Environmental Assessment
Lake Elmo Airport

Public Event

Environmental Effects Evaluation Process

1. Is the environmental category relevant to the proposed development?
   - YES
     - No Further Analysis Required
   - NO
     - Collect Data
     - Evaluate Effects
     - Determine Required Permitting/Mitigation

2. Are effects "significant" based on FAA-established thresholds and factors?
   - YES
     - No Further Analysis Required
   - NO
     - Federal Aviation Administration (FAA) Conducts Environmental Impact Statement (EIS)
## Preliminary Summary of Environmental Effects

<table>
<thead>
<tr>
<th>Environmental Analysis Category</th>
<th>Effects: Baseline Alternative (No Expansion Alternative)</th>
<th>Effects: Preferred Alternative</th>
<th>Required Permitting, Mitigation, and/or Associated Actions</th>
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<tbody>
<tr>
<td><strong>Air Quality</strong></td>
<td>None</td>
<td>Minimal impacts during construction</td>
<td>None</td>
</tr>
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</table>
| **Biological Resources** (including fish, wildlife, and plants) | None                                                   | Tree removal                     | - Tree removal to occur during NLEB dormant season (October 1 – April 30)  
- Implement April 2015 USFWS/USDOT NLEB avoidance and minimization measures  
- Implement MnDNR Blanding’s turtle avoidance measures |
| **Climate**                     | None                                                   | None                            | None                                                     |
| **Coastal Resources**           | N/A                                                    | N/A                             | None                                                     |
| **DOT Section 4(f) Lands**      | N/A                                                    | N/A                             | None                                                     |
| **Farmlands**                   | None                                                   | 43 acres converted directly or indirectly | To be determined                                         |
| **Hazardous Materials, Solid Waste, and Pollution Prevention** | None                                                   | None                            | Dispose of construction materials and other solid waste in accordance with state and local laws. |

### Environmental Assessment

**Lake Elmo Airport**

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- Implement April 2015 USFWS/USDOT NLEB avoidance and minimization measures  
- Implement MnDNR Blanding’s turtle avoidance measures |
| Climate | None | None | None |
| Coastal Resources | N/A | N/A | None |
| DOT Section 4(f) Lands | N/A | N/A | None |
| Farmlands | None | 43 acres converted directly or indirectly | To be determined |
| Hazardous Materials, Solid Waste, and Pollution Prevention | None | None | Dispose of construction materials and other solid waste in accordance with state and local laws. |
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<tr>
<td>Historic, Architectural, Archaeological, and Cultural Resources</td>
<td>None</td>
<td>None</td>
<td>Awaiting SHPO concurrence with FAA determination of effect</td>
</tr>
<tr>
<td>Land Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>Potential Zoning Conflicts</td>
<td>Potential Zoning Conflicts</td>
<td>Convene Joint Airport Zoning Board (JAZB) to develop an Airport Zoning ordinance</td>
</tr>
<tr>
<td>Ground Transportation</td>
<td>RPZ Conflicts</td>
<td>Increased travel time on 30th Street</td>
<td>None</td>
</tr>
<tr>
<td>Wildlife Attractants</td>
<td>Wetlands in vicinity of runway approach</td>
<td>Wetlands in vicinity of runway approach</td>
<td>To be determined</td>
</tr>
<tr>
<td>Natural Resources and Energy Supply</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Noise and Compatible Land Use</td>
<td>None</td>
<td>None</td>
<td>Update voluntary noise abatement plan and hold educational briefings for pilots</td>
</tr>
<tr>
<td>Socioeconomics, Environmental Justice, and Children’s Health &amp; Safety</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td><strong>Visual Effects</strong> (including airfield lighting)</td>
<td>None</td>
<td>Existing light system relocations and new light system installations</td>
<td>To be determined</td>
</tr>
<tr>
<td><strong>Water Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Wetlands** | None | 1.97 acres direct wetland impact | - Compensatory Mitigation Plan (assume impact will be banked)  
- USACOE 404 Army Corps Permit and Compliance with Minnesota Wetland Conservation Act  
- MnDNR Public Waters permit |
| **Stormwater** | None | 12.6 acres increased impervious area | - Stormwater Pollution Prevention Plan  
- On-Site Best Management Practices  
- MPCA CWA Section 401 Water Quality Certification and NPDES permit  
- VBWD permit |
| **Cumulative Impacts** | None | Under evaluation | To be determined |
Anticipated EA/EAW Timeline

Next Steps:

- Complete Evaluation of Effects
- Publish Draft EA/EAW (begins public comment period)
- Hold Public Hearing
- Finalize EA/EAW

For more detail, see the Stakeholder Engagement Plan on the project website. Schedule is subject to change. Any significant schedule updates will be published on the project website and distributed to e-news subscribers, as appropriate.

Environmental Assessment
Lake Elmo Airport
Environmental Analysis Categories

- Air Quality
- **Biological Resources** (including fish, wildlife, and plants)
- Climate
- Coastal Resources
- Department of Transportation Act, Section 4(f)
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historic, Architectural, Archeological & Cultural Resources
- Land Use
- Natural Resources and Energy Supply
- Noise and Compatible Land Use
- Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety
- Visual Effects (including light emissions)
- Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)
Purpose & Need Goals

**The PURPOSE of the proposed improvements:**

1. Address and attend to the airport’s failing, end-of-life infrastructure;
2. Enhance safety for airport users and neighbors; and
3. Improve facilities for the types of aircraft using, and expected to use, the airport.

**The NEED for the proposed improvements:**

1. Existing runway pavements are deteriorating and, for safety’s sake, need to be replaced.
2. The primary runway has several incompatible land uses within its runway protection zones (RPZs), including a railroad and two public roads.
3. The existing runway lengths do not meet the needs of current aircraft operators and their aircraft.
4. The airport lacks the most current navigational technology for landing aircraft.

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**Lake Elmo Airport Project History 1966 to 2017**

- **1965**: I966 first Plan (planned to extend the existing primary and crosswind runways to 3,200 and 3,500 feet, respectively, and construct two new runways—a 3,900-foot and 2,750-foot—making it a four-runway airport)
- **1975**: I976 Plan update (preserved the 1966 four-runway airport concept)
- **1985**: I1992 Plan update (recommended a relocated and extended primary runway initially to 3,300 feet, then ultimately to 3,900 feet; removed future parallel primary and crosswind runways)
- **1995**: 2008 Plan Update (planned to extend the primary runway to 3,900 feet and extend the crosswind runway to 3,200 feet)
- **2005**: 2015 Plan Update (planned to extend the primary runway to 3,600 feet, then reduced it to 3,500 feet based on community input)
- **2015**: 2017 EA/EA/EAW (for the extension of the primary runway to 3,500 feet and the crosswind runway to 2,750 feet)*ongoing

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Environmental Assessment
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Runway Alternatives Evaluation Process

Criteria for Identifying Range of Alternatives
- Maintain runway orientations
- Avoid or minimize land acquisition
- Avoid or minimize changes to airport use and aircraft flight patterns

Criteria for Screening Range of Alternatives
- Meet the Purpose and Need
- Conform to FAA policies
- Compatible with a viable 30th Street N. realignment alternative

Criteria for Identifying Preferred Alternative
- Practicability factors
- Environmental factors

Preferred Alternative
- ✓

For Evaluation Purposes Only

No Action Alternative
**Environmental Assessment**

**Lake Elmo Airport**

**Runway Length Needs**

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Existing RUNWAY 14/32 Length: 2,849'</th>
<th>Proposed RUNWAY 14/32 Length: 3,500'</th>
</tr>
</thead>
<tbody>
<tr>
<td>CESSNA 340</td>
<td></td>
<td>3,100'</td>
</tr>
<tr>
<td>BEECH BARON 58</td>
<td></td>
<td>3,300'</td>
</tr>
<tr>
<td>PILATUS PC-12</td>
<td></td>
<td>3,500'</td>
</tr>
<tr>
<td>BEECH KING AIR 200</td>
<td></td>
<td>3,500'</td>
</tr>
<tr>
<td>SOCATA TBM 700</td>
<td></td>
<td>3,500'</td>
</tr>
<tr>
<td>CITATION MUSTANG</td>
<td></td>
<td>3,490'</td>
</tr>
<tr>
<td>CITATION EXCEL</td>
<td></td>
<td>4,385'</td>
</tr>
<tr>
<td>CITATION X</td>
<td></td>
<td>5,400'</td>
</tr>
<tr>
<td>GULFSTREAM IV</td>
<td></td>
<td>4,700'</td>
</tr>
</tbody>
</table>

**NOTE:**
Propeller-driven aircraft runway lengths are based on accelerate-stop distances and jet-driven aircraft runway lengths are based on balanced field length takeoff distances, as identified in the respective aircraft performance manuals. Accelerate-stop distance is the length required to accelerate from a full stop to near lift off speed and then decelerate to a full stop. Balanced field length considers the accelerate-stop distance along with other safety factors as required for federal certification of these larger aircraft types. Lengths are calculated for a temperature of 82.3°F, field elevation of 933 feet above mean sea level, and typical takeoff flap settings.
The MAC is committed to a transparent and open community involvement process and has established a Community Engagement Panel (CEP) for this project. This is an advisory panel representing a diverse group of community stakeholders, including government representatives and staff, airport users, and local residents.

- Sign-up to receive updates via our e-news subscription program
- Check out the project website for up-to-date information
- Attend the four public events to learn more about the project
- Share your thoughts via the “Contact Project Team” tab of the website or on the comment forms at the public events

Project Website

[www.metroairports.org/General-Aviation/Lake-Elmo-Environmental-Assessment.aspx](http://www.metroairports.org/General-Aviation/Lake-Elmo-Environmental-Assessment.aspx)

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