



RECREATION FUNDING IN AMERICA:

CURRENT RESULTS AND FUTURE INSIGHTS

JUNE 2024

EXECUTIVE SUMMARY

Southwick Associates, Inc. conducted this study on behalf of the Outdoor Recreation Roundtable (ORR) to help develop a better understanding of current federal spending in support of outdoor recreation and associated trends and issues that might impact future funding and needs. Past and current federal spending that benefits outdoor recreation was quantified and evaluated, and projections of future funding scenarios were developed based on a variety of social, political, and economic factors. This report was made possible by the financial support of leading outdoor industry CEOs from KOA, Brunswick, Winnebago Industries, and Revelyst.

DEFINING OUTDOOR RECREATION SPENDING

This study developed a consistent approach to defining outdoor recreation spending and includes all federal agencies and programs that **directly or indirectly support outdoor recreation**.

While the primary purpose of a specific program may be species conservation, for example, if the on-the-ground actions increase or improve outdoor recreation, then the portion of that program's spending that benefits outdoor recreation was included in our estimates. When a federal budget line item or program was unclear regarding its benefit towards outdoor recreation, or when it was uncertain how much of the line item or program benefited outdoor recreation versus other needs such as agriculture, commercial fisheries, etc., a variation of the definition was then applied: *Would outdoor recreation participation be negatively impacted if this line item or program did not exist, and to what extent?* If the line item was considered not to be 100% devoted to outdoor recreation based on budget justification ([green book](#)) description, percentages were then applied to those line items to reflect the portion estimated to benefit outdoor recreation based on best expert opinion.

A good example of this comes from the U.S. Fish and Wildlife Service's budget line item for "construction." This line item includes funds for construction, improvement, acquisition, and other facilities required in the conservation, management, investigation, protection, and utilization of fish and wildlife resources. Only a portion of this account (50%) was estimated to be in support of outdoor recreation.

Additionally, this study categorized each program by its funding source and looked at the following sources of federal recreation spending:

- **Fossil Fuels:** Outdoor recreation expenditures funded by oil and gas extraction and offshore oil and gas leases. Example: Land and Water Conservation Fund (LWCF).
- **Consumer Fuel Tax:** Outdoor recreation expenditures funded by gasoline excise taxes, motorboat fuel taxes, etc. Example: Recreational Trails Program (RTP).
- **Dedicated Excise Tax:** Outdoor recreation expenditures funded by excise taxes from dedicated sources, such as a sporting goods sales tax. Example: Pittman-Robertson Wildlife Restoration and Dingell-Johnson Sport Fish Restoration Funds.

- **General Revenue:** The general fund is the largest fund of the federal government. It receives all collections not dedicated to other funds and includes all income taxes and other excise taxes. Example: Annual appropriations.
- **Recreation Fees:** Outdoor recreation expenditures funded from fees collected from outdoor recreation use of public land and outdoor recreation use permits. Example: Entrance fees.
- **Other Receipts:** Outdoor recreation expenditures funded from receipts collected from concession fees, lease payments, rental payments, timber sales, lease or use of public lands, donations, contributions, etc.

This study considered long-term funding sources for outdoor recreation, versus funding streams that are considered one-off and temporary. Therefore, recent legislative packages like the American Rescue Plan Act, Bipartisan Infrastructure Law, and Inflation Reduction Act, which have provisions that benefit outdoor recreation, were excluded from this analysis. This study does include the Legacy Restoration Fund, which allocates roughly \$1.9 billion annually to address the deferred maintenance backlog until 2025. Congressionally chartered foundations' contributions to recreation projects were also included in this analysis.

Finally, this study's findings are unique from other recent estimates of federal spending for outdoor recreation programs that have been provided by the Bureau of Economic Analysis's [Outdoor Recreation Satellite Account \(ORSA\)](#), which measures the national economic impact of the outdoor recreation economy annually. ORSA utilizes a categorization for federal outdoor recreation spending from the U.S. Government Accountability Office (GAO), but this categorization is not intended to fully or precisely reflect all agency spending that supports outdoor recreation. The GAO estimates only include programs that **exist for the primary purpose of outdoor recreation** and are not fully inclusive. While extremely useful, the GAO estimates were not used in this report in favor of an original, detailed review of federal land and water agencies' budgets so we could look back and project into the future, resulting in higher estimates than reported by the GAO. See the methodology section for more details.

KEY INSIGHTS

1. **Currently, federal spending on outdoor recreation is \$9.4 billion annually, not enough to keep up with growth in the federal maintenance backlog for outdoor infrastructure.**
 - a. The current backlog in deferred maintenance is \$25.8 billion and has been growing at an annual rate of 3.4% over the past ten years.
 - b. If federal spending only increases at the projected rate of inflation (2.8%) for the next 20 years, and the backlog of deferred maintenance continues at its same pace, the gap between annual spending and the backlog will be **\$34.0 billion**.
 - i. This potential future backlog will be twice the federal government's total spending for outdoor recreation.
 - ii. On top of this, various uncertainties in sources providing federal outdoor recreation dollars such as fees from fossil fuels and excise taxes may exacerbate the problem.

2. Increases in federal outdoor recreation spending lag significantly behind increases in overall federal spending.

Federal spending that benefits recreation has increased 22% (or \$1.7 billion) over the last twenty years (2002 to 2022), adjusted for inflation. In comparison, the overall federal budget for all purposes has increased 76% in the last two decades (Office of Management and Budget, 2023).

FEDERAL OUTDOOR RECREATION SPENDING INCREASE, 2002-2022

22%

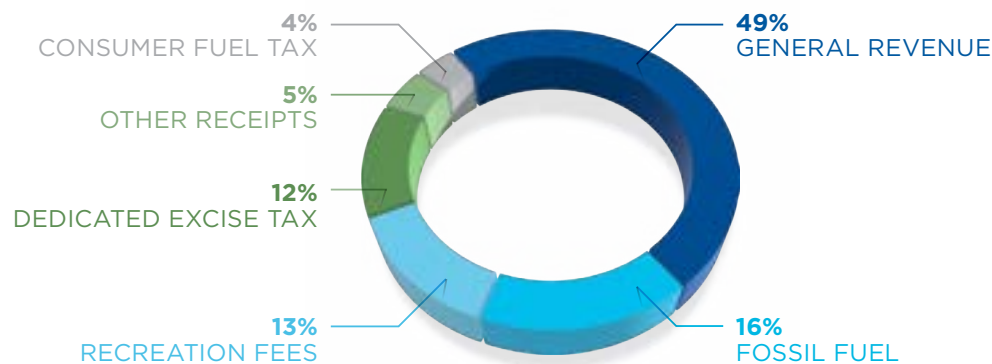
FEDERAL BUDGET INCREASE, 2002-2022

76%

Inflation Adjusted Expenditures	2002	2012	2022
	All Federal Agencies - Grand Total		
Total Expenditures	\$7,727,387	\$7,611,979	\$9,407,230
Fossil Fuels	\$1,169,273	\$593,465	\$1,541,050
Consumer Fuel Tax	\$332,475	\$387,734	\$357,250
Dedicated Excise Tax	\$691,391	\$819,279	\$1,131,670
General Revenue	\$3,900,542	\$4,238,282	\$4,647,540
Recreation Fees	\$1,085,659	\$1,162,967	\$1,254,725
Other Receipts	\$548,048	\$410,252	\$474,995

3. A significant portion of outdoor recreation funding comes from sources outside general revenue.

Less than half of federal outdoor recreation spending is from general revenue sources (49% in FY 2022). 51% of federal outdoor recreation spending comes from other sources including fossil fuel taxes (16%), recreation fees (13%), excise taxes (12%), other receipts (5%), and consumer fuel taxes (4%) (Figure 1).



4. Nearly \$2 billion of federal outdoor recreation spending is at risk from changing patterns in energy consumption.

Taxes on fossil fuel extraction and consumer fuel consumption comprise 20% of all federal outdoor recreation-related spending:

- Fossil fuels account for 16% of total federal outdoor recreation spending in FY 2022 (\$1.5 billion), up from 8% in 2012. These include accounts derived from oil and gas extraction and offshore leases (Figure 2).
- Consumer fuel taxes account for 4% of overall outdoor recreation spending (\$357 million). Outdoor recreation accounts funded by fossil fuels and consumer fuel taxes represent a small proportion of the overall federal outdoor recreation budget; however, the impact is greater for several individual federal agencies.

5. The federal outdoor recreation budget needs to increase significantly to keep pace with inflation.

If the 10-year expected annual inflation rate of 2.8% were to continue for 20 years, federal budgets for outdoor recreation would need to increase 74% by 2042 just to maintain current levels of support. Given that the current federal budget contribution to outdoor recreation is \$9.4 billion, an additional \$6.9 billion would be needed by 2042 (Table 15).

6. Outdoor recreation contributes 13.5 times more to U.S. GDP than its comparable proportion of federal spending.

Outdoor recreation accounts for 2.2% of the United States' Gross Domestic Product (GDP), which is greater than vehicle manufacturing, air transportation, and other critical industries (BEA, 2023). However, the percentage of the federal budget allocated towards outdoor recreation is only 0.16% (less than two-tenths of one percent) (Table 17). To match outdoor recreation's contribution to the U.S. GDP, spending on outdoor recreation as a share of the federal budget would have to increase 13.5 times.

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INTRODUCTION

PURPOSE

The Outdoor Recreation Roundtable (ORR) commissioned this study with Southwick Associates on behalf of a group of leading outdoor industry CEOs from across sectors to assess and summarize federal funding that benefits outdoor recreation and potential threats to future funding from current social and economic trends. The purpose of this report is to help readers understand current outdoor recreation spending at the federal level as well as to provide direction about potential future outdoor recreation spending under various social and economic scenarios. Funding data was collected and assembled for outdoor recreation-related expenditures by public land and water management agencies that impact outdoor recreation. Federal funding applied through congressionally chartered foundations was also included. This evaluation is intended to help foster, guide, and convene a conversation on the future of outdoor recreation funding needs given:

- A shift to renewable energy resources, electric vehicles, and other green fuel technology will result in decreased oil, natural gas, and fuel tax revenues that currently fund many outdoor recreation programs
- Increasing demand for outdoor recreation opportunities
- Mounting deferred maintenance backlog
- Stable or decreasing federal appropriations due to economic and inflationary trends
- Impacts of climate change and extreme weather events on outdoor recreation assets
- Impacts of changes in excise taxes and user fees based on participation in outdoor activities

BACKGROUND

Federal spending that benefits outdoor recreation has increased 22% (or \$1.7 billion) over the last twenty years, adjusted for inflation. In comparison, the overall federal budget for all purposes has increased 76% in the last two decades. However, this spending has not kept up with increasing demand. From 2007 to 2021, the Outdoor Foundation estimates the number of Americans who enjoy outdoor recreation has grown by 18.6%, placing greater strain on outdoor recreation access and maintenance efforts. This challenge is further increased by numerous social, political, and economic factors including:

- a. The offshore oil and gas extraction sector, whose royalties fund the Land and Water Conservation Fund (LWCF), is expected to decline in a clean energy economy. Revenue for programs supported by the Land and Water Conservation Fund (LWCF) is derived from oil and gas extraction leases issued by the federal Outer Continental Shelf (OCS) program. The Outer Continental Shelf Lands Act requires the Secretary of the Interior to prepare and maintain a schedule of proposed OCS oil and gas lease sales determined to “best meet national energy needs” for the 5-year period. New lease sales have decreased over the last twenty years, and with a near absence of new lease sales, OCS oil and gas production is expected to mostly continue only from existing leases.

- i. From 2022 data, the Bureau of Energy Management (BOEM, July 2022) shows existing oil and gas production on the OCS with oil production up by 30% between 2012 and 2021 and gas production down by 50% over the same timeframe. The short-term (20-year) production forecast for existing leases shows declining levels of production after 2024 (*BOEM, July 2022*).
- b. Fuel taxes from the sales of off-highway vehicles, recreational boats, and small-engine motor fuels, which fund the Recreational Trails Program and Sport Fish Restoration and Boating Trust Fund, are expected to decrease as boats and vehicles transition away from fossil fuels.
- c. Recent investments through the Bipartisan Infrastructure Law (BIL), Inflation Reduction Act (IRA) and the Great America Outdoors Act (GAOA) will certainly benefit outdoor recreation:
 - i. However, the Legacy Restoration Fund (LRF), which is funded by the GAOA, is only authorized through 2025. The LRF addresses deferred maintenance and repair needs at national parks, forests, wildlife refuges, and on other public lands.
 - ii. In addition, provisions for recreation in the BIL and IRA are short-lived funding streams likely to be spent in the next few years despite continued deferred maintenance needs and increasing demand for access to federal properties for outdoor recreation purposes.
- d. The impacts of more outdoor recreation users on federal properties, plus economic damage resulting from climate-induced extreme weather events are increasing the costs of providing basic outdoor recreation infrastructure and access. For example, in the United States, estimated damages from storms, floods, wildfires, and other climate-induced extreme weather events have already grown to about \$120 billion a year over the past five years (*Office of Management and Budget, 2022*).
- e. While revenues from excise taxes on sportfishing items, fuel, firearms, and ammunition have been increasing in recent years, long-term sportfishing and hunting participation rates have generally been flat, as seen in license sales trends. Considering that these excise taxes are a major funding source for agencies charged with maintaining fish and wildlife-related outdoor recreation and the growth in funding mandates placed on these agencies, additional revenue sources may eventually be needed.
- f. Considering that the outdoor recreation economy accounted for 2.2% of the nation's gross domestic product (GDP) in 2022, which is greater than many well-known and critical U.S. industries such as oil production and mining, discussions regarding future outdoor recreation funding are imperative, not just for the over one-half of Americans who enjoy the outdoors annually (Outdoor Foundation), but for the economic health and benefits of all Americans.

DATA SOURCES AND METHODOLOGY

FEDERAL SPENDING THAT BENEFITS OUTDOOR RECREATION

DEFINITION OF FEDERAL OUTDOOR RECREATION SPENDING

This study collected and quantified publicly available federal budget data related to outdoor recreation. Spending categories included: operations, maintenance, land acquisition, construction, roads, utilities, staffing expenditures, and administration related to outdoor recreation. Major maintenance budgets were included. Spending was based on each year's actual approved budgets, which can be different than the amounts allowed under federal legislation for many programs.

Establishing a standard definition of what constitutes "outdoor recreation funding" or spending was necessary to obtain the most comparable results between agency budgets.

When a federal budget line item or program was unclear regarding its benefit towards outdoor recreation, or when it was uncertain how much of the line item or program benefited outdoor recreation versus other needs such as agriculture, commercial fisheries, etc., a variation of the definition was then applied: *Would outdoor recreation participation be negatively impacted if this line item or program did not exist, and to what extent?* Given the lack of independent data regarding the benefits of federal programs to outdoor recreation, best estimates were applied using the expert opinion of Southwick Associates, with support from federal lands and outdoor recreation economics expert Ray Rasker, Ph.D., who assisted with reviewing the results to help identify improvements and weaknesses in assumptions or arguments. Southwick Associates remains responsible for all contents and estimates within.

DATA SOURCE

The [Federal Budget Database](#) contains historical data for completed fiscal years summarized from the financial records of the U.S. Government maintained by the Office of Management and Budget (OMB) and the Department of the Treasury. The FY 2022 Outlay table was used to extract from the database and included the actual expenditures (or outlays) by federal agencies for each year. This is a measure of what an agency or program actually spent, which is observed when the U.S. Treasury releases the funds for purchasing goods or services. Complete annual measures of expenditure are only available after the end of a fiscal year. The majority of data presented in this analysis reflect actual expenditure. Fiscal years 2002 and 2012 expenditure data are presented in the report and reflect actual expenditures while the current Fiscal year (2022) is an estimate of federal expenditures.

The federal budget expenditure data was examined for all the public land management agencies and federal agencies with associated outdoor recreation expenditures. The departments and agencies examined include:

- Department of the Interior
 - National Park Service (NPS)
 - Bureau of Land Management (BLM)
 - U.S. Fish and Wildlife Service (USFWS)
 - Bureau of Reclamation (BOR)
 - U.S. Geological Survey (USGS)

- U.S. Department of Agriculture (USDA)
 - U.S. Forest Service (USFS)
 - Natural Resources Conservation Service (NRCS)
- Department of Defense
 - Army Corp of Engineers (COE)
 - Environmental Protection Agency (EPA)
- Department of Commerce
 - National Oceanic and Atmospheric Administration (NOAA)

CALCULATIONS AND ADJUSTMENTS

For each agency, expenditure data were assessed to determine the line items (or accounts) that were related to outdoor recreation spending. Each of these line items (accounts) was reviewed and identified to determine if the account and associated budget category was an outdoor recreation-related expenditure. The budget categories reviewed included:

- Outdoor Recreation resources
- Conservation and land management
- Other natural resources, and
- Water resources.

If the authors determined the account not to be an outdoor recreation-related expenditure based on past research experience, then the line item was excluded.

To help understand if an account benefitted outdoor recreation, each account's budget justification (green book) was reviewed. These descriptions of the account's purpose and use were used to help determine if the account benefitted more categories than outdoor recreation. If the line item was considered not to be 100% devoted to outdoor recreation, percentages were then applied to those line items to reflect the portion estimated to benefit outdoor recreation based on best expert opinion. These descriptions were also used to help determine which of the following sources funded each account:

Fossil Fuels: Outdoor recreation expenditures are funded by oil and gas extraction and offshore oil and gas leases. Example: Land and Water Conservation Fund (LWCF).

Consumer Fuel Tax: Outdoor recreation expenditures are funded by gasoline excise taxes, motorboat fuel taxes, etc. Example: Recreational Trails Program.

Dedicated Excise Tax: Outdoor recreation expenditures are funded by excise taxes from dedicated sources, such as a sporting goods sales tax. Example: Pittman-Robertson Wildlife Restoration and Dingell-Johnson Sport Fish Restoration Funds.

General Revenue: The general fund is the largest fund of the federal government. It receives all collections not dedicated to some other fund and includes all income taxes and other excise taxes. Example: Annual Appropriations.

Recreation Fees: Outdoor recreation expenditures are funded from fees collected from outdoor recreation use of public land and outdoor recreation use permits. Example: Entrance Fees.

Other Receipts: Outdoor recreation expenditures are funded from receipts collected from concession fees, lease payments, rental payments, timber sales, lease or use of public lands, donations, contributions, etc.

Outdoor recreation spending was also adjusted for inflation with both actual expenditures and inflation-adjusted expenditures detailed in this report (*Federal Reserve Bank Philadelphia, Short and Long-Term Inflation Forecasts*).

Once outdoor recreation spending for each agency was calculated, spending for each major department was estimated by summarizing the spending reported for each of its agencies. Total federal spending was then estimated by summarizing the departmental estimates.

The same sources and steps were used to quantify outdoor recreation-related spending for each department and agency for the following time periods:

- 2002
- 2012
- 2022

This study also focused on developing an understanding of the potential demands on outdoor recreation funding from various economic and social trends. Projections were developed for the following periods.

- 10 Year Projection (2032)
- 20 Year Projection (2042)

These estimates were based on projected economic and social trends as reported by multiple government and academic sources, including:

- U.S. Energy Information Administration (*USEIA, 2023*) for oil & gas extraction
- University of Illinois' Department of Agricultural and Consumer Economics (*Irwin, 2019*)
- Inflation projections from the Federal Reserve Bank of Philadelphia (FRB, 2021) and
- Deferred maintenance backlog trends for federal land agencies derived from the Congressional Research Service (CRS, 2021)

The results for agency, departmental, and total spending for each year is presented in [Appendix A](#).

COMPARISON OF FEDERAL OUTDOOR RECREATION EXPENDITURES TO THE BUREAU OF ECONOMIC ANALYSIS OUTDOOR RECREATION SATELLITE ACCOUNT (ORSA), AND THE GOVERNMENT ACCOUNTABILITY OFFICE

The federal outdoor recreation expenditures estimated in this report were cross-referenced and compared with federal outdoor recreation spending estimates from the Bureau of Economic Analysis [Outdoor Recreation Satellite Account](#) (ORSA) and the Government Accountability Office (GAO, 2021). GAO based its government spending estimates on ORSA reports. There are distinct differences in methodology between the GAO and ORSA estimates compared to the methodology used in this report. Therefore, the estimates are not directly comparable. The GAO used a more conservative approach to estimate outdoor recreation funding based on programs that **primarily support outdoor recreation**, while this study considers **all programs that directly or indirectly support outdoor recreation**.

Five federal agencies were included in the GAO analysis, but the Bureau of Reclamation (BOR) and the National Oceanic and Atmospheric Administration (NOAA) were not. These two agencies are included in this report's estimates based on their outdoor recreation impacts. This report includes spending by agencies that benefit outdoor recreation even if the primary intent was not for outdoor recreation.

For the five agencies included in the GAO report, actual expenditures or budget allotments for outdoor recreation totaled \$3.67 billion in FY 2019, with an additional \$460 million collected from outdoor recreation fees. Please note that totaling the amount of outdoor recreation funds across the agencies was not recommended by the GAO report based on the inconsistent definition of outdoor recreation spending and programs used by each department and agency. The GAO report states the following limitations to its estimate:

“The GAO requested and analyzed readily available data for fiscal years 2010 through 2019 from the agencies’ data systems or existing documents and related documentation. The information the agencies provided is not based on a uniform definition of activities that support outdoor recreation. We did not assess the agencies’ rationales for including or excluding particular activities. Some agencies provided spending information, while others provided funding information.”

Furthermore, the report states *“The information that the seven federal agencies we reviewed have about their spending or funding that supports outdoor recreation varies, and available information is not intended to fully or precisely reflect all agency spending or funding on recreation Agencies’ spending or funding for budget lines they identified may not accurately reflect their overall support for outdoor recreation because, for example, a program can support multiple purposes, so it can be difficult to determine how to divide a program’s costs among its different purposes.”*

Also, *“recreation funding represents amounts available to the agencies at a particular time but not necessarily actual spending”* (GAO, 2021).

The GAO estimates only include spending for programs that exist for the primary purpose of outdoor recreation, while the estimates developed in this report consider all spending that provides outdoor recreation benefits even if the program's primary purpose is not outdoor recreation, the resulting estimates from each source are significantly different.

FOUNDATIONS THAT SUPPORT FEDERAL LAND MANAGEMENT AGENCIES

Quasi-public, congressionally chartered foundations that support federal land management agencies use a portion of their revenue for outdoor recreation purposes. Foundation expenditures for outdoor recreation-related programs that were included in this assessment are based on budget expenditures reported in each foundation's 2020 annual report. None of these reports specifically separate spending that benefits outdoor

recreation from other program expenditures. Therefore, based on the descriptions provided within each annual report, the authors estimated the proportion that likely benefited outdoor recreation. These estimates only include non-federal (private) revenue sources based on the assumption that federal government revenue sources were already accounted for in the federal line items identified as outdoor recreation expenditures in the public budget database. The foundations that support federal agencies and included here are:

- National Parks Foundation (NPF)
- National Environmental Education Foundation (NEEF)
- National Forest Foundation (NFF)
- National Marine Sanctuary Foundation
- Public Lands Foundation (PLF)
- National Fish and Wildlife Association (NFWF)

FUTURE OUTDOOR RECREATION SPENDING SCENARIOS

A major goal of this study was to better understand future federal outdoor recreation funding needs and threats. Realizing that it is not possible to accurately predict future conditions that will impact funding, this study offers for discussion possible future situations and scenarios and their potential impacts. Various government and industry resources were used to help anticipate potential future scenarios. These sources are presented with each scenario in this report. Focus was given to conditions and scenarios that might be expected in 10 and 20 years from 2022 (2032 and 2042). These future conditions and scenarios were matched with known spending and participation data to help the reader understand the potential federal outdoor recreation funding situations that could occur. The results are intended as a basis for discussion about possible actions that can be taken now to help ensure a better future for outdoor recreation.

Considering the major sources for outdoor recreation funding, attention was given to the following outdoor recreation spending scenarios:

- **Fossil Fuels (Consumer Fuel Tax, Oil & Gas Extraction, and Electric Vehicle Use):** This scenario considers possible future impacts on outdoor recreation funding sourced from fossil fuel revenues. Increased use of electric vehicles and the associated decline in gasoline consumption might impact federal outdoor recreation programs that are funded via fossil fuels, such as gasoline excise taxes and oil and gas extraction (US Energy Administration; Electric Vehicle Association).
- **Inflation-Adjusted Outdoor Recreation Expenditures:** This scenario considers the long-term limits that inflation can create for outdoor recreation programs if budgets remain fixed while inflation continues.
- **Human Use Impacts:** This scenario looks at potential impacts from increased outdoor recreation demand and continued deferment of maintenance backlogs.
- **Political Will and Federal Support for Outdoor Recreation:** This scenario estimates the percentage of the federal budget spent on outdoor recreation in comparison to the United States' Gross Domestic Product (GDP) as a way of exploring the need for greater public and political support for outdoor recreation funding.
- **Climate Change Impacts:** This topic reviews existing research on the economic impacts associated with climate change and provides examples of the estimated revenue impacts on outdoor recreation.

CAVEATS AND ASSUMPTIONS

Analyzing fiscal data from multiple agencies across multiple years was accomplished while recognizing several caveats and assumptions that may impact the results. The data researched for this report examined the role of federal funding for outdoor recreation-related expenditures for all public land management agencies and other federal agencies that directly or indirectly provide outdoor recreation opportunities.

While the background research and data assessed was a comprehensive review of all outdoor recreation-related funding sources for each federal agency, this report does not claim that the findings are exact. The federal budget expenditure data used to identify the outdoor recreation-related expenditures do not specifically identify which programs directly or indirectly support outdoor recreation or the percentage of each line item that does or does not benefit outdoor recreation. This review was conducted by a multitude of experts from ORR and Southwick Associates; however, this assessment should be considered a general estimate of federal budget expenditures, programs, and foundations' spending that support outdoor recreation. Please note that it was not the scope of this study to document specific federal accounts (line items). Instead, the goal was to gain a general idea of the federal government's total outdoor recreation spending, trends, and potential future conditions.

RESULTS

FEDERAL OUTDOOR RECREATION-RELATED SPENDING

The following tables detail the total outdoor recreation-related expenditures for each department and agency.

All Federal Agencies Combined- Outdoor Recreation-Related Expenditures

- Outdoor recreation expenditures (FY 2022) for all federal agencies combined is \$9.4 billion (Table 1).
- Outdoor recreation spending increased in the past 20 years from \$4.7 billion in FY 2002 to \$9.4 billion in FY 2022 (in actual dollars). When adjusted for inflation this is a 22% increase (\$1.7 billion). Inflation-adjusted expenditures during the first ten-year period between 2002 and 2012 decreased by 1%.

Table 1

All Federal Agencies: Total Outdoor Recreation Expenditures by Revenue Source - Actual Expenditures and Inflation-Adjusted Expenditures (in Thousands)

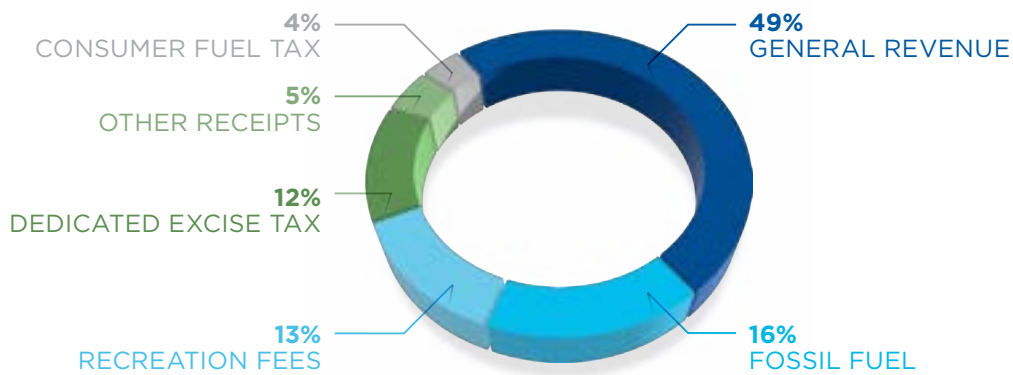
Actual Dollars	2002	2012	2022
	All Federal Agencies - Grand Total		
Total Expenditures	\$4,683,265	\$5,900,759	\$9,407,230
Fossil Fuels	\$708,650	\$460,050	\$1,541,050
Consumer Fuel Tax	\$201,500	\$300,569	\$357,250
Dedicated Excise Tax	\$419,025	\$635,100	\$1,131,670
General Revenue	\$2,363,965	\$3,285,490	\$4,647,540
Recreation Fees	\$657,975	\$901,525	\$1,254,725
Other Receipts	\$332,150	\$318,025	\$474,995

Inflation Adjusted Expenditures	2002	2012	2022
	All Federal Agencies - Grand Total		
Total Expenditures	\$7,727,387	\$7,611,979	\$9,407,230
Fossil Fuels	\$1,169,273	\$593,465	\$1,541,050
Consumer Fuel Tax	\$332,475	\$387,734	\$357,250
Dedicated Excise Tax	\$691,391	\$819,279	\$1,131,670
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Recreation Fees	\$1,085,659	\$1,162,967	\$1,254,725
Other Receipts	\$548,048	\$410,252	\$474,995

- In FY 2022, general revenue accounted for 49% of outdoor recreation expenditures and fossil fuels accounted for 16%. Outdoor recreation fees make up the next largest portion of funding for outdoor recreation (13%), followed by dedicated excise taxes (12%), other receipts such as grazing fees (5%) and consumer fuel taxes (4%) (Figure 1).
 - Altogether, approximately 29% of outdoor recreation spending originates from revenues received from outdoor recreation consumers.

Figure 1

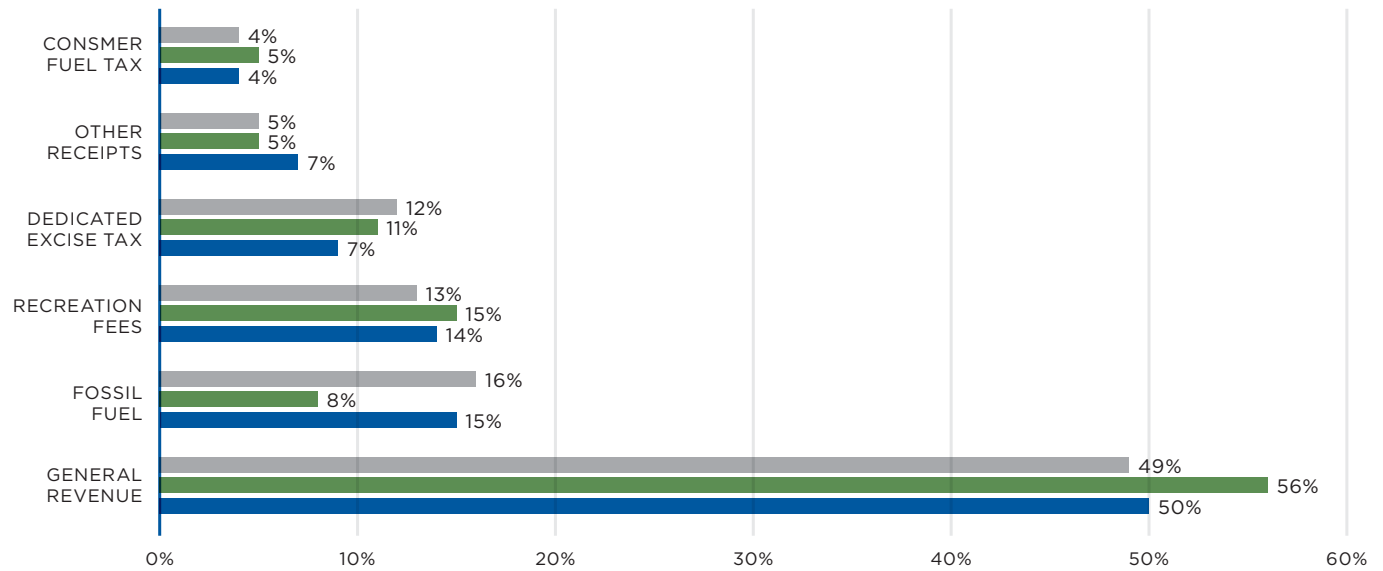
FY 2022 Outdoor Recreation Spending by Revenue Source for All Federal Agencies Combined (Actual Expenditures)



- General revenue sources account for over half of outdoor recreation spending for all federal agencies, ranging between 49-56% across the twenty-year timeframe (2002-2022) (Figure 2).
- The percentage of revenue from fossil fuels has fluctuated over the past 20 years, from 15% in 2002 and then down to 8% in 2012 and up to 16% in 2022. Outdoor recreation expenditures from dedicated excise taxes increased from 9% in 2002 to 12% in 2022. Other receipts have decreased slightly, from 7% in 2002 to 5% in 2022. Revenue from outdoor recreation fees and consumer fuel tax has remained stable over the two decades ranging between 13-15% and 4-5%, respectively.

Figure 2

Outdoor recreation Spending by Revenue Source for All Federal Agencies Combined (Actual Expenditures for FY 2022, 2012 and 2022)



Department of the Interior (DOI) - Outdoor recreation-related Expenditures

- Outdoor recreation expenditures (FY 2022) totaled \$7.2 billion (Table 2).
- The outdoor recreation budget increased between FY 2002 and FY 2022, from \$3.2 billion to \$7.2 billion (in actual dollars). When adjusted for inflation this was a 38% increase, a gain of \$2.0 billion in the last twenty years (Table 2).
- Less than half of DOI's outdoor recreation expenditures came from general revenue (40% in FY 2022), fluctuating between 40-49% over the last twenty years. Fossil fuels (19%) and outdoor recreation fees (16%) accounted for the next highest amounts at \$1.4 billion and \$1.2 billion, respectively (Table 3).
- The proportion of outdoor recreation spending attributed to dedicated excise tax was 15% (\$1.1 billion) in FY 2022 (Table 3). A small portion (3%) is from consumer fuel tax (\$252 million).

Table 2

Department of Interior: Total Outdoor Recreation Expenditures by Revenue
 Source - Actual Expenditures and Inflation-Adjusted Expenditures (in Thousands)

Actual Dollars	2002	2012	2022
	Department of Interior		
Total Expenditures	\$3,187,465	\$4,487,850	\$7,233,750
Fossil Fuels	\$392,950	\$306,100	\$1,366,850
Consumer Fuel Tax	\$145,500	\$213,500	\$252,000
Dedicated Excise Tax	\$412,275	\$626,600	\$1,110,420
General Revenue	\$1,481,015	\$2,191,600	\$2,913,860
Recreation Fees	\$554,175	\$859,025	\$1,184,625
Other Receipts	\$201,550	\$291,025	\$405,995

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Interior		
Total Expenditures	\$5,259,317	\$5,789,327	\$7,233,750
Fossil Fuels	\$648,368	\$394,869	\$1,366,850
Consumer Fuel Tax	\$240,075	\$275,415	\$252,000
Dedicated Excise Tax	\$680,254	\$808,314	\$1,110,420
General Revenue	\$2,443,675	\$2,827,164	\$2,913,860
Recreation Fees	\$914,389	\$1,108,142	\$1,184,625
Other Receipts	\$332,558	\$375,422	\$405,995

Table 3

Department of the Interior: Percentage of Total Outdoor Recreation Expenditures by Revenue Source

	2002	2012	2022
	Department of Interior		
Total Expenditures	\$3,187,465	\$4,487,850	\$7,233,750
Fossil Fuels	12%	7%	19%
Consumer Fuel Tax	5%	5%	3%
Dedicated Excise Tax	13%	14%	15%
General Revenue	46%	49%	40%
Recreation Fees	17%	19%	16%
Other Receipts	6%	6%	6%

Department of Commerce - Outdoor recreation-related Expenditures

- Outdoor recreation expenditures for FY 2022 totaled \$127 million (Table 4).
- The outdoor recreation budget increased in the last 20 years, between FY 2002 and FY 2022, from \$71M to \$127 million (in actual dollars). When adjusted for inflation, this increase is 8%, with a gain of \$9.5 million in the last twenty years.
- All outdoor recreation expenditures for the Department of Commerce come from general revenue sources (Table 5).

Table 4

Department of Commerce: Total Outdoor Recreation Expenditures by Revenue Source - Actual Expenditures and Inflation-Adjusted Expenditures (in Thousands)

Actual Dollars	2002	2012	2022
	Department of Commerce		
Total Expenditures	\$71,200	\$100,540	\$126,980
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$71,200	\$100,540	\$126,980
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Commerce		
Total Expenditures	\$117,480	\$129,697	\$126,980
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$117,480	\$129,697	\$126,980
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Table 5

Department of Commerce: Percentage of Total Outdoor Recreation Expenditures by Revenue Source

	2002	2012	2022
	Total - Department of Commerce		
Total Expenditures	\$71,200	\$100,540	\$126,980
Fossil Fuels	0%	0%	0%
Consumer Fuel Tax	0%	0%	0%
Dedicated Excise Tax	0%	0%	0%
General Revenue	100%	100%	100%
Recreation Fees	0%	0%	0%
Other Receipts	0%	0%	0%

Department of Agriculture - Outdoor Recreation-Related Expenditures

- Outdoor recreation expenditures for FY 2022 totaled \$1.9 billion (Table 6).
- The outdoor recreation budget increased in the last 20 years, from \$1.4 billion in FY 2002 to \$1.9 billion in FY 2022 (in actual dollars). When adjusted for inflation this is a decrease of 15% over the twenty-year period, a loss of \$328 million.
- The greatest portion of outdoor recreation expenditures for the Department of Agriculture came from general revenue sources, increasing from 60% in 2002 to 84% in 2022 (Table 7).
- Revenue from fossil fuels decreased over the last 20 years, with 23% attributed to outdoor recreation spending in 2002 down to 9% in 2022. This is a decrease of \$347 million in inflation-adjusted dollars.

Table 6

Department of Agriculture: Total Outdoor Recreation Expenditures by Revenue Source - Actual Expenditures and Inflation-Adjusted Expenditures (in Thousands)

Actual Dollars	2002	2012	2022
	Department of Agriculture		
Total Expenditures	\$1,361,850	\$1,212,800	\$1,918,700
Fossil Fuels	\$315,700	\$153,950	\$174,200
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$811,750	\$989,350	\$1,605,400
Recreation Fees	\$103,800	\$42,500	\$70,100
Other Receipts	\$130,600	\$27,000	\$69,000

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Agriculture		
Total Expenditures	\$2,247,053	\$1,564,512	\$1,918,700
Fossil Fuels	\$520,905	\$198,596	\$174,200
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$1,339,388	\$1,276,262	\$1,605,400
Recreation Fees	\$171,270	\$54,825	\$70,100
Other Receipts	\$215,490	\$34,830	\$69,000

Table 7

Department of Agriculture: Percentage of Total Outdoor Recreation Expenditures by Source - Actual Expenditures

	2002	2012	2022
	Total - Department of Commerce		
Total Expenditures	\$1,361,850	\$1,212,800	\$1,918,700
Fossil Fuels	23%	13%	9%
Consumer Fuel Tax	0%	0%	0%
Dedicated Excise Tax	0%	0%	0%
General Revenue	60%	82%	84%
Recreation Fees	8%	4%	4%
Other Receipts	10%	2%	4%

Department of Defense - Outdoor Recreation-related Expenditures

- Outdoor recreation expenditures for FY 2022 totaled \$43.8 million for the Department of Defense (Table 8).
- The outdoor recreation budget more than tripled in the last 20 years, from \$13.5 million in FY 2002 to \$43.8 million in FY 2022 (in actual dollars). When adjusted for inflation this is a 97% increase, a gain of \$21.5 million.
- Outdoor recreation expenditures for the Department of Defense came primarily from dedicated excise taxes and consumer fuel taxes, both at 49% of total outdoor recreation expenditures (Table 9).

Table 8

Department of Defense: Total Outdoor Recreation Expenditures by Revenue Source - Actual Expenditures and Inflation-Adjusted Expenditures (in Thousands)

Actual Dollars	2002	2012	2022
	Department of Defense		
Total Expenditures	\$13,500	\$21,000	\$43,800
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$6,750	\$8,500	\$21,250
Dedicated Excise Tax	\$6,750	\$8,500	\$21,250
General Revenue	\$-	\$4,000	\$1,300
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Defense		
Total Expenditures	\$22,275	\$27,090	\$43,800
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$11,138	\$10,965	\$21,250
Dedicated Excise Tax	\$11,138	\$10,965	\$21,250
General Revenue	\$-	\$5,160	\$1,300
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Table 9

Department of Defense: Percentage of Total Outdoor Recreation Expenditures by Revenue Source

	2002	2012	2022
	Department of Defense		
Total Expenditures	\$13,500	\$21,000	\$43,800
Fossil Fuels	0%	0%	0%
Consumer Fuel Tax	50%	40%	49%
Dedicated Excise Tax	50%	40%	49%
General Revenue	0%	19%	3%
Recreation Fees	0%	0%	0%
Other Receipts	0%	0%	0%

Federal Highway Administration (Recreational Trails Program) – Outdoor Recreation-Related Expenditures

- FY 2022 outdoor recreation expenditures for the Recreational Trails Program are \$84 million (Table 10).
- Funds for this program increased by 71% in actual dollars, since 2002. For inflation-adjusted dollars, the increase was only 3%.
- Over the last twenty years, the RTP has been funded 100% by consumer fuel tax (a portion of gasoline tax on off-highway vehicles) (Table 11).

Table 10

Federal Highway Administration (National Recreational Trails Program) Total Outdoor Recreation Expenditures by Revenue Source - Actual Expenditures and Inflation-Adjusted Expenditures *(in Thousands)*

Actual Dollars	2002	2012	2022
	Federal Highway Administration - Recreational Trails Program		
Total Expenditures	\$49,250	\$78,569	\$84,000
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$49,250	\$78,569	\$84,000
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$-	\$-	\$-
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Inflation Adjusted Expenditures	2002	2012	2022
	Federal Highway Administration - Recreational Trails Program		
Total Expenditures	\$81,263	\$101,354	\$84,000
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$81,263	\$101,354	\$84,000
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$-	\$-	\$-
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Table 11

Federal Highway Administration (Recreational Trails Program): Percentage of Total Outdoor Recreation Expenditures by Revenue Source

	2002	2012	2022
	Federal Highway Administration - Recreational Trails Program		
Total Expenditures	\$49,250	\$78,569	\$84,000
Fossil Fuels	0%	0%	0%
Consumer Fuel Tax	100%	100%	100%
Dedicated Excise Tax	0%	0%	0%
General Revenue	0%	0%	0%
Recreation Fees	0%	0%	0%
Other Receipts	0%	0%	0%

Outdoor Recreation-Related Spending by Foundations (Non-Federal Sources)

- Foundation expenditures for outdoor recreation-related programs from non-federal (private) sources were estimated based on the assumption that federal government revenue sources are already included in the accounts highlighted in the previous sections of this report. Total estimated non-federal outdoor recreation funds combined for all Foundations is estimated at \$111.9 million (Table 12). This is based on an estimate that 20% of overall Foundation revenue is spent on outdoor recreation-related programs. The National Parks Foundation has the highest outdoor recreation spending at \$74.0 million followed by the National Fish and Wildlife Foundation (\$24.2 million)

Table 12

FY 2020 Foundation Revenue and Support for Outdoor Recreation from Non-Federal/Private Sources (in Thousands)

	Estimated % of Foundation Revenue for Recreation*	Estimated Funds from Non-Federal/Private Sources
National Parks Foundation (NPF)	75%	\$74,025
National Fish and Wildlife	10%	\$24,201
National Forest Foundation (NFF)	50%	\$11,200
National Environmental Education	20%	\$2,240
National Marine Sanctuary Foundation	10%	\$230
Public Lands Foundation (PLF)	30%	\$14
GRAND TOTAL (All Foundations)	22%	\$111,910

Assumption*: Funds allocated for individual programs are not available in the Foundations’ annual reports, therefore an estimate was made based on the percent of recreation vs. conservation related programs based on the types of programs highlighted on the websites. Assumption*: Funds allocated for individual programs are not available in the Foundations’ annual reports, therefore an estimate was made based on the percent of recreation vs. conservation related programs based on the types of programs highlighted on the websites.

FEDERAL DEPARTMENTS AND AGENCIES AT RISK FROM DECLINES IN FOSSIL FUELS AND CONSUMER FUEL CONSUMPTION

Based on the federal department and agency expenditure tables presented previously, it is possible to present this same information in a slightly different way to evaluate the amount and proportion of outdoor recreation funding sources that are derived from fossil fuels and consumer fuel taxes. The move towards a clean energy economy will likely impact these funding sources in the future and evaluating recent expenditures (FY 2022) from these sources will help to identify the departments and agencies that are most at risk of declines in future outdoor recreation funding.

There are two ways to look at the risk related to a decline in funds sourced from fossil fuels and consumer fuel taxes. First, we look at the *total* dollars at risk, followed by the *proportion* of department and agency outdoor recreation-oriented budgets at risk.

- Total outdoor recreation expenditures sourced from fossil fuels and/or consumer fuel taxes for all federal departments combined is \$1.9 billion (Table 13). This represents 20% of all documented federal spending that supports outdoor recreation.
- The federal departments with revenue sources from fossil fuels and consumer fuel taxes that are at risk based on total outdoor recreation dollars spent on outdoor recreation are the Department of the Interior and the Department of Agriculture, with a total of \$1.6 billion and \$174 million in outdoor recreation spending coming from these sources, respectively.

- Considering the departments most at risk in terms of the proportion of outdoor recreation-oriented spending sourced from fossil fuels and consumer fuel taxes, the Department of Defense has 49% of its outdoor recreation expenditures supported by consumer fuel taxes, followed by the Department of Interior with 22% of its outdoor recreation spending sourced from fossil fuels and consumer fuel taxes.

Table 13

Federal Departments Outdoor Recreation Spending Sourced from Fossil Fuels and Consumer Fuel Tax Revenue Based on Total FY 2022 Expenditures.

Federal Departments	% Fossil Fuels	%	FY 2022 Recreation Expenditures Sourced from Fossil Fuels and/or Consumer Fuel Tax (In Thousands)
Department of Interior	19%	3%	\$1,618,850
Department of Agriculture	9%	0%	\$174,200
Department of Defense	0%	49%	\$21,250
Department of Commerce	0%	0%	\$0
Total			\$1,898,300 *

* Total includes Department of Transportation, Federal Highway Administration Recreational Trails Program (\$84 million)

- The top three federal agencies at greater risk from declines in fossil fuels and consumer fuel tax revenues are: the Fish and Wildlife Service (\$458 million), the National Park Service (\$341 million), and the Forest Service (\$174 million). (Table 14)
- Based on the proportion of spending sourced from consumer fuel taxes and fossil fuels, agencies at greatest risk are the Federal Highway Administration’s Recreational Trails Program and the Army Corp of Engineers, with 100% and 49% of their total outdoor recreation budget sourced by consumer fuel taxes, respectively. The Bureau of Land Management is also at risk, with 44% of its outdoor recreation budget sourced from fossil fuels, followed by the Fish and Wildlife Service, with 18% of its outdoor recreation spending sourced from fossil fuels and consumer fuel taxes.
- The National Park Service and Forest Service each have 10% and 9% of their outdoor recreation budget sourced from fossil fuels. If there is a drop in fossil fuel-related funding it affects only a small portion of the National Park Service and Forest Service outdoor recreation budget, but that still amounts to a significant amount of money, more than \$341 million and \$174 million per year, respectively.

Table 14

Federal Agencies Outdoor Recreation Spending Sourced from Fossil Fuels and Consumer Fuel Tax Revenue Based on Total FY 2022 Expenditures.

Federal Agencies	% Fossil Fuels	%	FY 2022 Recreation Expenditures Sourced from Fossil Fuel and/or Consumer Fuel Tax (In Thousands)
US Fish and Wildlife Service	8%	10%	\$457,650
National Park Service	14%	0%	\$341,000
Forest Service	9%	0%	\$174,200
Bureau of Land Management	44%	0%	\$105,600
Federal Highway Administration (Recreational Trails Program)	0%	100%	\$84,000
Army Corp of Engineers	0%	49%	\$21,250
Bureau of Reclamation	0%	0%	\$0
US Geological Survey	0%	0%	\$0
Environmental Protection Agency	0%	0%	\$0
Natural Resource Conservation Service	0%	0%	\$0
Farm Services Agency	0%	0%	\$0
National Oceanic and Atmospheric Administration	0%	0%	\$0
Total	16%	4%	\$1,898,300*

*Total also includes DOI Department-wide budget line item (\$715 million) that is spread across the DOI agencies

FUTURE OUTDOOR RECREATION FUNDING SCENARIOS

No one can accurately predict the future. Regardless, economic and social trends will certainly affect outdoor recreation participation and funding. This section presents scenarios that could impact future outdoor recreation funding and programs. The purpose is to help the reader understand the threats and opportunities federal policymakers may eventually encounter and to stimulate discussions about actions and changes that may eventually be needed.

Projections of future outdoor recreation funding were estimated for 10 and 20 years into the future, 2032 and 2042. These projections are based on scenarios that could affect future outdoor recreation spending.

Inflation-Adjusted Outdoor Recreation Expenditures

- Ten-year scenario: The forecasted average annual inflation rate until 2032 is 2.8%. Federal budgets will need to increase by 32% over the next ten years just to maintain current levels of support and keep pace with inflation. Given the current federal budget contribution to outdoor recreation of \$9.4 billion, an additional \$3.0 billion will be needed by 2032 (Table 15).
- Twenty-year scenario: If the 10-year expected annual inflation rate of 2.8% were to continue for 20 years, federal budgets would need to increase 74% by 2042 just to maintain current levels of support. Given the current federal budget contribution to outdoor recreation of \$9.4 billion, an additional \$6.9 billion would be needed by 2042.

Table 15

Future Outdoor Recreation Funding Projections Adjusted for Inflation (in thousands)

Inflation-Adjusted: Outdoor Recreation Funding Scenario	2032	2042
Expected increase in CPI (2.8% Annual inflation)	31.8%	73.7%
FY22 Recreation Funding (\$9.4 billion) Adjusted for Inflation	\$2,991,948	\$6,935,479

Consumer Fuel Tax Funding: A Decline in Gasoline Consumption

- The US Energy Information Administration’s data sources were used to develop a projection for outdoor recreation funding sourced via consumer fuel tax. This estimate is based on the 2050 carbon emission reduction goal, which is expected to result in a decline in gasoline consumption. A decline in gasoline consumption was estimated at 21% by 2032 and is down even further in 2042 to 43% (*Irwin, Department of Agricultural and Consumer Economics, 2019*). These consumption estimates were used to project an overall decline in gasoline tax consumption revenues allocated for outdoor recreation in 2032 and 2042 (Table 16).
- Many successful federal outdoor recreation programs are funded by excise taxes on the sale of gasoline such as sportfishing and boating, with 4% of total federal funding coming from consumer fuel taxes. Considering expected declines in U.S. gasoline consumption of 21% and 43% in the next 10 to 20 years respectively, funding for these programs should likewise be expected to decrease \$76 million to \$152 million over the same time frame.

Table 16

Future Outdoor Recreation Funding Projections Based on Gasoline Consumption Estimates

Fossil Fuel: Recreation Funding Scenario	2032	2042
Gasoline Consumption - % Change *	-21%	-43%
Recreation Funding Decline via Gasoline Tax (In Thousands)	-\$76,197	-\$152,393

*Assumption from US Energy Information Administration about steadily decreasing demand for gasoline based on increased miles per gallon of vehicles through 2050

Oil and Gas Funding: A Decline in Oil and Gas Leases on the Outer Continental Shelf

Crude oil and gas consumption is expected to increase by 17% by 2032. Demand will then dip after 2032, but by 2042 is still expected to be 15% over 2021 levels. However, the share of oil and gas production from Outer Continental Shelf (OCS) leases is declining and therefore the effect on the Land and Water Conservation Fund (LWCF) as a continued source of funding for outdoor recreation may be in jeopardy, despite the recent permanent authorization of funding for this program. According to the Bureau of Ocean Energy Management, the new leases on the OCS have been declining in recent years and the short-term (20-year) production forecast for existing OCS leases shows declining levels of production after 2024 (BOEM, July 2022).

Political Will and Federal Budget Support for Outdoor Recreation

The “Political Will” scenario refers to the percentage of the general federal budget directed towards outdoor recreation and how this percentage may change based on changes in public support.

- Outdoor recreation provides 2.2% of the United States’ Gross Domestic Product. This is more than twice the size of motor vehicle manufacturing and air transportation and three times the size of the U.S. oil and gas development sector (Bureau of Economic Analysis, Outdoor Recreation Satellite Account, 2021). However, the percentage of the federal budget allocated towards outdoor recreation is only 0.16% (less than two-tenths of one percent) of the federal budget.
- To match outdoor recreation’s contribution to the U.S. GDP, spending on outdoor recreation as a share of the federal budget would have to increase 13.5 (\$104.8 billion, Table 17).
- Maintaining public support for outdoor recreation is critical. If federal support for outdoor recreation issues fell 10%, outdoor recreation budgets would fall \$940 million, which is equivalent to:
 - 13% of the Department of the Interior’s annual outdoor recreation-oriented budget
 - 49% of the Department of Agriculture’s annual outdoor recreation-oriented budget
 - Over seven times the Department of Commerce’s annual outdoor recreation-oriented budget
- Programs such as the Legacy Restoration Fund are providing critical improvements to federal outdoor recreation resources but are not permanent and will soon end while ongoing maintenance needs will continue.

Impacts from Human Uses: Outdoor Recreation Participation Trends and Impacts on Maintenance Demands

The deferred maintenance backlog for the four federal land management agencies totals \$25.78 billion (*Congressional Research Service, 2021*). If the deferred maintenance backlog continues growing at the rate seen since 2011 (3.4%), by 2032, the total needed will exceed \$36 billion, or over \$10 billion more than the current backlog. By 2042, the total needed to address the maintenance backlog will exceed \$50 billion, or \$24.5 billion more than the current backlog (Table 17).

Table 17

Data Used to Project Deferred Maintenance of Federal Land Management Agencies based on Growth in Maintenance Backlog, 2011 to 2020 (NPS, FWS, USFW, BLM)

\$25,780,000,000	= 2020 maintenance backlog for the 4 major Federal land agencies (NPS, FWS, USFS, BLM)
3.4%	= Average annual growth in the deferred maintenance backlog from 2011 to 2020
39.7%	= compounded ten-year growth rate going forward to 2032
95.2%	= compounded 20-year growth rate going forward to 2042
\$36,015,405,000	= maintenance backlog by 2032 if the current annual growth rate continues
\$10,235,405,000	= additional backlog by 2032
\$50,314,561,000	= maintenance backlog by 2042 if the current annual growth rate continues
\$24,534,561,000	= additional backlog by 2042

Climate Change Impacts

The economic damage to the U.S. economy related to climate change is well documented in the literature. The impact of climate change on outdoor recreation participation and future spending is difficult to quantify; however, the following examples show research related to the fiscal impacts of climate change on various sectors of the economy.

- Damages from climate change will occur in many sectors, including agriculture, crime, coastal storms, energy, human mortality, and labor, and will grow with increases in global mean temperature, costing roughly 1.2% of gross domestic product per +1°C on average (*Science, July 2017*).
- Across the United States, estimated damages from storms, floods, wildfires, and other extreme climate-related weather events have already grown to about \$120 billion a year over the past five years as of 2022 (*Office of Management and Budget (OMB), 2022*).
- By 2050, average federal spending in response to wildland fire suppression is expected to increase by \$3.7 billion annually (in 2020 dollars) due to increased climate risks (*OMB, 2022*).

- Federal climate-related healthcare spending in a few key areas could increase by between \$824 million and \$22 billion (in 2020 dollars) by the end of the century (OMB, 2022).
- By 2050, average federal spending in response to coastal weather disasters is expected to increase by \$15 billion annually (in 2020 dollars) due to increased climate risks (OMB, 2022).
- Outdoor recreational impacts on local economies due to climate change are significant. The following highlights just a few of the many examples of outdoor recreation impacts nationwide:
 - \$240 million is estimated to be lost economic activity from tourists in Montana due to wildfires (*University of Montana Institute for Tourism and Recreation Research, 2017*).
 - \$33 million lost revenue from canceled reservations for the Durango and Silverton Natural Gauge Railroad in Colorado due to forest fires (*REI, July 2018*).
 - Hurricane Irma cost Florida’s fishing industries almost \$200 million, according to a damage assessment released by the state and federal governments (*National Oceanic and Atmospheric Administration, 2018*).

CONCLUSION

The purpose of this report was to analyze and communicate trends in federal spending that support outdoor recreation, with details by agency and source. In addition, this effort also provides ideas for how future outdoor recreation funding could be affected by possible social and economic scenarios. Recent trends suggest that overall recreation funds have not kept pace with inflation, and the maintenance backlog continues to grow while outdoor recreation participation and visitation to public lands have been increasing over the long term which can create additional pressure on federal budgets. This assessment of outdoor recreation-related funding sources and trends is meant to support discussions about outdoor recreation funding priorities, sources, and possible actions in the near- and long-term.

APPENDIX A: FEDERAL AGENCY OUTDOOR RECREATION EXPENDITURES

A detailed spreadsheet was produced listing all department plus agency-specific spending.

All Federal Outdoor Recreation-related Expenditures (*in Thousands*)

Actual Dollars	2002	2012	2022
	All Federal Agencies - Grand Total		
Total Expenditures	\$4,683,265	\$5,900,759	\$9,407,230
Fossil Fuels	\$708,650	\$460,050	\$1,541,050
Consumer Fuel Tax	\$201,500	\$300,569	\$357,250
Dedicated Excise Tax	\$419,025	\$635,100	\$1,131,670
General Revenue	\$2,363,965	\$3,285,490	\$4,647,540
Recreation Fees	\$657,975	\$901,525	\$1,254,725
Other Receipts	\$332,150	\$318,025	\$474,995

Inflation Adjusted Expenditures	2002	2012	2022
	All Federal Agencies - Grand Total		
Total Expenditures	\$7,727,387	\$7,611,979	\$9,407,230
Fossil Fuels	\$1,169,273	\$593,465	\$1,541,050
Consumer Fuel Tax	\$332,475	\$387,734	\$357,250
Dedicated Excise Tax	\$691,391	\$819,279	\$1,131,670
General Revenue	\$3,900,542	\$4,238,282	\$4,647,540
Recreation Fees	\$1,085,659	\$1,162,967	\$1,254,725
Other Receipts	\$548,048	\$410,252	\$474,995

	2002	2012	2022
	All Federal Agencies - Grand Total		
Total Expenditures	\$4,683,265	\$5,900,759	\$9,407,230
Fossil Fuels	15%	8%	16%
Consumer Fuel Tax	4%	5%	4%
Dedicated Excise Tax	9%	11%	12%
General Revenue	50%	56%	49%
Recreation Fees	14%	15%	13%
Other Receipts	7%	5%	5%

Department of the Interior – Summary of Outdoor Recreation Expenditures
(in Thousands)

Actual Dollars	2002	2012	2022
	Department of Interior		
Total Expenditures	\$3,187,465	\$4,487,850	\$7,233,750
Fossil Fuels	\$392,950	\$306,100	\$1,366,850
Consumer Fuel Tax	\$145,500	\$213,500	\$252,000
Dedicated Excise Tax	\$412,275	\$626,600	\$1,110,420
General Revenue	\$1,481,015	\$2,191,600	\$2,913,860
Recreation Fees	\$554,175	\$859,025	\$1,184,625
Other Receipts	\$201,550	\$291,025	\$405,995

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Interior		
Total Expenditures	\$5,259,317	\$5,789,327	\$7,233,750
Fossil Fuels	\$648,368	\$394,869	\$1,366,850
Consumer Fuel Tax	\$240,075	\$275,415	\$252,000
Dedicated Excise Tax	\$680,254	\$808,314	\$1,110,420
General Revenue	\$2,443,675	\$2,827,164	\$2,913,860
Recreation Fees	\$914,389	\$1,108,142	\$1,184,625
Other Receipts	\$332,558	\$375,422	\$405,995

	2002	2012	2022
	Department of Interior		
Total Expenditures	\$3,187,465	\$4,487,850	\$7,233,750
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Dedicated Excise Tax	13%	14%	15%
General Revenue	46%	49%	40%
Recreation Fees	17%	19%	16%
Other Receipts	6%	6%	6%

Department of Commerce - Summary of Outdoor Recreation Expenditures
(in Thousands)

Actual Dollars	2002	2012	2022
	Department of Commerce		
Total Expenditures	\$71,200	\$100,540	\$126,980
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$71,200	\$100,540	\$126,980
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Commerce		
Total Expenditures	\$117,480	\$129,697	\$126,980
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$117,480	\$129,697	\$126,980
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

	2002	2012	2022
	Total - Department of Commerce		
Total Expenditures	\$71,200	\$100,540	\$126,980
Fossil Fuels	0%	0%	0%
Consumer Fuel Tax	0%	0%	0%
Dedicated Excise Tax	0%	0%	0%
General Revenue	100%	100%	100%
Recreation Fees	0%	0%	0%
Other Receipts	0%	0%	0%

Department of Agriculture – Summary of Outdoor Recreation Expenditures
(in Thousands)

Actual Dollars	2002	2012	2022
	Department of Agriculture		
Total Expenditures	\$1,361,850	\$1,212,800	\$1,918,700
Fossil Fuels	\$315,700	\$153,950	\$174,200
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$811,750	\$989,350	\$1,605,400
Recreation Fees	\$103,800	\$42,500	\$70,100
Other Receipts	\$130,600	\$27,000	\$69,000

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Agriculture		
Total Expenditures	\$2,247,053	\$1,564,512	\$1,918,700
Fossil Fuels	\$520,905	\$198,596	\$174,200
Consumer Fuel Tax	\$-	\$-	\$-
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$1,339,388	\$1,276,262	\$1,605,400
Recreation Fees	\$171,270	\$54,825	\$70,100
Other Receipts	\$215,490	\$34,830	\$69,000

	2002	2012	2022
	Total - Department of Commerce		
Total Expenditures	\$1,361,850	\$1,212,800	\$1,918,700
Fossil Fuels	23%	13%	9%
Consumer Fuel Tax	0%	0%	0%
Dedicated Excise Tax	0%	0%	0%
General Revenue	60%	82%	84%
Recreation Fees	8%	4%	4%
Other Receipts	10%	2%	4%

Department of Defense – Summary of Outdoor Recreation Expenditures
(in Thousands)

Actual Dollars	2002	2012	2022
	Department of Defense		
Total Expenditures	\$13,500	\$21,000	\$43,800
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$6,750	\$8,500	\$21,250
Dedicated Excise Tax	\$6,750	\$8,500	\$21,250
General Revenue	\$-	\$4,000	\$1,300
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Inflation Adjusted Expenditures	2002	2012	2022
	Department of Defense		
Total Expenditures	\$22,275	\$27,090	\$43,800
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$11,138	\$10,965	\$21,250
Dedicated Excise Tax	\$11,138	\$10,965	\$21,250
General Revenue	\$-	\$5,160	\$1,300
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

	2002	2012	2022
	Department of Defense		
Total Expenditures	\$13,500	\$21,000	\$43,800
Fossil Fuels	0%	0%	0%
Consumer Fuel Tax	50%	40%	49%
Dedicated Excise Tax	50%	40%	49%
General Revenue	0%	19%	3%
Recreation Fees	0%	0%	0%
Other Receipts	0%	0%	0%

FHWA/Recreational Trails Program – Summary of Outdoor

Actual Dollars	2002	2012	2022
	Federal Highway Administration - Recreational Trails Program		
Total Expenditures	\$49,250	\$78,569	\$84,000
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$49,250	\$78,569	\$84,000
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$-	\$-	\$-
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

Inflation Adjusted Expenditures	2002	2012	2022
	Federal Highway Administration - Recreational Trails Program		
Total Expenditures	\$81,263	\$101,354	\$84,000
Fossil Fuels	\$-	\$-	\$-
Consumer Fuel Tax	\$81,263	\$101,354	\$84,000
Dedicated Excise Tax	\$-	\$-	\$-
General Revenue	\$-	\$-	\$-
Recreation Fees	\$-	\$-	\$-
Other Receipts	\$-	\$-	\$-

	2002	2012	2022
	Federal Highway Administration - Recreational Trails Program		
Total Expenditures	\$49,250	\$78,569	\$84,000
Fossil Fuels	0%	0%	0%
Consumer Fuel Tax	100%	100%	100%
Dedicated Excise Tax	0%	0%	0%
General Revenue	0%	0%	0%
Recreation Fees	0%	0%	0%
Other Receipts	0%	0%	0%

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