



U.S. Fish & Wildlife Service

Swan Lake *National Wildlife Refuge*

Project Update Draft Comprehensive Conservation Plan

September 2010

Planning Continues, New Comment Period Begins for New Preferred Alternative

By the close of the public comment period for the Swan Lake National Wildlife Refuge (NWR) Draft Comprehensive Conservation Plan (CCP) on July 5, it was clear that the community cares about the Refuge. It was equally clear that elements of the future management direction proposed in the Draft CCP were unpopular with local residents.

Shortly after the comment period for the Draft CCP ended, the U.S. Fish and Wildlife Service (Service) announced that a new alternative, Alternative 4, would be developed as part of the CCP. This update includes a description of Alternative 4 as well as information on migratory waterfowl and next steps in Refuge planning.

Comments from area residents centered on three primary areas of concern:

- Silver Lake water management
- Converting cropland to native habitat



Canvasback brood. Photo Credit:FWS

- Providing habitat suitable for the eastern massasauga rattlesnake

In developing Alternative 4, the Service's intent was to address the concerns voiced in the comments while still adhering to Service and National Wildlife Refuge System policy for wildlife and habitat conservation.

This update focuses on how Alternative 4 responds to the three major issues identified in comments on the Draft CCP. Additional information on Alternative 4 is available online at:

<http://www.fws.gov/midwest/planning/SwanLake>

Comments on Alternative 4 are welcome. Comments are most useful if they reach us by Oct. 4, 2010. Please direct e-mail comments to: r3planning@fws.gov

You are also welcome to send comments via U.S. mail to:

Swan Lake NWR
Attention: CCP Comment
16194 Swan Lake Avenue
Sumner, MO 64681

Alternative 4 Described

Alternative 4 responds to the comments the Service received on the Draft CCP, and it outlines a management direction aimed at increasing habitat for migratory waterfowl. Main points include the following:

- Silver Lake becomes a managed wetland instead of a reservoir, with water levels temporarily adjusted to encourage aquatic vegetation.
- Alternative 4 specifies that changes in Silver Lake's water level will occur incrementally and will be monitored to determine if the action is getting the desired result.
- The objective related to farming on the Refuge is amended to leave 400 acres of cropland.
- The objective to provide habitat for the eastern massasauga rattlesnake is removed.

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Comparison of Differences Between Alternative 3 and Alternative 4

Alternative 3 (former Preferred Alternative)	Alternative 4 (new Preferred Alternative)
<p><u>Objective 1.1: Streams and Water Bodies</u> Over the long term (50 years), mimic components of historic hydrologic function along reaches of Elk Creek, Turkey Creek, Tough Branch, and Yellow Creek that are within the Refuge. Over the 15-year life of the Plan, allow for seasonal and annual variations in water levels within the Swan Lake and Silver Lake basins to increase the amount and variety of native vegetation.</p> <p><u>Objective 1-2: Emergent Wetland</u> <i>Within Wetland Management Units</i> Over the life of the Plan, maintain at least 1,200 acres and up to 1,800 acres of emergent wetland habitat primarily within the Silver Lake, Swan Lake, and South Pool basins where bulrush and cattails comprise 25-50 percent of areal coverage and narrow-leaved cattail, bur reed, lotus, and arrowhead comprise less than 5 percent of areal coverage. Within 1 year of CCP approval, develop a water management regime that helps maintain the plant species mix described above.</p>	<p><u>Objective 1-1: Managed Wetlands – Silver Lake and Swan Lake</u> Over the 15-year life of the plan, increase the amount of native foods for waterfowl within the Silver Lake and Swan Lake basins by managing water levels to create or maintain a dense mixture of native aquatic and wetland plants that includes both emergents and submergents (for example wild millet, panic grass, smartweed, sedges, and pondweed). Within 3 years of plan approval, develop a detailed habitat management plan for achieving this objective that draws on the results of a hydrogeomorphic study of the watershed. The habitat management plan will identify source water storage, and management actions with measurable outcomes regarding things such as vegetation response and waterfowl numbers. These management actions will be implemented incrementally and monitored to measure success and to modify future actions to better meet stated outcomes.</p>
<p><u>Objective 1-6: Cropland</u> Within 10 years of Plan approval, convert all cropland to other native habitats.</p>	<p><u>Objective 1-6: Cropland</u> Over the 15-year life of the plan, gradually convert 1,000 acres of cropland to native vegetation, with approximately 400 acres of cropland remaining by year 15 located on suitable sites least affected by flooding. Also, continue to use farming as a tool to reduce undesirable vegetation and set back succession as needed within moist soil areas.</p>
<p><u>Objective 2-3: Eastern Massasauga Rattlesnake</u> Within 10 years of Plan approval, provide habitat suitable to support a viable population of the eastern massasauga rattlesnake and potentially avoid listing the snake under the Endangered Species Act.</p>	<p><u>Objective 2-3: Eastern Massasauga Rattlesnake</u> Deleted from the CCP</p>

How Alternative 4 deals with the primary issues is described in the following paragraphs.

Silver Lake and Alternative 4

Over the 15-year lifespan of the CCP, the objective will be to improve habitats within the Silver Lake and Swan Lake basins including herbaceous wetlands (similar to moist soil), mudflats and open water areas. The Service is committed to increasing the amount of aquatic vegetation, the natural food source for waterfowl and other migratory birds, available at Swan Lake NWR.

The steps toward this objective will be identified in a Habitat Management Plan, which will draw upon the results

of a watershed hydrogeomorphic study that is currently under way. Management actions, which would include temporarily lowering water levels within Silver Lake during the growing season, would be implemented in stages and monitored to make sure that they result in the desired outcome.

Alternative 4 addresses residents' concerns by confirming that changes in water management will be done incrementally, confirming that water management changes will occur in stages, and confirming that the effectiveness of these actions will be verified before they are repeated.

Water management proposed under Alternative 4 would affect but not eliminate fishing opportunities. Fish

numbers and varieties within Silver Lake are already affected by flood events. During those events, particularly flooding from the Grand River, the lake acts as a backwater area attracting a wide variety of fish species. When flood waters recede many of those species become trapped within the lake. This is expected to continue and would provide fishing opportunities at times when the Silver Lake basin is flooded.

Many comments related to a close connection between Silver Lake and the local economy. National wildlife refuges do affect local economies, perhaps most prominently by attracting visitors. Alternative 4 is expected increase overall Refuge visitation. Improving the

quality of habitat for waterfowl and other migratory birds, introducing duck hunting, and focusing on other visitor services all are features of Alternative 4 that we expect will draw more visitors to the Refuge, which has the potential to benefit area businesses.

Cropland

Alternative 4 proposes to convert 1,000 acres of cropland to other native habitats incrementally over 10 years. Approximately 400 acres of cropland will be left on the Refuge. In addition, farming will be used periodically as a tool to reduce undesirable vegetation within moist soil areas.

Reducing the amount of row crops is not unique to Swan Lake NWR's CCP. Service policy requires refuges to maintain or restore habitat to historic conditions if doing so is feasible and does not conflict with refuge purposes. Farming is not an establishing purpose at Swan Lake NWR, and we cannot justify the existing acreage in row crops. However, the availability of native seed, staff, and funding limit the amount of cropland that can be restored to more productive habitats in any given year. Therefore, the change from cropland to other habitats will be gradual over a number of years. By year 15 of the plan, approximately 400 acres will still be in crops, as well as additional periodic cropping within moist soil units.

Some comments said that crops are essential to wildlife diets. Agriculture draws some species of wildlife, however native habitat is a better source of food and it is a source of food for more species than row crops. Typically, highly adaptable species like white-tailed deer and Canada Geese respond to agriculture; declining species, grassland bird species for example, have a greater need for native habitat.

Refuges throughout the Midwest have reduced their farming programs without creating significant increases in wildlife depredation or experiencing lower numbers of migrating waterfowl.

Eastern Massasauga Rattlesnake

All of the strategies related to the eastern massasauga rattlesnake are deleted in Alternative 4.

Waterfowl and Swan Lake NWR

The Refuge lies within the Mississippi Flyway, through which an estimated 40 percent of the continent's waterfowl migrate.

National wildlife refuges play a crucial role in providing breeding, migrational, and wintering ground habitat for waterfowl. Over the past 75 years, the U.S. Fish and Wildlife Service has strategically established many of its refuges to help meet widely held waterfowl conservation goals. Refuges typically designate closed areas in which public use is not permitted to give waterfowl the opportunity to feed and rest without disturbance during migration and at wintering locations. Although hunting opportunities are proposed to expand under Alternative 4, such closed areas will remain on Swan Lake NWR.

Providing key food resources for migrating waterfowl is a daunting task and it remains a priority at Swan Lake NWR. Waterfowl are a diverse group of birds that includes dabbling ducks, diving ducks, geese and swans. Food preferences and utilization are extremely variable between these groups and even between species within a group.

Aquatic vegetation and the invertebrates associated with it are the common denominator in waterfowl diet. Increasing the amount and diversity of aquatic and wetland vegetation and maintaining 800 acres of moist soil habitat is aimed at increasing waterfowl use of Swan Lake NWR.

Step-down Management Plan Schedule

Hunting Plan	2 years
Habitat Management Plan, including forest, wetland and grassland components	3 years
Visitor Services Plan	5 years
Integrated Pest Management Plan	5 years
Inventory and Monitoring Plan	4 years

What's Next?

Work on the CCP continues. The addition of a new preferred alternative will result in many changes throughout the document, including revisions to maps and tables. Several edits not related to the change in the preferred alternative are also being made. We hope to have it completed by the end of the year.

Comprehensive conservation plans chart a course for a refuge's future, but it isn't the end of refuge planning. Greater detail on how and when strategies are implemented is established in step-down management plans. The schedule for step-down planning at Swan Lake NWR is described in Step-down Management Plan Schedule table.



Swan Lake NWR. Photo credit: FWS

Land Cover Under Alternative 4, Swan Lake NWR

