

### **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 1080), authorization is hereby granted to Marathon Petroleum Company, LP (hereinafter referred to as Marathon) for the incidental take of the State-endangered Bigeye Chub (*Flybopsis amblops*). The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that the taking is incidental to activities associated with the installation of a continuous water temperature monitor at the Route 1 bridge, and for ongoing thermal discharge from Marathon's Robinson Refinery into the Robinson Creek in Crawford County, IL.

#### **Procedural History**

The Illinois Pollution Control Board received a petition from Marathon on December 15, 2017, to request an alternative thermal effluent limitation for discharged water from Outfall MPC 001. This petition included two requests for alternative limits in the National Pollution Discharge Elimination System Permit (NPDES): one for water quality standards for temperature, and the other to allow for the use of 100% of the width of Robinson Creek as the mixing zone without a zone of passage. These two requests were granted by the Illinois Pollution Control Board. This is not to increase the temperature of their wastewater or to have higher limits for summer temperatures in Robinson Creek and does not allow for an increase peak flow volume of thermal effluent water.

The Department received a conservation plan prepared by EA Engineering, Science, and Technology, Inc., for Marathon on October 4, 2022, as a request for authorization for the incidental take of Bigeye Chub. Additional information was requested by the Department on October 25, 2022, and March 1, 2023, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on January 31, 2023, and March 7, 2023. The final conservation plan was approved by the Department on April 4, 2023. The public notice period will be detailed under #6 of the Compliance section below.

#### **Compliance with the Illinois Endangered Species Protection Act**

The Act includes six criteria that 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 action is the continued operation of a wastewater outfall from the Marathon Robinson Refinery that discharges to Robinson Creek, which feeds into the Wabash River. The wastewater is a mixture of treated process wastewater (stripped sour water, desalter water, cooling tower blowdown, boiler blowdown, and coker sluiceway purge) and stormwater runoff. This outfall carries an average of 2.65 million gallons of water/day from treated process wastewater and stormwater runoff. The peak flow was measured at 4.32 million gallons of water/day.

At the Route 1 Bridge at the end of the 1.7-mile mixing zone, a temperature monitor will be installed in Robinson Creek. This requires the installation of two I beam piles in the creek bed to anchor the sensors and support an access platform for equipment maintenance. The other activities to install this equipment does not occur in the water.

The total estimated area of Robinson Creek that has the potential to be impacted is **between 5.5 and 6.0 acres as the mixing zone**. This represents a bank-to-bank measurement, from River Mile 5 to approximately River Mile 7, without a zone of passage to the IL Route 1 bridge. Additionally, there will be **0.002 acres of temporary instream impact** where temperature monitoring equipment will be installed.

Take of Bigeye Chub could occur as a result of habitat exclusion in the summer months when the water temperature is the highest, and from installation and maintenance of the temperature monitoring equipment. Indirect take could temporarily occur as a result of increased noise, vibration, and turbidity from suspension of fine sediments in the water column that would adversely affect all life stages during installation at the monitoring equipment installation site. Impacts to riparian areas from vegetation clearing and woody debris removal, construction, or staging may temporarily adversely affect water quality.

The take of Bigeye Chub that could result from this project is not the purpose of Marathon's activities but is incidental to the carrying out of an otherwise lawful activity.

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

Proposed minimization and mitigation measures were included in Marathon's conservation plan.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by Marathon, based on the life history needs of Bigeye Chub.

**All required minimization and mitigation measures are presented under the Authorization section below.**

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

Marathon states that all requirements of the Conservation Plan and this Authorization will be incorporated into operations activities and operating costs of this facility.

It is the Department's opinion that Marathon's stated commitment to funding their proposed minimization and mitigation measures is sufficient to satisfy this criterion.

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 within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois:

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**Bigeye Chub** (*Hybopsis amblops*) is an Illinois state-endangered fish species.

**Habitat:** Bigeye Chub are a small fish found in creeks to medium sized rivers in quiet water. They prefer clear water with sand, gravel, or rocky bottoms.

**Reproduction:** Bigeye Chub spawn from late spring to early summer.

**Population:** Bigeye Chub decline has occurred because of poor water quality and habitat fragmentation. They are exceptionally intolerant of siltation and pollution.

**Range in Illinois:** In Illinois, Bigeye Chub are found in the Vermilion, Wabash, and Embarras River basins. Bigeye Chub are found in five (5) of 102 Illinois counties: Champaign, Clark, Crawford, Edgar, and Vermilion. There are currently twenty-seven (27) extant Element Occurrence Records of Bigeye Chub in the Illinois Natural Heritage Database.

**Incidental Take Authorizations:** The Department has 6 (six) previously issued or pending Incidental Take Authorizations for Bigeye Chub. Previous projects have included bridge work, dam removal, and demolition of a dilapidated bridge. This is the first authorization for the taking of Bigeye Chub in Crawford County.

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Based on the amount of habitat impacted by this project, the number of known occurrences of Bigeye Chub in Illinois, an assessment of the potential effect of this project on the listed species in the project footprint, the conservation measures included in this authorization for incidental take and the conservation

plan, and the understanding that vulnerability and recovery information on the species remains limited; it is the conclusion of the Department that the taking anticipated as a result of this project will not reduce the likelihood of survival or recovery of the species in the wild within the State of Illinois, the biotic community of which these species are a part, or the habitat essential to the species' existence in Illinois.

5. Any measures required under Section 5.5(b)(6) of the Act will be performed:

These measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and the signature of a representative of Marathon 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 Marathon's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on April 12, 2023, and in *The Robinson Daily News* on April 12, 19, 26, and May 3, 2023. A copy of the conservation plan was deposited at the Robinson Public Library where it was available for public review. The deadline for public comment was June 5, 2023. No comments were received from the public.

#### Authorization

It is the determination of the Department that the measures that will be implemented by Marathon will adequately minimize and mitigate the anticipated taking of Bigeye Chub incidental to activities associated with the installation of a continuous water temperature monitor at the Route 1 bridge, and for ongoing thermal discharge from Marathon's Robinson Refinery into the Robinson Creek in Crawford County, IL. Further, the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of the species in the wild within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois.

All terms and conditions included in the aforementioned conservation plan submitted by Marathon to the Department are incorporated into this agreement by reference and are made a part thereof. In the event there is conflict between the conservation plan and this authorization, this authorization shall control.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5] and the Administrative Rules for the Incidental Taking of Endangered and Threatened Species [Ill. Adm. Code 1080.40(b)], this authorization is issued subject to the following terms and conditions, which may include additions or modifications to the minimization and mitigation measures proposed by Marathon in the conservation plan:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of thirty (30) years from the date of the Department signature, unless terminated by written agreement of both parties.

Notwithstanding the above paragraph, due to the length of this Authorization, the Department reserves the right to reassess the terms of this Authorization every five years. If during reassessment the Department determines that Bigeye Chub have become more imperiled than when the species and impact analyses were initially conducted, the Department may request an amendment to this Authorization or additional minimization or mitigation by Marathon. Further, if during reassessment the Department determines that the level of minimization and mitigation no longer meets the requirement of 520 ILCS 10/5.5 for minimization and mitigation to the maximum extent practicable for the potential take, the Department may request an amendment to this Authorization or additional minimization or mitigation by Marathon. If an agreement cannot be reached between the Department and Marathon, this ITA will be terminated. Termination pursuant to this paragraph does not prohibit the Marathon for applying for a new ITA.

Additionally, this Authorization is issued on the condition that Marathon shall renew the NPDES permit every five (5) years, or as required to maintain a valid NPDES permit, for a maximum of six (6) renewal terms during the effective period of this document. Failure by Marathon to secure a valid NPDES permit shall result in revocation of this authorization. Termination pursuant to this paragraph does not prohibit the Marathon for applying for a new ITA.

This Authorization may be revoked pursuant to the Act and Ill. Adm. Code 1080.80(b) if the Department finds that Marathon has failed to comply with any of these terms and conditions or has been responsible for the taking of Bigeye Chub beyond that which is incidental to activities associated with the construction of temperature monitoring equipment and ongoing thermal discharge into Robinson Creek in Crawford County, IL.

2. The effective period of this Authorization may be altered by mutual written agreement between Marathon and the Department. The Illinois Endangered Species Protection Board shall be notified of any such alteration.

Any substantive changes, including but not limited to a change in the project footprint or a change in the State-listed species which could potentially be affected, will require that a new conservation plan be submitted to the Department to initiate the review and public notice process as required by the Act.

3. This Authorization may only be transferred upon approval and written authorization by the Department.
4. All on-site personnel shall be educated on characteristics of habitat in which Bigeye Chub may occur, the identification of Bigeye Chub, regulations protecting the species, where the species might be found, avoidance areas, travel restrictions for equipment and vehicles, how to report sightings or incidents that may involve take, and the importance

of avoiding take of the species. Marathon shall submit a copy of the education materials to the Department for review before work begins.

5. The Department reserves the right of entry by its staff or representatives to inspect species, potential habitat, and species management practices at the site of the impact area.
6. Biological consultants employed by, or conducting work on behalf of, Marathon shall hold the necessary permits for work with non-listed and listed species; these include an Illinois Department of Natural Resources (IDNR) Scientific Collection Permit as authorized under 17 Illinois Administrative Code 520, and an IDNR Endangered Species Permit as authorized under 17 Illinois Administrative Code 1070.
7. Marathon shall notify the Department's Endangered Species Program by email correspondence of construction commencement and completion of work to install the temperature logger at the bridge over Robinson Creek in Crawford County, IL. A project status report shall be submitted to the Department within 90 days of completion summarizing the implementation of minimization, mitigation, and restoration measures and evaluating the effectiveness of those measures and shall include a project photo log. The report shall also include a map and GPS coordinates of any listed species observed by Marathon or their representatives within the project footprint, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.
8. Any discoveries of additional State-listed species beyond those identified in this agreement halts work and shall be reported to the Department within 48 hours accompanied by location information (photograph, map, and GPS coordinates).
9. Marathon shall conduct, or cause to be conducted the following construction minimization efforts:
  - a. Instream work shall be prohibited during the Bigeye Chub spawning season of May and June.
  - b. Installation of the I beams shall take place during a period of low-flow to minimize disturbance to aquatic life
  - c. Work shall take place in the smallest footprint practicable.
  - d. If required, the streambank shall be stabilized with vegetation or riprap following installation.
  - e. Operational maintenance of the monitoring station shall be performed from the bank or platform as much as is practicable; instream disturbance shall be minimized.
  - f. Construction debris and excavated material shall be removed from the streambed as soon as practicable.
10. Marathon shall conduct, or cause to be conducted, the following ongoing minimization efforts:
  - a. Maintain outfall water temperatures within the standards required in the NPDES permit, including alternative thermal standards for the summer months.

- b. Review the effects of the alternative thermal effluent limit every five (5) years, as required by the NPDES permit.
11. Marathon shall conduct, or cause to be conducted, post-construction surveys for Bigeye Chub in Years 1 and 3 following construction and Years 1 and 3 following each renewal of the NPDES permit.
  - a. Surveys shall be conducted between July 15 and October 1.
  - b. Electrofishing and seining shall be used to collect fishes. Monitoring shall occur at three locales: approximately 300 meters upstream of the Marathon discharge, immediately downstream of the discharge, and approximately 5.6 kilometers downstream of the discharge. The sample extent at each locale shall be 100 meters. Electrofishing shall be applied to the entirety of the sample extent. Seining shall follow electrofishing efforts and target Bigeye Chub habitat. At least 50 square meters shall be sampled with seines.
  - c. Temperature and discharge shall be measured at each monitoring locale during survey events. Physical habitat shall be qualitatively assessed at each monitoring locale.
  - d. All captured fish shall be identified and enumerated. All collected Bigeye Chub shall be categorized as juvenile or adult. Proportion of all fishes with DELT anomalies (deformities, erosion, lesions, tumors) shall be recorded.

A report including, but not limited to survey methodology, map with sample extents, a summary of habitat characteristics, temperature, and discharge in each sample extent, number of individuals collected for each fish species recorded, proportion of individuals with DELTs, and proportion of Bigeye Chub categorized as juveniles shall be provided to the Department within 90 days of survey completion.

12. Mitigation to the maximum extent practicable is required by the Act. Marathon shall submit a one-time mitigation payment to the Illinois Department of Natural Resources - Illinois Wildlife Preservation Fund in the amount of \$5,580.00. The mitigation will be earmarked to bring conservation benefit to Bigeye Chub. Mitigation payments are nonrefundable, including events of revocation or termination.

Mitigation values are based on the Department's best current understanding of the species life history needs and impact analysis relevant to the project site's proposed conceptual design elements available at the time of review.

13. All reports, notifications, and other project documentation shall be submitted to:

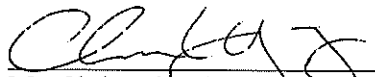
Illinois Department of Natural Resources  
Office of Resource Conservation  
Endangered Species Program – Incidental Take Authorization Coordinator  
One Natural Resources Way  
Springfield, IL 62702-1271

(217)557-8243  
DNR.ITAcoordinator@illinois.gov

The Department's Endangered Species Program shall provide all reports required under this agreement to the Illinois Endangered Species Protection Board and to the Department's Natural Heritage Database.


14. The Marathon official identified below is authorized to execute this agreement. Execution by Marathon indicates acceptance of all terms and conditions described in this authorization.
15. The execution of this agreement does not waive or excuse the responsibilities of Marathon to comply with other Federal, State, or local regulations, including but not limited to obtaining any required permits for the execution of this project.

*For the Illinois Department of Natural Resources:*

  
Mr. Christopher L. Young, Director  
Office of Resource Conservation

9/6/2023  
Date

*For the Marathon Petroleum Company LP:*

  
Mr. Darin J. Barber  
Robinson Refinery Environmental, Safety &  
Security Manager

8/28/2023  
Date