Introduction. The Wisconsin Department of Natural Resources (DNR) has a long history of promoting safe and accessible shooting opportunities for residents and visitors. This history includes a commitment to providing ranges on public lands and a shooting range grant program to assist with maintenance and development on private ranges in exchange for some public access. There are estimated to be over 400 shooting ranges in Wisconsin of which between 30 and 35 are on public land (state, county, or municipality). Five of these public ranges are located in the southeastern third of the state where the majority of the population live.

The public ranges are generally heavily used and several are in need of repair and/or maintenance work. Recent renovations to five public ranges have been completed with at least another dozen in line to be considered in the coming years.

In keeping with its long commitment for shooting opportunities, the Hunting and Shooting Sports Coordinator has developed this strategic plan in consultation with the DNR Office of the Secretary and staff from the bureaus of Law Enforcement, Wildlife Management, Facilities and Lands, and Remediation and Redevelopment. The primary objectives of this five-year strategic plan are to:

• Prioritize shooting range work
• Provide guidance for accessing and focusing available funding toward needs identified at ranges

Current Opportunity. With an estimated 1.7 million firearm owners in Wisconsin and over 400 ranges, including only five public ranges in the southeastern third of the state, there is need for expanded public shooting opportunities.

Vision. In order to maintain and expand recreational shooting opportunities and Wisconsin’s hunting heritage and the economic impact those activities have, we will increase opportunities for shooting in a safe environment within a reasonable travel distance for participants and in a location intended for recreational shooting.

Funding Sources. Funding for range projects is available from several sources including public funding from the Pittman-Robertson (PR) grant and private funding from groups such as the National Rifle Association, and the National Shooting Sports Foundation. Furthermore, because the PR grant revenues are taxes paid by shooters and hunters on ammunition and equipment, more people safely using ranges will provide Wisconsin DNR with increased funding.

Goals.

Actions Goal 1: Improve and increase public access to quality, safe shooting opportunities at well designed, safe ranges.

1. Renovate existing. Evaluate, prioritize, and implement range renovations at public ranges. Priorities are as follows:
   a) Renovate, maintain, and build public ranges located within 50 miles of LaCrosse, Eau Claire, Milwaukee, Kenosha, Waukesha, Madison, Janesville, Appleton, or Green Bay.
   b) Increase public access at private ranges located in the above area through the Shooting Range Grant Program.
   c) Renovate and maintain public ranges anywhere in Wisconsin.

2. Plan for future. Ensure that new shooting ranges are considered in master planning efforts on department lands. (see criteria below)

3. Site and build new.
   a. Identify locations and build new public shooting ranges as budgets and priorities permit.
   b. Consider identifying suitable locations and purchasing an option to purchase while range siting process is ongoing.
4. **Restore grant program.** Re-start the shooting range grant program (s. NR 50.17) in FY2013. See attached grant program
5. **Enlist partners.** Work with partners to develop agreements for range maintenance at all public land ranges if possible.
6. **Lease where possible.** Evaluate leasing public access to existing ranges as an alternative to building ranges.
7. **Share information.** Inform the public about range availability and locations with media releases, web pages, apps, and social media.
8. **Evaluate annually.** Annually review this strategic plan and adapt as needed.

**Actions Goal 2:** Decrease target shooting at non-range sites on public lands where necessary.

**Actions:**
1. Address unsafe target shooting situations on DNR land.
2. **Continue** focus on Goal 1, making adequate shooting opportunity available.
3. **Restore.** Work with partners to clean up unauthorized shooting ranges.
4. **Inform.** Provide shooters at these sites with information about where they should be shooting.

**Goal 3:** Implement sound environmental stewardship plans for publicly owned and funded ranges.

**Actions:**
1. **Manage appropriately.** Follow best management practices recommendations from organizations such as the National Shooting Sports Foundation and the US Environmental Protection Agency.
3. **Reclaim lead.** Demonstrate the feasibility and cost effectiveness of lead reclamation at both rifle and shotgun ranges.

**Actions Goal 4:** Encourage sound environmental stewardship of ranges not under state management.

**Actions:**
1. **Inventory.** Inventory existing ranges by county.
2. **Adhere to standards.** Encourage range owners and operators to follow best management practices recommendations from the National Shooting Sports Foundation’s Environmental Aspects of Construction and Management of Outdoor Shooting Ranges.
3. **Dispose properly.** Encourage range owners and operators to follow EPA’s Best Management Practices for Lead at Outdoor Shooting Ranges.
4. **Reclaim lead.**
   a. Education/communication with non-publicly owned ranges to promote the feasibility and cost effectiveness of lead reclamation.
   b. If possible, work with ranges shooting over water or wetlands to manage the shot-fall zone, re-orient the range, and/or reclaim the lead.

**Existing opportunities.** There are four types of public shooting opportunity in Wisconsin, listed in order of permanence from most to least:

1. Publicly owned and operated ranges open to the public. These ranges are owned and operated by all units of government; the main criterion is that they are publicly owned. These opportunities are most limited in the southeastern quarter of the state and making more available is a high priority for the DNR.
2. Public access obtained through the Shooting Range Grant Program. These leases extend for 20 years. It is important to note the number of years remaining on the lease and the amount of public opportunity when considering the permanence of this shooting opportunity.
3. DNR leases of public use at private ranges. These opportunities may extend for a period of months to years but can be terminated or not renewed by either party.
4. Private ranges open to the public at their own discretion. These opportunities are subject to elimination at any time.

**Guidance for DNR property managers.**

1. **General.** Most of the populous areas of the state are not near a public shooting range (Figures 1. and 2.) Planning and siting a new public shooting range sites in southeastern Wisconsin between Green Bay, Kenosha, Janesville, and Madison as part of acquisition and master planning is a high priority. Developing outdoor public rifle and handgun shooting opportunities is the top priority. Demand for trap and skeet shooting appears to be growing as well and can be considered in the master planning process where staff and infrastructure are supportive. Property managers should look to partner with local clubs to enhance opportunity. Public archery ranges are becoming more popular and should be considered also.

   According to recent surveys by the National Shooting Sports Federation, approximately 30% of Wisconsin residents own firearms. Providing 50 shooting station-days per week (5 days X 10 shooting stations) for 30 weeks (fair weather) per year results in 1,500 shooting stations-days per year in the 100,000 person radius. If 10% of firearm owners use a public range near where they live, meeting this objective will provide each of them with about a half-day of range time per year.

2. **Acquisition Feasibility Study-** In shaded counties and outside of the 100,000 resident buffer (Figure 1.); acquiring property to build a range is a high priority. If a parcel is located where establishing a range fits within the development criteria, inform the local land leader and the hunting and shooting sports coordinator.

3. **Master Planning** - If there is not a public rifle and handgun range within the radius of 100,000 residents surrounding the property, building a range will be considered in the property master plan.
   a. If the property is in a shaded county, a range should be considered. However, if the property is within the 100,000 resident buffer (Figure 1.), the need for another range should be determined in cooperation with the local DNR property manager and the Hunting and Shooting Sports Coordinator.
   b. If there are fewer than 20 public shooting days at privately owned ranges in the county (includes trap, rifle, or handgun) and the county is shaded, building a range will be considered in the property master plan.
   c. If there is a public range within 30 miles (Figure 2.) and the property lies within a 100,000 resident buffer (Figure 1.) of another public range, a range can be considered for the property based on public input and compatible uses but is not a high priority.

Examples:

Property is in northern Dodge County. Northern Dodge County is outside of the 100,000 resident radius of other public ranges and Dodge County is shaded. Constructing a range in northern Dodge County will be considered in the master planning process.

Property is in western Oneida County: Western Oneida County is within both the 30 mile and 100,000 resident radii of other publicly owned ranges. A range can be considered for the property based on public input and compatible uses but consideration is not required.

Property is in southwest Dane County: Southwest Dane County is within the 100,000 resident radius of Yellowstone Lake range. However, the county is shaded and Yellowstone Lake range is heavily used. Consult with local property manager and the Hunting and Shooting Sports Coordinator about siting a range.
County population and 100,000 resident buffer around public shooting ranges.

Figure 1.

Figure 2.
Where to Shoot in Wisconsin. See the DNR web page with links to ranges offering public access: http://dnr.wi.gov/education/outdoorSkills/shootingRanges/

The Wisconsin Shooting Environment and Identification of Needs

Americans, in general, view shooting sports as acceptable. According to a nationwide study conducted by Responsive Management\(^1\) in 2006, 79% of Americans approve of recreational shooting, with most of them strongly approving. Responsive Management research also found that 63% of respondents indicated shooting sports perfectly acceptable today. Each year, millions of Americans participate in shooting sports, including target shooting, archery, bow hunting, sporting clays, trap/skeet shooting, and hunting.

Responsive Management (2006) found that the most popular shooting sport is hunting, closely followed by recreational target shooting with a rifle. This study showed that people in the Mid-west participated at a higher rate than elsewhere in the country. An estimated 18.4% of adults in the mid-west participate in some type of target shooting, or an estimated 800,000 people in Wisconsin. There are over 350 shooting ranges in Wisconsin. Assuming even distribution of the ranges relative to the shooters, each range would have to serve over 1000 shooters. However most ranges are seasonal or limited in terms of number of shooters or open only to members resulting in an increased demand at the public ranges.

Responsive Management (2010) found that among hunters, opportunities to shoot with a friend or at a shooting range are reported as situations that would increase participation in the shooting sports. Responsive Management research indicates that the most important reasons for participating in any of the shooting sports (other than hunting) typically include honing skills, having fun, and to be with family and/or friends.

Shooting ranges are essential to the future of hunting and the shooting sports. People need affordable places reasonably close to home to learn and practice safe handling of firearms. Hunters’ needs are the same for places to site-in and practice with their firearms. Of the ranges on public land, the majority are not staffed. Several others are staffed and operated by a contractor concessionaires, volunteer groups, and/or county employees.

Public access to shooting opportunities in Wisconsin are particularly limited in the southern half of the state with only three DNR managed ranges south of State Highway 10 to serve well over half of the population. Further, in 18 southern counties target shooting on DNR lands is prohibited, increasing the pressure on off-range shooting public lands where target shooting is legal and demonstrating the need for increased access to shooting ranges. One of the three public ranges in southern Wisconsin (Waushara County) was renovated in spring 2012, and the other two (Yellowstone Lake in Lafayette County and McMiller in Waukesha County) were upgraded in 2013. Projects continue on public shooting ranges around the state.

In northern Wisconsin there are at least 29 shooting ranges on public land and these generally also receive heavy use although shooting outside of an established range is permitted in all northern counties. Two maintenance projects were completed in northern Wisconsin in 2013: Snaketrack in Iron County and Caywood in Vilas County.

\(^1\) Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.
Establishing and maintaining shooting ranges on public land is sound environmental management as well. Shooting ranges provide an established and managed location for shooting which provides a safer and manageable alternative to simply shooting on a public land. Since most shooting ranges on public land are managed and maintained by local partners, and lead abatement can be easily performed at an established range, having a managed shooting range on state property can be a preferred alternative in terms of safety and environmental stewardship.

The National Rifle Association, National Shooting Sports Foundation, and EPA all encourage operators of shooting ranges to adopt best management practices and/or environmental stewardship plans for the sites. During the active life of a shooting range, steps can be taken to reduce the amount of lead in the environment. A lead management program, which employs a variety of best management practices (BMPs), should include bullet and shot containment, prevention of lead migration, and periodic lead removal and recycling. There are many techniques available to achieve these objectives, which can be designed to meet the specific needs of individual ranges.

Table 1. Shooting Ranges on Public Land

<table>
<thead>
<tr>
<th>Name</th>
<th>County</th>
<th>Town</th>
<th>Range</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flambeau River</td>
<td>Ashland</td>
<td>41</td>
<td>1E</td>
<td>34</td>
</tr>
<tr>
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<td>Barron</td>
<td>33</td>
<td>13W</td>
<td>17</td>
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<tr>
<td>North Boundary Range (county forest)</td>
<td>Bayfield</td>
<td>50</td>
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<td>36</td>
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<tr>
<td>Cornell (county forest)</td>
<td>Chippewa</td>
<td>31</td>
<td>7W</td>
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<td>Chippewa</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sherwood Shooting Range</td>
<td>Clark</td>
<td>23</td>
<td>1E</td>
<td>21</td>
</tr>
<tr>
<td>Eau Claire Lakes Cons. Club</td>
<td>Douglass</td>
<td>45</td>
<td>9W</td>
<td>25</td>
</tr>
<tr>
<td>Northwoods Trap and Rifle Range</td>
<td>Douglass</td>
<td>44</td>
<td>11W</td>
<td>22</td>
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<tr>
<td>Boyceville</td>
<td>Dunn</td>
<td>30</td>
<td>14W</td>
<td>36</td>
</tr>
<tr>
<td>Colfax</td>
<td>Dunn</td>
<td>29</td>
<td>11W</td>
<td>29</td>
</tr>
<tr>
<td>Menomonie (county forest)</td>
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<td>12W</td>
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<td>18E</td>
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<tr>
<td>Northwoods</td>
<td>Iron</td>
<td>42</td>
<td>4E</td>
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<tr>
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<td>Iron</td>
<td>45</td>
<td>1E</td>
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<tr>
<td>Yellowstone</td>
<td>LaFayette</td>
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<td>4E</td>
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<td>10E</td>
<td>8</td>
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<tr>
<td>Corbin (county forest)</td>
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<td>27</td>
<td>7E</td>
<td>5</td>
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<tr>
<td>Amberg Range</td>
<td>Marinette</td>
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<td>Peshtigo Harbor Wildlife Area</td>
<td>Marinette</td>
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<td>23E</td>
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<td>Silver Birch Park</td>
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<td>14W</td>
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<td>Pierce County Public Range</td>
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<td>17W</td>
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</tr>
<tr>
<td>Cranberry Creek</td>
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<td>1E</td>
<td>18</td>
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<tr>
<td>Dewey (county forest)</td>
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<td>8E</td>
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<tr>
<td>Machickanee (county forest)</td>
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<td>27</td>
<td>19E</td>
<td>24</td>
</tr>
<tr>
<td>Shiocton</td>
<td>Outagamie</td>
<td>23</td>
<td>16E</td>
<td>28</td>
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<tr>
<td>Josie Creek Park</td>
<td>Rusk</td>
<td>35</td>
<td>5W</td>
<td>14</td>
</tr>
<tr>
<td>Taylor County</td>
<td>Taylor</td>
<td>30</td>
<td>2W</td>
<td>1</td>
</tr>
<tr>
<td>Boulder Junction</td>
<td>Vilas</td>
<td>42</td>
<td>7E</td>
<td></td>
</tr>
<tr>
<td>Caywood</td>
<td>Vilas</td>
<td>40</td>
<td>6E</td>
<td>14</td>
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<td>McMiller Range</td>
<td>Waukesha</td>
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<td>29</td>
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<tr>
<td>Wautoma</td>
<td>Waushara</td>
<td>19</td>
<td>10E</td>
<td>30</td>
</tr>
<tr>
<td>Frog Creek Washburn (county forest)</td>
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<td>42</td>
<td>11W</td>
<td>31</td>
</tr>
<tr>
<td>Wood County Range (county forest)</td>
<td>Wood</td>
<td>22</td>
<td>5E</td>
<td>4</td>
</tr>
</tbody>
</table>
Development Criteria and Priorities for Ranges on Public Land

General criteria for range development

1. Location: Ranges may be built on DNR lands where the range is compatible with the surrounding landuse. Ranges can also be built on county (if consistent with the County Forest Comprehensive Land Use Plan and the County Forestry committee is in favor), federal, or local government lands if consistent with owner’s comprehensive plan. General considerations:
   - Be aware of the issue of noise disturbance to residences within 1,000 yards (and in some cases further). Noise mitigation techniques can be employed to mitigate the disturbance
   - Design range to cause all rounds fired at the target to impact the backstop
   - Avoid wetlands or hydric soils or soils with hydric inclusions
   - Avoid State Natural Area’s
   - Avoid archeological sites if possible
   - Direct road access is preferred
   - Locate adjacent to major highways and roads
   - Minimize impact on other recreational users
   - Minimize impact on blocks of wildlife habitat
   - Topography that is supportive of developing a shooting range
   - Determine footprint based on the amount and variety of shooting opportunities offered.

2. Minimum Range Specifications:
   - The range will include at least a 50-yard firearm range and a 25-foot handgun range
   - Acceptable target stand design guidance is depicted in drawings A-36 through A-43 in the NRA Range Source Book although 4”x4” posts are much more durable than 2”x4”
   - Target height must be set in a manner that results in all rounds fired at the target impacting the backstop
   - Target stands will be non-mobile at fixed distances from the firing line to help ensure that all rounds impact the backstop
   - Paper targets only should be a requirement
   - There must be a minimum of five shooting stations (firing points or benches) at each range and ten per range site (i.e. five at the handgun range and five at the rifle range)
   - Backstops and shot-fall zones may not be in a wetland or over water
   - Backstops must be at least 20 feet in height
   - Parking must be provided at the range
   - The facility will be accessible to people with disabilities
   - Overhead structures to provide shade and protect shooters from rain are optional

3. Consult with the Hunting and Shooting Sports Coordinator for initial concept and design assistance.

4. Range development and renovation plans will be approved by a Range Technical Team Advisor from the National Rifle Association.

5. The NRA Range Source book is available and should be used as the guidance for shooting range design and implementation.

6. Range Operations: The range may be operated by a partner, such as a rod and gun club. The range may be open year round, and have established hours. County Forest Land hours, and management agreements are subject to approval of the County Forestry committee

7. If a partner wants to provide additional facilities, such as an archery range, funding will be considered on a case-by-case basis.

8. Some portion of Pittman-Robertson Section 4 funds will be available for range construction and renovation. The amount available will be determined based on priorities in the Hunter Education program, shooting range and hunter recruitment and retention program, available opportunities, and necessary range projects.

Range funding priorities:
Public land range projects will be evaluated considering the following criteria:

1. Range renovation and maintenance projects at existing ranges in shaded counties (Figure 1).
2. Construction of new ranges in shaded counties outside the 100,000 population buffer of present ranges (Figure 1).
3. Renovation projects at other existing ranges.
4. Construction of new ranges where reasonable range access is not available or convenient for public shooting.
5. Demonstration of need, amount of public support, cost, hunter education need, and siting constraints will be considered.
6. More consideration will be given projects to improve an existing range than to develop new ranges in the same locality.
7. Leasing public access at established ranges in shaded counties (Figure 1).
8. The department will evaluate needs (rifle, handgun, trap, skeet, etc.) and establish priorities during range grant cycles (odd numbered fiscal years.)

Privately Owned Ranges

The DNR has a shooting range grant program established in NR 50.17. This program provides cost share funding for qualifying upgrades and maintenance on private ranges in exchange for limited public access. Once popular, use of this program has declined in recent years, but gun clubs and range managers remain interested. Obtaining limited public access through this program or through a lease with existing ranges is often easier than finding a location to build a new range.

The DNR has range development grants available through this program. The details and criteria are available in the Shooting Range Grant Program documents.