ECONOMIC IMPACT STATEMENT

K.A.R. 115-15-1. Threatened and endangered species; general provisions.

REGULATION DESCRIPTION: This permanent regulation designates species classified as endangered and threatened in Kansas. The proposed amendments to the regulation are as follows:

Remove one endangered species: Peregrine Falcon, Falco peregrinus

Remove one threatened species: Bald eagle, *Haliaeetus leucocephalus*

* Add three threatened species: Shoal chub, *Macrhybopsis hyostoma*

Plains minnow, *Hybognathus placitus* Delta hydrobe, *Probythinella emarginata*

In conjunction with these proposed amendments, the department is also proposing amendments to K.A.R. 115-15-2, which designated species in need of conservation in Kansas (or SINC species). Proposed amendments to that regulation include the addition of the Bigeye shiner, Redfin darter, Lake sturgeon, Striped shiner, Common shiner, Southern redbelly dace, Cardinal shiner, and the Johnny darter to the list of SINC species, and the removal of the Plains minnow and the Delta hydrobe from the list of SINC species.

The Kansas Nongame and Endangered Species Act, K.S.A. 32-957 et seq., requires the department to adopt rules and regulations which contain a list of all species of wildlife indigenous to this state which have been determined to be endangered species . . . and a list of all such species which have been determined to be threatened (K.S.A. 32-960(c)(1)). In making this determination, a species may be threatened or endangered because of any of the following factors:

- (1) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (2) the overutilization of such species for commercial, sporting, scientific, educational, or other purposes;
- (3) disease or predation;
- (4) the inadequacy of existing regulatory mechanisms; or
- (5) the presence of other natural or man-made factors affecting its continued existence within this state.

K.S.A. 32-960(a). The law stipulates that the secretary make the above determinations on the basis of the best scientific, commercial, and other data available to the secretary after consultation, as appropriate, with federal agencies, other interested state agencies and interested persons and organizations. In addition, the secretary is required to take into consideration those actions, if any, being carried out or about to be carried out by the federal government, by other

states, by other agencies of this state or political subdivisions thereof, or by nongovernmental persons or organizations which may affect the species under consideration.

BACKGROUND: K.S.A. 32-960(d) requires that every five years the secretary shall conduct a review of the species listed . . . and shall submit any proposed changes in the listings . . . to federal and state agencies and local and tribal governments and to all individuals and organizations that have requested notification of departmental action. In February of 2008, the five-year review of Kansas threatened, endangered and species in need of conservation list was initiated. Approximately 450 individuals and organizations were mailed a petition for species review form to be returned by May 31, 2008. This initial process provides opportunity for submitting a petition for removal or addition of species to the Kansas list. By May 31, twenty-one species had been petitioned. State law also provides that petitions may be submitted outside of the five-year review process.

Of the twenty-one species petitioned, twelve species were petitioned to be listed as endangered or threatened in Kansas. In addition, two species were petitioned for removal from the threatened list in Kansas, one species was petitioned for removal from the endangered list and three species were petitioned for removal from the SINC species list.

In June 2008, the department began to review possible state threatened and endangered listing and delisting actions for the proposed species. The review was conducted by a scientific task committee composed of personnel from the U.S. Fish and Wildlife service, universities, the Kansas Biological Survey, and the department. The scientific task committee determined that sufficient data existed to further consider whether a listing action is warranted for nine species:

Bald eagle

Peregrine falcon

oroadhead skink

American eel

- * Shoal chub
- * Bigeye shiner
- * Redfin darter
- * Plains minnow
- * Delta hydrobe

As a component of the prescribed process, notice was published in the *Kansas Register* on September 4, 2008, informing the public that these species were being considered for listing actions, and that the department was obtaining a scientific review of these species—status from sources outside the agency. The notice also informed the public of four public meetings, to be conducted 90 days before submission of any proposed listing to the Wildlife and Parks Commission. Similar information was sent to federal and state agencies and local governments that may be affected by the proposed listings actions, as well as to individuals and organizations that had requested notification of proposed listing actions. Finally, this information was

included in a news release sent to local newspapers and radio stations, as well as in the department s September 11, 2008 statewide news release.

Public informational meetings were held October 2, 2008 in Topeka; October 7, 2008 in Wichita; October 9, 2008 in Parsons; and October 30, 2008 in Pittsburg. These locations were selected based on their proximity to areas that may be affected by the proposed listing actions. At each meeting, department staff discussed the laws and procedures for listing a species as threatened or endangered, and reviewed each species description, distribution, life history, and habitat. Staff emphasized that this was merely the beginning of the listing process, and that the public was invited to submit information for scientific review regarding each species status. Four public participants attended the meeting in Topeka; four public participants attended the meeting in Parsons; and thirty-one public participants attended the meeting in Pittsburg.

In addition to other public notification efforts, information about each species proposed for listing was made available to the public at department offices in Emporia, Topeka, and Pratt, and at public meetings of the Wildlife and Parks Commission in Tonganoxie on October 23, 2008 and in Emporia on January 8, 2009.

Finally, the scientific task committee sent information concerning the proposed listings to individuals and organizations believed to have knowledge and scientific information about one or more of the species in question. These individuals and organizations were asked to rate the species from zero (species in no danger) to ten (species near extirpation) for 17 different categories, using the Species Evaluation Categories endorsed by the Commission in the fall of 1997. These numerical evaluations, along with any other biological and scientific information submitted by the public, were collected by the scientific task committee over the 90 day public comment period.

Using this collected information, the scientific task committee finalized recommendations on January 6, 2009, and provided them to department administration. These recommendations were presented to the Wildlife and Parks Commission and to the public at the January 8, 2009 Commission meeting in Emporia. Taking into consideration the feedback received at that meeting, the department has proceeded to develop regulatory actions, as discussed below.

FEDERAL MANDATE: State law or regulation respecting a threatened or endangered species may be more restrictive, but cannot be less restrictive than federal law or regulation (16 U.S.C.A. 1535(f)). The Secretary of Interior may enter into cooperative agreements with a state, provided that state establishes and maintains an adequate and active program for the conservation of endangered and threatened species (16 U.S.C.A. 1535(c)). With such cooperative agreements come substantial financial assistance to the state to develop conservation programs. The cost sharing for such programs has 75% of the cost being borne by the federal government. Therefore, a determination by the Secretary of Interior that a state was not maintaining an

adequate or active program could place in potential jeopardy substantial federal assistance to the state.

None of the species proposed for listing actions are currently listed as threatened or endangered under federal law.

ECONOMIC IMPACT: The anticipated economic impacts from the proposed listing action of each species are discussed below.

<u>Peregrine falcon:</u> Most Peregrine falcons in Kansas are passage birds and are seen during migration in fall or spring. The population was severely limited by organo-chlorine insecticides that were banned in 1972. It took the population decades to recover and it is now considered robust. This falcon commonly is seen near mudflats and reservoirs where there is an abundance of shorebirds or ducks during migration. Pairs will roost together and hunt cooperatively. This bird has worldwide distribution. Because the Peregrine falcon is being proposed for delisting, no significant economic impacts on the public, small businesses or other state agencies are anticipated from the delisting.

<u>Bald eagle:</u> The Bald eagle is a North American bird of prey that primarily feeds on waterfowl, fish, mammals, and carrion. It typically nests near water in a large tree and will continue to add material to the nest and use it in subsequent years. Usually, 2 eggs are laid and it takes the young 4-5 years to develop adult plumage. Long-term pair bonds form and aerial courtship displays with talon locking and tumbling have been observed. Because the Bald eagle is being proposed for delisting, no significant economic impacts on the public, small businesses or other state agencies are anticipated from the delisting.

Shoal chub: The Shoal chub inhabits large low-gradient streams where shallow riffles of shifting sand occur. This fish is adapted to waters of high turbidity and dissolved solids. The Shoal chub is relatively small (2 ¾ inches) and has a short life. Few live longer than two years so most reproduction is from year-old fish. The spawning season is long (May – August) and occurs after rainfall events increase flow. The eggs develop as they drift downstream. The Shoal chub was previously listed and protected as an endangered fish when it was called the Speckled chub. The range is now limited to the Republican River and the lower Kansas River with notable declines in distribution in the last 50 years. Possible impacts through permit requirements or other limitations on habitat impacts would be minimized, since the species is only found infrequently. Consequently, no significant economic impacts on the public or other state agencies are anticipated from the listing of the Shoal chub as a threatened species.

The department is required to develop a recovery plan for each species listed as threatened or endangered, based on the priority list developed pursuant to K.A.R. 115-15-4. The cost to the department to establish a recovery plan for the Shoal chub is roughly estimated at \$5,000, with an additional \$1,000 in administrative costs. Annual implementation of the recovery plan may cost approximately \$1,000 in field staff time.

<u>Plains minnow:</u> The Plains minnow grows to 5 inches long and is partly herbivorous. It feeds in schools near the bottom where sediments accumulate in sandy substrates. High flows during the summer trigger spawning and the semi-buoyant eggs hatch as they are carried downstream where flow is more reliable. Few of these minnows live longer than 2 years. Evidence concludes that this species has declined greatly whereas it was a dominant species in the 1950's. It is considered a minor component of the fish fauna in the Republican, Smoky Hill and Arkansas river basins and still a significant portion of the fish fauna in the Cimarron River. Possible impacts through permit requirements or other limitations on habitat impacts would be minimized, since the species is only found infrequently. Consequently, no significant economic impacts on the public or other state agencies are anticipated from the listing of the Plains minnow as a threatened species.

The department is required to develop a recovery plan for each species listed as threatened or endangered, based on the priority list developed pursuant to K.A.R. 115-15-4. The cost to the department to establish a recovery plan for the Plains minnow is roughly estimated at \$5,000, with an additional \$1,000 in administrative costs. Annual implementation of the recovery plan may cost approximately \$1,000 in field staff time.

<u>Delta hydrobe</u>: The Delta hydrobe is a small (<5mm long) aquatic snail. Its flattened apex and small size make it distinctive. This snail is one of only five gill-breathing species (Prosobranchia) that occur in Kansas. In general, gill-breathing snails are less tolerant of pollution and resultant low dissolved oxygen level than the more numerous pulmonate snails that are also considered aquatic. Aquatic snails occupy a central position in the food web by grazing on periphyton and providing a food source for predators. The rare and isolated population in Cedar Creek is the only known occurrence in Kansas. This species needs high water quality and constant flow from spring-fed streams. Possible impacts through permit requirements or other limitations on habitat impacts would be minimized, since the species is very localized in occurrence. Consequently, no significant economic impacts on the public or other state agencies are anticipated from the listing of the Delta hydrobe as a threatened species.

The department is required to develop a recovery plan for each species listed as threatened or endangered, based on the priority list developed pursuant to K.A.R. 115-15-4. The cost to the department to establish a recovery plan for the Delta hydrobe is roughly estimated at \$5,000, with an additional \$1,000 in administrative costs. Annual implementation of the recovery plan may cost approximately \$1,000 in field staff time.

CAPITAL AND ANNUAL COSTS: At the present time, it is not possible to identify the specific capital and annual costs of compliance with the proposed regulation. Actual costs will be dependent upon the specific project and the extent of involvement by the Department of Wildlife and Parks during the early planning stages of project development. Projects which may affect the species proposed for listing would be reviewed on a case-by-case basis, with site specific mitigation options developed. Nonetheless, as described above, the capital and annual costs due to these proposed listing actions would be expected to be minimal, due to a number

factors including the current existence of other species in the same habitat that are already listed as threatened or endangered, the fact that the listing action would upgrade the species status, or the current listing status under federal law.

INITIAL AND ANNUAL COSTS OF IMPLEMENTATION AND ENFORCEMENT:

Initial and annual implementation costs will be borne entirely by the department. There exist several state and federal environmental protection laws that require project sponsors to conduct impact assessments and enter into consultation with the department to determine short- and longterm impacts their projects may have on wildlife resources, including threatened and endangered species. The Environmental Services Section (ESS) is responsible for providing departmental input to projects covered by such environmental laws. ESS staff reviews approximately 1,000-1,500 projects annually. Of these, approximately 20-30 projects require a permit to protect threatened and endangered species or their habitats, and less than 0.5% are required to perform mitigation involving compensation. Because the project is likely to already be affecting a currently-listed species, most projects that would affect a species proposed for listing at this time would not require an additional permit or more stringent conditions, unless there is a site-specific concern directly affecting a documented population of the newly listed species. Based on current knowledge, it is expected that the proposed listing actions might involve issuance of approximately 2 additional permits per year at an estimated cost of \$500. All permitting and enforcement activity will be incorporated into existing Department operations and require no additional funding.

Regulatory review provided through K.A.R. 115-15-1 is predicated on the need for a permit from another state agency or the involvement of public funding. The final determination of whether a permit is issued stands independent of the authorities of other state agencies. As such, there will be no negative impact, including increased funding requirements or workload, upon other state laws, regulations, or agencies.

Development of recovery plans for listed species will also be borne by the department. Estimates for these costs are provided above, in consideration of economic impacts of the proposed listing actions.

COSTS WHICH WOULD ACCRUE WITHOUT REGULATION: As noted above, federal law requires that the state establish and maintain an adequate and active program for the conservation of endangered and threatened species, and requires that the state program be at least as restrictive as the federal program. Listing a federally-listed species at the state threatened level meets this requirement. However, no species proposed for listing at this time are listed on the federal level. Therefore, costs which would likely accrue if the proposed regulation is not adopted are not readily identifiable.

COST ESTIMATE METHODOLOGY: Costs associated with work by Department employees are based on current state civil service salary plan. Costs estimates for the development of species' recovery plans are based on contract costs for development of recovery plans for other species.