## Appendix B – United States Fish and Wildlife Service
### Consultation Materials

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Hi Evan,

Per below, please reference the USFWS concurrence in the affected environment/environmental consequences section of the EA/EAW and include in the appropriate appendix.

Thanks,

Josh Fitzpatrick
Environmental Protection Specialist
FAA Dakota-Minnesota Airport District Office
Joshua.Fitzpatrick@faa.gov
(612) 253-4639

From: Horton, Andrew <andrew_horton@fws.gov>
Sent: Friday, March 15, 2019 3:52 PM
To: Fitzpatrick, Joshua (FAA) <Joshua.Fitzpatrick@faa.gov>
Subject: Re: [EXTERNAL] FW: Crystal Airport ESA Determination

Josh,

We agree with the determinations you have made and are supportive of the proposed conservation measures. In regard to the northern long-eared bat, tree removal will not take place during a period when the species would be present in the action area. Therefore, we do not expect any direct effects to the species as a result of the action.

- Andrew
Dear Mr. Horton:

Per the attached Project Exhibit, the Federal Aviation Administration (FAA) is working with the Metropolitan Airports Commission (MAC) on a large airport development project at the Crystal Airport.
The proposed action will require the removal of trees on Airport property to accommodate future non-
aeronautical development along 63rd Avenue North, as well as removal or trimming of several off-Airport
trees to clear the applicable runway approach threshold siting surfaces (TSS). An obstruction analysis
conducted for the recent Airport Layout Plan (ALP) update identified several trees in the approach and
departure areas. The MAC proposes to remove or trim any on- or off-Airport trees currently penetrating the
applicable approach TSS prescribed by FAA Advisory Circular (AC) 150/5300-13A, Airport Design, Draft
Change 2, as well as any additional trees that should be removed or trimmed to provide a clear approach TSS
for a reasonable period beyond project implementation. The timeframe analyzed in this EA/EAW is eight
years, which includes time for the environmental review and design phases and provides a forecast for
approximately five years from project implementation. The MAC also proposes to remove or trim any on-
Airport trees that penetrate the departure surface defined by FAA Order 8260.3D, U.S. Standard for Terminal
Instrument Procedures (TERPS). Off-Airport trees penetrating the departure surface will remain, as these trees
may be avoided through use of notes published in instrument departure procedures. The MAC will continue to
monitor tree growth and request that FAA publish obstacle notes in the flight procedures, as needed.

The attached Tree Mitigation and Growth Analysis report was completed in May 2018 compared tree heights
from 2013 Airports Geographic Information System (AGIS) data to a December 2017 spot survey, and
incorporated growth rates observed by a certified arborist in May 2018 (see attached study). This study
established appropriate growth rates to determine if trees are likely to penetrate the approach TSS within five
years of project implementation. The study also considered the growth rate of 2.5 feet per year suggested by
the FAA in Engineering Brief 91, Management of Vegetation in the Airport Environment.

Some trees near the Airport will require removal under the no-action alternative. Monitoring tree heights and
removing or trimming potential obstructions is an ongoing maintenance measure. An obstruction analysis
conducted in 2018 identified approximately eight existing off-Airport points currently penetrating the approach
TSS for Runways 14L/32R and 6L/24R, which slopes upward one vertical foot for every 20 horizontal feet
starting 200 feet from the runway threshold (the beginning of the runway available for landing). The
obstruction analysis identified several additional areas with trees forecasted to penetrate the TSS within five
years of project implementation. These areas are shown in the attached exhibits. The areas include up to 38
trees found on private properties and up to three trees in public rights-of-way in the approaches to Runways
14L/32R and 6L/24R. While some of these trees will need to be trimmed or removed for the no-action
alternative, there is an increase in the number of projected tree obstructions with the preferred alternative. The
projected removals also include approximately 32 trees within a city park in the Runway 14 approach. I have
included the park analysis as an attachment as well.

Along with regular growth, the increase in tree penetrations is partially because of the shift of the TSS aligned
with the 115-foot shift of Runway 14L/32R to the northwest, which introduces lower elevation limits for trees
off the Runway 14L end. However, the preferred alternative also reduces the total area of the TSS that must be
kept clear due to the closure of Runway 14R/32L. Any removals will be carefully targeted individual trees and
will not involve clear-cutting stands of trees. Identification of specific trees to be removed or trimmed will be
determined during the detailed project design phase.
The off-Airport trees to be removed include the species cottonwood, birch, white poplar, Siberian elm, red maple, Douglas fir, ash, box elder, and spruce. Although targeted tree removal is expected to occur off-Airport, such removal is not expected to result in adverse impacts to special status species, or loss, degradation, or fragmentation of native species’ habitats. Off-Airport tree removal will not target stands or large groupings of trees that will significantly disrupt habitats. In addition, the environment around the off-Airport tree removals is already fully urbanized and developed.

There are no acreages identified as tree removal, only individual trees based on the analyses provided above.

As of February 7, 2019, there were four federally-listed species with habitat in Hennepin County, including the Rusty Patched Bumble Bee (RPBB) and the Northern Long Eared Bat (NLEB), which is listed as threatened in the area. Two of these species are freshwater mussels with habitat in the Mississippi River and are not found within the project area. The FAA made a no effect determination for the Higgins eye pealymussel and snuffbox.

The NLEB is listed as threatened throughout its extensive range, including all of Minnesota, 36 other states, and multiple southeastern Canadian provinces. During summer, the NLEB typically roosts singly or in colonies under bark, in cavities, or in crevices of living and dead trees. Males and non-reproductive females may also roost in caves and mines during the summer. Most hibernate during winter in caves and mines with constant temperatures, high humidity, and no air currents.

The April 1, 2018, MDNR list of Hennepin County townships with documented NLEB maternity roost trees or hibernacula entrances did not include the Crystal Airport or any adjoining townships. Because the proposed project is within a mostly developed area and does not include documented suitable or designated critical habitat, the proposed action will likely have no effect on the NLEB.

The MAC proposes the following mitigation measures or Avoidance and Minimization Measures (AMMs) for tree removal from the Range-Wide Biological Assessment for Transportation Projects for Indiana Bat and Northern Long-Eared Bat (USFWS/USDOT, April 2015) to protect the NLEB:

Tree Removal AMM 2 - To avoid and minimize impacts to the NLEB, tree removal will be completed between October 1 and April 30, which is the dormant season for the bat at this latitude.

Tree Removal AMM 3 - Tree removal will be limited to that specified in project plans. Tree removal limits will be clearly indicated in the field by bright orange flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits. Tree clearing limitations will be discussed with contractors at the pre-construction meeting to ensure that they understand clearing limits and how they are marked in the field.
Based on the avoidance measures above and utilizing the attached streamlined consultation form, the FAA has made a may affect, not likely to adversely affect determination for the NLEB.

The RPBB live in colonies that have an annual cycle. The bees gather pollen and nectar from a variety of flowering plants and prefer tallgrass prairie habitat. No critical habitat has been designated for the RPBB. According to the USFWS website, the Airport is in a low potential habitat zone for the RPBB. There are no areas of tallgrass prairie within the study area, and areas dominated by grasses are mowed on a regular basis. Therefore, the proposed action does not affect vegetation types that provide habitat for the RPBB. The USFWS IPaC tool does not identify the RPBB as present within the limits of ground disturbance. Because the proposed project is within a developed area, in a low potential habitat zone for the RPBB, and does not affect any prairie habitat, the proposed project will have no effect on the RPBB or its habitat. As a result, no avoidance or mitigation measures are necessary for the RPBB. The FAA has issued a no effect determination for the RPBB.

Migratory Birds and Bald Eagles

Seven of the bird species protected by the MBTA found near the Airport have nesting seasons that fall between May and October. According to the IPaC species list, these species have been documented by USFWS survey sources during these months within approximately six miles of the Airport within the past ten years. These species include the black-billed cuckoo, the eastern whip-poor-will, the golden-winged warbler, the least bittern, the red-headed woodpecker, the willow flycatcher, and the wood thrush. The breeding season for the bald eagle extends from December to August, however eagles typically nest near bodies of water and away from developed areas. The other listed birds nest elsewhere in their range or have not been observed in the project area during nesting season. Many of the birds are typically found in densely wooded or wetland habitats, and while they are not likely to be affected by the proposed project where ground disturbances will primarily be limited to regularly mowed airfield areas, off-Airport tree removal has the potential to disturb some wooded wetland habitat. Prior to any construction activity during the nesting season, an MBTA nesting bird survey will be completed. Tree removal will occur outside of nesting months for birds observed in the area during their nesting season.

Please let me know if you have any questions and reply back with your agency’s decision.

Thank you,

Josh Fitzpatrick

Environmental Protection Specialist

FAA Dakota-Minnesota Airport District Office
Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service’s (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
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<tbody>
<tr>
<td>1. Does the project occur wholly outside of the WNS Zone?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>2. Have you contacted the appropriate agency to determine if your project is near known hibernacula or maternity roost trees?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>3. Could the project disturb hibernating NLEBs in a known hibernaculum?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>4. Could the project alter the entrance or interior environment of a known hibernaculum?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.</td>
<td>☐</td>
<td>☒</td>
</tr>
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</table>

You are eligible to use this form if you have answered yes to question #1 or yes to question #2 and no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant: Josh Fitzpatrick, FAA, Joshua.fitzpatrick@faa.gov

Project Name: Crystal Airport Development Project

Project Location (include coordinates if known): Crystal, MN (Airport and surrounding area)

Basic Project Description (provide narrative below or attach additional information):
See attached project exhibit for lengthy description.

2 See http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html
3 If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.
### General Project Information

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>Does the project occur within 0.25 miles of a known hibernaculum?</td>
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<tr>
<td>Does the project occur within 150 feet of a known maternity roost tree?</td>
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<tr>
<td>Does the project include forest conversion(^4)? (if yes, report acreage below)</td>
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<td></td>
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<tr>
<td>Estimated total acres of forest conversion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If known, estimated acres(^5) of forest conversion from April 1 to October 31</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>If known, estimated acres of forest conversion from June 1 to July 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the project include timber harvest? (if yes, report acreage below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated total acres of timber harvest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If known, estimated acres of timber harvest from April 1 to October 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If known, estimated acres of timber harvest from June 1 to July 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the project include prescribed fire? (if yes, report acreage below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated total acres of prescribed fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If known, estimated acres of prescribed fire from April 1 to October 31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If known, estimated acres of prescribed fire from June 1 to July 31</td>
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<tr>
<td>Does the project install new wind turbines? (if yes, report capacity in MW below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated wind capacity (MW)</td>
<td></td>
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### Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

**JOSHUA T FITZPATRICK**

Digitally signed by JOSHUA T
FITZPATRICK
Date: 2019.02.07 12:13:20
-06'00'  
Signature: ____________________________  
Date Submitted: 2/7/19

\(^4\) Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

\(^5\) If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

\(^6\) If the activity includes tree clearing in June and July, also include those acreage in April to October.
1. Decommission Runway 14R/32L and convert it to a full parallel taxiway for primary Runway 14/32, extended to the new runway ends.
2. Convert portions of primary Runway 14/32 blast pads to usable runway for a total published length of 3,750 feet with declared distances and change the runway designation to Utility.
3. Shift primary Runway 14/32 approximately 115 feet to the northwest along its centerline.
4. Reduce the length of existing Runway 06R/24L (turf) to 1,669 feet to clear Taxiways D and F from its RSAs.
5. Revise the existing Runway 14 instrument approach procedure and establish a non-precision GPS-based instrument approach procedure (LNAV) to the Runway 32 end.
7. Remove the section of Taxiway E that crosses Runways 06L/24R and 06R/24L between Taxiways A and Taxiway B.
8. Remove Taxiways E2 and E3 between Taxiway E and the future parallel taxiway and replace them with a single new connector located between the removed taxiway sections.
9. Add a connector taxiway between Taxiway E and the future parallel taxiway offset from existing Taxiway B by approximately 100 feet to the northwest.
10. Remove existing runway end connector Taxiways E1 and E4 and replace with connectors from the future parallel taxiway to the new Runway 14/32 ends.
11. Add new engine-run up pads on either end of Runway 14/32 on its northeast side.
12. Construct on-Airport perimeter roads around runway ends on the north, west, and south sides of the airfield to allow ground vehicles to circulate without crossing runways.
13. Expand the FBO apron to increase available tie-down spaces for aircraft and remove tie-downs from the Runway 06R RPZ.
14. Develop parcels of Airport land for non-aeronautical use along 63rd Avenue North, in the area west of the Twin Creek wetland complex and on both sides of the 63rd Avenue North entrance road.
FIGURE 4-4

Tree Removal Areas
Crystal Airport
Environmental Assessment