



**713 FW 3**

## ***Exotic Aquatic Animal Disease Eradication Plan***

FWM#: 440 (Supersedes 713 FW 3, 11/25/03, FWM  
433)

Date: March 3, 2004

Series: Fisheries

Part 713: Fish Health

Originating Office: Division of the National Fish  
Hatchery System

[PDF Version](#)

**3.1 What is the purpose of this chapter?** This chapter is the Service's exotic disease eradication plan, which you must consider when any exotic disease is found.

**3.2 How do exotic diseases spread?** These diseases may be spread by transporting infected aquatic animals or by transferring contaminated mud or water from contaminated watersheds. Control of the pathogens responsible for these diseases depends upon careful evaluation and containment procedures. The exotic disease eradication plan will inherently require a minimum of 5 months to complete. Therefore, the identification of these exotic disease pathogens in any aquatic animal stock at Service facilities must be met with prompt action.

**3.3 Who is responsible for implementing the provisions of this chapter?**

**A. Exotic Disease Eradication Task Force.** In response to the detection of an exotic disease, the appropriate Fish Health Center (FHC) Director will organize an Exotic Disease Eradication Task Force (EETF) to conduct an exotic disease evaluation containment project. Affected Service managers and representatives of appropriate agencies will serve on the EETF. The destruction of any aquatic animals on a Service facility may be exempted from the exotic disease eradication provisions of these guidelines upon consensus of the task force, provided that such recommendation leads to effective pathogen containment and minimal risk of spreading the pathogen. The EETF with concurrence of the Regional Director, may enforce the eradication plan through the following guidelines.

**B. The FHC Director** will serve as the Regional Director's representative onsite and will be in charge of field operations of the EETF. He/she will advise the Regional Director regarding inspection, diagnosis, treatment, quarantine zone, aquatic animal disposal, and disinfection. The FHC Director is responsible for collecting data on aquatic animals involved in the outbreak, obtaining watershed maps of the area, obtaining facility production and distribution records for the year preceding the outbreak, and compiling a complete epizootiological report of the outbreak.

**C. Facility Manager.** The manager of the affected Service facility is responsible for the acquisition and control of supplies and equipment used in the eradication program. He/she coordinates these activities with the FHC Director in charge of the EETF. He/she must maintain complete records of expenditures and prepare a final report listing all equipment and supplies purchased, expended, and retained. An overall cost summary must be included. The facility manager is also responsible for furnishing the FHC Director with aquatic animal production, transfer, and distribution records, and for the disposal of aquatic animals, if necessary.

**D. A Service external affairs specialist** will be designated by the Regional Director to release information to the public and to coordinate transmittal of information from the Regional Office to Headquarters, other Regional Offices, and other Federal, State, and tribal agencies. The Service FHC Director in charge of the EETF may also be assigned this responsibility. Coordinate all news releases through the Assistant Regional Director/Assistant Manager for External Affairs.

**3.4 What are the requirements pertaining to the establishment of a quarantine zone?**

**A. Notification.** Whenever the presence of a pathogen associated with an exotic disease is suspected at a Service facility, the FHC Director will immediately report this information to the Regional Director and will curtail the movement of all aquatic animals onto or from the suspect facility. The affected Service facility and potentially some area surrounding the facility ( see subparagraph C below) will be defined as a quarantine zone, and such quarantine status will be confirmed by a memorandum to the manager of the affected facility from the Regional Director spelling out specific restrictions. Personnel from the affected facility must not visit other stations during the quarantine period or until affected facility is decontaminated. Visiting officials must exercise extreme caution to avoid contact with pathogen-containing materials, and must disinfect their hands, shoes, and vehicle tires upon leaving.

**B. Service facilities that may have received aquatic animals infected with an exotic pathogen.** If aquatic animals suspected of harboring the exotic pathogen have been transferred from the affected facility to other Service facilities within the past year, similar quarantine zones will be established at those receiving facilities by the Regional Director. Such quarantine will remain in effect until inspections can be completed and the subject animals have been shown to not harbor the subject exotic pathogen. The Service does not have authority to establish quarantine zones at State, tribal, or private facilities similarly affected, but voluntary support for such quarantine should be sought from State agencies, tribal agencies, and private operators until the extent of the outbreak can be determined.

**C. Quarantine zone determination.** Use watershed boundaries to specifically determine a quarantine zone. The quarantine zone must be extended to at least a 5-mile radius of the affected Service facility and possibly further downstream if watershed conditions so indicate. Aquatic animal distribution from the quarantine zone must be halted and emergency fishing restrictions for this area should be sought by the Regional Director from the State and/or tribal agency involved. If deemed necessary, sampling may be extended to the watershed boundary.

**3.5 What process will be used to determine the extent of infection by the exotic pathogen?** The FHC Director in charge of field operations of the EDEF will obtain information on all shipments from the suspect facility during the previous year. Information obtained will be promptly reported to the Regional Director so that notifications can be made to recipients of suspect aquatic animals. The FHC Director will immediately begin surveys for disease detection to confirm the presence or absence of the causative agent of the suspect exotic disease. Surveys must be made of all populations of susceptible aquatic animals on the Service facility and within the quarantine zone. The size and location of survey sites will be determined on the basis of natural aquatic animal barriers, type of terrain, nature of the aquatic animal population, and characteristics of the disease outbreak itself.

**3.6 What procedures are used to survey the quarantine zone(s) for infected aquatic animals and to prevent the spread of disease?** All relevant aquatic animal populations within the quarantine zone must be sampled at the earliest possible time. If other aquatic animal facilities are located within the quarantine zone, the FHC Director in charge will visit each facility, including private facilities. During these visits, the FHC Director will: (1) explain the reason for the visit, (2) identify the location of the infected facility, (3) explain the nature of the disease and how it is spread, (4) advise the personnel concerning precautions necessary to prevent the spread of the disease, and (5) provide the facility's personnel with the name and contact information of the person to whom they should report any suspicious clinical signs (indications of the disease) noted in their aquatic animals. The personnel at these facilities should be informed that reliable, current information will be provided to them and told of the means by which it will be available. They should be asked to treat all information confidentially. Strict sanitary measures must be followed before entering or leaving aquatic animal facilities in any quarantine zone.

**A. Extent of sample collections.** During the period in which initial survey information is being collected from within the quarantine zone, every effort must be made to observe all aquatic animals, both domesticated and wild, for signs of any exotic disease and to collect representative samples from each population. Once appropriate approval has been obtained from the management agency or agencies with jurisdiction, samples of aquatic animals displaying clinical signs should be collected and documented as

to exact location, date collected, species and size of aquatic animals, name of the collector, and any abnormalities noted. State and/or tribal approval is essential prior to collection of all stream specimens.

**B. Sanitation.** All personnel working within the quarantine zone must observe strict sanitary measures as certain exotic diseases can be spread via shoes, boots, tires, shared equipment, and other means.

**C. Report of observations** Suspicious clinical signs among susceptible aquatic animals should be reported immediately to the Service FHC Director in charge of the EDETF.

**D. Followup to observed clinical sign(s).** The FHC Director will survey susceptible aquatic animal populations in the affected watershed(s) at least once. There is no alternative to laboratory examination of aquatic animal samples. Suspicious clinical signs noted in any susceptible aquatic animals, whether typical for the exotic disease or not, require closer examination and that samples be collected with full documentation.

### **3.7 What procedures are required for eradication of the exotic pathogen from the affected Service facilities?**

**A. Eradication policy and exemptions.** Upon confirmation of the diagnosis of an exotic disease, take immediate steps to assure the orderly decontamination of the facility. Unless exempted by the EDETF (paragraph [3.3.A](#)), all gametes, fertilized eggs, and aquatic animals will be humanely destroyed and buried. If local codes prohibit burial, then all contaminated aquatic animals, their gametes, and/or fertilized eggs must be incinerated consistent with local codes. A firm commitment to prompt action is essential to effective containment and eradication of any exotic disease. Additional procedural details (beyond that provided in the following sections) for burial, facilities decontamination, etc. are found in the [U.S. Fish and Wildlife Service Handbook of Aquatic Animal Health Procedures and Protocols \(Handbook\)](#).

**B. Eradication procedures and sequence.** An aquatic animal disposal operation will be carried out as soon as possible, and will consist of the following events:

- (1) Written recommendation that a disposal operation is necessary (FHC Director and facility manager).
- (2) Approval of disposal operation by Regional Director.
- (3) Arrangement for the equipment, materials, permits, and personnel needed to carry out disposal (facility manager).
- (4) Preparation of the burial pit (facility manager).
- (5) Disposal of infected or exposed aquatic animals (facility manager).

**C. Burial site specifications.** The site chosen for the burial pit should be within the grounds of the facility with easy access from rearing units, but sufficiently removed from areas subject to flooding and from facility well fields.

### **3.8 What cleaning and decontamination procedures are required following the eradication of the exotic pathogen? Refer to the [Handbook](#).**

### **3.9 Following decontamination, what procedures are required before a facility can resume normal production?**

**A. Cooling-off period.** After the Service facility has been cleaned and decontaminated, observe a 30-day waiting period before live aquatic animal tests begin. During this "cooling off" period, all rearing facilities should remain dry and, if possible, exposed to sunlight.

**B. Number of test animals.** Determine the number of test aquatic animals by the size of the facility to be tested. The facility should be tested by placing a suitable number of animals of the most susceptible age and species (to the disease in question) in live-boxes strategically placed within the facility. The water in the rearing units should be held at the normal operational level. Samples of aquatic animals from each live-box will be collected for laboratory examination at 60 and 120 days post-exposure unless the pathogen's life cycle dictates otherwise. The test aquatic animals should be regularly fed and cared for during the exposure period. After the completion of a negative 120-day test period, rearing units supplied with uncontaminated water may be restocked for normal production and the quarantine removed. These aquatic animals should be monitored at intervals of 90 days or less for at least 1 year.

---

*For information on the specific content of this chapter, contact the Division of the National Fish Hatchery System. For questions about this Web page, contact [Krista Holloway](#), in the Division of Policy and Directives Management.*

---

[Directives Home](#)

PDM Web sites: [Centralized Library of Servicewide Policies](#) | [FWS Forms](#) | [PDM Services](#)

[Privacy, Disclaimer and Copyright Information](#) | [Information Quality Act](#)

[U.S. Fish and Wildlife Service Home Page](#) | [Department of the Interior](#) | [USA.gov](#) |  
[About the U.S. Fish and Wildlife Service](#) | [Accessibility](#) | [Privacy](#) | [Notices](#) | [Disclaimer](#) | [FOIA](#)