

## Chapter 5: Planning and the Environment

### **I. Overview**

SRTPA's environmental characteristics is the theme of the following chapter. Specifically, the threatened and endangered species, conservation recreation lands, protected streams and rivers, coordination efforts, and environmental mitigation activities is discussed. Each of these characteristics have a direct relationship with the future needs of SRTPA and is essential to the long range planning process.

### **A. Threatened and Endangered Species**

The following threatened and endangered species in SRTPA were found on the U.S. Fish & Wildlife Service website Midwest Region. This list was revised as of October 2013. The information can be found here:

[http://www.fws.gov/midwest/endangered/LISTS/iowa\\_spp.html](http://www.fws.gov/midwest/endangered/LISTS/iowa_spp.html).

According to the U.S. Fish & Wildlife Service agency, the following species amongst SRTPA are currently designated as either a threatened species or endangered species.

#### **1. Northern Long-eared Bat**

The Northern Long-eared Bat is designated as a threatened species in each of the five SRTPA counties. The species can be found throughout much of the eastern and north central U.S, residing amongst 37 states. The Northern Bat's habitat typically features underneath bark, in cavities, and cervices of both live and dead trees during the summer season and caves and mines during the winter season. The most pressing threat to the species is the White-Nose syndrome, a fungal disease commonly known to affect bats.



**2. *Prairie Bush-Clover***

The Prairie Bush-Clover is a flowering plant species and is designated as a threatened species in each of the five SRTPA counties. The species is known to exist in Illinois, Iowa, Minnesota, and Wisconsin. The Prairie Bush-Clover is pale pink during blooming season. The flowering plant is typically seen as silvery-green due to its short blooming season however. Common threats looming on the species include conversion of pasture into cropland, overgrazing, and expansion on agricultural operations and urban development.



Photo by USFWS, Phil Dalpke

**3. *Western Prairie Fringed Orchid***

The Western Prairie Fringed Orchid is a flowering plant species and is designated as a threatened species in each of the five SRTPA counties. The species is known to exist amongst the Midwestern states, concentrated in Iowa and Nebraska. The Western Prairie can be found on unplowed, calcareous prairies and sedge meadows. Threats the species is vulnerable to include conversion of habitat to cropland and poorly conduct burning, grazing, and mowing.



**4. *Pallid Sturgeon***

The Pallid Sturgeon is a fish species and is designated as an endangered species in Monona and Woodbury County. The species can be found throughout the Mississippi and Missouri River and several tributaries from Montana to Louisiana. The Pallid



Sturgeon is most commonly found at the deeper depths of these rivers and tributaries. Reasons contributing to this species being designated as an endangered species include habitat destruction and modification, overutilization, inadequacy of existing regulatory mechanisms, and other natural or manmade factors.

### 5. **Least Tern**

The Least Tern (bird) is designated as an endangered species in Woodbury County and has been since 1985. Although populations of this species exist in Woodbury County, they typically are more concentrated in the U.S. Fish & Wildlife Service's Southeast Region.



Reasons contributing to the Least Tern remaining on the endangered species list for over three decades include habitat loss or degradation and nest disturbance. Other imposing threats to the species include changes to dams, reservoirs, and river systems, as well as recreational activities taking place on rivers and sandbars, forcing the species to abandon their habitat.

### 6. **Piping Plover**

The Piping Plover (bird) is designated as a threatened species in Woodbury County. The species is distributed throughout a large portion of the U.S., residing amongst the U.S. Fish & Wildlife Service's Great Lakes-Big Rivers Region



and Northeast Region. It should be noted that the Piping Plover is designated as a threatened species in the Northeast Region and an endangered species in the Great Lakes-Big Region. Similar to the Least Tern species, the Piping Plover has been designated as a threatened species in Woodbury County since 1986. Before receiving the threatened species designation, the species population underwent a significant decline due to hunting. Reasons contributing to the Piping Plover remaining as a threatened species for over three decades includes habitat loss or degradation, nest disturbance, and predation. The species is extremely sensitive to humans, leading to frequent abandonment of their habitat as well.

## **B. Conservation Recreation Lands**

Conservation Recreation Lands are essential to the area's well-being. According to the material that was obtained from the Natural Resources Geographic Resources Library, SRTPA has thirteen different classification categories. Looking at the reference map (page V-10), the Conservation Recreation Lands are represented by the green polygon features. This information was compiled from 2012 data at: <http://www.igsb.uiowa.edu/nrgislibx/gishome.htm>

As mention previously, there are thirteen different classification categories of the Conservation Recreation Lands. The SRTPA Region consists of: 98 Wildlife Management Areas; one Recreation Areas; seven State Preserves; fifty County Parks; one cemetery; two City Parks; two Sovereign Waters; eight State Parks; three State Forests; one NGO Preserve; one State Recreation Area; one Iowa Habitat Access Program (IHAP); and six Access Points.

In Woodbury County there are 33 Wildlife Management Areas, one State Preserve, 12 County Parks, two City Parks, one Access Point; two State Parks, one Sovereign Waters, and one IHAP. Some of these Wildlife Management Areas can be sub-classified as prairies, timbers, conservation areas, a greenbelt, lakes, and wildlife management areas.

In Plymouth County there are nine Wildlife Management Areas, two State Preserves, seven County Parks, one Access Point, one State Park, one NGO Preserve, and one State Recreation Area. Some of the Wildlife Management Areas can also be sub-classified as prairies.

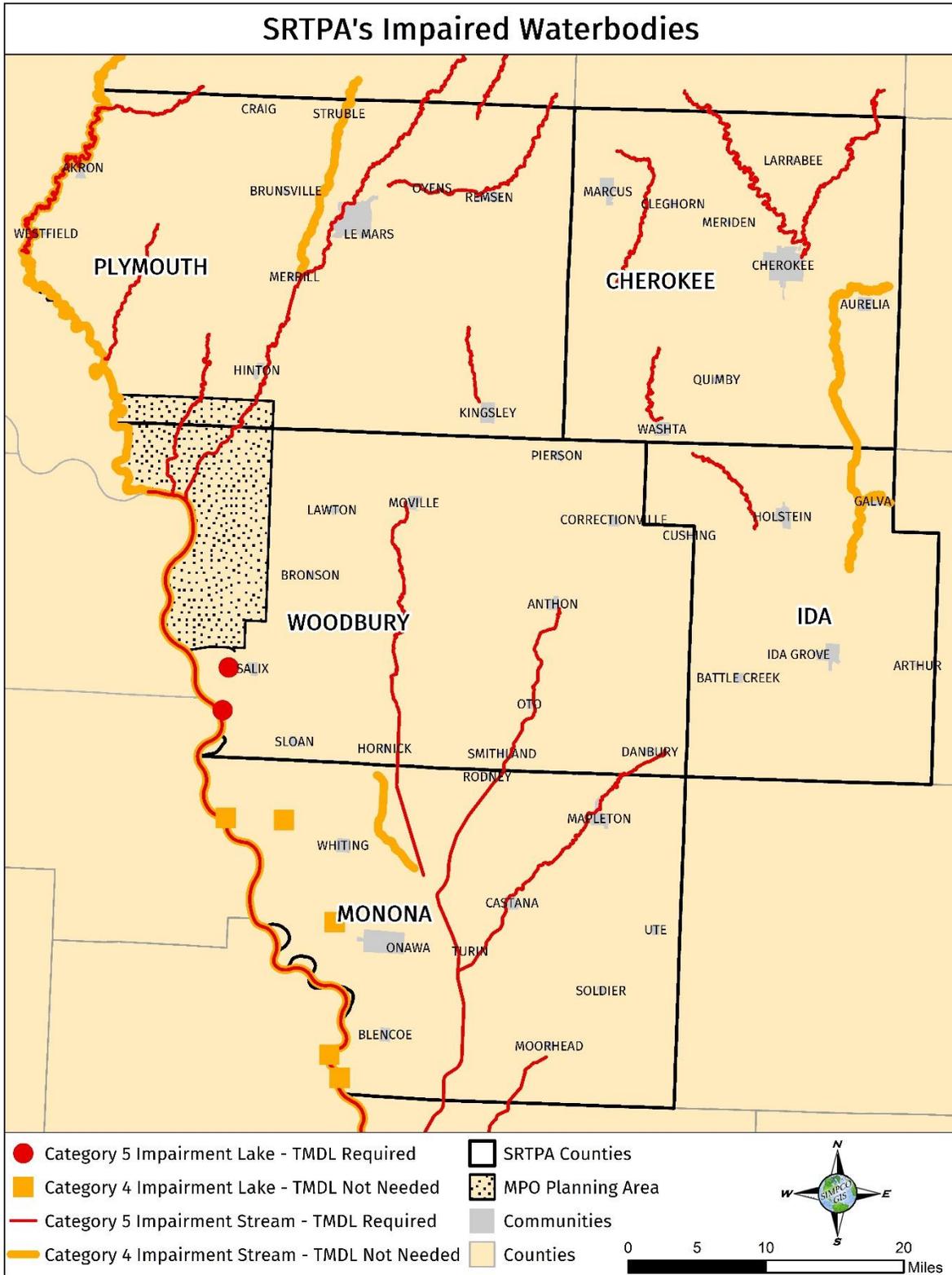
In Cherokee County there are 11 Wildlife Management Areas, three State Preserves, ten County Parks, and two Access points. The Wildlife Management Areas can also be sub-classified a greenbelt and a prairie.

In Monona County there are 36 Wildlife Management Areas, one Recreation Area, two State Preserves, 16 County Parks, three State Forests, five State Parks, and one Sovereign Waters. The Wildlife Management Areas can be sub-classified into woods, landing, recreation areas, lakes, bends, Loess Hills, and wildlife management areas.

In Ida County there are three County Parks, one Cemetery, and two Access Points.

### **C. *Protected Streams and Rivers***

The Big Sioux, Floyd, Little Sioux, Maple, Missouri, Soldier, and West Fork Little Sioux River were placed on Iowa's 2016 Impaired Waterbodies and designated as Category 5 Impairment, requiring an allocation to their total maximum daily load (TMDL) to combat the existing causes and sources of pollutants contributing to impairment. The TMDL determines the level of water quality needed to meet a water quality standard. Establishing the level of water quality needed results in identifying the maximum pollutant load from point and nonpoint sources, as well the "margin of safety" load, which a waterbody can receive and continue to meet water quality standards. The pollutants representing the margin of safety load accounts for the lack of understanding on the relationship between pollutant loads and water quality. Contributing causes and sources of pollutants leading to these rivers receiving the Category 5 Impairment designation include human and animal waste infiltrating the rivers that originated from wastewater treatment centers, industrial plants, land-apply manure, failing septic systems and rainwater/snowmelt carrying livestock and wildlife waste. To repair this damage, the watersheds need to be cleaned up of the pollution from human and animal waste.



## **D. Coordination Efforts**

As required in MAP-21, SRTPA must consult “as appropriate” with “State and local agencies responsible for land use management, natural resources, environmental protection, and historic preservation” in developing long-range transportation plans. SRTPA staff has currently updated the Public Participation Plan to include the efforts made to notify the public and interested state and local parties. There are routine and ongoing activities that the staff continues to uphold for the benefit of the community. These activities include but are not limited to: minutes and agenda dissemination; news releases; forming an advisory committee if necessary; giving presentations to organizations; holding public input meetings; availability to speak at city meetings; social media outreach; and holding open meetings with SRTPA’s Transportation Technical Committee and Policy Board. Regarding the efforts made by SRTPA’s staff to notify the public and state and local parties on the LRTP, staff develops and reviews the plan on a per-chapter basis. Following an outlined schedule, staff develops chapter(s) and presents the progress made to the Technical Advisory Committee and Policy Board on a monthly or bi-monthly basis. Upon presenting to the TAC and Policy Board, staff forwards the progress made to IDOT staff for review as well. Upon addressing the feedback received by the IDOT on the each of the plan’s chapters and presenting the changes to the TAC and Policy Board, staff will hold a public meeting and comment period for the general public. In addition to giving an opportunity to the general public to provide input staff will forward the plan to all state and local parties that are required to receive the plan in order to comply with standards as well. Staff is also responsible for contacting the following Natural Resources/Cultural Agencies: Iowa Department of Natural Resources, Iowa Department of Transportation – Office of Location and the Environment, Office of the State Archaeologist, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Services, Natural Resources Conservation Services, and the State Historical Society of Iowa regarding the development of plans and programs. The process of consulting with the resource agencies is a goal of the Long-Range Transportation Plan to link NEPA and planning. The goal includes early agency environmental coordination that will allow the public involvement, alternative consideration, and environmental information to help determine how a project may have to be altered or changed to help create a more streamlined environmental review process once it does reach the formal consultation stage.

## **E. Environmental Mitigation Activities**

The MAP-21 policy states that the LRTP shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the LRTP. Discussion may focus on policies, programs, or strategies. The discussion shall be developed in consultation with Federal, State and Tribal land management, wildlife and regulatory agencies. The map on page V-10 which includes conservation recreation lands and wetlands will illustrate many of SRTPA's environmental constraints.

SRTPA's staff has identified four common environmental issues for discussion in this 2045 LRTP. The environmental issues include:

- ◆ Threatened and endangered species
- ◆ Conservation recreation lands
- ◆ Conservation wetlands
- ◆ Protected streams and rivers

The following section provides a brief description of each potential mitigation activities:

### **1. Threatened and Endangered Species**

- ◆ Avoid new construction in and around areas with known threatened and/or endangered species.
- ◆ Take steps to minimize harm and compensate for impacts.
- ◆ Provide proper maintenance of wildlife fencing.
- ◆ Keep the roadway free of trash.
- ◆ Use minimal amounts of deicing agents.
- ◆ Alter drivers to possible presence of wildlife.
- ◆ Provide buffer strips along streams and rivers.
- ◆ Maintain natural lighting to the extent possible along roadways.
- ◆ Monitor wildlife

### **2. Conservation Recreation Lands and Cultural Areas**

- ◆ Avoid new construction around recreation and cultural areas.
- ◆ Take steps to minimize harm and compensate for impacts.

- ◆ Provide enhancements to the properties, including possible enhancements to the pedestrian/bicycle networks around these areas.
- ◆ Clean up refuse
- ◆ Reduce vehicle speeds and volumes near recreation and cultural areas
- ◆ Replace park/open space acreage taken.

### **3. Conservation Wetlands**

- ◆ Avoid transportation improvements that cross or otherwise affect wetlands.
- ◆ Take steps to minimize harm and compensate for impacts.
- ◆ Retain open spaces and vegetated natural buffers that are around wetlands.
- ◆ Reduce and/or prevent highway storm water run-off from entering wetlands.
- ◆ Employ low-impact development and construction activities.
- ◆ Maintain the overall natural habitat of the wetland
- ◆ Provide a buffer strip along wetlands

### **4. Protected Streams and Rivers**

- ◆ Take steps to minimize harm and compensate for impacts
- ◆ Provide buffer strips along streams and rivers.
- ◆ Avoid transportation improvements that cross or otherwise affect protected streams and rivers.
- ◆ Reduce and/or prevent highway storm run-off from entering the protected streams and rivers.
- ◆ Control livestock manure runoff.
- ◆ Limit cattle access to streams and explore other water sources for cattle.
- ◆ Improve manure application activities and reduce soil erosion.
- ◆ Find and replace improperly connected or failing septic systems.

S RTPA will continue to expand on environmental mitigation activities by comparing the 2045 LRTP with available State conservation plans, maps and inventories. In addition, S RTPA will coordinate and consult with the resources agencies listed in the above section. These agencies will be contacted during the development of future plans and TIPs.

## **II. Summary**

It is understood planning is an ongoing and dynamic activity and thus rapid adaptability to change is a requirement. It is therefore expected that S RTPA will promptly comply and participate in the above mentioned environmental mitigation activities and whatever future initiatives may arise during the course of the LRTP's duration. Achieving this goal will require working with the IDOT, the Iowa Department of Natural Resources, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Services, the State Historical Society of Iowa, the SIMPCO MPO and other relevant entities in their transportation planning activities.

