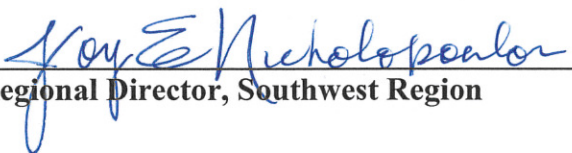


**U.S. Department of the Interior
U.S. Fish and Wildlife Service
Region 2, Southwest
Albuquerque, New Mexico**

FINDING OF NO SIGNIFICANT IMPACT

**Tiger Muskie Stocking in Lake Carl Etling
Cimarron County, Oklahoma
Environmental Assessment**



Regional Director, Southwest Region

3/7/16

Date

Summary of the Proposed Action

The Oklahoma Department of Wildlife Conservation (ODWC) proposes to increase Oklahoma angling opportunities by stocking sterile tiger muskie (*Esox masquinongy X E. lucius*) into Lake Carl Etling, located in northwest Oklahoma. The proposed project will also assist in reducing the undesirable fish species (common carp, gizzard shad, and green sunfish) that are currently dominating the lake's fish community.

Initially, tiger muskie stocking would be three to five fish/acre annually for three years to establish the population. Once established, annual maintenance stockings of 1 fish/acre may be needed to meet management objectives of controlling unwanted species and providing angling opportunities. Changes in the fish community will be monitored as part of ongoing monitoring efforts. Tiger muskie will be obtained in October each year as advanced fingerling (10 inches) from the Wyoming Fish and Game Department's Speas Fish Hatchery located in Casper, Wyoming.

Many states use tiger muskie as a biological control for undesirable fish species to improve the recreational fishery. In addition, tiger muskies are sterile hybrids which allow managers to control recruitment and population size and to modify stocking, if it is deemed detrimental to other fisheries management objectives.

The proposed project will be implemented using Sport Fish Restoration funds administered by the U.S. Fish and Wildlife Service's (Service) Wildlife and Sport Fish Restoration (WSFR) Program.

Alternatives considered

Two alternatives were included in the EA:

Alternative 1: Stocking of tiger muskie in Lake Carl Etling – Proposed Action

Stock tiger muskie at a rate of three to five fish/acre annually for three years to establish the population. Once established, annual maintenance stockings of 1 fish/acre may be needed annually to meet management objectives of controlling unwanted species and providing sport fish angling opportunities. Tiger muskie will be obtained in October each year as advanced fingerling (10 inches) from the Wyoming Fish and Game Department's Speas Fish Hatchery located in Casper, Wyoming. To evaluate the Proposed Action, ODWC will continue the current monitoring program of the fish community in Lake Carl Etling.

Alternative 2: No Action

The No Action Alternative is defined as maintaining the current conditions of Lake Carl Etling fish community and not stocking tiger muskie in the lake. Adoption of this alternative would ultimately result in a lack of recreational sport fish experiences at the lake. The probable outcome of the No Action Alternative would be continued dominance of the lake by undesirable nongame fish species, and declining use by anglers. The No Action Alternative includes no direct costs; however, loss of recreational fishing opportunities will impact local economies.

Monitoring of existing conditions, with particular emphasis on Lake Carl Etling's fish community, would be conducted as part of the No Action Alternative.

Impacts of Implementation

As described in the EA, implementing the Proposed Action would have no significant impacts on the environment. The Proposed Action is consistent with the purposes of the WSFR funding and with the goals of ODWC. Tiger muskie are sterile; therefore, population size can be closely controlled through stocking and harvest regulations. Many of the potential impacts of the proposal are avoided or significantly minimized through the use of a sterile hybrid. A brief summary of the impacts and conclusions in the EA follows. The EA discusses potential impacts and how they are minimized for the preferred project.

The following resources and socioeconomic factors were evaluated in detail in the EA to determine the impacts that would result from the proposed work at the priority sites: Land Use, Water Resources, Water Quality, Vegetation, Fish and Wildlife, Threatened and Endangered Species, Socioeconomics, Environmental Justice, and Cultural Resources. No other resources are expected to be affected.

Physical Resources

The Proposed Action will not impact physical resources (Land Use, Water Resources and Water Quality). There is no construction, ground disturbance, or changes to any geologic properties as a result of this action. Access to the lake by ODWC fisheries personnel would be at existing public areas.

Biological Resources

Although there are potential minor impacts to some biological resources, impacts will not be significant. As discussed in the EA, impacts of the Proposed Action may include changes in the fish community in Lake Carl Etling (reduction of undesirable non-game species dominating the lake), possible rare escape of tiger muskie from the lake, and temporary disturbance to wildlife during stocking activities.

Tiger muskie may escape the lake and enter South Carrizo Creek. However, South Carrizo Creek, which connects Lake Carl Etling to the Cimarron River, is an ephemeral and intermittent stream. Likewise, the Cimarron River through Cimarron County is also intermittent. Due to intermittent stream conditions and the environmental constraints (thermal, salinity, and ecological tolerance) on tiger muskie, the ability for these fish to survive in South Carrizo or the Cimarron River, if water were present, would be very limited in scope. There are no threatened or endangered aquatic species present in South Carrizo Creek or in Cimarron County.

Threatened and Endangered Species

There are currently four federally listed avian species found in Cimarron County and the Black Mesa State Park/Lake Carl Etling area: piping plover, interior least tern, lesser prairie-chicken

(chicken), and rufa red knot. Of these species, the piping plover, lesser prairie-chicken, and the rufa red knot have a potential to occur within the project vicinity. The following table summarizes the effect determinations on listed species in the project vicinity.

Effect Determinations on Listed Species in the Project Vicinity

Species	Effect Determination	Critical Habitat Determination
Piping plover (<i>Charadrius melodus</i>)	No Effect	Designated; No Effect
Lesser prairie-chicken (<i>Tympanuchus pallidicinctus</i>)	No Effect	Not designated
Rufa red knot (<i>Calidris canutus rufa</i>)	No Effect	Not designated

Overall, these three species tend to use terrestrial habitats and are not expected be affected by stocking of tiger muskie in Lake Carl Etling. Stocking will occur in October and will not be scheduled during peak migration periods or nesting seasons of these species. A visual survey of the Lake Carl Etling watershed will be conducted for the presence of any avian species of concern before each stocking event. If a species is noted, an alternative stocking date will be selected. There will be no effect to the surrounding habitats found within the area of Carl Etling Lake.

Because of the lack of suitable habitat, visual surveys, and scheduling stocking dates outside of peak migration periods or nesting seasons, the Service has made a determination of “no effect” on the piping plover and rufa red knot and its habitat.

There are no known chicken leks within a 20 mile radius of Lake Carl Etling or in Cimarron County; the closest known lek is located approximately 30 miles northwest of Carl Etling in Colorado. The species accounts for prairie chickens around the project area are very rare. Due to the rarity of chickens in the area and lack of habitat, the Service has determined that there would be “no effect” on the lesser prairie-chicken.

Human Environment

Impacts to the human environment (socio-economic, environmental justice) include the potential for increased use at Lake Carl Etling and associated benefits to the State, Cimarron County, and local community. Benefits would be in the form of increased recreation related spending and tax revenue. Increased use could also result in increased need for maintenance at camping and park facilities in the area. This is expected to be a minor impact. No minority or low-income populations have been identified that would be adversely impacted by the Proposed Action.

Cultural Resources

There would be no impacts to cultural resources under the Proposed Action; no ground disturbance would occur. ODWC personnel would use existing roads and public access for stocking activities.

Irreversible and Irretrievable Commitment of Resources of the Proposed Action

The implementation of this project would result in the commitment of resources such as fossil fuels and labor. In addition, federal funds would be expended for the implementation of the proposed project.

Cumulative Impacts

The Proposed Action would expand upon ongoing sport fish stocking activities at Lake Carl Etling and provide additional angling opportunities at this location. Tiger muskies have been previously stocked in October of 2014 and 2015 with state funds. Other species stocked in this lake include: largemouth bass, bluegill, walleye, and hybrid striped bass. Because the lake is located within an intermittent drainage, cumulative effects to other aquatic species within South Carrizo Creek and downstream are not likely to occur.

Recreation at the lake, stocking of sport fish, and maintenance at the site could also affect resources including listed avian species.

When combined with the effects of other cumulative actions, the effects of the Proposed Action would be largely beneficial and not contribute to any negative cumulative impacts on any resource or threatened or endangered species or critical habitat.

Environmental Commitments

The environmental commitments to minimize or mitigate potential effects listed in the EA would be implemented or incorporated as part of the Proposed Action.

Public Review

Public interest for the Proposed Action was solicited online. The draft EA was open for public comment for 30 days beginning February 2, 2016 through March 1, 2016 and noticed through the ODWC website (<http://www.wildlifedepartment.com/>) and on the Fish and Wildlife Service, Region 2 WSFR site (http://www.fws.gov/southwest/federal_assistance/index.html). No comments were received by the Service, although eight comments were received by the ODWC. Seven of the eight comments supported the project, and none requested additional information. The comments and responses are included in Appendix 1 of the Final EA.

Conclusion

Based on the analysis presented in the EA, the Service finds that there would be no significant impacts associated with the Proposed Action. The Service makes this Finding of No Significant Impact (FONSI) pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and the Council on Environmental Quality implementing regulations (40 CFR 1500). The Service has determined that the Proposed Action does not constitute a major Federal action that would significantly affect the human environment within the meaning of Section 102(2)(c) of the NEPA. Accordingly, preparation of an Environmental Impact Statement on the

Proposed Action is not required. Copies of the Final EA and this FONSI are on file at the U.S. Fish and Wildlife Service, WSFR, Region 2 office.