Wisconsin Department of Natural Resources

Fish, Wildlife and Habitat Management Plan

Guidance and direction for the Department of Natural Resources fish and wildlife conservation, management and recreation related activities funded under the Federal Aid in Sport Fish Restoration Act and the Wildlife Restoration Act.

October 1, 2025 – September 30, 2035

Table of Contents

1. PURPOSE, SCOPE AND DEFINITIONS

The Fish, Wildlife and Habitat Management Plan (FWHMP) establishes strategic direction for the Wisconsin Department of Natural Resources' fish and wildlife conservation, management and recreation related programs administered and funded under the Federal Aid in Sport Fish Restoration Act (SFR) and the Wildlife Restoration Act (WR) grant programs. This strategic plan satisfies federal requirements of 50 CFR Part 80 and Chapter 4 of the Fish and Wildlife Service Manual for States administering their SFR and WR grant programs under a Comprehensive Management System (CMS) grant and will be used as decisions are made on the use of funds from those grant programs.

The scope of the FWHMP is on work funded by SFR and WR, along with funding used to provide the required 25% match for these funds. State match is primarily from state hunting and fishing license funds, land acquisition stewardship funds, and hunter education safety volunteer hours. In addition to providing direction for the specific aspects of the Wisconsin DNR's fish and wildlife programs under the CMS grant, the plan may also serve as guidance and as a resource for other related fish and wildlife programs, initiatives and projects.

The FWHMP is part of a portfolio of plans and reports that provide strategic direction and guidance regarding Wisconsin's biological communities and ecosystems. Other department plans provide additional direction and serve as a resource as fish and wildlife programs are administered and as projects and initiatives are developed and implemented. As appropriate, those plans were used as resources and references in the development of this document – and together with the specific direction provided in this plan – serve as the comprehensive guide for the activities funded under the CMS grant.

The FWHMP establishes Goals, Objectives and Strategies to support fish and wildlife conservation, management and recreation associated with:

- Sport fish, associated habitat, aquatic education and boating access,
- Wild birds and mammals and their associated habitat, and
- Hunter education and shooting range construction.

The FWHMP also describes some of the major Trends, Challenges, Opportunities and Strategic Issues that shaped the development of – and will influence the accomplishment of the Goals and Objectives.

For purposes of this plan, the term 'fish and wildlife' is defined as sport fish, wild birds and wild mammals. The goals, objectives and strategies that make up this plan are directed at species meeting that definition, and the habitat that supports those species. Many of the approaches in this plan recognize that to be successful it's important to focus on the ecological landscape[1] scale in designing and implementing fish and wildlife conservation strategies – and therefore successful implementation of this plan will also benefit many fish and wildlife species and outdoor recreational activities that are not specifically covered under these grant programs.

In addition, the term 'hunting', includes all forms of lawful hunting under s. 29.001(42), Wis. Stats., and

[1] Ecological Landscapes are an ecoregional classification system used by the department. There are 16 Ecological Landscapes in Wisconsin.

includes shooting with firearms, air guns, cross bows, or bow and arrow, or capturing with traps. The term ‘fishing’ includes all forms of lawful fishing under s. 29.001(27) Wis. Stats., and it includes fishing with lines and spear fishing and other lawful means.

2. DEPARTMENT MISSION, VISION AND VALUES

The Fish, Wildlife and Habitat Management Plan's goals, objectives and strategies are established under, and guided by, the department's Mission, Values and Vision which define our purpose as an agency, guide how we do our work every day, set the standards for how we do our work, and envision what we are aiming to achieve in the future.

Mission

- To protect and enhance our natural resources: our air, land and water; our wildlife, fish and forests and the ecosystems that sustain all life;
- To provide a healthy, sustainable environment and a full range of outdoor opportunities;
- To ensure the right of all people to use and enjoy these resources in their work and leisure;
- To work with people to understand each other's views and to carry out the public will;
- And in this partnership consider the future and generations to follow.

Values

- Integrity
- Professionalism
- Collaboration
- Respect
- Customer Service

Vision Statement

We excel at protecting and managing natural resources while supporting the economy and the well-being of our citizenry.

3. PUBLIC PARTICIPATION

The department uses a range of public involvement methods in its efforts to ensure residents understand natural resource issues and have opportunities to provide input that results in improved department policies and practices in managing the state's fish and wildlife resources.

The discussion below describes examples of public engagement the department has completed to help inform 1) the department's assessment of the current, projected, and/or desired status of fish and wildlife resources, and 2) the department's development of an updated strategic plan for fish and wildlife resources in Wisconsin, known as the Fish, Wildlife and Habitat Management Plan.

These public engagement examples are presented along a continuum of involvement that runs from simply providing information to the public to actively empowering partners to independently pursue projects that benefit our state's fish and wildlife resources. The continuum is based in part on the International Association of Public Participation's "Spectrum of Public Participation" and includes the following levels:

1. **Inform the Public** – the department provides information to the public about fish and wildlife issues.
2. **Understand Public Perspectives and Participation** – the department gathers information about the public's use of fish and wildlife resources.
3. **Consult and Involve** – the department works directly with the public to incorporate their ideas, perspectives, concerns, and needs into decisions and policies.
4. **Collaborate** – the department works jointly with partners to develop potential alternatives, identify preferred solutions, and implement management actions.
5. **Empower Partners** – the department enables partners to take a lead role in some fish & wildlife management issues and actions.

Inform The Public: Department efforts to provide information to the public about fish and wildlife issues

One of the department's central roles is providing general information to the public about fish and wildlife and their pursuit. The department's intent is to provide balanced and objective information to assist people's understanding of issues and opportunities related to the state's fish and wildlife resources.

Topic: Provide general information about game fish, wild birds, and wild mammals as well as hunting, fishing, and trapping.

Agency staff invest considerable time in public outreach efforts to answer questions and present information on a range of fish and wildlife related issues. These run the gamut of formal presentations to large and small groups, to local events where staff can interact with the public informally to both provide information and hear people's ideas, concerns and needs related to fish and wildlife.

Nearly all of the department's resource conservation programs are involved in providing information to the public about our state's fish and wildlife and their habitats. This information is distributed to a variety of audiences in ways tailored to public needs.

Examples of public engagement:

- DNR staff host educational events and tours, often in partnership with Friends Groups, at fish hatcheries, wildlife education & visitor centers, nature centers and other DNR facilities.
- DNR staff lead a wide variety of field trips on department and partner properties to explain natural resources and their management.
- DNR staff participate in events such as the Wisconsin State Fair, Midwest Horse Fair, Canoecopia, Farm Technology Days, Midwest Outdoor Heritage Education Expo (MOHEE), sport shows, and numerous local community and partner events.
- DNR staff give presentations on fish and wildlife management, resources and issues to community groups, municipalities, schools and universities, clubs and other organizations.
- DNR staff actively engage with the public through social media platforms like Facebook, which generate significant interaction, questions, and comments from citizens. Staff also participate in newspaper, TV, and radio interviews.
- The department maintains the DNR Call Center to answer general questions about natural resources.
- The Wildlife Management and Natural Heritage Conservation Programs maintain a Wildlife Switchboard phone line where dedicated staff triage and respond to public inquiries.

Topic: Provide detailed information on places to pursue hunting, fishing, and trapping.

The department, federal and other state government and private partners manage about 7.5 million acres in Wisconsin to provide fish and wildlife habitat and provide opportunities for a wide range of outdoor recreation activities including hunting, fishing, and trapping. An important part of the

department's mission of ensuring that all residents have the opportunity to use and enjoy the outdoors is providing easily accessible ways for people to locate lands open to the public.

Examples of public engagement:

- The department maintains a comprehensive GIS mapping application that depicts lands open for hunting, fishing, and trapping (and other outdoor activities) in Wisconsin. This Public Access Lands (PAL) atlas includes:
    - Land and easements owned by federal, state, and county governments.
    - Lands enrolled in the Voluntary Public Access program.
    - Lands and easements owned by land trusts that are open to the public.
    - Lands enrolled in forest tax law programs (Managed Forest Law and Forest Crop Law) that are open to the public for hunting, fishing, and trapping.

In addition to the web-based mapping application, the PAL atlas is available as downloadable PDFs and in printed form.

Topic: Explaining upcoming management actions on DNR properties.

The department strives to ensure that when people visit DNR-managed properties they are not surprised by what they see and experience.

Examples of public engagement:

- DNR staff develop Annual Property Implementation Plans (APIPs). The department develops short-term work plans that describe the upcoming on-the-ground habitat management actions and recreation facility development projects. These work plans are based on the property's master plan (see the "CONSULT" section of this document for more information on property master plans). APIPs include habitat restoration projects, timber sales, tree plantings, prescribed burns, invasive species control as well as recreation and infrastructure development projects (e.g., new or expended parking areas, trails, buildings, roads).
- Most, large, multi-faceted properties typically have stand-alone APIPs while smaller, less intensively managed properties have management actions included in a department listing of habitat and development treatments and projects. The public is encouraged to contact property managers directly with their comments related to habitat and recreation facility developments. The department posts all planned management actions described in APIPs on the department's APIP webpage.

Topic: Habitat management on private lands to benefit fish and wildlife.

About 20% of the state is held in some form of public conservation ownership. Although these lands provide critical habitat for fish and wildlife, private lands and their use are very important to the health of most of the state's fish and wildlife species. The department provides ongoing opportunities for private landowners to learn about and implement land management techniques to provide high-quality habitats.

Examples of public engagement:

- The department works with the public in the following programs to assist private landowners in

managing fish and wildlife habitat:

- Forest Landowner Grant Program
- Landowner Incentive Program
- Weed Management Area grant program
- Deer Management Assistance Program
- Aquatic Invasive Species Control Grants

Topic: Fish and wildlife health issues and consumption advisories.

Ongoing and newly developing fish and wildlife health issues are complicated, impactful, and often concerning for the public. Department staff routinely engage with the public regarding ongoing and new wildlife health issues and consumption advisories.

Examples of public engagement:

- For new Chronic Wasting Disease (CWD) findings, the Wildlife Management program holds public meetings to discuss the findings and strategize potential management in addition to hosting a dedicated web page and issuing news releases. Every hunter who submits a deer for CWD sampling receives an email with their results.
- The department distributes fish and wildlife information on the DNR website and through GovDelivery messages. The department continually updates its website and provides information to the public through its extensive GovD system on the most current information related to fish and wildlife health and consumption advisories.
- Wildlife Management staff conduct an annual "Keep Wildlife Wild" campaign to educate the public on suspected orphan wildlife and to direct true orphan cases to an appropriate wildlife rehabilitation facility, including:
  - Implementing a communications plan that includes social media posts, news releases, and GovDelivery messaging.
  - Creating virtual, species-specific resources for the public on life history and normal wildlife behavior.
  - Working with external partners such as UW-Extension and Licensed Wildlife Rehabilitators to create consistent messaging and resources on living with wildlife.
  - In-person and virtual presentations to provide information on keeping wildlife wild and how to coexist with wildlife.

Understand Public Perspectives and Participation: Department efforts to gather information about the public's use of, and perspectives on, fish and wildlife resources

A key component of successfully managing fish and wildlife populations and providing desirable opportunities for people to engage in activities related to these populations is gathering input and data about the public's use of these resources.

Topic: Understanding participation in hunting, fishing, and trapping.

Successfully managing fish and wildlife populations and providing high quality experiences for

Wisconsinites and out-of-state visitors requires understanding what fish- and wildlife-related activities people pursue and where. In addition, demographic information on hunters, anglers, and trappers can be critical in anticipating future participation trends and demands.

Examples of public engagement:

- DNR staff analyze hunting, fishing, and trapping license and stamp sales data.
- DNR staff conduct surveys of Wisconsinites as part of the Statewide Comprehensive Outdoor Recreation Plan (SCORP) to gather statistically significant data on participation in hunting, fishing, and trapping (and other types of outdoor recreation).
- DNR staff conduct focus group discussions to better understand qualitative aspects related to participation that are not well captured by traditional survey techniques.
- DNR staff gather information on the effectiveness of hunter recruitment, retention, and reactivation (R3) programs and ways to enhance their success through surveys and focus groups.

Topic: Understanding people's satisfaction with their experiences at DNR properties related to fish and wildlife populations.

The department gathers input from the public at many of its larger, more popular properties to better understand people's experiences, satisfaction, and ideas to improve their visits.

Examples of public engagement:

- The department gathers input (often using comment cards or face-to-face informal interviews) from the public at many of its properties to better understand people's experiences, satisfaction, and ways to improve their visits.
- DNR staff participate on many Conservation Congress committees and gather feedback on a wide range of issues related to fish and wildlife populations and their management.
- DNR staff conduct surveys of hunters, anglers, and trappers to understand participant experiences. The department's Analysis Services program conducts surveys and focus groups for many programs in the department including the Fisheries Management, Wildlife Management, and Public Safety and Resource Protection bureaus. Examples from the last 10 years include:
  - Voice of the Customer
  - Deer Hunter Demographics and Deer Harvest
  - Hunter Perceptions and Responses to Chronic Wasting Disease
  - Assessing Sportfish Angler Dynamics in Northern Wisconsin

Consult and Involve: Department efforts to work directly with the public to incorporate their ideas, perspectives, concerns, and needs into decisions and policies

Fish and wildlife issues can be complicated, especially those revolving around hunting, fishing and land use impacts to private landowners. And because people can be understandably passionate about decisions that impact their lives in substantive ways, these issues can sometimes be difficult to resolve. The department's perspective is that incorporating in-depth input from a diversity of voices leads to better decisions and, as a result, the agency invests considerable staff time in consulting with individuals and organizations about their ideas and concerns related to fish and wildlife. This approach helps ensure that people feel heard and that, even if a decision is not their preferred choice, they can often understand the rationale behind a decision.

Topic: Developing strategic plans related to fish and wildlife species and fishing, hunting, and trapping.

The department engages with partner groups, advisory committees, and the general public to develop longer-term plans that establish goals and objectives for fish and wildlife management. These plans provide recommendations on various aspects of species management, including population management, habitat management, education and outreach efforts, damage management and harvest framework, among others. Statewide species management plans have been developed for sturgeon, trout, walleye, panfish, musky, bass, American marten, beaver, black bear, elk, greater prairie-chickens, ruffed grouse, sharp-tailed grouse, waterfowl, wild turkey, and wolf.

<u>Examples of public engagement:</u>

- Species management plans are collaboratively developed by advisory committees comprised of DNR staff and citizens representing groups with an interest in the management of a particular species.
- The Wildlife Management and Fisheries Management programs are updating their strategic plans and engaging with key stakeholders, partners, and license buyers through surveys and in-person events to gather input on goals, objectives, and priorities. The WM and FM program is keeping these partners and the public updated through the process to ensure ongoing engagement.
- DNR staff engage with the public in developing strategic plans, which typically includes an initial input opportunity where the public can provide perspectives and identify issues of concern, review of draft versions of a plan and, if the plan is presented to the Natural Resources Board for their approval, the opportunity to comment directly to the NRB.
- DNR staff revisit strategic plans periodically to incorporate the most recent data concerning species management and provide opportunities for ongoing public engagement.

Topic: Managing DNR properties for fish & wildlife habitats and recreation opportunities.

The department manages about 1.8 million acres of land - across more than 600 named properties - for a range of conservation and recreation purposes. It develops long-range management plans for these properties through the master planning process, which includes extensive public involvement. To streamline the master planning process, DNR properties are grouped together by the 16 ecological

landscapes in the state.

In accordance with a 2023 state statute, the department will develop biennial habitat workplans coinciding with the biennial state budget process and establish priorities and goals for habitat work on lands managed by the department. The first habitat workplan was developed for the FY26-27 biennium. The department will annually report its progress on the habitat work plan goals to the natural resources board, the joint committee on finance, and the relevant standing committees of the legislature.

Examples of public engagement:

Public engagement in developing master plans for all department-managed lands involves three formal input periods:

- Phase 1 - Scoping
  Public input is sought on general issues related to people's use of DNR-managed properties, ideas for improvement, issues to address in the planning process, and other topics of interest to the public. At least one in-person open house meeting is held.
- Phase 2 - Draft Master Plan
  Public input is sought on the draft plan. The public is encouraged to provide feedback on the department's preferred alternatives for the future management of all properties in the master plan. At least one in-person open house meeting is held.
- Phase 3 - Proposed Master Plan
  The public is encouraged to comment directly to the Natural Resources Board when the proposed plan is presented for their consideration.

Collaborate: Department efforts to work jointly with partners to develop potential alternatives, identify preferred solutions, and implement management actions

The department has a long history of pursuing joint, collaborative approaches with partner organizations and groups to many fish and wildlife management issues and policies.

Topic: Setting population goals and harvest targets to manage fish and wildlife populations.

In managing fish and wildlife populations, the department works collaboratively with the Wisconsin Conservation Congress. The Congress is a statutorily denoted citizens advisory group that informs and provides guidance to the Natural Resources Board and the DNR. The Congress' structure and the knowledge of its members make it uniquely suited to provide input and direction on a wide variety of issues related to fish and wildlife management. It currently has 23 standing committees that cover the spectrum of fish and wildlife issues. The DNR and Congress work collaboratively on these committees in setting population goals and harvest targets to manage fish and wildlife populations.

Examples of public engagement:

- The department and the Congress jointly host annual spring hearings in each county throughout the state where the public can discuss and vote on fish and wildlife management issues. Each

year the Congress presents the results of these votes to the Board and its stance on management issues based on the outcomes of the spring hearings.

Topic: Improving retention, increasing recruitment and reactivation of hunters, anglers, and trappers.

The department collaborates with partners to develop and implement education and mentoring programs to improve experiences and increase success rate for hunters, anglers, and trappers. These efforts are of heightened importance due to declines in the number of participants in some fish- and wildlife-related activities and the desire to help maintain their popularity.

Examples of public engagement:

- The department collaborates with a network of volunteer instructors and mentors to provide the public with opportunities to learn basic hunting and fishing skills, explore Wisconsin's land and water resources, and develop a set of conservation ethics to help ensure that Wisconsin's uplands, lakes and streams remain bountiful for future generations.
- Public education and mentoring programs include Learn to Hunt, Fish for Dinner, and a suite of safety related courses including hunting, ATV/UTV riding, Off-Highway Motorcycle riding, boating, and snowmobiling.

Empower Partners: Department efforts to enable partners to take a lead role in some fish & wildlife management issues and actions

For some fish and wildlife issues, partner organizations can take leadership roles in developing and implementing actions to benefit fish and wildlife and their habitats as well as fishing, hunting, and trapping.

Topic: Identifying and implementing grant-funded projects related to managing fish and wildlife populations and providing hunting, fishing, and trapping opportunities.

Partner groups are often well suited to identify local needs and opportunities related to fish and wildlife. For many grant programs the department administers, the agency establishes guidelines and qualifications and then empowers partners – including municipalities to non-profit groups – to identify projects that best meet community needs and leverage local opportunities (note: grant programs that have historically been funded in part through USFWS Office of Conservation Investment funds are noted with an (*)).

Examples of public engagement:

- Partners are encouraged to submit proposals for a variety of grants that meet stated goals and objectives related to hunting, trapping, and fishing. Examples of grant programs include:
    - County Conservation Aid. Wisconsin counties and Native American tribes can submit grant requests to receive financial assistance to enhance fish and wildlife programs.

- Summer Tribal Youth Program. Provides members of a Native American tribe or band 13 to 19 years of age with an opportunity to work on projects related to the conservation of natural resources.
- Urban Wildlife Damage Abatement and Control. Funds to develop wildlife plans, implement specific damage abatement and/or control measures for white-tailed deer and/or Canada geese.
- Wildlife Damage Abatement and Claims. Funds to abate damage and partially compensate commercial agricultural producers for damages from white-tailed deer, black bear, turkey, Canada geese and/or elk.
- Wetland Conservation Trust in Lieu Fee Mitigation Program. Funds for land trusts, conservation groups, government organizations, or Wisconsin landowners to preserve, enhance, and restore wetland resources in Wisconsin.
- Acquisition and Development of Local Parks. Funding for acquisition and development of local nature-based outdoor recreation opportunities
- Angler Recruitment, Retention, and Reactivation (*). Funding to support education, training and development of anglers and mentors.
- Boating Infrastructure Program (*). Funds support construction and renovation of public transient boating infrastructure.
- Hunter Recruitment, Retention, and Reactivation (*). Funding to support education, training and development of safe and ethical hunters and mentors.
- Local Shooting Ranges (*). Funds for construction and renovation of recreational shooting ranges that are open to the public.
- Recreational Boating Facilities and Sport Fish Restoration (*) – Boat Access. Funding to support local recreational boating projects.
- Sport Fish Restoration (*) – Fishing Piers. Funding to support local public fishing access.
- Fish and Wildlife Stamps – Funding to support habitat and stocking.

4. TRENDS

Following are some key trends that will affect fish and wildlife conservation, management and recreation activities in the future. These trends were considered as the strategic issues were developed - and will continue to be important as the goals, objectives and strategies included in this plan are addressed, as progress is evaluated, and steps are taken to adapt to changing conditions.

Participation in Hunting, Trapping, Shooting Sports, Fishing, Boating, and Wildlife Watching

Outdoor recreation continues to be a top driver of Wisconsin's economy. Outdoor recreation contributes $7.8 billion to Wisconsin's GDP, more than the GDP contribution from mining and farming combined.[2] Ninety-five percent of Wisconsin residents participate in outdoor recreation, and it is a primary driver behind visitation to the state. The outdoor recreation economy in Wisconsin is diverse, employing 93,000 people in a variety of sectors in both rural and urban areas, and annually contributing $3.9 billion in worker compensation.

Hunting

Like national trends, the total number of hunters in Wisconsin, as well as the number of hunters as a percentage of population, has declined over the past several decades. Between 2020 and 2024, Wisconsin hunter numbers declined from 671,804 to 652,427. This trend is expected to continue, but hunting remains a strong tradition in Wisconsin and is important to the goals of wildlife management. Wisconsin ranks third in the nation for the number of hunters and seventh for the number of days spent hunting.[3] From 2020 through 2024, an average of 660,000 hunters purchased an average of 1.4 million hunting authorizations annually.[4] Of these, about 647,000 were white-tailed deer hunters.

Hunting Authorizations Purchased.

	ALL Hunting	ALL Deer
2020	1,406,499	877,047
2021	1,378,767	861,890
2022	1,356,390	846,432
2023	1,344,249	838,670
2024	1,344,192	839,826

Individuals who hunt wild turkeys, pheasants, or waterfowl are required by state law to purchase a species-specific stamp to legally harvest these game birds in Wisconsin. Funds generated from the sale of the stamps support habitat management for each species. Stamp sales have remained relatively stable with an average of 34,000 pheasant stamps, 53,000 waterfowl stamps, and 99,000 wild turkey

[2] Wisconsin Office of Outdoor Recreation. 2020. *Outdoor Recreation: A Top Driver of Wisconsin's Economy*. Madison, WI.

[3] Southwick Associates. 2021. *Economic Impacts of Hunting and Target Shooting - Technical Report within U.S. States and Congressional Districts*. Fernandina Beach, FL.

[4] Wisconsin DNR. 2025. Go Wild license sales database.

stamps sold annually over the past five years.

Stamps Purchased.

	Waterfowl	Pheasant	Turkey
2020	56,959	35,111	102,765
2021	53,468	33,895	100,687
2022	51,072	34,119	96,691
2023	50,806	34,163	97,038
2024	50,772	33,776	97,761

Most hunters in Wisconsin are white/Caucasian males who live in urban areas. About 3 percent of women, about 4 percent of African Americans, about 5 percent of Hispanics, and about 16 percent of Asian Americans in the region hunt.[5]

Based on national survey data, hunters spend $2.9 billion annually on hunting-related purchases and support 25,000 jobs in Wisconsin.[2] Ammunition purchases are an important subcategory of hunters' overall spending. National surveys indicate hunters who purchase ammunition spend an average of $130 per person.[6] Small game hunters spend the least, with an average purchase of $65. Big game hunters spend the most, averaging $88 in ammunition purchases. Seventy-seven percent of all hunting ammunition was purchased by hunters who identify as white. Proportionally more rural hunters (70%) than urban hunters (59%) bought ammunition.

Trapping – The Wisconsin DNR supports modern, regulated trapping as a safe, efficient and practical means of taking target species of furbearers and ensuring healthy and diverse furbearer populations are sustained into the future. Anyone wishing to trap in Wisconsin must complete a Wisconsin Trapper Education Course. From 2020 through 2024, Wisconsin issued an average of 23,400 licenses to trappers.[3]

Shooting Sports – The use of both public and private shooting ranges by those interested in a variety of shooting sports has grown in popularity in both rural and urban areas across the country and in Wisconsin. Some ranges are operated by law enforcement agencies, though most ranges in Wisconsin are privately owned and cater mostly to recreational shooters. The Wisconsin DNR currently manages 11 public shooting ranges located throughout the state. Visitors can access all but one of these ranges free of charge. The DNR also reimburses local governments, clubs, organizations, and educational institutions for shooting range construction through the shooting range grant program.

Nationally, target shooting is the most popular type of shooting sport, predominantly with a rifle or shotgun, closely followed by use of a handgun, and distantly followed by use of archery equipment.[7] In a

[5] Aiken, R. 2024. *2022 Participation and Expenditure Patterns of African American, Asian American, Hispanic, and Female Hunters and Anglers: Addendum to the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.* Washington, DC: Office of Conservation Investment, U.S. Fish and Wildlife Service.

[6] U.S. Fish and Wildlife Service. 2024. *Bullet Points: Trends in Ammunition Purchases*. Washington, DC: Office of Conservation Investment.

[7] Responsive Management/National Shooting Sports Foundation. 2008. *The Future of Hunting and the Shooting Sports: Research-Based Recruitment and Retention Strategies*. Produced for the U.S. Fish and Wildlife Service under Grant Agreement CT-M-6-0. Harrisonburg, VA.

survey of Wisconsin residents, target archery shooting was the ninth ranked outdoor activity based on frequency of participation.[8] In another survey, 17 percent of households indicated they had participated in range (target, clay, trap) shooting in the past 12 months. [9] Wisconsin ranks 17th in number of target shooting participants; about 405,000 Wisconsinites spend around $239 million annually on target shooting-related purchases and support 3,800 jobs with salaries and wages totaling $127 million in the state.[2]

According to a recent DNR survey, two-thirds of hunters use shooting ranges.[10] The most common activities at both DNR managed and private shooting ranges are sighting in firearms, recreation/target practice and improving shooting skills for hunting on an annual or several times per year basis. Levels of participation in these activities are relatively comparable.

Fishing – Angling remains a strong tradition in Wisconsin. In one recent survey, 40 percent of households indicated they had been fishing in the last 12 months and about 16 percent indicated that they had been ice fishing.[8] From 2020 through 2024, an average of 2.4 million anglers purchased an average of 2.5 million fishing authorizations annually.[3] Anglers contribute $1.9 billion in economic output to the Wisconsin economy and support 13,580 jobs.[11]

Angling Authorizations Purchased

	Nonresidents	Residents	All
2020	350,497	1,077,851	1,428,386
2021	364,471	993,251	1,357,722
2022	334,768	951,297	1,286,089
2023	330,566	938,384	1,268,966
2024	337,930	951,085	1,289,027

Wisconsin requires anglers pursuing trout on inland waters or salmon or trout in the Great Lakes to purchase an Inland Waters Trout Stamp or Great Lakes Trout and Salmon Stamp, respectively, in addition to a fishing license. The Inland Waters Trout Stamp was created in 1977 to provide funding to improve and restore trout habitat, support trout surveys, and provide increased trout fishing opportunities. Similarly, the Great Lakes Trout and Salmon Stamp was created in 1982 to support trout and salmon rearing and stocking program for the Great Lakes. Sales of trout and salmon stamps have remained relatively stable over the past five years with an average of 168,000 inland and 146,000 Great Lakes stamps sold annually.

[8] Holsman, R. H., J. B. Petchenik, J. Pohlman, and C. Harris. 2017. *Outside in Wisconsin: Results of the 2016 Statewide Comprehensive Outdoor Recreation Plan (SCORP) Survey*. Misc. Publication PUB-SS-1178. Madison, WI: Bureau of Environmental Analysis and Sustainability, Wisconsin Department of Natural Resources.
[9] Cleary, M. 2025. *Results from the 2023 Statewide Survey of Wisconsinites' Recreation Behavior*. PUB-EA-044. Madison, WI: Bureau of Environmental Analysis and Sustainability, Wisconsin Department of Natural Resources.
[10] Schuelke, N. 2024. *Shooting Range Use Among Wisconsin Hunters*. Publication PUB-EA-043. Madison, WI: Bureau of Environmental Analysis and Sustainability, Wisconsin Department of Natural Resources.
[11] American Sportfishing Association. 2021. *Economic Contributions of Recreational Fishing—Wisconsin*. Fernandina Beach, FL: Southwick Associates.

Trout and Salmon Stamps Purchased.		
	Inland Trout	Great Lakes Salmon
2020	173,952	145,620
2021	174,427	150,519
2022	166,584	142,053
2023	162,691	143,976
2024	164,186	147,490

Most anglers in Wisconsin are white/Caucasian males who live in urban areas. About 11 percent of women, about 12 percent of African Americans, about 14 percent of Hispanics, and about 34 percent of Asian Americans in the region fish recreationally.[4]

With the response to the COVID-19 pandemic beginning in March 2020, public demand for outdoor recreational activities that allowed individuals to comply with social distancing guidelines increased. The Wisconsin DNR saw a sharp spike in annual fishing license sales for the 2020 fishing season compared to 2019.[12] Indeed, between 1 March and 30 September 2020, the department sold approximately 119,000 more licenses that conferred an annual fishing authority to Wisconsin residents than it sold in 2019 (13% increase). Almost half (47%) of the increase came from new customers, with sales of first-time buyer licenses more than doubling from 2019 (103% increase). Sales of nonresident annual fishing licenses showed a similar increase to that of resident annual licenses.

Boating – Boating continues to be a popular activity among Wisconsinites, and studies have shown a strong link between boating, fishing, and other outdoor activities. Nationally, 81 percent of boaters engage in at least one other outdoor activity: 67 percent are also wildlife watchers, 43 percent enjoyed fishing, 34 percent also participated in target shooting, 15 percent also hunted, and 15 percent enjoyed archery target shooting.[13] Nationally and regionally, the most active cohorts of boaters are white, rural, male, and in two age groups, ages 46-54 and 55-64, and have above median household incomes.[12]

In early 2025, 623,000 Wisconsin DNR customers had 1.1 million boats registered in Wisconsin.[3]

Wildlife Watching – In the recently released Economic Contributions of Wildlife Watching in the United States Addendum[14] to the 2022 National Survey of Fishing, Hunting, and wildlife associated recreation, 37% of the US population identify as bird watchers (96 million people). Trip-related and equipment-related expenditures associated with birding in 2022 supported $279 billion in total industry output, 1.4 million jobs, and $90 billion in job income across the nation. Additionally, in the Birding in the United States: A Demographic and Economic Analysis, the average birder tends to live in the urban south and is a white older person, but the ages of 16-34 represent more people (25,006) than the 65+ demographic (23,096)

[12] Beardmore, B. 2021. *Results of the 2020 First-time Fishing License Buyer Study*. PUB-EA-002. Madison, WI: Bureau of Environmental Analysis and Sustainability, Wisconsin Department of Natural Resources.
[13] Aiken, R., and J. Leonard. 2024. *Motorized Boating in the United States: A Demographic and Economic Analysis, Addendum to the 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*. Washington, DC: Office of Conservation Investment, U.S. Fish and Wildlife Service.
[14] 2022 Economic Contributions of Wildlife Watching in the United States Addendum, USFWS, 2024

Fish and Wildlife Populations

Wildlife populations have changed dramatically on the Wisconsin landscape over the last several hundred years, but these changes were not well documented before the mid-1800s. Many species declined with the massive habitat changes that occurred to the landscape with the advent of modern farming and timber harvest. Other issues facing wildlife were overharvest for food and persecution of those species considered a threat to livestock or people. Some species responded favorably to farming and forestry, while others increased for a time but then later declined, such as the northern bobwhite and the greater prairie-chicken. One species, the passenger pigeon became extinct, while others were extirpated from the state, including the American bison, elk, gray wolf, cougar, American marten, fisher, and wild turkey. Others including white-tailed deer and black bear declined but remained. In the 1900s to 1940s some species declined even further, especially top predators, after the introduction of pesticides. Other species continued to decline through the 1960s and beyond as a result of more intensive farming, leaving little habitat for wildlife, or from fragmentation or intensive use of forest and grassland habitats.

Nonnative species were introduced for sporting opportunities, such as ring-necked pheasant, gray partridge, brown trout, and rainbow trout. Invasive species were introduced or moved into Wisconsin from neighboring states and have had impacts on native species such as the common carp, European starling and house sparrow.

In the last 80 years, several species have been reintroduced into the state including fisher, elk, American marten, trumpeter swan, and whooping crane. Some species recolonized the state on their own including gray wolf and moose, and others increased in abundance such as bald eagle and osprey once harmful pesticides such as DDT and its derivatives were banned in the 1970s, along with subsequent efforts to monitor and conserve nests. Additionally some species have increased dramatically, taking advantage of the human-shaped landscape including white tailed deer, coyote, raccoon, and Canada goose.

Birds - Wisconsin provides important breeding, wintering, or migratory habitat for 284 native bird species. Of these 284 species, 68 (24%) have been identified as Species of Greatest Conservation Need (species with low or declining populations). Twenty-four of these species are currently listed as Threatened or Endangered in Wisconsin, and one is listed as federally Threatened or Endangered. There are about 35 game bird species in Wisconsin, which provide diverse bird hunting opportunities.

Habitat conversion is the primary concern facing bird species in Wisconsin. Nationally, grassland bird populations have shown some of the most precipitous declines of any bird group, falling by 40% since 1968. Grassland birds have now stabilized at low levels, and there are some species that have shown increases in certain portions of their range as a result of significant investments in Farm Bill Conservation programs. Some species, however, continue to decline due to changing agricultural practices and land uses. Recent research has shown that grassland birds are sensitive to landscape- scale features. In short, the more open the landscape and the greater the amount of grassland present, the better the birds will fare.

Many wetland birds, nationally and in Wisconsin, have shown strong population increases, particularly since the 1990's. These increases reflect the success of conservation efforts associated with the Clean Water Act, North American Waterfowl Management Plan, and North American Wetlands Conservation Act (NAWCA). Conservation partners like Ducks Unlimited have worked together with the department to access significant NAWCA resources used to preserve over 144,000 acres of wetlands and associated upland habitats in Wisconsin. These efforts have benefitted the more than half of all Wisconsin game and nongame birds that depend on wetlands for some portion of their lifecycle, including both breeding and migratory waterfowl, rails, terns, herons and bitterns. A specific concern is regarding shorebirds that use ephemeral mudflats and shallow-flooded fields as resting and feeding sites during the spring and fall migration, being harmed by the draining of habitat for agriculture and housing development.

The eastern forest bird species that have seen the deepest declines are those dependent on either young forests or mature forests. We are also seeing sharp declines in boreal bird species that were found in the northernmost counties. In contrast, some species previously limited to southern counties are now being found farther north. Efforts are currently underway to develop a landscape scale design for southern forests, concentrating on the Driftless Area of southwest Wisconsin, which will integrate areas for oak regeneration. This approach will benefit early-successional species like ruffed grouse and blue- winged warbler, while mature forest area protection is aimed at providing habitat for species like wood thrush and cerulean warbler. Federal Breeding Bird Survey data and monitoring on local national forest lands suggest that populations of many north woods species are doing well as northern forests recover from the historic cutovers last century.

Mammals - Of the 70 mammal species native to Wisconsin, 13 (19%) have been identified as Species of Greatest Conservation Need, while five of these species are listed as Threatened or Endangered at the state or federal level. Twenty-two of these mammal species are classified as game species, i.e. there is a harvest (hunting or trapping season) and/or bag limits – which provide diverse hunting opportunities in the state. Included are the big game species of deer, bear, and elk, 15 furbearers and 5 small game species. Nine species are considered "protected" where take is not allowed except in specific situations or by permit, and several small and medium size mammals are designated as "Unprotected species" with no season or bag limits, though a hunting/trapping license is required in some instances.

Traditional monitoring and the establishment of population estimates for game species using harvest reporting and radio telemetry is continuing and is being supplemented with information gathered with the use of new technology. Trail cameras, which allow for both citizen-based reports of species presence, and other research methods are now frequently used to monitor and estimate populations. Information gathered from monitoring initiatives has demonstrated the southward range expansion of some species including black bear, bobcat, wolves and fisher. Monitoring information has also provided information indicating that fisher populations in their original core range have declined. Cougar observations have increased in the last 10 years to an average of some 20-30 verified reports a year, although there is no evidence of a breeding population to date. Information gathered indicates that these are likely young, male cougars originating from populations in western states that are moving through.

Concerns expressed by hunters about lack of deer, undesirable regulations, and a perceived lack of input on deer management issues resulted in an independent review of the deer management program over a

decade ago. In 2013, the result of this review set in motion several changes to the deer program including: the use of county boundaries to identify deer management units (DMUs); development of citizen County Deer Advisory Councils (CDACs) to recommend population goals and harvest quotas; changes in the metrics used to evaluate deer population levels; development of a Deer Management Assistance Program (DMAP) to assist individual or cooperatives of landowners in managing their land for deer; and implementation of electronic registration. In 2025 the Department concluded a review of the two forest zones, as well as metropolitan subunit boundaries. The northern forest DMUs have been returned to habitat-based units. Several metro subunits in Southeast WI have been expanded. The Department remains committed to engaging with our hunting constituents to manage the deer herd in a biologically and socially acceptable manner.

Wisconsin's elk population is no longer a geographically isolated novelty, but an established and growing herd of increasing ecological, social and economic importance which comes with associated challenges and opportunities. Due to the continued success of elk herds within the Clam Lake and Black River elk ranges, the focus of the Wisconsin Elk Management Plan, 2024-2034 is intended to guide elk management at a statewide level to ensure healthy and robust elk populations while supporting consumptive and non-consumptive enjoyment of the elk resource. This plan reflects the best available information regarding ecological, social, economic and cultural issues surrounding elk management in Wisconsin.

Habitat management within both the Central and Northern elk management zones has focused primarily on the dietary needs of elk, and current management efforts have focused on the creation and maintenance of natural or established forest openings, enhancement of natural grassland and shrub-type habitats such as barrens, and forest management practices that promote early successional aspen and mast-producing oak.

The expected 2024 post-calving population estimate for the northern elk herd is 356 (314-397). The 2024 post-calving population estimate for the central herd is approximately 188 (164-208) elk.

The black bear population has increased both numerically and in distribution, and bears are now common through about two-thirds of the state. Populations are highest in the northern forested parts of the state (bear zones A, B, D). Continued southward expansion of the bear population is expected, but bear numbers across much of southern Wisconsin will be limited by habitat availability and management actions. Harvest goals and permit levels are evaluated and adjusted annually across the 6 bear management zones to achieve management objectives.

The state's gray wolf population is as large and widespread as it has been in modern times, and all biological indications point to a secure and healthy population. Resident wolf packs can be found all across the forested regions of northern and central Wisconsin. Individual transient wolves can occasionally occur in any part of the state. The gray wolf has been delisted from and relisted to the federal endangered species list several times over the last ten years. Wolves are currently (early 2025) listed as federally endangered. Wisconsin has implemented four regulated wolf harvest seasons (2012-2014, Feb. 2021) during the time that the state had management authority, resulting in the legal harvest of a total of 746 wolves. Intensive monitoring of the wolf population in ongoing, and a new Wolf Management Plan was approved in late 2023 to guide wolf management in the years ahead.

Similar to other parts of the country, bat species that overwinter in caves and mines have experienced sharp declines due to white-nose syndrome caused by a non-native fungus. In Wisconsin, four species are impacted, with the most devastating impacts seen for northern long-eared bat.

Habitat conversion, degradation, and disease are the primary concerns for mammal species, especially those that are rare or have declining populations. Threats to habitat vary widely, from loss of native prairie habitat due agricultural cultivation, roads, and houses; to changes in forest habitats through management activities that decrease the extent of older forests, nursery trees, woody debris and open forest canopies. Invasive plants can also degrade and simplify habitats, such as the invasion of prairies and forests by woody shrubs like buckthorn. While these habitat modifications are a threat to some species, they are a benefit to others. However, old forests with abundant features like large woody debris are scarcer in today's landscape. Non-native invasive plant species can also degrade and simplify habitats, such as invasion of prairies by woody shrubs such as buckthorn. Pollution from a variety of sources is an important threat to mammal Species of Greatest Conservation Need, including chemicals that can negatively impact mammal species themselves as well as water quality and possibly invertebrate prey species. Changes in ecological processes are also important for many species, including succession of grassland habitats to shrubland and woodland due to lack of fire on the landscape.

Many of Wisconsin's game mammals are adaptable and do well in a variety of habitats, including human-dominated areas, and thus can cause damage or nuisance situations. The Department continues to contract with the USDA Wildlife Services for response to deer, bear, beaver, and wolf damage.

Fish - There are 148 fish species native to Wisconsin. There are at least 17 non-native species established in the state, for a total of 165 fish species. Twenty-six of these are identified as Species of Greatest Conservation Need, 10 are listed as threatened and 10 as endangered. There are 53 sport fish species, which includes 36 species that are the traditional sport fish species, plus a number of other species that are commonly fished for and harvested, at least in some places in the state (2 gars, 1 bowfin, 4 minnows, 7 suckers, 1 smelt, 1 burbot, 1 drum), which provide diverse angling opportunities. Angling interest for native non-game species such as buffalo and redhorse species continues to grow. There has also been growth in anglers targeting small non-game species (aka. micro-fishing).

Wisconsin's fish populations have always been in flux, but in the last 20 years populations trends have become apparent that have important implications for fisheries management. Changing patterns of climate, land use, and angler behavior have led and will likely continue to lead to some species increasing and others decreasing. In response to temperatures, habitat available for supporting brook trout and brown trout is predicted to decrease by mid-century while smallmouth bass habitat is predicted to remain stable to slightly increase. Agricultural practices within watersheds will continue to influence the health of fisheries. While agricultural practices in some watersheds have evolved to benefit fish populations there are other watersheds where agricultural practices have changed to the detriment of fish populations. Expanding water use (i.e. irrigation and consumption) and urban sprawl will bring additional threats to many of our aquatic resources. Walleye populations have declined in many lakes. Causes are uncertain but may include changing biological communities, habitat, and climate. Conversely, these same factors as well as lessened harvest have caused large increases in largemouth and smallmouth bass populations. Muskellunge distribution, numbers, and sizes are generally up statewide, due mainly to better stocking practices, more restrictive regulations, and greater

catch-and-release angling. Habitat loss is a concern for all fish including rare and declining species identified as Species of Greatest Conservation Need.

Shoreline modifications and development, urban and rural runoff, and aquatic invasive species can all affect the availability and quality of aquatic habitat. Management approaches that help protect specific refuge areas such as important spawning grounds, is an important consideration in protecting fish species including rare species that rely on specific habitat – as would approaches that address large river systems such as the Mississippi and Wisconsin which provide important habitat for species throughout their life cycle.

Changes in Wisconsin's fish populations are inevitable, and trends should be documented and considered in developing management strategies for species and water bodies. In some cases, management goals and stakeholder expectations will need to be modified to reflect inexorable shifts in species composition associated with long-term and landscape-scale environmental and social changes. In other cases, appropriate management actions can be applied to maintain or enhance current fisheries. Research should be conducted to determine the causes of distribution and populations trends and to identify the management responses that are most suitable and the places where they will be most effective.

5. STRATEGIC ISSUES – Opportunities and Challenges

Fish and Wildlife Populations and Habitat

Wisconsin's diverse fish and wildlife populations are the result of a wide range of quality fish and wildlife habitat, and a long history of natural resource conservation. The state's natural resources – including fish and wildlife resources - supply the public with aesthetic, cultural and economic benefits.

Although Wisconsin's landscape has changed significantly since the 1800's – Wisconsin is fortunate to remain home to a diverse array of fish and wildlife species. This includes about 57 wildlife game species and 53 sport fish species, which provide diverse hunting and fishing opportunities in the state. Important breeding, wintering or migratory habitat is provided for 284 bird species – 84 of these species have been identified as Species of Greatest Conservation Need. Of the 69 mammal species that are native to Wisconsin, 14 have been identified as Species of Greatest Conservation Need. There are 148 fish species native to Wisconsin – 26 of those species are identified as Species of Greatest Conservation Need.

The ecological health of the state in the future - and the ability to meet the public's interests in outdoor activities – including fishing, hunting and wildlife watching – requires continued stewardship to ensure the long-term viability of healthy fish, wildlife and habitat. Following are some key population and habitat issues that will grow in importance in the coming years.

Fish and Wildlife Adaptive Management Goals

Adaptive management is an alternative population management framework that uses an objective-based approach with an associated reference table to make population management decisions. Management actions are implemented, as needed, to achieve the population objective (increase, maintain or decrease of the population) based on a set of metrics and relative to what is actively occurring on the landscape. Thus, the population objective is a management action and not a specific numeric population goal or range. Metrics are often used with the objective-based approach to measure the effectiveness of the population objective specific to the metrics of concern. Based on annual review of these metrics and localized needs, annual harvest quotas could be set to achieve the target management objective.

By including multiple objectives in a given population range, the DNR has a greater ability to manipulate the species population abundance and rate of change by having the ability to increase, maintain or decrease within a given population range. Robust monitoring of metrics responsive to management objectives, including population monitoring, is critical to ensure decisions are based on objective data and management actions can be adjusted to maximize success. Research and monitoring activities are needed to maintain data needed for decision making.

Monitoring populations to address nuisances and damage caused by overabundant species will also continue to be important. When some fish and wildlife populations grow in numbers - or expand their range – problems can occur. These problems can include crop and structural damage, nuisance situations and habitat degradation.

It will also be important to continue monitoring species to identify where there are significant declines in populations and identify actions that can be taken to address rare and declining species. In particular it will be important to monitor the status of particular species identified as Species of Greatest Conservation Need in *Wisconsin's Wildlife Action Plan*, and look for opportunities to incorporate the conservation actions included in the Wildlife Action Plan into species and population management plans.

Fish and Wildlife Health

The health of fish and wildlife populations is critical to overall species survival. The health of fish and wildlife is influenced by many interacting factors, such as genetics, environmental stressors, habitat quality, and disease. Fish and wildlife health populations are facing increasing challenges from factors such as habitat loss and/or degradation, contaminants, climate change and increased urbanization. Considering these increasing and often compounding challenges, and the increasing frequency of emerging diseases, monitoring and managing wildlife health is increasingly important.

Understanding fish and wildlife health allows managers to assess population dynamics, providing the opportunity for better informed decisions about harvest management. Diseases can significantly impact wildlife populations, leading to declines or extinctions, especially for vulnerable species. In some instances, fish and wildlife diseases can negatively impact economic activities such as tourism, hunting and fishing. Understanding and managing wildlife diseases is crucial for conserving biodiversity and maintaining healthy ecosystems.

The DNR maintains a strong program of fish and wildlife disease monitoring to detect the introduction of new diseases, monitor changes in disease patterns and understand significant impacts on fish and wildlife populations. While it's difficult to predict what additional diseases may emerge and the specific effects of those diseases on Wisconsin's fish and wildlife populations, it will continue to be important that populations be monitored, cases of mortality be investigated when appropriate, and partnerships with other agencies, organizations and the public be maintained to identify future threats. Priority diseases, such as chronic wasting disease or highly pathogenic avian influenza, may warrant more extensive monitoring or application of resources to manage.

Fish and wildlife health is also important for human and domestic animal health. Some pathogens that affect wildlife can also affect humans or domestic animals. DNR works closely with sister agencies, especially the Wisconsin Department of Health Services and The Department of Agriculture Trade and Consumer Protection, to ensure consistency, accuracy and efficiency in responding to wildlife disease events.

Finally, responding to and monitoring wildlife health is of interest to a growing segment of the general public. Social science has documented that societal changes, such as urbanization, are leading to a shift in wildlife values among the American public. This shift is leading to more diverse expectations of fish and wildlife management agencies and opportunities to engage new audiences. One of these shifts is an increase in the proportion of the public that believe that humans and wildlife are meant to co-exist or live in harmony, and thus wildlife deserve rights similar to the rights of humans. "Health" to these individuals often extends to individual animals and an expectation that DNR staff respond to any sick, injured or orphaned wild animal. It will be important to consider the changing expectations of the public as they relate to wildlife health and balance with the agency priority of protecting fish and wildlife as a resource.

Quality Habitat

Wisconsin's fish and wildlife populations are dependent upon habitat provided by the wide range of ecological landscapes across the state. Changes in the quality and availability of habitat result in changes in fish and wildlife populations, and can determine whether individual species thrive or decline.

Habitat Challenges:

- Invasive Species: Although no longer a new issue, invasive species are a major concern for aquatic and terrestrial fish and wildlife habitat. New invasive species are continually being detected and existing invasive species are spreading to new locations, resulting in the potential for major changes to ecosystem composition, structure and function. Many wetlands in the southern part of the state have challenges with purple loosestrife, phragmites and reed canary grass. Garlic mustard, common buckthorn, and Japanese honeysuckle have invaded many forests, eliminating native spring wildflowers and significantly reducing oak regeneration. Habitat for native species in inland lakes has been negatively affected by aquatic invasive species. Many invasive species introduced into the Great Lakes have made their way to the Mississippi River and inland waters and wetlands. Examples of some of the most problematic include the rusty crayfish, Eurasian water milfoil, and zebra mussels. A number of invasive species are found in Lakes Michigan and/or Superior – including the spiny water flea, round goby, ruffe and white perch. A number of invasive species are also found in the Mississippi River watershed, but not the Great Lakes watershed, including invasive carps. Invasive plant and animal species will continue to present major challenges and it will be increasingly important to factor in approaches to both prevent the spread of invasive species where possible and lessen the impact of these species where that is the best option. Finally, efforts will continue to be needed to prevent new species from entering the state, along with strategic control of the highest priority species[15].
- Land Use & Development: Changing land use patterns have also resulted in loss of habitat, with particularly significant impacts on those species that require large expanses of habitat, or that have very specialized habitat needs. Over the past 20-years, the upper Great Lakes states of Michigan, Minnesota, and Wisconsin, each rich in natural inland lakes, have experienced increases in human population. Patterns of growth tend to be away from agriculture and urban core areas and toward suburbs and lake rich areas such as central and northern Minnesota, northern Wisconsin, and the upper peninsula and lake regions of lower Michigan. Shorelines in particular are exceedingly important in maintaining a lake's health and the diversity of its aquatic biota. Approximately eighty percent of the aquatic plants and animals on the state's endangered and threatened species list spend all or part of their life cycle with the nearshore zone. As many as ninety percent of the living things in lakes and rivers are found along their shallow margins and shores. Conversion of natural lakeshore habitat to residential development has greatly accelerated and has cumulative effects on fish and wildlife habitat, water quality, and biota of lake ecosystems.
- Fragmentation: Connected to this loss of habitat through development is the accelerating fragmentation of land ownership into smaller and smaller tracts. This parcelization of rural landscape has significant implications for how habitat conservation efforts need to be approached. Smaller parcels tend to be more expensive to conserve, both in terms of staff time for projects that seek to encourage conservation by landowners as well as acquisition and management costs. In addition, it

[15] These included "prohibited" species listed in Wis. Admin. Code NR 40.

becomes substantially harder to protect larger, contiguous blocks of habitat and provide suitable public access when dealing with multiple small-acreage owners rather than fewer large-acreage owners. In addition, fragmentation of aquatic habitat by dams and barriers negatively impacts aquatic species ability to access reproductive, rearing, feeding, and refuge habitat.

- Farming: Farming practices continue to evolve in the direction of larger intensively farmed tracts utilizing an array of pesticides and fertilizers that can negatively impact biodiversity and habitat on the landscape, such as neonicotinoid insecticides that kill native pollinators and excessive nutrients that lead to eutrophication of waterways and wetlands. Fencerows are often cleared to increase field size and marginally wet soils are drained through tile lines and pumping systems. Dry soils are often irrigated with large scale pivot style irrigation systems that can impact groundwater and aquifers. Collectively these changes can have significant impacts on fish and wildlife habitat. However, the department works closely with federal partners such as NRCS and landowners to incorporate wildlife friendly farming practices such as conservation grazing to manage grasslands and Environmental Quality Incentives Program (EQUIP) practices to encourage "farming the best and conserving the rest".

- Energy Development: The increased use and demands forenergy in Wisconsin and the associated energy development has consequences for habitats and land use. Large scale energy projects such as transmission lines and pipelines traverse hundreds of miles and a broad diversity of macro and micro habitats. In addition to these energy corridors, there are numerous large solar farms projects in the state with several more being planned and/or seeking permits. Wind energy development continues to increase, and with it the potential for significant impacts on bird and bat species, some of which are rare or have declining populations. Demand for sand used outside Wisconsin in hydro fracking petroleum extraction have driven an increase in the development of industrial sand mines in Wisconsin. Wisconsin also has over 120 FERC regulated hydro dams. The number of FERC regulated hydro dams in Wisconsin is one of the highest in the nation. Hydro dams have the potential to impact fish and wildlife populations, habitat, and migration by altering natural water levels and water quality and impacting natural fish and wildlife passage and migration. All of these energy developments have the potential to impact fish and wildlife species and their habitats and the Department should work to minimize impacts through appropriate regulatory and non-regulatory processes.

  With these energy developments come opportunities to partner with utilities to address some of the impacts they have on fish and wildlife species. For example, Integrated Vegetation Management practices can be implemented to create sustainable wildlife habitat and improve corridors between existing wildlife habitat that can benefit a broad range of species, while also complying with utility safety and reliability standards. In Wisconsin, the Department has also built partnerships with Federal Energy Regulatory Commission (FERC) regulated hydropower customers to develop land and wildlife management plans associated with the lands surrounding dams and flowages. The hydropower owners provide financial assistance to non-profit organizations and local fish and wildlife groups to survey the landscape, monitor and manage waterways, educate the public about invasive species, enhance our parks and recreational opportunities. The department should continue to pursue these management plans and continually evaluate whether the benefits of these plans are adequate mitigation for environmental impacts caused by FERC regulated hydropower operations. There are other opportunities the department is beginning to explore with wind and solar farms to partner together to remediate the impacts of these energy developments. All of these issues must continue to be considered as planning and implementing fish and wildlife management strategies

continues in the coming years.

Habitat Opportunities and Successes

To offset the negative impacts of changing land use and improve upon Wisconsin's vast and diverse habitat resources, the department has developed habitat strategies to:

- Develop and complete habitat enhancement protection and enhancement projects.
- Ensure the efficient use of available resources based on impact, cost/benefit analysis, and management needs.
- Provide the ability to set long-term, large-scale habitat goals and smoothly integrate goals into the existing framework.
- Improve collaboration with other programs and land-managing organizations.
- Open partnership opportunities with government and non-government organizations through offering well-defined habitat and resource needs.

Examples of these strategy and prioritization efforts include:

- Habitat Management Guidelines (HMGs) have been developed for priority habitat types in the state including grasslands, barrens/savanna, oak forests, wetlands, and young forests. The HMGs are concise guides for department property managers that outline the habitat type goals, management techniques, and ways to overcome common challenges.
- ArcGIS Online habitat prioritization tools are interactive maps that overlay DNR and partner land ownership with spatial habitat priorities. Staff utilize these maps in developing habitat workplans and projects for state lands. Generally only work in high or medium priority habitats is funded.
- The Wisconsin Wildlife Action Plan outlines the Species of Greatest Conservation Need (SGCN), their associated habitats and the Ecological Landscapes they use. It also highlights Conservation Opportunity Areas and actions to conserve SGCN.
- The 2020 Wisconsin Waterfowl Habitat Conservation Strategy (Strategy) is a 15-year plan that directs strategic waterfowl habitat conservation. The Strategy is a stepped-down plan that will aid in the delivery of the goals and objectives of the North American Waterfowl Management Plan (NAWMP) and the Upper Mississippi River and Great Lakes Region Joint Venture's Waterfowl Habitat Conservation Strategy. The Strategy takes these other plans further by developing goals, objectives and priorities that are specific to ecological and social needs at the state level. Improving habitat for waterfowl in Wisconsin is one of the main objectives for sustaining and growing waterfowl populations, as outlined in the Wisconsin Waterfowl Management Plan.
- Species Management Plans which identify key habitats needed to meet the species population goals.
- The Wisconsin Inland Trout Management Plan 2020-2029 provides direction for the inland trout management in Wisconsin. It guides the allocation of resources, identifies constraints, determines locations and prioritization of management including habitat management.
- Brook Trout Reserves program has identified HUC-12 watersheds where brook trout have the best chance of surviving in the face of warmer temperatures thru mid-century and provides a portfolio of management options addressing habitat management, acquisition, planning and partnering that will all be important to long-term brook trout conservation within Brook Trout Reserves

- Streambank Protection Program prioritizes easement acquisition and protects coldwater and warmwater fisheries, water quality, and riparian habitat.
- Healthy Watersheds, High-Quality Waters provides a road map for how to strike an improved balance between restoration and protection, while emphasizing high quality waters of Wisconsin.
- Multi-program involvement and collaboration in State permit reviews such as Waterway and Wetlands, Dam Safety, High-Capacity Wells, Aquatic Plant Management and Environmental Assessments permits.
- Ongoing assessment, designation and protection of critical habitat through the Critical Habitat Designation program.

Utilizing the above strategies the department conducts a variety of habitat restoration and management activities including:

- Wetlands: There are numerous efforts ongoing between the department and partners to implement wetland habitat conservation. Several grant funding programs at the national, state, and local levels have brought partners together in this effort. Examples include the North American Wetlands Conservation Act (NAWCA), Waterfowl Stamp Funding, Farm Bill programs, the Great Lakes Restoration Initiative (GLRI), the Natural Resource Damage Assessment (NRDA), and funds raised from private donors and foundations.

  Additionally, various wetland mitigation programs, such as mitigation banks and in-lieu fee programs are in place to create or replace wetlands that have been altered through processes such as wetland permitting and highway construction. Other opportunities, such as phosphorous credits/trading provide a means to mitigate negative effects on water quality, and will likely have a positive impact on wetland habitat as well. On department lands, staff restore wetlands on newly acquired lands and actively manage thousands of acres of wetland impoundments to maximize habitat quality and provide wildlife-based recreation.

- Grasslands: The department has a focused effort to restore and maintain a variety of grassland types on state lands to benefit game and non-game wildlife such as prairie chickens, pheasants, and numerous at-risk birds, as well as pollinators. Native tallgrass and shortgrass prairies are restored and maintained in spatial priority areas with appropriate soil types. Cool season grasslands are managed primarily through cooperative agreements with neighboring farmers to graze or harvest hay. Prescribed burning is the primary tool of grassland management in Wisconsin and the department annually burns over 29,000 acres.

- Forests: The ownership pattern of the private, non-industrial forest has shown a striking change in recent years. The number of private forest owners has more than tripled in the last forty years to an estimated 426,000. These landowners manage approximately 11.5 million acres of forest, of which 9.7 million of those acres are owned by non-industrial family forest owners. This comprises about 68% of the state's total forested land. Conversely, public entities hold 5.2 million acres of Wisconsin's forests. The federal government manages an estimated 1.6 million acres of forest land, much of this in the Chequamegon-Nicolet National Forest. The State of Wisconsin manages another 1.2 million acres. Local, primarily county government agencies, manage an estimated 2.4 million acres of forest land in the state. Native Americans tribes own 0.4 million acres. These lands are either managed by the tribes or by the federal government in trust on behalf of members of the tribal community.

Within ownership, it is significant to evaluate the proportion of forested lands that are urban versus rural. Wisconsin cities and villages cover 2.1 million acres, just over 6 percent of the state's total land area, and are home to 70 percent of the population.

Each year, nearly 3,400 new forestland parcels are created. The average size of privately owned forest parcels in southern Wisconsin is now just over 30 acres and 90% of forest owners own fewer than 100 acres. Many of today's new forest owners are from urban areas and own land primarily for personal recreation use and aesthetic enjoyment. With this new ownership pattern comes new challenges and opportunities. Owning land for timber management tends not to rank very high as a reason for owning land. Consequently, many do not, as a common practice, participate in traditional forest management activities or assistance programs, with roughly 34 percent of family forest landowners having a written forest management plan to guide their land management decisions. Some of these landowners have demonstrated an interest in learning to properly manage the property for sustainable timber production, climate change mitigation for the future and to benefit our wildlife resources. On a state-wide scale, this means that changes in policy and forest management on public lands may be overshadowed by changes on private lands.

There are significant opportunities to help family forest landowners increase their engagement and stewardship of their lands through targeted outreach, marketing and increased use of social media platforms. There are also many state, federal, and partner programs that encourage responsible land ownership including: Managed Forest Law (MFL), DNR's Forest Stewardship Program, Deer Management Assistance Program (DMAP), Young Forest Partnership (YFP), DNR's urban and community forestry grant programs, federal farm bill programs, and the Landowner Incentive Program (LIP) to name just a few. High landowner interest in responsible land management and multiple program offerings to fit individual needs, provides a great opportunity to support Wisconsin's natural resources.

- Fisheries: There are numerous ongoing efforts by the department and partners to protect and enhance fisheries habitat, such as acquiring streambank protection easements and Fee Title properties and developing and implementing habitat enhancement projects such as native plantings in stream bank areas, installing stream habitat structures, and improving floodplain connectivity.

Participation in Hunting, Fishing, and Wildlife Watching

Hunting, fishing, and wildlife watching are activities with a long tradition in Wisconsin, and are important to our state's culture and economy. In addition to the estimated $5.5 billion annually in expenditures associated with hunting, fishing and wildlife watching in Wisconsin, many of those responding to the public outreach questionnaire referenced earlier in this plan indicated that they value these activities as being very important to their lives.

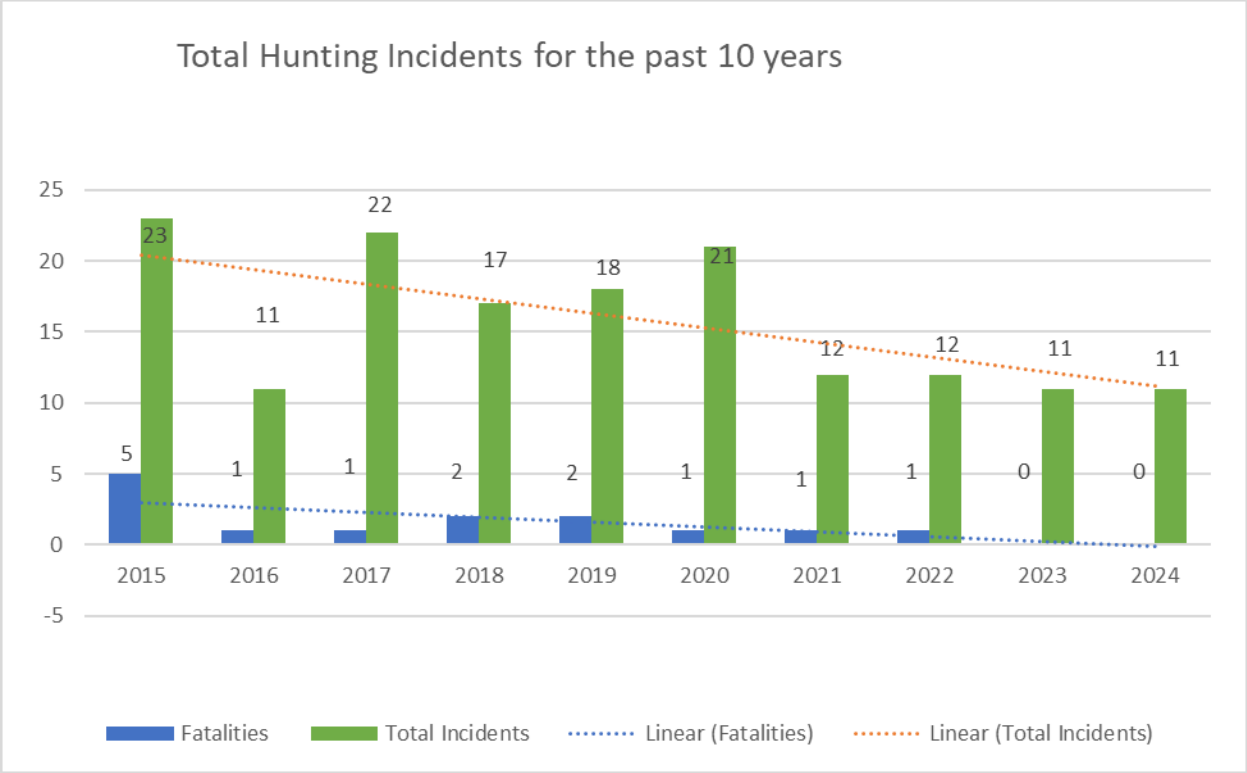
As more people move from rural areas of the state to more urban/suburban areas, and as there are shifts in interests in fish and wildlife activities. It is also important to reach out to those who don't participate in outdoor activities – or who have dropped out of participation – to foster an interest in fish and wildlife related activities.

As Wisconsin's population grows, diversifies and becomes more urban, the value of some public properties will continue to grow – especially those properties close to urban areas and those with facilities and trails that facilitate use. This will result in increased costs to maintain properties and facilities, the potential for greater conflict between those using these properties, and increased opportunities to connect with people to highlight the value and benefits these lands provide. It will also be important to better understand who visits properties, what activities they participate in, what could be done to improve their outdoor experiences, and how to better engage people in the protection and management of these properties.

Hunting[4,5]

The number of hunters in Wisconsin peaked in 1997 at 813,000. A 2025 demographic analysis suggests that deer hunter numbers will likely decline by 27-40% by the year 2040, and Wisconsin has experienced a decline of approximately 20% as of 2024. The resultant loss in license revenues will seriously erode conservation funding. Hunting license fees and excise taxes on firearms and ammunition provide significant financial resources for the wildlife conservation programs in Wisconsin. Supporting hunters, meeting their needs for access to hunting opportunities, managing for abundant and sustainable game populations and investing in hunter safety programs will continue to be critical. Providing education and pathways to help those new to hunting will also continue to be a focus of the department. Wisconsin's Hunting & Shooting Sports program supports volunteers, staff, and contracted partners who coordinate educational outdoor skills programs for the public, which cover "advanced" hunting and shooting skills as a next step to completing hunter safety. The programs provide support to those interested in learning to hunt, with a parallel goal of engaging existing hunters as volunteer instructors.
The Department will also continue to implement programs that coordinate hunter education and safety programs with firearm and archery-range programs. This includes a commitment to provide shooting ranges on public lands and a program to assist with maintenance and development of private shooting ranges that provide some public access. The interest in recreational shooting programs and hunter training, specifically hunter safety, continues to be high. Ensuring hunting is a safe recreational activity is key element to maintain the overall public support for legal hunting. Based on changes in technology, motivation and the demands of modern hunters, delivery of hunter training to the customer has changed with online training opportunities while maintaining hands on training to instill in our new hunters safe firearm handling. As the hunting community diversifies it will be increasingly important to

adapt the style, format and delivery system used to provide hunter education in order to ensure we are



reaching our diverse customers. This also includes supporting a strong, diverse volunteer instructor corps to teach hunter education in all communities throughout Wisconsin.

In conjunction with partner groups and through efforts to increase participation and volunteers, the Hunter Education program has seen a reduction in hunting incidents and continues to trend downward. In 2024, there were 11 hunting incidents with zero fatalities which brings the 10-year average of hunting incidents down to 15.8 from a 10-year average of 26 in 2015. The number of fatal hunting incidents has also seen a significant reduction in the past 10 years, from 5 in 2015 to the last two years being fatality free.

This reduction, in part, can be attributed to Hunter Education program efforts to increase communication and outreach to the public with awareness and safety messaging as well as campaigns to increase volunteer participation. Volunteer participation has been on a downward trend, the past 10 years, which also matches national trends in volunteerism. However, with dedicated outreach and a fully staffed team, Hunter Education has seen an increase in volunteers in more recent years.

Recreational shooting[6] continues to grow with more customers looking for access to safe public access shooting ranges. The highest demand for safe ranges is connected to population centers, and this which can present a challenge. Users and the general public support additional safe shooting opportunities however finding suitable location for a new range is difficult. Grants or partnerships with existing private or club ranges maybe a potential avenue to increase access to public shooting ranges.

Fishing [4,5]

More than 1.2 million people are licensed anglers in Wisconsin. That number has trended down over the past 20 years. Only anglers ages 16 and older are required to have a license to fish, so these numbers do

not capture anglers who are 15 and under. Fishing license fees and excise taxes on fishing equipment provide significant resources for fishery conservation programs through habitat management and restoration projects, and fish stocking and propagation initiatives. Supporting anglers and meeting the needs of those who fish will continue to be a priority for the department – including programs to recruit anglers and introduce people to fishing. For example, in 2022, the department partnered with the Recreational Boating and Fishing Foundation (RBFF) to obtain a Mobile First Catch Center, dubbed *Fishmobile*, in Wisconsin, to deliver fishing outreach programming to underserved communities.

Boating/Boating Access [7]

Motor boating is a highly popular activity in Wisconsin due to the abundance of lakes and rivers and the state's Great Lakes shoreline. Over the last ten years (2015-2024), an average of 615,000 boats are registered in the state each year, with only a small amount of variability; from a low of 604,000 to a high of 624,000. The 2024-2028 Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP) estimated that 38% of the state's residents over age 16 (1.7 million people) participate in motor boating each year. And for all boating, which would include motorized and non-motorized boats, the estimate is a 47% participation rate or about 2.2 million people over age 16.
Studies have shown there is a strong link between boating and fishing, with over half of those who go recreational boating do so for the purposes of fishing. There continues to be a strong interest in fishing from kayaks, and this method of fishing is now widely promoted in the fishing media and by outdoor recreational goods suppliers. It's anticipated that the number of registered boats in Wisconsin will remain relatively stable, and that there will continue to be some growth in the number of non-motorized boats (kayaks) but solid quantitative information is lacking at the present time.

A critically important common theme for both boaters of all types and anglers is the need for access to water. The Department will continue to support boating by obtaining and developing new access sites to the waters of the state where needed, and also to maintain and where necessary enhance existing access sites.

Wildlife Watching [4]

More than 2.4 million people feed, observe, or photograph wildlife in Wisconsin. Wildlife watching is growing in popularity over time, and it will continue to be important to engage with and support those interested in wildlife watching, and find opportunities to meet the needs associated with this growing area. Some wildlife watchers are also hunters and/or anglers – while others are not. Opportunities should be pursued to bring together all who are interested in Wisconsin's fish and wildlife resources – to address and be involved in fish and wildlife management and conservation issues.

Communication - Collaboration - Customer Service–Engaging and Serving the Public

Managing Wisconsin's fish and wildlife resources can only be accomplished through collaboration with,

and understanding and meeting the needs of, the many current partners, customers and stakeholders who have an interest in how these resources are managed.

Wisconsin's changing demographics will require the Department to develop new partnerships and to better understand the natural resources-related interests and wishes of an increasingly diverse, urban, and technology-oriented population. Adapting communication to better serve customers and meet the needs of Wisconsin's changing population and taking greater advantage of evolving technology and the use of, for example, social media, to communicate with customers will continue to be important in the coming years. Strategies to engage the public will be critical to the success of fish and wildlife conservation in the state. Evaluating current outreach and engagement efforts and adapting and evolving as needed to maximize success is a strategic priority.

Environmental and Ecological Health

Wisconsin's fish and wildlife populations are dependent upon the many factors that influence the environmental and ecological health of the state. Following are a few of the factors that will be of particular importance as fish and wildlife conservation strategies are developed and implemented in the coming years.

Water Quality and Quantity

Wisconsin's water resources include over 44,000 miles of rivers and streams, more than 15,000 lakes, 800 miles of Great Lakes shoreline, 250 miles of Mississippi River frontage and an estimated two quadrillion gallons of groundwater.

Water resources have undergone many changes over the past years and decades. Water quality in many large streams and rivers has been steadily improving as contamination from 'point' sources has been substantially lowered since the 1970's. The fish populations in many of these water bodies have dramatically rebounded and now support populations of many popular sport fish species. Pollution problems still exist and several waterbodies, including the lower Fox River, are the focus of clean-up efforts. Addressing 'non-point' sources of pollution – a more pervasive form of contamination– can pose additional challenges. The sediments, nutrients and toxic materials that wash off farm fields, city streets, construction sites, parking lots and barnyards, have degraded many surface waters and contaminated some of the state's groundwater. Fish and wildlife conservation projects and strategies will need to consider the implications of water quality on the ability to achieve goals and strategies.

Water clarity affects the ability of fish and wildlife to find food, how deep aquatic plants can grow, dissolved oxygen content, and water temperature. Nutrients—like phosphorus—can dramatically affect water quality, create harmful algal blooms, and determine what species can survive. Nonpoint source pollution - polluted runoff - is a leading cause of water quality problems in Wisconsin. Polluted runoff is caused by rainfall or snowmelt moving over and through the ground picking up natural and human–made pollutants, depositing them into rivers, lakes, wetlands and groundwater. Steps to further reduce nonpoint pollution will translate to improved fish and wildlife habitat across Wisconsin's aquatic landscapes.

Water quantity issues can also affect fish and wildlife habitat – specifically regarding the availability of good quality groundwater to provide adequate base flow to lakes, streams and wetlands. Lowered

water tables can have major impacts on wetland vegetation, in some cases, by effectively decreasing the water levels in the wetland to the point where aquatic vegetation can no longer survive. Excess groundwater withdrawals may also reduce the output of springs and seepages, altering the quality and quantity of water received by lakes and streams, destroying important micro habitats and species dependent on those habitats. Groundwater quantity problems have occurred as a result of drought and bedrock structures that yield low volumes, and as a result of excess withdrawal and pumping and land use activities that limit infiltration rates.

Adapting to Changing Environmental Conditions

The department regularly makes decisions amidst change, and our mission statement directs us to think about the future and how it will affect our customers, the people of Wisconsin. Using sound science to inform our decision- making has always been important to the agency, and it remains especially true as we consider how to adapt to changing environmental conditions. Changes in environmental conditions can alter the behavior, distribution, development, reproduction, and survival of fish and wildlife populations. In turn, such changes can alter the benefits that our customers receive from those populations. As such, successful management of our natural resources will depend on first, our ability to understand and predict the impact of these changes on the state's ecosystems, and secondly, on how well we have planned for managing these changes.

The effects of changing environmental conditions may be direct (e.g., heat stress) or indirect (e.g., changes in habitat). Fish and wildlife respond to both types of effects. For the majority of species, there is a common set of weather-climate conditions that affect individuals and populations: advance of spring conditions, spatial shift in climate niche, high temperature extremes, altered snow cover and cold exposure, altered periods of ice cover, drought, and heavy precipitation/flooding events. Climate change increases the risk of wildlife disease by altering host-pathogen interactions, changing the distribution of pathogens, and introducing new diseases.

Some fish and wildlife species are dependent on specific temperature and precipitation patterns. When changes in these patterns occur, changes in a species' geographic range may occur. All species live within an upper and lower temperature range. When temperatures are outside this range, physiological stress or death can occur. While some fish and wildlife species tolerate a wide range of temperatures, for others the range is quite narrow. For example, in response to the earlier onset of spring conditions, some species initiate migratory and breeding behavior earlier in the year, resulting in various concerns including lack of adequate food source. Some cold-water fish species may no longer be able to occupy portions of waterbodies that are warmed by increased ambient air temperatures. Altered snow cover and cold exposure are also of concern, particularly in the extremes of northern Wisconsin. Drought and periods of high rainfall and flooding are occurring as regional weather patterns change – resulting in the loss or alteration of critical habitat, reduced reproductive success, and further isolation of small populations. For example, flooding is a fairly ubiquitous cause of reproductive failure in waterfowl and shorebirds. A single event can result in complete nest loss in an entire colony.

Similarly, high river flows can flush eggs and larval fish from their habitats. Spring and early summer droughts can impact the reproduction of amphibians that rely on ephemeral pond habitats and limit the availability of waterfowl foods.

Biological or ecological data and Information

The need for accurate scientific information will grow in importance as challenges grow in complexity. Sound, science-based conservation policies require a careful balancing of ecological, social and economic factors. Ecological research to answer and address specific conservation questions and issues, along with a better understanding of public views and interests based on robust social science, will be needed to ensure the best available science is available and used in formulating management strategies and in designing approaches that are most likely to achieve established conservation objectives.

Funding

Outdoor recreation is an important driver of tourism in Wisconsin and contributes significantly to the state's economy. In 2021, Wisconsin's outdoor recreation economy contributed $8.7 billion to the state's GDP, with $602 million contributed by boating/fishing and $208 million from hunting/shooting. Financial support for fish and wildlife management programs is largely dependent upon fishing and hunting license fees and excise taxes on the purchase of fishing equipment and firearms and ammunition. Like many other states, Wisconsin saw a significant increase in hunting, fishing, and trapping license sales during the COVID-19 pandemic. However, the rate of modest maintenance and decline in participation has since returned to pre-pandemic levels, and fewer licensed hunters and anglers results in reduced revenue available for fish and wildlife conservation. However, Wisconsin remains committed to providing opportunities for citizens of all ages to learn, participate, and re-engage with our outdoor heritage, and we continue to explore and share ideas for how the future of conservation funding can be diversified to include revenues from other sources. New funding mechanisms that reflect the diverse array of fish and wildlife conservation programs will be increasingly important in the coming years.

Infrastructure and Technology

The physical resources necessary for the Department to carry out its responsibilities include buildings, roads, bridges, dikes, specialized equipment, fish hatcheries and other structures. Maintaining the infrastructure needed to accomplish program goals is expensive. An improved and updated inventory of infrastructure, including age and condition, is needed to plan for anticipated costs for maintenance and repair as well as for making decisions on where new infrastructure is needed and whether older infrastructure should be considered for removal.

In addition, the ways in which people use technology to get information and communicate with each other – the various options for electronic communications – are much different now than they were in the past. Greater demands will be placed on the Department to provide data and information quickly to customers, and tailor communication to meet a wide range of customer needs. The changes in technology also provide opportunities to collect and interpret data more efficiently, and communicate information quickly. Technology is also increasing the effectiveness of harvesting fish and game, which may have implications for fish and wildlife programs, how fishing and hunting are monitored and regulated. It will be critical to be aware of the opportunities associated with evolving technology, as well the additional demands and expectations the availability of new technologies will have on staff and program operations.

Workforce

A work environment that maximizes employee productivity and satisfaction will attract and retain a

diverse, knowledgeable and innovative staff. As with all organizations, the Department will continue to face challenges with the loss of specialized expertise and experience through retirements and position reductions. It will be important to identify those skills and expertise that will be critical to accomplishing the array of fish and wildlife conservation objectives in the coming decade, and to focus recruitment and training programs on meeting those needs. Career development and quality training will help ensure professional and dedicated employees, build leadership, and help align staff and skills to emerging issues. Staff also need to have adequate tools to perform their duties, including up-to-date technology.

Administrative Processes and Management Systems

Efficient, effective administrative processes and adaptive management systems are essential to an organization's ability to meet responsibilities and accomplish program goals and objectives. As available resources continue to diminish and program challenges increase, administrative processes that are nimble and include cross-program efficiencies will be even more critical to ensuring that funding and staff time are being invested to achieve the greatest benefits. Management systems need to facilitate forward thinking, supported by data that is collected and updated to identify trends and develop understanding of the implications for fish and wildlife conservation. As goals and strategies are updated or established, identified emerging issues need to be addressed with resources aligned to support those goals and strategies. Regular monitoring and evaluation is also important, to adapt as needed to reach goals and respond to changes and new information. It's important for all of the fish and wildlife programs to work collectively to achieve common goals and make decisions regarding the best use of resources.

6. FISH AND WILDLIFE GOALS, OBJECTIVES & STRATEGIES

Four broad goals have been developed to describe what we are aiming to accomplish through the implementation of this plan - in consideration of the trends, strategic issues, opportunities and challenges facing fish and wildlife conservation, management and recreation. For each, there is a series of objectives that define more specifically what the aim is, along with a number of strategies - the approaches that will be used in achieving the objectives and goals. A number of outcomes have also been included, which will be used in developing specific measures to evaluate progress and adapt.

Goal I: Protect, restore and enhance sustainable fish and wildlife populations and habitat through an integrated approach.

Outcomes:

- Wisconsin is home to diverse and sustainable populations of fish and wildlife that are representative of healthy ecosystems and sustainable use, and are at levels acceptable to the public
- The public is satisfied with the availability of fish and wildlife for fishing, hunting and wildlife watching.
- The potential effects of invasive species, environmental contaminants, fish and wildlife diseases, climate change and other challenges are understood, and strategies are in place to minimize threats to fish, wildlife and habitat.
- The number of rare or declining fish and wildlife species has decreased.

Objectives:

1. The diversity of Wisconsin's fish and wildlife populations are maintained, and populations are managed to assure their long-term viability, while minimizing the negative impacts of overabundant species and satisfying the public's desire for hunting, fishing and wildlife watching opportunities.

2. Habitat on public and private land is present in sufficient quantity, quality and spatial distribution to sustain fish and wildlife species at desired levels.

3. Fish and wildlife conservation actions are developed in consideration of the varied and dynamic factors that affect populations, are based upon the ecological potential of specific landscapes, and are designed and implemented to provide the greatest benefits and greatest chance for success.

Strategies

A balanced approach:

A.) Provide assistance, guidance and incentives to landowners to provide and improve fish and wildlife habitat on private lands, including partnering with other organizations and agencies that are involved in private lands management.

B.) Work with customers, partners, and the general public to conserve fish and wildlife populations and habitat, through a combination of regulations, policies, partnerships and outreach.

C.) Pursue opportunities to manage fish and wildlife populations using a community and ecosystem-based approach to help ensure a diverse array of species is maintained.

D.) Provide technical information and support to municipalities and land-use planners to mitigate negative impacts of land use on fish and wildlife habitat and populations.

E.) Work with the Department's Water Quality and Watershed programs on joint projects and initiatives to identify opportunities to enhance fish and wildlife habitat by addressing specific water quality issues.

Monitor and assess:

F.) Inventory, monitor and assess the status of fish and wildlife species, using the best available science and protocols.

G.) Assess populations and establish harvest frameworks and hunting and fishing regulations for sport fish and game wildlife species, and monitor nuisances and damage caused by detrimental or overabundant species and developing and carrying out management actions that effectively address public concerns.

H.) Monitor the presence and effects of diseases and environmental contaminants on fish and wildlife, develop and implement plans to address threats, evaluate progress and adapt plans as needed. Monitor trends that indicate future threats to fish and wildlife and develop proactive strategies to prevent or minimize impacts.

I.) Monitor the presence and spread of terrestrial and aquatic invasive species and develop, implement and adjust management approaches that prevent or limit the spread of invasive species, focusing on the greatest threats and the most vulnerable habitats. Monitor trends that indicate future threats from invasive species and develop proactive strategies to prevent or minimize impacts.

Prioritize, plan and take action:

J.) Prioritize fish and wildlife species that require updated species management plans that include management objectives to achieve those goals. Develop species and habitat management plans and conduct management work that aligns with identified plans and priorities.

K.) Incorporate conservation actions identified in Wisconsin's Wildlife Action Plan in species and habitat management plans, in order to help keep common species common and decrease the number of rare or declining fish and wildlife species.

L.) Stock/Introduce/Restore fish and wildlife species when and where appropriate to sustain a population, restore a system to its natural ecological potential, address a need for greater genetic diversity or provide fishing, hunting and wildlife watching opportunities.

M.) Prioritize habitats for protection, restoration and enhancement with a focus on identifying opportunities within specific ecological landscapes that will be most important to fish and wildlife conservation into the future, including protecting and restoring critical linkages between existing habitat blocks to facilitate fish and wildlife adaptation to large-scale, long-term changes to habitat and environmental conditions.

N.) Develop and implement long-term management plans for all /properties managed by the Department which focus available resources on management activities that will provide the most benefit to fish and wildlife activities and resources.

O.) Focus land protection efforts and available resources, on those properties that address the highest priorities for fish and wildlife conservation and recreation.

Evaluate and adapt:

P.) Evaluate progress in implementing species and habitat/property management plans and adapt as needed to increase chances for success in reaching goals.

Q.) Identify specific opportunities to adjust management plans and approaches to enhance the ability of fish and wildlife populations and individual species to adapt to large scale, long-term changes to habitat and environmental conditions.

R.) Evaluate the effectiveness and validity of fish and wildlife population and habitat management tools and approaches, to learn how to adapt to be more effective.

Goal II: Support and increase opportunities for people to participate in fish and wildlife-focused activities

Outcomes:

- Increase and diversify the number of people who enjoy Wisconsin's natural resources through fish and wildlife- focused activities.
- Anglers, hunters and wildlife watchers are satisfied with the quality and availability of fish and wildlife recreational opportunities.

Objectives:

1. Fish and wildlife populations are managed to meet the demand, and provide additional opportunities for fishing, hunting, and wildlife-associated recreation.
2. Recruitment and retention programs have been developed and implemented to increase the number of people who enjoy fishing, hunting, and wildlife-associated recreation.
3. Fish and wildlife recreational activities have been enhanced by reducing the number of incidents, fatalities, user conflicts and property damage
4. Through access to both public and private lands - fishing, hunting, and wildlife-associated recreation opportunities are abundant, are well distributed across the state, and provide opportunities to increase involvement in fish and wildlife conservation.
5. Factors affecting fishing, boating, hunting, and wildlife-associated recreation activities are well understood to support program decision-making.
6. Existing infrastructure is assessed regularly and maintained in support of Department responsibilities and program goals

Strategies

Data, research and trends:

A.) Collect and use data and other information regarding future trends and current demand and interest in fishing, hunting, and wildlife-associated recreation as population and property management plans are developed and implemented.

B.) Conduct research to better understand how and why people enjoy and value fish and wildlife

C.) Conduct surveys and use other mechanisms to collect data on the use of Department properties, to better understand how many people visit these properties, what their interests are, what kinds of activities they participate in, and how their experience could be improved.

D.) Assess emerging recreational activities, trends and technologies for user conflicts and compatibility with fish and wildlife conservation and established principles of ethical fish and wildlife recreational activities.

Access and opportunity:

E.) Prioritize habitat projects that provide opportunities for access to fish and wildlife recreation – including projects that provide opportunities close to where Wisconsin's population is shifting – to urban and suburban areas – and other areas that will be experiencing rapid population growth.

F.) Work with private landowners to strategically improve public access opportunities for fish and wildlife-focused recreation on their land.

G.) Maintain current infrastructure and strategically add infrastructure to facilitate use of Department-managed lands and facilities for a variety of fish and wildlife- focused recreation by the public, including fishing, hunting, and wildlife-associated recreation and the development and maintenance of shooting ranges.

H.) Support local units of governments and other partners in developing and maintain boat and shore fishing access areas/opportunities.

Promote participation:

I.) Partner with other organizations to promote and support outdoor initiatives that engage the public in conservation, provide information on fish and wildlife, and provide opportunities to participate in fish and wildlife- focused activities.

J.) Use data regarding the status of fish and wildlife populations and individual species to identify management approaches to support and promote opportunities for fishing, hunting, and wildlife-associated recreation.

K.) Establish harvest frameworks in species and population management plans that provide sustainable opportunities for the public to hunt, trap and fish.

L.) Develop and implement clear fish and wildlife regulations that can be easily understood and enforced, and that increase opportunity, promote quality experiences and reduce conflicts between user groups.

M.) Through both agency-led and collaborative efforts with partners, enhance and build upon fishing, boating safety, and hunter safety courses, certification programs and facilities such as shooting ranges to support hunter safety, to meet the needs of the public.

N.) Improve communications letting the public know where fish and wildlife-focused recreational opportunities are available.

O.) Protect the public's right to use public waters for fishing, hunting, and wildlife-associated recreation

P.) Promote fishing and hunting as legitimate uses of fish and wildlife and compatible with the conservation of all fish and wildlife.

Goal III: Continue to promote communication and engagement with the public and program partners regarding fish and wildlife conservation issues

Outcomes:

- The public is well-informed and knowledgeable about fish and wildlife conservation issues and is engaged in discussions and decision-making as management strategies are developed and implemented.
- People of all backgrounds and interests are actively engaged in fish and wildlife-focused activities and understand and appreciate the value of healthy fish and wildlife populations and habitat – to them and to the state as a whole.
- The public values the Department's stewardship of Wisconsin's fish and wildlife resources and supports continued investment of their conservation dollars with the agency.
- Conservation organizations, land trusts, friend groups, volunteers and others consider the Department to be a valuable partner as we collaborate on fish and wildlife conservation projects and initiatives.

Objectives:

1) Fish and wildlife conservation information is available to the general public, program partners and customer groups - tailored to meet their needs and interests.
2) Opportunities are provided for people to be engaged and involved in decisions that affect fish and wildlife conservation and recreation.
3) Strong partnerships are fostered to bring people together to work together, to pursue common fish and wildlife conservation goals.

Strategies

Promote involvement:

A.) Promote programs that provide opportunities for all who have an interest in fish and wildlife conservation to work together to pursue common goals – including programs such as Citizen Based Science surveys and data collection initiatives that provide "hands on" opportunities to contribute.

B.) Provide timely information on public participation and decision-making processes used by fish and wildlife programs. Monitor public input opportunities and processes and adjust as needed to maximize public engagement. Notify those interested of opportunities to participate in decision-making.

C.) Develop and enhance partner and stakeholder coalitions to engage in planning efforts and support fish and wildlife management programs, and support partner groups in developing locally-led fish and wildlife conservation and recreational initiatives

D.) Use citizen advisory groups to help address fish and wildlife issues.

Communicate information and assess views:

E.) Communicate key fish and wildlife conservation messages, encourage participation in fish and wildlife programs and events, and use new and evolving technology and tools to promote timely, effective communication with a wide range of audiences.

F.) Routinely evaluate and adjust the communication strategies to better meet the needs, expectations and interests of the public; and to provide transparency as fish and wildlife management issues are discussed and decisions are made.

G.) Routinely assess views and interests in a range of fish and wildlife conservation issues. Consider opinions and attitudes of stakeholders and the public in developing and implementing conservation strategies.

H.) Share information about Wisconsin's fishing, hunting and conservation heritage – along with the benefits of fish and wildlife management to the state's economy.

Goal IV: Ensure management systems, resources, and data are available to effectively meet program objectives and to make sound decisions based on science, including ecological, social and economic factors

Outcomes:

- The public values the Department's effective and efficient use of the fish and wildlife financial resources we are entrusted with.
- Programs have a good understanding of fish and wildlife strategic issues and trends that will require attention – and have plans and systems in place to address those issues, evaluate progress and adapt.
- Necessary resources – staff, financial resources, infrastructure and technology- are available to provide good customer service and successfully implement fish and wildlife programs.
- Data and other information needed to make sound, science-based decisions is available, and being used.
- Resource management decisions are informed by appropriate data and other scientific information

Objectives:

1.) Financial, infrastructure and staff resource needs are assessed, and business practices and management systems used, result in effective implementation of programs and the efficient use of resources.

2.) Programs are administered following continuous improvement strategies – that includes understanding and planning for future needs, implementing programs and aligning resources with those plans, evaluating progress and adapting plans and implementation steps as needed.

3.) Existing technologies are supported and new technologies are adopted to provide good customer service and implement programs more effectively and efficiently.

4.) Initiatives and procedures are developed and implemented to increase the ability to attract, support and retain a diverse, well trained and professional workforce.

5.) Maintain and support scientific and research functions of the agency to produce scientific

information needed to inform agency management decisions

Strategies

Provide and align resources:

A.) Determine staff and financial resource needs, establish short-term and long-term plans and budgets to provide resources, and align resources with the highest priorities necessary to meet fish and wildlife goals and objectives.

B.) Require work and workloads to be aligned with established priorities – and require program and individual workplans to include information on how priorities are being addressed.

C.) Explore opportunities for sustainable, broad-based funding necessary to address increasingly more complex fish and wildlife management needs, and diverse interests in fish and wildlife conservation.

D.) Provide staff with the resources and equipment they need to get the job done.

E.) Assess and prioritize infrastructure needs associated with the implementation of fish and wildlife programs. Address these needs as short-term and long-term plans are developed and resources are aligned with those plans.

Evaluate and adapt:

F.) Routinely measure progress toward meeting goals and objectives and incorporate specific steps for evaluating and reporting on progress in short-term and long-term plans.

G.) Monitor trends and emerging issues that affect fish and wildlife programs and establish plans that anticipate the effects on the ability to meet program goals.

H.) Assess technology needs across the fish and wildlife programs and identify opportunities to meet those needs – through the adoption of new technology and through adapting procedures to make better use of currently available technology.

I.) Assess staffing issues across the fish and wildlife programs, to determine where attention is needed in order to attract and retain staff with specific expertise and experience.

J.) Assess, develop and implement training programs that provide basic, on-going employee training regarding program and Department operations and procedures – including employee safety requirements - as well as specialized training tailored to specific employee classifications and work responsibilities.

K.) Identify and address factors that limit employee engagement, satisfaction, effectiveness and retention, where possible.

L.) Evaluate administrative processes and eliminate or improve processes in order to provide better customer service and assure that resources are being used as efficiently as possible.

Obtain and share information:

M.) Determine what the data and other information needs are in order to make specific fish and wildlife resource management decisions, and in order to implement programs in general. Support the development of data management applications that are user-friendly and provide the information and reports needed.

N.) Follow established protocols to obtain and use data and information needed to reach fish and wildlife goals and objectives and support research initiatives that provide information and data critical for answering questions and making decisions regarding resource management.

O.) Provide information to stakeholders and the general public regarding the use of resources to achieve specific fish and wildlife goals and objectives and develop reports and outreach materials to meet those information needs.

Q.) Support cross program, interdisciplinary initiatives that provide opportunities for programs to share expertise, information and resources.

Appendix: Constitutional, Statutory and Regulatory Authorities

Constitution

The State Constitution includes a provision specific to fish and wildlife – regarding the right to fish and hunt: Section 26 - ***The people have the right to fish, hunt, trap, and take game subject only to reasonable restrictions as prescribed by law***.

Statutes

Statutory authorities to manage fish and wildlife populations and habitat are found primarily in Ch. 29 Wis. Stats. – Wild Animals and Plants.

Specifically:

- ss. 29.001 – 29.095, Wis. Stats. - Definitions and General Fish and Wildlife Regulations
- ss. 29.161 – 29.241, Wis. Stats. - Hunting, Trapping and Fishing Approvals
- ss. 29.301 – 29.364, Wis. Stats. - Hunting and Trapping Regulation
- ss. 29.401 – 29.424, Wis. Stats. - Fishing Regulation
- ss. 29.501 – 29.541, Wis. Stats. - Commercial Activities
- ss. 29.553 – 29.569, Wis. Stats. - Approvals, Fees and Effective Periods
- ss. 29.591 – 29.598, Wis. Stats. - Education and Training
- ss. 29.601 – 29.627, Wis. Stats. - Miscellaneous Provisions
- ss. 29.604 – Endangered and Threated Species Protected
- ss. 29.701 – 29.753 Wis. Stats. - Fish and Game Propagation and Stocking
- s. 29.875, Wis. Stats. - Captive Animals
- ss. 29.885 – 29.89, Wis. Stats. - Wildlife Damage
- ss. 29.921 – 29.991, Wis. Stats. - Enforcement

Additional authorities are included in Ch. 23 Wis. Stats. – Conservation. This chapter includes various authorities that provide for an 'adequate and flexible system for the protection, development and use of forests, fish and game, lakes, streams, plant life, flowers and other outdoor resources in this state'. In addition, Chs. 24 – 28 and 30 – 34 Wis. Stats., include provisions that affect fish and wildlife conservation including conservation funding programs; protection of forests, parks and outdoor recreation areas; and provisions related to navigable waters in the state.

Administrative Rules

Regulatory provisions are included in the Wisconsin Administrative Code, which establish policies and specific provisions for the implementation of a wide range natural resource programs that affect fish and wildlife conservation. Chapters NR 1, NR 10, NR 20, and NR 27, Wis. Adm. Code include the main provisions regarding fish and wildlife conservation.

(Constitutional, Statutory and Regulatory Authorities, Continued)

Specifically:

- Ch. NR 1, Wis. Adm. Code – Natural Resource Policies Establishes policies concerning the management of fisheries, aquatic resources and wildlife; specific provisions regarding game birds and mammals, nongame wildlife, captive wildlife, natural areas, wildlife areas, use of public lands, and land acquisition.
- Ch. NR 10, Wis. Adm. Code – Game, Hunting and Trapping Seasons and Regulations Establishes specific provisions regarding protected and unprotected wild animals, hunting and trapping regulations - including limits and quotas, and wildlife disease management
- Ch. NR 20, Wis. Adm. Code – Fisheries Establishes specific provisions regarding open and closed seasons, bag limits, possession limits, size restrictions and other rules governing the taking of fish in the inland and outlying waters of Wisconsin.
- Ch. NR 27, Wis. Adm. Code – Endangered and Threatened Species Establishes provisions regarding rare fish and wildlife.

Following are additional chapters of the Wis. Adm. Code that include provisions that relate to specific aspects of fish and wildlife management, recreation and conservation.

- Ch. NR 8, Wis. Adm. Code - License and Permit Procedures
- Ch. NR 10, Wis. Adm. Code – Game and Hunting
- Ch. NR 11, Wis. Adm. Code - Closed Areas
- Ch. NR 12, Wis. Adm. Code - Wildlife Damage and Nuisance Control
- Ch. NR 13, Wis. Adm. Code - Chippewa Treaty Rights Participants
- Ch. NR 15, Wis. Adm. Code - Game Refuges
- Ch. NR 16, Wis. Adm. Code - Captive Wildlife
- Ch. NR 17, Wis. Adm. Code - Dog Trials and Training
- Ch. NR 18, Wis. Adm. Code - Falconry
- Ch. NR 19, Wis. Adm. Code - Miscellaneous Fur, Fish, Game and Outdoor Recreation
- Ch. NR 21, Wis. Adm. Code - Wisconsin-Minnesota Boundary Waters
- Ch. NR 22, Wis. Adm. Code - Wisconsin-Iowa Boundary Waters
- Ch. NR 23, Wis. Adm. Code - Wisconsin-Michigan Boundary Waters
- Ch. NR 24, Wis. Adm. Code - Clams

- Ch. NR 25, Wis. Adm. Code - Commercial Fishing — Outlying Waters
- Ch. NR 26, Wis. Adm. Code - Fish Refuges
- Ch. NR 28, Wis. Adm. Code - Wild Plants
- Ch. NR 29, Wis. Adm. Code – Natural Heritage Inventory Data Sharing and Fees
- Ch. NR 30, Wis. Adm. Code – Forest Fire Control
- Ch. NR 40, Wis. Adm. Code - Invasive Species Identification, Classification And Control
- Ch. NR 44, Wis. Adm. Code - Master Planning For Department Properties
- Ch. NR 45, Wis. Adm. Code - Use of Department Properties
- Ch. NR 50, Wis. Adm. Code - Administration Of Outdoor Recreation Program Grants & State Aids
- Ch. NR 51, Wis. Adm. Code - Administration Of Stewardship Grants
- Ch. NR 52, Wis. Adm. Code - Stewardship Land Access
- Ch. NR 58, Wis. Adm. Code - Endangered Resources Grant Programs
- Ch. NR 60, Wis. Adm. Code - Public Inland Lake Protection and Rehabilitation

Appendix: References

For specific demographic information and hunting, fishing and wildlife watching related data cited:

1. 2011 National Survey of Fishing, Hunting and Wildlife Associated Recreation – revised February 2014 US Fish and Wildlife Service
2. Hunting and Fishing Licensing Data 1995 – 2013 Wis. Dept. of Natural Resources
3. Shooting Sports Participation – 2014 National Shooting Sports Foundation
4. 2024 Wisconsin Statewide Comprehensive Outdoor Recreation Plan – Wis. Dept. of Natural Resources

Portfolio of some of the reports and plans that guide natural resource conservation in Wisconsin – including fish and wildlife conservation – and were used as a resource and as background in the development of this plan:

- Wisconsin Department of Natural Resources *in prep*. 2025-2055 Wisconsin Wildlife Action Plan. Madison, WI.
- Wisconsin All Bird Conservation Plan – Wisconsin Bird Conservation Initiative, 2013
- Land Legacy Report- *An inventory of places to meet Wisconsin's future conservation and recreation needs,* 2014 Wis. Dept. of Natural Resources
- The ecological landscapes of Wisconsin: an assessment of ecological resources and a guide to planning sustainable management. Wisconsin Department of Natural Resources, PUB-SS-1131 2015, Madison
- Wisconsin's Biodiversity as a Management Issue, Wis. Dept. of Natural Resources, 1995
- Climate Change Impacts on Wisconsin's Wildlife – A Preliminary Assessment
- Tech Bulletin No. 197, 2013 Wis. Dept. of Natural Resources
- Wisconsin White-tailed Deer Trustee and Review Committee – Final Report and Recommendations, 2012
- North American Waterfowl Management Plan, updated version 2012 North American Waterfowl Management Planning Committee
- National Fish Habitat Action Plan, 2006 Association of Fish and Wildlife Agencies
- Wisconsin Water Quality Report to Congress, 2014, Wis. Dept. of Natural Resources,
- Various Wis. Dept. of Natural Resource's species, project and program specific plans and reports
- 2020 Statewide Forest Action Plan – Wisconsin Dept. of Natural Resources
- Division of Forestry's Strategic Direction – Wisconsin Dept. of Natural Resources
- Forest Legacy Program Wisconsin Assessment of Need – Wisconsin Dept. of Natural Resources