

Order Adopting Amendment

COMMONWEALTH OF PENNSYLVANIA PENNSYLVANIA FISH AND BOAT COMMISSION

Title 58. Recreation Part II. Fish and Boat Commission Chapter 75 Fishing

Preamble

The Fish and Boat Commission (Commission) amends 58 Pa. Code Chapter 75 (relating to endangered species). The Commission is publishing this final-form rulemaking under the authority of 30 Pa. C.S. (relating to the Fish and Boat Code) (code). The amendment adds the Salamander Mussel to the list of endangered species.

A. *Effective Date*

The final-form rulemaking will go into effect immediately upon publication of an order in the *Pennsylvania Bulletin*.

B. *Contact Person*

For further information on the final-form rulemaking, contact Jason E. Oyler, Esq., P.O. Box 67000, Harrisburg, PA 17106-7000, (717) 705-7810. This final-form rulemaking is available on the Commission's website at www.fish.state.pa.us.

C. *Statutory Authority*

The amendment to §75.1 (relating to endangered species) is published under the statutory authority of section 2305 of the code (relating to threatened and endangered species).

D. *Purpose and Background*

The final-form rulemaking is designed to update, modify and improve the Commission's regulations pertaining to endangered species. The specific purpose of the amendment is described in more detail under the summary of changes.

E. *Summary of Changes*

The Salamander Mussel (*Simpsonaias ambigua*) has been added to the Pennsylvania endangered species list because it meets the following criteria:

CRITERIA A

A.2

As related to a decline in the area of occupancy, extent of occurrence and/or quality of habitat, four Pennsylvania subpopulations of Salamander Mussels have been documented within the past 39 years: Allegheny River pool 5, Allegheny River pool 6, French Creek and Dunkard Creek. Presently, only two subpopulations are considered extant (i.e., still in existence, not extinct): Allegheny River pool 5 and Allegheny River pool 6. The Dunkard Creek subpopulation is considered functionally extirpated (i.e., locally extinct) since there is no evidence of recruitment. The French Creek subpopulation is considered extirpated since no live Salamander Mussels have ever been collected, despite repeated surveys. The Allegheny River pool 5 subpopulation is under direct threat from proposed commercial sand and gravel operations. The Allegheny River pool 6 subpopulation is threatened by genetic isolation, natural mortality and the threat of a catastrophic pollution event. Combined with the threats below, a projected 80% population reduction within the next 10 years is expected for the Salamander Mussel.

As related to actual or potential levels of exploitation, the lock and dam system in the Allegheny and Ohio Rivers, combined with maintenance/commercial sand and gravel dredging, have altered and destroyed Salamander Mussel habitat, eliminated habitat continuity and genetically

isolated subpopulations occurring in the Allegheny and Monongahela River systems. Allegheny River pool 5 has recently received authorization for dredging. The Department of Environmental Protection (DEP), in consultation with the Commission and concurrence of the dredgers, has amended the dredgers' permits to provide for a specialized protocol to be utilized when Salamander Mussels are found in pre-dredging surveys.

As related to the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites, zebra mussels have colonized the Allegheny River, Ohio River and French Creek. Mortality from zebra mussel infestation is expected. Anthropogenic disturbances (i.e., disturbances derived from human activities) such as acute or chronic pollution events could destroy remaining live Salamander Mussels in Dunkard Creek or either Allegheny River subpopulation. Sedimentation from oil and gas developments, forestry and agricultural practices could have an adverse effect on mussel/host interactions and reduce Salamander Mussel recruitment. The Salamander Mussel is the only known North American mussel to use an amphibian as a host. Any alteration or reduction to host habitat (e.g., loss of large flat rocks, sediment burial of large flat rocks) is likely to alter host numbers or behavior and reduce Salamander Mussel recruitment.

CRITERIA B

B.3

Evidence of Salamander Mussels (represented by live, fresh dead or relic shells) has been found at 10 sites over a total of 5.8 stream miles including functionally extirpated or extirpated sites (Dunkard Creek and French Creek) and Allegheny River pool 5 and pool 6. This criterion for extent of occupancy provides for endangered status for species occupying less than 10 river miles.

B.4

B.4.a

The Salamander mussel is severely fragmented across its present range in the Commonwealth. There are only three known locations for live Salamander Mussels: Dunkard Creek, Allegheny River pool 5, and Allegheny River pool 6.

B.4.b

B.4.b.3. The Commission projects a continuing decline in the area, extent and/or quality of habitat of at least 75%. This percentage is derived from the expected loss of suitable water quality and habitat for the functionally extirpated Dunkard Creek subpopulation and considers the extirpation of the French Creek population. If the habitat for the Allegheny River pool 5 Salamander mussel subpopulation is lost due to commercial sand and gravel dredging and natural mortality or pollution events reduce the Salamander Mussel subpopulation in pool 6, the continuing decline is projected to be at least 75%.

B.4.b.4. The number of areas of occupancy is conservatively projected to decline by at least 50%. Based upon recent survey data (within the past 25 years), four areas of occupancy are known. The French Creek and Dunkard Creek subpopulations are considered functionally extirpated or extirpated (= 50% decline) and if the Allegheny River pool 5 subpopulation is lost due to commercial sand and gravel dredging, the decline will be greater (= 75% decline).

B.4.b.5. A continued decline in mature individuals is projected to be at least 50%. Only one live Salamander Mussel was found but no recruitment observed in Dunkard Creek. Because mature individuals in Dunkard Creek are not likely to produce new recruits, this subpopulation is not counted as capable of reproduction. The French Creek subpopulation is considered extirpated. A projected continued decline of at least 50% is estimated.

B.4.b.6. The presence of a mature but apparently non-reproducing subpopulation in Dunkard Creek and extirpated French Creek subpopulation establishes an observed decline of 50%. The reproductive and recruitment status of the Allegheny River pool 5 subpopulation is unknown. Recruitment has been observed in the Allegheny River pool 6 subpopulation.

The Commission adopted the amendment to §75.1 as set forth in Annex A.

F. *Paperwork*

The final-form rulemaking will not increase paperwork and will create no new paperwork requirements.

G. *Fiscal Impact*

The amendment will have no direct adverse fiscal impact on the Commonwealth or its political subdivisions. The amendment will impose no new direct costs on the private sector or the general public. The direct regulatory significance of designating a mussel species as endangered is limited to prohibiting persons from taking, catching, killing or possessing these mussels in the Commonwealth. Because the Salamander Mussel does not have any commercial or recreational significance because of its rarity, there are no direct fiscal impacts from providing these protections.

The private sector and regulated community have asserted that designation of certain mussels, including the Salamander Mussel, as endangered may have indirect fiscal impacts on them and the Commonwealth because of impacts on permitting decisions by DEP and other agencies. If an endangered species is found in an area slated for development, applicants for permits may be required to conduct additional studies or adjust the project to avoid adverse impacts on these mussels and their habitat. These are fiscal impacts resulting from regulatory and statutory authorities other than those under the aegis of the Commission.

H. *Public Comments*

A notice of proposed rulemaking, containing the amendments and seeking public comments, was published at 38 Pa. B. 6617 (December 6, 2008). The original public comment period was December 6, 2008 through January 6, 2009. On January 30, 2009, the Commission extended the

comment period until March 15 and directed staff to hold a public meeting on the listings in the greater Pittsburgh area prior to the April meeting. A notice extending the public comment period until March 15 and advising the public of the meeting on March 2, 2009 in Kittanning was published at 39 Pa. B. 1074 (February 21, 2009).

The Commission received a total of 174 public comments, including oral and written comments provided at the March 2nd meeting. During the formal comment period of December 6, 2008 through January 6, 2009 and the extended comment period of January 31 through March 15, 2009, the Commission received 169 comments: 106 comments favored the entire proposal, 62 comments opposed it and one was undetermined. The Commission received five comments between January 7 and January 30, of which four supported the proposal and one opposed it. Copies of all public comments and the transcript from the March 2 meeting were provided to the Commissioners. The Commissioners also were provided with copies of a comment/response document, which is available on the Commission's website at www.fishandboat.com under "Featured Topics."

In response to the comments and the interest in the proposed listings by members of industry, the environmental community and the general public, the Commission, through its staff, conducted further analysis, clarified the A.2 criterion after consultation with the Pennsylvania Biological Survey and reevaluated each of the proposed species as it relates to the objective criteria.

FINDINGS

The Commission finds that:

(1) Public notice of intention to adopt the amendment adopted by this order has been given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§1201, 1202) and the regulations promulgated thereunder, 1 Pa. Code §§7.1 and 7.2.

(2) A public comment period was provided, and all public comments received were considered.

(3) The adoption of the amendment of the Commission in the manner provided in this order is necessary and appropriate for administration and enforcement of the authorizing statutes.

ORDER

The Commission, acting under the authorizing statutes, orders that:

(A) The regulations of the Commission, 58 Pa. Code Chapter 75, are amended by amending §75.1 to read as set forth in Annex A.

(B) The Executive Director will submit this order and Annex A to the Office of Attorney General for approval as to legality and form as required by law.

(C) The Executive Director shall certify this order and Annex A and deposit them with the Legislative Reference Bureau as required by law.

(D) This order shall take effect on immediately upon publication in the *Pennsylvania Bulletin*.

For the Pennsylvania Fish and Boat Commission

Douglas J. Austen, Ph.D
Executive Director

Annex A

Regulation No. 48A-208

Title 58. Recreation

Part II. Fish and Boat Commission

Subpart B. Fishing

CHAPTER 75. ENDANGERED SPECIES

§ 75.1. Endangered species.

* * *

(d) *Invertebrates*. The following species are endangered:

* * *

(7) Salamander mussel, *Simpsonaias ambigua*.