

## **Peer Review Plan: Listing Salamanders as Injurious Due to Risk of Salamander Chytrid Fungus**

### ***About the Document***

**Subject and Purpose:** The U.S. Fish and Wildlife Service (Service) is evaluating the Order Caudata to determine which salamander species should be listed as injurious under the Lacey Act (18 USC 42, as amended) to prevent the risk of introduction into the United States of *Batrachochytrium salamandrivorans* (Bsal), a fungus that causes fatal infections in European and native salamanders. The Service does not have the authority under the Lacey Act to list pathogens, but we can list the host species if the pathogen, such as this fungus, causes the host to be injurious. The fungus is known to affect only salamanders and is not yet known to be found in the United States. The Service will consider results of the peer review to address any questionable or unresolved issues and new information.

This document updates the schedule of the previous peer review plan that was made available in August 2015.

**Importance of Scientific Information:** Based on peer-reviewed literature and other sources identifying likely effects of Bsal on salamanders, the Service is evaluating species that are expected to be carriers of Bsal and are capable of transmitting it to vulnerable salamanders in the United States. Bsal has not been found in the United States. Trade in salamanders is the most likely pathway for introduction of the fungus. The Service uses Injurious Wildlife Evaluation Criteria to evaluate whether a species does or does not qualify as injurious under the Lacey Act. The criteria include the likelihood and magnitude of release or escape of the fungus or of the salamander carrying the fungus, of survival and establishment upon release or escape, and of spread from origin of release or escape. The criteria also examine the effect of the loss of salamanders from Bsal on wildlife and wildlife resources (through factors such as pathogen transfer, effects on threatened and endangered species and their respective habitats), on ecosystems, and on human beings, forestry, horticulture, and agriculture. Additionally, the Service evaluates the likelihood and magnitude of wildlife or habitat damages resulting from measures to control the fungus if it is introduced into the United States.

### ***About the Peer Review Process***

**Type of review:** Independent Peer Review – The Service will solicit comments from independent scientific reviewers who will submit to the Service individual written comments and responses to questions posed to them.

**Number of reviewers:** The Service will use three or more independent expert reviewers. The Service will solicit a minimum of three peer reviewers requesting their participation as soon as practicable in the rulemaking process.

**Reviewer Expertise:** Any one or combination of the following: salamander biology and ecology, amphibian diseases (including Bsal and *Batrachochytrium dendrobatidis* (Bd)), invasive species risk assessment, and trade in amphibians.

**Selection of Peer Reviewers:** The Service will select peer reviewers based on their expertise with the subject matter and as described in the Office of Management and Budget Peer Review Guidelines ([Final Information Quality Bulletin for Peer Review](#)), including having not been

involved in trade in any of the proposed species nor in a position to financially benefit from the review.

Peer reviewers will be asked such questions as: whether the Service provides an accurate and adequate review and analysis of the effects of Bsal as categorized under the injurious wildlife evaluation criteria, affecting the health and welfare of human beings, the interest of forestry, agriculture, or horticulture, or the welfare and survival of wildlife or the wildlife resources of the United States; if our analysis of the criteria is logical and supported by the evidence we provide; whether we provide accurate and adequate review and analysis of why the listing as injurious is essential; and if we cite necessary and pertinent literature to support our scientific analyses under the substantial evidence standard. Peer reviewers will be advised that they should not provide advice on policy.

**Management of Peer Reviewer:** The Service will manage the peer review within the Branch of Aquatic Invasive Species. Because of the urgent need for the prohibitions provided by this rule, peer reviewers will review the rule when the rule is made available for public comment. Because this peer review process is occurring simultaneously with publication of the action for public comment, peer reviewers will not be provided public comments although they may view the comments on [www.regulations.gov](http://www.regulations.gov). A summary of the comments of reviewers and our responses will be provided in our final determination.

#### ***About Public Participation***

The public is invited to submit comments on this peer review plan by sending emails to [prevent\\_invasives@fws.gov](mailto:prevent_invasives@fws.gov) (please state “Salamander peer review plan” in the subject line). The deadline for filing comments is December 16, 2015.

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