

Policy Brief
November 2024

A Path Forward for America's Best Idea

Lessons Learned for Our National Parks
From the Great American Outdoors Act

By Tate Watkins



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On the Cover
Acadia National Park



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GLENN CANYON NATIONAL
RECREATION AREA

AN INVESTMENT IN CONSERVATION

**Since Congress passed
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ACADIA NATIONAL PARK

S Congress passed the Great American Outdoors Act in 2020, billions of dollars have been devoted to repairing, restoring, and replacing critical assets at national parks.¹ So far, the landmark investment is helping reconstruct seawalls in the capital’s iconic Tidal Basin, rehabilitate potable water delivery throughout Canyonlands National Park, restore forestland in Cuyahoga Valley, stabilize a historic wharf at Alcatraz Island, and renew wastewater systems at Acadia National Park, along with numerous other projects.² The act created the Legacy Restoration Fund to tackle these much-needed maintenance projects, funded by up to \$1.9 billion annually from federal energy development revenues. The National Park Service receives 70 percent of the total, or about \$1.3 billion each year. More than 100 large-scale projects are underway, along with hundreds of smaller preservation activities, spanning all 50 states.³

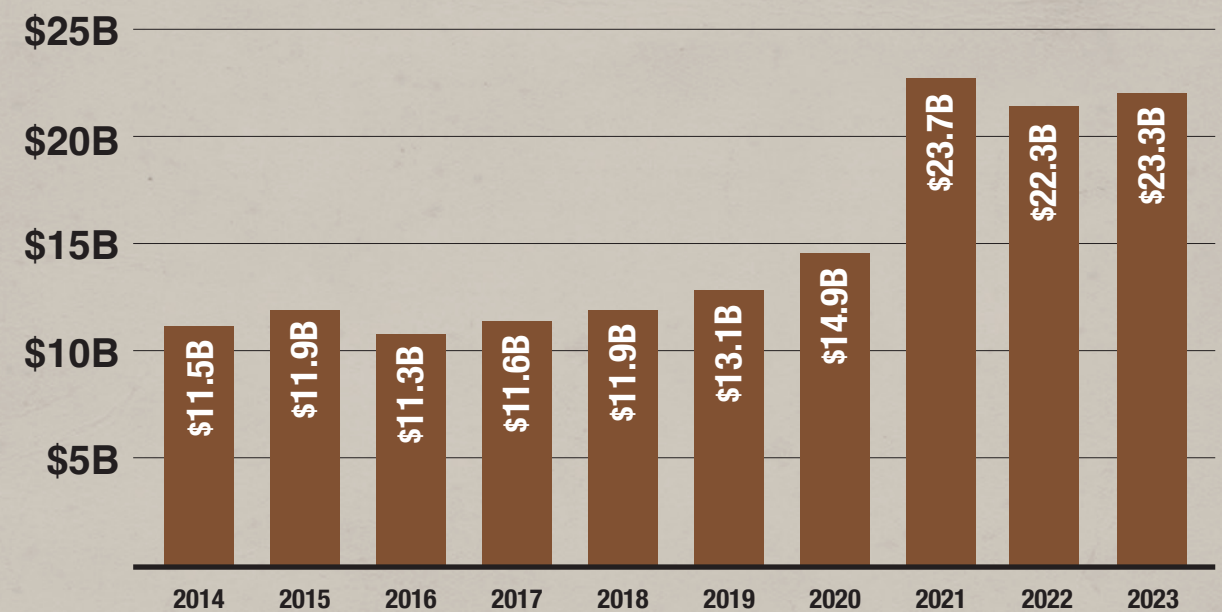
Given that the Legacy Restoration Fund expires at the end of September 2025, conservationists, advocacy groups, and lawmakers have begun to discuss the potential for reauthorizing it.⁴ Some members of Congress have criticized the National Park Service, however, because its maintenance backlog has grown rather than shrunk despite the generational investments of the act. When the Great American

Outdoors Act (GAOA) passed, the agency estimated its deferred maintenance backlog at \$14.9 billion. The following fiscal year, its estimate ballooned to \$23.7 billion.⁵ Government oversight agencies have questioned the agency’s estimating methods, including an across-the-board markup attributed to inflation and a renewed effort to tally maintenance needs once the act offered the prospect of substantial funding. The current estimate stands at \$23.3 billion.⁶

Sen. Angus King (I-Maine) has described the surge in the backlog as “disheartening,” while Sen. Steve Daines (R-Mont.) lamented that it has grown “massively—virtually doubling.” The senators have also urged the agency to focus on routine maintenance to prevent the backlog from growing even larger.⁷ “My concern is that we’re still deferring maintenance,” said King, “instead of digging out of the hole.” Likewise, in the House, Rep. Bruce Westerman (R-Ark.) stressed that Congress was still waiting to see the expected reductions in the backlog after making historic investments in the park service.⁸ “Instead of thinking we’re more than halfway through, and on pace, to another five-year reauthorization to wipe out the maintenance backlog,” said Westerman, “we find we’re actually in worse shape than we thought we were in when approved GAOA to begin with.”⁹

The reported maintenance backlog at national parks has grown for years, although government oversight agencies have questioned the estimates.

National Park Service deferred maintenance estimates by fiscal year



When the Great American Outdoors Act passed in 2020, the National Park Service estimated its deferred maintenance backlog at \$14.9 billion. The following fiscal year, its estimate ballooned to \$23.7 billion. Two reported causes of the increase are an across-the-board markup for inflation and a newfound focus on counting maintenance needs due to the prospect of substantial funding from the act. The current estimate is \$23.3 billion.

Note: Dollars in nominal terms.
Source: Congressional Research Service





Funding from the Great American Outdoors Act may be on its way to improving thousands of federal assets, but the picture has been muddled by a maintenance backlog that continues to grow as well as concerns over the politicization of project selection. While various aspects of the Legacy Restoration Fund have proven to be foresighted and advantageous, the agency still faces major problems in tracking and addressing maintenance. As the potential for reauthorization looms next year, the first iteration of the act offers several lessons in light of longstanding maintenance challenges at the National Park Service.

LESSONS LEARNED

The Great American Outdoors Act has helped national parks begin to rehabilitate crucial infrastructure and make capital improvements, and several aspects have been particularly foresighted and beneficial.

Billions of dollars from GAOA have been directed to much-needed projects, from replacing failing wastewater systems to repairing eroded trails to rebuilding visitors centers. Various provisions of the act have set the agency up for success. For instance, the act allows unspent dollars in the Legacy Restoration Fund to be invested in U.S. Treasury bonds to earn interest, which can be used to cover program costs.

Yet the current deferred maintenance system is broken. The existing deferred maintenance system is not logical, accurate, or explainable. Government oversight agencies have repeatedly called into question various estimating methods used by the agency. Moreover, the focus on deferred projects takes attention away from routine maintenance that extends the lifespan of park assets, compounding the backlog challenges.

The broken approach to maintenance makes it difficult for the agency to defend its selection of projects and opens up the process to accusations of political bias. Because the system to estimate and track deferred maintenance has failed, defending the selection of GAOA projects becomes more difficult and open to being politicized.

The agency risks jeopardizing potential reauthorization of the Great American Outdoors Act. Without changes to the deferred maintenance system, not only will the National Park Service struggle to overcome its maintenance challenges, but Congress may also be dissuaded from continuing to provide significant funding for them, making it even more difficult to address park system needs.

RECOMMENDATIONS

Various strategies can help the agency improve its approaches to national park stewardship generally or under a potential future iteration of the Great American Outdoors Act specifically.

- 1 Replace the broken deferred maintenance system and terminology.**
- 2 Devote future GAOA funding toward sound stewardship generally and jettison the focus on “deferred” maintenance.**
- 3 Protect investments made through GAOA 1.0.**
- 4 Retain aspects of GAOA 1.0 that have proven useful and successful.**
- 5 Select projects based on appropriate criteria that limit political influence over spending.**
- 6 Explore creative innovations to visitor fees that can complement GAOA investments.**
- 7 Consider regular reauthorization of GAOA that would allow the park service to make long-term plans to recapitalize assets.**
- 8 Recognize that maintenance needs will never “zero out” and instead focus on how much and what types are acceptable.**



YOSEMITE NATIONAL PARK

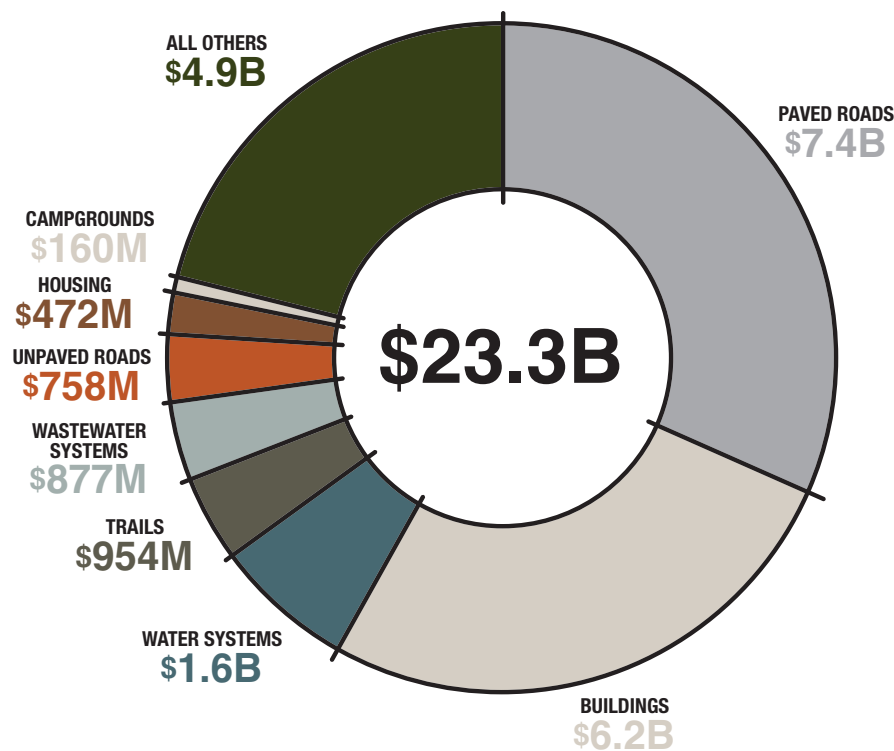
LONG-STANDING MAINTENANCE CHALLENGES

The National Park Service has struggled to maintain its roads, visitor centers, campgrounds, historic structures, trails, utility systems, and other assets for decades. Infrastructure in many parks dates back to the Civilian Conservation Corps era of the 1930s or the agency’s Mission 66 construction push of the ‘50s and ‘60s.¹⁰ Much of it has reached or exceeded its anticipated lifespan without being repaired or replaced. The result has been a backlog of deferred maintenance, generally considered maintenance or repairs that were not completed on schedule.¹¹ As the backlog has swelled steadily over time, so has political salience of the issue.

Today, many of the units with the highest amounts of deferred maintenance are older parks, such as Yellowstone and Grand Canyon, with infrastructure largely constructed in the mid-20th century. Other units, including Gateway National Recreation Area, Golden Gate National Recreation Area, and the National Mall and Memorial Parks, are in urban areas, which require complex infrastructure and can also drive up labor and material costs. Similarly, large backlogs at the George Washington Memorial, Natchez Trace, and Blue Ridge Parkways reflect the relatively high share of deferred maintenance accounted for by paved roads (\$7.4 billion, or nearly one-third of the total backlog).¹²

While there are questions over the accuracy of estimates, paved roads are a significant portion of the total reported maintenance backlog.

National Park Service deferred maintenance by type of asset



Paved roads account for nearly one-third of the total backlog, and the challenges extend far off pavement as well. An estimated \$1 billion is needed to address overdue work on trails alone.

Note: Figures for FY2023. “Paved Roads” includes paved roadways, bridges, and tunnels. “All Others” includes utility systems, dams, constructed waterways, marinas, aviation systems, railroads, ships, monuments, fortifications, towers, interpretive media, and amphitheaters.

Source: Congressional Research Service



BLUE RIDGE PARKWAY



The Government Accountability Office has noted that “deferring or delaying maintenance can diminish the quality of an asset and, in the long term, can shorten the life and value of an asset,” ultimately leading to “significantly higher maintenance and repair costs.”¹³ To further complicate the matter, the agency has had no standard approach to classify which and when maintenance projects become “deferred.”¹⁴ For its part, the agency has noted that root causes of the backlog include insufficient regular funding to care for park assets along with increases in construction costs, noting that until parks receive sufficient annual funding to adequately address recurring maintenance needs nationwide, the backlog will continue to grow.¹⁵

The Inspector General Office of the Department of the Interior has described past deferred maintenance estimates as akin to “a house of cards built upon a house of cards.”¹⁶ In a 2023 report, it found that the agency was “unable to effectively identify and manage its deferred maintenance, in large part due to inaccurate and unreliable data” in the agency’s software management system, which relies on work orders recorded

in the system.¹⁷ The report cited significant failures to keep an updated accounting record of those work orders. Moreover, it questioned a blanket 35-percent markup applied to deferred maintenance projects in fiscal year 2021, intended to account for costs related to “compliance, design, construction management, and project management,” which had previously been excluded from estimates.¹⁸ The markup resulted in a \$3.7 billion increase in the backlog in a single year.¹⁹ The office also noted the long-term nature of the overall problem, adding that the agency has “struggled to manage deferred maintenance for at least two decades.”²⁰

Relatedly, in early 2024, the Government Accountability Office reported that land management agencies attribute a portion of recent increases in deferred maintenance to “staff putting in more effort to log all deferred maintenance because of the increased funding available” from the Legacy Restoration Fund. When funding was limited, the office reported, “there was not an emphasis on logging complete data on all deferred maintenance needs because so much of it would not be funded.” The

Despite the muddled overall picture, the first iteration of the Legacy Restoration Fund is undoubtedly supporting hundreds of projects that are restoring critical infrastructure and assets for national parks.



availability of funding, however, spurred agencies “to reevaluate their asset management approach and fostered a cultural change toward maintaining better data on deferred maintenance.”²¹

Nevertheless, the National Park Service has not adequately explained to Congress, the public, or federal oversight agencies why its maintenance needs continue to balloon despite generational investment from the Great American Outdoors Act. That’s partly because the agency’s deferred maintenance system is not logical, accurate, or explainable. Moreover, the focus on needs that have been “deferred”—which has no standard or consistent definition or classification—takes attention away from routine maintenance that extends the lifespan of park assets, ultimately compounding the challenge.

The National Park Service’s record of estimating, tracking, and addressing deferred maintenance would logically lead Congress to question the agency’s ability to handle future dedicated funding responsibly. Despite the muddled overall picture, however, the first iteration of the Legacy Restoration Fund is undoubtedly supporting hundreds of projects that are restoring critical infrastructure and assets for national parks.

Implementing GAOA 1.0

To date, the Legacy Restoration Fund has directed full funding of \$1.3 billion to national parks each year. The National Park Service has already earmarked more than \$4 billion for over 100 large-scale projects, along with 300 smaller-scale historic preservation activities.²² The Congressional Research Service has reported that projects funded from fiscal year 2022 to 2024 will address a total of \$3.28 billion of the agency’s deferred maintenance needs, and if fiscal year 2025 projects are fully funded, they will address an additional \$940 million of overdue maintenance.²³

Moreover, Congress was prudent and far-sighted with several provisions of the act, including providing long-term flexibility, allotting contingency funding in case of budget overruns, and allowing funds to be invested to earn interest. The latter aspect has provided enough earnings to cover all of the act’s administrative costs.²⁴

The Government Accountability Office has reported that all agencies receiving funding from the act, including the National Park Service, generally followed appropriate standards when administering deferred

The Legacy Restoration Fund is supporting more than 100 major projects at National Park Service sites.

Great American Outdoors Act projects at U.S. national parks



When smaller-scale preservation activities are included, restoration efforts span all 50 states and total more than \$4 billion in funding.

Source: Department of the Interior



YELLOWSTONE NATIONAL PARK

Given that local park staff have the best knowledge of their own needs and priorities, it makes sense to harness the bottom-up identification of priorities by individual parks.

but is too thin to effectively address the highest priorities.

Moreover, some lawmakers have bemoaned the selection of projects. In 2022, House Natural Resource Committee Republicans alleged that the agency “in some cases, seems to prioritize funding for relatively obscure park units in urban areas over crown jewels of the National Park System in rural areas.”³¹ Republicans have specifically criticized a \$161 million investment in the George Washington Memorial Parkway just outside of Washington, D.C.³² Additionally, they took issue that Rep. Nancy Pelosi’s (D-Calif.) congressional district was set to receive \$166 million from the Legacy Restoration Fund for two park units, “an amount that could otherwise address the deferred maintenance backlog in eleven states totaling 35 park units,” the House Republicans wrote.³³

Regardless of how projects have been selected, the appearance of selection based on political grounds rather than best practices presents a hurdle for prospects of future funding for parks. The perception that national parks have been unable to make progress on their long-standing maintenance challenges arguably presents an even more challenging hurdle. Lastly, the National Park Service’s failure to keep up with its maintenance needs in the past prompts the question of whether it will be able to properly steward the new investments funded by GAOA 1.0.

maintenance projects under the act. For example, it reported that all agencies prioritized projects that presented safety threats if unaddressed.²⁵ It also noted that the National Park Service initially selected projects at sites with high visitation and selected projects that were ready to be implemented quickly.²⁶

The office has also documented why the amount of deferred maintenance addressed by a given project may be less than a project’s total cost. For one, project costs related to environmental approvals, planning requirements, or design processes might not be accounted for in deferred maintenance estimates. For another, a portion of projects that modernize infrastructure or bring assets up to code would likely not be classified as deferred. A project at the Mammoth Cave Hotel, for instance, includes removing a flat roof and rebuilding a pitched roof—more expensive than a simple replacement,

but designed to reduce long-term maintenance costs.²⁷

In general, the National Park Service focuses all of its investments on “important facilities and infrastructure that can be maintained in acceptable condition throughout their respective lifecycles,” according to the agency. Individual parks identify projects of need, and as project size and complexity increases, there are “escalating levels of scrutiny and review, with many projects requiring regional review and prioritization, and some requiring detailed review by headquarters staff and senior leadership.”²⁸ The agency’s centralized Bureau Investment Review Board, made up of senior managers from across the agency, is the highest level of review. According to the GAOA Project Management Office, the board seeks to “provide leadership, direction, and accountability for major investment decisions” and “provides a servicewide policy perspective

and oversight of major facility investments, helping parks to think more strategically about their facility and infrastructure investment proposals by considering park-wide needs, priorities, and logical construction sequences.”²⁹

When it comes to selecting specific Legacy Restoration Fund projects, however, it is not clear how the agency has prioritized among its many needs. Given that local park staff have the best knowledge of their own needs and priorities, it makes sense to harness the bottom-up identification of priorities by individual parks. The details of the review processes at the regional and national levels, however, remain opaque. The agency touts that funded activities selected to date span “all 50 States, the District of Columbia, Puerto Rico, and the US Virgin Islands,” suggesting one consideration may have been to disperse funding everywhere.³⁰ That approach, however, risks a “peanut butter spread” that covers all geographic areas



GREAT AMERICAN OUTDOORS ACT 1.0 IN ACTION

Project Snapshots



Tidal Basin, National Mall and Memorial Parks

Twice a day, the Tidal Basin in our nation's capital absorbs 250 million gallons of high-tide waters from the Potomac River. Once the tide turns, water flushes out of the basin, taking with it silt and sediment and keeping the Washington Channel navigable. Originally built in the 1800s, the 10-foot deep, 107-acre pool also maintains water levels in the Lincoln Memorial Reflecting Pool through a pumping system. But the historic seawalls of the iconic basin are sinking, prompting a \$113-million investment to rehabilitate them. The project will add 700 pilings to bolster the foundation of a new, sturdier concrete seawall to protect against future higher tides and storm surges. Workers plan to salvage and reuse historic materials wherever possible. The investment will address safety hazards, reduce future maintenance costs, and preserve famous landmarks, including the renowned Japanese cherry trees that blossom each spring.

Sources: National Park Service Begins Reconstruction of Tidal Basin and West Potomac Seawalls; District of Columbia Great American Outdoors Act Legacy Restoration Fund Fact Sheet; Tidal Basin, Washington, D.C.



Going-to-the-Sun Road, Glacier National Park

One of the top attractions for the three million people who visit Glacier National Park each year is traversing the Continental Divide on Going-to-the-Sun Road. Completed in 1933, the feats of daring and engineering required to build the road included climbing 3,000 feet each morning to survey sites, carving a path from solid rock while navigating sheer cliffs, and dealing with short construction seasons and 60-foot snow drifts. It's the only roadway that links the east and west sides of the park and is the primary route for visitors to enjoy scenic views of alpine forests and glacial lakes. A \$26-million effort will rehabilitate nine miles of the road and replace an inadequate historic bridge. The project will improve geometry and alignment of the route, widen curves, help control traffic, and run fiber optic cable to park headquarters.

Sources: Montana Great American Outdoors Act Legacy Restoration Fund Fact Sheet; Going-to-the-Sun Road: Federal Highway Administration Contributions and Crossroads



Fort Yellowstone and Old Faithful Historic Housing, Yellowstone National Park

Some of the historic structures that house employees in Yellowstone date to the 1800s, and many of them have severely deteriorated. That includes 34 structures at the Fort Yellowstone complex near Mammoth Hot Springs, many of which suffer from failing roofs, foundations, windows, and other exterior components that risk water intrusion and pose safety hazards. Similarly, the Laurel Dormitory in the Old Faithful Inn Historic District requires rehabilitation to address outdated mechanical, electrical, and plumbing systems, all carried out on an active geothermal site. Approximately \$43 million from the Legacy Restoration Fund will make the work possible. Overhauling and refurbishing structures as needed at both sites will provide safe, modern, quality housing for employees, part of a larger effort to replace and expand employee housing at the world's oldest national park.

Sources: Wyoming Great American Outdoors Act Legacy Restoration Fund Fact Sheet; Yellowstone Announces Major Employee Housing Improvement Initiative; Focusing on the Core





Transcanyon Waterline, Grand Canyon National Park

The vast majority of the roughly six million people who visit the Grand Canyon each year enter at the South Rim, where about 2,500 residents live year round. All of them rely on a 12.5-mile pipeline system that carries water from the North Rim, across the canyon, and up the rim's south side. Unfortunately, the Transcanyon Waterline has had 85 major failures since 2010, disrupting park operations, forcing cancellations of visitors' lodging reservations, and threatening locals' water supply. Originally built in the 1960s, the waterline exceeded its anticipated 30-year lifespan long ago. A series of band-aid repairs over the years have often required helicopters to shuttle workers and supplies over rugged terrain to fix leaks, costing roughly \$25,000 per repair. The Legacy Restoration Fund and revenues from park visitor fees are combining to fund more than \$200 million to replace and rehabilitate the waterline as well as carry out other crucial utility work, securing the park's water systems for the next half-century.

Sources: Arizona Great American Outdoors Act Legacy Restoration Fund Fact Sheet; Grand Canyon National Park Prepares for \$208 Million Multi-year Repair to Transcanyon Waterline; Grand Canyon's Main Water Line Has Broken Dozens of Times. Why Is It Getting a Major Fix Only Now?



South Campground, Zion National Park

Zion National Park draws roughly five million visitors each year to its iconic pink and red sandstone cliffs, narrow slot canyons, world-class rock climbing, and diverse range of plants and animals. Visitation to the park has more than doubled in two decades, stretching maintenance capacity and overwhelming campground infrastructure. The South Campground is one of the park's busiest, hosting 100,000 annual visitors and routinely hovering at 90 to 100 percent capacity. The site, which first hosted campers in the 1920s, has fallen into poor condition and is in need of work. Visitor fee receipts, disaster recovery funding, and \$15 million from the Legacy Restoration Fund are combining to rehabilitate the campground to better serve visitors and ensure its functionality for the long term. The project will enhance 128 campsites, repave roads and vehicle pads, update bathrooms and drinking water systems, improve sewage and drainage systems, and more.

Utah Great American Outdoors Act Legacy Restoration Fund Fact Sheet; National Park Service Begins Total Rehabilitation of Major Campground at Zion National Park



Water Treatment, Hawaii Volcanoes National Park

Virtually all of the potable water used by the roughly two million annual visitors to Hawaii Volcanoes National Park comes from a single source: rain. Historic structures that date to 1924 collect rainwater, which is processed through a series of sand filters and then treated to be safe for consumption. Overdue maintenance issues within the system, however, have increased the frequency of emergency repairs and risk the entire park's water supply. Thanks to the Great American Outdoors Act, these issues are now being addressed. The project will replace roofs, siding, and gutters; make needed structural repairs; perform electrical and seismic upgrades to various components; and revamp water lines, storage tanks, and treatment processes. Nearly \$34 million from the Legacy Restoration Fund will be used to rehabilitate the water treatment infrastructure, assuring a reliable and safe supply for the island park for years to come.

Hawaii Great American Outdoors Act Legacy Restoration Fund Fact Sheet; Hawaii Volcanoes National Park Water Quality Consumer Confidence Report



RECOMMENDATIONS

Various strategies can help the agency improve its approaches to national park stewardship and make potential reauthorization of the Great American Outdoors Act more attractive to lawmakers.

1 Replace the broken deferred maintenance system and terminology.

The National Park Service's several-decade old system to estimate, track, and report deferred maintenance has failed. The Government Accountability Office and the Interior Department's inspector general have called the system into question on various counts. Because the system is illogical, inaccurate, and unexplainable, it is indefensible. The agency is in the process of updating its system to one based partly on quick visual checks, known as parametric condition assessments.³⁴ The agency should harness the logical aspects of its emerging approach, such as the efficient parametric assessments³⁵ and reliance on a preexisting Federal Highway Administration inspection framework,³⁶ and completely implement a new system for estimating its maintenance needs.³⁷

Perhaps just as importantly, the agency should also reframe the issue more logically and accurately by developing new terminology to discuss maintenance, whether it be routine, deferred, or otherwise. Rather than arbitrary measures of what merits a project becoming "overdue," the ultimate focus should be on less-subjective factors—such as safety and visitation. If many people's lives will be put at risk in case of a major bridge failure, for instance, then that bridge should be a top priority. But prioritizing thousands of agency projects has become virtually impossible with a broken system. New terminology, framing, and communication of the issue will not only help the agency manage parks but also explain its maintenance needs and their prioritization to Congress, taxpayers, and visitors.

Congress should direct parks to focus on improving stewardship generally, using logical, less-subjective criteria so that all visitors will be able to enjoy parks for generations to come.

2 Devote future GAOA funding toward sound stewardship generally and jettison the focus on "deferred" maintenance.

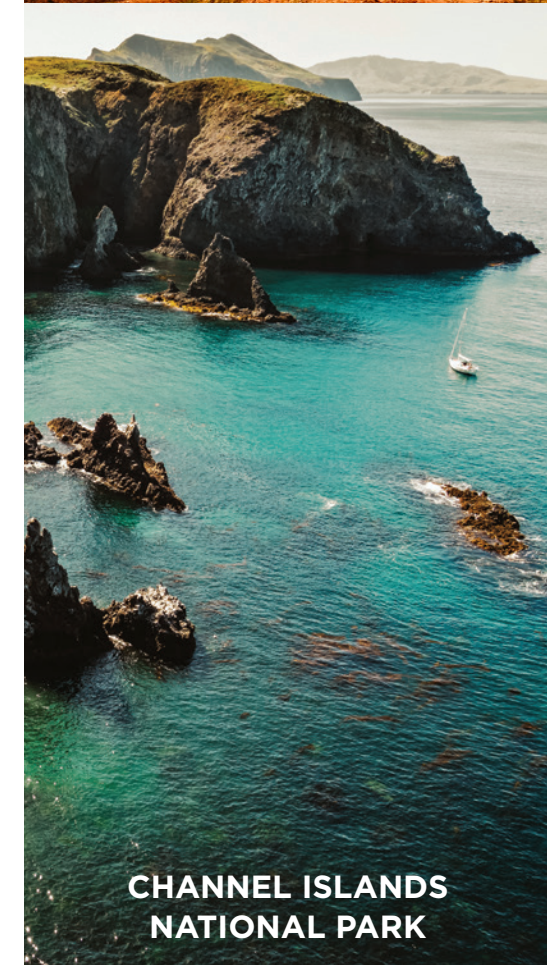
If Congress stipulates that funding can only be used on deferred maintenance, then the message to agencies is that park infrastructure must be in a state of disrepair before it can be repaired or replaced. Moreover, setting aside the various long-standing issues with estimating, tracking, and reporting deferred maintenance, the National Park Service has had no uniform determination of what comprises "deferred" maintenance or when something becomes "deferred," rendering the term virtually meaningless. Congress should avoid "deferred" terminology and refrain from tying funding to it. Instead, it should direct parks to focus on improving stewardship generally, using logical, less-subjective criteria so that all visitors will be able to enjoy parks for generations to come.³⁸

3 Protect investments made through GAOA 1.0.

The Great American Outdoors Act has already devoted billions of dollars to national parks. It makes little sense to have invested such significant resources into 1.0 projects only for agencies to fail to steward the assets rehabilitated and built through them.³⁹ Congress should ensure that a sufficient portion of any future Legacy Restoration Fund is dedicated to maintaining and protecting the value of investments from GAOA 1.0.



BRYCE CANYON NATIONAL PARK



CHANNEL ISLANDS NATIONAL PARK



BLUE RIDGE PARKWAY



MOUNT RAINIER NATIONAL PARK



4 Retain aspects of GAOA 1.0 that have proven useful and successful.

Interest earnings: The GAOA Project Management Office has highlighted the importance of the ability to earn interest from the Legacy Restoration Fund through U.S. Treasuries, which helps pay for administrative costs and cover project cost overruns. The fund had earned approximately \$77 million in interest as of fiscal year 2023 and is expected to earn an additional \$197 million in fiscal year 2024. Interest earnings have already covered all administrative costs of GAOA at the department and agency levels.⁴⁰

Long-term flexibility: The Government Accountability Office has praised the general flexibility of the Legacy Restoration Fund, noting that it does not expire nor need to be spent in a particular time frame. That flexibility helps given that many construction projects are long term, and often there are contractor delays or price increases due to inflation.⁴¹

Nimble workforce: The Government Accountability Office has also praised agencies' ability to use funds to maintain, train, and expand internal maintenance teams who complete straightforward tasks and practice various trades at small scale with relatively quick turnarounds. Examples of work performed by these "maintenance action teams" include rebuilding trail boardwalks, rehabilitating window shutters on historic buildings, preserving historic aqueducts, and removing debris.⁴² For smaller, simpler projects that may not warrant the time and complexity required to navigate federal bidding and contracting processes, internal teams have been able to carry out work more quickly and at a lower cost than would have been the case with contracted work.⁴³

Contingency funding: The Government Accountability Office notes another benefit is the inclusion of contingency funds that can be used to deal with unforeseen cost overruns if certain requirements are met. These contingency funds allow agencies more flexibility to deal with inflation and other challenges and address deferred maintenance.⁴⁴

5 Select projects based on appropriate criteria that maximize impact and limit political influence over spending.

As GAOA criteria suggest, safety and visitation should have significant weight when selecting projects. The National Park Service should assess what assets would fail absent attention and weigh the risk of failure in conjunction with how seriously and how many people would be impacted in the event of infrastructure failure. Such an approach would suggest that, for instance, assets like highly trafficked roads, overnight facilities, and wastewater treatment facilities be prioritized. It would also suggest that, at a system-wide scale, the agency would weigh repair or replacement of a rarely used bridge in a remote area much less than a bridge used by a million visitors a month.

Likewise, ensuring sufficient availability of safe and quality employee housing would be prioritized given that at many parks, serving visitors hinges on being able to hire, house, and retain employees in agency housing. Senators King and Daines have highlighted the challenge of employee housing shortages, which affect parks from Acadia to Grand Teton and Yellowstone and beyond, and they proposed legislation aimed at addressing the problem.⁴⁵ Yellowstone National Park is in the process of a major, multi-year effort to improve employee housing, which includes replacing dilapidated and at times unlivable trailers with modular homes, updating stand-alone homes, restoring historic structures, and adding new employee housing capacity. The strategic effort has saved tens of millions of dollars by leveraging modern building techniques and has been supported by donations. The park's creative and successful plan could serve as a model to be expanded at other sites as applicable.⁴⁶

Transparently ranking agency projects based on factors such as safety, visitation, and the ability to house an adequate workforce, rather than soft goals such as geographic equity, will be the most effective way for the agency to address its maintenance challenges and avoid perceptions of politicization.



ARCHES NATIONAL PARK

6 Explore creative innovations to visitor fees that can complement GAOA investments.

National Park Service receipts from entrance and recreation fees have played an increasingly important role at many national parks as visitation has boomed in recent years.⁴⁷ Empowering parks to innovate with their fee structures and the use of their receipts would help complement investments from the Legacy Restoration Fund, whether directly by contributing to rehabilitation and repair projects or indirectly by helping cover routine maintenance and other needs in ways that help stretch park budgets.

Ideas include granting more authority to park superintendents to set fees and experiment with creative structures while harmonizing with peer parks, eliminating agency directives that tie the hands of superintendents when it comes to spending fee revenues, and clarifying that managers are permitted to use their fee receipts for operations and permanent visitor-service employees.⁴⁸ Relatedly, parks could be encouraged to explore ways to implement a surcharge for overseas visitors.⁴⁹ The agency should also consider raising the price of its annual recreation pass to reflect the value it provides and keep its pricing in line with individual park fee structures.⁵⁰

7 Consider regular reauthorization of the Legacy Restoration Fund that would allow the park service to make long-term plans to recapitalize assets.

Much like in the private sector, recapitalizing assets and infrastructure will often call for special funding sources. Regularly devoting federal energy revenues to parks through the Legacy Restoration Fund, perhaps through consistent five-year reauthorization of the program, could provide a realistic plan for recapitalizing park assets over the long haul. Otherwise, a lack of certainty over reauthorization hinders long-term planning.⁵¹ Relatedly, legislators may wish to explore new complementary or alternative user-based options to help fund park stewardship over the long term.⁵²

8 Recognize that maintenance needs will never “zero out” and instead focus on how much and what types are acceptable.

The National Park Service maintains more than 70,000 assets that are worth nearly \$200 billion. The moment a ribbon is cut on a new bridge, visitor center, or campground bathroom, it begins to deteriorate. The agency should be upfront about what portion of maintenance needs it will have at a given time and set expectations with Congress and the general public accordingly. It should also make clear that the acceptance of outstanding maintenance will be different for different assets—well-traveled bridges or wastewater treatment facilities, for instance, should always be prioritized over less crucial assets. Relatedly, the agency should explore options to dispose of underused or defunct assets or transfer parkways or commuter roads to state or local entities wherever feasible.⁵³ Painting a realistic picture of what it takes to maintain roughly \$200 billion of infrastructure can help the agency frame the scale and scope of its maintenance challenges and set realistic expectations.



VALLEY FORGE NATIONAL HISTORICAL PARK

CONCLUSION

The Legacy Restoration Fund is helping repair and restore neglected assets at national parks across the country, and many aspects of the fund's creation through the Great American Outdoors Act have set it up for success. Yet long-standing problems with the National Park Service's methods to track, report, and address maintenance continue to plague the agency. As the potential for reauthorizing the program looms, the above recommendations would not only bolster confidence in the agency to steward funding for maintenance but also help ensure national parks will be properly cared for now and into the future.

Go Deeper:



How Overseas Visitors Can Help Steward Our National Parks, PERC Policy Brief (2023).



Fixing National Park Maintenance for the Long Haul, PERC Policy Brief (2020).



Enhancing the Public Lands Recreation Fee System, PERC Policy Brief (2020).



A Better Way to Fund Conservation and Recreation, PERC Policy Brief (2020).



Breaking the Backlog: 7 Ideas to Address the National Park Deferred Maintenance Problem, PERC Public Lands Report (2016).



GRAND TETON NATIONAL PARK



GREAT SMOKY MOUNTAINS NATIONAL PARK



OLYMPIC NATIONAL PARK

ENDNOTES

- ¹ U.S. Department of the Interior, "About GAOA," accessed June 10, 2024, <https://www.doi.gov/about-gaoa>.
- ² National Park Service, "GAOA Stories," accessed July 29, 2024, <https://www.nps.gov/subjects/infrastructure/gaoa-stories.htm>. National Park Service, "National Park Service Begins Reconstruction of Tidal Basin and West Potomac Seawalls," News Release, August 15, 2024. National Park Service, "Utah Great American Outdoors Act Legacy Restoration Fund Fact Sheet," 4.
- ³ National Park Service, "National Parks and Public Land Legacy Restoration Fund," accessed June 10, 2024, <https://www.nps.gov/subjects/infrastructure/legacy-restoration-fund.htm>.
- ⁴ Laura B. Comay, "National Park Service Deferred Maintenance: Overview and Issues," Congressional Research Service (July 25, 2024).
- ⁵ U.S. Department of the Interior, Office of the Inspector General, "The National Park Service Faces Challenges in Managing Its Deferred Maintenance," (September 2023): 6.
- ⁶ Comay, *National Park Service Deferred Maintenance: Overview and Issues*, 4.
- ⁷ Rob Hotakainen, "Senators Lament Fast-Rising NPS Maintenance Backlog," *E&E News*, May 11, 2023.
- ⁸ Rob Hotakainen, "House Republicans Scold NPS for Costly Maintenance Backlog," *E&E News*, July 28, 2023.
- ⁹ Molly Weisner, "National Parks Need \$22 Billion to Address Growing Maintenance Backlog," *Federal Times*, January 11, 2024.
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- ¹¹ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 4.
- ¹² Comay, *National Park Service Deferred Maintenance: Overview and Issues*, 2-7.
- ¹³ Government Accountability Office, "Deferred Maintenance: Agencies Generally Followed Leading Practices in Selections but Faced Challenges," (January 2024): 1.
- ¹⁴ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 13.
- ¹⁵ Rob Hotakainen, "'House of Cards': Watchdog Slams NPS During Hearing," *E&E News*, January 11, 2024.
- ¹⁶ Hotakainen, *'House of Cards'*.
- ¹⁷ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 1.
- ¹⁸ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 6.
- ¹⁹ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 2. Note that NPS previously estimated "deferred maintenance" but now estimates "deferred maintenance and repairs," which aims to capture the full cost of addressing overdue maintenance.
- ²⁰ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 11.
- ²¹ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 14.
- ²² NPS, *National Parks and Public Land Legacy Restoration Fund*.
- ²³ NPS did not report similar estimates for FY2021 projects. Comay, *National Park Service Deferred Maintenance: Overview and Issues*, 15.
- ²⁴ Personal Correspondence, U.S. Department of the Interior GAOA Project Management Office, May 23, 2024.
- ²⁵ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*.
- ²⁶ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 18-19.
- ²⁷ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 17.
- ²⁸ NPS FY2025 Budget Justification, SpecEx-3.
- ²⁹ GAOA PMO, *Great American Outdoors Act: National Parks and Public Land Legacy Restoration Fund Strategic Plan*, 14.
- ³⁰ NPS, *National Parks and Public Land Legacy Restoration Fund*.
- ³¹ Letter from Rep. Bruce Westerman, Ranking Member, H. Comm. on Nat. Res., et al., to The Hon. Debra Haaland, Sec'y, U.S. Dep't of the Interior & The Hon. Thomas Vilsack, Sec'y, U.S. Dep't of Agriculture (July 15, 2022).
- ³² Kelsey Brugger, "Republicans Investigate Spending on Parks, Outdoors Law," *E&E News*, April 17, 2023.
- ³³ Letter from Rep. Bruce Westerman. In a similar vein, House Republicans decried \$200 million in Inflation Reduction Act funding for the Presidio National Park Site in Pelosi's congressional district. According to House Republicans: "During testimony before the Committee, Director Chuck Sams confirmed that the agency had not used the criteria supported by GAO [for the Presidio IRA funding] and instead had transferred hundreds of millions of dollars of taxpayer money at the direction of political officials at DOI." Office of Rep. Bruce Westerman, Chair, H. Comm. on Nat. Res., Hearing Memo on "National Park Service's Deferred Maintenance Backlog: Perspectives from the Government Accountability Office and the Inspector General," Joint Subcommittee on Oversight and Investigations and the Subcommittee on Federal Lands (January 10, 2024).
- ³⁴ Comay, *National Park Service Deferred Maintenance: Overview and Issues*, 8.
- ³⁵ Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 11. The parametric condition assessment is a much quicker and cheaper way to estimate deferred maintenance. It is an accepted industry standard, and NASA uses a version of the approach to estimate deferred maintenance. NASA, "Deferred Maintenance Assessment Report" (2016). As the Congressional Research Service notes: NPS performs a rapid visual assessment of various aspects of an asset (e.g., for a trail, the plants and trees along the trail, the trail surface, constructed trail features such as steps or bridges, etc.) and scores them on a scale of 0 to 9 based on their condition (e.g., score of 9 for "great condition," score of 1 for "poor condition," or score of 0 if the aspect is not applicable). The agency then converts the condition scores to deferred maintenance estimates. The visual assessments are to be performed annually, with a "comprehensive review" every five years. Comay, *National Park Service Deferred Maintenance: Overview and Issues*, 8.
- ³⁶ The Federal Highway Administration (FHWA) works with the NPS to inspect transportation assets, including paved roads, parking areas, bridges, and tunnels. Comay, *National Park Service Deferred Maintenance: Overview and Issues*, 8. These assessments are combined with parametric condition assessments and inspection data for concessionaire-occupied assets to produce total deferred maintenance estimates. Inspector General, *The National Park Service Faces Challenges in Managing Its Deferred Maintenance*, 11.
- ³⁷ For more details, see NPS FY2025 Budget Justification, SpecEx-1. Additionally, the agency should consider simplifying and better defining its asset classes in an effort to improve prioritization.
- ³⁸ Tate Watkins, "Fixing National Park Maintenance for the Long Haul," PERC Policy Brief (2020).
- ³⁹ For more on prioritizing the maintenance of existing park assets, see Watkins, *Fixing National Park Maintenance for the Long Haul*, 6.
- ⁴⁰ GAOA Project Management Office.
- ⁴¹ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 22-23.
- ⁴² U.S. Department of the Interior, "Maintenance Action Teams," accessed June 10, 2024, <https://www.doi.gov/gaoa-maintenance-action-teams>.
- ⁴³ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 22.
- ⁴⁴ GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 22-23.
- ⁴⁵ Office of Sen. Angus King, Chair, S. Subcomm. on Nat. Parks, "Daines, King Introduce Bill to Reduce Crowding on Public Lands and Support Partnerships with Gateway Communities," February 2, 2022. Rob Hotakainen, "NPS Employees Face a Worsening Housing Crunch as Prices Soar," *E&E News*, February 1, 2022.
- ⁴⁶ National Park Service, Yellowstone National Park, "Focusing on the Core," accessed July 29, 2024, <https://www.nps.gov/yell/learn/management/focusing-on-the-core.htm>. National Park Service, Yellowstone National Park, "Yellowstone Announces Major Employee Housing Improvement Initiative," News Release, February 19, 2020.
- ⁴⁷ Tate Watkins, "Enhancing the Public Lands Recreation Fee System," PERC Policy Brief (2020).
- ⁴⁸ Watkins, *Enhancing the Public Lands Recreation Fee System*. Shawn Regan et al., "Breaking the Backlog: 7 Ideas to Address the National Park Deferred Maintenance Problem," PERC Public Lands Report (2016).
- ⁴⁹ Tate Watkins, "How Overseas Visitors Can Help Steward Our National Parks," PERC Policy Brief (2023).
- ⁵⁰ Watkins, *Enhancing the Public Lands Recreation Fee System*, 8.
- ⁵¹ For example, the Government Accountability Office has reported: "According to officials at the four land management agencies, the short-term nature of the LRF can create challenges with hiring. The LRF is designed as a 5-year program through 2025; however, construction projects to address deferred maintenance may take longer. Therefore, agencies could face difficult decisions on whether to hire (1) an employee to serve a 5-year term that might end during the project, or (2) a permanent employee they might not be able to justify in their budgets after the LRF funding ends." GAO, *Deferred Maintenance: Agencies Generally Followed Leading Practices*, 22.
- ⁵² See, for instance, Tate Watkins and Jack Smith, "A Better Way to Fund Conservation and Recreation," PERC Policy Brief (2020), and Tate Watkins, "Leave No Trace?" PERC Reports 36, no. 2 (Winter 2017).
- ⁵³ Watkins, *Fixing National Park Maintenance for the Long Haul*, 7-8.



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Tate Watkins is a research fellow and managing editor at PERC. He holds an M.A. degree in economics from Clemson University.



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