

THE
TRUST
FOR
PUBLIC
LAND

The Nature
Conservancy 

**NATURAL
CLIMATE
SOLUTIONS
FINANCE
FEASIBILITY
STUDY**

SEPTEMBER 2020
WISCONSIN



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INTRODUCTION

The Trust for Public Land

The Trust for Public Land (TPL) has been connecting communities to the outdoors, and to each other, since 1972. Our mission is to create parks and protect land for people, ensuring healthy, livable communities for generations to come. TPL has protected more than 3.3 million acres and completed more than 5,400 park and conservation projects nationwide.

In Wisconsin, TPL has completed several land protection projects, including Forever Northwoods. TPL established Forever Northwoods to protect the iconic landscapes of northern Minnesota, Wisconsin, and Michigan and preserve a heritage that is at risk of disappearing. This landscape encompasses millions of acres of forest; thousands of wild rivers, streams and lakes; and the northern Great Lakes all within a day's drive of more than 40 million people. All six National Forests of the upper Midwest are located here as well as national treasures such as Apostle Islands National Lakeshore, Isle Royale National Park, St. Croix National Scenic Riverway, and the headwaters of the Mississippi River. By partnering with communities, landowners and public agencies, TPL's Northwoods Initiative works to protect water quality, prevent forest fragmentation, manage resources sustainably to maintain local economies, negotiate win-win outcomes for all stakeholders, and keep people connected to recreational opportunities in wilderness and natural areas.

To help public agencies acquire and restore land, build and improve parks, and fund park maintenance, TPL assists communities in securing public financing. TPL's conservation finance program offers technical assistance to elected officials, public agencies and community groups to design, pass and implement public funding measures that reflect popular

priorities. Since 1996, TPL has been involved in over 570 successful ballot measures and dozens of statewide legislative campaigns creating more than \$79 billion in new funding for parks, land conservation and restoration. Voters across the nation have approved 82 percent of the ballot measures directed and supported by TPL and its lobbying affiliate, The Trust for Public Land Action Fund.

In Wisconsin, TPL has been involved in one successful park and land conservation ballot measure, generating \$30 million in Dane County for parks, wetlands, rivers, streams, forests, prairies, trails. The Trust for Public Land is looking for new, creative ways to invest in nature-based solutions to manage climate change impacts in Wisconsin with a focus on "natural climate solutions" to enhance nature's ability to absorb and store carbon in forests, wetlands, and agricultural soils. This new climate mitigation strategy requires prioritization by state and local decision-makers. Given the substantial investment of time and resources required for a successful conservation finance initiative, preliminary research is essential to determine which options and funding levels are feasible, economically prudent, and likely to be publicly acceptable. This research provides a stand-alone, fact-based reference document that can be used to evaluate financing mechanisms from an objective vantage point.¹

¹ This feasibility study is not a legal document and should not be relied upon for legal purposes or a legal opinion. The contents of this report are based on the best available information at the time of research and drafting, April-June 2020. This research does not take into account developing and possible future impacts to the state, national, and global economy due to the COVID-19 pandemic. Revenue and cost impacts may need to be adjusted accordingly once more information on the impacts to Wisconsin is available.

The Nature Conservancy

The Nature Conservancy (TNC) began in 1951 when leading scientists, committed citizens and dedicated leaders came together with a shared vision to protect and care for nature. From our first land purchase to our latest water fund, we are constantly evolving to bring innovative solutions to the challenges facing our world. Thanks to more than a million members and the dedicated efforts of our diverse staff and more than 400 scientists, we impact conservation in 79 countries and territories across six continents.

For two decades, TNC's work has been guided by a framework we call Conservation by Design, which articulates our conservation vision and marries our collaborative, science-based approach with key analytical methods. It unifies our efforts around the world by providing a common language and consistent approach across the diversity of systems, cultures, geographies and communities in which we engage.

In Wisconsin, TNC has worked collaboratively with members and donors, volunteers, landowners, business, public agencies, elected officials and communities to conserve more than 236,000 acres at beloved and ecologically significant landscapes, including the Baraboo Hills, the Door Peninsula and the forests and wild lakes in the Northwoods.

In our first 60 years, we have:

- **Protected** 175,769 acres of working forests in northern Wisconsin and the jobs they support
- **Conserved** 120 river miles for fish, wildlife and anglers
- **Restored** more than 30,000 acres of habitat with prescribed fire

- **Supported** farmers in putting conservation practices on 200,000 acres of agricultural land to build soil health and protect water quality in lakes and streams
- **Helped** protect refuges for rare species and outstanding examples of Wisconsin's native habitats at 65 State Natural Areas

The Nature Conservancy advances and defends science-based, nonpartisan policy solutions that work for both people and nature in the U.S. and around the world. We believe the health of natural systems and the welfare of human communities are closely linked and that diverse public and private interests can work together to achieve lasting conservation success.

In Wisconsin, we advocated for the creation of the Knowles-Nelson Stewardship Program and have played a leading role each decade in ensuring that it is reauthorized and funded. Staff and volunteers also advocate for sound environmental policies and funding at the federal level, helping ensure passage of vital conservation programs like the Great American Outdoors Act, the Wildfire Disaster Funding Act and the Great Lakes Restoration Initiative.

EXECUTIVE SUMMARY

The summer of 2020 is predicted to be the hottest ever recorded, and climate change is causing more extreme, dangerous, and expensive natural disasters. According to the Environmental Defense Fund, the financial impacts of fires, tropical storms, floods, droughts, and crop freezes have quadrupled since 1980.² Meanwhile, as the number of COVID-19 cases continues to increase nationwide, states are grappling with declining economic projections and revenue shortfalls. Natural climate solutions are a cost-effective way to address climate change proactively, improving resilience and helping communities mitigate damage. Mitigating climate damage is essential to the future of human health in resilient communities.



The key to slowing climate change is to reduce carbon dioxide emissions, and the land can help. Natural areas like forests, farms, grasslands and wetlands, store and absorb carbon as they grow, and could do a lot more. U.S. forests remove between 12 and 14 percent of total U.S. greenhouse gas emissions each year through carbon sequestration, and offset nearly 16 percent of annual carbon dioxide emissions alone.³ The majority of land sector sequestration in the U.S. is attributed to forests, which capture carbon rapidly, in great quantity, and for long periods of time, storing it in tree trunks, leaves, branches, roots, and soil including peatlands. U.S. forests stored 58.7 billion metric tons of carbon in 2019.⁴ The U.S. Global Change Research Program estimates that terrestrial wetlands in the continental United States store a total of 13.5 billion metric tons of carbon, much of which is within soils deeper than 30 cm. The study found that peatlands in forested regions of the East and Upper Midwest store the most carbon, accounting for nearly half the wetland carbon in the United States.⁵

Land can offset a growing percentage of U.S. carbon emissions through conservation, restoration, and improved management of these natural resources. Reforestation has the largest mitigation potential to increase carbon absorption, followed by improved forest management practices.⁶ Such actions not only mitigate climate impacts, but also provide additional co-benefits: resilient ecosystems reduce threats from disturbances such as wildfire, drought, and floods; while protecting fish and wildlife habitat, drinking water supplies, working farms and forests, and recreational opportunities.

The Trust for Public Land undertook this feasibility analysis to explore the state funding options available in Wisconsin to further natural climate solutions. In order to understand what would be an appropriate funding source or sources, this report first provides a brief overview of the state's budget. Next, the report provides an overview of existing programs that fund land conservation and other natural climate solutions and compares those programs to other states' programs. Then, the report analyzes possible revenue options for funding natural climate solutions, including, where available, estimates on revenue-raising capacity and examples of successful, similar programs in other states.

There are a number of potential public funding sources in Wisconsin that can be woven together to further natural climate solutions.⁷ Federal, state, local, and private conservation programs each have a role to

play to help achieve these objectives. However, at the heart of the most successful programs is a substantial, long-term, dedicated source of state revenue. With a consistent and reliable source of funds, Wisconsin can establish and meet meaningful statewide climate goals and priorities that protect valuable natural resources, reflect community values, and leverage funds from federal agencies and private partners.

Strategically conserving, restoring and managing natural resources is becoming increasingly urgent as Wisconsin faces threats from climate change impacts. Several funding recommendations in this report can be considered by the state for natural climate solutions including: general obligation bonds, the sales tax, property tax, real estate transfer fee, room tax, severance tax, carbon tax, and cap and trade. These options are summarized in the table on the following page. This study also explores several policy and regulatory strategies to promote natural climate solutions.

Next steps should include narrowing funding options to those that best match the needs and political and fiscal realities in Wisconsin and testing voter attitudes toward a specific set of funding proposals, which is essential for any proposal that requires voter approval. TPL recommends conducting a public opinion survey that tests ballot language, tax tolerance, and program priorities of voters in Wisconsin.

2 https://insideclimatenews.org/news/24082020/extreme-weather-costs-wildfire-climatechange?utm_source=InsideClimate+News&utm_campaign=3932fbc440-&utm_medium=email&utm_term=0_29c928ffb5-3932fbc440-327866961

3 Proceedings of the National Academy of Sciences Oct. 2017, www.pnas.org/content/114/44/11645, and <http://www.ncsl.org/research/environment-and-natural-resources/state-forest-carbon-incentives-and-policies.aspx>

4 Congressional Research Service, U.S. Forest Carbon Data: In Brief, updated May 5, 2020 (<https://fas.org/sgp/crs/misc/R46313.pdf>)

5 <https://bwsr.state.mn.us/carbon-sequestration-wetlands>

6 Griscom et al. 2017, <https://www.pnas.org/content/114/44/11645>

7 <https://global.nature.org/initiatives/natural-climate-solutions/ncs-about>

CLIMATE CHANGE ADAPTATION, RESILIENCE, AND MITIGATION

Wisconsin is already feeling the effects of a changing climate, including extreme, unexpected, and fluctuating droughts, floods, and hot and cold spells. One of the tools the state can use to prepare for climate change impacts and mitigate carbon dioxide emissions are nature-based solutions.

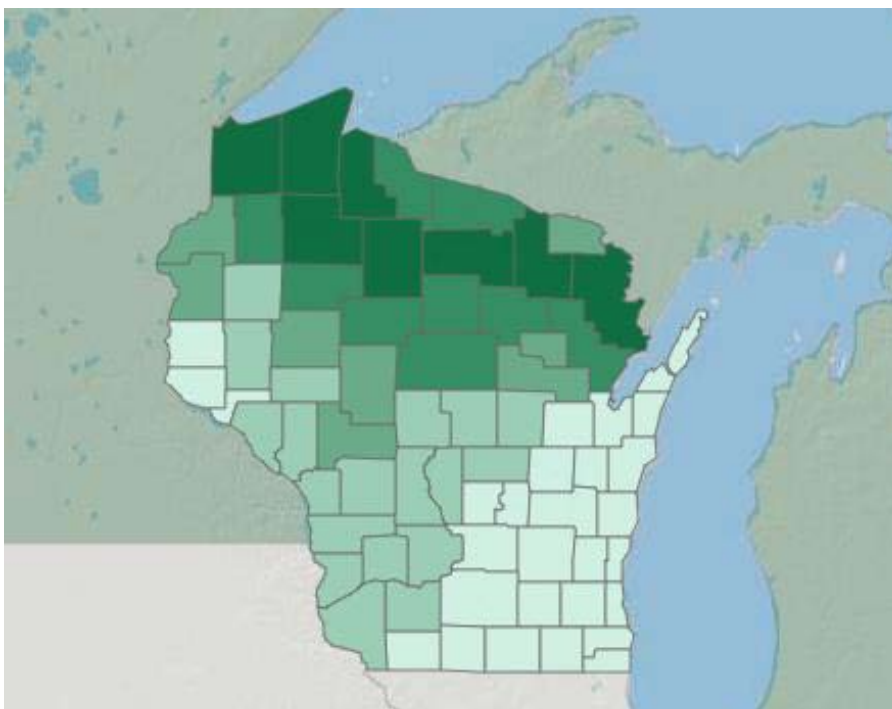
Nature-based solutions are strategies that conserve, create, restore and employ natural resources to enhance climate adaptation, resilience, and mitigation. They mimic natural processes or work in tandem with human-made engineering approaches to address natural hazards, like flooding, erosion, drought, and heat islands. Nature-based solutions can also help to maintain healthy natural cycles that sequester and maintain carbon and other greenhouse gases.

Wisconsin is a member of the U.S. Climate Alliance, a bipartisan coalition of governors committed to reducing greenhouse gas emissions consistent with the goals of the Paris Agreement. The U.S. Climate Alliance Natural and Working Lands Initiative is

focused on helping states use land-based resources to sequester and store carbon.

CARBON SEQUESTRATION

The natural areas throughout Wisconsin sequester over 1 billion metric tons of carbon.⁸ The top ten counties for existing carbon stocks in the state are Bayfield, Sawyer, Forest, Marinette, Ashland, Price, Douglas, Oneida, Vilas, and Iron. These are the counties with the most potential for land conservation (avoided conversion) to sequester carbon. The following maps created by The Trust for Public Land depict the places in Wisconsin with the most existing carbon stocks, including both public and private ownership.



CARBON LEGEND (METRIC TONS)

0-5,316,860
5,316,860-14,253,794
14,253,794-24,120,874
24,120,874-36,706,083
36,706,083-65,713,671

TOP 10 COUNTIES

Bayfield	65,582,506
Sawyer	54,714,415
Forest	52,592,318
Marinette	52,145,508
Ashland	49,753,875
Price	47,996,011
Douglas	47,006,109
Oneida	43,781,207
Vilas	36,706,083
Iron	35,830,907

⁸ The Trust for Public Land, Carbon Map

Forest Carbon - Existing Carbon Stocks

State: Wisconsin

SOCIAL VALUE	TOTAL MARKET VALUE
\$49,115,964,548 U.S. dollars	\$59,471,247,074 U.S. dollars

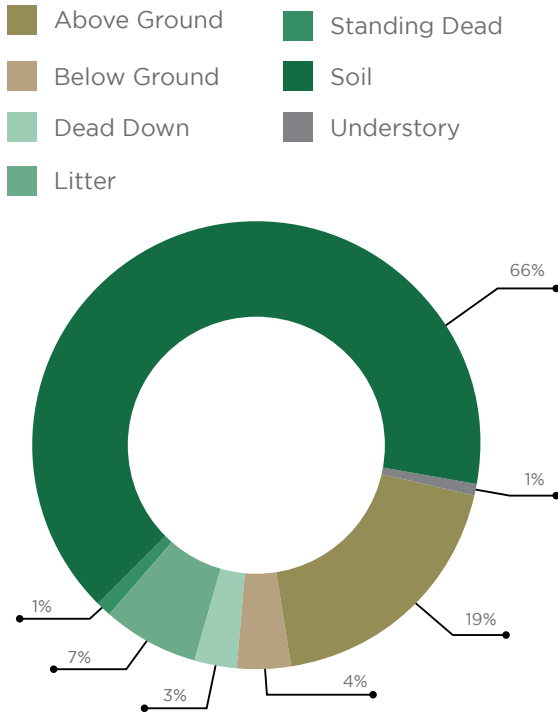
Gasoline Equivalence 460,560,036,648 gallons annually	Miles driven by avg. passenger vehicle 930,226,601,294 miles annually	Homes' energy use 442,008,320 for one year	Pounds of coal burned 4,478,114,929,642 lbs annually
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Please note that these estimates are approximate and should not be used for emission inventory or formal carbon foot printing exercises

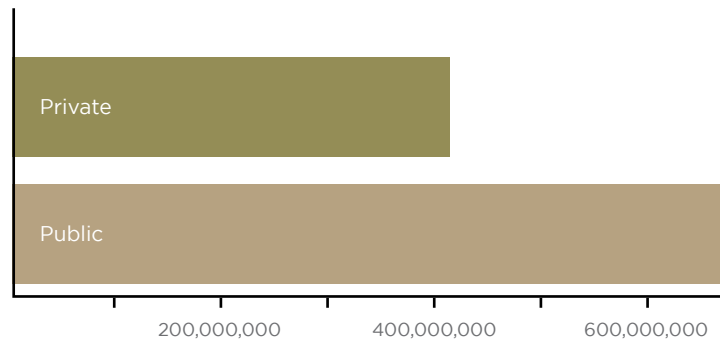
Existing Carbon Stock Type	Public Lands		Private Lands		All Lands	
	Metric Tons	Market Value	Metric Tons	Market Value	Metric Tons	Market Value
Above Ground	76,602,639	\$4,084,843,365	135,874,204	\$7,245,505,526	212,476,843	\$11,330,348,891
Below Ground	15,653,949	\$834,748,397	27,446,010	\$1,463,651,224	43,099,959	\$2,298,309,621
Dead Down	10,718,816	\$571,581,947	18,653,372	\$994,692,906	29,372,188	\$1,566,274,852
Litter	33,042,732	\$1,762,006,975	48,323,558	\$2,576,858,548	81,366,289	\$4,338,865,524
Soil Organic	280,244,974	\$14,944,091,265	451,936,445	\$24,099,556,142	732,181,419	\$39,043,647,407
Standing Dead	3,008,619	\$160,434,901	5,886,330	\$313,889,144	8,894,949	\$474,324,046
Understory	3,380,508	\$180,265,952	5,987,402	\$319,278,833	9,367,911	\$499,544,785
All Stocks	422,139,119	\$22,139,119	693,118,931	\$36,960,636,316	1,115,258,051	\$59,471,247,074

All of the calculations, data sources, and assumptions in this report are from EPA's Greenhouse Gas Equivalencies Calculator available at <https://www.epa.gov/energy>

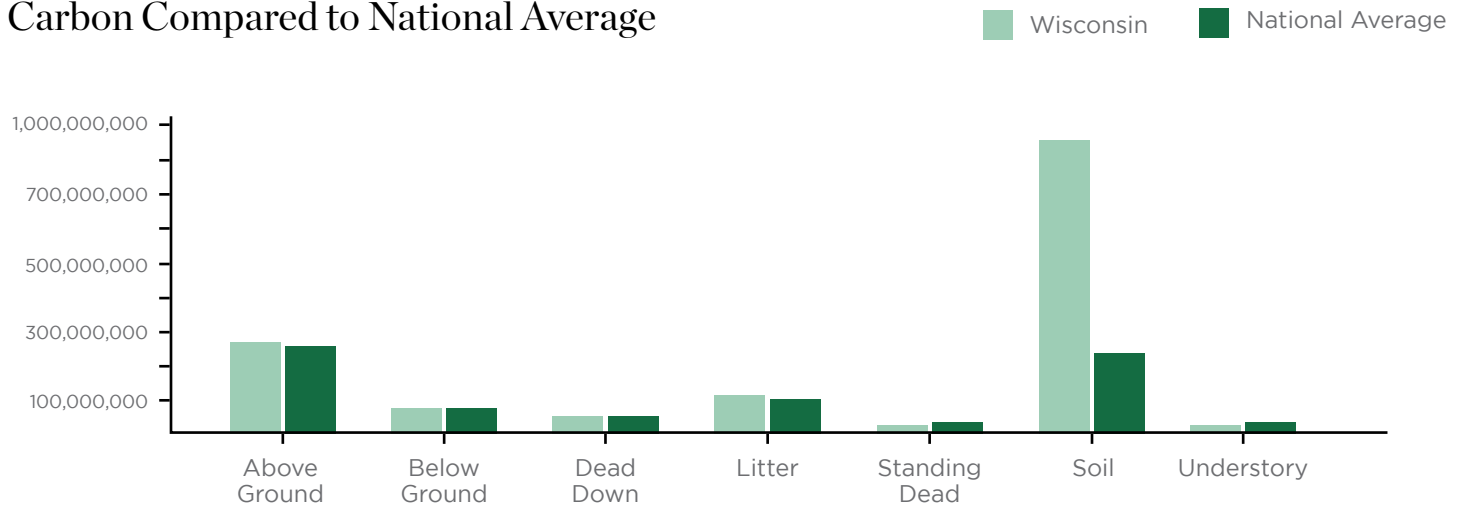
Carbon by Type



Tons of Carbon by Land Type



Carbon Compared to National Average



Soil carbon comprises the majority of Wisconsin’s carbon storage, as illustrated in the charts above. Soil carbon includes all organic material in soil to a depth of 1 meter but excluding the coarse roots of the below ground pools.⁹

⁹ U.S. Environmental Protection Agency, Carbon Storage in Forests ([https://cfpub.epa.gov/roe/indicator.cfm?i=86#:~:text=In%202016%2C%20the%20most%20recent,\(U.S.%20EPA%2C%202018\).&text=Much%20of%20this%20increase%20reflects,\(U.S.%20EPA%2C%202018\).](https://cfpub.epa.gov/roe/indicator.cfm?i=86#:~:text=In%202016%2C%20the%20most%20recent,(U.S.%20EPA%2C%202018).&text=Much%20of%20this%20increase%20reflects,(U.S.%20EPA%2C%202018).))

NATURAL CLIMATE SOLUTIONS OPPORTUNITIES

The natural climate solutions identified in this report will revolve around three topics (1) avoided conversion of specific land types, (2) forest management for increased carbon storage, and (3) agricultural management for increased carbon storage. Through a diverse set of funding options and policy proposals and changes, Wisconsin can take steps to implement the following solutions:

AVOIDED CONVERSION OF FORESTS, FARMLAND, GRASSLANDS, AND WETLANDS

Conversion of certain types of land is a major source of carbon release. For example, grasslands are being lost at a rate of over one million acres per year nationally. When grassland is converted to cropland, about 28 percent of the carbon in the top meter of soil is released to the atmosphere. This trend could be reversed by re-enrolling 13 million acres of marginal cropland in conservation programs and restoring them to provide habitat and storage of carbon in the soil.¹⁰

FOREST MANAGEMENT FOR INCREASED CARBON

In a 2018 study by The Nature Conservancy that studied 21 natural climate solutions, increased reforestation (the planting of trees) emerged as the most effective means to achieve greater carbon storage nationally, equivalent to eliminating the emissions of 65 million passenger cars. Other high-performing forest solutions include allowing longer periods between timber harvest to increase carbon storage; increasing controlled burns and strategic thinning in forests to reduce the risk of megafire; and avoided loss of forests from urban sprawl.¹¹

AGRICULTURAL MANAGEMENT FOR INCREASED CARBON

The loss of carbon from agricultural soils has been, in part, attributed to tillage, a common practice providing a number of benefits to farmers. The promotion of less intensive tillage practices and no tillage (the absence of mechanical soil disturbance) aims to mitigate negative impacts on soil quality and to preserve soil organic carbon (SOC).¹² Farmers can also plant cover crops, which sequester carbon from the atmosphere and return it to the soil during times of the year when fields would normally be bare.

¹⁰ <https://www.nature.org/en-us/newsroom/natural-climate-solutions-study/>

¹¹ <https://www.nature.org/en-us/newsroom/natural-climate-solutions-study/>

¹² Environmental Evidence Journal Abstract: How does tillage intensity affect soil organic carbon? A systematic review, 2017.

CURRENT CONSERVATION FUNDING

The most straightforward way to preserve, restore and expand the land-based carbon sink in Wisconsin is to capitalize on existing government programs that support conservation, restoration, and improved management of natural systems. The key is to identify state programs that naturally align, or can be amended, to incentivize climate mitigation opportunities.

Conservation Fund¹³

The Conservation Fund is a segregated (SEG) trust fund used to finance many of the state’s resource management programs administered by the Department of Natural Resources (DNR). DNR programs supported by conservation fund revenues include wildlife and fish management, forestry, the state parks system, the endangered resources program, and several recreational vehicle programs. The conservation fund also supports programs and operations in other agencies, including the Lower Wisconsin State Riverway Board, the Fox River Navigational System Authority, the Kickapoo Reserve Management Board, the University of Wisconsin System, the State Historical Society, and the Departments of Tourism, and Agriculture, Trade and Consumer Protection.

The conservation funding is divided into nine accounts: fish and wildlife, forestry, parks, water resources, boat registration, all-terrain vehicle, snowmobile, endangered resources, and natural resources magazine. The accounts pertaining to natural climate solutions or conservation are described in more detail below.

FISH AND WILDLIFE ACCOUNT

The primary source of revenue to the fish and wildlife account is the fees charged for hunting, fishing and special licenses and stamps. In recent fiscal years, fish and wildlife account revenues have regularly been less than authorized expenditures for the account. The 2015 Wisconsin Act 55 required DNR, in consultation with stakeholders such as hunters, anglers, trappers, and conservationists, to prepare and submit to the Joint Committee on Finance a plan to address the imbalance in the fish and wildlife account. The report, titled “Revenue Options for Wisconsin Fish, Wildlife and Habitat Management,” was delivered on

TABLE 1: FISH AND WILDLIFE ACCOUNT REVENUE

	2016-17 Actual	2017-18 Preliminary	2017-18 % of Total
Resident Hunting Licenses	\$20,509,300	\$20,401,700	25.9%
Nonresident Hunting Licenses	7,210,800	7,404,400	9.4
Hunting Stamps	1,217,200	1,169,700	1.5
Resident Fishing Licenses	13,467,900	13,337,600	17.0
Nonresident Fishing Licenses	9,980,100	9,877,200	12.6
Two-Day Great Lakes	555,100	506,700	0.6
Fishing Stamps	2,746,500	2,715,000	3.5
Combination Licenses	9,303,600	9,518,400	12.1
Permit Application Fee	1,113,800	1,574,000	2.0
Other Licenses and Permits	99,500	104,100	0.1
Timber Sales	4,470,000	5,031,600	6.4
Education and Safety	209,100	160,400	0.2
GoWild Transaction Fees	-115,100	696,500	0.9
Tribal Gaming Revenue	3,000,000	3,000,000	3.8
All Other	2,092,400	3,151,500	4.0
Total	\$75,860,200	\$78,648,800	100.0%

December 30, 2016. It recommended one or more of the following: (a) increasing license fees; (b) creating flexible license packages, in which patrons could buy multiple licenses together, at a discount; (c) creating

a loyalty program or automatic renewal options to encourage patrons to buy every year, reducing turnover; (d) charging admission fees at state wildlife areas, fisheries, and natural areas; (e) creating a non-motorized watercraft fee, levied on sailboats, canoes, and kayaks; and (f) selling gift cards and other flexible payment methods. For FY 2019, DNR budgeted \$73 million in revenue and \$76.2 million in expenditures for Fish and Wildlife, resulting in a decreased account balance. Eventually, if expenditures continue to outpace revenues, the available balance will be depleted or DNR will have to reduce spending.

Fishing and hunting are on the rise in Wisconsin during COVID-19. So far in 2020, 1.4 million individuals have purchased fishing licenses, a 14 percent increase over the same time frame in 2019. Turkey licenses have reached a 3-year-high with more than 400,000 licenses issued, a 10 percent increase over spring 2019 numbers. Preliminary totals show Wisconsin turkey hunters registered 44,963 birds during the 2020 spring turkey hunting season, nearly a 17 percent increase from the 38,576 birds registered in the 2019 spring season. The 2020 youth season resulted in a total of 2,880 birds registered, up 47 percent from 1,953 in 2019. Harvest increased significantly across all zones and time periods compared to 2019 levels.¹⁴

FORESTRY ACCOUNT

Article VIII, Section 10, of the Wisconsin Constitution allows the state to appropriate money for the purpose of acquiring, preserving and developing the forests of the state through a tax on property not to exceed 0.2 mill (20¢ per \$1,000 of property value). This tax is frequently referred to as the “forestry mill tax” and was the only property tax levied by the state. 2017 Act 59 reduced the tax from 0.1697 mill (16.97¢ per \$1,000 of property value) to 0. Act 59 instead created a sum-sufficient general purpose revenues (GPR) transfer to the forestry account to replace the revenue from the tax. This transfer is equal to 16.97¢ per \$1,000 of the assessed property value in the state, meaning the forestry account is to receive an identical amount from the GPR transfer as it would from the mill tax. Since the funds are not longer dedicated, the forestry account must compete with other general fund expenditures such as education, and funds are more easily diverted to other purposes.

Other sources of revenue to the forestry account include: (a) revenues from the sale of timber on state forest lands; (b) revenues from the sale of stock from the state’s tree nurseries; (c) camping and entrance fees at state forests; (d) severance and withdrawal payments from timber harvests on cooperatively managed county forests; (e) withdrawal payments from privately owned land enrolled in the forest crop law and managed forest law programs; and (f) a portion of the revenue from the sale of the conservation patron licenses, to reflect the fact that license holders are granted admission to state forests at no additional charge as part of the license.

TABLE 6: FORESTRY ACCOUNT REVENUE

	2016-17 Actual	2017-18 Preliminary	2017-18 % of Total
Mill Tax	\$85,759,800	\$89,259,600	82.1%
Timber Sales	8,595,700	9,199,100	8.5
Nurseries	846,700	712,200	0.7
Forest Tax Law	10,096,600	1,960,900	1.8
Campsite Fees	3,444,900	3,431,000	3.2
Admission Stickers	3,173,800	3,098,000	2.9
Sales and Services	725,300	552,800	0.5
Conservation Patron Allocation	280,900	326,700	0.3
Other	91,000	92,700	0.1
Total	\$113,014,700	\$78,648,800	100.0%

¹³ Wisconsin Legislative Fiscal Bureau, Conservation Fund, Informational Paper 60, January 2019

¹⁴ <https://dnr.wi.gov/news/releases/article/?id=5223>

PARKS ACCOUNT

State parks operations are funded primarily from the parks account of the conservation fund. Account revenues derive mostly from parks motor vehicle admission fees and camping fees. Parks operations were previously funded in part by GPR, but 2015 Act 55 removed base-level GPR funding for parks operations, beginning in 2015-16. Act 55 instead increased admission fees, trail pass fees, and camping fees, and provided additional expenditure authority from the parks account to continue base-level funding for state park and trail operations.

TABLE 10: PARKS ACCOUNT REVENUE

	2016-17 Actual	2017-18 Preliminary	2017-18 % of Total
Park Stickers	\$9,378,000	\$9,346,200	42.3%
Campsite Fees	8,582,100	8,797,800	39.9
Campsite Reservations Vendor	1,125,600	1,160,800	5.3
Conservation Patron Allocation	834,500	974,500	4.4
Golf Fees	117,600	117,300	0.5
Trail User Fees	920,700	865,800	3.9
Rents, Sales, and Services	722,900	616,600	2.8
Timber Sales	418,700	111,600	0.5
All Other Revenue	67,600	86,400	0.4
Total	\$22,167,700	\$22,077,000	100.0%

Since COVID-19 began impacting people’s lives in mid-March, visits to Wisconsin State Parks have totaled more than 6.4 million. Weekend attendance on May 16-17 was up more than 44 percent compared to the previous year and that percentage continued to rise to 52 percent by June 13-14 as camping reopened on state properties. The DNR has also recorded a dramatic uptick in camping reservations with 73 percent of campsites reserved July 1 to the 31 in 2020 compared to 62 percent in the same period in 2019. Since camping re-opened June 10, campers have utilized a total of 203,296 site nights (number of campsites x nights reserved).

ENDANGERED RESOURCES ACCOUNT

The endangered resources account primarily funds DNR activities related to endangered and threatened plant and animal species, as well as for certain non-game species. In June, 2013, DNR renamed the Endangered Resources Bureau the Natural Heritage Conservation (NHC) Bureau to reflect a broader perspective of the work the Bureau undertakes, which includes work on non-listed bird and mammal species. The NHC Bureau aims to identify, protect and manage native plant and animal species, natural communities and other natural features, as well as to enhance and restore populations and habitats of rare or endangered species. Additionally, program staff works to promote the knowledge, appreciation and stewardship of Wisconsin’s native species and ecosystems for present and future generations.

TABLE 22: ENDANGERED RESOURCES ACCOUNT REVENUE

	2016-17 Actual	2017-18 Preliminary	2017-18 % of Total
Revenue	\$20,509,300	\$20,401,700	25.9%
License Plate Sales	7,210,800	7,404,400	9.4
Income Tax Check-Off	1,217,200	1,169,700	1.5
Donations	13,467,900	13,337,600	17.0
Other Revenue	9,980,100	1,574,000	12.6
Total	\$75,860,200	\$78,648,800	100.0%
Expenditures	\$2,040,700	\$1,680,400	

A voluntary income tax check-off program was created in 1983 to support DNR’s endangered resources protection program. Individual income taxpayers can donate a portion of their tax refund or, if taxes are due, include an additional amount with their tax payment for the endangered resources program. Beginning with tax year 2001, corporate income taxpayers are also allowed to participate in the check-off program. After deducting the costs it incurs for collecting the donated amounts, the Department of Revenue forwards the check-off revenue to DNR for deposit in the conservation fund. For fiscal year 2017-18, 12,900 returns included the endangered resources checkoff, with a total of \$255,700 transferred to the Department. Check-off

revenues and other donations are statutorily matched up to \$500,000 GPR annually.

Additional revenue comes from proceeds from the Endangered Resources license plate. The \$25 additional annual fee required to buy the plate is credited to the account. In 2017-18, sales of 16,860 endangered resources license plates generated \$421,900.

Other revenue to the account include private donations, the sale of resident wild ginseng harvest and Class A resident wild ginseng dealer licenses, sale of wild rice harvesting permits, and revenue from timber harvests in state natural areas.

Warren Knowles-Gaylord Nelson Stewardship Program¹⁶

Wisconsin's first stewardship program was created in 1989 Wisconsin Act 31 to acquire land to expand nature-based outdoor recreational opportunities and protect environmentally sensitive areas. Under the program, the Department of Natural Resources (DNR) acquires land and provides grants to local units of government and nonprofit organizations for land acquisition and property development activities through the issuance of 20-year tax exempt-bonds. These bonds are backed by the full faith and credit of the state, and the government is required to use its taxing power if necessary to repay the debt. Annual debt service payments for principal and interest on stewardship bonds are primarily funded from general purpose revenues (GPR), with a portion paid from the segregated (SEG) conservation fund.

The Knowles-Gaylord Nelson Stewardship Program has high potential for natural climate solutions. The program could be expanded to include not only land conservation (avoided conversion) but also forest management and agricultural management activities.

Since its creation in 1989, the program has been reauthorized twice—in 1999 Wisconsin Act 9 and in 2007 Wisconsin Act 20. The current authorization ran through 2019-2020. The statutory allocations under each reauthorization of the program are shown in the table below.

TABLE 22: ENDANGERED RESOURCES ACCOUNT REVENUE

	Original	Stewardship 2000	Reauthorized Stewardship	Total	%of Total
DNR Land Acquisition	\$150,800,000	\$345,250,000	\$175,500,000	\$671,550,000	52.5%
State Property Development*	35,000,000	65,000,000	74,750,000	174,750,000	13.7
Local Assistance (Grants)**	45,200,000	155,250,000	199,000,000	399,450,000	31.3
Recreational Boating	0	6,500,000	25,000,000	31,500,000	2.5
Total	\$231,000,000	\$572,000,000	\$474,250,000	\$1,277,250,000	100%

*Including Kettle Moraine Springs Fish Hatchery renovations authorization of \$7 million in fiscal year 2014-15.

**Including grants to nonprofit conservation organizations (NCOs) and grants for county forests from the land acquisition subprogram.

15 <https://dnr.wi.gov/news/releases/article/?id=5223>

16 Wisconsin Legislative Fiscal Bureau, Warren Knowles-Gaylord Nelson Stewardship Program, Informational Paper 61, January 2019

Over the last several years changes have been made to the program that limit its ability to acquire land necessary to implementing natural climate solutions. Formerly, only Stewardship grants over \$750,000 required approval from the Legislature’s Joint Finance Committee, and any Committee member objecting to a project had to publicly identify themselves. Now, all grants over \$250,000 require Committee approval, and any member of the Committee can anonymously object to a grant and indefinitely delay critical natural climate solution projects. In addition, the Department of Natural Resources’ ability to purchase potential working forest and wetlands carbon sinks lands with Stewardship dollars has been drastically limited compared to its previous authority and funding.

The current program, as amended by 2015 Wisconsin Act 55, has an annual bonding authority of \$33.25 million through 2019-20. Beginning in fiscal year 2011-12, any remaining unobligated bonding authority may not be used in future fiscal years, effectively reducing authorized program bonding below the statutorily enumerated total.

As of June 30, 2018, the stewardship program has allowed DNR to purchase land or acquire easements on 826,231 acres. The table to the right provides a summary of the acreage acquired by program area.

TABLE 4: CUMULATIVE DNR PURCHASES, JANUARY 1, 1990 THROUGH JUNE 30, 2018

	Acres
Park Stickers	49,858
Campsite Fees	287,303
Campsite Reservations Vendor	7,443
Conservation Patron Allocation	55,160
Golf Fees	105,246
Trail User Fees	203,066
Rents, Sales, and Services	89,443
Timber Sales	28,712
Total	826,231



FISCAL HEALTH, BUDGET, AND DEBT

In 2019, Wisconsin continued its steady economic expansion, setting record high employment levels and maintaining a historically low unemployment rate. Key highlights of Wisconsin's relative economic performance include:

- Wisconsin's unemployment rate remains below the national rate and is among the lowest in the region, tied with Indiana and Minnesota and well below Illinois and Michigan as of September 2019.
- Wisconsin's labor force participation rate of 67.9 percent was the ninth highest nationally in 2018 and well above the national average of 62.9 percent.
- Wisconsin's growth in gross domestic product since 2007 exceeds the region's growth over the same period.
- Wisconsin's per capita income growth since 2007 has matched the nation's growth rate as well as that of the region.

Strong economic growth and certain one-time factors bolstered tax collections, led by unusual strength in corporate income taxes and strong gains in individual income and sales taxes. Total general fund tax collections increased 7.4 percent in Fiscal Year 2019 from Fiscal Year 2018. Individual income tax collections rose 6.1 percent, sales and use taxes rose 4.5 percent, while corporate income taxes surged 49.7 percent. Overall collections were well ahead of budgeted estimates for Fiscal Year 2019 and modestly exceeded the revised forecasts later in the year.

The State of Wisconsin continues to maintain its commitment to solid financial responsibility. The State's Budget Stabilization Fund ended Fiscal Year 2019 with a balance of \$649.1 million, the highest balance ever in this "rainy day" fund and more than double the Fiscal Year 2018 ending balance of \$320.1 million. The General Fund ended Fiscal Year 2019 with an overall cash balance of \$2.51 billion on a budgetary basis. Finally, in May 2019, the state made a payment of \$58.7 million to refund previously issued debt. This will result in an estimated future debt savings for Wisconsin taxpayers of \$68.9 million.

Investors and independent research recognize the strengths of the Wisconsin retirement system; Wisconsin's fully-funded pension system and minimal

other post-employment benefit (OPEB) liabilities continue to be recognized by the credit rating agencies. In August 2017 and October 2017, Moody's Investors Service, Fitch Ratings, and Kroll Bond Rating Agency all raised Wisconsin's credit rating, and in July 2019, Kroll Bond Rating Agency changed the rating outlook to positive from stable, citing Wisconsin's strong pension funding, conservatively managed budgets and improving economy. Higher credit ratings will lower borrowing costs and continue to improve Wisconsin's fiscal position.

Wisconsin continued to build its economic recovery through economic development and infrastructure investment. Revenue growth from the state's continued economic expansion, combined with sound fiscal management, have allowed critical spending pressures to be addressed without raising taxes. The prime example of this ability is the State's growing general fund expenditures for Medicaid, which increased over the last four years by \$486.2 million (from Fiscal Year 2015 to Fiscal Year 2019). State general fund expenditures for the Medicaid program grew from \$1.5 billion in Fiscal Year 2011 to \$3.0 billion in Fiscal Year 2019. No other state program has received an increase approaching this level of magnitude during this period.

In total, the State of Wisconsin's continued commitment to tax relief, financial responsibility and an enhanced business climate are yielding positive results. Wisconsin's combined state and local tax ranking has fallen from the 10th highest in Fiscal Year 2011 to the 19th highest in Fiscal Year 2017 as the State reduced the tax burden on both households and businesses.¹⁷

Due to the ongoing COVID-19 pandemic, many states are projecting decreased revenues and budget shortfalls. Wisconsin is projecting a \$2 billion decline in general fund tax revenues for FY 2021, a 10 percent decline from pre-COVID-19 revenue projections.¹⁸ Wisconsin's 2019-2021 biennial budget was passed during the 2019 legislative session. In April 2020, the Governor ordered an immediate, across-the-board 5 percent cut to all state spending.¹⁹

2019–21 Biennial Budget²⁰

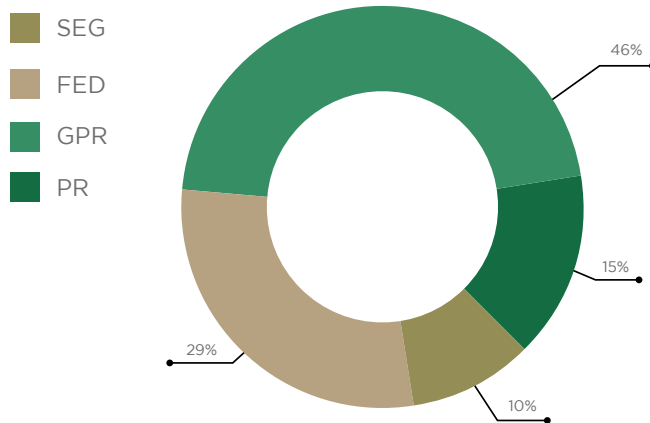
Wisconsin's operating budget is \$40.7 billion in fiscal year 2019-20 and \$42.7 billion in fiscal year 2020-21. These figures include all four major funding sources and all state agencies and programs.

On an annual basis, the Governor's all funds budget for fiscal year 2019-20 represents an increase of \$2,078.4 million (5.4 percent) over the fiscal year 2018-19 adjusted base, and the budget for fiscal year 2020-21 represents an increase of \$2,006.9 million (4.9 percent) compared with fiscal year 2019-20.

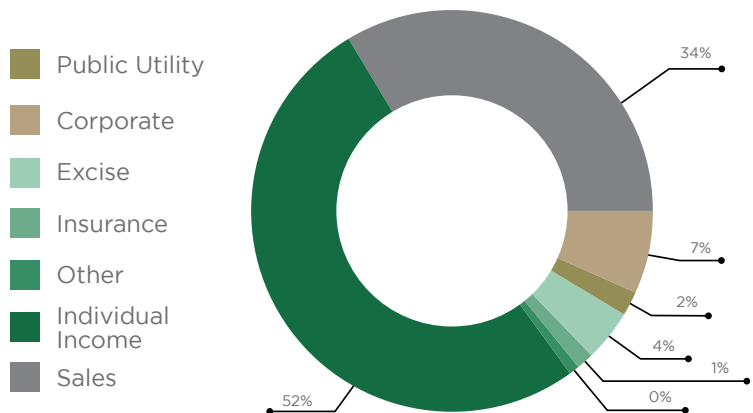
The largest portion of the state budget is funded from general purpose revenue (GPR), which includes the individual income tax, state sales tax, corporate income tax and various other taxes.

Federal revenues (PR-F or SEG-F) are the second-largest source of funds in the state budget. The amounts budgeted represent state agency estimates of the various federal program grants expected to be received. Corresponding state matching dollars, where applicable, are budgeted in the other state funding sources.

Fiscal Year 2020–21 Budget by Fund Source



Fiscal Year 2020–21 GPR Tax Revenue by Type



17 Wisconsin Comprehensive Annual Financial Report For the fiscal year ended June 30, 2019

18 <https://www.cbpp.org/research/state-budget-and-tax/states-grappling-with-hit-to-tax-collections>

19 https://journaltimes.com/news/local/govt-and-politics/governor-orders-5-cut-to-all-state-spending-due-to-covid-19-robin-vosapplauds/article_bc37302c-419f-5933-9cf2-ffc41fc9ec3c.html

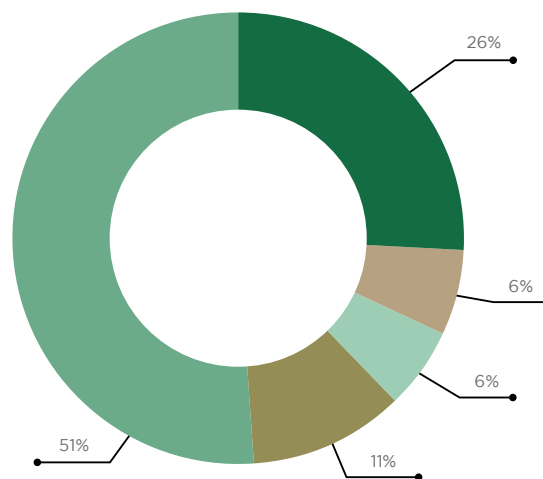
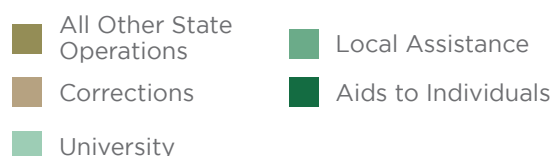
20 Largely excerpted from State of Wisconsin Budget in Brief, February 2019. May change due to COVID-19.

Program revenue (PR-O) is received from user fees that finance specific activities such as public utility regulation, agricultural commodity inspections and State Fair Park admissions. Program revenue is generally budgeted to reflect the anticipated demand for these activities.

Segregated revenues (SEG-O) include revenues from such sources as the motor fuel tax, hunting and fishing license fees, and lottery ticket sales. These revenues are deposited in segregated funds such as the Transportation Fund, the Conservation Fund and the Lottery Fund, which are credited with any interest they earn. Segregated revenues can only be used for specific purposes and are not general revenues of the state.

The Governor recommended a GPR budget of \$18.5 billion in fiscal year 2019-20 and \$19.8 billion in fiscal year 2020-21. On an annual basis, the Governor’s GPR budget for fiscal year 2019-20 is a spending increase of \$669.9 million (3.8 percent) over the fiscal year 2018-19 base, and for fiscal year 2020-21 is a spending increase of \$1,367.7 million (7.4 percent) over fiscal year 2019-20.

Fiscal Year 2020–21 GPR Budget Allocation by Purpose



TOURISM, OUTDOOR RECREATION, AND THE ECONOMY

In addition to the natural goods and services provided by protected lands, public investment in land conservation in Wisconsin contributes to a thriving outdoor recreation economy. According to the Outdoor Industry Association, in 2017 66 percent of Wisconsin residents participate in outdoor recreation each year. Together, residents and nonresidents spend \$17.9 billion each year on outdoor recreation, which generates \$1.1 billion in state and local tax revenue. Such spending also supports 168,000 jobs and \$5.1 billion in wages and salaries. In fact, more than twice as many jobs in Wisconsin depend on outdoor recreation (168,000) as on the dairy industry (79,000).²¹

Lands protected by the state of Wisconsin also support viable populations of fish, game, and other wildlife species. These lands are accessible for wildlife watching, fishing, and hunting, which are critical to the state’s economy and culture. In fact, Wisconsin ranks second in the nation for the number of resident hunters. In 2011, there were 763,384 resident hunters who spent \$2.25 billion on hunting-related retail sales. In the same year, there were 894,522 total hunters across the state, and these hunters spent a combined 12 million days hunting.²² The economic contribution of all hunting activity across the state was more than \$2.5 billion in retail sales, which supported over 34,000 jobs with more than \$1 billion in salaries and wages.²³ Looking beyond hunting, there were 1.2 million anglers and 2.4 million wildlife-watching participants in Wisconsin in 2011. These anglers and wildlife-watchers spent \$1.4 billion and \$1.5 billion on trips and equipment, respectively.²⁴

21 Outdoor Industry Association, <https://outdoorindustry.org/state/wisconsin/>

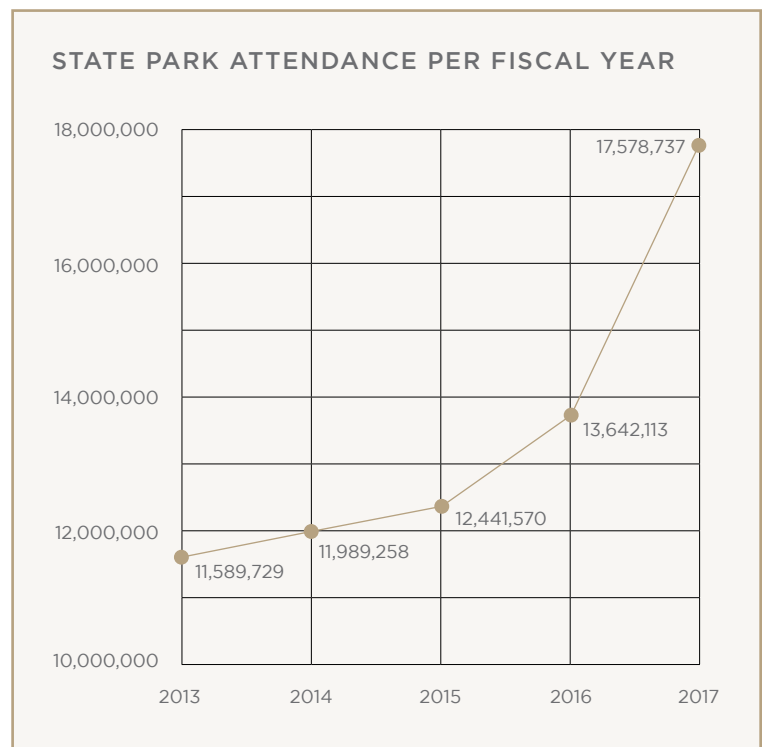
22 This includes residents and non-residents.

23 Southwick Associates. *Hunting in America: An Economic Force for Conservation*. Produced for the National Shooting Sports Foundation in partnership with the Association of Fish and Wildlife Agencies. 2012.

24 U.S. Fish and Wildlife Service, U.S. Census Bureau, 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. While 2016 survey results are available at the national level, the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation did not collect data at the state level, so there are no state-level reports. Thus, 2011 is the most recent year for which data are available.

During its three-decade existence, the Warren Knowles-Gaylord Nelson Stewardship Program, which sunsets in 2020, has been a popular way to preserve land for future generations. Over the years, the program has been renewed and amended multiple times, resulting in a complex series of requirements that can pose challenges to non-profit conservation organizations and other users of the program. Prior to reauthorizing the program, the Governor believes that a wide range of stakeholders should be allowed to weigh-in on the future of the program. Thus, the budget recommends utilizing unused bonding authority to extend the current Knowles-Nelson Stewardship Program for an additional two years, through 2022. In conjunction with the budget, the Governor will work with conservation and recreation stakeholders to make recommendations on the future funding and programmatic needs of the Knowles-Nelson Stewardship Program.

The Wisconsin state park system is renowned as one of the finest parks systems anywhere. Parks attendance is steadily increasing. While the state parks system continues to set attendance records, funding has not kept up with demand. The Governor recommends providing an additional \$1,431,200 SEG to the Department of Natural Resources in each fiscal year for parks operations costs. The funds would pay for additional LTE staff during peak operating times, provide additional supplies for park facilities and cover costs associated with additional electrified campsites. The Legislature ultimately decided to reduce the Governor’s recommendation by \$335,400 annually. The 2019-21 budget includes an increase in parks and southern forest general operations appropriations of \$1,095,800 annually. In order to reduce the amount of time hunters, anglers and trappers spend filling out paperwork and streamline license renewal, the Governor recommends allowing the Department of Natural Resources to establish an automatic renewal option for hunting, fishing and trapping licenses. This change was approved by the Legislature and included in the 2019-21 budget.



The Kickapoo Valley Reserve is an 8,600-acre tract of public land in southwestern Wisconsin that provides outdoor recreational and educational opportunities for citizens of all ages. The forest in the reserve needs proper forest management practices to ensure that the reserve is available for generations to come. In the Governor’s budget, the Kickapoo Reserve Management Board is provided with 1.0 FTE SEG position to hire a forester to properly manage the woodland acres of the reserve.

The Governor also recommends significant investments in the Department of Tourism to invest in this important sector of Wisconsin's economy. The budget proposes a new Office of Outdoor Recreation at the Department of Tourism, to enhance the state's outdoor economy through the promotion of outdoor activities and building partnerships with outdoor-related businesses. The budget provides \$274,300 GPR in fiscal year 2019-20, \$349,000 GPR in fiscal year 2020-21 and 3.0 FTE GPR positions for this effort. The Legislature modified the Governor's proposal to provide funding on a one-time basis during the 2019-21 biennium, and specified that the positions are two-year project positions that expire June 30, 2021.

The Governor also provides \$374,200 GPR in fiscal year 2019-20, \$415,800 GPR in fiscal year 2020-21 and 2.0 FTE GPR positions in the Department of Tourism to enable the department to increase its capacity to produce promotional videos in-house, which will increase efficiency, better align marketing campaigns and ultimately increase tourism in Wisconsin. Finally, the Governor invests in a robust marketing campaign led by the Department of Tourism, providing \$4,080,000 GPR in fiscal year 2019-20, \$1,106,700 GPR in fiscal year 2020-21 and 1.0 FTE GPR position to increase out-of-state marketing, showcase Wisconsin as a premier cultural and recreational destination, and attract tourists.

Debt Administration²⁵

The State of Wisconsin Building Commission, an agency of the State, is empowered by law to consider, act upon, authorize, issue and sell all debt obligations of the state. All general obligation bonds and notes authorized and issued by the state are secured by a pledge of the full faith, credit and taxing power of the State of Wisconsin and are customarily repaid over a period of twenty to thirty years.

The total general obligation debt outstanding for the state as of June 30, 2019 was \$7.7 billion. During Fiscal Year 2019, \$288.5 million of general obligation bonds and \$53.8 million of General Obligation Demand Notes were issued to provide for the acquisition or improvement of land, water, property, highways, buildings, equipment, or facilities for public purposes or to refund outstanding bonds. Of the bonds issued in the current year, \$145.6 million were to be used for University of Wisconsin System academic and self-amortizing facilities, \$98.9 million for transportation projects, \$17.6 million for environmental programs,²⁶ and \$25.7 million for correctional and mental health facilities. The

remaining proceeds from new bonds issued were used for various other projects.

At June 30, 2019, \$4.0 billion of general obligation bonds were legislatively authorized but unissued.

Article VIII of the Wisconsin Constitution and Wis. Stat. Sec. 18.05 limit the amount of general obligation bond debt the state can contract in total and in any calendar year. In total, debt cannot exceed five percent of the value of all taxable property in the state. The amount of debt contracted in any calendar year is limited to the lesser of three-quarters of one percent of the aggregate value of taxable property or five percent of the aggregate value of taxable property less net indebtedness at January 1.

At June 30, 2019, State of Wisconsin general obligation fixed-rate bonds had a rating of AA+ from Fitch Ratings, AA+ from Kroll Bond Rating Agency, Aa1 from Moody's Investors Services, and AA from Standard and Poor's Rating Services. General obligation variable rate notes had a rating of F1+ from Fitch Investors Services, L.P, P-1 from Moody's, and A-1+ from Standard and Poor's Corporation.

²⁵ Wisconsin Comprehensive Annual Financial Report For the fiscal year ended June 30, 2019

²⁶ This includes \$8.96 million for Warren Knowles-Gaylord Nelson stewardship program; \$3.3 million for soil and water projects; \$1.84 million for the safe drinking water loan program; \$1.78 million for dam safety projects; \$1.3 million for conservation reserve enhancement program.

BEST PRACTICES FROM OTHER STATES

Substantial State Investment

The foundation to implement effective natural climate solutions is a strong fiscal commitment on the part of state government through stable revenue sources. Substantial and direct state investment fosters program development and long-term vision. Some existing state programs rely on a single revenue stream, while others use a combination of dedicated revenue sources.

Commonly utilized revenue sources by states for land conservation funding are general obligation bonds, general fund appropriations, lottery proceeds, sales taxes, real estate transfer taxes and deed recording fees. Other state revenue sources for conservation include license plate revenues, hunting and fishing license fees, hotel/motel taxes, cigarette taxes, state income taxes and oil and gas revenues. The highest level of security for conservation funding comes from constitutional dedication.

Common Revenue Streams for State Conservation Programs	
Revenue Stream	Selected Examples
General obligation bonds	California, Maine, Ohio
Budget appropriations	Arizona, Utah, Montana, North Carolina
Lottery proceeds	Colorado, Minnesota, Oregon
Sales taxes	Arkansas, Minnesota, Missouri, New Jersey
Sporting goods sales taxes	Georgia, Texas, Virginia
Real estate transfer taxes	Arkansas, Florida, Maryland, Delaware, Hawaii
Deed-recording fee	New Hampshire, Massachusetts

Source: *The Trust for Public Land's Conservation Almanac*

Since 1996, 57 of 66 statewide conservation and park finance measures have been approved around the country. These ballot measures are often relied upon to protect natural resources under threat of conversion or development. Many state conservation funding programs are created with voter approval and others through the legislative process.

For example, in June 2018, California voters approved a \$4.1 billion bond with 57 percent support. The bond is dedicated to conservation, park and climate programs, and funds state and local parks, environmental protection and restoration projects, water infrastructure, and flood protection projects. This is one of the few funding measures that has explicitly dedicated funds to the effects of climate change.

27 Sherman, Lucille. "Voters asked to renew parks and conservation tax for the fifth time." *Columbia Missourian*. October 12, 2016. Accessed June 27, 2020. http://www.columbiamissourian.com/news/state_news/voters-asked-to-renew-parks-and-conservation-tax-for-the/article_c12a63f6-8c95-11e6-b2e1-c350aae73d9f.html

28 Missouri State Parks. "Parks, Soils and Water Sales Tax." Accessed June 27, 2020. <https://mostateparks.com/page/55069/parks-soils-and-water-sales-tax>

29 Nebraska Environmental Trust 2016 Annual Report

30 Nebraska Environmental Trust (https://environmentaltrust.nebraska.gov/about/our_priorities.html)

31 <https://governor.ohio.gov/wps/portal/gov/governor/media/news-and-media/031419>

Midwestern Examples

These funding examples to the right are statewide programs focused on land conservation. These existing funds have the potential to be used for land conservation projects to help implement natural climate solutions.

MICHIGAN

In 1984, voters passed a constitutional amendment establishing the Michigan Natural Resources Trust Fund and provided constitutional protection for the acquisition of land for public recreation and environmentally significant lands. Financial support is provided to local governments and the Department of Natural Resources through oil and gas lease revenues. About \$30 million is generated annually for conservation purposes. Such funds could potentially be used to help implement a state natural climate solutions plan.

MISSOURI

In 1976, Missouri voters passed a permanent 1/8th of 1 percent sales tax, which generates \$90 million to \$100 million a year for the management of Missouri's fish, forestry and wildlife. These funds are administered by the Department of Conservation. The state also has a separate, dedicated sales tax for state parks and soil and water conservation. In 1984, Missouri voters approved a constitutional amendment that implemented a 1/10th of 1 percent sales tax. The tax generates approximately \$90 million annually and revenue is split equally between these two programs. These funds are administered by the Department of Natural Resources. The tax provides about 75 percent of annual funding for the state parks department.²⁷ Voters reauthorized the tax in 1988, 1996, and 2016. At least two-thirds of voters approved the reauthorization each time it appeared on the ballot.²⁸

NEBRASKA

In 1992, Nebraska voters approved a constitutional amendment that created the Nebraska Lottery and the Environmental Trust. Of the total revenues, 44.5 percent is to be used for environmental protection purposes. The remaining funds are used for education purposes. In FY16, the Trust Fund received \$18.8 million in lottery proceeds. The lottery has transferred more than \$260 million to the Trust in the last 22 years.²⁹ Trust Fund revenue currently supports grants in the following priority areas: habitat, surface and groundwater, waste management, air quality, and soil management.³⁰

OHIO

In 2000 and 2008, voters approved constitutional amendments that secured \$800 million in bond funding for the Clean Ohio Fund. The Fund restores, protects, and connects Ohio's important natural and urban places by preserving green space and farmland, improving outdoor recreation, and cleaning up brownfields to encourage redevelopment and revitalize communities.

In 2019, Ohio Governor Mike DeWine outlined his H2Ohio water quality initiative, which he introduced as part of his proposed budget for the 2020-2021 biennium. The proposal would create a special H2Ohio Fund that would be used to protect Ohio's water quality over 10 years and could amount to approximately \$900 million. H2Ohio funding would be used for water programs across the state, including for Lake Erie and other rivers, lakes, and waterways in Ohio, for efforts such as:

- Prevention and land-based management programs, such as funding efforts to minimize the introduction of nutrients and other runoff into Ohio waterways, additional staffing at soil and water conservation districts, and more aggressive action to address failing septic systems and other water treatment needs across Ohio.
- Water-based restoration programs, such as the creation of more wetlands in targeted areas to naturally filter out nutrients and sediment and utilizing emerging technologies to minimize water quality problems and treat polluted water.
- Science, research, and measurements, such as supporting ongoing research and data collection to advise on metrics and measurable goals, and to stay updated on and utilize new prevention and treatment technologies.³¹

CHOOSING A NATURAL CLIMATE SOLUTIONS FUNDING STRATEGY

There are several types of broad-based revenue sources available to state governments to pay for natural climate solutions. Three primary funding mechanisms include discretionary spending (i.e., budget appropriations), dedicated funding streams, and general obligation bonds.

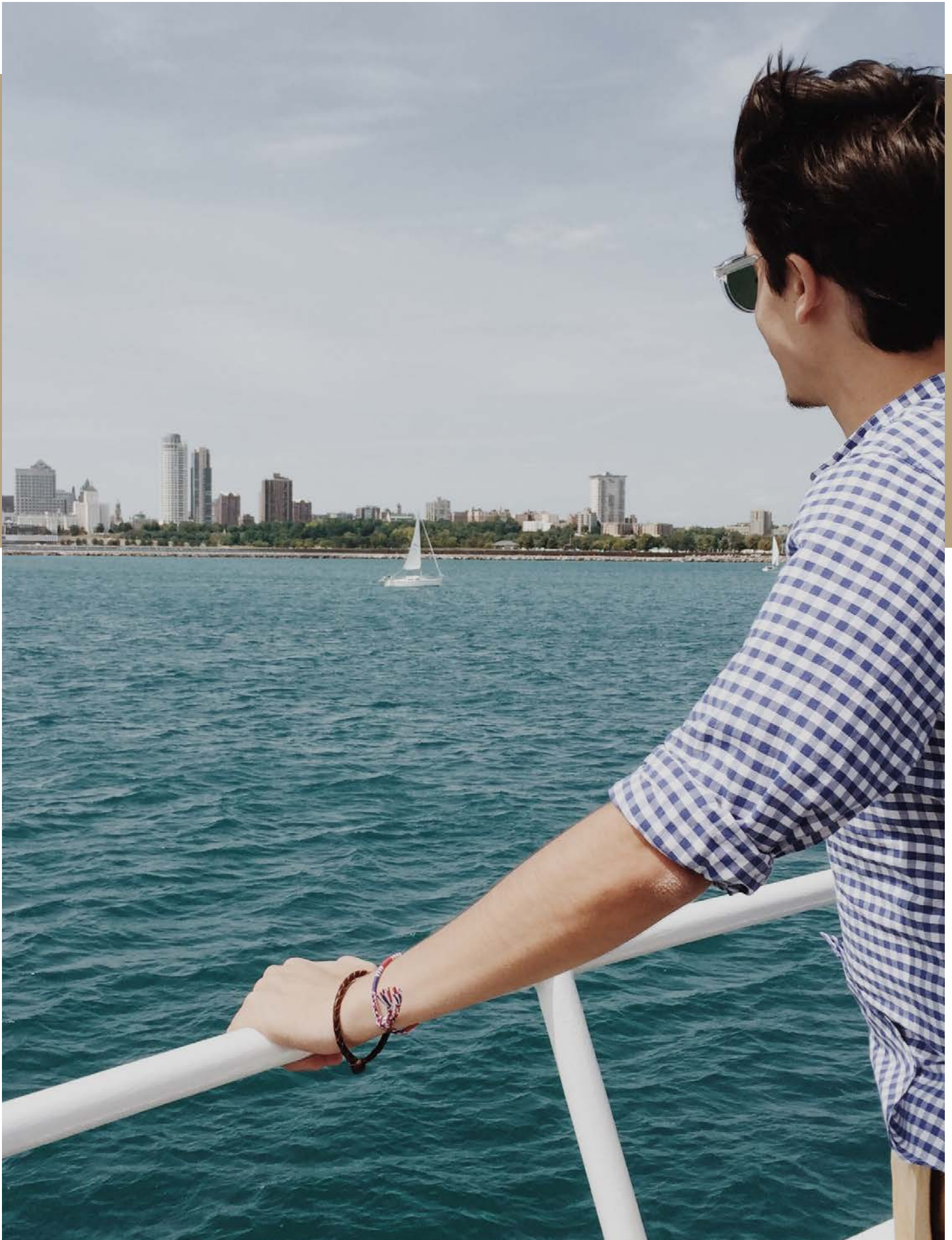
The financing options utilized by a state will depend on a variety of factors such as taxing capacity, budgetary resources, voter and legislator preferences, and political will. While many states can create funding for conservation through their budgetary process, this either happens infrequently or does not yield adequate funding. In The Trust for Public Land's experience, whether for conservation funding, or funding for specific projects to promote natural climate solutions, governments that create funding via the budget process generally create less funding than those that create funding through voter supported ballot measures. As elected officials go through the process of making critical budgetary decisions, funding for parks and land conservation sometimes lags behind other public purposes and behind what voters usually support.

With their own funding for natural climate solutions, state governments are better positioned to leverage funding with federal agencies and private philanthropic partners. Having predictable funding sources empowers the state to establish long-term climate priorities that conserve, restore and manage forests and wetlands to help communities become resilient to climate change impacts. In addition, sustainable funding will help absorb, store and mitigate carbon dioxide emissions while creating co-benefits, such as the conservation of habitat, water supplies, working farms and forests, parks, and trails.

This feasibility report focuses on potential revenue options that are significant, pragmatic, and proven. This study examines general obligation bonds, the sales tax, property tax, real estate transfer fee, room tax, severance tax, carbon tax, and cap and trade. This study also explores several policy and regulatory strategies to promote natural climate solutions.

When evaluating the range of funding options available for natural climate solutions in Wisconsin, it is helpful to keep several factors in mind. These funding favorability factors include:

- **Nexus between funding source and natural climate solution:** Is there a natural linkage between the funding source (like a sporting goods sales tax dedication) and climate mitigation, resilience and mitigation?
- **Revenue raising capacity:** Will the revenue source raise enough money to accomplish reasonable conservation objectives? Establishing a new funding source requires significant effort and must generate adequate funding to warrant the effort.
- **Reliability:** Will the source provide consistent funding, or will it suffer fluctuations due to the economy? Will it be subject to diversions to other emerging priorities?
- **Competition:** Are there other state agencies or programs competing for the same funding source?
- **Precedent:** Has another state been successful in using the funding option? Breaking new ground can be more challenging when there is no precedent.
- **Political feasibility:** Is there a political champion who will lead the effort?
- **Lack of organized opposition:** Another aspect of political feasibility is the presence of likely, paid opposition. Certain funding options could have predictable opponents and can be hard to neutralize.
- **Potential partners:** Can supporters of natural climate solutions align themselves with other groups to mutually establish a new funding source (e.g., the arts, sportsmen, water resource protection, recreation, outdoor industry, etc.)?



GENERAL OBLIGATION BONDS

Wisconsin has the capacity to issue additional general obligation bonds for natural climate solutions under the statutory debt limits.

The annual debt limit for 2018 was just over \$4.1 billion as shown in the table to the right. The State Constitution imposes a ceiling on the aggregate amount of general obligation debt the state may incur in any calendar year. Annual debt is limited to the lesser of: (a) 0.75 percent of the aggregate value of all taxable property in the state; or (b) 5 percent of the aggregate value of all taxable property in the state, less the state’s net indebtedness as of January 1 of the current year. For purposes of calculating the 2018 debt limit, the aggregate full market value of all taxable property in the state was \$549,532,691,500. The net indebtedness of the state was \$8,155,029,919.

Comparison of GO Debt Contracted to Debt Limitation			
Calendar Year	Debt Actually Contracted	Annual Debt Limit	Debt Contract as % of Limitation
2009	\$524,765,000	\$3,839,339,873	14.1%
2010	\$809,293,000	\$3,719,281,442	21.8%
2011	\$896,260,000	\$3,651,481,746	24.5%
2012	\$735,585,000	\$3,533,193,969	20.8%
2013	\$642,295,000	\$3,506,269,200	18.3%
2014	\$598,170,000	\$3,596,099,766	16.6%
2015	\$750,475,000	\$3,679,519,080	20.4%
2016	\$713,305,000	\$3,788,432,462	18.8%
2017	\$607,975,000	\$3,944,884,094	15.4%
2018	\$547,290,000	\$4,121,495,186	13.3%

Source: Wisconsin Legislative Fiscal Bureau, State Level Debt Issuance

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2012	\$735,585,000	\$3,533,193,969	20.8%
2013	\$642,295,000	\$3,506,269,200	18.3%
2014	\$598,170,000	\$3,596,099,766	16.6%
2015	\$750,475,000	\$3,679,519,080	20.4%
2016	\$713,305,000	\$3,788,432,462	18.8%
2017	\$607,975,000	\$3,944,884,094	15.4%
2018	\$547,290,000	\$4,121,495,186	13.3%

Source: Wisconsin Legislative Fiscal Bureau, State Level Debt Issuance

The state’s total outstanding general obligation debt as of December 2018 was \$7.75 billion. The table to the left shows the other types of debt the state has incurred, in addition to general obligation debt. The bonding authorization for a particular agency purpose is cumulative; it refers to bonds issued rather than outstanding. Thus, if \$1 million of bonds have been issued for a purpose under a \$1 million bonding authorization, the Legislature must increase the bonding authorization before any additional bonding takes place, even if some or all of the bonds in the original authorization have been retired. The Governor recommends a level of borrowing authority, and the Legislature sets the bonding authorization as part of the budget process.

The state holds excellent general obligation bond ratings as follows: AA+ from Fitch Ratings; Aa1 from Moody’s Investors Services; and AA from Standard and Poor’s Rating Services.

The table above indicates the estimated annual debt service for GO bonds ranging from \$100 million to \$300 million. If Wisconsin was to issue a \$100 million GO bond, the state would pay an estimated annual debt service of about \$12.3 million for 10 years.³²

Use of bonds to fund land conservation presents both opportunities and potential drawbacks. Borrowing a specified amount in bonds can provide the state with the revenue and flexibility needed to fund large-scale natural climate solutions projects upfront, when land is available. Bonds also ensure a steady stream of funding independent from the general operating budget. Costs are typically spread out and therefore borne by both current and future beneficiaries. One potential drawback is that GO bonds proceeds may not be used for maintenance and operations: bonds are solely for acquisition and capital improvement projects.³³ In addition, there is often competition for GO debt among many programs at the state level in need of financing, especially in times of budget shortfalls. Still, since 2000, 97 percent (32 of 33) of statewide bond measures for land conservation have been approved by voters from California, to Texas, to Virginia, to Maine. State bonds in Wisconsin do not require voter approval; the state building commission has supervision over all matters relating to the contracting of public debt and the issuance of evidence of indebtedness therefor.³⁴

Wisconsin GO Bond Financing Estimates	
Bond Issue	Annual Debt Service
\$100,000,000	\$12,329,094
\$150,000,000	\$18,493,642
\$200,000,000	\$24,658,189
\$250,000,000	\$30,822,736
\$300,000,000	\$36,987,283

Source: Wisconsin Legislative Fiscal Bureau, State Level Debt Issuance
 *Includes Environmental Improvement Fund bonds.

32 The Trust for Public Land’s bond cost calculations provide an estimate of debt service for potential bond issuances. Assumptions are that the entire debt amount is issued in the first year and payments are equal until maturity. In reality, the entire amount would most likely not be issued all at once. The jurisdiction’s financial advisors, bond counsel and underwriters would establish the actual terms of any bond.

33 Federal government rules governing the issuance of tax-exempt bonds limit the use of proceeds to capital purposes such that only a small fraction of bond funds may be used for maintenance or operations. State and local laws may further limit the use of bond proceeds.

34 Wisconsin Statutes 18.03

SALES TAX

Many states opt to use state sales tax revenue for land conservation. For example, in Georgia, a voter-approved constitutional amendment created the Georgia Outdoor Stewardship Trust Fund to protect water quality, wildlife habitat, and parks, and dedicated up to 80 percent of the existing sales tax collected by sporting goods stores to those purposes. In Minnesota, voters approved a Constitutional Amendment increasing their state sales tax by 3/8th of 1 cent in November 2008.

The passage of this measure followed the economic downturn and supports new investments in parks, land conservation and cultural institutions. It will raise an estimated \$6.9 billion over 25 years. Missouri and Arkansas have also both established 1/8th cent state sales taxes dedicated to conservation and are widely acclaimed for their efforts to support funding for wildlife conservation.

In Wisconsin, the state sales tax is 5 percent on the purchase price of taxable retail sales. In addition, counties may impose local sales tax of up to 0.5 percent on the purchase price. In limited circumstances, other taxes may apply (such as “room” tax and stadium district tax).³⁵ Factoring in local taxes, Wisconsin is ranked 43rd out of 50 states for combined state and local sales tax rates (5.46 percent). Compared to its neighbors, Wisconsin has the lowest state tax rate and the lowest combined state and local tax rate.³⁶

State and Local Sales Tax Rates					
State	State Tax Rate	Rank	Avg. Local Tax Rate	Combined Rate	Combined Rank
Illinois	6.250%	13	2.83%	9.08%	6
Minnesota	6.875%	6	0.58%	7.46%	18
Iowa	6.000%	17	0.94%	6.94%	27
Michigan	6.000%	17	0.00%	6.00%	38
Wisconsin	5.000%	33	0.46%	5.00%	43

Source: *The Tax Foundation, State and Local Sales Tax Rates, January 2020*

Increasing the Sales Tax

The general state sales tax has the potential to generate substantial funds for natural climate solutions in Wisconsin. The table below shows the estimated annual cost per household and annual revenue that could be generated by an increase in the state sales tax. These cost and revenue estimates

are based on an estimated sales tax collection of \$5.4 billion for the 2017-18 fiscal year. For example, a 0.25 percent increase above Wisconsin’s current 5 percent state sales tax would raise more than \$272 million annually for natural climate solutions at a cost of \$34 to the typical household.

Wisconsin Sales Tax Revenue & Cost Estimates				
Sales Tax Rate Increase	Annual Revenue*	Annual Cost/Household	Total Revenue Attributed to Resident Spending	% Revenue Attributed to Resident Spending
0.125%	\$136,202,500	\$17	\$39,886,118	29%
0.250%	\$272,405,000	\$34	\$79,772,237	29%
0.375%	\$408,607,500	\$51	\$119,658,355	29%
0.5..%	\$544,810,000	\$68	\$159,544,474	29%

* Based on FY 2018 collections of \$5,448.1 million from 5% state sales tax (Wisconsin Legislative Fiscal Bureau).

Dedicating a Portion of Existing Sales Tax (Sporting Goods Sales Tax)

Three states, Texas, Virginia, and Georgia, dedicate a portion of general sales tax revenue attributable to the purchases of sporting goods to parks and land conservation. In November 2019, Texas voters approved a constitutional amendment dedicating sporting goods sales tax revenue to parks and recreation. The measure was approved by 88 percent of voters statewide. The Texas Legislature passed a law in 1993 allowing the tax revenues to be used for parks and historical sites; however, over the years the funds were often diverted to balance the state budget. The constitutional amendment ensures that the funds will go to the Texas Parks and Wildlife Department and the Texas Historical Commission.

Example: Georgia Outdoor Stewardship Act³⁸

During the 2018 legislative session, the Georgia General Assembly passed House Bill 332 and House Resolution 238, establishing the Georgia Outdoor Stewardship Act. The final votes were 168-1 in the House and 55-0 in the Senate. On November 6, 2018 Georgia voters passed the amendment with 83 percent support. Revenues are estimated to be \$20 million per year for ten years. This newly founded grant program provides a dedicated funding mechanism to support parks and trails and protect and acquire lands critical to wildlife, clean water and outdoor recreation across the state of Georgia. The Georgia Outdoor Stewardship Act became effective July 1, 2019. The first grant funding cycle opened in the fall of 2019.

The Georgia Department of Natural Resources announced the first selection of the Georgia Outdoor

Stewardship Program “Conserve Georgia” grants for conservation and outdoor recreation projects in February 2020. The grants totaled \$19.86 million of funding to benefit local parks and trails systems and state-owned lands. Grantees joined with private, public, and non-profit partners to help provide the support to leverage the state outdoor stewardship dollars with an estimated \$77 million in additional match funds.

For the inaugural 2019–20 grant cycle, eligible applicants, which include local governments, recreation authorities, state agencies, and certain non-profit organizations, cumulatively submitted 58 applications requesting a total of \$78 million dollars in grant funding. The Georgia Outdoor Stewardship Trust Fund Board of Trustees reviewed all projects and selected a slate of proposals, which

35 Wisconsin Legislative Fiscal Bureau, Sales and Use Tax, Informational Paper 7, January 2019

36 The Tax Foundation, State and Local Sales Tax Rates, January 2020, <https://taxfoundation.org/2020-sales-taxes/>

37 Wisconsin Legislative Fiscal Bureau, Sales and Use Tax, Informational Paper 7, January 2019

38 Largely excerpted from 2019 Georgia Outdoor Stewardship Program Workshop PPT, Georgia Department of Natural Resources (<https://gadnr.org/gosp>)

was subsequently approved by the Board of Natural Resources and the Appropriations Subcommittees of the State House of Representatives and State Senate over DNR.

Of the 14 selected, eight projects are by local governments or nonprofit organizations for the development or stewardship of local parks or trail systems, two are by DNR for the acquisition of conservation land, and four are by DNR for stewardship projects on state lands.³⁹

Allocations for each funding pool (Local Parks and Trails of Regional Significance, State Stewardship, and State Acquisition) is determined by the Board of Trustees prior to each cycle announcement. Local parks and trails projects have a \$500,000 minimum and a \$3 million maximum funding threshold. There is no minimum or maximum amounts for State Stewardship or State Acquisition projects. Grantees pay for 100 percent of the total project cost and then submit for reimbursement of 75 percent of eligible costs. Applicants must provide at least 25 percent of the total project cost as a match.

LOCAL TRAILS AND PARKS OF REGIONAL SIGNIFICANCE

These funding opportunities are reserved for local governments, constituted recreation authorities, and nongovernmental entities to acquire and/or improve local parks, trails, and conservation lands. The Local Parks and Trails of Regional Significance Application shall be used to apply for any of the three distinct projects below:

- Acquisitions of property, to include conservation easements
- Local stewardship funding for maintenance, restoration or improvement projects
- Combination projects that involve both the acquisition of land, either through fee-simple, lease, or conservation easement purchase, and a maintenance, restoration or improvement project.

The 2019-2020 selected projects are as follows:

Forsyth County, Eagles Beak Park, \$2,250,000

Forsyth County plans to create a 225-acre outdoor passive recreation space along the biologically diverse Etowah River. This project will serve as a recreation corridor for residents and visitors, featuring a large green space area, ADA-approved play park and extensive trail system marking the historical Trail of Tears.

Jefferson County, Where the Moss Meets the River, \$898,983

Jefferson County plans to develop 230 acres of lowland forest bordering the meandering Ogeechee River to enhance and expand opportunities for recreation, healthy living and wellness, nature education and conservation of land for public use. Park facilities will include new hiking and mountain biking trails, campsites, an outdoor classroom and kayak launch.

City of Johns Creek, Cauley Creek Park Development, \$3,000,000

The City of Johns Creek plans to develop the 200-acre Cauley Creek Park located on the Chattahoochee River between Abbotts Bridge Chattahoochee River NRA and National Park Service land. The funds will be directly used to develop the park into a community destination that both serves the local population and encourages visitation by providing nature-based recreational opportunities such as hiking, biking, fishing and wildlife viewing that are not presently available in the area.

South Fork Conservancy, Confluence Natural Trail Network and Blueway, \$950,500

South Fork Conservancy plans to create two-miles of nature trails in the heart of Atlanta, connecting four regional trail networks and 25 acres of green space. This project will enable hundreds of thousands of residents within a 10-minute walk of the trail to enjoy new outdoor recreational opportunities in some of the most park-deficient neighborhoods of Atlanta.

39 <https://georgiawildlife.com/dnr-announces-14-grants-through-georgia-outdoor-stewardship-program>

40 <https://georgiawildlife.com/dnr-announces-14-grants-through-georgia-outdoor-stewardship-program>

41 <https://georgiawildlife.com/dnr-announces-14-grants-through-georgia-outdoor-stewardship-program>

Trees Atlanta, Inc., Atlanta BeltLine Westside Extension Trail, \$1,000,000

Trees Atlanta, Atlanta BeltLine, Inc. and the PATH Foundation plan to construct the Atlanta BeltLine Westside Trail Extension to the Silver Comet Trail. The project will help close the gap between downtown Atlanta and the Silver Comet Trail, while also addressing fragmented wildlife habitat in an urban environment by extending the Atlanta BeltLine Arboretum.

The Trust for Public Land, Chattahoochee Camp and Paddle Trail, \$2,260,000

The Trust for Public Land plans to create a 48-mile long camp and paddle trail on the Chattahoochee River. Funds will be used to install three rustic campsites within the Chattahoochee River National Recreation Area boundary to enable multi-day paddling trips.

Unified Government of Athens-Clarke County, Restore Our River, \$550,000

Athens-Clarke County plans to re-establish high-quality wildlife habitat, enhance ecosystem services and provide enhanced outdoor recreation opportunities along the North Oconee River in Athens' downtown district. This project creates the first publicly accessible water trail on the North Oconee River as well as in Athens-Clarke County.

City of Winder, Winder/Fort Yargo Multi-Use Connector Trail, \$1,001,757

The City of Winder plans to construct a one-mile multi-use trail for walking, bicycling, inline skating and nature viewing from downtown Winder to Fort Yargo State Park. The 10 ft.-wide pathway will create access for residents, park patrons and visitors to and from the state park and the city.⁴⁰

STATE STEWARDSHIP

State stewardship funding is available for State of Georgia agencies and nongovernmental entities only. These entities may apply for maintenance, restoration or improvement projects to enhance public access, use or safe enjoyment of permanently protected conservation land and current state-owned parks.

The 2019-2020 selected projects are as follows:

Department of Natural Resources, Coastal Resources Division, Noyes Cut Ecosystem Restoration Project, Camden County, \$1,733,833

The Department of Natural Resources, partnering with the U.S. Army Corps of Engineers, plans to close and fill the no-longer-needed Noyes Cut on the Satilla River in order to restore fisheries in coastal waters. This ecosystem restoration project will improve habitat and water quality for important marine species as well as improve recreational opportunities for boaters, anglers, hunters and wildlife viewers.

Department of Natural Resources, Wildlife Resources Division, Sprewell Bluff Longleaf Pine Restoration, Meriwether County, \$69,025

The Department of Natural Resources plans to restore approximately 550 acres of loblolly pine plantation to longleaf pine habitat on Sprewell Bluff WMA. This project will return a native forest type to Sprewell Bluff, benefiting several high priority species and improving recreational opportunities for hunters, hikers and wildlife enthusiasts.

Department of Natural Resources, Wildlife Resources Division, Sandhills Longleaf Pine Restoration, Taylor County, \$26,884

The Department of Natural Resources plans to restore approximately 125 acres of longleaf pine on the West Unit of Sandhills WMA. Restoration of this habitat will benefit populations of gopher tortoise, loggerhead shrike, Bachman's sparrow, coal skink, and southern hognose snake, among other species of conservation concern.

Department of Natural Resources, Wildlife Resources Division, Post-Hurricane Michael Longleaf Pine Restoration at Silver Lake and Chickasawhatchee, Decatur and Dougherty Counties, \$60,500

The Department of Natural Resources plans to replant containerized longleaf seedlings on 500 acres of storm-damaged pine stands on Silver Lake and Chickasawhatchee WMAs. This project will address the urgent need to replant and reforest mature pine stands that were impacted by Hurricane Michael on the two largest WMAs in Southwest Georgia.⁴¹

STATE ACQUISITION

State Land Acquisitions funding is available for State of Georgia agencies and nongovernmental entities only. These agencies may apply to acquire critical areas for the provision or protection of clean water, wildlife, hunting, military installation buffering or for natural resource-based outdoor recreation. The State Land Acquisition Application shall be used to apply for either of the two distinct projects below:

- Acquisitions of property, to include conservation easements
- Combination projects that involve both the acquisition of land, either through fee simple or conservation easement purchases, **and** a maintenance, restoration or improvement project.

The 2019-2020 selected projects are as follows:

Department of Natural Resources, Wildlife Resources Division, Cabin Bluff Acquisition, Camden County, \$2,555,000

The Department of Natural Resources plans to acquire 7,958 acres of property which will be managed as a Wildlife Management Area and 3,217 acres under a conservation easement for a total of 11,175 acres in Camden County, providing permanent protection to the property. Cabin Bluff is located within 10 miles of I-95 and offers opportunities for hunting, fishing, boating, camping, hiking and wildlife observation.

Department of Natural Resources, Wildlife Resources Division, Ceylon Acquisition (Phase I), Camden County, \$3,504,000

The Department of Natural Resources plans to acquire over 4,000 acres in Camden County. This property, which will be managed as a Wildlife Management Area, is located within 5 miles of I-95 and offers opportunities for hunting, fishing, boating, camping, hiking and wildlife observation.⁴²

Sporting Goods Sales Tax in Wisconsin

In FY 2020, sales tax revenue from sporting goods stores in Wisconsin was about \$46.8 million.⁴³ A portion of this revenue stream, for example, \$35 million, could be dedicated to natural climate solutions, depending upon how the state might define “sporting goods” for this purpose, for example, “hunting, fishing, and wildlife watching equipment.”

Such dedication would take away revenues currently allocated to other purposes and potentially necessitate cuts to other areas of the Wisconsin state budget or create the need to generate additional funds from other sources. However, \$35 million in sales tax revenue represents less than 1 percent of total state sales and use tax revenue in 2019.

⁴² <https://georgiawildlife.com/dnr-announces-14-grants-through-georgia-outdoor-stewardship-program>

⁴³ Communication with Wisconsin Department of Revenue. Note that this revenue is only for filers that self-report as sporting goods stores and does not include sales tax on sporting goods sold at retailers such as Target or Amazon.com.



PROPERTY TAX

The property tax is the largest source of combined state and local tax revenue in Wisconsin. Prior to 1900, the property tax was the state government’s largest tax. As the state’s economy has diversified, state government has come to rely on other tax sources and has established various aid programs to reduce local reliance on the property tax.

The last remaining state property tax was the state forestation tax, which was repealed in 2017 Act 59, but was previously levied in 2016(17) at a rate of \$0.17 per \$1,000 of value. Revenues from the tax were replaced with an annual transfer from the state general fund to the state conservation fund in an amount equal to \$0.17 mill for each dollar of assessed valuation of property in the state.⁴⁴

The tax would have generated more than \$89 million in FY 2017-18 and \$91 million in FY 2018-19.⁴⁵ The average homeowner paid about \$26 for the tax in 2016.⁴⁶

Wisconsin could reinstate a statewide property tax and dedicate the revenues to natural climate solutions. For example, a property tax of \$0.17 per \$1,000 value would generate more than \$98 million annually and cost the median homeowner \$30 per year in additional property taxes.

Wisconsin Sales Tax Revenue & Cost Estimates			
Milage	Total Assessed Value*	Estimated Annual Revenue	Cost/Year/Median House**
0.10	\$580,872,723,300	\$58,087,272	\$17
0.15	\$580,872,723,300	\$87,130,908	\$26
0.17	\$580,872,723,300	\$98,748,363	\$30
0.20	\$580,872,723,300	\$116,174,545	\$35
0.25	\$580,872,723,300	\$145,218,181	\$43

* Wisconsin Department of Revenue, Property Tax Overview, December 2019

** Median value \$173,600, US Census Quickfacts

44 Wisconsin Legislative Fiscal Bureau, Property Tax Level in Wisconsin, Informational Paper 13, January 2019

45 Wisconsin Legislative Fiscal Bureau, State Tax and Fee Modifications Included in 2017 Act 59, December 2017

46 <https://www.wpr.org/legislators-plan-approve-state-property-tax-cut>

REAL ESTATE TRANSFER FEE

Several states use a real estate transfer tax to fund parks and land conservation, including Illinois, Pennsylvania, Arkansas, and Tennessee. As one example, Florida has long employed revenues generated from a documentary stamp tax to fund conservation through a state program known as Florida Forever.

Since the inception of the Florida Forever program in July 2001, the state has purchased more than 818,616 acres of land for conservation with over \$3.1 billion of revenue generated from real estate transactions.⁴⁷

In January 2019, Massachusetts Governor Baker proposed a new source of funding for climate resiliency projects (which include natural climate solutions) to be funded by an increase in the state's real estate transfer tax. Currently, the state imposes a tax on any transfer of real estate ownership, equal to \$4.56 per \$1,000 of property value. The transfer tax is levied on the seller. Governor Baker's recommendation would raise that rate to \$6.84 per \$1,000 of property value. According to the Baker Administration, this would raise between \$130 million and \$150 million per year that would be allocated toward a state-managed fund to address climate change.

There is a reasonable nexus between real estate development and land conservation, and the state of Wisconsin could consider increasing the current fee and dedicating the revenue to natural climate solutions. However, since revenues from the tax fluctuate with the real estate market, income can be difficult to predict. In addition, the creation of a new tax or increase of an existing fee involving real property is usually strongly opposed by the real estate industry – a well-funded opponent.

Wisconsin currently imposes a real estate transfer fee on the grantor of real estate at the rate of \$0.30 per

\$100 of value.⁴⁸ Twenty percent of all fees collected are retained by the county in which the transaction occurred, and the remaining balance is transmitted to the state general fund.⁴⁹ The total amount of real estate transfer fee collected in Wisconsin showed steady increases from \$54.0 million in 2000 to \$99.9 million in 2005. During the period between 2006 and 2011, however, the amount declined sharply from \$93.3 to \$44.2 million. Since 2012, the fee collected has increased each year from \$57.8 million to \$99.4 million in 2019.⁵⁰

Wisconsin Real Estate Transfer Fee Estimates

Fee Increase	Annual Revenue
\$0.05	\$16,566,667
\$0.10	\$33,133,333
\$0.15	\$49,700,000
\$0.20	\$66,266,667

Wisconsin could increase the real estate transfer fee and dedicate the additional revenues to natural climate solutions. Using 2019 collections of \$99.4 million as a benchmark, an additional \$0.05 per \$100 value (which would equate to a 17 percent increase) could be expected to generate \$16.5 million. The additional \$0.05 per \$100 would cost the seller of the median home in Wisconsin \$86.80.⁵¹ The State Legislature would need to pass a law increasing the real estate transfer fee.

47 <https://floridadep.gov/lands/environmental-services/content/florida-forever>

48 WI Statutes, 77.22

49 WI Statutes, 77.24

50 Wisconsin Department of Revenue RETransfer

51 U.S. Census Quickfacts, Median value of owner-occupied housing units, \$173,600

ROOM TAX

Wisconsin could consider imposing a statewide room, or lodging, tax to fund natural climate solutions. The state authorizes municipalities to levy a tax on the renting of sleeping rooms at hotels, motels, resorts, inns, bed and breakfasts and other lodging facilities in the local area.

The tax rate can be set from 0 to 8 percent, with limited exceptions. In 2017, 291 of Wisconsin's 1,853 municipalities had a room tax. The median room tax rate was 5.5 percent.⁵² State statutes require that 70 percent of room tax collections must be spent to promote the local tourism industry.

Twenty-eight states and the District of Columbia levy a statewide lodging tax at rates ranging from 0.32 percent in Utah to 15 percent in Connecticut. Of the states neighboring Wisconsin, Iowa levies a 5 percent state lodging tax, Illinois levies 6 percent, and

Michigan levies up to 6 percent depending on location and the size of the hotel.⁵³ Minnesota is the only neighboring state without a statewide lodging tax.

The current room taxes levied by 291 Wisconsin municipalities (with a median tax rate of 5.5 percent) generated more than \$99.5 million in 2017.⁵⁴ Based on these figures, a statewide room tax of 5 percent could be estimated to generate more than \$100 million per year. There is a reasonable nexus between parks, land conservation, and tourism.

SEVERANCE TAX

Wisconsin imposes a severance tax upon each producer who severs oil or gas from the soil or water in the state. The tax is imposed at a rate of 7 percent of the market value of the total production of oil or gas.

If more than one producer severed oil or gas at the same location, the tax owed by each producer would be proportionate to each producer's ownership interest. However, the person in charge of production would be liable for the entire amount of the tax due, but could withhold the amount of tax imposed on each producer. Proceeds from the tax are deposited into the general fund.

The tax was established January 1, 1992, pursuant to 1991 Wisconsin Act 262. Since that time, no oil or gas wells have been operated in the state; therefore, no revenues have been generated from the tax. Thus, the severance tax is not a viable option for funding natural climate solutions in Wisconsin.⁵⁵

⁵² Wisconsin Legislative Fiscal Bureau, Local Government Revenue Options, Informational Paper 15, January 2019

⁵³ <https://www.ncsl.org/research/fiscal-policy/state-lodging-taxes.aspx>

⁵⁴ Wisconsin Legislative Fiscal Bureau, Local Government Revenue Options, Informational Paper 15, January 2019

⁵⁵ Wisconsin Legislative Fiscal Bureau, Miscellaneous Taxes, Informational Paper 11, January 2019

CARBON TAX

A carbon price or tax creates a price for emitting carbon dioxide (and potentially other greenhouse gases) into the atmosphere.

Despite pushback from the Legislature, Wisconsin Governor Tony Evers is pushing for clean energy adoption.⁵⁶ On August 16th, 2019, Evers signed an executive order calling for the state's energy usage to be 100 percent carbon free by 2050, making Wisconsin the first Midwestern state with a 100 percent clean electricity commitment. The order also establishes a new Office of Sustainability and Clean Energy, which will develop the state's clean energy plan and ensure Wisconsin reaches the carbon reduction goals of the Paris Climate Accords. Evers created a climate change task force in early October 2019 to come up with recommendations to mitigate and adapt to the effects of climate change by August 2020. Lieutenant Governor Mandela Barnes serves as chairman of the task force; other members include Republican and Democratic members of the Legislature and representatives from the state's agriculture, energy, health, business, education and environmental sectors.⁵⁷

In 2018, Wisconsin ranked 20th in carbon emissions nationwide.⁵⁸ Greenhouse gas emissions included carbon dioxide, methane, and nitrous oxide.⁵⁹

Carbon dioxide is the primary greenhouse gas emitted through human activities. In 2018, carbon dioxide accounted for about 81.3 percent of all U.S. greenhouse gas emissions from human activities. By definition, it has a Global Warming Potential of 1, because it is the gas being used as the reference. Methane's lifetime in the atmosphere is much shorter than carbon dioxide, but it is more efficient at trapping radiation than carbon dioxide. Pound for pound, the comparative impact of methane is 25 times greater than carbon dioxide over a 100-year period. Nitrous oxide molecules stay in the atmosphere for an average of 114 years. The impact of 1 pound of nitrous oxide on warming the atmosphere is almost 300 times that of 1 pound of carbon dioxide.

The table below estimates the revenue that could be generated by placing a tax on carbon and other greenhouse gas emissions. The price per ton increases proportionally with Global Warming Potential. For example, a tax of \$20 per ton on carbon dioxide emissions in Wisconsin could generate more than \$1.1 billion per year for natural climate solutions.

Carbon Tax Revenue Estimates

Greenhouse Gas	2018 Emissions (tons)*	Global Warming Potential	\$/Ton	Annual Revenue
Carbon Dioxide	57,861,954	1	\$20	\$1,157,239,089
Methane	5,861	25	\$500	\$2,930,271
Nitrous Oxide	675	298	\$5,960	\$4,022,739

⁵⁶ Wisconsin joined the U.S. Climate Alliance in February 2019.

⁵⁷ <https://climate-xchange.org/network/#wisconsin>

⁵⁸ <https://www.eia.gov/environment/emissions/state/analysis/pdf/stateanalysis.pdf>

⁵⁹ <https://dnr.wi.gov/topic/AirEmissions/Historical.html>

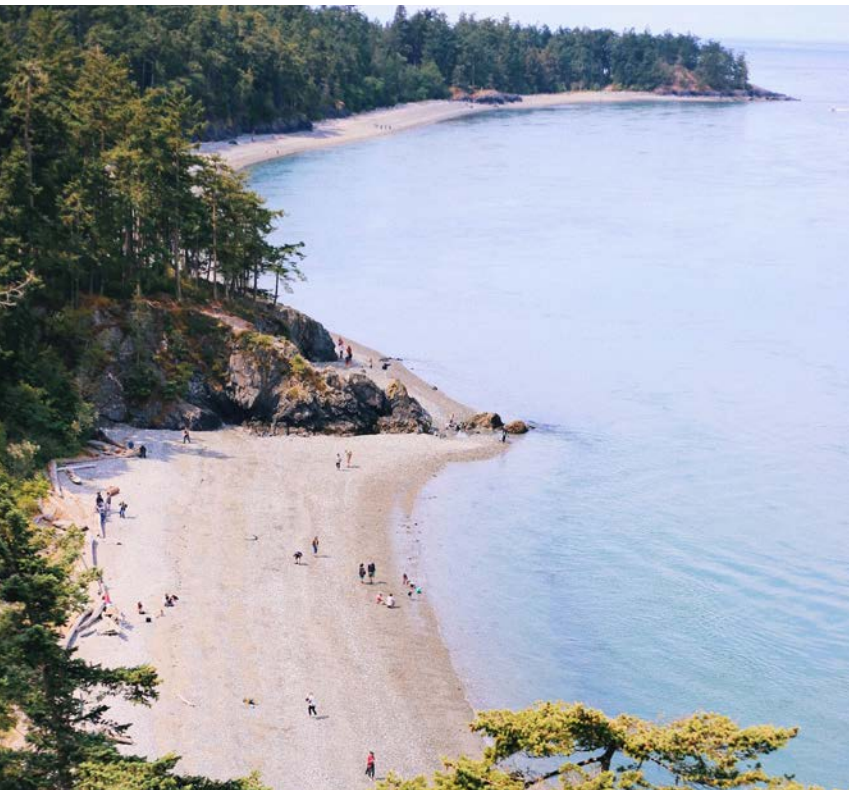
Carbon Pricing Example: Washington⁶⁰

So far, no states have passed a carbon tax. Ballot Initiative 732 in 2016 and 1631 in 2018 would have made Washington the first U.S. state with a carbon tax. According to the latest data published in 2018, Washington ranked 25th in carbon emissions nationwide.⁶¹

Initiative 1631 would have enacted a carbon emissions fee on large emitters based on the carbon content of fossil fuels sold or used in the state and electricity generated in or imported for use in the state. The fee would have been \$15 per metric ton of carbon beginning on January 1, 2020 and would have increased by \$2 per metric ton each year until the state’s greenhouse gas reduction goals of 2035 were met and the 2050 goals were on track to be met. Revenue from the fee would have gone into three funds: (1) for air quality and energy programs and projects, (2) for water quality and forest health projects, and (3) for investments related to communities. Under Washington law, this measure was a fee and not a tax because the revenue could not have been spent on government expenses or public programs; rather, it would have been dedicated to specific accounts related to investing in climate and environmental projects.

Specific to natural climate solutions, the measure would have dedicated 25 percent of revenue to the clean water and healthy forests account for investments related to water and forests such as programs, activities, or projects that:

- ✔ Restore and protect fisheries and marine habitats;
- ✔ Reduce flood risks and prepare for a rise in sea level; and
- ✔ Increase water supply



A clean water and healthy forests panel would have been created and tasked with providing detailed recommendations to the public oversight board regarding investments and other matters related to water and forest programs.

The ballot language was as follows:
Initiative Measure No. 1631 concerns pollution. This measure would charge pollution fees on sources of greenhouse gas pollutants and use the revenue to reduce pollution, promote clean energy, and address climate impacts, under the oversight of a public board. Should this measure be enacted into law?

This measure would have raised almost \$2.3 billion in its first five fiscal years. It failed at the ballot with 57 percent voting against.

60 Excerpted from Ballotpedia.org ([https://ballotpedia.org/Washington_Initiative_1631_Carbon_Emissions_Fee_Measure_\(2018\)\)](https://ballotpedia.org/Washington_Initiative_1631_Carbon_Emissions_Fee_Measure_(2018)))

61 <https://www.eia.gov/environment/emissions/state/analysis/pdf/stateanalysis.pdf>

Carbon Pricing Example: Boulder, Colorado⁶²

In 2006, Boulder, Colorado passed the country's first carbon tax, in the form of the Climate Action Plan (CAP) Tax. The CAP tax is levied on city residents and businesses, based on the amount of electricity they consume; and the utility Xcel Energy charges consumers in their monthly utility bills. Consumers receive rate deductions for using electricity from renewable sources, particularly for utilizing Xcel's Wind Source program. Rates vary depending on the sector and cost an average family about \$21 a year. In total, the CAP tax generates about \$1.8 million in annual revenue. Proceeds are directed to the city's Office of Environmental Affairs to fund programs that reduce greenhouse gas emissions, such as weatherization efforts, sustainability projects, and solar rebates. Profits could also go towards conservation, restoration, land management actions and other natural climate solutions.



States That Have Introduced Carbon Pricing Legislation

In January 2018, state-level lawmakers in nine states — Connecticut, Maryland, Massachusetts, New Hampshire, New York, Oregon, Rhode Island, Vermont, and Washington — announced the formation of a Carbon Costs Coalition that seeks to tax carbon.⁶³ Through this coalition, each state hopes to create and pass independent carbon pricing legislation, while utilizing the others for resources and ideas. Carbon bills have been introduced and re-introduced in over a dozen state legislatures including Maryland, Washington, New York, Hawaii, Rhode Island, Vermont, Massachusetts and Maine, and proposals to study a carbon tax have been introduced in New Mexico, New York, New Hampshire and Vermont.⁶⁴

⁶² Boulder's Climate Action Plan (CAP) (<https://bouldercolorado.gov/climate/climate-action-plan-cap-tax>)

⁶³ <https://www.utilitydive.com/news/lawmakers-from-9-states-vow-to-put-a-price-on-carbon/516154/>

⁶⁴ <https://www.forbes.com/sites/patrickgleason/2018/02/26/state-lawmakers-compete-to-levy-nations-first-carbon-tax/#528544aa3ac3>

CAP AND TRADE

Cap-and-trade programs are government-mandated, market-based systems that set a limit on the total amount of greenhouse gas emissions allowed from various industries. This cap is divided into allowances and distributed to companies within the relevant industries. Companies that do not use all of their allowances can sell the remainder or save allowances for future use.

This ability to sell emission allowances provides companies with an incentive to lower their emissions and invest in cleaner forms of energy. The cap progressively decreases, decreasing emission levels accordingly. Cap-and-trade programs have boasted high compliance rates and are an economically effective approach to reducing air pollution.

In the U.S., two cap-and-trade programs have been established to reduce carbon emissions and other air pollutants: (1) California (as part of the Western Climate Initiative) and (2) the Regional Greenhouse Gas Initiative (RGGI) comprised of eleven Northeast and Mid-Atlantic States. Emission allowances under cap and trade can be distributed by the government for free or through an auction. Auction sale of carbon allowances under RGGI has collectively raised more than \$3.5 billion since the program's inception in 2005, and California has collected \$13 billion from the sale of allowances since 2013. California's fourth quarter auction of 2019 generated \$739 million for the state. The average revenue per state per quarterly RGGI auction is \$7.38 million, or \$29.5 million per year. Revenues for Wisconsin specifically are difficult to predict.

Through a mechanism known as "California Climate Investments" administered by the California Air Resources Board, California has been actively investing a portion of these proceeds into programs that undertake forest carbon mitigation. This includes investment in forest conservation grants, fire risk reduction, and urban reforestation among other activities.

RGGI states have mostly chosen to focus the use of carbon revenues in other areas like energy efficiency. However, there are some important examples where RGGI states have used auction proceeds to fund land sector activities, such as urban reforestation in Connecticut. New Jersey operated under a legislative mandate to spend a portion of RGGI proceeds on land sector activities. This potential future use of allowance proceeds to help fund land sector activities will be an important consideration for RGGI states in the future.

In addition to providing a source of funding for forest carbon mitigation programs, cap-and-trade legislation can create the legal framework to establish a forest offsets market. This unique financial incentive mechanism is explored later in this report.

65 Virginia joined in 2020.

66 <https://www.rggi.org/auctions/auction-results>

67 https://www3.arb.ca.gov/cc/capandtrade/auction/proceeds_summary.pdf

68 <https://www.rggi.org/auctions/auction-results>

69 Largely excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>), unless otherwise noted.

Example: California Cap-and-Trade Invests in Natural Climate Solutions

Passed in 2006 and building on the passage of RGGI in 2005, Assembly Bill 32 requires California to return to 1990 levels of greenhouse gas emissions by 2020. All programs developed under AB 32 contribute to the reductions needed to achieve this goal and will deliver an overall 15 percent reduction in greenhouse gas emissions compared to the “business-as-usual” scenario in 2020 if the state did nothing at all.⁷⁰

The Cap-and-Trade Program is linked with the program in Québec. It functions as a single market, although any proceeds from the sale of California allowances at auction are returned to California, and Québec proceeds are returned to Québec. The program applies to emissions that cover approximately 80 percent of California’s GHG emissions – with the exception of emissions from natural and working lands. Entities with more than 25,000 metric tons CO₂e annually are required to be in the program, as are all electricity importers. Essentially, that means the program covers all transportation fuel suppliers, electricity generators and electricity importers, and all large stationary, industrial sources. In total, the program covers about 450 entities.⁷¹

The program offers more than half of emission permits (called allowances) for sale at quarterly auctions; entities are not required to participate in auctions, but the auctions have thus far resulted in more than \$13 billion in revenue for California. With an increasing auction floor price, as well as the optional nature of the auctions, annual revenue cannot be predicted.⁷²

The Legislature appropriates money from the Greenhouse Gas Reduction Fund (GGRF) to agencies to administer California Climate Investments programs

that facilitate GHG emission reductions and provide additional economic, environmental, and public health benefits, consistent with existing legislative guidance. Historically, four agencies have received 60 percent of each quarterly auction through continuous appropriations enacted in Chapter 36, Statutes of 2014 (Senate Bill (SB) 862). Chapter 120, Statutes of 2019 (SB 200), established the Safe and Affordable Funding for Equity and Resilience (SAFER) Drinking Water program, which received \$100 million for Fiscal Year (FY) 2019–20, and will receive a continuous appropriation of five percent of auction proceeds up to \$130 million beginning in FY 2020–21.

The Legislature appropriates remaining available funds through the annual budget process. SB 901 (Chapter 626, Statutes of 2018) states that these annual budget appropriations shall include \$200 million through FY 2023–24 for forest health, fire prevention, and fuel reduction programs. Additional legislation identifies other transfers and obligations from the GGRF, such as a transfer to offset a suspended manufacturing tax and use fee and replacement of a fire prevention fee in State Responsibility Areas.

California’s program devotes millions to natural climate solutions. Cap-and-trade revenue is being invested into the following NCS-enhancing program areas: climate adaptation and resiliency, forest health, urban and community forestry and greening, wetlands and watershed restoration and wildfire prevention. For example, sustainable forestry has received \$624 million to date.⁷³

70 https://ww3.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf

71 https://ww3.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf

72 https://ww3.arb.ca.gov/cc/capandtrade/auction/proceeds_summary.pdf

73 https://ww2.arb.ca.gov/sites/default/files/classic/cc/capandtrade/auctionproceeds/2020_cci_annual_report.pdf

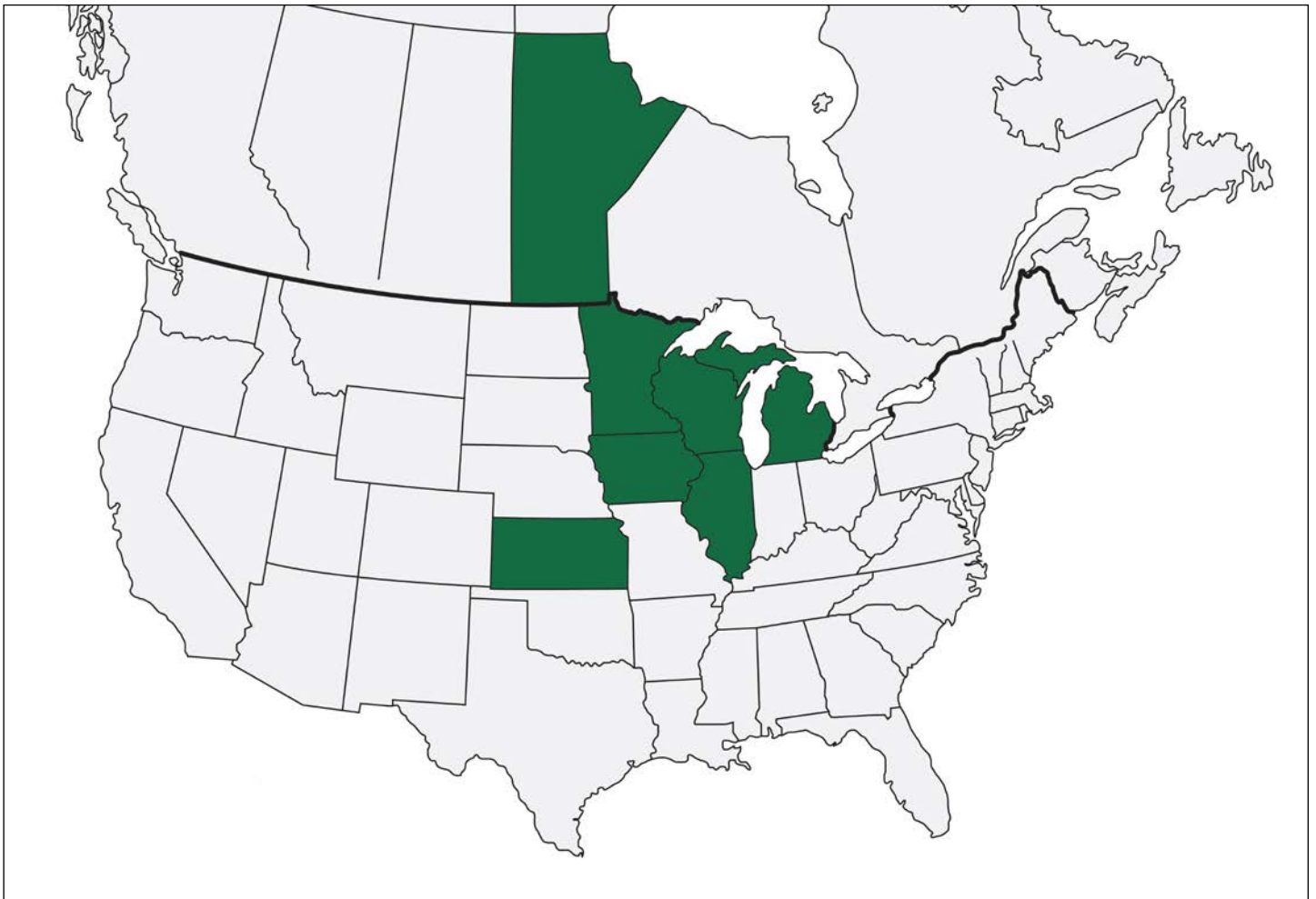
Midwestern Greenhouse Gas Reduction Accord

In 2007, governors of the diverse Midwestern states and the premier of Manitoba unified behind a commitment to advance the region toward a lower-carbon energy economy that “maximizes the energy resources and economic advantages of Midwestern states while reducing emissions of atmospheric CO₂ and other greenhouse gases.” The Midwestern Greenhouse Gas Reduction Accord (Midwestern Accord) is a **regional agreement by six governors of states of Minnesota, Wisconsin, Illinois, Iowa, Michigan, Kansas, and the Canadian Province of Manitoba.**

To support this agreement, in 2009, the Midwestern Governors Association’s Energy Security and

Climate Stewardship Roadmap: Advisory Group Recommendations outlined strategies to “capturing the enormous opportunity for the Midwest to build on its historic strengths and reclaim its position as a manufacturing powerhouse and a place of innovation.”

The accord has been inactive since March 2010, when the advisory group presented a plan for action to the association with a scheduled implementation date of January 2012. With no rescission of past policy declaration yet with no implementation of recommendations or a clear path forward, the status of the initiative today is uncertain.⁷⁴



⁷⁴ Excerpted from <https://climatechange.lta.org/midwestern-accord/>

POLICY AND REGULATORY STRATEGIES

Leveraging Existing Forest Programs⁷⁵

The most straightforward mechanism for delivering carbon incentives is to use existing grant and cost-share programs. The key is to identify state programs that naturally align, or can be expanded, to incentivize the most relevant forest climate mitigation practices for a given state's unique forest carbon mitigation opportunities.

California has used this approach successfully by directing funds from the sale of carbon emission allowances into California Climate Investments, which funds various state authorities to support forest-climate mitigation actions such as conserving forestland from development, reducing fire risk, and urban reforestation. Under state law, funds expended from carbon allowance revenues must have a measurable benefit on climate mitigation. To meet this requirement, California has created special application requirements and carbon accounting rules to assure that the state can assess the carbon benefits from the projects it funds through with cap-and-trade revenues. Revenues to fund incentives through existing forest

programs do not have to derive from a climate-specific funding source like the California Climate Investments. Any source of state funding could be used to support the most relevant work through these programs.

The most essential element of this model is to develop a rigorous, science-based process for specifying eligible forest practices based on the expected carbon benefit and quantifying the expected carbon mitigation benefits of these practices. This quantification will help to set appropriate payment rates for each practice, and help estimate the total carbon benefit delivered annually by each program.

Existing Forest Programs in Wisconsin⁷⁶

The Wisconsin Legislature created the Knowles-Nelson Stewardship Fund in 1989 to preserve natural areas and wildlife habitat, protect water quality and fisheries, and create new opportunities for outdoor recreation. Grants are made to local governments and land trusts. The state sells bonds to support the fund payable from tax revenues. Since 1989, the Stewardship Fund appropriations have been adjusted several times from the original funding level of \$25 million annually. Land trusts and local governments have also raised over \$130 million to match grants through the Stewardship program. Together, the state and its partners under the Stewardship program have protected about 500,000 acres in 71 of 72 counties.

⁷⁵ Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

⁷⁶ Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

Until 2017, a statewide forestry mill tax was levied for the maintenance of 23 state forests, forest-fire prevention and suppression infrastructure, debt service on the Stewardship Fund, and other programs involving the health, economic and productivity of public and private woodlands.

To date, the Stewardship Fund, in partnership with the federal Forest Legacy program, has purchased interests in approximately 259,435 acres of private, productive forestland that will be available for future timber production, public access and wildlife habitat, by attaining access, subdivision and sustainable forestry rights through working forest easements. Additionally, since 2007, a portion of Stewardship funding has been utilized by County Forests that have added more than 18,000 acres to their land management programs. Counties may apply for grants or loans for the purchase, development, preservation and maintenance of the county forestlands, as well as for economically productive forestry operations.

Landowner Tax Incentives⁷⁷

One of the most attractive mechanisms for incentivizing actions by private landowners is the tax code. Studies have shown that some landowners view tax incentives more favorably than grants or cost-share payments, even when the net financial impact is the same. Many state and local jurisdictions are well-positioned to provide different kinds of tax incentives for landowners to implement forest carbon improvements.

Forestland is sometimes taxed at its highest potential market value. High taxes and other business expenses create an incentive for landowners to convert their forests to more profitable land uses or to harvest timber prematurely. Most smaller landowners receive financial returns infrequently, given the long time it takes for trees to grow to marketable sizes. The financial realities of conversion are sometimes overwhelming. For example, in the South, on average, short-term returns for land development hover around \$36,000 per acre. Tax liability can be the difference between whether a forest owner chooses to permanently conserve and manage their land, or sell it to a developer for immediate financial gain.

The Forest-Climate Working Group, a coalition of landowners, industry, conservation interests and carbon interests working to develop climate policy

solutions using forests, supports the use of tax incentives to encourage these landowners to retain their forestland and invest in targeted management and restoration. State and local governments could strengthen existing tax incentives, and design new ones, to encourage sustained forest ownership and sustainable forestry practices. Policy options include the following:

CURRENT USE LAWS⁷⁸

Current use laws assess and tax forested land based upon current usage, rather than its “highest and best” use, providing significant savings while encouraging owners to resist development pressures, accumulate stored carbon, and maintain sequestration and environmental co-benefits. Current use tax valuation programs are widespread across the U.S. today. All 50 states have policies calling for some sort of reduced property taxes for forest properties.

While these valuation programs have made a positive impact, their scale of implementation and overall effectiveness can be limited and several programs could use improvements. In other cases, states are reluctant to implement such programs due to concerns about the loss in general revenue. The ability to dedicate carbon tax or cap-and-trade revenues to offset loss of tax revenue from current use

⁷⁷ Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

⁷⁸ Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

enrollment would help to address this issue. Beyond limitations on enrollment, many programs provide low financial returns relative to the opportunity cost of development. Enhancing this financial benefit could increase enrollment, another case where additional revenue linked to climate mitigation could help.

To incentivize long-term preservation, half of state preferential property tax programs have minimum enrollment periods, usually of about 10 years, and over 80 percent have a withdrawal penalty. These enrollment and withdrawal provisions are crucial in ensuring long-term carbon benefits. Many current use laws could be expanded to provide incentives for the long-term retention of forests, and could institute or expand a withdrawal penalty.

About half of all state current use programs require a forest management plan.

CURRENT USE IN WISCONSIN⁷⁹

Most property is assessed according to its highest and best use, or that use which will produce the greatest net return to the property owner over a reasonable period of time. The highest and best use method of valuation is used for property classified as residential, commercial, manufacturing, productive forest, other (farm buildings), or personal property.

Since 2004, property classified as “undeveloped” (previously called “swamp or waste”) or “agricultural forest” has been valued at 50 percent of full market value. Assessors continue to determine these properties’ values under the concept of highest and best use, but the values are reduced to half of their original amounts.

A 1974 amendment to the state constitution’s uniformity clause permits agricultural land to be treated differently from other types of property for property tax purposes. Provisions enacted under 1995 Act 27 require land that is “devoted primarily to agricultural use” to be assessed on the basis of that use. Although state law directs DOR to define agricultural use through administrative rule, the

statutes specify that agricultural use includes the growing of short rotation woody crops, including poplars and willows, using agricultural practices generally associated with field crop production, including soil management, cultivation, and row cropping. Otherwise, the DOR rule defines agricultural use to include:

- ✔ producing crops (growing crops mainly for food and fiber), but not forestry;
- ✔ producing livestock (raising or fattening animals for the sale of animals or animal products);
- ✔ growing Christmas trees or ginseng;
- ✔ maintaining land eligible for enrollment in various federal agriculture programs; and
- ✔ maintaining land that was previously in agricultural use, but is subject to an easement under or is enrolled in various state or federal conservation programs.

However, the last two items listed above were declared invalid by a circuit court in June, 2018, based on the determination that DOR promulgated these components of the rule without compliance with statutory rulemaking procedures. DOR has appealed the court’s decision and the appeal remains pending.

Because use-value assessment is limited to agricultural land, other farm property is valued according to its “highest and best use.” This includes the farm operator’s homestead, other farm buildings, any residence of the farm operator’s spouse, children, parents, or grandparents, the land necessary for the location of those buildings, and private roadways. Property on farms classified as agricultural forest land and undeveloped land is valued at half of its full market value.

Wisconsin’s current use laws could be changed to incentivize landowners to manage their land for natural climate solutions, or provide a larger incentive for farmers utilizing conservation practices.

79 Wisconsin Legislative Fiscal Bureau, Property Tax Administration, Informational Paper 14, January 2019

CONSERVATION TAX INCENTIVES⁸⁰

Twelve states provide income tax credits to private landowners who voluntarily donate land or easements to a public agency or nonprofit organization for conservation purposes. Some states allow landowners with little taxable income to transfer tax credits to another taxpayer and/or to carry the credit forward over a number of years. Several state tax incentives apply to fee simple donations as well as conservation easements.

When combined with existing conservation programs and the federal income tax deduction for donations of conservation easements, voluntary land donations are attractive and affordable options for forest landowners. States that do not currently offer tax credits for conservation easements could consider enacting these incentives, as they deliver clear carbon benefits. The following states currently have a statewide land conservation tax incentive program for donations of conservation land: Arkansas, California, Colorado, Connecticut, Delaware, Georgia, Iowa, Maryland, Massachusetts, Mississippi, New Mexico, New York, South Carolina, and Virginia.

As an example, the Massachusetts Conservation Tax Credit was enacted in 2011. It offers up to \$75,000 for landowners that donate their land for conservation, and funding is capped at \$2 million per year. Over six years, the program protected over 12,000 acres of significant conservation land, including prime forest and agricultural soils. So far, each \$1 of state tax credits has leveraged \$4.29 of private land donated value.

FOREST CARBON SERVICES INCENTIVES⁸¹

Additional incentives could be designed specifically to increase the financial viability of carbon-beneficial forestry practices. Tax credits could be allocated to landowners engaging in afforestation, reforestation, and other forest management and restoration efforts with defined carbon mitigation benefits. Under this approach, policymakers could offer different property

tax credits or deductions for different forestry practices, based on the relative improvements in carbon sequestration or a mixture of carbon and other environmental and economic goals. Calibration of the tax incentive would be tied to the scale of carbon benefit expected from any given practice, and the number of acres impacted by that practice.

These tax credits could come in the form of state and/or local property tax exemptions, as well, if landowners prove they have established and maintained the forest practice. For example, if a landowner were to demonstrate they planted a new forest on abandoned agricultural land, the landowner would receive a per acre afforestation tax credit the first year. This tax credit would be calibrated to the carbon sequestration rate for the type of forest that had been planted, and then receive another payment per acre in subsequent years by demonstrating survival rates of the planted seedlings and that the land is being managed for carbon benefits.

In Mississippi, the Mississippi Reforestation Tax Credit provides a Mississippi income tax credit up to 50 percent of the cost of approved hardwood and pine reforestation practices. The tax credit promotes reforestation on non-industrial private forestland. The credit applies only to individuals or groups of non-industrial private forest landowners. The limit is \$10,000 per year with a lifetime cap of \$75,000.⁸² The Arkansas Wetland and Riparian Zone Creation, Restoration, and Conservation Tax Credits Act allows a state income tax credit to be taken by taxpayers who engage in the development, restoration, or conservation of wetland and riparian zones. The total amount of tax credit that can be claimed is \$50,000 per project, not to exceed \$5,000 in any one tax year for up to a maximum of ten years. If less than \$50,000, the maximum tax credit allowed is equal to the total cost of the approved project.⁸³

A few states have provided heftier tax credits for forests certified by the Sustainable Forestry

80 Largely excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

81 Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

82 <https://www.mfc.ms.gov/programs/private-landowner-services/reforestation-tax-credit/>

Initiative or Forest Stewardship Council. These programs could be modified to specifically target the adoption of additional forest practices specific to carbon. To increase carbon mitigation on lands in the tax program, states could develop incentives for landowners to receive additional income tax credits for improved management strategies that optimize

the carbon benefits of their forests. Policymakers should determine a process for calculating the annual aggregate carbon value of these tax credits so that they can communicate the benefits of this policy approach, in comparison to other emissions reductions efforts.

Forest Carbon Offsets⁸⁴

Cap-and-trade programs can help catalyze land sector mitigation by providing a legal framework for forest carbon offsets. A forest carbon offset is the reduction of emissions of one ton of carbon dioxide made to compensate for emissions made elsewhere. This reduction can come from either avoiding one ton of carbon emissions, or increasing forest carbon sequestration by one ton. Regulated industries under cap and trade can purchase offset credits from landowners and land managers to meet their emission reduction targets, providing compliance flexibility.

California has demonstrated how offsets can drive activity in the land sector. Since the inception of California's program in 2013, 45 forest carbon offset projects have generated more than 53 million carbon offset credits. However, California is the only U.S. state with an extensive forest carbon offset program. The 10 states regulated by RGGI have not successfully launched a forest carbon offset market because relatively low prices for emissions allowances have not provided financial incentive for covered entities such as utilities to purchase offsets.

Forest Products⁸⁵

Every year, America's growing population requires the construction and improvement of thousands of new homes and workspaces. Residential and commercial buildings in U.S. cities have typically been built using steel and concrete, both of which significantly contribute to greenhouse gas emissions. This puts urban development on a collision course with sustainability, unless builders find environmentally friendly alternatives to meet this construction demand. That is where wood products come in.

Responsibly harvested wood is one of the best materials for reducing carbon emissions and storing carbon in buildings. In fact, each ton of wood used in place of steel and concrete reduces carbon emissions by about 7.7 tons. If opportunities for wood buildings were maximized in all potential markets, the U.S. could

see as much as 33 million tons of carbon reduction and storage benefits annually, the equivalent of permanently shutting down eight coal-fired power plants. Increased forest product usage also helps revitalize rural communities that rely on the forest economy and incentivizes investments in forest management. The Forest-Climate Working Group estimates that increased wood usage could result in up to \$14 billion in economic benefits for the U.S.

Today, new technology utilizing "mass timber" panels, cross-laminated timber, and other expansive wood-based building systems has allowed wood to emerge as a cost-effective and sustainable material for building construction. However, the U.S. is lagging in the adoption of these new technologies, especially when compared to progress made in other parts of

⁸³ <https://www.agriculture.arkansas.gov/natural-resources/divisions/water-management/wetlands-riparian-zone-tax-credit-program/>

⁸⁴ Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

⁸⁵ Excerpted from Forest Climate Working Group: Tapping into U.S. Forests to Mitigate Climate Change (<http://forestclimateworkinggroup.org/wpcontent/uploads/2018/09/AF-FCWG-Toolkit-Digital.pdf>)

the world. Barriers to adoption, such as antiquated building code restrictions, are often most effectively dealt with at the local level.

State and local governments seeking opportunities to support climate mitigation and reduce carbon emissions could explore a range of policy approaches that encourage innovation in wood building construction. There are several policy options that encourage forest product usage, including:

Public Awareness Programs

Raising awareness about the benefits of forest products will help increase wood usage in the construction of buildings. This will avoid emissions from alternative materials, extend carbon-storage initiated in the forest, and reduce the embedded energy in buildings in the form of energy used to create the materials in the building. States could invest a portion of revenues raised by carbon pricing mechanisms, or other sources, into large-scale efforts promoting forest products.

Organizations like Woodworks, a nonprofit that provides training about modern wood technology, have effectively educated builders, homeowners, architects and engineers about the benefits of forest products. It is estimated that current annual investments of \$1 million in Woodworks have reduced

overall emission levels by 3.6 million tons of CO₂ per year, through increased sequestration and avoided emissions. State and local governments could expect similar impacts with investment in public awareness and education programs.

Procurement Policies

State and local governments could establish a procurement policy for government-owned and funded buildings, requiring building construction to use low-carbon materials. Implementation of such a policy could reduce carbon emissions from the building-construction sector by about 9.5 percent.

Low-Carbon Building Construction

State and local governments could establish a tax credit, deduction or exemption for commercial and residential building owners that use low-carbon materials in their construction projects. This could be part of any public/private partnership initiative to revitalize the state's infrastructure. This credit might be awarded upon proof of installation, structured similarly to credits provided for energy-saving installations like solar panels and geothermal heating systems. States could develop a listing of low-carbon building materials that qualify for this program, and offer tax credits commensurate with the carbon benefits of each product.

Payments in Lieu of Taxes⁸⁶

The Department of Natural Resources (DNR) pays aids in lieu of property taxes on land holdings to the jurisdictions in which the land is located. Payments may vary based on the date of DNR's acquisition. Since 1992, when DNR acquires land, the Department pays aids to the city, village, or town in which the land is located to approximate the tax that would be due on the estimated value of the property at the time it was purchased, adjusted annually to reflect changes in the equalized valuation of all land, excluding improvements, in the taxation district. The municipality then pays each taxing jurisdiction, including the county and school district, a proportionate share of the payment, based on its levy. Prior to July 1, 2011, the estimated value typically equaled the purchase price, while after that date the value typically represents the equalized (property tax) value in the year prior to purchase.

2015 Act 55 specifies that in fiscal year 2015-16, 45 percent of payments of aids in lieu of taxes for lands acquired after 1991 be made from the forestry account of the conservation fund, and the remainder from general purpose revenues (GPR). Beginning in fiscal year 2016-17, 50 percent of these aids are paid from the forestry account with 50 percent from GPR.

⁸⁶ Wisconsin Legislative Fiscal Bureau, Warren Knowles-Gaylord Nelson Stewardship Program, Informational Paper 61, January 2019

The table below shows aids in lieu of property tax payments for the past 10 years. The amounts shown in the table include approximately \$364,000 GPR and \$780,000 segregated (SEG) conservation fund annually for payments for lands acquired prior to January 1, 1992.

Fiscal Year	GPR	SEG	Total
2009-10	\$7,675,400	\$4,736,500	\$12,411,900
2010-11	8,305,000	4,736,400	13,041,400
2011-12	7,842,000	5,619,300	13,461,300
2012-13	7,389,700	6,246,200	13,635,900
2013-14	8,031,200	6,246,800	14,278,000
2014-15	7,444,700	6,246,700	13,691,400
2015-16	6,309,700	7,229,300	13,539,000
2016-17	7,433,900	6,097,100	13,531,000
2017-18	6,603,900	7,015,100	13,619,000
2018-19*	6,672,500	7,350,000	14,022,500

* Budgeted

Forest Tax Laws⁸⁷

Forest Crop Law

The FCL was enacted in 1927. Under the FCL, an owner of a quarter-quarter section (about 40 acres) in a town or village could petition the DNR to enter the land in the program. If the DNR determined that forestry was the best use for the land and that a stand of merchantable timber could be produced within a reasonable period of time, the land was entered under the program under a contract for either 25 years or 50 years. The landowner had to practice forestry, notify the DNR of timber harvests, and permit public access to the land for hunting and recreation. Land

enrolled under the FCL is exempt from property taxes. The DNR makes an annual payment of \$0.20 per acre to the municipality where the land is located. The municipality retains 80% and remits 20% to the county. In addition, landowners are required to make the payments described below:

(1) Acreage share. This is an annual payment by the landowner to the municipality where the land is located. The municipality retains 80% and remits 20% to the county. The payments are shown below:

Date of Entry or Type of Land	Applicable Dates	Acreage Share
Prior to 1972	Permanent	\$0.10
After 1972	2004 to 2013	\$1.66
After 1972	2014 to 2023	\$2.52

The payment for land enrolled after 1972 is recalculated every 10 years. The rate for 2014 to 2023 equals \$0.20 (the amount charged in 1972) multiplied by the following ratio:

Aggregate Land Value in the State in 2012 = \$132,650,021,400 = 12.5796

Aggregate Land Value in the State in 1972 = \$10,544,826,600

87 Wisconsin Department of Revenue, Division of Research and Policy, Forest Tax Laws, October 24, 2019

(2) Withdrawal Tax. If land is withdrawn from the FCL either at the owner’s request or upon a DNR finding the owner has violated the contract, a withdrawal tax must be paid. The tax equals the sum, for the years the contract was in effect, of the differences between the amount of real estate taxes that would have been levied on the land and the acreage shares and severance taxes actually paid on the land. Each year’s difference is subject to interest at 12% per year (or 5% for pre-1977 contracts) for each year the real estate tax has been deferred. The DNR retains an amount equal to the total payments it has made to the municipality on the parcel. Any excess is paid to the municipality, which keeps 80% and remits 20% to the county.

(3) Termination Tax. When a contract expires and the land is not enrolled under the MFL program, a termination tax of 10% of the value of the standing timber is assessed. The DNR retains an amount equal to the total payments it has made to the municipality on the parcel. Any excess is paid to the municipality, which keeps 80% of the payment and remits 20% to the county.

The FCL was generally closed to new entries in 1985. A provision of the 2009-11 biennial budget permitted a non-profit archery club that purchased land already enrolled under the FCL program before

January 1, 2009, to request DNR to keep the land in the program. Because some FCL contracts are for 50 years, the last FCL contracts will expire in 2035.

Managed Forest Law

An owner of twenty or more contiguous forest acres may apply to the DNR to enter his or her land into the MFL program. If the DNR finds that at least 80% of the parcel is producing or capable of producing at least 20 cubic feet of merchantable timber per acre per year and that the land is not developed in a manner incompatible with the practice of forestry, the DNR issues an order entering the land under the program. The agreement is for 25 or 50 years (at the landowner’s option), and can be renewed. The landowner agrees to follow a forest management plan and to permit (with limited exceptions) public access for hunting and recreation. MFL land is exempt from property taxes. The DNR makes an annual payment of \$0.20 per MFL enrolled acre to the municipality where the land is located. The municipality retains 80% of this payment and remits 20% to the county. Landowners are also required to make certain payments, which are described below:

(1) Acreage Share. This is an annual payment by the landowner to the municipality where the land is located. The municipality retains 80% and remits 20% to the county. The payments are shown below:

	Acreage Share by Year Paid	
	2014-2018	2018-2022
Entered before April 28, 2004	\$0.79	\$0.74
Entered on or after April 28, 2004	\$2.14	\$2.04

The amounts in the above table are based on statutory formulas. For example, the \$0.74 rate equals the original rate of \$0.74 multiplied by the ratio of the average statewide tax per acre on agricultural, undeveloped, and taxable forest land for 2016 divided by the corresponding average for 1986. The \$2.04 rate equals the average equalized value per acre of taxable

forest land in 2016 (\$2,071) times the net statewide tax rate for 2016-17 (19.6783 mills) times 5%.

(2) Closure Fee. This is an annual payment made by the landowner to the municipality where the land is located. The municipality retains 80% and remits 20% to the county treasurer. The payments are shown below:

	Closure Fee by Year Paid	
	2014-2018	2018-2022
Entered before April 28, 2004	\$1.08	\$1.01
Entered on or after April 28, 2004	\$8.54	\$8.16

The \$1.01 rate equals the original payment of \$1.00 multiplied by the same ratio used to adjust the acreage share payment. The \$8.16 rate equals the average equalized value per acre of taxable forest land in 2016 (\$2,071) times the net statewide tax rate for 2016-17 (19.6783 mills) times 20%. The closure fee is in addition to the acreage share payment.

(3) Non-compliance Fee. This fee is \$250. If the DNR determines that an MFL landowner has not complied with the management plan, it notifies the municipality where the land is located, which then levies and collects the fee. The municipality keeps 80% of the fee and remits 20% to the county.

(4) Withdrawal Fee. The DNR assesses a fee of \$300 on all withdrawals from the MFL program that occur before the expiration of the MFL agreement period. DNR retains the entire fee.

(5) Withdrawal Tax. For a “large property” defined as collectively greater than 1,000 acres, the landowner must pay the greater of (a) the product of the net assessed value tax rate in the year prior to withdrawal times the assessed value of the land in the year prior to withdrawal times the number of years the land was under an MFL order, minus the acreage share and yield taxes paid; or (b) 5% of the stumpage value of the merchantable timber on the land. For withdrawals from the MFL program on renewed MFL

orders, the calculation under (a) above is made from the year of the renewal. For parcels under 1,000 acres, withdrawals are taxed at a rate equal to the property tax applicable to the land in the previous year times the number of years in the program, or 10 years, whichever is less. A landowner may withdraw a parcel of land without paying withdrawal taxes or fees if the DNR determines the parcel is unsuitable for the production of merchantable timber as a result of certain environmental factors. DNR remits 100% of any withdrawal taxes to the municipality where the land is located. The municipality keeps 80% of the payment and remits 20% with the county.

(6) Agreement Expiration. When an agreement expires and is not renewed, the land becomes subject to the property tax.

Since a decision to withdraw from the MFL is not reversible once filed with the DNR, a MFL landowner may request the Department of Revenue to estimate the withdrawal tax. The request must be accompanied by a non-refundable fee equal to the greater of \$100 or the number of acres affected times \$5.

Enrollment Levels

For a landowner interested in pursuing forestry, enrolling the land under the MFL is an increasingly attractive way to ease the property tax burden.

The number of privately owned acres enrolled under the various forest tax law programs and the average per acre property tax on taxable forest land for selected years are shown in the table below.

ACRES ENROLLED AND AVERAGE PROPERTY TAX ON FOREST LAND, 1960-2018

Year	Acres Enrolled				Average Net Property Tax per Acre of Taxable Forest Land
	Woodland Tax Law	Forest Crop Law	Managed Forest Law	Total Acres Enrolled	
1960	60,431	361,211	0	421,642	\$0.52
1965	107,431	490,154	0	597,585	0.56
1970	154,185	643,514	0	797,699	0.87
1975	158,302	951,808	0	1,110,110	1.42
1980	256,349	1,287,833	0	1,544,182	3.31
1985	447,851	1,468,912	0	1,916,763	5.90
1990	302,338	1,452,194	372,102	2,296,532	6.87
1995	55,507	1,406,718	804,269	2,513,325	7.76
2000	0	471,727	1,971,474	2,498,708	12.90
2005	0	334,362	2,784,889	3,119,251	23.53
2010	0	208,167	3,079,985	3,288,152	32.61
2011	0	190,926	3,133,534	3,324,460	32.55
2012	0	174,726	3,195,894	3,370,620	32.84
2013	0	155,471	3,236,030	3,391,501	33.75
2014	0	148,003	3,271,936	3,419,939	32.29
2015	0	128,528	3,305,206	3,433,734	32.39
2016	0	121,273	3,316,955	3,438,228	32.29
2017	0	113,824	3,344,858	3,458,682	32.57
2018	0	104,120	3,378,413	3,482,534	32.54

Acrage Source: 1960-1985: Wisconsin Department of Natural Resources, Forestry Division
 1990-2018: State totals from Statements of Assessment filed with DOR

Tax per Acre Source: Calculated by the DOR for land in the forest class

Changes for Natural Climate Solutions

The Managed Forest Law program could be adjusted to include carbon as a forest product, or a new

similar program could be created with payments linked to carbon sequestration potential, rather than timber production.

CONCLUSION AND NEXT STEPS

This natural climate solutions finance feasibility study presented several options for funding natural climate solutions in Wisconsin and provided an analysis of which options and funding levels are feasible, economically prudent, and likely to be publicly acceptable. This report examined general obligation bonds, the sales tax, property tax, real estate transfer fee, room tax, severance tax, carbon tax, and cap and trade. This report also explored several policy and regulatory strategies to promote natural climate solutions.

Next steps should include narrowing funding options to those that best match the needs and political and fiscal realities in Wisconsin and testing voter attitudes toward a specific set of funding proposals. The Trust for Public Land recommends conducting a public opinion survey that tests ballot language, tax tolerance, and program priorities of voters in Wisconsin.



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