

**Wisconsin Department of Natural Resources  
Natural Resources Board Agenda Item**

**SUBJECT:** Request approval of the proposed amendments to the Columbia County Planning Group Master Plan and review of the Environmental Impact Statement for the Columbia County Shooting Range proposed on Mud Lake Wildlife Area.

**FOR: June 2015 Board meeting**

**TO BE PRESENTED BY:** Mark Aquino, Director, Office of Business Support and Science

**SUMMARY:**

In 2012, the Natural Resources Board approved the Columbia County Planning Group (CCPG) Master Plan for DNR-managed wildlife and fishery lands in Columbia County. The plan identified there is a need for a public shooting range in Columbia County. The plan also discussed the public safety and neighboring landowner concerns associated with target shooting in parking lots on the Swan Lake and French Creek wildlife areas.

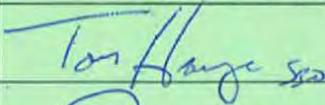
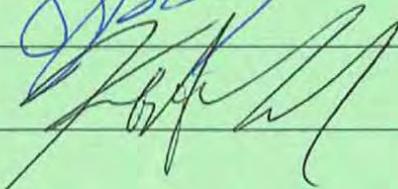
In order to fulfill shooting range needs identified in the WDNR's Shooting Ranges in WI Strategic Guidance, 2014 – 2019 (attached) and through the master plan planning process, the department received approval to proceed with the master plan amendment process for the CCPG Master Plan as well as the development of an Environmental Impact Statement for the Columbia County Shooting Range site proposed on Mud Lake Wildlife Area at the September NRB meeting.

Following the September meeting, Department staff conducted an open house on the draft EIS and the draft CCPG masterplan amendment on December 17<sup>th</sup>. Based on comments received, a final CCPG masterplan amendment was presented at an open house on February 5<sup>th</sup> in conjunction with a public hearing on the EIS. As a result of the public comment period on the masterplan amendment which ran from December 17<sup>th</sup> - February 27<sup>th</sup>, a total of 45 comments were received regarding the CCPG masterplan and the environmental impact statement with 22 comments (49%) in support, 10 (22%) unsure and 13 comments (29%) opposed.

**RECOMMENDATION:** Recommend approval of the amendments to the Columbia County Planning Group Masterplan.

**LIST OF ATTACHED MATERIALS (check all that are applicable):**

- Background memo
- CCPG Masterplan Amendment
- Columbia County Shooting Range EIS
- 

Approved by	Signature	Date
Tom Hauge, Wildlife Management Bureau Director		6-10-15
Sanjay Olson, Land Division Administrator		6-10-15
Cathy Stepp, Secretary		6-10-15

**CORRESPONDENCE/MEMORANDUM**

DATE: May 29, 2015

TO: Natural Resources Board

FROM: Secretary Cathy Stepp

SUBJECT: Request approval of a master plan amendment to the Columbia County Planning Group Master Plan to in order to develop a shooting range on Mud Lake Wildlife Area.

In 2012, the Natural Resources Board approved the Columbia County Planning Group (CCPG) Master Plan for DNR-managed wildlife and fishery lands in Columbia County. The plan identified public safety and neighboring landowner concerns associated with target shooting in parking lots on the Swan Lake and French Creek wildlife areas and identified the need for a public shooting range in Columbia County. Specifically, the approved master plan stated:

**Shooting Ranges** (from page 43):

There is significant demand for a public shooting range in Columbia County. Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.

The Department recognizes the need for a designated and managed public shooting facility in the county. DNR staff are collaborating with local officials and interested sporting groups to establish a public shooting range that meets the generally accepted siting criteria. Several of the CCPG properties were considered in these deliberations, but none were selected. Establishing a shooting range on a CCPG property will require an amendment to this master plan. If a public shooting range is established in the county, the DNR will evaluate options to address concerns about target shooting on these wildlife areas.

As a starting point in the process to address the target shooting concerns, DNR staff responsible for property management of Columbia County wildlife and fisheries areas, reviewed and evaluated the properties in Columbia County to create a list of potential shooting range sites. The evaluation looked at a variety of elements for siting a shooting range including but not limited to:

- Minimize the number of residences within a 1,000-yard buffer to minimize noise concerns
- Avoid wetlands or hydric soils or soils with hydric inclusions
- Avoid State Natural Areas
- Avoid archeological sites
- Direct road access is preferred
- Located adjacent to major highways and roads
- Minimize impact on other recreational users
- Minimize impact on blocks of wildlife habitat
- Topography that provides opportunities to use the terrain to shoot into or minimize potential noise concerns

This effort resulted in the identification of seven potential sites located in the Columbia County Towns' of Dekorra, Lowville and Springvale.

An ad hoc citizen work group was formed in January 2014 to further evaluate the list of seven potential sites in Columbia County. The ad hoc citizens group ultimately identified Mud Lake Wildlife Area as their preferred site to establish a shooting range in an area more specifically identified on the attached map. In order to move forward with this recommendation and potential design phase of the shooting range, NR 44.04(1)(c) requires an amendment to the CCPG Master Plan. Assuming that this master plan amendment process will adopt the ad hoc committee's recommendation to site a shooting range on Mud Lake Wildlife Area, a change to the particular management classification from "Habitat Management Area" to a "Special Management Area" will be necessary. It should be noted that this potential habitat classification change would not change the overall goal and objective of Mud Lake Wildlife Area and a shooting range would be an allowable use on a wildlife area that would have a minimal impact on the primary adjacent use of pheasant hunting on this particular property.

For the siting of a shooting range, as a result of public interest in this issue with varying levels of concern being expressed regarding the different proposed locations during the ad-hoc committee process, the Department will also be completing an Environmental Impact Statement during the master plan amendment process to evaluate the impacts of the range establishment on the resources of the area. The proposed tentative timeline for the master plan amendment process, including the EIS, is identified below.

- |                          |  |
|--------------------------|--|
| October 31, 2014         | Release the Public Involvement Plan.   |
| Dec. 1, '14- Feb. 5, '15 | Start drafting proposed amendments to the Columbia County Planning Group Master Plan.  |
| December 1, 2014         | Release the Environmental Impact Statement for the proposed Columbia County Shooting Range which will start the 45-day public review process.  |
| December 11, 2014        | WDNR conducts an open house to receive input on the proposed amendments to the Columbia County Planning Group Master Plan and the draft Environmental Impact Statement for the Columbia County Shooting Range. |
| Dec. 11 – Feb. 2, 14     | Department evaluates comments received through the open house and makes modifications to the Columbia County Planning Group Master Plan proposed amendment and the EIS.  |
| February 5, 2015         | WDNR conducts an open house on the final amendments to the Columbia County Planning Group Master Plan and a public hearing for the Columbia County Shooting Range EIS.   |
| February 13, 2015        | End of the public input period for the Environmental Impact Statement for the Columbia County Shooting Range.  |
| Feb. 13 - April 7, 2015  | Finalize proposed amendment to the Columbia County Planning Group Master Plan and the Environmental Impact Statement for the Columbia County Shooting Range.   |
| April 23, 2015           | Columbia County Shooting Range Environmental Impact Statement approved.  |

Public comments were received following the release of the Environmental Impact Statement on December 8<sup>th</sup>, 2014 through February 27<sup>th</sup>, 2015 with two formal points in the process as well as through an on-line survey regarding the EIS, a masterplan amendment and various design aspects of the proposed shooting range:

- Twenty members of the public, elected county and town officials and non-DNR agency staff attended an open house for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on December 17, 2014. A total of 11 comments were provided on the poster boards around the room and 1 additional person completed a comment form and submitted it at the meeting. Attendees included 6 members of the Columbia County Board, 1 member of the Town of Pacific Board and 1 member of the Town of Lowville Board.
- Thirty members of the public, elected county and town officials and non-DNR agency staff attended an open house and the formal hearing for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on February 5, 2015. Eight individuals provided oral public testimony on the EIS and one individual provided written testimony.
- Thirty two people completed the on-line survey from December 23<sup>rd</sup>, 2014 through February 27, 2015 and two additional people mailed in a printed copy of the survey.

In addition, staff received three phone calls, four letters and 5 emails during the public comment period. In addition, the Town of West Point presented a resolution regarding target shooting on state lands in Columbia County and in the Town of West Point.

The table below provides a summary of the comments received through the various methods regarding the EIS and the masterplan amendment Columbia County Planning Group Master Plan. The information provided below provides a summary that includes comments received on the masterplan amendment itself due to the close relationship between the EIS, the CCPG Amendment and the development of the shooting range itself.

Columbia County Shooting Range EIS/Masterplan Amendment Comments			
Comment Method	Strongly Support/Support	Unsure	Strongly Oppose/Oppose
On-line Survey	17	8	9
Letters	1	1	1
Phone Calls	1	0	2
Email Messages	3	1	1

Overall, a total of 45 comments were received specific to the environmental impact statement with 22 comments (49%) in support of the EIS findings, 10 (22%) unsure and 13 comments (29%) opposed.

In addition to the public comments received during the Columbia County ad-hoc shooting range committee process and the Department received a resolution passed by the Town of Pacific and subsequently the Columbia County Board. Those resolutions are attached to the green sheet for reference. Both resolutions request the Department to amend the CCPG Master Plan to establish a new public shooting range. Both resolutions also ask the Department to concurrently address uncontrolled target shooting at problem areas on WDNR properties in Columbia County, specifically Swan Lake Wildlife Area.

In order to address the uncontrolled target shooting problems, the Department will be submitting a scope statement to initiate NR 45 rulemaking to provide the DNR with the authority to close specific activities on portions of state owned lands and to establish general rules for shooting ranges developed, the Department.

In addition to the resolutions received during the ad-hoc process, the Department also received a resolution from the Town of West Point requesting amendments to the CCPG Master Plan which would indicate that target shooting should not be allowed on state-owned lands in the Town of West Point. Currently, the DNR-managed lands that are within the jurisdiction of the Town of West Point consist of the Gibraltar Rock SNA/Ice Age Trail parcels. Since the Ice Age Trail is part of the Wisconsin DNR's State Park System, target shooting is not allowed on these parcels. In the future, if additional parcels are purchased within the Town of West Point and recreational conflicts occur, pending approval of the NR45 rule, the Department will have the authority to address the site-specific situations that occur by restricting the specific activity that is causing the conflict.

As a result of the feedback that the Department has received through the CCPG Master Plan amendment and EIS public involvement process, the Department is requesting approval of the CCPG Master Plan Amendment and the authority to proceed forward with the final design of a shooting range on Mud Lake Wildlife Area. Following completion of the design, construction would be scheduled to begin during the spring of 2016 with the facility open to the public prior to the fall of 2016.

# Columbia County Planning Group (CCPG) Master Plan Amendment

**Property Name: Mud Lake Wildlife Area**

**Date the current Master Plan was approved: December 2012**

Additions are underlined and deletions are identified by ~~strikethrough~~.

## Proposed Section Amendments to the CCPG MP (Pages 42-43)

### Recreation and Public Use Objectives:

**Add:**

- Provide opportunities for recreational firearm shooting and target practice

### Recreation and Public Use Management Prescriptions:

**Add:**

- Develop a managed shooting range on the Mud Lake Wildlife Area to accommodate rifle, pistol, handgun and shotgun firearms.

**Delete:**

#### ~~Shooting Ranges~~

~~There is significant demand for a public shooting range in Columbia County. Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.~~

~~The Department recognizes the need for a designated and managed public shooting facility in the county. DNR staff are collaborating with local officials and interested sporting groups to establish a public shooting range that meets the generally accepted siting criteria. Several of the CCPG properties were considered in these deliberations, but none were selected. Establishing a shooting range on a CCPG property will require an amendment to this master plan. If a public shooting range is established in the county, the DNR will evaluate options to address concerns about target shooting on these wildlife areas.~~

## Proposed Section Amendments to the CCPG MP (Pages 64 - 67)

### Mud Lake Wildlife Area

**Table 2-6: Mud Lake Wildlife Area Desired Cover Types (approximate acreage)**

Cover Type	Current		Desired 50 year	
	Acres	% Cover	Acreage Objective	% Cover
Agriculture	94	4	35	2
Grassland	495	22	<u>524</u> <del>515</del>	23
Prairie	43	2	93	4
Oak	458	20	441	20
Oak Savanna	0	0	65	3
Central Hardwood	10	<1	0	0
Upland Conifer	10	<1	0	0

Upland Shrub	40	2		20	<1
Swamp Hardwood	50	2		50	2
Bottomland Hardwood	28	1		0	0
Forested Wetland	30	1		30	1
Sedge Meadow	160	7		160	7
Marsh	455	20		455	19
Shrub Wetland	70	3		70	3
Developed	10	<1		40 19	<1
Water	330	15		330	15
<b>Total</b>	<b>2,283</b>	<b>100</b>		<b>2,283</b>	<b>100</b>

## **Add:**

### **Special Use Management Area – Shooting Range (9 acres)**

#### **Management Objective:**

- Provide a public shooting range with ancillary facilities for rifle, shotgun and pistol firearms in an area between Conservation Drive and King Road with access off of King Rd on existing DNR land as shown on Map E-2.

#### **Management Prescriptions:**

- Construct a public shooting range for rifle, pistol and shotgun firearms. The shooting distances shall be 50 yards and 100 yards for rifle and shotgun, 25 foot for pistol, and 50 yards for patterning shotguns and archery when not in use by firearms. The range will include “no-blue sky” shooting shelters.
- Supporting facilities will include ADA accessible parking and access paths, sanitation facilities and information kiosk.
- Complete construction by Fall 2017.

The entire pages with edits are available in Attachment A.

## **Supporting Information**

### **Purpose and need for the plan change:**

In 2012, the Natural Resources Board approved the Columbia County Planning Group (CCPG) Master Plan for DNR-managed wildlife and fishery lands in Columbia County. The plan identified public safety and neighboring landowner concerns associated with opportunistic target shooting in parking lots on the Swan Lake and French Creek wildlife areas and identified the need for a public shooting range in Columbia County. Specifically, the approved master plan stated:

#### **Shooting Ranges (from page 43):**

“There is significant demand for a public shooting range in Columbia County. Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.

The Department recognizes the need for a designated and managed public shooting facility in the county. DNR staff are collaborating with local officials and interested

sporting groups to establish a public shooting range that meets the generally accepted siting criteria. Several of the CCPG properties were considered in these deliberations, but none were selected. Establishing a shooting range on a CCPG property will require an amendment to this master plan. If a public shooting range is established in the county, the DNR will evaluate options to address concerns about target shooting on these wildlife areas.”

In addition to the need identified in the Columbia County Planning Group masterplan, promoting hunting, shooting sports and hunter safety is a long standing objective within WDNR. Providing the public with accessible, environmentally friendly and safe public shooting ranges to shoot and sight-in rifles and handguns is one element of this objective. With an estimated 800,000 shooters and hunters in Wisconsin and recent strong growth in interest in shooting, providing access to safe places to shoot is a priority for WDNR.

Columbia County falls within a high priority area for range development in the “Strategic Guidance for Shooting Ranges in Wisconsin – 2014 – 2019” (Attachment B). Within this strategic guidance, the goal is to increase opportunities for shooting in a safe environment within a reasonable travel distance for participants and in a location intended for recreational shooting. Currently, no public shooting range exists in Columbia County and the surrounding area. The Wautoma shooting range is the closest public shooting range which is approximately 60 miles from Poynette and the Yellowstone Wildlife Area range is approximately 67 miles away. All areas, including all of Columbia County, lying outside of a 100,000 resident buffer drawn around public shooting ranges have been identified as a high priority for the development of a shooting range.

**Is the proposed plan change supported by or inconsistent with the property vision, goals and objectives or other plan provisions?**

The development of a shooting range on one of the properties in the planning group was identified in the masterplan and is consistent with the oval vision and goals for the properties. Specifically, the vision and goals indicated that the properties will provide abundant outdoor recreational opportunities in lightly developed settings for current and future users. These opportunities will be provided in a mosaic of high quality and ecologically diverse aquatic habitats, open wetlands, grasslands, savannas and forests. One of the specific goals identified in the plan is to provide abundant recreational opportunities for hunting, fishing, trapping, birding, wildlife viewing, nature enjoyment, natural vistas and other compatible outdoor activities with an emphasis on non-motorized recreation.

The specific site on Mud Lake Wildlife Area Mud Lake Wildlife Area, will require a classification change from “Habitat Management Area” to a “Special Management Area”. This potential habitat classification change would not change the overall goal and objective of Mud Lake Wildlife Area and a shooting range would be an allowable use on a wildlife area that would have a minimal impact on the primary adjacent use of pheasant hunting on this particular property.

**Anticipated primary benefits of the proposed plan change** (include only information not presented in the purpose and need section above):

This amendment would allow for the construction of a shooting range on a 9-acre portion of Mud Lake Wildlife area. Currently, target shooting is occurring in a variety of parking lots on wildlife areas around the county and development of a well-designed, ADA accessible shooting range will meet an identified need within the county and provide the opportunity to more effectively address the complaints from neighboring landowners and other property users by directing the target shooting to an established range.

In addition to the property management benefits, Columbia County falls within a high priority area for range development in the “Strategic Guidance for Shooting Ranges in Wisconsin – 2014 – 2019” (Attachment B). Within this strategic guidance, the goal is to increase opportunities for shooting in a safe environment within a reasonable travel distance for participants and in a location intended for recreational shooting. All areas, including all of Columbia County, lying outside of a 100,000 resident buffer drawn

around public shooting ranges have been identified as a high priority for the development of a shooting range.

**Additional anticipated benefits:**

In addition to the individual users, due to the proximity of the range site to the MacKenzie Center, the development of a shooting range at this location will provide an opportunity for participants from the MacKenzie Center to travel to the range to participate in outdoor skills development.

**Unavoidable adverse impacts:**

An environmental impact statement (EIS), see Attachment C, was prepared as part of the shooting range evaluation process with no significant adverse impacts identified.

**Summary of any alternatives considered:**

Based on historical efforts by DNR staff and recent interest DNR staff local to Columbia County reviewed and evaluated all the DNR owned properties in Columbia County to create a list of potential shooting range sites. The evaluation looked at a variety of elements for siting a shooting range including but not limited to:

- Minimize the number of residences within a 1,000-yard distance to minimize noise concerns
- Avoid wetlands or hydric soils or soils with hydric inclusions
- Avoid State Natural Areas
- Avoid archeological sites
- Direct road access is preferred
- Located adjacent to major highways and roads
- Minimize impact on other recreational users
- Minimize impact on blocks of wildlife habitat
- Topography that provides opportunities to use the terrain to shoot into or minimize potential noise concerns

This process created a list of 7 potential sites located in 3 Columbia County Townships. See Attachment D.

An ad-hoc work group involving representatives from DNR, local elected officials, Columbia Counting Sporting Alliance, Conservation Congress and other conservation organizations was formed and worked through a process which narrowed the 7 sites to 2 sites.

**Compatibility with statutes, codes, and department policies:**

The definition and management of state wildlife areas is identified in state statute NR 1.51 which indicates that the primary purpose is to provide "areas in which any citizen may hunt, trap or fish." This statute further indicates that in order to fulfill the statutory charge of providing public hunting and trapping on wildlife areas, the quality of their wildlife habitat must be maintained or developed. However, this is not to be construed as authority for exclusive single-purpose management of entire properties. Wildlife habitat needs and public hunting objectives shall receive major consideration in management planning for wildlife areas; however, fishery, forestry, wild resource and outdoor recreational objectives will be accommodated when they are compatible and do not detract significantly from the primary objective.

**Federal aid limitations** (cite if any federal aid moneys are involved with either acquisition or management of the property and whether the proposed plan change is compatible with the aid requirements or if a federal review of the proposal is required):

The specific parcel on Mud Lake Wildlife Area that has been identified for the shooting range was purchased in 1965 from the Ambassador Corporation using Outdoor Recreation Action Program funding.

This funding source was the result of an excise tax on cigarettes and as a result, there are no federal aid limitations associated with the acquisition of this parcel.

**Public review process:**

In order to narrow down the options for a shooting range in the County, an ad-Hoc work group was formed including representatives from the Wisconsin DNR, local elected officials (1 from each Town where a potential site existed, as well as a representative from the County Board), Columbia County Sporting Alliance, Conservation Congress and other conservation organizations from Columbia County. The Ad-Hoc group worked through a process to develop additional evaluation criteria and ultimately narrowed the seven sites to two potential locations, Dekorra Wildlife Area and Mud Lake Wildlife Area. DNR held a public input process to obtain citizen feedback on the two sites which involved Department staff attendance at town board meetings in the Towns of Dekorra and Lowville, an open house held in Portage to answer questions as well as an online survey which collected feedback for 30 days. Information regarding the public meetings and the on-line survey were provided to the public through press releases, meeting notices as well as through the Wisconsin DNR website, specifically the Columbia County Shooting Range webpage.

Following the public input process, the Ad Hoc committee recommended that their preference was for DNR to consider the Mud Lake Wildlife Area on King Road in south central Columbia County first and the Dekorra site second.

With the preferred location identified, the Department requested approval at the September NRB meeting to proceed forward with the development of an Environmental Impact Statement and an amendment to the CCPG masterplan. The specific timeline that was followed for the public involvement process for this stage of the plan included:

- |                      |  |
|----------------------|--|
| December 1, 2014     | Release the draft Environmental Impact Statement for the proposed Columbia County Shooting Range which will start the 45-day public review process.  |
| December 11, 2014    | WDNR open house to receive input on the proposed amendments to the Columbia County Planning Group Master Plan and the draft Environmental Impact Statement for the Columbia County Shooting Range. |
| Dec. 11 – Feb. 2, 14 | Department evaluates comments received through the open house and made modifications to the Columbia County Planning Group Master Plan proposed amendment and the EIS.                             |
| February 5, 2015     | WDNR conducted an open house on the final amendments to the Columbia County Planning Group Master Plan and a public hearing for the Columbia County Shooting Range EIS.                            |
| February 27, 2015    | End of the public input period for the Environmental Impact Statement for the Columbia County Shooting Range.  |
| Feb. 27 - April 30   | Finalize proposed amendment to the Columbia County Planning Group Master Plan and the Environmental Impact Statement for the Columbia County Shooting Range based on public feedback.              |
| April 7-8, 2015      | Natural Resources Board meeting where WDNR will request the approval of the amendment to the Columbia County Planning Group Master Plan.   |

**Description of the support and/or opposition to the proposal** (include reasons for the various positions taken and any unresolved issues or concerns):

Public comments were received following the release of the Master Plan Amendment and the Environmental Impact Statement on December 8<sup>th</sup>, 2014 through February 27<sup>th</sup>, 2015 with two formal points in the process as well as through an on-line survey:

- Twenty members of the public, elected county and town officials and non-DNR agency staff attended an open house for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on December 17, 2014. A total of 11 comments were provided on the poster boards around the room and 1 additional person completed a comment form and submitted it at the meeting. Attendees included 6 members of the Columbia County Board, 1 member of the Town of Pacific Board and 1 member of the Town of Lowville Board.
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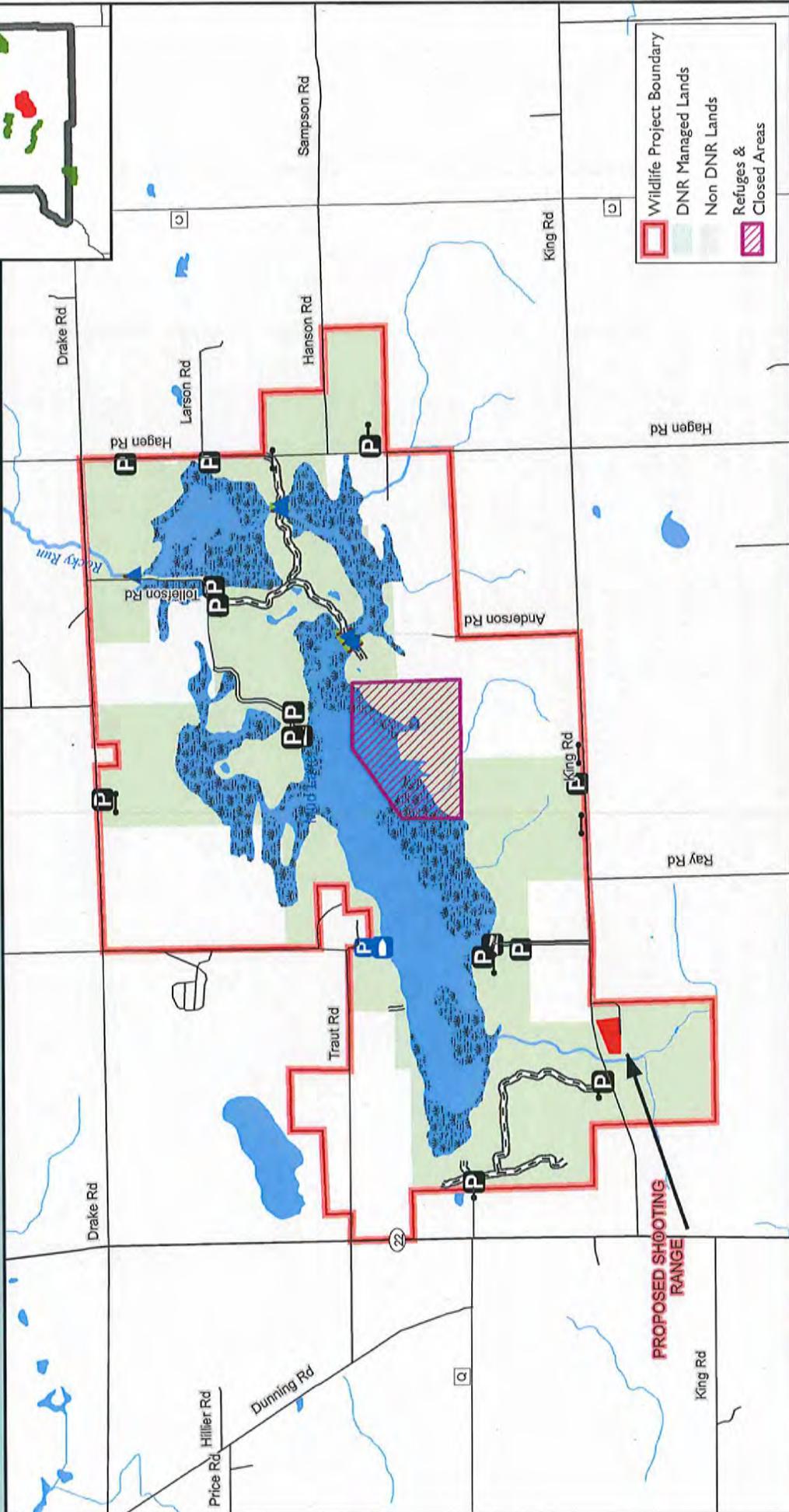
A summary of comments received and responses provided is available in Attachment E.

# Mud Lake Wildlife Area Current & Planned Infrastructure & Special Use Area

## Columbia County Planning Group

1:36,670

**DRAFT**



**Wildlife Project Boundary** (Red outline)

**DNR Managed Lands** (Light Green fill)

**Non DNR Lands** (White fill)

**Refuges & Closed Areas** (Pink hatched fill)

**Water Control**

- Mud Lake Boat Access
- Planned Unimproved Boat Access
- Dike - Native Surface

**Proposed Shooting Range** (Red square)

**Mud Lake Parking Area** (Blue 'P' symbol)

**Planned Parking** (Black 'P' symbol)

**Gate** (Black line with bar)

**DNR Managed Roads**

- Public Access Road
- DNR Service Road \*
- \* Not Specifically Maintained for Public Use
- Planned Access Road

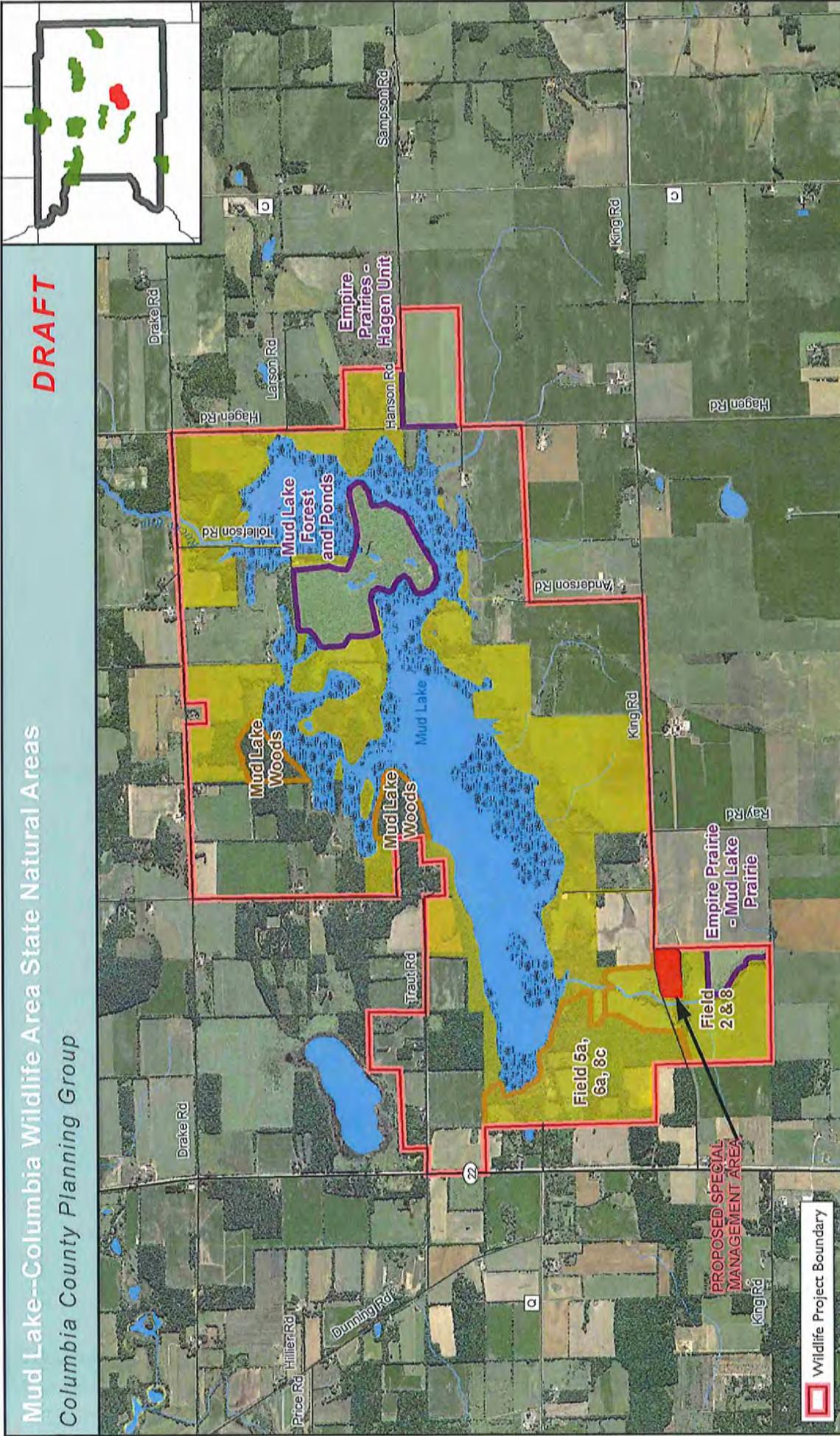
**WISCONSIN DEPARTMENT OF NATURAL RESOURCES**  
Bureau of Facilities and Lands

WRColumbia-IP-E-2 .jmh Dec 16, 2014

# MAP E-2

Mud Lake--Columbia Wildlife Area State Natural Areas  
Columbia County Planning Group

**DRAFT**



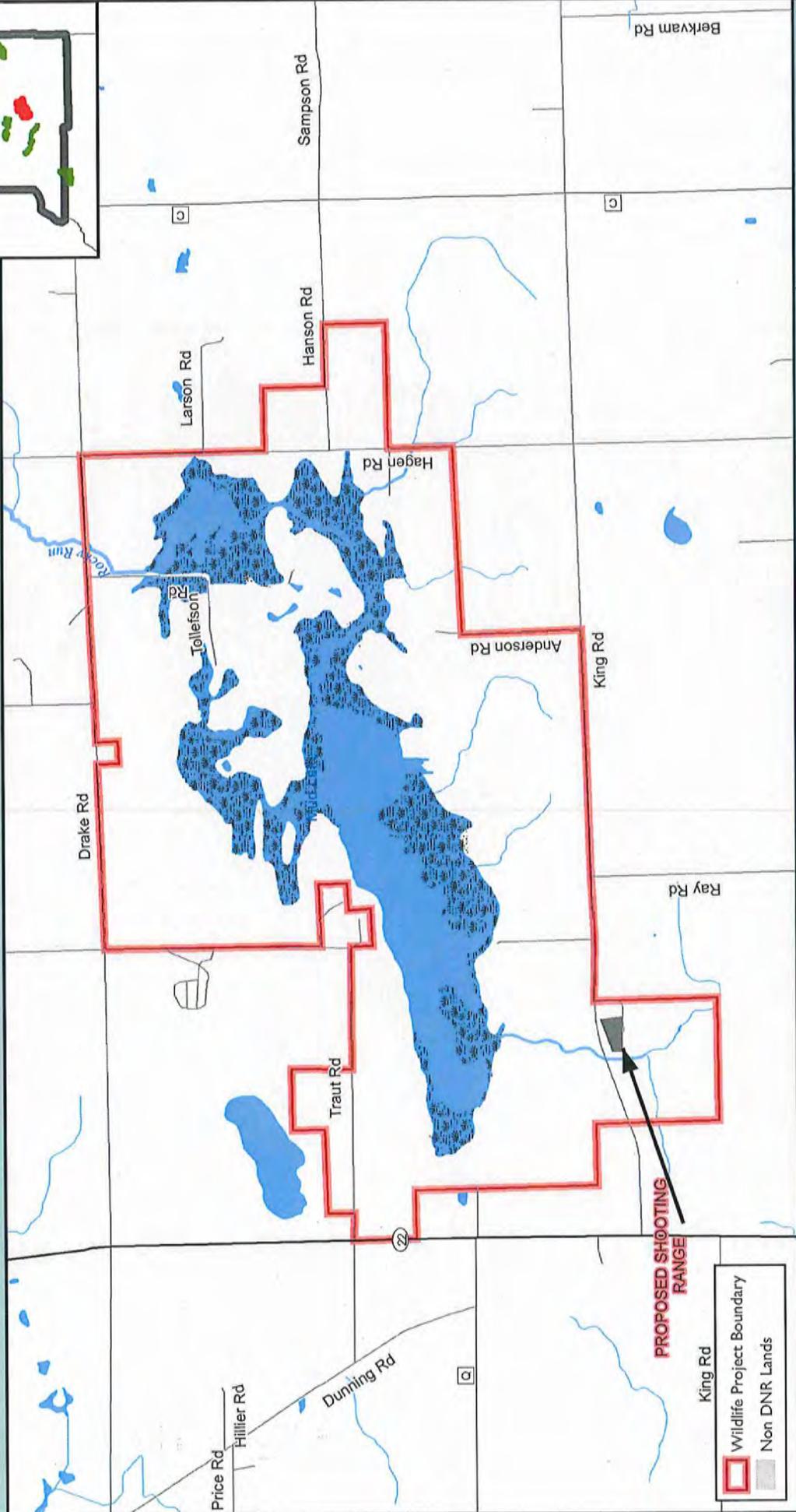
- Wildlife Project Boundary
- Proposed Special Management Area
- Native Community Management Area
- Habitat Management Area
- State Natural Area (SNA)
- Management Units
- Marsh



# Mud Lake Wildlife Area Proposed Land Cover

## Columbia County Planning Group

**DRAFT**



- Wildlife Project Boundary
- Non DNR Lands

- Proposed Land Cover of DNR Managed Lands
- Forested Wetland
  - Grassland
  - Water
  - Agriculture
  - Marsh
  - Oak
  - Central Hardwood
  - Oak Savanna
  - Prairie
  - Shrub Wetland
  - Sedge Meadow
  - Swamp Hardwood
  - Upland Shrub

Land cover information is extracted from WDNR Forestry reconnaissance data, as well as Wisconsin Wetland inventory data. Land cover has been reclassified for the master plan process.

# Columbia County Planning Group Master Plan

Amendment – April 2015



## AMENDMENTS:

Proposed language added is underlined and blue.

Proposed text to be removed is identified by ~~strikethrough~~.



2. There has been a slow decline in the number of hunters and trappers statewide that could negatively impact game population control efforts and program revenues. However, bird watching has increased and there has been a new cohort of non-traditional, non-revenue generating recreational activities (e.g., walking, pet walking and geocaching). Many of these new uses will probably be compatible with the primary purposes of these properties, but may contribute to crowding or conflicts during hunting season or at peak use periods.
3. The growth and diversity of outdoor activities will probably result in increasing year round usage of the properties and present additional management opportunities and maintenance challenges.

In addition, ongoing population growth and non-compatible land uses immediately adjacent to wildlife and fishing areas (e.g., the addition of housing on the boundaries of state properties) can adversely affect the management, use and enjoyment of these public lands. For example, gun hunting is not allowed within 100 yards of a home unless the resident agrees.

### **Recreation and Public Use Objectives:**

- Provide high quality hunting, fishing and trapping opportunities consistent with the capacity and character of the natural resources at the respective properties.
- Provide passive management opportunities for wildlife observation, hiking, non-groomed cross country skiing, snow shoeing, nature study, berry picking, canoeing, nature education and other outdoor activities as practicable given the physical characteristics and primary management objectives.
- Promote safe and enjoyable compatible recreational opportunities with an emphasis on off trail, non-motorized activities in a non-congested and rustic setting.
- Improve accessibility and recreational opportunities for mobility impaired individuals.
- Provide opportunities for research and educational activities consistent with the primary management purposes and user safety.
- [Provide opportunities for recreational firearm shooting and target practice](#)

### **Recreation and Public Use Management Prescriptions:**

- Install, maintain and monitor parking lots, access roads, boat launches and signage consistent with Department policies and rules.
- Access shall be provided appropriate to the management objectives of the property with a focus on providing dispersed access to lower congestion and enhance the experience of users.
- Stock pheasants immediately prior to and during the pheasant hunting season on sites with suitable cover to supplement natural pheasant production and provide improved opportunities for hunting success. Maintain a network of mowed stocking lanes as a means to provide department vehicular access for pheasant stocking and hunter foot access.
- Provide improved trout fishing, boating access and wildlife observation opportunities and infrastructure for mobility impaired individuals as determined practicable.
- Manage the riparian vegetation along classified trout streams to protect in-stream habitat while also providing improved fishing opportunities for anglers.
- Service roads, non-designated trails and dikes may be walked by hunters, anglers and hikers to access the property unless closed for maintenance or other habitat management activities.
- Stock trout in suitable streams according to Fisheries Management guidelines and criteria.

- [Develop a managed shooting range on the Mud Lake Wildlife Area to accommodate rifle, pistol, handgun and shotgun firearms.](#)

## Shooting Ranges

There is significant demand for a public shooting range in Columbia County. Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.

The Department recognizes the need for a designated and managed public shooting facility in the county. DNR staff are collaborating with local officials and interested sporting groups to identify a location for to establish a public shooting range that meets the generally accepted siting criteria. Several of the CCPG properties were considered in these deliberations, but none were selected. Establishing a shooting range on a CCPG property will require an amendment to this master plan. If a public shooting range is established in the county, the DNR will evaluate options to address concerns about target shooting on these wildlife areas.

## Ice Age Trail Routes

The Ice Age Trail is a Wisconsin State Trail and one of eleven National Scenic Trails in the U.S. It is a long-distance hiking and backpacking trail. A 2.5 mile segment of the Ice Age Trail (IAT) is located at the Lodi Marsh WA and an extension of this popular trail segment is anticipated in the near future. In addition, the National Park Service will be leading a planning effort in collaboration with DNR Parks and Recreation to consider trail expansion within a multi-county area, including Columbia, Sauk and Marquette Counties. Portions of these trail alignments may pass through the Pine Island WA and the French Creek WA. Relevant DNR programs (e.g., Wildlife Management and Endangered Resources) will be involved with the planning and decision making for these wildlife areas and the associated natural areas.

The following criteria will be used to assess the suitability of a CCPG property to host an IAT segment:

- soil suitability
- habitat management priorities
- natural heritage inventory information
- compatibility with other recreational uses
- development and maintenance considerations

Additional routing criteria may be applied during the IAT planning process.

A route through the Pine Island WA will need to consider the following issues:

- 1.) Extensive wetlands and wet soils,
- 2.) Dog training and trial areas are inappropriate as designated trail routes, and
- 3.) The Caledonia Levee within the Pine Island WA is a separate management unit that is the responsibility of the Facilities and Lands program. The levee segments are flood control structures with unique safety, maintenance and long-term management considerations that make them unsuitable as a designated IAT route. If the responsibility for managing the levees is shifted to a different program or the containment of the Wisconsin River during high flows is no longer required the use of these sand dikes as a trail routing option may be revisited.

## Mud Lake Wildlife Area

The Mud Lake WA has a diverse mix of open water, marsh and emergent wetlands partially surrounded by scattered oak woodlands and grassy uplands. The wildlife area has three flowages – Mud Lake (800 acres), Hagen Road Flowage (120 acres) and Tollefson Road Flowage (110 acres). Dikes and water control structures are used to regulate water flows and enhance waterfowl habitat. Water levels have been established for the flowages to minimize flooding on adjacent private lands. This wildlife area is the headwaters of the Rocky Run Creek.

Mud Lake WA provides excellent hunting opportunities for waterfowl, white-tailed deer, wild turkey, pheasant and other species of small game. Pheasants are stocked on the property to supplement the upland hunting opportunities. This property is heavily used and crowding can be an issue during opening weekends for waterfowl, pheasants and the nine day deer gun hunting season.

Other uses on the property include trapping of beaver, muskrat and other furbearers, and fishing for northern pike, perch and various pan fish.

Mud Lake WA is part of the larger Northern Empire Prairie Wetlands Important Bird Area (IBA) and is popular with birders during the spring migration. Madison Audubon Society and the Rio Conservation Club have erected and maintain kestrel boxes, bluebird houses, and wood duck houses on the property. The 160-acre closed area is a good location for observing waterfowl.

The impoundments are used by canoers, anglers and bird watchers. Other seasonal activities include mushroom hunting and berry picking in spring/summer/fall and snowshoeing and cross country skiing during the winter. Geocaching is an increasingly popular activity on the wildlife area.

This property has the most extensive invasive species challenges of the CCPG properties. Many upland areas are infested with multiple exotic species including buckthorn, honeysuckle, Russian olive, garlic mustard and particularly Japanese hedge parsley and wild parsnip. The native, but aggressive box elder, is also present in large quantities in the woodlands. In the wetlands, cattails are often dominant with smaller areas infested with reed canary and common reed grass.

Horseback riding is not authorized on the property, but continues to present a management challenge.

All of the maps for Mud Lake can be found in Map Series E-1 through E-6.

### Property Goals

- Designate Mud Lake Forest and Ponds unit as a State Natural Area (130 acres).
- Expand the project boundary by 918 acres to increase habitat for grassland nesting ducks, pheasants and grassland birds.
- Rebuild dikes and replace the water control structures, as needed, to allow better control of water levels in the flowages to enhance the wetland habitat for waterfowl.
- Expand Oak Savanna and grassland habitats for grassland songbirds and game birds.

These habitats will be managed in accordance with the General Habitat Management Objectives and Prescriptions described in Section One of this Chapter or as supplemented below. Table 2-6 details the existing and desired cover types for current state owned lands (MAPS E-1 and E-5).

Cover Type	Current		Desired 50 year	
	Acres	% Cover	Acreage Objective	% Cover
Agriculture	94	4	35	2
Grassland	495	22	524 515	23
Prairie	43	2	93	4
Oak	458	20	441	20
Oak Savanna	0	0	65	3
Central Hardwood	10	<1	0	0
Upland Conifer	10	<1	0	0
Upland Shrub	40	2	20	<1
Swamp Hardwood	50	2	50	2
Bottomland Hardwood	28	1	0	0
Forested Wetland	30	1	30	1
Sedge Meadow	160	7	160	7
Marsh	455	20	455	19
Shrub Wetland	70	3	70	3
Developed	10	<1	40 19	<1
Water	330	15	330	15
<b>Total</b>	<b>2,283</b>	<b>100</b>	<b>2,283</b>	<b>100</b>

### **Wetlands, Woods, Grasslands, Shrub and Agricultural Lands: Habitat Management (1,650 acres)**

#### **Management Objectives:**

- Manage for pre-settlement plant communities to enhance habitat value for game and native non-game species.
- Improve the productivity of grassland nesting waterfowl.

#### **Management Prescriptions:**

- Create larger blocks of open Sedge Meadows, Grasslands, Oak Woodlands and Oak Savanna.
- Increase the amount of permanent upland grass to improve cover and nesting success of grassland nesting ducks, pheasants and grassland birds.
- Convert all or portions of the Upland Shrub, Central Hardwoods, Upland Conifers, Bottomland Hardwoods and Oak Woodlands to Oak Savanna and Grasslands.
- Plant food plots for dove and pheasant.
- Monitor and control invasive species as practicable.

### **Mud Lake Forest & Ponds Natural Area: Native Community Management (130 acres)**

#### **Management Objectives:**

- Manage as a closed canopy oak woodland and as an ecological reference area.
- Maintain ephemeral ponds and protect their habitat value for herptiles.

#### **Management Prescriptions:**

- Use single tree and group selection harvest as needed to maintain closed canopy Oak Woodland; leave white oak and some hickory and black cherry while removing non-oak species (red maple and other Central Hardwoods).
- Use prescribed fire, mechanical brushing, chemical application to develop desired native understory and foster oak regeneration.
- Protect ephemeral ponds during management activities.
- Monitor and control invasive species as practicable.

### **Empire Prairie Natural Area – Hagen Prairie Unit: Native Community Management (80 acres)**

#### **Management Objectives:**

- Protect existing Dry-mesic Prairie remnant and convert current row crop land to dry-Mesic Prairie.
- Manage Hagen Prairie as an ecological reference area.

#### **Management Prescriptions:**

- Sow former row crop lands with local seed sources to promote local genetic material and create a diverse prairie community.
- Conduct prescribed burns as time and resources allow.
- Manage the wetlands according to the General Habitat management prescriptions.
- Allow agricultural activities prior to initiating phased prairie restoration.

### **Empire Prairie Natural Area - Mud Lake Prairie Unit: Native Community Management (13 acres)**

#### **Management Objectives:**

- Protect the Mesic Prairie and manage as an ecological reference area.
- Manage oaks along the western periphery of the prairie to develop a oak savanna.

#### **Management Prescriptions:**

- Conduct prescribed burns as the principal habitat management tool and use mowing or herbicide application as needed to control woody species encroachment of the prairie.
- Develop an Oak Savanna by removing non-oaks and thinning oaks west of the prairie.
- Monitor and control invasive species as practicable.

### **Mud Lake Woods: Habitat Management (70 acres)**

#### **Management Objective:**

- Protect and expand the semi-open canopy of mature Southern Dry-mesic Forest.

#### **Management Prescriptions:**

- Regenerate white oak and retain mast producing species (e.g., hickory and black cherry).
- Remove maple and other undesirable woody species.

- Endangered Resources (ER) and Wildlife will consult after pre-harvest invasive species removal, but prior to timber sale activities to assess the need for a rare plant or animal survey by ER staff.
- Monitor and control invasive species as practicable.

### **Field Areas 5a, 6a and 8c: Habitat Management (180 acres)**

#### **Management Objective:**

- Improve habitat quality and natural regeneration of the Oak Woodlands.

#### **Management Prescriptions:**

- Use approved habitat management techniques to encourage oak regeneration.
- Use prescribed fire and brushing to maintain a mosaic of smaller grass and brush openings within the Oak Woodlands.

### **Field Areas 2 and 8: Habitat Management (160 acres)**

#### **Management Objective:**

- Create a large contiguous block of Surrogate Grassland.
- Re-classify 9 acres of Habitat Management Area to Special Management Area.

#### **Management Prescriptions:**

- Cut and prevent regeneration of all Bottomland Hardwood species.
- Sow area with native and introduced forbs and grasses to develop a Surrogate Grassland.
- Utilize prescribed burns, and brushing and herbicides as needed, to achieve the desired species composition and to control the regeneration of woody and weed species.
- Remove 9 acres from Habitat Management Area and reclassify as Special Management Area (See Maps E-3 and E-5).

### **Habitat Management Infrastructure**

The following supplement the general habitat objectives and prescriptions described in Chapter Two, Section One and the General Property Administration and Policies (Page 44).

#### **Management Objective:**

- Retain the existing service roads, gates, dikes and water control structures.

#### **Management Prescriptions:**

- Maintain the current 2.25 miles of primitive and lightly developed gravel service roads, nine gates, three dikes (collectively about 0.14 miles long) and five water control structures.
- Replace the water control structure and/or lower the dike at the Mud Lake Flowage to allow greater range of water level fluctuations to improve waterfowl habitat management activities.

### **Special Use Management Area – Shooting Range (9 acres)**

#### **Management Objective:**

- Provide a public shooting range with ancillary facilities for rifle, shotgun and pistol firearms in an area between Conservation Drive and King Road with access off of King Rd on existing DNR land as shown on Map E-2.

#### **Management Prescriptions:**

- [Construct a public shooting range for rifle, pistol and shotgun firearms. The shooting distances shall be 50 yards and 100 yards for rifle and shotgun, 25 foot for pistol, and 50 yards for patterning shotguns and archery when not in use by firearms. The range will include "no-blue sky" shooting shelters.](#)
- [Supporting facilities will include ADA accessible parking and access paths, sanitation facilities and information kiosk.](#)
- [Complete construction by Fall 2017:](#)

## Public Use Management

The following supplement the general public use objectives and prescriptions described in Chapter Two, Section One - General Recreation Management and Use (page 40).

### Management Objectives:

- Retain the current complement of public access roads, parking lots and boat launches.
- Improve recreational opportunities for mobility impaired individuals.

### Management Prescriptions:

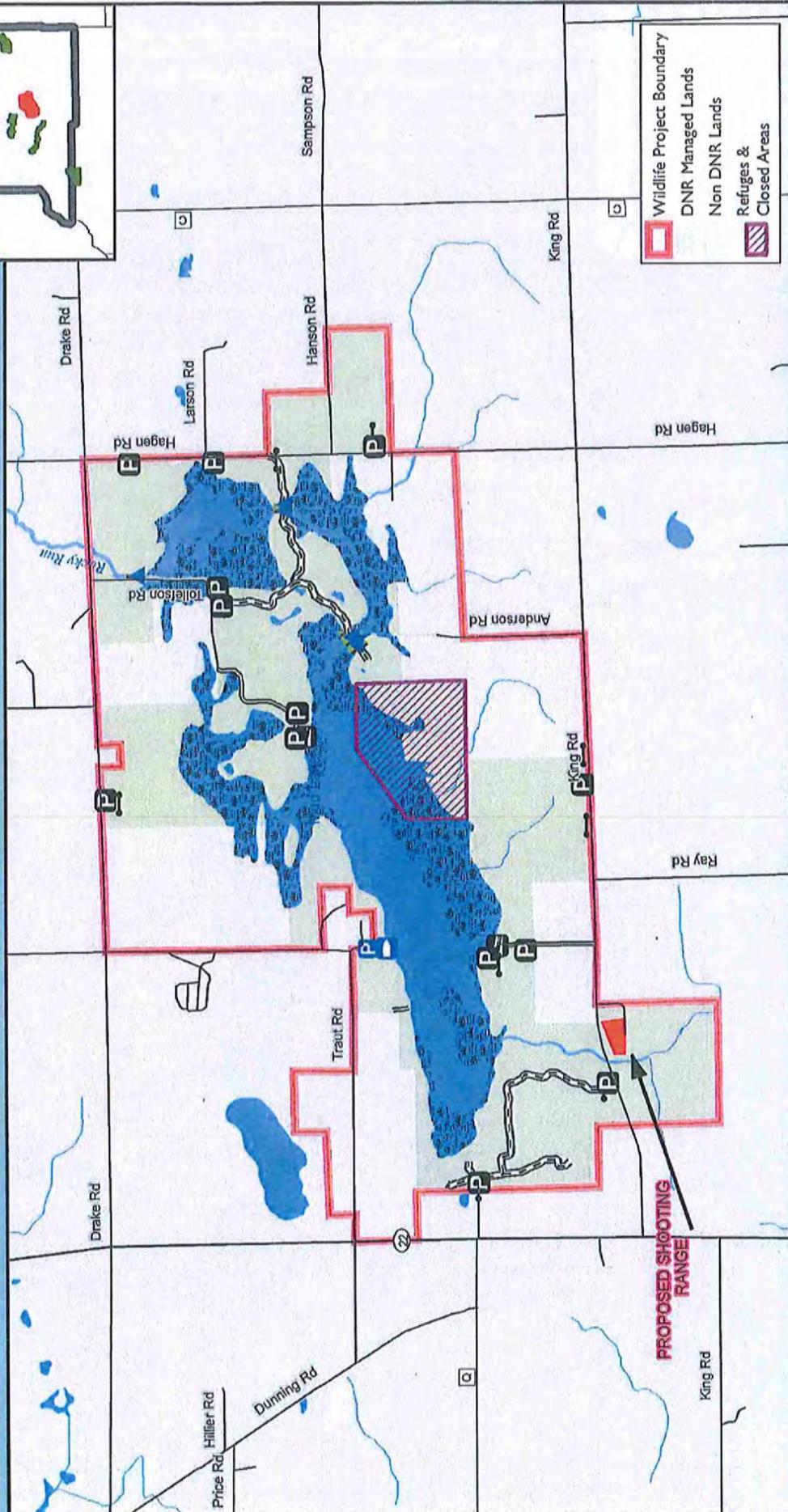
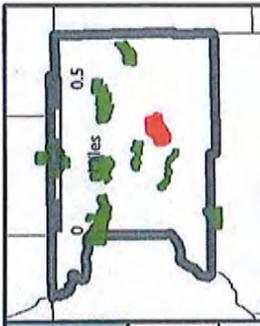
- Maintain the current 13 parking lots, about 1.75 miles of primitive and lightly developed gravel public access roads, and two boat landings. Replace the parking lot and carry in access boat landing on Traut Road with an improved site as shown in **Map E-2**.
- Evaluate the feasibility of adding an accessible hunting/observation blind and infrastructure. Report on the feasibility of an accessible site by December, 2015. Take action as appropriate.

# Mud Lake Wildlife Area Current & Planned Infrastructure & Special Use Area

## Columbia County Planning Group

1:36,670

**DRAFT**



**Wildlife Project Boundary**

**DNR Managed Lands**

**Non DNR Lands**

**Refuges & Closed Areas**

**Proposed Shooting Range**

**Mud Lake Parking Area**

**Planned Parking**

**Gate**

**Water Control**

**Mud Lake Boat Access**

**Planned Unimproved Boat Access**

**Dike - Native Surface**

**DNR Managed Roads**

**Public Access Road**

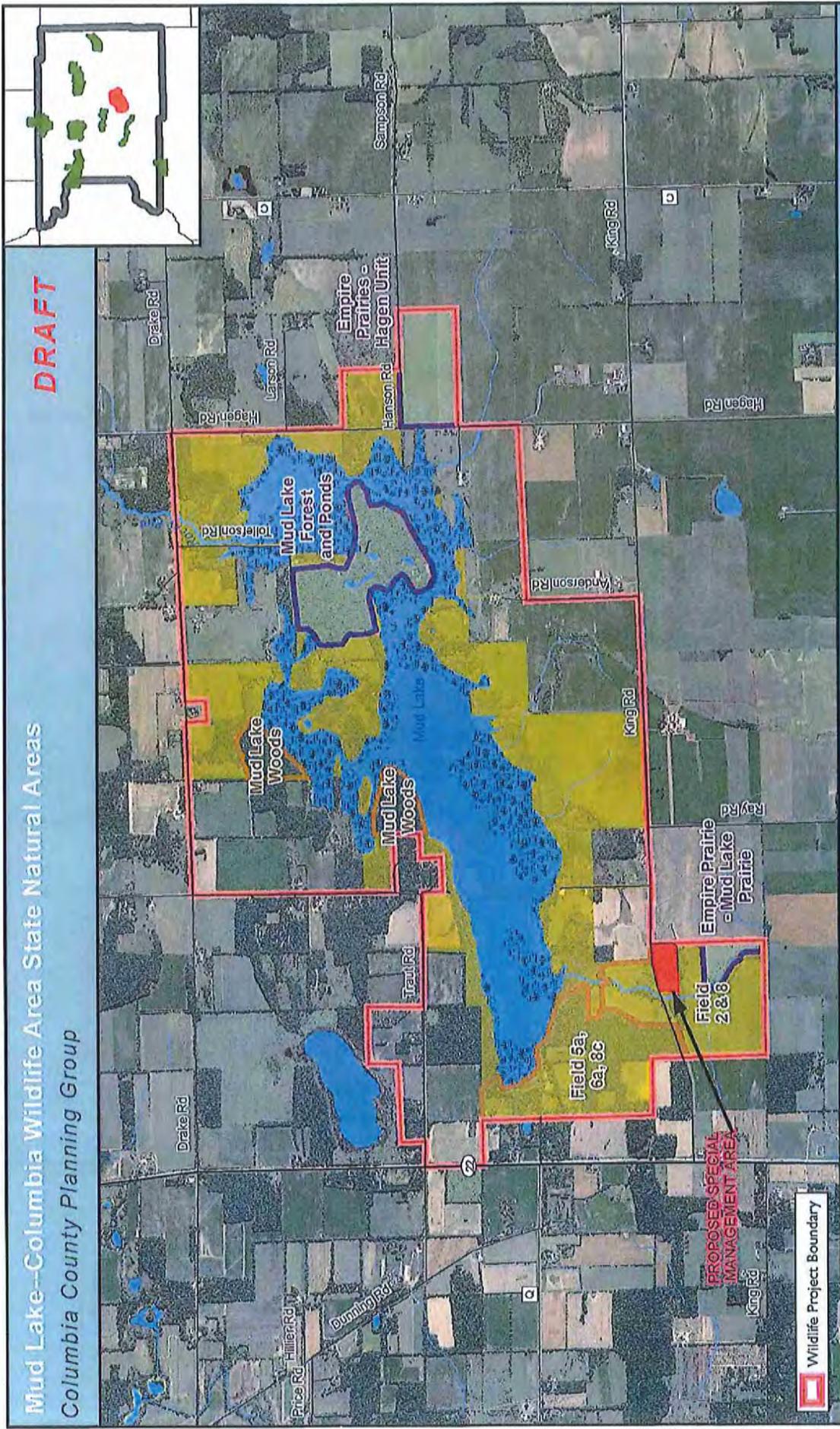
**DNR Service Road**

**\* Not Specifically Maintained for Public Use**

**Planned Access Road**

Mud Lake-Columbia Wildlife Area State Natural Areas  
Columbia County Planning Group

**DRAFT**



  Wildlife Project Boundary  
 Proposed Special Management Area  
 Native Community Management Area  
 Habitat Management Area  
  State Natural Area (SNA)  
 Management Units  
 Marsh

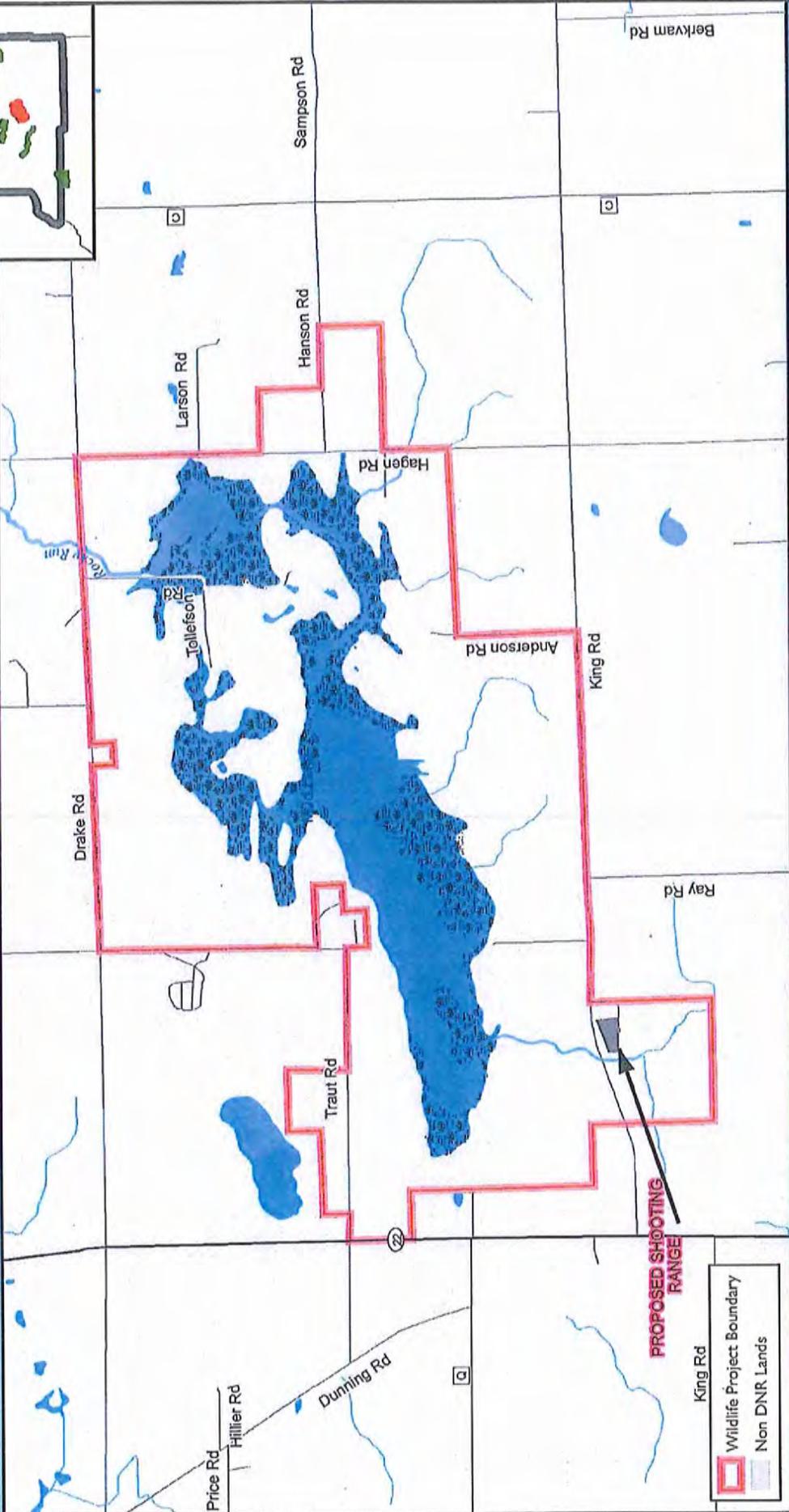
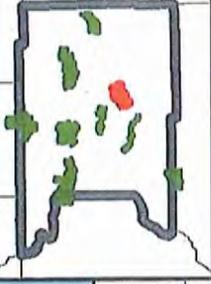
WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
 Bureau of Facilities and Lands  
 WMC-Columbia-MP-E-3 acr Dec 16, 2014  
 1:36,670  
 0 0.5 Miles  
 N

**MAP E-3**

# Mud Lake Wildlife Area Proposed Land Cover

## Columbia County Planning Group

**DRAFT**



**Proposed Land Cover of DNR Managed Lands**

- Forested Wetland
- Water
- Central Hardwood
- Developed
- Agriculture
- Non DNR Lands

- Marsh
- Oak
- Oak Savanna
- Prairie
- Shrub Wetland
- Sedge Meadow
- Swamp Hardwood
- Upland Shrub

WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
Bureau of Facilities and Lands  
WM-Columbia-MP-E-5 kmh December 2014  
**MAP E-5**

Land cover information is extracted from WDNR Forestly reconnaissance data, as well as Wisconsin Wetland Inventory data. Land cover has been reclassified for the master plan process.



# **Environmental Issues Associated with Outdoor Shooting Ranges**

RR-5486

## **INTERNAL GUIDANCE EFFECTIVE JANUARY 20, 2015**

*This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.*

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### **BACKGROUND**

The Department of Natural Resources has a lengthy history of promoting safe hunting and shooting practices and recognizes the important role that shooting ranges play in providing training and hunter education programs. Sport shooting ranges fill an important role in this effort by providing facilities where people can practice safe shooting skills as well as participate in a popular outdoor activity. Wisconsin has an estimated 600+ active sport shooting ranges.

The Department is also responsible for protecting and enhancing our ecosystems. There are growing concerns about the environmental effects of lead that is used in a variety of outdoor recreational activities. Lead levels resulting from these activities may be concentrated, such as within the shot fall area of sport shooting ranges, or widely dispersed throughout the landscape as a result of recreational activities.

In areas of concentrated shooting, lead has to be managed appropriately to minimize its impact on the environment and wildlife and failure to do so creates potential legal risks and liability for range operators. This guidance focuses on response to environmental issues at these shooting ranges. The Department has formed a Lead Work Group to address the impacts of lead more broadly discharged to the environment through recreational activities. The intent of this document is to identify the laws impacting sport shooting ranges and provide guidance on prioritizing and addressing adverse environmental impacts that may be found at some facilities. The Department strongly encourages ranges to adopt Best Management Practices.

### **LEGAL AUTHORITIES**

The Department does not have express statutory authority to directly regulate sport shooting ranges but there are federal and state environmental laws that may apply to discharges to the environment from ranges or environmental contamination from lead that falls on land or water as a result of shooting activities, including:

- The federal Clean Water Act and Wis. Stat. § 283, which regulates discharges of pollutants to waters of the state;
- The federal Resource Conservation and Recovery Act (RCRA) and Wis. Stat. § 291, which regulates the management of hazardous wastes; Wis. Stat. § 289
- The federal Comprehensive Environmental Response Compensation Liability Act (CERCLA) and Wis. Stat. §§ 292.11 and 292.31, which regulates the discharge of hazardous substances and environmental pollution.

When there are documented impacts that pose a threat to public health, welfare, safety or the environment, the Department can require shooting ranges to conduct the appropriate environmental response actions under the applicable statutory authority to address environmental concerns.

Additionally, state and federal courts have heard cases on environmental issues caused by ranges. Decisions vary by jurisdiction, but in one Wisconsin case, U.S. v. Lake Geneva Associates, No. 98-C-0972, (E.D. WI), a shooting club was held responsible for environmental contamination and loss of migratory birds. In that specific case, the United States Department of Justice pursued cost recovery for remediation and natural resources damages. The Department encourages any entity to consult with municipalities, the Department, and their legal counsel to identify potential liability.

### **DEPARTMENT REGULATORY ACTIONS**

At active ranges, the practice has been to consider the deposition of lead shot to be part of the operation of the shooting ranges; however, site specific circumstances, including but not limited to deposition in water, may affect the applicability of the above referenced federal and state laws. The particular facts in a given case will be especially important in making a determination to take regulatory action. Our practice has been that RCRA or state waste permits are not required to operate a shooting range. State or federal waste water discharge approvals or permits may be required based on the location of the range, body of water affected, and circumstances specific to a particular range. The Department will encourage shooting range operators to contact the designated staff to discuss any questions related to regulatory requirements.

The Department may consider taking regulatory action at shooting ranges that fall into one or more of the following categories:

1. Closed shooting ranges, in particular where there is a pending real estate transaction or a change in land use;
2. When there are documented impacts to surface water or groundwater, and/or evidence of adverse impacts to wildlife such, including measured concentrations of lead in rivers, lakes, or private wells that exceed applicable criteria; or
3. When off-site properties have been impacted.

If a shooting range meets any of the criteria listed above, the Department's Remediation and Redevelopment program will evaluate the information available and may send the shooting range a Letter of Responsibility under Wis. Stat. § 292.11, asking the property owner and/or range owner or operator to take appropriate actions under the Wis. Admin. Code § NR 700 rule series. These actions will include hiring an environmental consultant. If the property owner and/or shooting range owner or operator fail to respond, enforcement action may be considered based upon an assessment of the environmental contamination and the risk to the health, safety, or the environment.

The Department may be notified of a potential discharge of a hazardous substance from shooting ranges through citizen complaints or an environmental investigation. Before taking action, including the collection of environmental samples, DNR staff should discuss such complaints with the appropriate District Water Leader, District AWARe Program Manager and the Remediation and Redevelopment Program Director.

### **BEST MANAGEMENT PRACTICES**

The Department strongly recommends Best Management Practices (BMPs) be established and implemented at outdoor shooting ranges. BMPs provide methods to limit the extent of lead shot contamination, facilitate periodic clean up (lead shot, bullets and bullet fragments and other debris, including wadding, shell casings, clay and paper targets), and set objectives for the development of a site specific management plan. The use of BMPs makes environmental and fiscal sense by minimizing the potential for adverse environmental effects and limiting liability for cleanup costs.

BMPs are particularly important in avoiding shooting over wetlands, into surface water or beyond the property boundary of a range. If a range is oriented so that the fall zone is over wetlands or water it may be possible to change the orientation of the range and avoid further lead deposition in those areas. If changing the fall zone by reorienting the range is not possible, the Department suggests the use of non-toxic shot as defined by 50 CFR 20.21(i)(1). Additionally, the Department will require the management of shot shell-wads and targets to prevent deposition into waters or wetlands. These measures will help control the deposition of lead to wetlands and waterways, as well as neighboring properties. Taking these steps may minimize environmental contamination and the need for cleanup actions either now or in the future.

The EPA and a number of national organizations, including the National Association of Shooting Ranges have developed BMPs that are readily available to the public. The following is a list of resources and references for more information and guidance on BMPs and environmental issues at outdoor shooting ranges:

U.S. Environmental Protection Agency:

[http://www.epa.gov/region02/waste/leadshot/epa\\_bmp.pdf](http://www.epa.gov/region02/waste/leadshot/epa_bmp.pdf)

National Association of Shooting Ranges:

<http://www.nssf.org/ranges/rangeresources/>

Michigan Department of Environmental Quality: [http://www.michigan.gov/documents/deq/deq-oppca-shootingranges-managelead\\_287288\\_7.pdf](http://www.michigan.gov/documents/deq/deq-oppca-shootingranges-managelead_287288_7.pdf)

Interstate Technology & Regulatory Council: <http://www.itrcweb.org/Documents/SMART-2.pdf>

## **POTENTIAL FOR LEAD RECLAMATION**

For active ranges shooting, the Department practice has been to not apply solid or hazardous waste laws to the collection and storage of range related wastes, such as spent slugs and bullets, expended shot, wadding, casings, clay targets, etc. However, shooting ranges should follow best management practices and be encouraged to periodically collect and properly dispose or recycle lead and other range related waste at their facilities, in accordance with Wis. Admin. Code § NR 500 Series, which applies to solid waste. There is the potential for lead collection and/or removal efforts to trigger fugitive dust issues under Wis. Admin. Code § NR 415. Owners of shooting ranges wishing to remove lead from wet areas may need applicable permits, including but not limited to, Wisconsin Pollution Discharge Elimination System (WPDES) permits. Disposal of the return water or other materials must be done in accordance with the WPDES permit. Please consult with your District AWaRe Program Manager and District Water Leader about the appropriate response to these efforts.

## **UNITED STATES COAST GUARD**

Be advised, the United States Coast Guard (USCG) has jurisdiction to regulate and enforce federal law on federal waters, including Lake Michigan, Lake Superior, and the Bay of Green Bay. Owners and operators of shooting ranges located within or shooting in an area of jurisdiction of the USCG should be directed to contact a local representative of USCG to ascertain whether operation is permissible.

## **CONTACTS**

The following people are available resources to help answer questions you may have:

John Robinson, NOR Remediation & Redevelopment Team Supervisor (715) 359-8932

Steve Sisbach, Environmental Enforcement Section Chief (608) 266-7317

Coast Guard Contact: Sector Lake Michigan, Milwaukee (414) 747-7148

# Columbia County Shooting Range Site Options

Hinkson Creek Fisheries Area (T11N – R09E, S. 21)	
Pros	Cons
Topography	Residences are close, and close to Poynette
Not too far from Poynette	Takes up main parking area for access to the stream.
Relatively close to the Interstate and relatively easy to find	A house in the area was hit by an errant bullet - higher sensitivity
Close to the MacKenzie EEC	Shooting noise may impact quality of fishing experience.
Centrally located in the county	Located on an isolated/remote township road.
	Archeological site identified on the site.

Jennings Creek Wildlife Area (T12N – R11E, S.35)	
Pros	Cons
Topography - Would be shooting into a hill.	Residences are close to the site
A parking lot is currently established on the site	A campground is approximately .6 miles from this location.
Not too far off a county highway	This portion of the property is heavily hunted.
Centrally located in the County	Remote/lightly travel location - dumping could become a problem.
	Difficult to find for new users.

Mud Lake Wildlife Area - Hagen Rd (T11N-R19E, S.14)	
Pros	Cons
Close the MacKenzie EEC	Concerns regarding the WA have been expressed by neighbors in the past
Underutilized portion of the property	Residences are ~300 yards from site.
Centrally located in the county	Soil types may be challenging for construction.
	Potential concerns from waterfowl hunters due to the proximity of an important waterfowl hunting area
	The trail through the site is heavily used by bowhunters and other outdoor recreationalists
	Lots of tree clearing would be required.
	Direction of shooting may be challenging due to potential down-range issues.

Peter Hellend Wildlife Area - Sawyer Rd (T12N-R11E, S. 4)	
Pros	Cons
Remote Location - distant from residences	Remote Location - Dumping potential
Topography	Main hunter access location - waterfowl specifically
The property has no history of dumping	Not on a main highway - difficult to find
	20 minute drive from Portage

Rowan Creek Fishery Area - CTH CS (T11N-R09E, S. 32)	
Pros	Cons
Access - Directly off CS and Close to the Interstate	Residences are approximately 220' from site
Easy excavation	1.5 miles from the Columbia County Sportsman's League location that were shooting was shut down by court order.
Amenities are close (gas, food, etc.)	Close to Poynette.
A proposed change to commercial zoning on the adjacent property may reduce conflict.	Flat Topography
Close the MacKenzie EEC	Size and Soils are questionable
Centrally located in the county	Takes up main parking area for access to the stream.
	Shooting noise may impact quality of fishing experience.
	This area is likely to be a future crossing of the property by the county snowmobile trail system
	Concerns about adjacent development in the area.
	Township has identified the adjacent area as an economic development area.
	Residences are close to the site

Mud Lake Wildlife Area - King Rd (T11N-R10E, S. 28)	
Pros	Cons
Second least intrusive of the options provided to neighboring landowners - only 2 houses within 1,000 yard distance	Wet soil conditions on portions of the property indicate potential wetland areas.
Close to MacKenzie EEC	SNA is approximately 660' away.
Easy access off of STH 22	The area was identified for different management in the recently completed MP
Adjacent area heavily hunted for pheasant. Proposed footprint is lightly hunted.	If site is chosen, the township may request fencing around the parking lot.
Topography - Hill provides a safe location	Site development will need to avoid disturbing Conservation Rd. due to Town request
Discussed previously with township	

Centrally located in the county	
---------------------------------	--

Dekorrra Public Hunting Grounds (T11N-R8E, S. 13)	
Pros	Cons
Topography may limit noise transfer and allow shooting into hillside	Heavy hunter use on the property
Location is highly disturbed adjacent to interstate	Access from the wayside and for the public are currently not allowed and would be challenging
Houses are not adjacent to the parcel - on back side of the hill	Security of the wastewater treatment plant may need to be addressed.
	Endangered species present on the site.
	There are approximately 68 residences within a 1,000 yard distance from site.

SUMMARY OF PUBLIC INVOLVEMENT AND COMMENTS ON THE DRAFT EIS AND COLUMBIA COUNTY PLANNING GROUP MASTERPLAN AMENDMENT

Background

Public comments were received following the release of the Environmental Impact Statement on December 8<sup>th</sup>, 2014 through February 27<sup>th</sup>, 2015 with two formal points in the process as well as through an on-line survey regarding the EIS, a masterplan amendment and various design aspects of the proposed shooting range:

- Twenty members of the public, elected county and town officials and non-DNR agency staff attended an open house for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on December 17, 2014. A total of 11 comments were provided on the poster boards around the room and 1 additional person completed a comment form and submitted it at the meeting. Attendees included 6 members of the Columbia County Board, 1 member of the Town of Pacific Board and 1 member of the Town of Lowville Board.
- Thirty members of the public, elected county and town officials and non-DNR agency staff attended an open house and the formal hearing for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on February 5, 2015. Eight individuals provided oral public testimony on the EIS and one individual provided written testimony.
- Thirty two people completed the on-line survey from December 23<sup>rd</sup>, 2014 through February 27, 2015 and two additional people mailed in a printed copy of the survey.

In addition, staff received three phone calls, four letters and 5 emails during the public comment period. In addition, the Town of West Point presented a resolution regarding target shooting on state lands in Columbia County and in the Town of West Point.

Overview of the Environmental Impact Statement Comments

The table below provides a summary of the comments received through the various methods regarding the EIS and the masterplan amendment Columbia County Planning Group Master Plan. The information provided below provides a summary that includes comments received on the masterplan amendment itself due to the close relationship between the EIS, the CCPG Amendment and the development of the shooting range itself.

Columbia County Shooting Range EIS/Masterplan Amendment Comments			
Comment Method	Strongly Support/Support	Unsure	Strongly Oppose/Oppose
On-line Survey	17	8	9
Letters	1	1	1
Phone Calls	1	0	2

Overall, a total of 45 comments were received specific to the environmental impact statement with 22 comments (49%) in support of the EIS findings, 10 (22%) unsure and 13 comments (29%) opposed.

The individuals that “strongly supported” or “supported” the EIS and the development of the range felt it was a good use of tax dollars and generally felt there is a need for a safe place to shoot in Columbia County. In addition to expressing their support for the range, a group of the respondents also recommended fencing the site and installing a 200 yard range and maintaining a 25’ range.

The individuals that “strongly opposed” or “opposed” the EIS and the development of the range identified a number of concerns related to the range development. Specifically:

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact wildlife on the parcel and the property in general.**

**Response:** The specific site identified to establish the range was historically the homestead on the property consisting of a residence, a barn and several outbuildings. Following removal of the buildings, the site has reverted to an old field/upland meadow dominated by Canada goldenrod, multiflora rose, wild parsnip, smooth brome grass, black locust, common buckthorn, and Bell’s honeysuckle. The perimeter of the site transitions into a wetland community that consists of a lowland deciduous forest dominated by silver maple, green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), and rough avens (*Geum laciniatum*). Wildlife usage on the 9-acre portion of the property has not been surveyed however provided the size and proximity of the parcel to adjacent large expanses of grassland cover, common wildlife species such as robins, sparrows, wild turkey, white-tailed deer, rabbits and mice likely frequent this location.

Although one endangered and one special concern bird species were documented within the 1 mile buffer of the project area, the endangered bird species prefers large shallow marshes with abundant vegetation adjacent to open water. In addition, the special concern bird species prefers freshwater wetlands dominated by bulrush and cattail with small groves of alder, willow, or other brush. Since the parcel that will be developed for the range is an upland site and the two habitat types do not exist at that location, impacts on the endangered and special concern species should not occur.

In other areas where shooting ranges have developed similar to the proposed range, impacts to wildlife have been undetectable. Wildlife, such as deer, turkeys and songbirds have been

identified on shooting ranges and frequently use adjacent property in lieu of the range itself following development of the site.

The development of natural habitat and the increased use by humans would likely reduce the use by some species of wildlife on this parcel. However, the habitat that would be lost is not locally or regionally scarce and the majority of the Mud Lake Wildlife Area would remain as it is. Although the adjacent area is heavily hunted for pheasants, the development of a range should not impact the pheasant hunting that occurs on the adjacent property.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact other recreational users on the property.**

**Response:** The primary activity that occurs on Mud Lake Wildlife area is pheasant, waterfowl, deer and turkey hunting as well as wildlife watching. The site that was chosen is currently a reclaimed homestead site and is on the periphery of a large grassland area primarily used for pheasant hunting. Since the area where the range will be built is surrounded by a small silver maple forest, pheasant hunting does not occur at a significant level on this portion of the property. Regarding other forms of hunting, this portion of the property does not represent a habitat type that is limited or of significance for hunting these alternative species, especially waterfowl.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact the conference center and the agricultural-based seasonal business in the Town of Lowville.**

**Response:** The immediate project area is rural with agriculture as the primary business. Additional businesses within the area include an event/wedding facility and a seasonal agriculture-based tourist attraction that includes strawberry picking and fall-oriented seasonal activities such as a corn maze and a hayride. Primary hours of operation for the facility occur during June and July as well as primarily late September through October. The conference center/wedding facility is approximately 1 mile from the proposed range and is open year-round based on reservations. Neither of these businesses are within view of the proposed shooting range location. In addition to being isolated from view of these businesses, measures, such as increased backstop and sideberms, a shooting direction away from these businesses as well as the use of shooting tubes should reduce the noise emitted from the range.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact the roads in the Town of Lowville.**

**Response:** The project would result in increased traffic to the shooting range. The average daily traffic count for King Road, as provided by the Columbia County Highway Department from State Highway 22 to Conservation Drive was 75 vehicles per day in the mid-1990s (personal communication). To provide a perspective of the expected increased traffic, at the recently completed Yellowstone Wildlife Area range, the average vehicle count into the parking lot is 25 vehicles per day.

According to tests completed by the American Association of State Highway and Transportation Officials (AASHTO) and published in a WI Towns Association bulletin, the amount of damage a road sustains is directly related to the weight of the load and how often it is applied. Typically, passenger autos and light duty vehicles are not a problem but rather it is trucks carrying legal weight loads of up to 80,000 GVW over weakened surfaces which do the damage. Some research has provided figures which show a single 18-wheeler loaded to 80,000 lbs. will do as much damage as 3,000 – 9,600 cars, depending on the design specifications of the road itself.

**Comment: Several individuals questioned the need for the development of a shooting range in Columbia County and generally feel it isn't needed.**

**Response:** Currently, no public shooting range exists in Columbia County and the surrounding area. The Wautoma shooting range is the closest public shooting range which is approximately 60 miles from Poynette and the Yellowstone Wildlife Area range is approximately 67 miles away. In 2012, the board approved the Columbia County Master Plan for DNR-managed wildlife and fishery lands in the county. The plan identified public safety and neighboring landowner concerns associated with shooting in parking lots on the Swan Lake and French Creek wildlife areas and identified the need for a public shooting range in Columbia County.

#### **Shooting Ranges**

(from: Columbia County Planning Group Master Plan, pg. 43)

“Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.”

In addition to the need identified in the Columbia County Planning Group masterplan, Columbia County falls within a high priority area for range development in the “Strategic Guidance for Shooting Ranges in Wisconsin – 2014 – 2019” (Attachment C). Within this strategic guidance, the goal is to increase opportunities for shooting in a safe environment within a reasonable travel distance for participants and in a location intended for recreational shooting. All areas, including all of Columbia County, lying outside of a 100,000 resident buffer drawn around public shooting ranges have been identified as a high priority for the development of a shooting range.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will produce a large amount of noise in the area.**

**Response:** As part of the construction process, measures, such as increased backstop and sideberm heights and establishing a shooting direction away from these businesses and closest residences should mitigate the sound level emitted from the range.

As a part of the evaluation process, a sound study was conducted by the Wisconsin Structures and Materials Testing Laboratory to establish baseline sound level in the surrounding area due

to a typical hunting rifle of .308 caliber being fired at the shooting range location, under calm wind conditions. Following construction of the range, this information will provide base-level information to evaluate noise levels emitted from the range and may result in further evaluation to mitigate noise levels if the department determines it is necessary.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact on property values in the area.**

**Response:** The economic impact that this facility would have on local property values is unknown. Land values are based on a variety of factors including local zoning and land division ordinances, physical features of a property, prevailing local markets and local and regional economies. Because these factors vary and may change over time there is no way to predict the influence of local land uses on future real estate markets.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will result in significant litter in and around the range.**

**Response:** The Wisconsin DNR is interested in working with local partners to help develop and manage the Columbia County Shooting Range once it is developed. During the public comment period for the EIS and masterplan amendment, the Columbia County Sporting Alliance has offered to assist with the management of the site. If approved, the Department will meet with the group and further discuss entering into an agreement to provide financial assistance to them or other groups that are willing to meet the operational and management needs identified for the Columbia County shooting range. The range will not be continually staffed by a Department employee however staffing will be considered on weekends during busy times of the year. Department O&M would be carried out by wildlife management and law enforcement staff in Columbia County with funding primarily provided by Pittman Robertson funding.

**Comment: The Town of West Point passed a resolution requesting an amendment to the Columbia County Planning Group masterplan indicating target shooting is not allowed on State Natural Areas, state-owned segments of the Ice Age Trail, State Fisheries Areas and State Wildlife Areas with the exception of Mud Lake Wildlife Area.**

**Response:** Throughout the process that has been used to establish a shooting range in Columbia County, the Wisconsin DNR has indicated that eliminating target shooting on all other DNR-managed properties in the County was excessive. In situations where target shooting creates public health and safety issues and significant neighbor concerns, the Department has committed to addressing this issue through a NR 45 rule proposal that will be introduced in 2015.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area may result in lead leaching into the ground water.**

**Response:** There is a variety of evidence which indicates that lead is typically highly immobile in soil, both at ranges where lead is deposited as well as at locations where lead naturally occurs in the soil.

Wisconsin DNR data from three outdoor shooting ranges in SCR indicate that lead decreases to background values at depths locally as shallow as 1 ft bgs, and at maximum depths of 2-4 ft bgs. Soil at one of these ranges is sandy, which is the soil type most likely to allow downward migration of lead. At another of the ranges, the fall zone for the lead ammunition was a corn field that was tilled for many years, which is believed to account for some of the downward movement of lead at that range. None of the three ranges have an ES exceedance for lead in groundwater. Groundwater is as shallow as 8 ft bgs at two of the ranges.

An investigation conducted in Washington at six orchards where lead arsenate was formerly used found that elevated concentrations of lead are typically restricted to the upper 40 cm of soil. In this situation, the soils were sandy loam and loam, and the orchards have been irrigated since approximately 1915.

In order to minimize any associated risks of lead in the environment, best management practices will be utilized which involve periodic reclamation of the lead that accumulates in the berms of the range.

BEFORE THE  
DEPARTMENT OF NATURAL RESOURCES

DETERMINATION ON  
WISCONSIN ENVIRONMENTAL POLICY ACT COMPLIANCE

For

Columbia County Shooting Range (CCSR)

**INTRODUCTION**

The Wisconsin Environmental Policy Act (WEPA), s. 1.11, Stats., requires state agencies to fully consider and disclose the environmental impacts of agency actions. Chapter NR 150, Wis. Adm. Code, outlines policy and procedures for implementing WEPA for the Department of Natural Resources (DNR). Section NR 150.35, Wis. Adm. Code requires a final written determination regarding WEPA compliance.

The Wisconsin Department of Natural Resources has prepared an environmental impact statement (EIS) for the CCSR in order to satisfy WEPA as outlined above.

**FINDINGS OF FACT**

The Department of Natural Resources finds that:

1. The Department proposed an amendment to the Department's Columbia County Planning Group Master Plan to allow for the development of a new public shooting range on the Mud Lake Wildlife Area in the Town of Lowville, Columbia County.
2. The Department determined to follow the EIS process for review of this proposal under s. NR 150.30, Wis. Adm. Code.
3. On December 10, 2014, the Department completed a Draft Environmental Impact Statement (DEIS) and received public comments through February 27, 2015.
4. Pursuant to s. NR 150.30 (3), Wis. Adm. Code, on December 10, 2014 the Department announced the availability of the DEIS for public comment and announced a public meeting at the Columbia County Law Enforcement Center, 711 East Cook Street, Portage at 6 p.m. The DEIS was published on the Department's web site at: <http://dnr.wi.gov/topic/EIA/Current.html>.
5. On December 17, 2014, the Department held a public informational meeting on the

project and DEIS at the Columbia County Law Enforcement Center from 6 to 8 p.m.

6. On January 22, 2015, the Department announced an open house and public hearing would be held on February 5, 2015 on the project and DEIS at the Columbia County Law Enforcement Center, 711 East Cook Street, Portage at 7 p.m.
7. On February 5, 2015, the Department of Natural Resources held a public hearing on the project and DEIS at the Columbia County Law Enforcement Center, 711 East Cook Street, Portage at 7 p.m.
8. Written and verbal comments were received by the Department at the December 17, 2014 informational meeting and at the February 5, 2015 public hearing and open house. Comments were also accepted in letter, electronic mail and over the phone between December 10, 2014 and February 27, 2015.
9. Pursuant to s. NR 150.30 (4)(b), Wis. Adm. Code, the Department prepared a summary of the comments received and responded to the DEIS comments in a document dated April 17, 2015. The Department has prepared a Final EIS.
10. The Final EIS has been published on the Department's web site at:  
<http://dnr.wi.gov/topic/EIA/ArchiveTitle.html>.

## **CONCLUSIONS OF LAW**

The Department concludes that:

1. The Department of Natural Resources, under s. 1.11, Stats., and Ch. NR 150, Wis. Adm. Code, has the responsibility to comply with WEPA, and the authority to determine its compliance with that Act.
2. The procedure and analysis identified in the Findings of Fact complies with the requirements of s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.

## **DETERMINATION**

The DNR has complied with the requirements of WEPA, s. 1.11, Stats. and ch. NR 150, Wis. Adm. Code, for the proposed CCSR project. This determination applies to all subsequent Department actions on the project, the impacts of which are considered in the Final EIS.

Dated at Fitchburg, Wisconsin, this 23<sup>th</sup> day of April, 2015

STATE OF WISCONSIN  
Department of Natural Resources  
For the Secretary

By:   
Eric Heggelund, Environmental Analysis and Review  
program, South Central Region

**NOTICE OF APPEAL RIGHTS**

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes, administrative codes, and case law establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, ss. 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. Such a petition shall be filed with the appropriate circuit court and shall be served on the Department. The petition shall name the Department of Natural Resources as the respondent.

# **Final Environmental Impact Statement**

## **Columbia County Shooting Range**

### **Mud Lake Wildlife Area**

### **Section 28, Town of Lowville, Columbia County**

Prepared by:

Wisconsin Department of Natural Resources

Prepared for:

U.S. Fish and Wildlife Service, Region 3

Division of Federal Aid

1 Federal Drive

Fort Snelling, Minnesota

Contact:

Eric Lobner, District Program Manager, Southern District

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3911 Fish Hatchery Rd

FITCHBURG WI 53711

Email: [Eric.Lobner@WI.gov](mailto:Eric.Lobner@WI.gov)

Phone: 608.275.3474

**Note to reviewers:** This Environmental Impact Statement (EIS) has been prepared by the Wisconsin Department of Natural Resources (WDNR) to be consistent with National Environmental Policy Act (NEPA) and Wisconsin Environmental Policy Act (WEPA) requirements for environmental review. NEPA requirements are relevant since WDNR is seeking federal Pittman-Robertson (P-R) funds for the project. The US Fish and Wildlife Service administers P-R funds and will ultimately decide if NEPA and other applicable federal regulations have been met before a funding decision is made. The purpose of this EIS is to inform decision-makers and the public of the anticipated effects on the quality of the human environment of a proposed action or project and describes the alternatives that were considered to the proposed action or project. The EIS is an informational tool that does not compel a particular decision by the agency or prevent the agency from concluding that other values outweigh the environmental consequences of a proposed action or project. Contact:

Mail: Wisconsin DNR  
ATTN: Eric Lobner  
3911 Fish Hatchery Rd.  
Fitchburg, WI 53711  
Phone: 608.275.3474  
Email: [eric.lobner@wi.gov](mailto:eric.lobner@wi.gov)



shooting sports and hunter safety is a long standing Department of Natural Resources objective. One ongoing element of this effort is to provide public shooting ranges (rifle and pistol) that are accessible to those with physical limitations, environmentally friendly and provide safe locations for hunters and shooters to shoot and sight-in rifles and handguns.

In order to narrow down the options for a shooting range in the County, an ad-Hoc work group was formed including representatives from the Wisconsin DNR, local elected officials (1 from each Town where a potential site existed, as well as a representative from the County Board), Columbia Counting Sporting Alliance, Conservation Congress and other conservation organizations from Columbia County. The Ad-Hoc group worked through a process to develop additional evaluation criteria and ultimately narrowed the seven sites to two potential locations, Dekorra Wildlife Area and Mud Lake Wildlife Area. DNR held a public input process to obtain citizen feedback on the two sites which involved Department staff attendance at town board meetings in the Towns of Dekorra and Lowville, an open house held in Portage to answer questions as well as an online survey which collected feedback for 30 days. Information regarding the public meetings and the on-line survey were provided to the public through press releases, meeting notices as well as through the Wisconsin DNR website, specifically the Columbia County Shooting Range webpage.

Following the public input process, the Ad Hoc committee recommended that their preference was for DNR to consider the Mud Lake Wildlife Area on King Road in south central Columbia County first and the Dekorra site second.

Therefore, the Wisconsin Department of Natural Resources is investigating the proposal to develop the Columbia County Shooting Range on Wisconsin DNR owned and managed property identified as the Mud Lake Wildlife Area located at T11N-R10E, Sec. 28, Town of Lowville, Columbia County. The specific site is located approximately 4.2 miles east of the Village of Poynette and .75 miles east of State Highway 22 on the south side of King Road (Lat/Long 43.396063, -89.312269). See Attachment B, Location Map.

The proposed range would consist of four individual shooting lanes with approximately 6 shooting positions each: a 25 foot range; a patterning range;

a 50 yard range; and a 100 yard range. Backstops and separation berms would consist of on-site sand materials. Each berm and backstop would be 20' tall with a top width of 10' and a base (bottom) width of 45' wide. The shooting range is intended for fixed target shooting. The proposed range would not be designed for trap or skeet shooting. These appropriate backstops and longitudinal berms would allow multiple users to occupy and use each lane simultaneously. The new site would include a gravel parking area with an ADA compliant pit toilet and sidewalks.

Range construction would be completed by the Wisconsin DNR operations crew or with a private vendor through a bidding process with DNR oversight to assure compliance with site development plans, environmental and grant commitments. Operation and maintenance (O&M) would be handled by the Wisconsin DNR with a goal of working in conjunction with local groups interested in assisting with the management of the site. O&M responsibilities would mainly consist of litter control, berm and shooting lane mowing (if needed), periodic spent (lead) bullets & brass casing recovery/recycling, shooting bench and target support replacement, pit toilet housekeeping, septic pumping, and other activities needed to keep the range in good condition. The range would not be continually staffed by a Department employee however staffing will be considered on weekends during busy times of the year. Department O&M would be carried out by wildlife management and law enforcement staff in Columbia County. Standard hours of operation for a shooting range are expected to be from sunrise to sunset with potentially one closed day a week to accommodate training opportunities through WDNR programs as well as by law enforcement programs in the area. However, the facility may not have snow cleared in the winter months as use during that time is expected to be low.

## **1.2 PURPOSE**

The purpose of the project is to develop a safe and available public shooting range facility in Columbia County. The shooting range would provide a common place for experienced hunters or law enforcement to refine their skills. This range would also provide a place to promote effective training and education for responsible new hunters and their mentors including youth groups and hunter safety courses.

The purpose of this EIS document is to look at the feasibility and potential for environmental consequences associated with the site selected by an ad-hoc shooting range committee.

### **1.3 NEED**

Promoting hunting, shooting sports and hunter safety is a long standing objective within WDNR. Providing the public with accessible, environmentally friendly and safe public shooting ranges to shoot and sight-in rifles and handguns is one element of this objective. The Milwaukee Journal Sentinel quotes WDNR Secretary Cathy Stepp:

"The best place for someone to learn to shoot and to practice shooting is at a well-managed and maintained range"..."The Shooting Range Grant Program will help range operators and clubs provide high quality shooting opportunities around the state."

With an estimated 800,000 shooters and hunters in Wisconsin and recent strong growth in interest in shooting, providing access to safe places to shoot is a priority for WDNR.

Wisconsin has more than 600 shooting ranges, including 33 on public land (state, county or municipality), according to DNR records. Keith Warnke, DNR hunting and shooting sports coordinator, said one of the most obvious needs is to increase opportunities for shooters and hunters close to home.

The adage that "practice makes perfect" is particularly important considering the safety risk associated with firearm use.

Currently, no public shooting range exists in Columbia County and the surrounding area. The Wautoma shooting range is the closest public shooting range which is approximately 60 miles from Poynette and the Yellowstone Wildlife Area range is approximately 67 miles away. In 2012, the board approved the Columbia County Master Plan for DNR-managed wildlife and fishery lands in the county. The plan identified public safety and neighboring landowner concerns associated with shooting in parking lots on the Swan Lake and French Creek wildlife areas and identified the need for a public shooting range in Columbia County.

#### **Shooting Ranges**

(from: Columbia County Planning Group Master Plan, pg. 43)

“Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.”

In addition to the need identified in the Columbia County Planning Group masterplan, Columbia County falls within a high priority area for range development in the “Strategic Guidance for Shooting Ranges in Wisconsin – 2014 – 2019”(Attachment C). Within this strategic guidance, the goal is to increase opportunities for shooting in a safe environment within a reasonable travel distance for participants and in a location intended for recreational shooting. All areas, including all of Columbia County, lying outside of a 100,000 resident buffer drawn around public shooting ranges have been identified as a high priority for the development of a shooting range.

#### **1.4 BACKGROUND**

Outdoor shooting ranges provide recreational facilities for millions of shooting sports enthusiasts in the United States. Ranges are especially important to Wisconsin constituents as demonstrated by Wisconsin range protection legislation. Senate Bill 527, also known as the Shooting Range Protection Bill, expanded the provisions of law concerning zoning conditions related to noise. This bill provides that a person who owns or operates a sport shooting range is not subject to state or local zoning conditions or rules related to noise and non-conforming use. SB 527 also protects the range owner or operator from civil liability, ensuring the future of Wisconsin's shooting ranges. This bill passed the legislature with wide margins, 19 – 13 in the Senate and 65-30 in the House. It was signed into law by Governor Walker on April 9, 2014.

DNR is interested in increasing the number of properly designed shooting ranges in Wisconsin to enhance hunter skills and safety. A side benefit is meeting an increasing demand for shooting practice as a public outdoor recreation pursuit.

Firearm use, while hunting or practicing, carries a high safety risk. Since 1967 DNR has had an established hunter education program that attempts

to prevent firearms incidents in order to maintain a safe and successful recreational experience. Over the last 45 years the number of hunting accidents have progressively decreased while the number of hunters has increased.

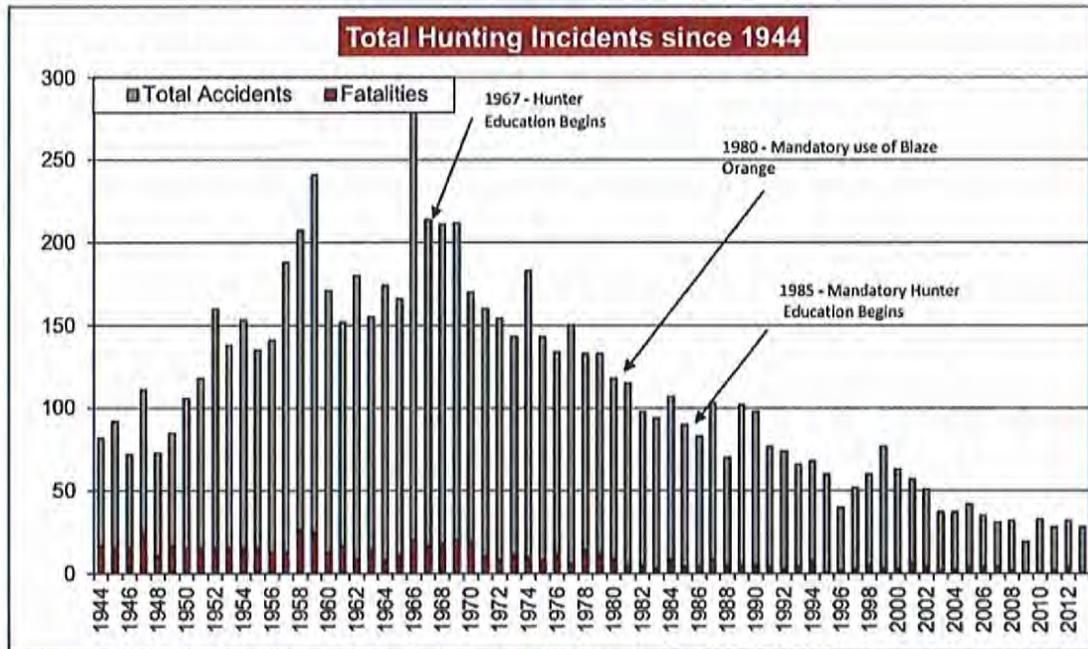


Figure 1

There were 27 total hunting incidents during the 2013 hunting season. One of the 27 incidents was fatal. Thanks to the efforts of Wisconsin hunter education programs, hunting is a safe activity in Wisconsin and is maintaining that safety record. In 2013, Wisconsin finished below the 10-year average of 29 incidents per year. New hunters are now required to complete a Basic Hunter Education course before they can purchase a hunting license.

#### 2013 Hunter Education Program Summary:

- 962 traditional hunter education courses
- 90 online Internet field day courses
- 88 adult test-outs
- 135 archery courses
- About 33,300 students certified
- 26,220 in basic hunter education, 2,007 through the Internet field day,
- 2,762 adults certified and 2,375 students certified in archery.

The WDNR currently has more than 4,100 active volunteer hunter education instructors, 500 Internet field day certified instructors, and 20 DNR employees who support the adult test-out program. Shooting practice is encouraged for graduates to continue to gain experience with safe firearm handling and shooting accuracy. **Ranges are an ideal practice training ground.** (Statistics taken from Wisconsin Hunter Education Annual Incident Report-2013).

Specifically within Columbia County, as a result of the long-standing interest to develop a shooting range in the county and the interest identified in the county as demonstrated by the volume of shooting in wildlife area parking lots, a variety of approaches have been pursued to develop a range. Following a decision by the Columbia County Board to not pursue the development of a range on Columbia County property, DNR staff responsible for property management of Columbia County wildlife and fisheries areas reviewed and evaluated the DNR-managed properties in Columbia County to create a list of potential shooting range sites. The evaluation looked at a variety of elements for siting a shooting range including but not limited to:

- Minimize the number of residences within a 1,000-yard distance to minimize noise concerns
- Avoid wetlands or hydric soils or soils with hydric inclusions
- Avoid State Natural Areas
- Avoid archeological sites
- Direct road access is preferred
- Located adjacent to major highways and roads
- Minimize impact on other recreational users
- Minimize impact on blocks of wildlife habitat
- Topography that provides opportunities to use the terrain to shoot into or minimize potential noise concerns

This effort resulted in the identification of seven potential sites located in the Columbia County Towns of Dekorra, Lowville and Springvale.

An ad hoc citizen work group was formed in January 2014 to further evaluate the list of seven potential sites in Columbia County. The ad hoc

citizens group ultimately identified Mud Lake Wildlife Area – King Road site as their preferred location to establish a shooting range (See Attachment A).

In addition to a need for statewide shooting ranges, DNR is interested in working with local partners to help develop and manage these (new or improved) ranges. In this situation, the Department will be reaching out to groups that have expressed an interest in assisting with the management and where possible, entering into agreements to provide financial assistance to the groups that are willing to meet the operational and management needs identified for the Columbia County shooting range. The range will not be continually staffed by a Department employee however staffing will be considered on weekends during busy times of the year. Department O&M would be carried out by wildlife management and law enforcement staff in Columbia County. The department would not maintain permanent staff at the proposed shooting range.

In all of the alternatives identified, due to the fact that ground disturbance would be greater than 1 acre in size, a storm water permit under ch. NR 216 Wis. Adm. Code would be applied for and Best Management Practices according to ch. NR 151 Wis. Adm. Code would be followed to control construction site erosion. Range construction would be supervised by Wisconsin DNR Lands and Facilities program engineers, Law Enforcement and Wildlife Management program staff.

## CHAPTER 2 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

### 2.1 ALTERNATIVES CONSIDERED BUT DISMISSED FROM DETAILED ANALYSIS

All Wildlife and Fisheries Areas in Columbia County were initially evaluated following the criteria above and narrowed to a total of 7 sites. Following deliberations by the ad-hoc range committee, 5 of the sites were eliminated. Those 5 sites and the pros and cons of each which were identified by the committee and ultimately resulted in their dismissal from further consideration, are summarized below.

Hinkson Creek Fisheries Area (T11N – R09E, S. 21)	
Pros	Cons
Topography	Residences are close, and close to Poynette
Not too far from Poynette	Takes up main parking area for access to the stream.
Relatively close to the Interstate and relatively easy to find	A house in the area was hit by an errant bullet - higher sensitivity
Close to the MacKenzie EEC	Shooting noise may impact quality of fishing experience.
Centrally located in the county	Located on an isolated/remote township road.
	Archeological site identified on the site.

Jennings Creek Wildlife Area (T12N – R11E, S.35)	
Pros	Cons
Topography - Would be shooting into a hill.	Residences are close to the site
A parking lot is currently established on the site	A campground is approximately .6 miles from this location.
Not too far off a county highway	This portion of the property is heavily hunted.
Centrally located in the County	Remote/lightly travel location - dumping could become a problem.
	Difficult to find for new users.

Mud Lake Wildlife Area - Hagen Rd (T11N-R19E, S.14)	
Pros	Cons
Close the MacKenzie EEC	Concerns regarding the WA have been expressed by neighbors in the past
Underutilized portion of the property	Residences are ~300 yards from site.
Centrally located in the county	Soil types may be challenging for

	construction.
	Potential concerns from waterfowl hunters due to the proximity of an important waterfowl hunting area
	The trail through the site is heavily used by bowhunters and other outdoor recreationalists
	Lots of tree clearing would be required.
	Direction of shooting may be challenging due to potential down-range issues.

Peter Hellend Wildlife Area - Sawyer Rd (T12N-R11E, S. 4)	
Pros	Cons
Remote Location - distant from residences	Remote Location - Dumping potential
Topography	Main hunter access location - waterfowl specifically
The property has no history of dumping	Not on a main highway - difficult to find
	20 minute drive from Portage

Rowan Creek Fishery Area - CTH CS (T11N-R09E, S. 32)	
Pros	Cons
Access - Directly off CS and Close to the Interstate	Residences are approximately 220' from site
Easy excavation	1.5 miles from the Columbia County Sportsman's League location that were shooting was shut down by court order.
Amenities are close (gas, food, etc.)	Close to Poynette.
A proposed change to commercial zoning on the adjacent property may reduce conflict.	Flat Topography
Close the MacKenzie EEC	Size and Soils are questionable
Centrally located in the county	Takes up main parking area for access to the stream. This parking lot is also heavily used by non-consumptive users, dog walker's, bird watchers etc.
	Shooting noise may impact quality of fishing experience.
	This area is likely to be a future crossing of the property by the county snowmobile trail system
	Concerns about adjacent development in the area.
	Township has identified the adjacent area as an economic development area.
	Residences are close

Following the elimination of five of the sites, an on-line survey open to the public was completed by the Department which was advertised through press releases as well as on the WDNR website to receive input on the two remaining sites, Mud Lake Wildlife Area – King Road and Dekorra Public Hunting Grounds. The pros and cons of each of those two remaining sites are identified below.

Mud Lake Wildlife Area – King Rd (T11N-R10E, S. 28)	
Pros	Cons
Second least intrusive of the options provided to neighboring landowners - only 2 houses within 1,000 yard distance	Wet soil conditions on portions of the property indicate potential wetland areas.
Close to MacKenzie EEC	SNA is approximately 660' away.
Easy access off of STH 22	The area was identified for different management in the recently completed MP
Adjacent area heavily hunted for pheasant. Proposed footprint is lightly hunted.	If site is chosen, the township may request fencing around the parking lot.
Topography - Hill provides a safe location	Site development will need to avoid disturbing Conservation Rd. due to Town request
Discussed previously with township	
Centrally located in the county	

Dekorra Public Hunting Grounds (T11N-R8E, S. 13)	
Pros	Cons
Topography may limit noise transfer and allow shooting into hillside	Heavy hunter use on the property
Location is highly disturbed adjacent to interstate	Access from the wayside and for the public are currently not allowed and would be challenging
Houses are not adjacent to the parcel - on back side of the hill	Security of the wastewater treatment plant may need to be addressed.
	Endangered species present on the site.
	There are approximately 68 residences within a 1,000 yard distance from site.

A total of 256 people completed the on-line survey which was available from March 13, 2014 – April 15, 2014 with 18% preferring the Dekorra PHG site and 68% preferring the Mud Lake WA site. Following a review of the survey information, the ad-hoc committee recommended that a range be developed at the Mud Lake WA – King Rd site. Survey results are attached

as Attachment D.

## **2.2 ALTERNATIVES CARRIED FORWARD FOR DETAILED ANALYSIS**

### **2.2.1. Alternative A – Mud Lake Wildlife Area – King Road (Proposed Action)**

See Chapter 1, Project Summary.

This proposed action would provide a long term shooting range serving hunters, enthusiasts, and law enforcement. This location can support the appropriate berm heights, individual shooting lanes and a gravel parking lot with ADA accessible pit toilets.

The proposed action would construct a new range to include at least a 25 foot range, 50 yard patterning range, 50 yard, and 100 yard target distances. Based on public input received through the public meetings held on the masterplan amendment, consideration may be given to developing a 200 yard range at the site. The range would be intended for fixed target shooting. Each distance would be separated by an earthen berm at least 20 feet in height. Each berm would have a 10 foot flat top to allow mower access, and the sideslopes would be 1:1. Berms would be finished with topsoil and seeded. The bottom of each shooting lane would be finished with topsoil, seed and hydromulch to establish turf.

On-site construction materials would be used to construct the berms and when necessary, additional material would be brought in from an off-site location. Each shooting lane would have their own individual shooting benches and target supports.

Best Management Practices would be followed to control construction site erosion. Range construction would be supervised by Wisconsin DNR Lands and Facilities program engineers, Law Enforcement and Wildlife Management program staff.

The facility would be open to the public from sunrise to sunset all year as seasonal weather allows and may be closed to the public one day a week to

accommodate training opportunities by the WDNR as well as local law enforcement entities. The facility may not have snow cleared in the winter months as use during that time is expected to be low. The range would not be staffed continually however; the Wisconsin DNR may provide staffing on weekends during busy times of the year. In addition to WDNR staff managing and maintaining the site, the Department is interested in pursuing a management agreement with groups from Columbia County that may be interested in assisting in the management of the site.

### **2.2.2 Alternative B - No Action.**

This alternative would not develop a new range in Columbia County. It is expected that the recreational shooting and target practice that has occurred in several parking lots, including those at Swan Lake WA and French Creek WA would continue. These activities would likely continue to generate concerns about public safety, reduced quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement. Safety, shooting skills, education and range accessibility needs would not be met. Having the ability to direct individuals to a designated and properly designed shooting range is expected to reduce the likelihood of haphazard target shooting occurring on public land around the county.

### **2.2.3 Alternative C – Dekorra Public Hunting Grounds**

This proposed action would provide a long term shooting range serving hunters, enthusiasts, and law enforcement. This location can support the appropriate berm heights, individual shooting lanes and a gravel parking lot with ADA accessible pit toilets. Access to the site would be off of County Highway V and would require significant signage to direct users to the site. An access road off of the county highway would need to be upgraded in order to accommodate 2-way traffic into the site.

The proposed action would construct a new range to include a 25 foot, a patterning range, 50 yard, and 100 yard target distances with a 200 yard range being considered. Each distance would be separated by an earthen berm 20 feet in height. Each berm would have a 10 foot flat top to allow mower access, and the sideslopes would be 1:1. Berms would be finished with topsoil and seeded. The bottom of each shooting lane would be

finished with topsoil, seed and hydromulch to establish turf.

On-site construction materials would be used to construct the berms and when necessary, additional material would be brought in from an off-site location. Each shooting lane would have their own individual shooting benches and target supports.

Best Management Practices would be followed to control construction site erosion. Range construction would be supervised by Wisconsin DNR Lands and Facilities program engineers, Law Enforcement and Wildlife Management program staff.

The facility would be open to the public sunrise to sunset all year as seasonal weather allows. The facility may not have snow cleared in the winter months as use during that time is expected to be low. The range would not be staffed continually however; the Wisconsin DNR may provide staffing on weekends during busy times of the year. In addition to WDNR staff managing and maintaining the site, the Department is interested in pursuing a management agreement with groups from Columbia County that may be interested in assisting in the management of the site.

This site was not identified as the preferred alternative by the ad-hoc committee due to public response to the on-line survey. The principle concerns that were expressed during that process included the noise concerns for the large number of residences within the 1,000 yard distance of the range, the lack of easy access to the site from the interstate, as well as concerns regarding potential vandalism at the wastewater treatment facility located adjacent to the proposed site.

## CHAPTER 3 AFFECTED ENVIRONMENT

### 3.1 PHYSICAL CHARACTERISTICS

#### **Alternate A Proposed Alternative:**

Construction activities for the proposed action (A) would mostly be confined to the non-wetland areas shown in Attachment A, Location Map. Upland within the project area consists of an old field meadow that transitions to a deciduous hardwood forest around the periphery of the parcel. Dominant plant species primarily included Canada goldenrod (*Solidago canadensis*), multiflora rose (*Rosa multiflora*), wild parsnip (*Pastinaca sativa*), smooth brome grass (*Bromus inermis*), black locust (*Robinia pseudoacacia*), common buckthorn (*Rhamnus cathartica*), and Bell's honeysuckle (*Lonicera x bella*). Scattered black cherry (*Prunus serotina*) and boxelder (*Acer negundo*) are mixed with white ash (*Fraxinus americana*) along Conservation Dr., which leads to a small and unimproved parking area. The wetland portions of the parcel are dominated by silver maple (*Acer saccharinum*). The wetland located on the western side of the property is directly connected to a wetland complex to the west and to the south of the parcel and is influenced by an intermittent stream that runs parallel to the western boundary of the parcel identified. The wetland located on the east side of the parcel is a depressional silver maple community that continues east. King Rd. runs along the parcels northern boundary. The Property is relatively flat, sloping downward from the central area of the site to the west and to the northeast from topographic highs of approximately 970 feet above mean sea level (msl) in the central area of the site to topographic lows of approximately 950 feet msl in the west and northeastern portions of the site.

Most of the vegetation located in the upland portions of the parcel would be cleared and grubbed to make room for the berms, shooting lanes and parking areas.

On-site topsoil would be temporarily stockpiled and subsequently spread on rough graded shooting lanes/berms for vegetation.

A wetland delineation was contracted with a private contractor and specific on-site posts and flagging were installed to accurately identify the boundaries of the wetland areas in order to avoid disturbance. See

## Attachment E, Wetland Delineation Report.

Wetlands exist on the periphery of the identified parcel of Alternative A and will be avoided during the construction process. Figure 2 is an overlay of the range area on a WDNR wetland inventory map.



Figure 2 - Wetland Map at Proposed Action

The nearest body of water is Mud Lake which is north of the proposed shooting range, approximately .40 of a mile across King Road. The lake is approximately 2,165 acres. (T11N R10E S21 - 23) This lake is managed for wildlife, primarily waterfowl and the water quality is currently not considered impaired.



Photo of Mud Lake (WDNR Database)

### 3.2 BIOLOGICAL ENVIRONMENT (HABITAT/VEGETATION)

The specific site identified to establish the range was historically the homestead on the property consisting of a residence, a barn and several outbuildings. Following removal of the buildings, the site has reverted to an old field upland meadow dominated by Canada goldenrod, multiflora rose, wild parsnip, smooth brome grass, black locust, common buckthorn, and Bell's honeysuckle. The perimeter of the site transitions into a wetland community that consists of a lowland deciduous forest dominated by silver

maple, green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), and rough avens (*Geum laciniatum*). Wildlife usage on the 9-acre portion of the property was not surveyed however provided the size and proximity of the parcel adjacent large expanses of grassland cover, common wildlife species such as robins, sparrows, wild turkey, white-tailed deer, rabbits and mice likely frequent this location.

The proposed range site's topsoil would be windrowed or stockpiled during berm construction. The salvaged topsoil would be placed on the finished berms for vegetative establishment.

### **3.3 RARE SPECIES AND NATURAL COMMUNITIES**

This section discusses the potential impacts to endangered resources that might be affected by construction or operation of the proposed Columbia County Shooting Range.

Endangered resources include rare or declining species, high quality or rare natural communities, and unique or significant natural features.

Endangered resources are tracked via the state's Natural Heritage Inventory (NHI) database which is maintained by the DNR's Bureau of Natural Heritage Conservation. The project area evaluation consists of both the project area and a buffer of 1 mile for terrestrial and wetland species and a 2-mile buffer for aquatic species.

The combined presence of natural habitat and man-made disturbances must be taken into consideration to evaluate whether there is likelihood that rare species are present and the potential for negative impacts to those species. For the purposes of this document, rare species are defined as federal- or state-listed threatened and endangered species, federal candidate and proposed species, and state special concern species. These species are not common which means they are low in numbers or restricted to small geographical areas, i.e., difficult to find. Therefore, while the existing sources of information are important for estimating impacts to rare species, they are incomplete. Additional rare species beyond those identified may actually be present in potentially impacted areas.

Also, the Wisconsin NHI database only has information on rare species for

areas which have been previously surveyed for that species or group, during the appropriate season and the observation recorded.

This section identifies the endangered resources that have been recorded in the vicinity of the project site, the project’s potential impacts to these resources, and the mitigation measures that should be implemented. This list and information are taken from the NHI database.

**State Rare Species and Natural Communities\***

Taxa Group	Protected Status		
	State Endangered or Threatened	State Special Concern	Not Applicable
Birds	1	1	
Reptiles		1	
Natural Communities			2
<b>Summary</b>	<b>1</b>	<b>2</b>	<b>2</b>

\*There are no federally endangered or threatened species or federally proposed or candidate species present in the area.

**3.3.1. Birds**

Almost all native bird species are protected by the Migratory Bird Treaty Act (MBTA). Under the MBTA, it is unlawful to take, capture, kill, or possess migratory birds, their nests, eggs, and young. This may apply to birds nesting in or adjacent to the project area if construction disturbance results in nest abandonment.

Important Bird Areas (IBAs) are designated by the National Audubon Society, Inc. and managed in partnership with the WDNR and other stakeholders. These sites are of ornithological importance because they provide essential habitat to species of breeding or non-breeding birds of conservation concern. The Northern Empire Prairie IBA overlaps the project site.

Due to the MBTA and the presence of an IBA at the site, it is recommended that impacts to nesting birds be avoided by conducting construction activities in areas of suitable habitat (particularly tree removals) outside the breeding and nesting season which runs from approximately March through August.

One endangered and one special concern bird species were documented within the vicinity of the project area. The Endangered bird species prefers large shallow marshes with abundant vegetation adjacent to open water. The Special Concern bird species prefers freshwater wetlands dominated by bulrush and cattail with small groves of alder, willow, or other brush.

A wetland delineation was completed on the project area and wetland areas are planned to be avoided during project construction. Additionally, areas of open water will not be impacted by the project. If wetland areas are able to be avoided, suitable habitat for these species will not be impacted by this project and no further action will be necessary.

If wetland areas are not able to be avoided, habitat assessments should be conducted to determine if suitable habitat exists at this site for these two bird species. If the habitat assessment indicates that suitable habitat does exist, the work should be conducted outside of the avoidance periods for these two species. The required avoidance period for the endangered bird species runs from May 15<sup>th</sup> through July 31<sup>st</sup>. The recommended avoidance period for the Special Concern bird species is from April 15<sup>th</sup> through July 31<sup>st</sup>.

### **3.3.2 Reptiles**

A Special Concern turtle has been recorded within the vicinity of the project area. This species nests within 900 feet of suitable wetlands and waterways. This turtle species overwinters in standing water that is typically more than 3 feet deep and with a deep organic substrate but will also use both warm and cold-water streams and rivers where they can avoid freezing.

A wetland delineation has been completed for the project area and wetland areas will be avoided during project construction. Since the site does not

contain permanent areas of standing water, there is no suitable overwintering habitat at the site. The remaining areas of concern are non-overwintering areas and upland areas.

The simplest and preferred method to avoid take of this turtle, is to avoid directly impacting individuals, known locations, and areas of suitable habitat. If suitable habitat cannot be avoided, the following measures will be implemented to avoid impacts:

Non-overwintering areas – If wetland areas are not able to be avoided, the following measures will be followed. For wetlands / water bodies shallower than three feet at the deepest point, conduct work outside of the turtle’s active season (**March 15 – October 15**). The installation and maintenance of exclusion fencing using the WDNR [Amphibian and Reptile Exclusion Fencing Protocol](#) is an avoidance option that can be used during this period as long as the exclusion fencing is installed **between October 16 and March 14**. Work can then be conducted within the fenced area at any time of year as long as the fencing is maintained.

Upland nesting habitat – Avoid work in suitable upland nesting habitat (sandy and/or well-drained soils) within 275 m (900 ft) of a wetland or water body during the turtle’s nesting period (**May 20 – October 15**). The installation and maintenance of exclusion fencing using the WDNR [Amphibian and Reptile Exclusion Fencing Protocol](#) is an avoidance option that can be used during this period as long as the exclusion fencing is installed **between October 16 and May 19**. Work can then be conducted within the fenced area at any time of year as long as the fencing is maintained.

### **3.3.3. Natural Communities**

Natural communities may contain rare or declining species and their protection should be incorporated into the project design as much as possible. Minimizing impacts to and/or incorporating buffers along the edges of these natural communities will occur in order to avoid impacts. Two wetland natural communities were identified in the NHI database within the vicinity of the project area.

One of the wetland natural communities is an open, marsh, lake, riverine and estuarine community with permanent standing water, dominated by robust emergent macrophytes, in pure stands of single species or in various mixtures.

The other wetland natural community is an herbaceous community of aquatic macrophytes that occurs in lakes, ponds, and rivers. Submergent macrophytes often occur in deeper water than beds of floating-leaved or emergent species, but there is considerable overlap. This community type can also be found in deep water wetlands and flowages that have little moving water present.

A wetland delineation was completed for the project area and wetland areas are planned to be avoided during project construction. This fact, along with the absence of permanent standing water, indicates that these two natural communities will not be impacted and no further action will be necessary.

If wetland areas are not able to be avoided during project construction, impacts to these natural communities should be minimized and/or buffers should be incorporated along their edges.

#### **3.3.4. Additional Recommendations**

It is recommended that backstops and berms be placed in such a way as to maximize the distance from known or newly recorded wetlands in order to reduce impacts to these areas from accumulation of spent lead.

Additionally, it is recommended that periodic recovery and recycling of lead be conducted in order to reduce the potential for lead contamination entering the wetland areas.

### **3.4 LAND USE**

The proposed site for the development of the shooting range is located on Mud Lake Wildlife Area. In order to establish the range on the wildlife area, a master plan amendment will need to occur to change the management classification from "Habitat Management Area" to a "Special Management Area". This potential habitat classification change would not change the

overall goal and objective of Mud Lake Wildlife Area and a shooting range would be an allowable use on a wildlife area that would have a minimal impact on the primary adjacent use of pheasant hunting on this particular property.

The area outside of the wildlife area boundary is all classified as A-1 Agricultural which should not be negatively impacted by the presence of a shooting range. The Township of Lowville has indicated that there are very few businesses located within their jurisdiction. They have indicated that there is a wedding facility and a corn maze within the township. The wedding facility is located approximately 1 mile from the proposed shooting range and the corn maze is approximately 1.5 miles south of the location.

The nearest residence to the proposed shooting range is approximately .4 miles. Occupants of some nearby residences have expressed concern about the development of the range with specific concerns regarding the increase in noise, impacts on wildlife as well as potential negative impacts on land values.

### **3.5 CULTURAL/PALEONTOLOGICAL RESOURCES**

The Wisconsin Historical Society, Museum Archaeology Program completed a Phase I site identification survey of the Mud Lake WA – King Rd project area. The project area consists of a small hill, which is mainly grassland on the west and dense woods/brush to the east. The far western footslope is low and wet, the location of an intermittent stream draining north into Mud Lake. The eastern footslope is also low and wet with standing water at the southwest intersection of King Road and Conservation Lane. The upland portion was investigated by shovel testing at a 15 m interval.

A historic Euro American farmstead was identified across approximately three acres (about 260 x 460 feet) of the area. The farmstead is located off of a driveway that extends north from Conservation Lane. At least eight structures were identified. These include a house foundation constructed of mortared limestone.



Other barns and outbuildings are constructed with concrete foundation walls or concrete slabs. A circular depression near one foundation may represent a silo. A smaller circular depression adjacent to the house is interpreted as a cistern. A possible well is indicated by an open depression built with large boulders located just to the west of the driveway. Several small depressions located near the house were investigated as possible privies but none were identified. Additional historic trash was observed at the northeast footslope.

Generally light densities of artifacts were recovered during the systematic shovel testing. A majority of artifacts were recovered from shovel tests excavated within the house foundation and adjacent cistern. Recovered artifacts include a mix of construction and domestic items totaling around 100. The assemblage consists primarily of construction related items such as nails (wire and machine cut), mortar/plaster, tiles and brick, window glass. A few ceramics (whiteware, porcelain and stoneware) were recovered. Other items include plastic and organics.

Based on deed research and plat maps, the site had been owned/occupied by four owners prior to it being acquired by the State of Wisconsin Conservation Commission (WisDNR) in 1964. The property was initially acquired by Silas W. Herring as a patent deed in 1849. A house/farm is indicated on the 1861 plat (the earliest available) and remains present on all subsequent plat and topo maps until the 1960s.

Based on the long Euro American occupation record and mixed artifact assemblage the site does not appear to be eligible for listing on the National Register of Historic Places. No additional archaeological investigations are

recommended at the site. The Request for State Historical Society Comment and Consultation form is attached as Attachment E. The complete Phase I Archeological Site Identification Survey is attached as Attachment F.

### **3.6 LOCAL SOCIO-ECONOMIC CONDITIONS**

The project area is rural with agriculture as the primary business in the immediate area. Additional businesses within the area include an event/wedding facility and a seasonal agriculture-based tourist attraction that includes strawberry picking and fall-oriented seasonal activities such as a corn maze and a hayride. Primary hours of operation for the facility occur during June and July as well as primarily late September through October. The conference center/wedding facility is approximately 1 mile from the proposed range and is open year-round based on reservations. The Township of Lowville has indicated that there are very few businesses aside from agriculture within their jurisdiction.

Attachment A identifies the residences within a 1,000 yard distance around the parcel identified for development of the range.

The project would result in increased traffic to the shooting range. The average daily traffic count for King Road, as provided by the Columbia County Highway Department from State Highway 22 to Conservation Drive was 75 vehicles per day in the mid-1990s (personal communication). To provide a perspective of the expected increased traffic, at the recently completed Yellowstone Wildlife Area range, the average vehicle count into the parking lot is 25 vehicles per day.

According to tests completed by the American Association of State Highway and Transportation Officials (AASHTO) and published in a WI Towns Association bulletin, the amount of damage a road sustains is directly related to the weight of the load and how often it is applied. Typically, passenger autos and light duty vehicles are not a problem but rather it is trucks carrying legal weight loads of up to 80,000 GVW over weakened surfaces which do the damage. Some research has provided figures which show a single 18-wheeler loaded to 80,000 lbs. will do as much damage as 3,000 – 9,600 cars, depending on the design specifications of the road itself.

### **3.7 ECONOMIC ISSUES**

The project would use federal Pittman-Robertson funds for range development. 25% of the cost is required to come from non-federal cost share and may be in-kind services. The entire construction cost is estimated to be between \$400,000 and \$667,000. Final cost will depend largely on the final design and is also dependent on how much soil is available on-site and how much (if any) will have to be brought in. If it is required to haul in significant amounts of soil, the cost estimate will now be much higher. The Wisconsin DNR would contract with an engineering firm to provide cost estimates based on past range development work and current construction costs. DNR would then be able to estimate our 25% share of the construction and will consider the use of in-kind services such as DNR providing staff and equipment to clear and level the foot-print of development. There are several other possibilities that the Department could employ to contribute the required match. Range construction will temporarily provide jobs to contractors building the range.

## **CHAPTER 4 ENVIRONMENTAL CONSEQUENCES**

### **4.1 POTENTIAL IMPACTS FROM RANGE DEVELOPMENT**

#### **Endangered/Threatened Species**

Refer to Chapter 3.3. One endangered and one special concern bird species were documented within the vicinity of the project area. The Endangered bird species prefers large shallow marshes with abundant vegetation adjacent to open water. The Special Concern bird species prefers freshwater wetlands dominated by bulrush and cattail with small groves of alder, willow, or other brush.

Impacts to nesting birds will be avoided by conducting construction activities in areas of suitable habitat (particularly tree removals) outside the breeding and nesting season which runs from approximately March through August.

#### **Environmental Justice**

The development of a shooting range in Columbia County would have the potential to have a minor positive impact on Environmental Justice by providing a quality, free public shooting facility.

#### **Economics**

DNR would be using federal Pittman-Robertson funds for the construction of the range and associated entities including parking areas and pit toilets. DNR will be requesting \$300,000 - \$500,000 to help complete this work with the total cost of the project consisting of 75% from Pittman-Robertson and 25% being provided by the WDNR. Range construction would temporarily provide jobs to contractors building the range. Additional resources would be spent in the operation and maintenance of the facility and would primarily be provided by Pittman-Robertson funds. If expended on this project, these funds would not be available for other uses.

The Township of Lowville has expressed concern over the increased traffic that the proposed facility would bring to local roads and the additional road maintenance that this traffic would require. The level of traffic that this facility would generate is unknown; however the Yellowstone Lake shooting range, a similar facility in Lafayette County, generates approximately 25 vehicles per day. An additional 25 passenger vehicles per day would not be

expected to significantly increase road maintenance costs.

Range users may increase sales at nearby communities such as Poynette, WI. The Town of Lowville has commented that there are no existing businesses within their jurisdiction that would benefit from the proposed range. Businesses within the area include an event/wedding facility and a seasonal agricultural based tourist attraction (corn maze). The wedding facility is approximately 1 mile from the proposed range. The economic impact that this facility would have on local property values or businesses is unknown.

The economic impact that this facility would have on local property values is unknown. Land values are based on a variety of factors including local zoning and land division ordinances, physical features of a property, prevailing local markets and local and regional economies. Because these factors vary and may change over time there is no way to predict the influence of local land uses on future real estate markets.

**Controversy** - Controversy exists from a variety of angles regarding the development of a shooting range in Columbia County. Significant concern and controversy exists regarding the volume of target shooting that is occurring from wildlife area parking lots within the county, primarily on Swan Lake and French Creek Wildlife Areas. A site specific closure occurred at Swan Lake WA and site manipulation occurred at French Creek Wildlife Area which seems to have addressed most of the human health and safety concerns that have been expressed.

Concern exists regarding the development of a shooting range on Mud Lake Wildlife Area without also taking additional action to address target shooting at wildlife area parking lots throughout the county. The Columbia County board, the Town of Pacific Board, and the Columbia County Conservation Congress have passed resolutions asking for this DNR action before the shooting range amendments to the Master Plan are allowed to proceed. The Department has committed to addressing this issue through a NR 45 rule proposal that will be introduced in early 2015.

Although the preferred location for the shooting range as identified by the public involvement survey and consequently the ad-hoc committee was the Mud Lake Wildlife Area – King Road site, there is some concern about siting

the range at that location. Specifically, increases in traffic and the impact the traffic will have on King Rd have been presented. Some neighbors have also expressed concerns about the increase in noise that they will experience from this facility.

## **4.2 IMPACTS SPECIFIC TO ALTERNATIVES CONSIDERED**

### **4.2.1 Alternative A - Proposed Action, Mud Lake Wildlife Area**

#### **Cultural Resources**

Archeological features have been reviewed by the State Historical Society and no resources were identified and the site has been cleared for construction.

#### **Habitat Impacts**

Minor negative impacts would be expected. The historical use of the proposed site was a homestead prior to being left fallow. This alternative would convert an existing 9-acre old field meadow and a small portion of adjacent hardwood forest to a shooting range. The development of natural habitat and the increased use by humans would likely reduce the use by some species of wildlife on this parcel. However, the habitat that would be lost is not locally or regionally scarce and the majority of the Mud Lake Wildlife Area would remain as it is. Although the adjacent area is heavily hunted for pheasants, the development of a range should not impact the pheasant hunting that occurs on the adjacent property.

Minor and temporary fugitive dust and equipment exhaust emissions would be generated during range construction. The contractors working on this project would be required to follow erosion control best management practices during construction.

#### **Biological Impacts**

Minor negative biological impacts would be expected. Wildlife that may be displaced by the construction of the shooting range are common species and should be able to find similar habitat nearby. The proposed facility is not expected to reduce any local wildlife populations.

#### **Economics**

Range construction would temporarily provide jobs to contractors building the

range.

Range users may increase sales at nearby communities such as Poynette, Rio and DeForest WI. The Town of Lowville has stated that there are no existing businesses within their jurisdiction that would benefit from the proposed range. Businesses within the area include an event/wedding facility and a seasonal agricultural-based tourist attraction (strawberry patch and corn maze). The wedding facility is approximately 1 mile from the proposed range. Neither of these businesses are within view of the proposed shooting range location. In addition to being isolated from view of these businesses, measures, such as increased backstop and sideberms, a shooting direction away from these businesses as well as the use of shooting tubes should reduce the noise emitted from the range.

The economic impact that this facility would have on local property values is unknown. Land values are based on a variety of factors including local zoning and land division ordinances, physical features of a property, prevailing local markets and local and regional economies. Because these factors vary and may change over time there is no way to predict the influence of local land uses on future real estate markets.

The Township of Lowville has expressed concern over the increased traffic that the proposed facility would bring to local roads and the additional road maintenance that this traffic would require. The level of traffic that this facility would generate is unknown; however the Yellowstone Lake shooting range, a similar facility in Lafayette County, generates approximately 25 vehicles per day. An additional 25 passenger vehicles per day would not be expected to significantly increase road maintenance costs.

According to tests completed by the American Association of State Highway and Transportation Officials (AASHTO) and published in a WI Towns Association bulletin, the amount of damage a road sustains is directly related to the weight of the load and how often it is applied. Typically, passenger autos and light duty vehicles are not a problem but rather it is trucks carrying legal weight loads of up to 80,000 GVW over weakened surfaces which do the damage. Some research has provided figures which show a single 18-wheeler loaded to 80,000 lbs. will do as much damage as

3,000 – 9,600 cars, depending on the design specifications of the road itself.

### **Social Conditions**

Alternative A would meet user needs, improve year-round public access, be handicapped accessible and improve hunter education opportunities.

### **Safety**

There is a safety risk associated with shooter error, firearm malfunction and intentional shooter vandalism. Alternative A would improve safety over the existing condition of target shooting occurring at random wildlife areas around the county that do not have backstops and side berms.

Alternative A will have berms separating the shooting ranges reducing the risk of one user injuring another by stray bullets or ricochets when adjusting or checking targets. Construction of side and back berms and single direction shooting lanes would further help prevent stray fire from escaping the site.

Range use and shooting practice would help promote/retain firearm safety practices for hunters and other range users.

Intentional vandalism is always a possibility, especially in this case where the site will not be continuously manned and supervised. If vandalism becomes a problem increased surveillance from local law enforcement officials will be requested to discourage such activities.

### **Noise**

Alternative A will cause increased use and an associated increase in shooting noise frequency at that location. The new facility would be open year-round from sunrise to sunset. Winter use is unlikely. Noise would be reduced for areas adjacent to the parking lots where target shooting is currently occurring. From a population density perspective, there is less impact to adjacent dwellings for Alternate A than Alternate C. Therefore a positive effect can be recognized for Alternate A as the adjacent land is sparsely populated. A sound study was conducted by the Wisconsin Structures and Materials Testing Laboratory to establish baseline sound level in the surrounding area due to a typical hunting rifle of .308 caliber being fired at the shooting range location, under calm wind conditions

(Attachment H). Following construction of the range, additional features may be added to the range to further reduce the level of noise disturbance associated with the range.

### **Land Use**

Because Alternative A is a new location, ground disturbance and topographic changes are necessary. Primary land use adjacent to the proposed site is agriculture and conservation land and should not be negatively impacted by the development of the range.

### **Lead Recovery**

There is a variety of evidence which indicates that lead is typically highly immobile in soil, both at ranges where lead is deposited as well as at locations where lead naturally occurs in the soil.

Wisconsin DNR data from three outdoor shooting ranges in SCR indicate that lead decreases to background values at depths locally as shallow as 1 ft bgs, and at maximum depths of 2-4 ft bgs. Soil at one of these ranges is sandy, which is the soil type most likely to allow downward migration of lead. At another of the ranges, the fall zone for the lead ammunition was a corn field that was tilled for many years, which is believed to account for some of the downward movement of lead at that range. None of the three ranges have an ES exceedance for lead in groundwater. Groundwater is as shallow as 8 ft bgs at two of the ranges.

Shooting ranges over water, particularly shotgun ranges, are typically discouraged due to concerns regarding breakdown of lead in water and 1) ingestion by wildlife feeding in such areas and 2) surface or groundwater contamination and associated negative human/biological health effects.

An investigation conducted in Washington at six orchards where lead arsenate was formerly used found that elevated concentrations of lead are typically restricted to the upper 40 cm of soil. In this situation, the soils were sandy loam and loam, and the orchards have been irrigated since approximately 1915.

In order to minimize any associated risks of lead in the environment, best

management practices will be utilized which involve periodic reclamation of the lead that accumulates in the berms of the range.

### **Recreation**

The new range under Alternative A would improve opportunity for year round recreational practice shooting for all users. The range will be accessible to all users including minorities and users with disabilities. Some potential current uses on the parcel, including hunting, hiking, and wildlife watching would likely be negatively impacted by the development of a shooting range. These activities would still be available on the rest of the wildlife area and should not be significantly impacted by this proposal.

### **Cumulative Impacts**

Cumulative impact has been defined in the National Environmental Policy Act as “the impact on the environment which results from the incremental impact of the action (in this case new shooting range development) when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such other action”.

Chapter 1 describes DNR interest in developing new shooting ranges across Wisconsin to promote hunting safety. No criteria have been set as to the demand for new ranges, how many should be built, location of such facilities, etc. Similarly DNR has no regulations regarding safe setback distances from other types of land uses. It is not expected that so many new ranges would be proposed in near proximity to each other that there would be an additive cumulative effect such as for safety or noise.

Alternatives A or C would not set a precedent resulting in substantial increased demand for such facilities elsewhere. But it would create a safer and more accessible facility to meet local and statewide shooting range demand.

No conflicts with local, state or federal plans or policies are expected. Lead deposition and cumulative spent lead build-up in earthen berms is not known in Wisconsin to present a serious risk of groundwater contamination or other environmental risk (see above Lead Recovery discussion). DNR would not support or seek federal funding for any new shooting ranges over water. At some future time DNR may want to consider a mandatory, unified

lead recovery program for any ranges they seek to develop to help prevent or minimize lead contamination problems.

One possible cumulative effect is that shooting enthusiasts would become accustomed to the new range location and would frequent it more than random, uncontrolled locations in wooded property, gravel pits or open fields.

### **Controversy**

The nearest residence to the proposed shooting range is approximately .4 miles. Some nearby residents have expressed concern about the development of the range with specific concerns regarding the increase in noise, impacts on wildlife as well as potential negative impacts on land values. As discussed above, a proposed range would increase the level of shooting noise that neighbors would experience. As part of the design phase of the range, specific efforts may be incorporated into the shooting range to reduce the noise level including shooting tubes, higher berms and an angle of shooting directed to the southeast.

Regarding the concerns expressed about the increased traffic on the local roads there are a variety of research results which provide some valuable insights. According to tests completed by the American Association of State Highway and Transportation Officials (AASHTO) and published in a WI Towns Association bulletin, the amount of damage a road sustains is directly related to the weight of the load and how often it is applied. Typically, passenger autos and light duty vehicles are not a problem but rather it is trucks carrying legal weight loads of up to 80,000 GVW over weakened surfaces which do much of the damage. Some research has provided figures which show a single 18-wheeler loaded to 80,000 lbs. will do as much damage as 3,000 – 9,600 cars, depending on the design specifications of the road itself.

Considering King Road, currently the average daily traffic count as provided through personal communications with the Columbia County Highway Department from State Highway 22 to Conservation Drive was 75 vehicles per day in the mid-1990s. To provide a perspective of the expected increased traffic, at the recently completed Yellowstone Wildlife Area range, the average vehicle count into the parking lot is 25 vehicles per day.

As a result, based on the research from the American Association of State Highway and Transportation Officials (AASHTO), if the level of traffic use is similar to what we are experiencing at Yellowstone, the increased traffic on King Road due to the shooting range would be negligible.

#### **Significance of Precedence**

The development of a range is not a precedence setting action as there are numerous locations where the Department has worked with other entities to develop ranges or independently developed ranges, throughout the state.

#### **Significance of Risk**

The risk associated with this action is low as the Department has developed and operates numerous other ranges around the state and has had a minimal number of incidences of errant bullets when the range is designed to NRA design standards.

### **4.2.2 Alternative B - No Action**

#### **Cultural Resources**

No known impacts as a result of this action.

#### **Environmental Justice**

Negative effect. Without the development of a shooting range in Columbia County, there would not be a free ADA-accessible public shooting facility within a radius of 100,000 people. Those individuals without the financial resources to purchase range time or a membership to a private range will not have the opportunity to target shoot at a range.

#### **Economics**

No major impact. Federal funding could be used for other projects.

#### **Habitat Impacts**

Slight negative. Target shooting will continue at various wildlife area parking lots around the county. These sites lack the ability to effectively reclaim the lead that is being deposited at these sites while at a properly designed and managed range, the range design allows for proper lead reclamation.

**Biological Impacts**

None. No new disturbance would take place as a result of this action.

**Social conditions**

Long term adverse effect as there would be no sanctioned range for individual users, social groups or organizations such as hunter's safety training, boy scouts, or law enforcement training & practice.

**Safety**

In the short term safety would not change. It is speculated that safety overall would decrease as current users would shoot in uncontrolled or unimproved areas elsewhere.

**Noise**

Negative. Without the development of a range, it is likely that uncontrolled target shooting at unimproved sites will continue which has resulted in noise complaints, specifically from the residents of the subdivision adjacent to the Swan Lake WA parking lot.

**Land Use** - None.

**Lead Recovery**

Negative. Lead reclamation is not possible at the uncontrolled, unimproved sites around the county. At a well-designed and managed site, lead reclamation is a part of the standard operation and management of the facility.

**Recreation**

Negative. Adverse effect as there would be no sanctioned range for individual users, social groups or organizations such as hunter's safety training, boy scouts, or law enforcement training & practice. In addition, complaints have been received from other recreational users of the wildlife area when uncontrolled target shooting is occurring at wildlife area parking lots in the county.

**Cumulative Impacts**

None identified by this action.

**Controversy**

No change. Long term and on-going controversy will continue by not providing a range suitable for current users of the range.

**4.2.3 Alternative C – Dekorra Public Hunting Grounds****Cultural Resources**

Unknown however no impact is expected.

**Habitat Impacts**

Slightly greater than Alternative A due to higher habitat quality.

**Biological Impacts**

Negative impact due to the loss of grassland habitat and the presence of an endangered species at the site which is dependent on grassland habitat.

**Social Conditions**

Same as for Alternative A.

**Safety**

Generally same as for Alternative A.

**Noise**

Potentially more negative than Alternative A due to the higher number of residences within the 1,000 yard distance of the range, however a noise analysis was not conducted for this site. It should be noted that comments have been received which indicate the increase noise would be unnoticeable due to the presence of the interstate adjacent to the site.

**Land Use**

Same as for Alternative A.

**Lead Recovery**

Same as for Alternative A.

**Recreation**

Generally same as Alternative A.

**Cumulative Impacts**

Same as for Alternative A.

**Controversy**

Slightly higher due to the number of residences within 1,000 yard distance of the site.

### 4.3 Summary Comparison of Environmental Consequences by Alternative

Impact type	Alternative A (Mud Lake WA)	Alternative B (No Action)	Alternative C (Dekorra PHG)
<b>End./Thr. Species</b>	None	No effect	Negative
<b>Cultural Resources</b>	None	No effect	None
<b>Envir. Justice</b>	Positive	Negative	Positive
<b>Economics</b>	None	No effect	None
<b>Habitat</b>	No effect	No effect	Minor negative
<b>Biological</b>	No effect	No effect	Minor negative
<b>Social Conditions</b>	Positive	Negative	Positive
<b>Safety</b>	Positive	Negative	Positive
<b>Noise</b>	Negative	Negative	Negative
<b>Land Use</b>	No effect	No effect	No effect
<b>Lead Recovery</b>	Positive	Negative	Positive
<b>Recreation</b>	Positive	Negative	Positive
<b>Cumulative</b>	No effect	No effect	No effect
<b>Controversy</b>	Minor Negative	Negative	Negative

## **CHAPTER 5 LIST OF PREPARER(S)**

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## **CHAPTER 6    CONSULTATION AND COORDINATION WITH THE PUBLIC AND OTHERS**

The range site is owned by the Wisconsin DNR and is located in the Town of Lowville, Columbia County. A shooting range is an allowable use on a wildlife area that would have a minimal impact on the primary adjacent use of pheasant hunting on this particular property.

Significant public involvement has occurred to narrow down and select the preferred location for the establishment of a range in Columbia County. See Chapter 2 for additional information.

This environmental assessment will be made available as a draft document for public review and comments, further allowing identification of any controversy associated with the project. Per FWS instruction a news release will be sent by DNR to local and statewide media describing the project and requesting comments. If new issues or controversy emerge DNR will attempt to resolve them before forwarding the EIS and grant application to FWS. All comments received and a description of any actions taken to resolve them would be forwarded to FWS as part of the final EA. FWS would make a final determination on the need for an EIS and a decision on the grant application.

## **CHAPTER 7 – SUMMARY OF PUBLIC INVOLVEMENT AND COMMENTS ON THE DRAFT EIS**

April 17, 2015

### Background

Public comments were received following the release of the Environmental Impact Statement on December 8<sup>th</sup>, 2014 through February 27<sup>th</sup>, 2015 with two formal points in the process as well as through an on-line survey regarding the EIS, a masterplan amendment and various design aspects of the proposed shooting range:

- Twenty members of the public, elected county and town officials and non-DNR agency staff attended an open house for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on December 17, 2014. A total of 11 comments were provided on the poster boards around the room and 1 additional person completed a comment form and submitted it at the meeting. Attendees included 6 members of the Columbia County Board, 1 member of the Town of Pacific Board and 1 member of the Town of Lowville Board.
- Thirty members of the public, elected county and town officials and non-DNR agency staff attended an open house and the formal hearing for the draft Environmental Impact Statement at the Columbia County Law Enforcement Center on February 5, 2015. Eight individuals provided oral public testimony on the EIS and one individual provided written testimony.
- Thirty two people completed the on-line survey from December 23<sup>rd</sup>, 2014 through February 27, 2015 and two additional people mailed in a printed copy of the survey.

In addition, staff received three phone calls, four letters and 5 emails during the public comment period. In addition, the Town of West Point presented a resolution regarding target shooting on state lands in Columbia County and in the Town of West Point.

### Overview of the Environmental Impact Statement Comments

The table below provides a summary of the comments received through the various methods regarding the EIS and the masterplan amendment Columbia County Planning Group Master Plan. The information provided below provides a summary that includes comments received on the masterplan amendment itself due to the close relationship between the EIS, the CCPG Amendment and the development of the shooting range itself.

Columbia County Shooting Range EIS/Masterplan Amendment Comments			
Comment Method	Strongly Support/Support	Unsure	Strongly Oppose/Oppose
On-line Survey	17	8	9
Letters	1	1	1
Phone Calls	1	0	2
Email Messages	3	1	1

Overall, a total of 45 comments were received specific to the environmental impact statement with 22 comments (49%) in support of the EIS findings, 10 (22%) unsure and 13 comments (29%) opposed.

The individuals that “strongly supported” or “supported” the EIS and the development of the range felt it was a good use of tax dollars and generally felt there is a need for a safe place to shoot in Columbia County. In addition to expressing their support for the range, a group of the respondents also recommended fencing the site and installing a 200 yard range and maintaining a 25’ range.

The individuals that “strongly opposed” or “opposed” the EIS and the development of the range identified a number of concerns related to the range development. Specifically:

**Comment:** Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact wildlife on the parcel and the property in general.

**Response:** The specific site identified to establish the range was historically the homestead on the property consisting of a residence, a barn and several outbuildings. Following removal of the buildings, the site has reverted to an old field/upland meadow dominated by Canada goldenrod (*Solidago canadensis*), multiflora rose (*Rosa multiflora*), wild parsnip (*Pastinaca sativa*), smooth brome

grass (*Bromis inermis*), black locust (*Robinia pseudoacacia*), common buckthorn (*Rhamnus cathartica*), and Bell's honeysuckle (*Lonicera x bella*). The perimeter of the site transitions into a wetland community that consists of a lowland deciduous forest dominated by silver maple, green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), and rough avens (*Geum laciniatum*). Wildlife usage on the 9-acre portion of the property has not been surveyed however provided the size and proximity of the parcel to adjacent large expanses of grassland cover, common wildlife species such as robins, sparrows, wild turkey, white-tailed deer, rabbits and mice likely frequent this location.

Although one endangered and one special concern bird species were documented within the 1 mile buffer of the project area, the endangered bird species prefers large shallow marshes with abundant vegetation adjacent to open water. In addition, the special concern bird species prefers freshwater wetlands dominated by bulrush and cattail with small groves of alder, willow, or other brush. Since the parcel that will be developed for the range is an upland site and the two habitat types do not exist at that location, impacts on the endangered and special concern species should not occur.

In other areas where shooting ranges have developed similar to the proposed range, impacts to wildlife have been undetectable. Wildlife, such as deer, turkeys and songbirds have been identified on shooting ranges and frequently use adjacent property in lieu of the range itself following development of the site.

The development of natural habitat and the increased use by humans would likely reduce the use by some species of wildlife on this parcel. However, the habitat that would be lost is not locally or regionally scarce and the majority of the Mud Lake Wildlife Area would remain as it is. Although the adjacent area is heavily hunted for pheasants, the development of a range should not impact the pheasant hunting that occurs on the adjacent property.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact other recreational users on the property.**

**Response:** The primary activity that occurs on Mud Lake Wildlife area is pheasant, waterfowl, deer and turkey hunting as well as wildlife watching. The

site that was chosen is currently a reclaimed homestead site and is on the periphery of a large grassland area primarily used for pheasant hunting. Since the area where the range will be built is surrounded by a small silver maple forest, pheasant hunting does not occur at a significant level on this portion of the property. Regarding other forms of hunting, this portion of the property does not represent a habitat type that is limited or of significance for hunting these alternative species, especially waterfowl.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact the conference center and the agricultural-based seasonal business in the Town of Lowville.**

**Response:** The immediate project area is rural with agriculture as the primary business. Additional businesses within the area include an event/wedding facility and a seasonal agriculture-based tourist attraction that includes strawberry picking and fall-oriented seasonal activities such as a corn maze and a hayride. Primary hours of operation for the facility occur during June and July as well as primarily late September through October. The conference center/wedding facility is approximately 1 mile from the proposed range and is open year-round based on reservations. Neither of these businesses are within view of the proposed shooting range location. In addition to being isolated from view of these businesses, measures, such as increased backstop and sideberms, a shooting direction away from these businesses as well as the use of shooting tubes should reduce the noise emitted from the range.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact the roads in the Town of Lowville.**

**Response:** The project would result in increased traffic to the shooting range. The average daily traffic count for King Road, as provided by the Columbia County Highway Department from State Highway 22 to Conservation Drive was 75 vehicles per day in the mid-1990s (personal communication). To provide a perspective of the expected increased traffic, at the recently completed Yellowstone Wildlife Area range, the average vehicle count into the parking lot is 25 vehicles per day.

According to tests completed by the American Association of State Highway and Transportation Officials (AASHTO) and published in a WI Towns Association

bulletin, the amount of damage a road sustains is directly related to the weight of the load and how often it is applied. Typically, passenger autos and light duty vehicles are not a problem but rather it is trucks carrying legal weight loads of up to 80,000 GVW over weakened surfaces which do the damage. Some research has provided figures which show a single 18-wheeler loaded to 80,000 lbs. will do as much damage as 3,000 – 9,600 cars, depending on the design specifications of the road itself.

**Comment:** Several individuals questioned the need for the development of a shooting range in Columbia County and generally feel it isn't needed.

**Response:** Currently, no public shooting range exists in Columbia County and the surrounding area. The Wautoma shooting range is the closest public shooting range which is approximately 60 miles from Poynette and the Yellowstone Wildlife Area range is approximately 67 miles away. In 2012, the board approved the Columbia County Master Plan for DNR-managed wildlife and fishery lands in the county. The plan identified public safety and neighboring landowner concerns associated with shooting in parking lots on the Swan Lake and French Creek wildlife areas and identified the need for a public shooting range in Columbia County.

### **Shooting Ranges**

(from: Columbia County Planning Group Master Plan, pg. 43)

“Several parking lots at the Swan Lake WA and French Creek WA are heavily used for recreational shooting and target practice by locals and out of county individuals. These activities have generated concerns about public safety, quality of life (e.g., noise and litter) and inquiries by local elected officials and law enforcement.”

In addition to the need identified in the Columbia County Planning Group masterplan, Columbia County falls within a high priority area for range development in the “Strategic Guidance for Shooting Ranges in Wisconsin – 2014 – 2019”(Attachment C). Within this strategic guidance, the goal is to increase opportunities for shooting in a safe environment within a reasonable travel distance for participants and in a location intended for recreational shooting. All areas, including all of Columbia County, lying outside of a 100,000 resident buffer drawn around public shooting ranges have been identified as a high priority for the development of a shooting range.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will produce a large amount of noise in the area.**

**Response:** As part of the construction process, measures, such as increased backstop and sideberm heights and establishing a shooting direction away from these businesses and closest residences should mitigate the sound level emitted from the range.

As a part of the evaluation process, a sound study was conducted by the Wisconsin Structures and Materials Testing Laboratory to establish baseline sound level in the surrounding area due to a typical hunting rifle of .308 caliber being fired at the shooting range location, under calm wind conditions. Following construction of the range, this information will provide base-level information to evaluate noise levels emitted from the range and may result in further evaluation to mitigate noise levels if the department determines it is necessary.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will negatively impact on property values in the area.**

**Response:** The economic impact that this facility would have on local property values is unknown. Land values are based on a variety of factors including local zoning and land division ordinances, physical features of a property, prevailing local markets and local and regional economies. Because these factors vary and may change over time there is no way to predict the influence of local land uses on future real estate markets.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area will result in significant litter in and around the range.**

**Response:** The Wisconsin DNR is interested in working with local partners to help develop and manage the Columbia County Shooting Range once it is developed. During the public comment period for the EIS and masterplan amendment, the Columbia County Sporting Alliance has offered to assist with the management of the site. If approved, the Department will meet with the group and further discuss entering into an agreement to provide financial

assistance to them or other groups that are willing to meet the operational and management needs identified for the Columbia County shooting range. The range will not be continually staffed by a Department employee however staffing will be considered on weekends during busy times of the year. Department O&M would be carried out by wildlife management and law enforcement staff in Columbia County with funding primarily provided by Pittman Robertson funding.

**Comment: The Town of West Point passed a resolution requesting an amendment to the Columbia County Planning Group masterplan indicating target shooting is not allowed on State Natural Areas, state-owned segments of the Ice Age Trail, State Fisheries Areas and State Wildlife Areas with the exception of Mud Lake Wildlife Area.**

**Response:** Throughout the process that has been used to establish a shooting range in Columbia County, the Wisconsin DNR has indicated that eliminating target shooting on all other DNR-managed properties in the County was excessive. In situations where target shooting creates public health and safety issues and significant neighbor concerns, the Department has committed to addressing this issue through a NR 45 rule proposal that will be introduced in 2015.

**Comment: Development of a shooting range on the King Rd site on Mud Lake Wildlife Area may result in lead leaching into the ground water.**

**Response:** There is a variety of evidence which indicates that lead is typically highly immobile in soil, both at ranges where lead is deposited as well as at locations where lead naturally occurs in the soil.

Wisconsin DNR data from three outdoor shooting ranges in SCR indicate that lead decreases to background values at depths locally as shallow as 1 ft bgs, and at maximum depths of 2-4 ft bgs. Soil at one of these ranges is sandy, which is the soil type most likely to allow downward migration of lead. At another of the ranges, the fall zone for the lead ammunition was a corn field that was tilled for many years, which is believed to account for some of the downward movement of lead at that range. None of the three ranges have an ES exceedance for lead in groundwater. Groundwater is as shallow as 8 ft bgs at two of the ranges.

An investigation conducted in Washington at six orchards where lead arsenate was formerly used found that elevated concentrations of lead are typically restricted to the upper 40 cm of soil. In this situation, the soils were sandy loam and loam, and the orchards have been irrigated since approximately 1915.

In order to minimize any associated risks of lead in the environment, best management practices will be utilized which involve periodic reclamation of the lead that accumulates in the berms of the range.

## CHAPTER 8 REFERENCES CITED

Copies of references cited can be obtained from DNR contact person listed on page 1.

1. National Rifle Association Range Manual, 2012.
2. Natural Heritage Inventory (NHI) database, Wisconsin Dept. of Natural Resources
3. Hunting, Fishing and Trapping 2000 - A Report Addressing Long Term Planning for the Secretary's Issue of Hunting, Fishing and Trapping in Wisconsin, WDNR, 2000.
4. "Shooting ranges a big target for funding from DNR"; Milwaukee Wisconsin Journal Sentinel, June 29, 2013.
5. Wisconsin Hunter Education Annual Incident Report-2013, WDNR.
6. Best Management Practices for Lead at Outdoor Shooting Ranges, EPA-902-B-01-001, June 2005, Region 2.
7. American Association of State Highway and Transportation Officials study
8. Outdoor Shooting Ranges: Best Practices, 2003, State of Minnesota, Department of Natural Resources.

## **ATTACHMENTS**

Attachment A: Columbia County Planning Group Masterplan

Attachment B: Location Map

Attachment C: Strategic Guidance for Shooting Ranges in Wisconsin – 2014 – 2019

Attachment D: Online Survey Results Overview

Attachment E: Wetland Delineation Report

Attachment F: Request for State Historical Society Comment and Consultation

Attachment G: Phase I Archeological Site Identification

Attachment H: Mud Lake Sound Study