Augusta Creek
State Fish and Wildlife Area
Master Plan

Michigan Department of Natural Resources and Environment
Wildlife Division
IC 2039 (Rev. 11/19/13)
INTRODUCTION
The primary purpose of this plan is to set strategic direction and guide future management activities used to achieve desired conditions for Augusta Creek State Fish and Wildlife Area (Augusta Creek SFWA). Obligations to the funding sources used to acquire and manage this area require that it be maintained for the purpose of managing wildlife, wildlife habitat and associated recreation including hunting and trapping. Other activities and uses of the area that complement or do not conflict with wildlife management have been considered and incorporated where appropriate. This plan also describes an adaptive approach to management, in which biologists assess the effectiveness of their management efforts.

This plan describes management on Augusta Creek SFWA that is expected to take approximately ten years to complete. However in developing this plan, time frames beyond the decade-long interval and land outside the boundaries of the area were taken into consideration. Progress on the plan will be reported annually. The management planned in this document was a good faith effort considering the conditions, anticipated resources, and state of knowledge at the time the plan was written. It is not guaranteed that the management activities will be accomplished as planned.

The Augusta Creek SFWA is located in Kalamazoo County, which is in the Wildlife Division’s Southwest Region (Figure 1). The land surrounding the Augusta Creek SFWA is largely agricultural, mixed with some privately owned forest land. The area totals 385 acres and the original purchase for Augusta Creek SFWA occurred in 1988. Payment for this property was made using funds from the Michigan Land Trust Fund. This purchase included 5,000 feet of Augusta Creek which was and still is highly prized as a trout stream. The dedication memo dated November 14, 1988 states, “That the land be dedicated for fishermen access to the waters of Augusta Creek, and for hunting, and be administered by the Wildlife Division.” A second purchase of 142 acres was made in 1993 and included an additional 4,355 feet of August Creek. Again funding from the Michigan Natural Resources Trust Fund was used to acquire the property. This land was dedicated using the same quote as above.
Augusta Creek State Fish and Wildlife Area Planning Boundary

Figure 1. Local view of Augusta Creek State Fish and Wildlife Area showing project boundary and state-owned lands.
In 2013, Augusta Creek SFWA was chosen as a More Bang for Your Buck project area. The primary management goal changed under this project focus, from a breeding area for grassland birds to a focus on pheasants. The project satisfies the need for a southern Michigan public area that will help support the goals of the Wildlife Divisions Pheasant Initiative Program. The current land cover does not provide adequate winter food and cover to sustain a resident pheasant population. Plans were initiated in 2013 to establish winter food and cover over the next 10 years so the goals of the project may be reached.

Currently, deer and turkey dominate the wildlife community and are abundant throughout the Augusta Creek SFWA. Small game species, squirrels and rabbits are abundant and there is a healthy assemblage of furbearing species as well. Upland game birds besides turkeys include woodcock and an occasional pheasant. Ruffed grouse and bobwhite quail were once found in the area but are currently absent. Migratory waterfowl are common on the small lakes with wood ducks, mallards and Canada geese being most common throughout the year.

Hunting and fishing related recreation are the most important types of recreation that occur on the area. Trout fishing remains a very important component of public recreation on the area with over 1 ½ miles of August Creek access. Each year a number of trout anglers take to the waters seeking German brown trout. Fall deer hunting is an important activity on the area and small game hunters also seek rabbits and upland game. Turkey hunters are able to find good numbers of turkeys on the area and account for a portion of use during the spring season. Other uses include hiking and bird watching. Public use of the area is monitored and any uses that are not compatible with wildlife management are promptly addressed.

Michigan Natural Features Inventory maintains a database of occurrences of threatened or endangered species in the state of Michigan. A search of this database indicates that there are several occurrences of state listed species of plant or animal on the Augusta Creek SFWA including; Rose-pink, bald rush, umbrella sedge, Virginia flax, eastern massasauga rattlesnake, least shrew, weed shiner. In addition, there are 2 occurrences of the prairie fen community which is listed as rare in the state. Most of the listed species are in association with these fens.

Although future management of the area must consider all of these species, the presence of the eastern massasauga rattlesnake may have the greatest influence on management. The eastern massasauga rattlesnake uses a variety of lowland habitats including river bottom woodlands, shrub swamps, bogs, marsh borders, sedge meadows and wet meadows. They also use adjacent uplands in the summer. Habitat management in these areas will need to address concerns for the well being of individual snakes before being implemented.

Figure 2 shows the current land cover at Augusta Creek SFWA. Much effort has gone into the prairie restoration work at the August Creek SWFA over the past several years. As a result much of the area is now in a mixed warm season grass cover type with associated wildlife resources utilizing the habitat.
Figure 2. Current IFMAP cover type of Augusta Creek State Fish and Wildlife Area.
What follows is the strategic direction for Augusta Creek SFWA. The plan describes the goals or desired future condition for the area, the objectives under each goal, and the actions associated with each objective. Goals should come mostly from the featured species and habitat issues relevant for the given SGA, but could also come from recreational infrastructure needs or natural communities. For the purpose of this master plan, the following definitions will be used:

**Goal** – A desired future condition of the area.

**Objective** – A management approach or strategy that the best science suggests can be used to move the area toward the goal. An objective is a quantifiable input to be completed within a defined timeframe that contributes towards accomplishing the goal.

**Action** – An operational means to accomplish an objective. An action is a step needed to complete an objective and is described in sufficient detail to inform implementation in operational and annual work plans. It is expected to take approximately ten years to complete all the objectives.

**Goals/Objectives/Actions (listed as highest priority to lowest)**

**Goal I** is to establish adequate winter food and cover to support a resident pheasant population.

**Rationale:** 1) Augusta Creek SFWA is a More Bang for Your Buck project area to support the Pheasant Initiative Program; 2) The current land cover does not provide adequate winter food and cover to support a resident pheasant population.

**Assessment:** Presence of a resident pheasant population.

**Objective A** is to determine the appropriate quantity and distribution of winter food and cover plantings.

**Action 1.** Use recommendations outlined in the Pheasant Initiative Program to map appropriate changes to current land cover types.

**Objective B** is to implement the cover type changes where appropriate by 2018.

**Action 1.** Create a planting plan that will spread the establishment of new cover type acres over the next 5 years.

**Action 2.** Maintain the newly planted acres to improve establishment.

**Goal II** is to use prescribed fire to maintain and restore prairie and woodland habitat for featured species over the lifetime of this plan.

**Rationale:** 1) Previous planning and projects have aimed at establishing prairie to much of the area; 2) Bobolink, eastern massassauga rattlesnake, eastern meadowlark and ring-necked pheasant are featured species dependant on grassland cover type; 3) Prescribed fire is a preferred method of maintaining established grasslands and woodlands.

**Assessment:** Number and frequency of acres burned.

**Objective A** is to develop a burning plan over the entire SGA by 2014.

**Action 1.** Determine proportion of area suitable for inclusion in a burn program and desired rotation will ensure the entire area is burned every 5 years (i.e. 3 burn units that are rotated with a year between burns).

**Objective B** is to selectively thin 35 acres of pine by 2015 (Stand 6).
Action 1. Conduct a red pine thinning by 2015.
Action 2. Removal of other undesirable trees as necessary.
Action 3. Include woodland into one of the burn units outlined above.

Goal III is continuing treatment of invasive species throughout the SWFA.
Rationale: 1) invasive species continue to be a threat to the overall integrity of the SWFA.
Assessment: Reduction in the number of acres impacted by invasive species.

Objective A is to restore 15 acres of hardwoods in NW corner of SWFA by 2015.
Action 1. Remove black locust from northwest corner of SWFA via timber sale process (Stand 1).
Action 2. Follow up removal with chemical or other mechanical treatment as necessary.

Objective B is to stay abreast of new threats through monitoring of invasive species throughout the lifetime of this plan.
Action 1. Periodically assess and map out existing and new locations of invasive plant species.
Action 2. Develop a plan to address existing and new concerns in a timely manner to reduce the threat of spreading.

Recreational and Commercial Uses
Recreational and commercial uses on the area that are not incidental to our management for the purposes described above are generally not allowed. These uses can be allowed, however, under the following circumstances:

1. The uses must not interfere or conflict with the wildlife conservation purposes of the area described above.
2. The DNR has no obligations to determine if requested uses would conflict or interfere; the burden of determining must remain with those requesting the uses.
3. The requested uses cannot be exclusive of other allowable uses and must not result in the DNR losing management control of any portion of the area.
4. A lack of a specific prohibition in rules and regulations for the area does not constitute approval of the activity.
5. The DNR always reserves the ability to disallow activities previously allowed as wildlife conservation needs dictate.

Additionally, the DNR will continue to monitor any existing commercial and recreational uses for interference with the intended purposes of the area as described in this plan.

Acquisition and Disposal of Land
The land acquisition strategy for the Augusta Creek SFWA is to grow until the dedicated boundary is under state ownership. At this time, there are no parcels for sale within the dedicated boundary.
**Review and Approval**

The Augusta Creek FWA Master Plan was available for public comment for 30 days at the Plainwell OSC. No comments were received. The final plan was approved on April 24, 2015 and will be reviewed within 10 years of the approved date.

**Approvals**

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<tr>
<th>Wildlife Biologist (Author)</th>
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