



Illinois Department of Natural Resources

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Rod R. Blagojevich, Governor

Joel Brunsvold, Director

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (Act) (520 ILCS 10/5.5) and the regulations adopted to implement the Act (17 Ill. Adm. Code, Part 1080), authorization is hereby granted to the Forest Preserve District of Cook County (hereinafter referred to as FPDCC) for the incidental take of banded killifish (*Fundulus diaphanus*). The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that this taking is incidental to activities associated with shoreline rehabilitation on Powderhorn Lake, Cook County, Illinois¹.

Procedural History

A conservation plan prepared by FPDCC was received by the Department on January 3, 2005. Public notice of FPDCC's request for authorization of incidental take was published in the Edwardsville Intelligencer on October 19, 2005 and in The Chicago Tribune, a newspaper of general circulation in the vicinity of the project site, on October 19 and 26 and November 2, 2005. Public comments on FPDCC's conservation plan were accepted by the Department until December 2, 2005. No comments were received from the public during the specified comment period.

Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria which must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The stated and apparent purpose of this proposed action is to improve angler access to Powderhorn Lake by removing accumulated sediment from a near-shore portion of the lake and reinforcing the shoreline to minimize future bank erosion. The take that could result from this project is not the purpose of FPDCC's activities, but is incidental to the carrying out of an otherwise lawful activity.

¹The subject property is located in the North ½ of the fractional southeast 1/4 of Section 5, Township 36 North, Range 15 East, Third Principal Meridian, Cook County, Illinois.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

The conservation plan prepared by FPDCC describes work to be done along approximately 933 linear feet of the shoreline of Powderhorn Lake. This portion of the shoreline has eroded over 30 feet shoreward from its original location. Sediments will be removed from shallow water areas and those sediments will be used (if found suitable) to create "outcrops" along the shore to provide enhanced access to this portion of the lake for bank anglers.

To minimize the potential effects of this work on banded killifish, FPDCC has scheduled all project activities for times outside of the spawning season for the species. Shoreline work will be performed slowly and deliberately, reducing the likelihood that any banded killifish will be unable to move away from potential harm. The shoreline work will also be performed at several distinct areas with interspersed undisturbed areas. This should provide potential refugia for banded killifish within a short distance of the individual work areas.

Mitigation measures to be implemented on the site include restoration of native plant species along the restored shoreline in areas now dominated by non-native species. Erosion control measures will be implemented throughout the project to minimize the introduction of additional sediments to Powderhorn Lake. Pre-construction and post-construction fish inventories will be conducted.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

FPDCC has secured funding for the shoreline rehabilitation through the State of Illinois' Illinois First Capital Development Fund. These funds will cover the approximate \$325,000 cost of the shoreline work. Fish inventories, water quality analyses, site inspections and other related work will be performed by FPDCC personnel with funding from normal operating funds.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

Banded killifish historically were considered abundant in lakes and clear streams in northern Illinois. In recent years, their range and abundance has been reduced by changes to their aquatic habitat such as impoundment of streams and declining water quality in lakes. Banded killifish currently are known from only a small number of lakes in Lake and Cook counties.

Take of banded killifish in Powderhorn Lake could occur by crushing of individual

animals by movement of equipment or placement of shoreline structures. The mobility of banded killifish and the nature of the proposed shoreline work make it likely that any direct take will be very small. Normal behaviors of banded killifish may be disrupted by project activities, but any such disturbance will be brief and not likely to adversely affect individual fish or the population of banded killifish in Powderhorn Lake.

Where banded killifish occur, they are typically present in large numbers. The limited take that could occur as a result of this project is not likely to reduce the likelihood of survival of the species in Powderhorn Lake or the recovery of the species in Illinois.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - Section 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and FPDCC's signature on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

Public notice of FPDCC's request for authorization of incidental take was published in the Edwardsville Intelligencer on October 19, 2005 and in The Chicago Tribune, a newspaper of general circulation in the vicinity of the project site, on October 19 and 26 and November 2, 2005. Public comments on FPDCC's conservation plan were accepted by the Department until December 2, 2005. No comments were received from the public during the specified comment period.

Authorization

It is the determination of the Department that the measures that will be implemented by FPDCC will adequately minimize and mitigate the potential loss of a small number of banded killifish (*Fundulus diaphanus*) as a result of shoreline rehabilitation on Powderhorn Lake. Further, it is our opinion that the take authorized herein will not diminish the likelihood of the survival of this species in the wild within the State of Illinois, the biotic community of which those species are a part or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 and Ill. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a period of three (3) years from the date of the Department signature, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 and Ill. Adm. Code Part 1080.80).

2. FPDCC shall conduct, or cause to be conducted, a pre-construction survey of fishes of Powderhorn Lake to determine the presence of banded killifish in the project area. The survey shall identify to species and enumerate by species all fish collected by non-lethal means. FPDCC shall provide a report to the Department which shall include but not be limited to the species and numbers of fish collected and the locations of all collections of banded killifish. This report shall be provided to the Department no less than 15 days before any construction within wetted areas of Powderhorn Lake begins.

3. FPDCC shall conduct, or cause to be conducted, a post-construction survey of fishes of Powderhorn Lake to determine the presence of banded killifish in the project area. The survey shall identify to species and enumerate by species all fish collected by non-lethal means. FPDCC shall provide a report to the Department which shall include but not be limited to the species and numbers of fish collected and the locations of all collections of banded killifish. This survey shall be done within 180 days of project completion and the survey report shall be provided to the Department no more than 30 days after completion of the survey.

4. In order to avoid take of spawning banded killifish, eggs, or newly hatched young fish, FPDCC shall not conduct project activities within wetted areas of Powderhorn Lake between June 1 and September 1 of any calendar year. This seasonal restriction shall not apply to the hand planting of native aquatic vegetation within the project area.

5. This authorization for incidental take is valid only for take associated with an otherwise lawful activity. If any required license, permit or authorization from the Department or any other federal, state or local agency is denied, this authorization is null and void. Activities that may result in incidental take shall not be initiated until all required licenses, permits or authorizations have been issued. If any required license, permit or authorization is revoked by the Department or any other federal, state or local agency, this authorization shall be null and void.

6. The effective period of this authorization may be altered by mutual agreement between FPDCC and the Department.

7. This authorization may be revoked pursuant to Section 5.5 of the Illinois Endangered Species Protection Act (520ILCS 10/5.5 and Ill. Adm. Code Part 1080.80) if the Department finds that FPDCC has failed to comply with any of these terms and conditions or has been responsible for the taking of banded killifish beyond that which is incidental to shoreline rehabilitation at Powderhorn Lake, Cook County, Illinois.

8. The FPDCC official identified below is authorized to execute this agreement. Execution by FPDCC indicates acceptance of all terms and conditions as described in this document.

For the Illinois Department of
Natural Resources



Mike Conlin, Director
Office of Resource Conservation

December 14, 2005
Date Signed

For the Forest Preserve District of
Cook County



Christopher T. Merenowicz, Asst. Director
Resource Management Department

December 14, 2005
Date Signed

