



U.S. DEPARTMENT
OF THE INTERIOR

Bipartisan Infrastructure Law

Three Years of Progress

November 2024



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Introduction Secretary's Message

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When President Biden first took office, he promised the American people that the Biden-Harris administration would help combat the challenges that people nationwide have grappled with for generations. These barriers to a better future—from a lack of 21st century infrastructure in rural and Tribal communities to extreme environmental hazards like legacy pollution—cannot be solved without the Federal Government's attention and resources. This was something our administration understood and has acted on every day since.

Today, on the third anniversary of President Biden's signing of the historic Bipartisan Infrastructure Law (BIL), I am deeply proud to say we have kept the President's promise. This law—a once-in-a-generation investment in the future of our country—has allowed the Department of the Interior (Department) to confront these challenges head-on with the resources they demand, while harnessing invaluable partnerships within the communities who know how to best direct them.

Our Department received \$28.1 billion from BIL across our Bureaus and Offices. Three years into BIL's implementation, we have made rapid progress to deliver a more equitable, sustainable future that works for everyone. Our team has maintained a commitment to ensure these investments empower local communities to tackle the problems that have jeopardized health and safety while also creating good-paying jobs, advancing environmental justice, and boosting local economies.

The ongoing efforts outlined in this report are making a tangible difference in the lives of the American people and the ecosystems we all depend on. This progress is grounded in partnerships that are helping to guide these investments. State, local, and Tribal voices—indispensable perspectives that will continue to inform us on the road ahead—are leading the way.

None of this would have happened without the dedicated Department officials across our country, who deliver

on our promises to the American public. They are dedicated and committed public servants, working every day to determine how our Department can answer President Biden's call for a better tomorrow. These are leaders I am honored to serve alongside each day.

Of course, there is still work to be done in the fight for a cleaner, more sustainable future. But BIL and our determined workforce have made an undeniable impact in this most pressing mission. Our team remains committed to accomplishing the progress that remains—one State, one Tribal Nation, and one community at a time.

Deb Haaland
Secretary of the Interior



Financial Summary

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The Bipartisan Infrastructure Law (BIL) invests over \$28 billion to jump-start economic investment and address longstanding needs in Interior Department programs, and \$2.5 billion to fulfill pre-existing Indian Water Rights Settlements. These investments include:

- \$16 billion to **plug orphaned oil and gas wells and reclaim abandoned mine lands**. Cleaning up these toxic legacy pollution sites left behind by extractive industries is building healthier communities, creating jobs, and spurring economic revitalization in hard-hit energy communities.
- More than \$8 billion to **address water and drought challenges**, including making western communities more resilient to drought and climate change and advancing the short- and long-term sustainability of the Colorado River System.
- \$466 million to **support efforts in Indian Country** through the Bureau of Indian Affairs to revitalize Tribal infrastructure projects and advance climate resiliency.
- \$1.5 billion across Department land management agencies for **wildland fire management** to strengthen the wildland firefighting workforce, build fire resilience through fuels management and burned area rehabilitation, and invest in research, and technology modernization.
- \$1.4 billion to support **ecosystem restoration and resilience**, building on proven, nature-based projects, programs, and partnerships to protect cherished wildlife and nature resources while creating good-paying jobs that strengthen communities.
- More than \$500 million that's improving our **scientific innovation** and increasing our understanding of mineral resources across the country through integrated mapping, the preservation and collection of geological and geophysical data, and a laboratory facility for energy and minerals research.



Legacy Pollution

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President Biden's Bipartisan Infrastructure Law delivers the largest investment toward tackling legacy pollution in American history.

At the Department of the Interior (the Department, Interior Department, or DOI), the Law provides nearly \$16 billion for states, Tribes, and federal agencies to reclaim abandoned mine lands and clean up orphaned oil and gas wells. These investments create jobs, remove environmental hazards, and restore lands for other uses, such as outdoor recreation and economic activities.

Abandoned Mine Land Reclamation

The Bipartisan Infrastructure Law provides \$11.3 billion over 15 years to address dangerous health, safety, and environmental conditions and clean up pollution caused by historic coal mining. This funding, overseen and distributed by the Office of Surface Mining Reclamation and Enforcement, is helping the Department and partners reclaim most

of the currently inventoried abandoned mine lands. States and Tribes are already using the more than \$1.75 billion awarded from the Bipartisan Infrastructure Law to plan and implement projects to protect homes and infrastructure from subsidence and landslides, create new recreation opportunities, and clean up streams polluted with acid mine drainage.

In June, the Department made almost \$725 million more in fiscal year 2024 funding to 22 states and the Navajo Nation to create good-paying jobs and catalyze economic opportunity by reclaiming abandoned coal mine lands. As of November 4, 2024, OSMRE has awarded more than \$350 million in FY24 BIL AML grant funding to Colorado, Iowa, Maryland, New Mexico, Pennsylvania, and Wyoming.

Work-To-Date

Over the last three years, the Abandoned Mine Land Program has:

- Awarded more than \$1.75 billion dollars in BIL grants to 22 states and the Navajo Nation;

- Reclaimed 130 AML problems; and


- Reclaimed 811 acres of abandoned mine lands

Legacy Pollution

Bobby Reid Drainage Project, Kentucky

The Bobby Reid Drainage Project is the first community-wide BIL-funded project in Kentucky. Residents living along Homestead Estates Lane in Johnson County were experiencing drainage issues and related flooding that were harming their homes and yards as well as a nearby county roadway. Some of the flooding appeared to be coming from old mine portals adjacent to the neighborhood. Field investigations and mine history research found that the portals and drainage were related to a large flooded underground mine that had been abandoned for over 70 years.

The ongoing \$2.9 million project involves the construction of concrete ditches, culverts, and drop boxes to improve drainage and control the flooding that was impacting the 12-home neighborhood. In addition to drainage control, three mine portals have also been closed: one with a wildlife-accessible closure and the other two completely filled and sealed. The Bobby Reid Drainage Project is a great example of how the Kentucky Department of Abandoned Mine Lands is utilizing its \$74 million annual BIL grant award to address safety issues resulting from past mining and keep communities safe.



The Bobby Reid Drainage AML Reclamation Project in Johnson County, KY protects a 12-home subdivision by building concrete ditches, culverts, and drop boxes to control drainage. Photo from KY Division of Abandoned Mine Lands

Legacy Pollution

Lewis Mine Fire BIL AML Project, Colorado

The underground mine workings at the 73-acre Lewis Mine in South Boulder County, Colorado, were burning for more than 50 years. After a period of extended drought and the December 2021 Marshall Wildfire, the Colorado Division of Reclamation, Mining, and Safety (DRMS) determined that the Lewis Mine Fire had become more active, with increased subsidence, surface venting, and ground surface instability. The increase in activity, combined with the proximity to dense suburban development and infrastructure, heightened the potential impact to human health and safety, personal property, and infrastructure.

Until the historic amount of funding provided in the BIL to address legacy pollution, the Colorado DRMS was only able to address subsidence events on a piecemeal basis, prioritizing reclamation for the most immediately dangerous AML features. Thanks to nearly \$600,000 of BIL funding for this project, Colorado was able to properly mitigate the Lewis Mine Fire. DRMS excavated burning and smoldering coal—with temperatures of up to 600 degrees Fahrenheit—and then blended the burning material with cold overburden, reducing the temperature to below 90 degrees Fahrenheit before returning the material to the excavation.



Legacy Pollution

Mine Subsidence and Bridge Repair in Wyoming

Hanna, Wyoming, a Justice40 community, is divided by the Union Pacific Railroad, with the north and south segments of the town connected by a single overpass. The Union Pacific Coal Company operated several mines in the Hanna Coal Basin during the late 19th to mid-20th centuries to support the transcontinental railroad. These mining operations left behind large open spaces less than 300 feet underground. As a result, the supporting bedrock surrounding the open spaces has collapsed over time, causing subsidence events such as large troughs and sinkholes.

Carbon County Road 297 (CR 297) provides critical community access if the main overpass is damaged or becomes obstructed, as it becomes the only way for the Hanna Fire Department and EMS services to reach the southern half of town. In 2022, severe subsidence required closure of CR 297, eliminating this important emergency services lifeline.

To address the subsidence, Wyoming's Department of Environmental Quality, Abandoned Mine Lands Division used historical maps from the Union Pacific Railroad to determine the approximate extents of the underground mine workings and open spaces, along with data collected by prior exploratory drilling programs. More than 300 boreholes were drilled to facilitate the injection of a specialized grout to fill and stabilize the mine voids. Howard Concrete, a Union contractor from Pennsylvania that has worked on other BIL AML projects around the country, conducted the grouting work and restored the road surface. This \$7.3 million dollar project significantly mitigated subsidence risk for CR 297, and increased the longevity and safety of this important secondary access road. The CR 297 Project is the first BIL AML project to be implemented in Wyoming and is a great example of how BIL funds are being used to address legacy pollution and make communities safer.



Legacy Pollution

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Orphaned Oil and Gas Wells

In January 2023, Secretary Haaland issued Secretary's Order 3409 to establish the Orphaned Wells Program Office to ensure effective, accountable, and efficient implementation of President Biden's historic investment in orphaned wells clean up. Orphaned wells are legacy pollution sites, which create environmental hazards and jeopardize public health and safety by contaminating groundwater, emitting

noxious gases and methane, littering the landscape with rusted and dangerous equipment, and harming wildlife.

The Bipartisan Infrastructure Law provides funding to states, Tribes, and federal bureaus and agencies to inventory, assess, plug, remediate, and restore orphaned gas and oil well sites and decommission associated infrastructure.

Work-To-Date

As of September 30, 2024, plugged over **9,437** orphaned wells on State and private lands.¹ Additionally, the Program has:

- Plugged 199 orphaned wells on Federal Land.
- Reduced methane emissions by about 155,000 metric tons of carbon dioxide equivalent per year.

- Restored 558 habitat acres on state and private lands.
- Announced \$2.2 billion from BIL total for orphaned wells.
- Awarded 19 state phase 1 formula grants, totaling \$520 million.

¹See FY24 Orphaned Wells Program Office Report to Congress.



Legacy Pollution

Bipartisan Infrastructure Law Team Visits Erie County, New York

Through the Bipartisan Infrastructure Law funding, New York is plugging orphaned wells in urban, suburban, and rural communities across the state. The State received a \$25 million initial grant in August 2022, and in October 2023, Interior Department Infrastructure Coordinator Winnie Stachelberg traveled to Erie County, NY, to participate in a press conference with New York State officials to announce the start of the well-plugging program and view the first well plugged by the New York Department of Environmental Conservation (DEC) with BIL funds.

During the visit, DOI officials and staff also witnessed active plugging operations at the Burg J1 orphaned gas well in the Town

of Alden. Landowners reported the well to the DEC in 2021, expressing concern about the brine the well was leaking into their front yard. A DEC inspection determined the well was leaking over 1,000 grams per hour of gas as well as brine and was located within 200 feet of the residence. Plugging operations were completed and the methane emissions were eliminated in November 2023. Final site reclamation was approved in December 2023.

Infrastructure Coordinator Stachelberg speaks during an October 2023 orphaned well press event in New York.



In September 2024, Infrastructure Coordinator Stachelberg returned to the state to again meet with New York DEC officials, view well sites plugged and remediated with initial grant funds, view sites that will be cleaned-up with formula grant funds and speak with landowners who benefitted from the work happening on the ground. During the visit, DEC and DOI officials visited the site of the Burg J1 gas well that the state plugged with BIL funds in late 2023. The property owners were thrilled with the plugging and restoration work and thankful that the polluting well leaking brine and gas no longer posed a threat.

As of June 30, 2024, the State has plugged 29 orphaned wells.



Contractors plugging the Burg J1 well in Alden, NY.



The front lawn of a home in Alden, NY, ten months after the Burg J1 orphaned gas well was successfully plugged.

^[1] <https://dec.ny.gov/news/press-releases/2024/9/new-york-state-department-of-environmental-conservation-and-us-department-of-the-interior-tour-reclaimed-oil-and-gas-well-plugging-sites>

Western Water and Drought

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Water is essential to feeding families, growing crops, sustaining wildlife and the environment, and powering agricultural businesses. The Law is a historic step to provide critical funding to address water and drought challenges and invest in our nation's western water and power infrastructure while rebuilding our existing projects to withstand a changing hydrology.

The Law provides the Bureau of Reclamation a total of \$8.3 billion including:

- **\$1 billion to boost existing WaterSMART Programs** to support water recycling and reuse projects that seek to conserve and use water more efficiently, mitigate conflict in areas at high risk of future water supply and demand imbalance, and accomplish other benefits that contribute to sustainability. \$551.7 million has been announced as of September 2024.
- **\$1 billion for rural water projects** that will provide clean, reliable drinking water and support other critical water supply needs of rural communities and Tribal nations. \$806 million has been announced as of September 2024.
- **\$500 million for dam safety projects** that will fund construction work to maintain reliability and minimize risk to the public through Reclamation's Safety of Dams Program. \$105.2 million has been announced as of September 2024 including more than \$5 million in recent funding for the B.F. Sisk Dam in California and Willow Creek Dam in Montana.
- **\$300 million to implement the Colorado River Basin Drought Contingency Plan**, designed to protect the Colorado River system through voluntary reductions and increased conservation. \$138.5 million has been announced as of September 2024.



- **\$250 million for Aquatic Ecosystems Restoration** to invest in the health of fisheries, wildlife, or aquatic habitat through habitat restoration and improved fish passage. \$106.7 has been announced as of September 2024.
- **\$250 million for desalination construction** to support the development and supplement municipal and irrigation water supplies through the treatment of ocean or

brackish water, providing a local supply and flexibility during water shortages. \$74.3 million has been announced as of September 2024.

- **\$100 million for watershed health projects**, including the design, implementation, and monitoring of conservation outcomes of habitat restoration projects that improve watershed health. \$22.7 million has been announced as of September 2024.

- **\$100 million for new small surface and groundwater storage projects** with a capacity between 2,000 and 30,000 acre-feet have announced \$55 million; or which large projects to convey water to or from surface water or groundwater storage. \$604 million has been announced as of September 2024.



Work-To-Date

- The Bipartisan Infrastructure Law has enabled improved federal stewardship of our critical infrastructure and increased efforts to support our partners, stakeholders, Tribal nations and communities in water management and efforts to combat impacts of drought and climate change.
- **The Bureau of Reclamation has thus far announced more than \$4.2 billion in funding for an ever growing 587 projects in the 17 western states, Alaska, and Hawaii.**
- **A focus on improving water storage, conveyance, hydropower generation and increasing safety was supported with the investment of \$520 million this year in 57 projects across the West under the Aging Infrastructure funding portion of Bipartisan Infrastructure Law. This builds upon previous announcements to total \$1.5 billion.**
- An investment of \$242 million was announced to expand western water storage and conveyance to ensure

clean, reliable drinking water to communities. This includes \$90 million to continue construction of a water system to bring safe drinking water to 50,000 people in 39 rural communities along the Arkansas River near Pueblo, Colorado. Work continues to Boone Reach 1 and design and planning of future phases.

- Reclamation stood up a new large-scale water recycling program with the announcement of a \$99 million to the Metropolitan Water District for design and planning of its Pure Water Southern California—one of four projects announced in California and Utah to receive a total of \$179 million.
- With historic investments from the Bipartisan Infrastructure Law, Reclamation is reaching new communities in urban, suburban, and rural parts of U.S., with funding opportunities targeted to reach and facilitate participation from disadvantaged and underserved communities.

Western Water and Drought

Lewis & Clark Regional Water System

Critical infrastructure investment has enabled the Bureau of Reclamation to provide clean water to 350,000 people in rural communities.

The Bipartisan Infrastructure Law has greatly impacted the Rural Water Program and specifically the timeline for the Lewis & Clark Regional Water System. The Articles of Incorporation for the project were signed in 1990. Madison was an original member of the project and waited 34 years for water. Yet, the investment from Bipartisan Infrastructure law enabled that water

to arrive much sooner than expected. It also helped to ensure connection ahead of changes in construction costs that could have caused further delays.

In August, the city of Madison, South Dakota became the 19th member to connect to the water system. That connection occurred about a decade sooner than project managers had estimated in recent years due to budget constraints. They attribute the accelerated timeline and major progress on building the system to the investment of \$152.4 million from the Bipartisan Infrastructure Law. To mark the milestone, President Biden spoke with Madison Mayor Roy Lindsay about how



this new supply of clean water will allow residents to stop rationing water and bring new businesses to the community.

On October 28, Sibley, Iowa, became the 20th and final community connected to the water system. The Lewis & Clark project is now providing clean, safe drinking water to an estimated 350,000 people in rural South Dakota, Minnesota, and Iowa through 310 miles of water pipeline. The final phase of the project, to be completed in 2026, will expand the water system's capacity to 45 million gallons per day.

Figure 1: Photo: Workers installing a segment of pipe at the Lewis and Clark Regional Water System.



Economic Contributions



The Department of the Interior's BIL programs, activities, and services support the well-being of Americans in every part of the Nation. It's challenging to put an economic value on many of the Department's activities, however, we can evaluate how DOI lands and waters provide valuable ecosystem services and how the Department's actions and activities contribute to our Nation's economy.



In FY24, the Department's BIL investments for the abandoned mine land remediation program, orphaned well program, water infrastructure program, and ecosystem restoration supported 28,000 jobs and contributed over \$3 billion to the US economy.



Tribal Investments

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Tribal communities have too often been left behind and not given a seat at the table for the decisions that impact them and their communities, including project development and funding opportunities.

President Biden's Bipartisan Infrastructure Law is deploying record investments to provide affordable high-speed internet, safer roads and bridges, modern wastewater and sanitation systems, clean drinking water, reliable and affordable electricity, and good paying jobs in every Tribal community.

The Interior Department supported the historic investment by holding nation-to-nation consultations with Tribes, providing a pathway to inform early planning decisions across programs and initiatives outlined in the law.

At the 2022 White House Tribal Nations Summit, the Department announced the launch of a new first-of-its-kind Voluntary Community-Driven Relocation Program, with an initial \$135 million commitment from the President's Investing in America agenda – historic legislation passed by Congress and signed by the President including the Bipartisan Infrastructure Law, the Inflation Reduction Act, American Rescue Plan, and the CHIPS and Science Act - to support Tribes severely impacted by the climate crisis. Support for relocation is being provided by the Federal Emergency Management Administration and the Denali Commission.

Projects funded through the Bipartisan Infrastructure Law include:

- **\$2.5 billion to satisfy obligations under the Indian Water Rights Settlement Completion Fund** that help deliver long-promised water resources to Tribes and a foundation for future economic development for entire communities dependent on common water resources.
- **\$250 million for Tribal dams and water projects** to address irrigation, power systems, dam safety and water sanitation.
- **\$216 million for Tribal climate resilience** which will support adaptation strategies and community-driven relocation for Tribal communities impacted by climate change impacts.

The Bipartisan Infrastructure Law also made Tribal communities eligible for additional Department programs to support building resilience to wildland fire and drought, restoring ecosystems, enabling fish passage, and addressing legacy pollution from abandoned mine lands and orphaned oil and gas wells.



Tribal Investments

Oglala Dam Project at Pine Ridge Reservation

The Oglala Dam was first built in the 1940s and is located on White Clay Creek, approximately one mile south of the town of Oglala on the Pine Ridge Indian Reservation in southwestern South Dakota, the Oglala Dam. The reservoir formed by Oglala Dam was drained in 2019 to protect communities downstream following flood damage that compromised the spillway and outlet works.

The Safety of Dams program is using \$63.6M in Bipartisan Infrastructure Law funding to supplement construction of the Oglala Dam safety remediation. This serves as the Bureau of Indian Affairs largest BIL project. The project includes demolition of the existing spillway and outlet works, and construction of a new roller-compacted concrete spillway, outlet works and partial embankment replacement.

Figure 5 Photo: The groundbreaking of the Oglala Dam Project at Pine Ridge Reservation.



Ecosystem Restoration

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Recognizing that healthy ecosystems are part of the Nation's infrastructure, the Bipartisan Infrastructure Law is making a major investment in the conservation and stewardship of America's public lands that is improving outdoor spaces and habitats for people and wildlife for generations to come.

The Law includes \$1.4 billion for ecosystem restoration, which is a significant down payment in protecting our shared natural heritage. With these resources, the Interior Department is collaborating with states, Tribes, and local communities to invest millions of dollars annually to restore habitat connectivity for aquatic species around the country and advance habitat restoration, invasive species control, conservation of at-risk and listed species and benefits to several significant ecosystems.

The USFWS is leading BIL-funded restoration in:

- **Klamath Basin** conservation work in support of the recently signed Memorandum of Understanding with communities in the region.
- Lake Tahoe aquatic invasive species control.
- Sagebrush steppe ecosystem.
- Removing barriers to fish and wildlife passage throughout the country via the National Fish Passage Program.

The US Bureau of Reclamation is leading BIL-funded programs in:

- Establishment of a new aquatic ecosystem restoration program
- Colorado River endangered species recovery

This funding will support coordinated work across the Department through the BIL Ecosystem Restoration Program (Section 40804), including investments in:

- Grants for states, Tribes, and territories to participate in voluntary restoration efforts.
- Good Neighbor Agreements with states and Tribes for cross-boundary restoration work with Federal partners
- Addressing invasive species and establishing an institutional architecture for a coordinated early detection and rapid response framework for proactive management of invasive species
- Implementing a national revegetation effort
- Contracts to restore ecological health on federal and tribal lands.
- Increasing resilience of recreation sites on federal and tribal lands



In 2023, the Department unveiled a Restoration and Resilience Framework to support coordination across restoration programs and efforts and drive transformational outcomes.

The framework includes a commitment to nine conservation challenges, called out as the Keystone Initiatives (KI).

The KIs include the Klamath River Basin, the sagebrush biome, Atlantic Coast salt marshes, Gravel to Gravel (salmon restoration in Alaska), Hawaiian forest birds (See graphic below), grasslands, and Appalachia, as well as two national scope KIs, the National Early Detection and Rapid Response (EDRR)

Framework for invasive species and the National Seed Strategy. These KIs were selected for their alignment with strategic priorities and bureau missions, their ability to be driven by a locally led, collaborative restoration strategy, and opportunity to leverage funds with other BIL or IRA programs.

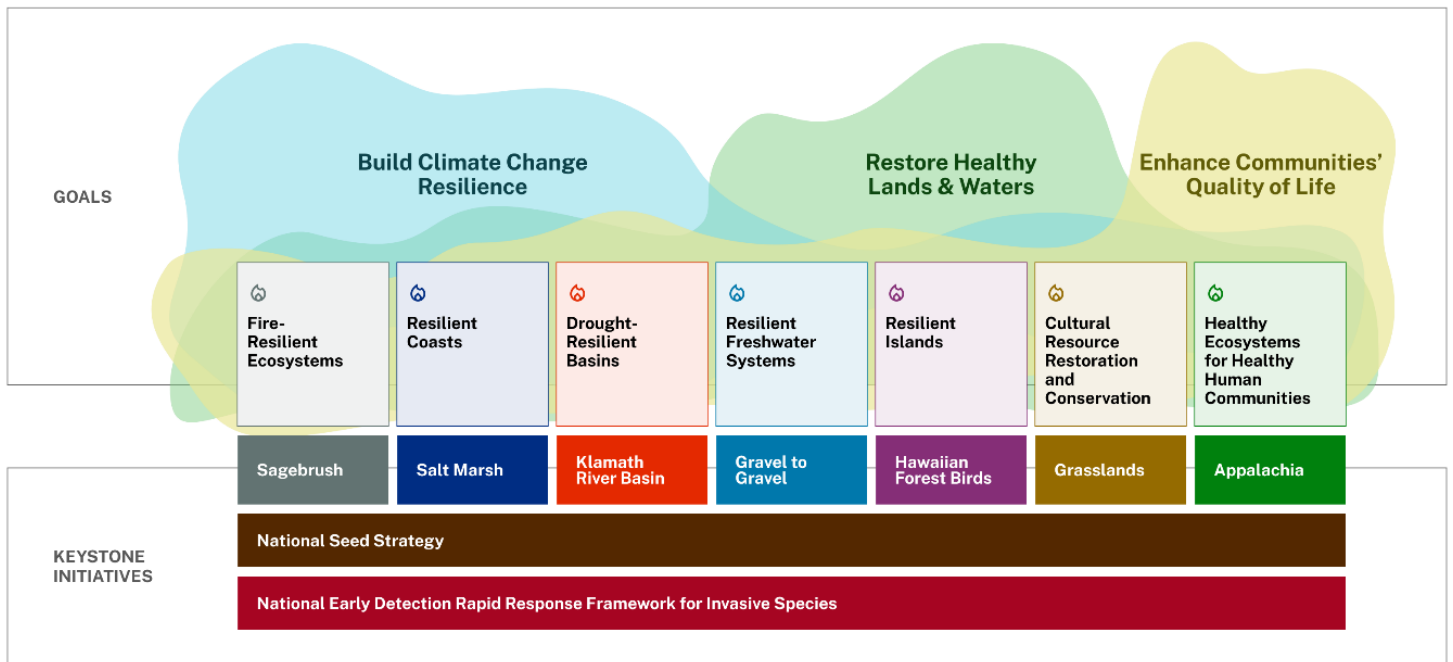


Figure 1. The Restoration and Resilience Framework



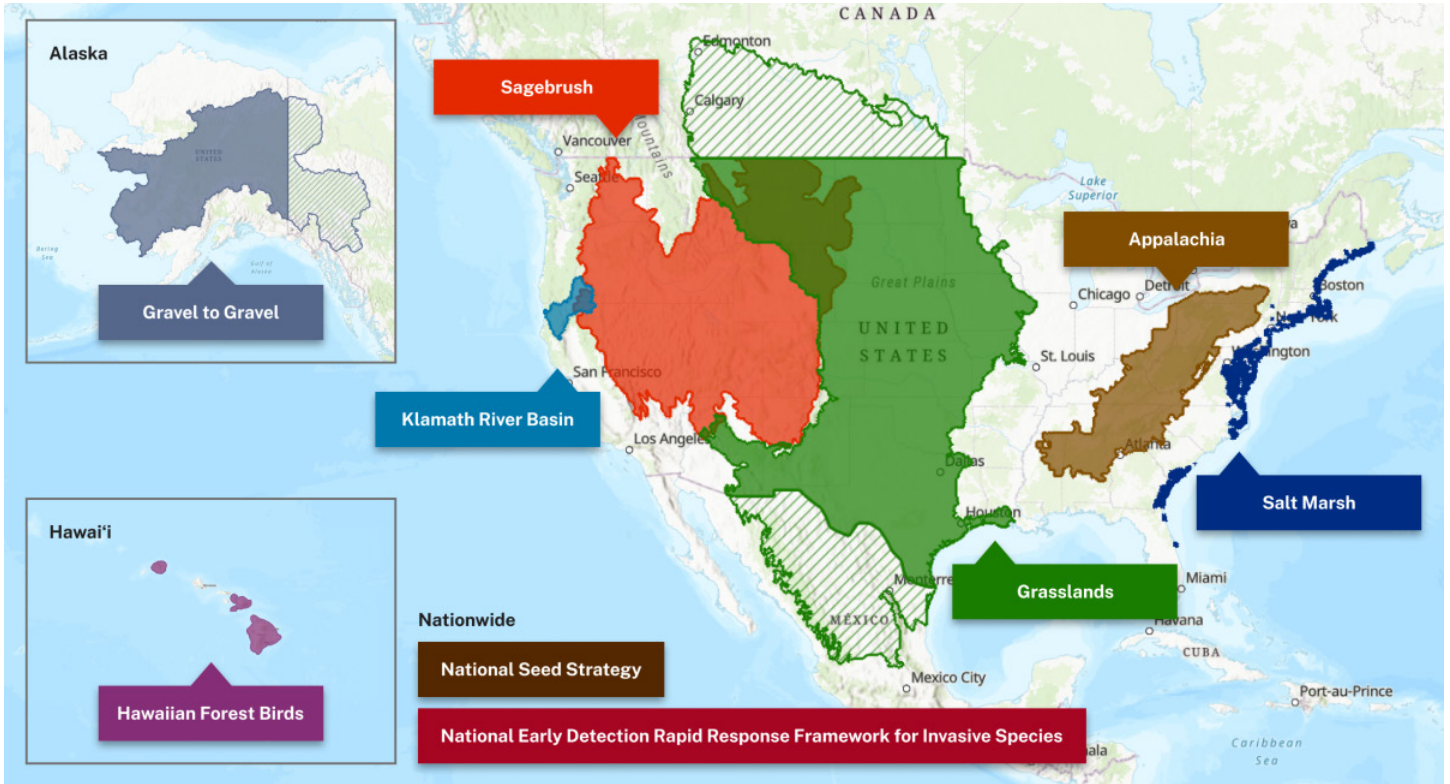


Figure 2. The Keystone Initiatives

In addition to investments made through the Restoration and Resilience Framework, another major area of investment to advance ecosystem restoration at scale has been aquatic connectivity, or the reconnection of rivers and streams through the removal of barriers. The Bipartisan Infrastructure Law allocated \$200 million for restoring fish and wildlife passage to remove in-stream barriers and provide technical assistance which enabled the National Fish Passage Program (NFPP). The funding was to be distributed over five years beginning in 2022, providing the opportunity to invest in our nation’s rivers, streams, and communities.

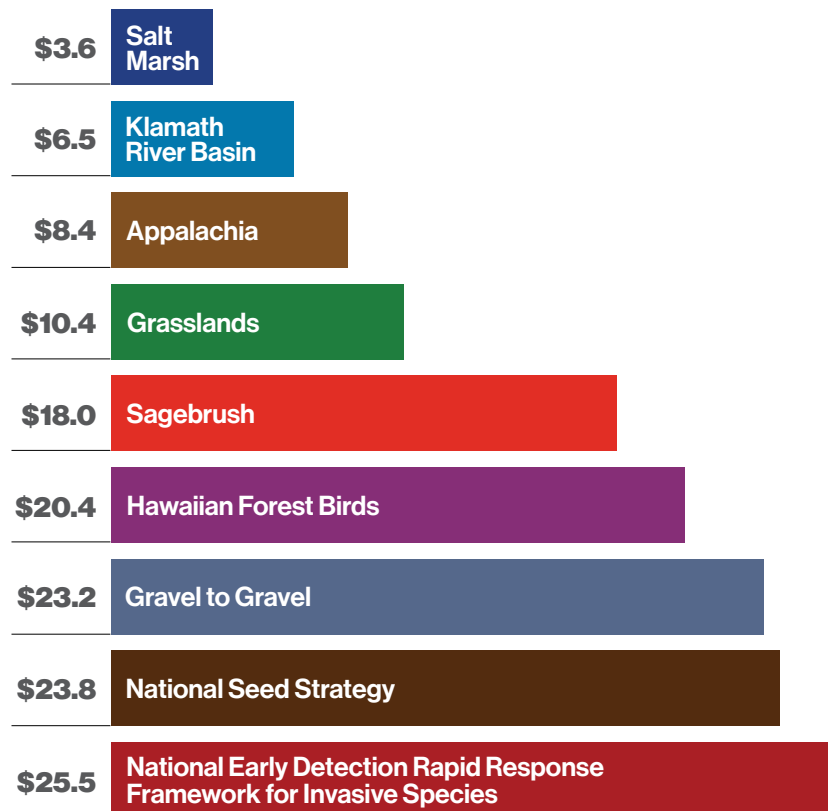


Figure 3. Investments in the Keystone Initiatives under BIL Section 40804 from FY22-24, in millions of dollars. Other BIL and IRA investments have also been leveraged to support the Keystone Initiatives.

Ecosystem Restoration

National Fish Passage Program

To date, the U.S. Fish and Wildlife Service has allocated \$143 million for 122 Bipartisan Infrastructure Law fish passage projects. Once completed, it's projected to remove 346 barriers that are fragmenting rivers, blocking fish migration, and putting communities at higher risk to flooding and reopen roughly 12,300 stream miles to improve aquatic connectivity and fish passage. These actions are the most effective ways to help conserve vulnerable species while building safer infrastructure and improving climate resilience.

With implementation underway for some of these projects, to date, almost 40 barriers have been removed and about 1,500 stream miles have been reopened.

The Service is also facilitating a multi-agency effort to coordinate the delivery of roughly \$2 billion in Bipartisan Infrastructure Law funding for the restoration of fish passage and aquatic connectivity. In doing so, the Federal government is identifying new ways to coordinate across Federal agencies and improve how we share information about projects and leverage resources through the Federal Interagency Fish Passage Task Force.

Image 1: The phases of the Little River Dam removal process. The center picture shows the notching phase, where some water was allowed to move through, preparing for the final phase with full dam removal and streambank restoration. Canvas and rocks hold the sediment that was placed to stabilize the banks.



Ecosystem Restoration

Preventing the Extinction of Hawaiian Forest Birds

The unique and iconic forest birds of Hawaii are facing an immediate extinction crisis. Found nowhere else on Earth, at least 12 species are confronted with imminent extinction in the next few years from habitat loss, invasive species, climate change and disease, such as avian malaria spread by mosquitoes. Thanks to investments from the Bipartisan Infrastructure Law these birds have a fighting chance.

Hawaiian forest birds are an integral ecological and cultural component of the Hawaiian Islands. These birds reflect the health of forests and represent cultural connections between the Native Hawaiian Community and the islands. The loss of these species compromises the integrity of unique ecosystems as well as the natural and cultural heritage of Hawaii.

A major component of the Hawaii Forest Bird Keystone Initiative includes the planning and implementation of landscape-level mosquito control using Incompatible Insect Technique (IIT). The goal of this effort is to reduce the mosquito vector of avian malaria that is decimating Hawaii's forest bird populations. The IIT mosquito control technique has been used widely for human health but never before for avian conservation.

Since IIT deployment commenced in November 2023, BIL ER has funded the release of over 10 million non-biting IIT male mosquitoes across two sites on Maui — That's approximately 500,000 IIT mosquitoes per week.





IIT release sites on Maui

Getting to this point has taken a substantial collaborative effort, requiring contributions from both public and private partners to establish a plan of action, obtain all regulatory and compliance permits, hire additional field staff, initiate pre- deployment monitoring, ramp up rearing and production of IIT mosquitoes, organize delivery and deployment schedules for IIT mosquitoes, and initiate aerial deployment. The two sites on Maui will continue to receive 500,000 IIT mosquitoes per week, with plans to expand production and deployment on Kauai in January 2025. Post-deployment efficacy and integrity monitoring is occurring simultaneously to assess the success of the treatments and help inform future decisions about the utility of the IIT tool.



Native Hawaiian birds such as the 'i'iwi (previous page) and 'amakihi (above) are found nowhere else on earth and face critical threats.

Scientific research is vital to the nation's understanding of its energy and critical mineral resources, training and retaining the next generation of natural resource scientists and preserving the nation's irreplaceable geologic knowledge.

The Bipartisan Infrastructure Law provides \$510.7 million to the U.S. Geological Survey (USGS) to support integrated mapping and interpretation of mineral resources data, the preservation of data from geochemical samples from the Earth Mapping Resource Initiative (Earth MRI), and a replacement facility for USGS energy and minerals research centers in Golden, Colorado. Direct funding is also available for Department bureaus and federal agencies to provide USGS science to support additional infrastructure projects.

The USGS is making historic investments in scientific research such as:

- **\$167 million for a USGS Energy and Minerals Research Facility** to support the design, construction and tenant build out of a state-of-the-art USGS-owned facility for energy and minerals research through a cooperative agreement with an academic partner.

- **\$23.7 million for National Geological and Geophysical Data Preservation (NGGDPP)**, to support State Geological Surveys through the matched grants program to preserve and make digitally accessible geological and geophysical data and assets, including support of the Earth MRI critical minerals priorities.

- **\$320 million to advance the mapping mission of the USGS** to provide integrated topographic, geologic, geochemical, and geophysical mapping; accelerate the integration and consolidation of geospatial and resource data; and support the interpretation of subsurface and above-ground mineral resources data.

Collectively, these investments will deliver science information and data essential to the design, development, and management of the nation's infrastructure.

Work-To-Date

- Earth MRI has completed 13 airborne geophysical surveys, with data recently published or forthcoming, 19 airborne geophysical surveys are currently underway, and the USGS is also conducting new regional to district-scale hyperspectral surveys across the U.S. Earth MRI has also funded 44 geologic and geochemical mapping projects and 30 mine waste projects with state geological surveys to survey critical minerals that are essential to the U.S. economy, national security, and clean-energy technology.

- Through the NGGDPP program, grants to 35 state geological surveys have resulted in 54 projects to preserve historical data and samples, house samples and data, modernize hundreds of geologic maps, and create data delivery and archiving systems to increase digital access to these resources.

Scientific Innovation

Earth MRI

Through the Earth MRI BIL investments, the USGS worked in partnership with state geological surveys and private industry to collect new high-resolution geophysical data. To date, BIL funds contributed to geophysical data coverage of over 10 percent of the nation in areas that are prospective to host critical minerals. This has dramatically increased nationwide mapping of the rocks on and below the land surface, allowing geologists to identify areas favorable for critical mineral deposits, and allowing the U.S. to catch up to other advanced nations.

Testimonial

“Our state’s partnership with USGS through Earth MRI has been tremendously successful; the high-resolution data has been transformative in allowing us to observe our region’s basement structure and has already informed us about the potential source of an earthquake swarm occurring near Columbia. The data has so many applications for natural hazards, economic resources, and land planning,” said Scott Howard, state geologist of South Carolina.

Earth MRI has tripled coverage of high-resolution geophysical surveys

Pre-Earth MRI (2019)

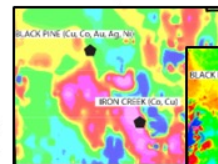


Current Coverage (2024)

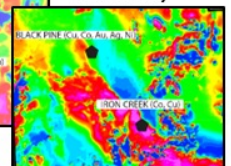


Modern, high-resolution geophysical data from Earth MRI are providing essential, detailed insights into mineral systems like the Idaho Cobalt Belt.

1978 survey



2022 Earth MRI survey



The Bipartisan Infrastructure Law is bringing much-needed support to communities across the country to increase the resilience of lands facing the threat of wildland fires and to better support federal wildland firefighters.

The law includes \$1.5 billion for the Department to invest in preparedness, fuels management, post-fire restoration, and fire science, including:

- **\$878 million for hazardous fuels management** to protect vulnerable communities from wildfire while preparing natural landscapes for a changing climate.
- **\$325 million for post-fire restoration and rehabilitation activities** that will mitigate the damaging effects of wildfires and set landscapes on a path towards natural recovery and climate resilience.
- **\$245 million in investments in wildfire preparedness**, including an increase in pay for firefight and other workforce reforms. The law also provides for the purchase of early wildfire detection and real-time monitoring radios to support interoperability with interagency partners; financial assistance to local communities and Tribes to purchase slip-on tanks; and proactive planning for wildland fire response.
- **\$10 million to support science and research on wildland fire management** issues that mitigate wildfire risk.



Work-To-Date

Since the passage of the **Bipartisan Infrastructure Law**, the Department of the Interior has:

- Allocated over **\$1 billion** to support **wildland fire management** across the nation.
- Increased fuels management work by more than 50 percent to **reduce wildfire risk** by investing \$393 million to reduce excess vegetation on 2.2 million acres.
- Invested \$120 million in **temporary pay increases for 5,440 Interior wildland firefighters**, with the pay supplements now continuing through annual appropriations pending Congressional approval of a permanent pay solution.
- Significantly accelerated the pace and scale of **post-fire rehabilitation efforts** with an investment of more than \$227 million.
- Invested \$67 million to **improve training and equipment** to better prepare the Department's wildland fire personnel to respond to wildfires.
- Took significant steps in the development of a **first-of-its-kind health and wellbeing program** for federal wildland firefighters.
- Launched a pilot program to **strengthen local governments' wildfire response** by providing grants to convert vehicles into wildland fire engines, with nearly \$1.3 million awarded in the first round of funding.



Wildland Fire

Building Ecosystem and Community Resilience to Wildfire through Partnerships

In 2020, the fast-moving Alameda fire tore through neighborhoods in Talent and Phoenix, Oregon. Today, an innovative partnership is promoting an all-lands approach to improving ecosystem resilience and reducing risk from future wildfires.

In June 2023, the U.S. Fish & Wildlife Service's Partners for Fish and Wildlife Program awarded a \$2 million cooperative agreement to the Oregon-based nonprofit the Lomakatsi Restoration Project. Funded by the Bipartisan Infrastructure Law, the agreement supports ecologically-based wildfire risk reduction and forest resilience efforts.

The Lomakatsi Restoration Project was formed to restore a wide range of complex forest communities and wildlife habitats while simultaneously reducing severe wildfire threats near communities in southwest Oregon and northern California, where wildfires often threaten lives, property, and forest ecosystems. In the process, the project has created hundreds of living-wage jobs with an emphasis on Tribal and Hispanic employment. It is also supporting rural economies by delivering restoration byproducts, including small-diameter trees and biomass material to local mills. Lomakatsi has established long-term collaborative partnerships with





Tribes, agencies, conservation groups, industry, and forest-based communities throughout the area.

Bipartisan Infrastructure Law funding enabled the Lomakatsi Restoration Project to reduce wildfire risk on nearly 1,100 acres near the Oregon communities of Ashland, Jacksonville, Medford, Phoenix, and Talent by piling excess vegetation and then burning the piles when weather conditions allowed. Through this project, prescribed burns have been conducted on 22 acres of private land near these communities to further reduce wildfire risk. The project also mechanically thinned, piled, and burned flammable vegetation near many of Ashland's at-risk homes, reducing

the chances that a future wildfire could adversely affect the community.

The remaining Bipartisan Infrastructure Law funds in the cooperative agreement will be used to continue reducing wildfire risk near communities in southwest Oregon and northern California.

The Lomakatsi Restoration Project exemplifies how Bipartisan Infrastructure Law funding is helping small, rural communities reduce wildfire risk while supporting local economies, building a more resilient future where we can successfully live with fire.



