partner agencies.

Paleontological Services – Evaluates paleontological sites, excavates critical fossils in danger of destruction and issues paleontological excavation permits.

Data Management Program – Develops, updates and maintains web-based applications to ensure information is timely and readily available to the public and industry.

Utah Core Research Center (UCRC) – Serves as a repository and laboratory for Utah well cuttings and core, providing petroleum, coal and geologic samples for industry and academic research and public education.

Public Inquiry – Provides information on Utah geology and geologic issues to governments, industry, educators and the general public.

Natural Resources Map & Bookstore – Award-winning bookstore offering a selection of publications and maps on Utah geology and other natural resource topics, and the only retail outlet that maintains an inventory of topographic maps for the entire state of Utah.

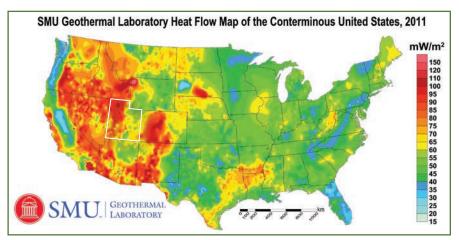
Case Studies

Geothermal Resources

Problem: Utah is uniquely positioned to access vast geothermal resources to provide renewable, carbon-neutral, baseload electricity to the western grid. The Utah Geological Survey (UGS) has for many years conducted statewide geothermal resource exploration, resulting in the identification and characterization of several geothermal resources. Recently, interest in geothermal has surged and private industry has indicated a need for more site-specific data before moving ahead with project development. The UGS hopes to meet this challenge by leveraging our unique capabilities to provide foundational geoscience data to support investment in this rich resource.

Solution: Decades of geothermal research at UGS and the University of Utah contributed to the U.S Department of Energy (DOE) selecting Utah as the site for the Frontier Observatory for Research in Geothermal Energy (FORGE), located near Milford. The FORGE project is actively working to produce geothermal electricity and demonstrate technologies for enhanced geothermal systems (EGS) that could be applied across the United States. Beginning in 2018, DOE has committed upwards of \$220 million to research and development at the Utah FORGE site. Additionally, the UGS is a collaborative partner in the DOE-funded INGENIOUS project, with goals to accelerate the discovery of new, commercially viable, hidden geothermal systems (i.e., systems with no surface expression like a hot spring) while significantly reducing their exploration and development risks.

Outcome: Recently, Fervo Energy announced plans to construct a 400 megawatt (MW) geothermal power plant, Cape Station, next to FORGE. In addition to substantial private funding, Fervo was awarded a \$25 million DOE grant (with UGS as a research partner) to assist in the development of this enhanced geothermal resource. Cape Station is anticipated to deliver carbon-neutral electricity beginning in 2026, reaching full potential in 2028. Two Power Purchase Agreements (PPAs) have been signed, totaling 320 MW of geothermal power generation for 15 years. Located in Beaver County, this geothermal power plant will provide roughly 6,600 jobs during construction and 160 full-time jobs throughout its operations, generating more than \$437 million in earned wages. Economic impacts of this project are tremendous, with anticipated contributions amounting to nearly \$1.1 billion throughout its construction and operational phases.



On Time Deliverables for STATEMAP

Problem: One of the primary responsibilities of the UGS is to create geologic maps under a cooperative partnership with the U.S. Geological Survey (USGS) STATEMAP program. Geologic maps are used by public and private entities to inform many land use decisions, including minerals and energy, geologic hazards, water resources, land development, etc. Geologic mapping requires knowledge of geologic principles, familiarity with Utah's unique geologic formations and units, and time (sometimes years) to physically walk the landscape, along with interpreting aerial and other imagery to correctly infer geological relationships. When the mapping geologist has completed their work, the geologic units are digitized and the maps are prepared for publication. Because the entire process is time-consuming, over the past decades the UGS has stretched contract deliverable deadlines into subsequent years before completing the process.

Solution: In the UGS 2024 Strategic Plan, we committed to a key result of "100 percent of grant-funded project reports delivered on time." The UGS Mapping Program took up this challenge and committed to completing all STATEMAP deliverables within the contract deadline. This required a focused, team effort by the UGS' Program Manager, Geologic Mapping team, our GIS staff, technical reviewers, editors, and digital mapping and website management team, along with adopting new software to streamline and track the workflow.

Outcome: UGS completed and submitted all project deliverables to the USGS by the contract deliverable deadline of June 30, 2024. This accomplishment put Utah ahead of many other states' completion of their STATEMAP deliverables and frees our staff to accelerate the beginning and completion of the next round of STATEMAP projects.

Delivering Information to the Public Using Interactive Websites

Problem: The UGS conducts field research and collects and compiles data from many sources to provide geological information about Utah to the public, including geologic mapping, energy and minerals, groundwater and wetlands, geologic hazards, etc. As research and data have migrated to online digital delivery, the UGS has recognized the need to make this information readily available to all Utahns and the public at large, in an up-to-date, current and easily accessible online format.

Solution: To meet this demand for readily accessible information about Utah's geological, energy and water resources, the UGS' Data Management Program has developed over 20 webbased applications that provide timely, searchable information on topics of interest to private and public entities, and industry. Well-designed, easily navigable web pages include (among many others): an interactive geologic map portal, popular sites of interest for rockhounding and GeoSights, a Bonneville Salt Flats Storymap and a newly launched Groundwater Data Hub. In addition, the UGS has collaborated with other agencies to provide and disseminate information, including collaborating with the Utah Office of Energy Development (OED) on the Energy Resources of Utah website, and hosts <u>earthquakes.utah.gov</u> on behalf of the University of Utah Seismograph Stations (UUSS).

Outcome: Utah's Energy Resources webpage, a collaboration of UGS and OED, received the Utah Digital Technology Services (DTS) award for "Best Use of GIS."

Utah Division of Water Resources

Mission Statement

The Division of Water Resources plans, conserves, develops and protects Utah's water resources.

Director's Commitment

The state had another great winter! The last time we had two consecutive years of above normal snowpack was 2005 and 2006. This has refilled the majority of our reservoirs except for Lake Powell. While reservoirs were brimming with water and passing the spring runoff, dam issues raised alarms at Panguitch Lake and Kolob Reservoir. The emergency issues were mitigated and work is underway to secure funding to fix the dams. This has reminded us of how important it is to prioritize funding for dam safety and aging water infrastructure.

While the summer dried out, our work did not. We are committed to working hard to implement recently developed programs as well as improve on long-standing ones. Recent initiatives include landscape incentive programs, integrating water planning with land use, providing grants for aqueduct resiliency and water infrastructure, and contributing to both the Water Infrastructure Funding Study and the Unified Water Infrastructure Plan. The Board of Water Resources remains an important body that helps fund water projects across the state.

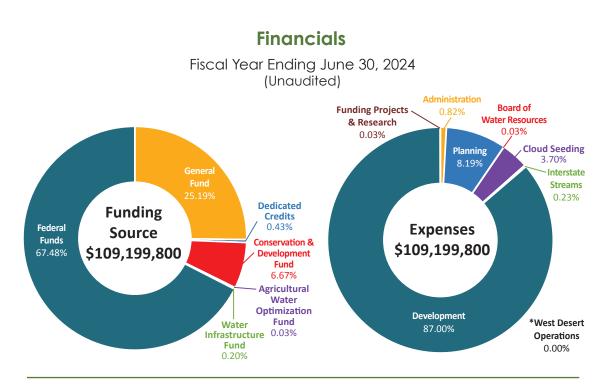
This year we have had some hallmark successes. This includes completing the Work Plan for the Great Salt Lake Basin Integrated Plan, hosting two Growing Water Smart Workshops, replacing over 1.5 million square feet of grass with waterwise landscaping through the statewide landscape conversion incentive program and facilitating the creation of nearly all local watershed councils. Additionally, the Board of Water Resources has received applications for all \$250 million of the secondary metering grant money and contracted over \$237 million with secondary water suppliers.

We must continue our commitment to collaborating and working transparently with our sister agencies in the complex world of water that we are all a part of. The success of the state and Water Resources only occurs because of our fantastic team. I am grateful for them and all their diligent work.



Candice Hasenyager Director





Water Education and Conservation – The division coordinates with local water agencies, individuals and professional groups to develop and implement water conservation programs to reduce per capita water use. It also partners with several water districts to run the <u>Slow the Flow</u> campaign and operate the statewide <u>Utah Water Savers</u> rebate program. In addition, the division provides waterwise education through various resources and produces the <u>Weekly Lawn Watering Guide</u>.

Water Development and Conservation Funds – The Board of Water Resources administers three revolving state water development and conservation funds that have contributed over \$1.2 billion to help build over 1,600 water projects across the state.

Technical Assistance – The division provides technical assistance to Utah water users. Areas of expertise include design and construction engineering, geology, drafting, geographic information systems, feasibility studies and planning reports.

Water Planning – The division tracks Utah's current and long-term water-related needs, performs water use studies and prepares inventories of municipal and industrial water use and water-related land use.

Hydrology and Modeling – The division develops and maintains the state water budget. This accounts for and estimates all of the water used in the state over the last 30 years. In addition, our staff develops geographic information system applications, water demand/supply and hydrologic models to assist in the state's forecasting and planning needs.

Water Optimization – The division supports and provides reporting on the Agricultural Water Optimization Program. It also coordinates with the Colorado River Basin states and federal agencies regarding Colorado River Salinity Control Program activities.

Cloud Seeding – The division oversees the implementation of cloud seeding which augments natural precipitation and enhances crucial snowpack.

Case Studies

Wasatch Front Aqueduct Resilience

Problem: We live in earthquake country. Aqueducts, which serve over 2 million residents along the Wasatch Front, are susceptible to major damage as they cross faults, landslide areas, liquefaction zones and/or high-ground shaking areas.

Solution: In September 2023, the Utah Legislature provided \$50 million for aqueduct resilience projects on the Wasatch Front.

Outcome: The full amount of funds has been awarded to five water suppliers. Some of those water suppliers have already begun studies and construction. These improvements are expected to strengthen and enhance the reliability of our water supply along the Wasatch Front in the event of a major earthquake.



Cloud Seeding Studies

Problem: Many data gaps in the state's radar network have been identified. These gaps not only pose challenges for cloud seeding operations but also for agencies such as the Division of Emergency Management and the Department of Transportation that need these additional data points critical to weather forecasting and public safety.



Solution: The division's cloud seeding coordinator has partnered with UDOT, the National Weather Service in Salt Lake City, the National Weather Service Western Regional Headquarters and the Colorado River Authority to discuss bringing gap-filling radars to the state. Input from the University of Utah and Utah State University will be valuable in determining data sites. Funding is needed for this project.

Outcome: This group is currently working with two companies to bring four or more additional radars to Utah. These radars will aid the division's cloud seeding program as well as other agencies in the federal, state, local and private sectors for years to come.

Secondary Meter Grants

Problem: Inefficient secondary water use. A significant challenge in water conservation efforts with Utah has been the lack of secondary water meters, which makes it difficult to measure and manage water usage accurately. This has led to uninformed, inefficient secondary water use across the state.

Solution: In 2022, the state legislature passed HB 242, followed by SB 251 in 2023. These bills resulted in Utah Code 73-10-34, which requires all secondary pressurized connections be metered by Jan. 1, 2030. In addition, any new secondary service connection installed within a 1st or 2nd class county after April 1, 2020, must be metered at the time of installation. Similarly, any new secondary service connection installed within a 3rd, 4th, 5th, or 6th class county after May 4, 2022, must be metered at the time of installation.

Along with this legislation, \$250 million in ARPA grants was appropriated for the purchase and installation of secondary water meters. The Board of Water Resources was tasked with distributing these funds.

Outcome: Since Aug. 2022, the board awarded funds to approximately 93 secondary water suppliers via three application periods. 23 of those suppliers withdrew their applications, which released approximately \$25 million of previously committed funds. These remaining funds were made available during a 4th application period (July 2024) so all funds will be committed and contracted before Dec. 31, 2024.

Water Conservation Ordinances

Problem: Excessive residential water use. Water use in residential areas has been a major concern for the sustainability of Utah's water supply. Excessive installation of non-functional lawns and inefficient landscaping practices contribute to excessive water use.

Solution: For a property to be eligible for participation in the landscape conversion incentive program, it must be located in a community that has adopted qualifying water-efficient landscape ordinances for new construction. These ordinances promote the thoughtful use of grass and encourage waterwise landscaping.

Outcome: 62% of the state's population lives in an area that has adopted ordinances and is eligible for the program. Last year, over 3 million square feet of grass was replaced with waterwise landscaping, which will result in an estimated 87 million gallons of water saved annually.



Utah Division of Water Rights

Mission Statement

The Division of Water Rights promotes order and certainty in administering the beneficial use of Utah's water.

Director's Commitment

For more than 150 years, our office has managed Utah's water rights records, decisions and agreements. This accumulation of detail enables us to strategically and wisely plan for what lies ahead.

As the State Engineer, I rely on this institutional knowledge, combined with the water data we collect presently, to responsibly oversee the management, apportionment and distribution of the state's waters. This role is a great privilege and a significant responsibility.

Understanding water — its use and movement through the system — is complex but essential. As such, developing a process of continually collecting and presenting water data in a simplistic, yet effective way, is what our office strives for the most.

In the past year, the Division of Water Rights has made great strides in improving accountability for Utah's water. Our team of professionals has a tremendous devotion to our state and the associated work that positively affects the lives of many Utahns.

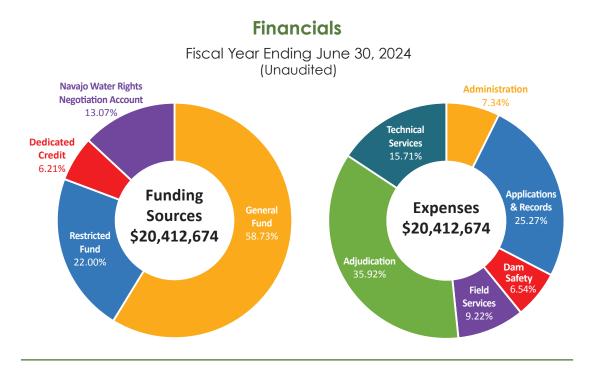
Going forward, our approach continues to focus on measuring water and automating data collection and reporting; using hydroinformatics to manage and deliver large water data sets; and integrating all data into the Utah Water Rights Network geodata system.

We are grateful for the support of the Department of Natural Resources, our sister divisions in the department and the Legislature. Together, we know we are making a difference in this great state.



Teresa Wilhelmsen Director/State Engineer





Water Right Applications – Process water right applications and maintain permanent records for all water rights in the state. Help the public access water rights information and complete application forms required by the agency.

Measurement of Water – Oversee water commissioners and provide support where the agency is directly involved in the daily distribution of water among water rights holders.

Adjudication – Present to the district court a proposed determination of water rights within hydrologic areas of the state where such investigations have been ordered by the court and obtain an adjudication order decreeing those water rights.

Dam Safety – Physically inspect and monitor the operation of public and private dams, approve new dam construction, consult and approve dam upgrades and intervene in emergencies. Inspections and monitoring efforts are based on each dam's hazard rating for potential loss of life and property.

Data Services – Gathers, curates and disseminates the critical water data that is necessary for the management of the state's water resources.

Stream Channel Alterations – Process permits to alter the banks or beds of natural streams under terms of the Utah Code and the general permit from the U.S. Army Corps of Engineers.

Geothermal Permitting and Oversight – Process permits to use geothermal resources in the state. Inspect geothermal facilities and monitor pressure tests.

Well Drilling Regulations and Licensing – Oversee licensing and regulation of water well drillers in the state.

Studies and Technical Services – Collect water resources data for surface water, groundwater and water use throughout the state. Perform studies to determine water availability and management alternatives. Support integrating data automation technology into agency operations.

Enforcement – Administer the division's water rights, dam safety and stream alteration enforcement program as authorized by statute and administrative rule. Investigate violations of Utah water rights law and initiate actions that encourage compliance.

Case Studies

Colorado River Water Rights Distribution Priority Schedule

Problem: The State Engineer faces the critical challenge of potential curtailment on the Colorado River under the Colorado River Compacts. With over 33,000 Utah water rights in the Upper Colorado River Basin, many records were unclear and inaccurately reflected in the Division of Water Rights database, leading to ambiguity and inefficiency in water rights administration.

Solution: The division developed a tool and organized a team tasked with auditing and clarifying water rights records in the Upper Colorado River Basin. The project implemented an innovative web interface that integrated water rights accounting data, general water rights data and geographic hydrologic information.



Outcome: The project has been successful in auditing a substantial number of records and accurately reflecting water rights data in the updated system — significantly improving the clarity and certainty of water rights administration, reducing the risk of legal disputes and enhancing the state's ability to mitigate the impacts associated with the prospect of curtailment.

Next Generation of Water Rights Data and Application Processing

Problem: Fragmented and hard-to-find water rights data hinders efficient management, public data access and water-use transparency. Coupled with the increasing complexity of contemporary applications — an outmoded application processing interface leads to a backlog of pending actions.

Solution: The Division of Water Rights is implementing a comprehensive modernization effort that includes transitioning application processing to a fully virtual system and developing a central water data repository.

Outcome: These initiatives will streamline application submission, payment, review and recordkeeping by moving these processes online, while simultaneously standardizing and improving the efficiency of water rights management, making data and processes more transparent and accessible.

Great Salt Lake Basin Measurement Infrastructure Gap Analysis

Problem: The Great Salt Lake (GSL) Basin faces significant challenges due to fragmented and insufficient water measurement infrastructure — leading to data gaps that hinder effective water distribution, management and research.

Solution: The Division of Water Rights, in partnership with Utah State University, conducted a comprehensive Measurement Infrastructure Gap Analysis to identify and prioritize areas requiring new or improved measurement infrastructure. This analysis involved evaluating existing infrastructure, identifying gaps, and creating a prioritized list for upgrading or adding new measurement devices to improve data accuracy and availability.

Outcome: The implementation of prioritized infrastructure improvements are underway, aiming to enhance the reliability and coverage of water measurement across the GSL Basin. These efforts are expected to significantly improve water management practices by providing more accurate and timely data, ultimately supporting better decision-making for water resource management in the region.



Utah Division of Wildlife Resources

Mission Statement

The Division of Wildlife Resources serves the people of Utah as trustee and guardian of the state's fish and wildlife.

Director's Commitment

It would be difficult to find a team that's more "Naturally Utah" than the employees of the Division of Wildlife Resources. In everything they do, they strive for the highest levels of integrity, professionalism, accountability, teamwork and cooperation. I'm proud to work with them and call them my friends.

For our employees, public safety is always a top priority. They will drop everything to remove a bear from a campground or to relocate a moose from a backyard, and they don't stop until the job is done. With the state's rapid population growth, these types of encounters are frequent and draw a lot of attention. We are committed to defusing dangerous situations and educating Utahns about wildlife safety.

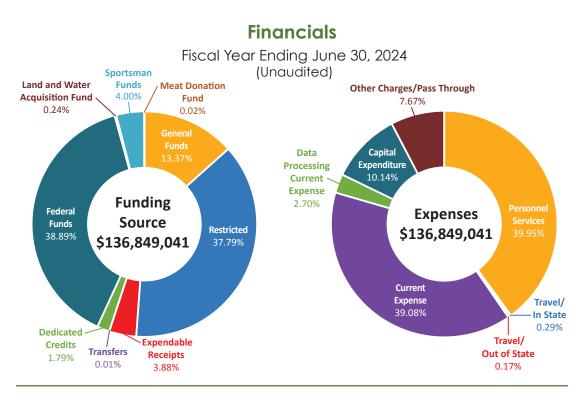
Our employees also prioritize wildlife conservation and research. Every winter, they capture and GPS collar more than 1,000 big game animals. This work occurs statewide, often in sub-zero temperatures and knee-deep (or deeper) snow. Because of their extraordinary efforts, Utah is on the leading edge of research about mule deer survival and elk migration.

This level of commitment is the norm for our employees. They take pride in their work and in serving the people of Utah. We have incredibly bright, talented people who manage our fisheries, grow fish for our reservoirs and oversee fish health. They get the work done even if it requires long hours or weekends. They are the primary reason Utah is a world-class fishing destination.

These are just some of the most visible examples. There are hundreds more. We have employees who issue licenses and permits, who restore habitat after wildfires, who track and catch poachers and who communicate essential information about wildlife behavior and regulations. I'm inspired by their dedication and grateful for the opportunity to serve Utah alongside them.







Aquatic Animal Health and Research Center – Monitors the health of Utah's wild fish populations and those in state fish hatcheries. Provides hatcheries with disease assessment and treatments.

Certificates of Registration – Issues licenses and certificates of registration to falconers, private pond owners and people who want to own exotic pets.

Community Fisheries Program – Partners with local governments to provide community fishing opportunities for Utah youth and families.

Dedicated Hunter Program – Provides additional hunting opportunities for Utah deer hunters who perform volunteer service benefiting wildlife.

George S. and Dolores Doré Eccles Wildlife Education Center – Features an education center (801-451-5536) and nature trails to educate visitors about the Great Salt Lake wetlands and active wildlife management.

Great Basin Research Center and Seed Warehouse – Conducts rangeland-rehabilitation research. Also stores, mixes and distributes seed for restoration projects.

Hardware Wildlife Education Center – Provides opportunities to learn about elk and other wildlife species through an assortment of exhibits, displays and activities. Primarily open during the winter months (435-753-6206) when sleigh rides occur on the Hardware Wildlife Management Area, but other special displays are offered seasonally. Hatcheries - Owns and operates Utah's state fish hatcheries.

Hunter Education – Trains individuals in the safe handling of firearms and responsible hunting ethics. The Lee Kay Center for Hunter Education (801-972-1326) and the Cache Valley Hunter Education Center (435-753-4600) provide Hunter Education courses and public shooting ranges.

Licenses and Permits – Sells hunting and fishing licenses and permits.

Natural Heritage Program – Identifies and monitors plant and animal species, and maintains a database for making natural resource decisions.

Website and Communications – Provides many online services and tools. Customers can visit <u>wildlife.utah.gov</u> to buy hunting and fishing licenses, download regulation guidebooks and find a wealth of information about Utah's wildlife.

Wildlife Recreation Events Program – Offers many wildlife-viewing events as well as hands-on clinics and seminars that provide instruction on hunting, fishing, shooting and more.

Case Studies

Allocating \$5.5 million to 60 Projects to Aid in Wildlife Recovery

Problem: Over the past 22 years, Utah has successfully prevented 27 listings under the Endangered Species Act and has developed a model program for cooperative delisting. With that said, close to a dozen Utah species will be up for listing decisions within the next three years, and more than 150 additional species are in need of active state management to prevent future ESA petitions for listing. Funding levels were insufficient to address the scope of the problem.

Solution: In April 2024, Utah's Species Protection Account (formerly the Endangered Species Mitigation Fund) allocated a total of \$5.5 million to fund 60 wildlife-recovery projects. That funding was an increase from past years, due to an additional one-time \$2 million appropriation from the Utah Legislature during the 2024 legislative session.

Outcome: Nearly half of the funding will go toward programs and recovery efforts that help Utah species currently listed under the ESA (i.e., Utah prairie dog, June sucker, razorback sucker, bonytail, Mojave desert tortoise and others). The remaining funding will go toward:

- Surveys and more information about key species that use the Great Salt Lake (i.e., Wilson's phalarope, red-necked phalarope and snowy plover).
- Research and habitat improvements for other native species in need of conservation (i.e., Western toad, pygmy rabbit, pinyon jay, bluehead sucker and others).
- Matching federal state wildlife grant funding to extend funds further and complete additional habitat and species protection projects.

By proactively working to prevent ESA listings, and to maintain state control, we can conserve Utah's wildlife without disrupting our way of life.

Construction Underway on the Loa Fish Hatchery

Problem: Originally built in 1936, the aging Loa Fish Hatchery had to be closed in 2014 after it was infested by New Zealand mudsnails. The hatchery historically had the capacity to produce roughly 180,000 pounds of fish each year — the most trout of any of the state's 13 fish hatcheries. Its closure decreased fish production and stocking throughout Utah and put a strain on the other remaining hatcheries.

Solution: In early 2023, the Utah Legislature passed a generous funding appropriation that provided \$56.8 million to rebuild the hatchery.

Outcome: After plans were finalized, construction on the new Loa Fish Hatchery began in March 2024, and it will be completed in 2027. The first phase of the construction was performed by a

local Wayne County contractor, and the hatchery will eventually provide up to six full-time jobs. These positions which will pay around \$47,000 annually — will bring an estimated \$238,000 into the local economy each year. When completed, the hatchery will produce 350,000 pounds of fish annually, while returning clean water to the nearby Fremont River.



Expanding the East Canyon Wildlife Management Area

Problem: Many of Utah's deer, elk and other big game animals rely on the state's wildlife management areas as places to feed and rest during the winter months. Recently, land adjacent to the East Canyon Wildlife Management Area (located directly north of East Canyon Reservoir) was slated for subdivision and listed for sale. We wanted to purchase it and expand the existing wildlife management area but did not have enough funding on hand for the purchase.

Solution: In early 2024, the Utah Legislature allocated \$8.5 million for the purchase of the 2,642acre property and associated water rights. We were grateful for the funding and combined \$5 million from our accounts with \$5 million from the Utah Division of State Parks to add to the legislative appropriation. In July 2024, we completed the purchase and acquired the property.



Outcome: After we make some access and habitat improvements, the property will be open to the public as an extension of the East Canyon Wildlife Management Area. Likewise, after the Division of State Parks completes its planning process, it will take title to approximately 400 acres of the property to expand East Canyon State Park and its recreation opportunities. We are looking forward to carefully managing this new parcel and providing more public land and access to hunters in Morgan County.

