Final Scoping Environmental Assessment Worksheet

Metropolitan Airports Commission
Airlake Airport Runway Extension

Lakeville, Minnesota

February 28, 2011

ENVIRONMENTAL ASSESSMENT WORKSHEET

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. **Project Title:** Airlake Airport Runway Extension

2. **Proposer:** Metropolitan Airports Commission (MAC)
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3. **RGU:** Metropolitan Airports Commission (MAC)
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4. **Reason for EAW preparation (check one)**

   ☒ EIS scoping ☐ Mandatory EAW ☐ Citizen petition ☐ RGU discretion ☐ Proposer volunteered

If EAW or EIS is mandatory give EQB rule category subpart number and subpart name: 4410.4400, Subpart 15. Subpart Name: Airport Runway Projects.

5. **Project Location**

   County: Dakota City/Township: Eureka Township and adjacent portion of the City of Lakeville

   N ½ of Section 4, Township 113N, Range 20W
   SW ¼ of Section 3, Township 113N, Range 20W

   Attach each of the following to the EAW:
   - County map showing the general location of the project (see **Figure 5-1**)
   - U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable). (See **Figure 5-2**)
   - Site plan showing all significant project and natural features (See **Figure 5-3**)

6. Description

a. Provide a project summary of 50 words or less to be published in the *EQB Monitor*.

The Metropolitan Airports Commission proposes to construct a 902-foot extension to the existing 4,098-foot runway at the Airlake Airport in Lakeville. The runway would also be widened from 75 to 100 feet. Extension of the runway to 5,000 feet in length would require realignment of segments of Cedar Avenue and 225th Street.

b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.

The proposed project would extend the existing runway at the Airlake Airport from 4,098 feet to 5,000 feet in length. The 902-foot extension would be constructed on the southeast end of the existing runway. The full length of the runway would be reconstructed at the time of the extension and the runway would be increased from 75 to 100 feet in width. The existing safety areas would be relocated with the extended runway. The existing High Intensity Runway Lights (HIRLs) would be reinstalled on the extended and widened runway.

The existing 40-foot-wide parallel taxiway would be extended the full length of the extended runway. The existing reflectors that line the taxiway may be extended along the extended taxiway, or Medium Intensity Taxiway Lights (MITLs) would be installed along the full length of the taxiway.

The existing instrument landing system (ILS) to Runway 30 would be reinstalled on the extended runway, or the system would be upgraded and replaced. Reinstallation of the existing (or upgraded equipment) would include relocation of the glide slope antenna and the associated glide slope critical area alongside the extended runway end. It would also include relocation of the approach lighting system, the series of lights that extend 2,400 feet off of the southeast runway end. The localizer antenna on the northwest end of the runway would not be relocated.

The extended runway would reach just across the existing alignment of Cedar Avenue and the associated safety areas would encompass the intersection of Cedar Avenue with 225th Street. This would require realignment of both roadways to a location outside of the Object Free Area (OFA) of the extended runway and clear of the runway approach surface. Cedar Avenue would be reconstructed from a point approximately 0.4 mile south of 215th Street to the point where Cedar Avenue crosses the Vermillion River. The intersection with 225th Street would be reconstructed to maintain the east/west corridor through the area.

The airport improvements would not require acquisition of additional property. However, realignment of Cedar Avenue and 225th Street would require acquisition of new right-of-way.

c. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The existing 4,098-foot runway is of insufficient length to meet the minimum Federal Aviation Administration (FAA) design standards for the critical family of aircraft operating at the Airlake Airport. These standards indicate that the runway should be a minimum of 5,500 feet in length. However,

Minnesota Statutes Section 473.641 subdivision 4 prohibits the MAC from extending runway length at its minor airports beyond 5,000 feet without prior legislative authorization. Although less than the recommended 5,500-foot runway length, the proposed 5,000-foot runway would improve the safety of operations at the airport by providing a runway length as close as possible to the FAA recommended runway length. Additional description of the calculation of the recommended runway length is provided in the Draft Scoping Document and in the Airlake Airport Long-Term Comprehensive Plan (2007).

d. Are future stages of this development including development on any outlots planned or likely to happen? _ Yes X No

   If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

Future development and improvement of the Airlake Airport is described in the Long Term Comprehensive Plan (LTCP). The MAC prepared a Comprehensive Development Plan for the airport in 1989 and completed a LTCP in 1997. The LTCP was updated in 2007 and describes the existing (2005) and future (2010, 2015, 2020, and 2025) use of the airport. The forecasted use and user characteristics define the improvements necessary to maintain safe aviation operations.

The 2007 LTCP defines the need for the currently proposed runway extension. However, the document indicates the need is 10-15 years into the future. The wider runway provided by the proposed project will also contribute to the ability to lower the approach visibility minimums below one mile. It is expected that these changes would take place concurrent with the runway/taxiway extension.

The LTCP also defines the need for additional hangar storage to serve existing demand as well as the future demand of the forecasted growth in based aircraft. An existing partial parallel taxiway on the south side of the runway provides access to existing taxilanes and available area for hangar construction. This existing building area is expected to accommodate nearly all of the expected 20-year growth in based aircraft. Two smaller areas adjacent to the existing building area could be available for expansion if necessary, but no plans for expansion in these areas is currently planned.

The extended runway with improved visibility minimums and sufficient aircraft storage will provide Airlake Airport users with sufficient facilities for the foreseeable 20-year planning term. No further developments beyond those described above are currently planned. The 1989 Comprehensive Development Plan recommended construction of a crosswind runway to meet FAA recommendations for wind coverage. Improvement in available wind data now shows that the existing runway provides sufficient coverage and that the cost of a crosswind runway would outweigh the operational benefit, so the concept was dropped from consideration.

Future development surrounding the airport is expected to be industrial in the City of Lakeville and remain agricultural in Eureka Township. Development potential outside of MAC property, including that along the realigned Cedar Avenue, would not be directly affected by the proposed runway extension, nor dependent upon it.

e. Is this project a subsequent stage of an earlier project? __ Yes X No

   If yes, briefly describe the past development, timeline and any past environmental review.

The airport was originally a private airfield constructed, owned and operated by Hitchcock Industries as part of the Airlake Industrial Park. The airfield originally consisted of a 5,000-foot bituminous runway

with Fixed Base Operator (FBO) facility and hangar storage. It was originally constructed to serve the industrial park, but became a privately owned / public use facility open not just to users of the industrial park, but to all aircraft that could operate there.

The Airlake Airport was purchased by the MAC in 1981 in response to the Federal Aviation Administration (FAA) program to improve the reliever airport system and the safety at major hub airports (Minneapolis – St. Paul International Airport (MS)) by providing a training facility for conducting instrument approaches for the Twin Cities Area at an airport other than MSP to serve the southern area of the Twin Cities.

After purchase by the MAC, the Airlake Airport runway was rehabilitated and the thresholds displaced to the existing 4,098 feet to establish the required approaches and safety areas to FAA standards. Additional hangar areas were constructed, an Instrument Landing System (ILS) installed, and the partial parallel taxiway extended to the full runway length. The south building area was prepared for construction of hangars in 1999. Construction of the existing partial parallel taxiway and taxilanes will provide for 70 to 80 additional aircraft hangars.

References: *Metropolitan Airports Commission, 2007. Airlake Airport (LVN) Draft Long Term Comprehensive Plan.*

7. Project magnitude data

Total Project Area (acres) Approximately 120 acres
Number of Residential Units: Unattached none Attached none Maximum units per building N/A
Commercial/Industrial/Institutional Building Area (gross floor space): none

Indicate area of specific uses (in square feet):

Office	N/A	Manufacturing	N/A
Retail	N/A	Other Industrial	N/A
Warehouse	N/A	Institutional	N/A
Light Industrial	N/A	Agricultural	N/A

Other Commercial (specify) N/A
Building height N/A If over 2 stories, compare to heights of nearby buildings N/A

No structures would be constructed with this project. Some small FAA facility support buildings associated with the electronic navigation system (Instrument Landing System) may require relocation or reconstruction as a result of the runway extension and approach lighting shift. No hangar construction would be associated with the project.

Proposed Treatment of Topic in EIS:

This topic is not relevant. The EIS will not include a separate discussion of the area project disturbance. The area of disturbance related to specific issues (i.e., wildlife habitat) will be discussed in the appropriate impact assessment of each issue.

8. **Permits and approvals required.** List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure.

Table 8-1
Summary of Permits and Approvals

Unit of Government	Type of Application or Approval	Status
Federal		
Federal Aviation Administration	Environmental Assessment	To be conducted jointly with State EIS
Federal Aviation Administration	Airport Layout Plan (ALP) Grant Funding	To Be Obtained
Federal Aviation Administration	Construction Safety Plan approval	To Be Obtained
Federal Aviation Administration	Land Release approval	To Bo Obtained, if necessary
U.S. Army Corps of Engineers	Section 404 Permit	To Be Obtained
State		
Minnesota Pollution Control Agency	NPDES Construction Permit	To Be Obtained
Minnesota Pollution Control Agency	Section 401 Water Quality Certification	To Be Obtained
Minnesota Pollution Control Agency	Multi-Sector General Permit Update	To Be Obtained
Minnesota Department of Natural Resources	Public Waters Work Permit	To Be Obtained
State Historic Preservation Office	Historic Property and Cultural Resources Review	To Be Obtained
Local		
Eureka Township	Minnesota Wetland Conservation Act	To Be Obtained
Vermillion River Watershed Joint Powers Organization	Grading and erosion control, and storm water treatment permits	To Be Obtained
Dakota County Highway Department	Cedar Avenue approval	To Be Obtained

Proposed Treatment of Topic in EIS:

This topic is minor. The EIS will identify project-related permits and approvals in association with the impact assessment of each issue, as appropriate.

9. **Land use.** Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

Current land Use

Land use on the site consists of developed areas for aviation use and open space maintained by mowing. The area of the airport has been under aviation use since 1966. Those areas not required for aviation use are leased for agricultural use. A small former gravel pit located near a large wetland complex in the southeastern portion of the airport property has been operated by local law enforcement agencies as a shooting range.

Land use surrounding the airport is primarily agricultural as shown on **Figure 9-1**. Bachman's Nursery operates a large nursery operation southeast of the airport. The area immediately north of the airport (the southern boundary of Lakeville) is under industrial use. The nearest residential uses north of the

airport are located to the northwest north of 215th Street (County Road 70). The nearest residential uses south of the airport include several farmsteads along 225th Street.

Transportation corridors in the immediate area include Cedar Avenue (County Road 23) on the east, 225th Street to the south and Highview Avenue to the west. County Road 70 (215th Street) is north of the adjacent industrial area. Within the project area, Cedar Avenue is a two-lane, undivided, rural section with asphalt shoulders. It is an arterial roadway and major traffic corridor serving Lakeville and Apple Valley. 225th Street is a two-lane gravel roadway with no shoulders. It primarily serves rural residences and agricultural facilities, such as Bachman's production plots but is an important direct east/west route.

The Minneapolis Northfield & Southern (MN&S) railway runs along the west property boundary of the airport. The MN&S was purchased by the Soo Line Railroad in the 1970s; the Soo Line was bought by Canadian Pacific (CP) Railway in the 1990s and Progressive Railroad leases the track from CP. The Airlake Industrial Park is the primary base of operation for Progressive Rail that uses the MN&S railway to serve its industrial customers in Lakeville. Use of the railway includes daily interchange of approximately 30 rail cars between the Industrial Park and the City of Northfield. Use of the railway to the north is limited by a railroad bridge over the Minnesota River in Savage. The bridge cannot support rail traffic, so that section of track is limited to storage of rail cars.

Adjacent Land Use Compatibility

Land use compatibility with airport use is primarily associated with noise impacts from airport operations or safety issues related to development off the ends of runways. Roadways and other linear transportation features in safety areas can also be considered incompatible and must provide sufficient approach clearance.

The proposed runway extension would be constructed entirely within existing airport property. However, the runway extension would extend the Runway Protection Zone (RPZ) to the southeast to encompass MAC-owned agricultural land surrounding a large wetland and along the wooded floodplain of the Vermillion River. A small former gravel pit is also located within the RPZ. The Cedar Avenue and 225th Street realignments would be constructed primarily through agricultural areas.

Existing noise at the airport is consistent with FAA and Metropolitan Council guidelines and does not adversely affect the limited development around the airport. The proposed runway extension would not increase noise impacts to any sensitive land uses (residential, church, school, etc.) including the Wat Lao Buddhist Temple located south of the intersection of Cedar Avenue and 225th Street.

The limited development within the Runway Protection Zone (RPZ) and model Mn/DOT Safety Zones (Zone A and Zone B) is compatible with airport use. The proposed runway extension would result in relocation of these safety zones beyond the end of the extended runway, but would encompass only agricultural areas (Bachman's) and would not include any incompatible uses (see **Figure 9-2**).

Future development along the Cedar Avenue corridor east of the airport is expected to include industrial uses similar to those north of the Airport. These uses would be compatible with continued and growing operations at the Airlake Airport. No incompatible land uses are allowed by current zoning or are anticipated by the comprehensive planning.

Potential Environmental Hazards from Past Land Use

Several gas and petroleum pipelines cross the airport property. These include a 24" and 16" natural gas pipe line operated by Northern Natural Gas that runs east/west and crosses the runway at the mid-point. Four other utilities run approximately north/south and cross the existing runway near the eastern terminus. These lines include an 8" gas pipeline, 12" petroleum pipeline, 6" petroleum pipeline operated by William's Brothers, and an 18" crude oil pipeline operated by Koch Pipeline Company. All of the gas and petroleum pipelines currently cross beneath the existing runway. Extension of the runway does not require utility coordination related to gas or petroleum pipelines. Coordination with the pipeline owners will be required to verify the pipeline locations and ensure compatibility of the pipeline with the widened runway.

A review of several environmental record sources was completed to obtain information regarding any known hazardous materials or environmental waste impacts on and adjacent to the Airlake Airport. Numerous tank sites are recorded in the industrial developments north of the airport. Several spills were recorded south of the airport and outside of the project limits, but none are recorded within the existing boundary of the Airlake Airport or within the potential roadway corridors of the Proposed Action.

There is a shooting range located in the southeastern portion of the MAC property in a small former gravel pit. The range has been operated by the City of Lakeville Police and Dakota County Sheriff Departments. There is no known contamination at the property, but use as a firing range suggests potential for lead contamination in the soils. None of the project alternatives would result in disturbance of soils within or near the shooting range. The law enforcement agencies have indicated that they will no longer use the site and are in the process of closing the range. The City of Lakeville and Dakota County are working cooperatively to assess for any contamination and will implement proper remediation practices at the site. Remediation is to be accomplished to residential levels to minimize the potential for contamination of the surrounding area, including runoff to the Vermillion River.

Proposed Treatment of Topic in EIS:

The topic of land use compatibility is minor, but will be discussed briefly in the EIS using the same information as in the EAW. Additional description about the state model airport zoning restrictions will also be included. The EIS will discuss necessary precautions to be taken at intersections with existing pipelines. Although not related to or affected by the Proposed Action, the EIS will include discussion of the closure and remediation of the shooting range, including the results of testing and the extent and success of the remediation.

10. Cover types. Estimate the acreage of the site with each of the following cover types before and after development. **If Before and After totals are not equal, explain why**.

The extent of the proposed project area includes the limits of airport property and the proposed road realignment corridors (see **Figure 10-1**). The cover types for the runway project and the roadway realignments have been calculated separately.

Cover Types for the Runway Extension

The area of the proposed runway extension consists of 466 acres made up of that portion of the airport property east of the MN&S railway, excluding the proposed limits of the future realigned road rights-of-way. Although the area is quite large, land use changes from the runway extension are primarily conversion of lawn/landscaping (including mowed and maintained areas surrounding the airfield facilities) and agricultural land into impervious surface for the runway improvements. The forested area

along the Vermillion River is expected to be at sufficient distance and elevation to avoid the need to clear or trim trees with the RPZ. Land use within the RPZ will not change.

Table 10-1
Cover Type Changes resulting from the Runway Extension

	Before	After		Before	After
Types 1-8 wetlands	27.2	27.2	Lawn/landscaping	132.4	152.5
Wooded/forest	2.6	2.6	Impervious surfaces[1]	86.0	85.4
Brush/grassland	0.0	0.0	Storm water features[2]	0	0
Cropland	217.0	197.5	Other (gravel pit)	0.8	0.8
			Total (acres)	466.0	466.0

[1] The difference in the area of impervious surface includes an increase in 5.1 acres from the runway/taxiway extension and a decrease in 5.7 acres from the removal of the existing Cedar Avenue and 225th Street pavements.

[2] Existing and future stormwater features are included in the lawn/landscaping calculations because the area of future facilities are estimated until project design provides additional information.

Cover Types for the Cedar Avenue and 225th Street Realignments

The proposed Cedar Avenue and 225th Street realignments would occur both within and outside of airport property limits. The roadway corridors would be located in areas outside of those affected by the proposed runway extension but within the RPZ and other portions of airport property. Where the roadway alignments intersect airport property, changes in cover have been attributed to the roadway because the proposed aviation project would not result in any change in land cover. The cover changes that would result from the roadway realignment are described below and are in addition to, and do not duplicate, the changes attributed to the runway extension.

The realignment of Cedar Avenue would consist of construction of 4,900 linear feet of new roadway within a 180-foot right of way. Nearly all of the Cedar Avenue realignment would occur within areas of agricultural use, but would cross the unnamed tributary of the Vermillion River south of the airport.

The realignment of 225th Street would consist of construction of 5,000 linear feet of new roadway within a 60-foot right-of-way. The roadway realignment would occur primarily in areas of agricultural use. The alignment has been selected to avoid impacts to wetlands.

The calculations of changes in cover types have been estimated using the maximum proposed roadway length and a project corridor 100 feet wide for each roadway. This gives a total project area for the roadways of approximately 25 acres.

Table 10-2
Cover Type Changes resulting from the Cedar Avenue and 225th Street Realignments

	Before	After		Before	After
Types 1-8 wetlands	0.6	0.6	Lawn/landscaping[1]	0.5	16.2
Wooded/forest	0.0	0.0	Impervious surfaces	2.7	8.4
Brush/grassland	0.0	0.0	Storm water features[2]	0.0	0.0
Cropland	21.4	0.0	Other	0.0	0.0
			Total	25.2	25.2

[1] Lawn/landscaping "after" includes right of way area outside of the paved surface of the roadway.
[2] Storm water features to be included with the new roadways are unknown, but are assumed to be within the right-of-way and are therefore included in the lawn/landscaping calculations. The area of future facilities are estimated until project design provides additional information

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed in the EIS using updated information from preliminary project design. Discussion of cover type changes will be provided in association with the impact assessment of each issue, as appropriate, and will include description of conversion of existing land cover types that would result from project implementation specific to sensitive or protected cover types, including wetlands. The area of future storm water facilities will be defined in the storm water treatment discussion in the EIS and will be based on preliminary project design. The need for any tree clearing or tree trimming within the new RPZ will be determined and potential impacts to the Vermillion River evaluated.

11. Fish, wildlife and ecologically sensitive resources

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

Fish Resources
The project area contains several fish resources including the Vermillion River and an unnamed tributary approximately ½ mile south of the airport and the south tributary of South Creek, which crosses through the airport (see **Figure 11-1**). All of these have been designated as Trout Streams by the Minnesota Department of Natural Resources. All are managed by the Vermillion River Watershed Joint Powers Agreement. The Vermillion River and unnamed tributary are perennial streams and occur within a narrow wooded floodplain. The south tributary of South Creek is an intermittent stream that flows through the airport, conveyed by culverts under the existing runway and taxiway. The intermittent flow makes the tributary of South Creek a seasonally important fishery. All of these streams flow to the east and ultimately to the Mississippi River.

Although the proposed project would extend the runway toward the Vermillion River, the extension would result in no direct impacts to the river. Most of the surface runoff on the airport property is northward toward the south tributary of South Creek as shown on **Figure 11-2**.

Widening of the runway would require extending the culverts that allow the south tributary of South Creek to pass through the airport. The additional impervious and culvert length could result in fisheries impacts to the south tributary of South Creek. However, impacts are likely limited as the stream is intermittent and only a seasonal fishery resource.

The realignment of Cedar Avenue would avoid a new crossing of the Vermillion River, but could require a new or widened crossing of the unnamed tributary. Culverts and bridges can be considered impacts to fisheries as they have the potential to lead to loss of habitat, be barriers to movement, and be potential sources of erosion. Proper design of crossings is necessary to minimize these impacts. Because these resources are also trout streams, impacts related to nutrient loading and thermal pollution can have greater significance than would be present in warm-water streams. Compliance with the storm water treatment standards of the Vermillion River Watershed Joint Powers Organization, which encourage infiltration and minimize discharge, will reduce the risks of nutrient and thermal impacts to fisheries resources. The proposed project would also comply with added best management practice requirements assigned by the Minnesota Pollution Control Agency Construction Stormwater Permit for discharge to trout streams.

Cumulative Effects. Cumulative effects to the designated trout streams and fish could result from changes in water quality or quantity due to project construction. These issues are addressed in Items 12 and 17.

Proposed Treatment of Topic in EIS:
This topic is potentially significant and information beyond what is in the EAW will be included in the EIS. The EIS will acquire fisheries data for the streams and identify specific species of concern. The EIS will quantify the quantity and quality of storm water runoff and analyze the impacts that may occur to fisheries from these discharges.

Wildlife Resources
The project area is dominated by agricultural land uses, which limits the quality and diversity of wildlife habitats. Wildlife expected to be present include white tailed deer, raccoon, red fox, pheasant, and a variety of songbirds and small mammals. The habitat along the Vermillion River is an exception, and contains a variety of wooded, riparian, and wetland habitats. The Vermillion River corridor provides passage for a variety of wildlife species throughout the project area, and is the highest quality habitat within the project area. The Vermillion River corridor would be expected to have greater species richness due to greater habitat diversity.

The proposed project would impact primarily agricultural areas, and would avoid alteration of the higher quality habitat along the Vermillion River and tributaries. Extension of the Runway Protection Zone over the Vermillion River would result, but would be a change in designation and would not result in a physical change to the landscape.

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary.

b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial waterbird nesting colonies or regionally rare plant communities on or near the site? X Yes _No

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the DNR Natural Heritage and Nongame Research program has been contacted give the correspondence reference number: SEH License Agreement - LA532. Describe measures to minimize or avoid adverse impacts.

A search of the Minnesota Department of Natural Resources (MNDNR)Natural Heritage Information System database revealed two occurrences of rare natural features within one mile of the project area: the Blanding's turtle (*Emydoidea blandingii*), is a state-listed Threatened species, and the rattlesnake master (*Eryngium yuccifolium*) is a state-listed Special Concern plant species associated with mesic prairies.

The recorded rattlesnake master (*Eryngium yuccifolium*) sighting is outside of the airport property and away from areas that would be disturbed by the proposed project. A reconnaissance visit to the area on May 20, 2009 failed to identify any native prairie remnants along either Cedar Avenue or 225th Street. Based on the lack of habitat, it is expected that no impacts to rattlesnake master would occur.

Blanding's turtles are associated with wetlands and also utilize adjacent uplands for nesting. The areas adjacent to the Vermillion River and its tributaries include habitat for the Blanding's turtle. Although there have been no recorded sightings on the airport property or in the area that would be disturbed by the proposed project, there is the potential for Blanding's turtle to occur in the area of the Vermillion River and the proposed Cedar Avenue realignment.

In response to this potential, Best Management Practices would be implemented during construction to avoid direct impacts to Blanding's turtles. A Blanding's turtle fact sheet prepared by the MNDNR would be included in the project specifications to notify the construction contractor about the potential to encounter the species and what actions to be taken should a Blanding's turtle be identified. Construction schedules would also be set in consideration of typical turtle breeding and nesting periods.

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary.

12. **Physical impacts on water resources.** Will the project involve the physical or hydrologic alteration— dredging, filling, stream diversion, outfall structure, diking, and impoundment — of any surface waters such as a lake, pond, wetland, stream or drainage ditch? X Yes __No

If yes, identify water resource affected and give the DNR Protected Waters Inventory number(s) if the water resources affected are on the PWI. Describe alternatives considered and proposed mitigation measures to minimize impacts.

Streams
Three streams shown on the 7.5 minute USGS quadrangle map intersect the limits of the proposed project (see **Figure 11-1**). These streams are also identified as Public Waters under the projection of the MNDNR and the Vermillion River Watershed Joint Powers Organization (VRWJPO). The following table summarizes the potentially-impacted water resources. Alterations to protected watercourses would require a MNDNR Public Waters Work Permit (PWWP) for any work performed below the Ordinary High Water Level (OHWL). The VRWJPO also requires permitting for work within the beds of these waters.

Table 12-1 Watercourses within the Project Area						
Name	**Stream Type**	**Location**	**Impact**	**Protected Watercourse**	**Trout stream**	**Impaired Water**
South tributary of South Creek	Intermittent	Through LVN, including under runway. North side of project area	Runway widening and Cedar Ave relocation	Yes	Yes	No
Unnamed Tributary of Vermillion River	Perennial	South of 225th Street	Cedar Ave relocation	Yes	Yes	No
Vermillion River	Perennial	South of 225th Street	Cedar Ave relocation	Yes	Yes	Yes (fecal coliform, turbidity)

The proposed widening of the runway would require extending the culvert that routes the south tributary of South Creek through the airport property. The south tributary of South Creek is intermittent, but has been identified as a Public Water and a trout stream by the MNDNR and as a Principal Connector Aquatic Corridor by the VRWJPO. The runway extension would place a portion of the Vermillion River and some associated wetlands within the Runway Protection Zone, but would not result in any physical changes to the resources.

Realignment of Cedar Avenue would include construction at or near the existing crossings over Public Waters, at the Vermillion River, at an unnamed tributary of the Vermillion River, and at the south tributary of South Creek. All three of these resources are identified as Public Waters and Trout Streams by the MNDNR. The south tributary of South Creek and the tributary of the Vermillion River are identified as Principal Connector Aquatic Corridors by the VRWJPO. The Vermillion River is identified as an Upper Reach Conservation Corridor by the VRWJPO. Wetland impacts may occur with these water crossings, most notably those associated with the Vermillion River, which has areas of floodplain adjacent to the main channels.

The Vermillion River is listed by the Minnesota Pollution Control Agency and United States Environmental Protection Agency as an Impaired Water due to fecal coliform and turbidity, which affects Aquatic Recreation and Aquatic Life. A Total Maximum Daily Load (TMDL) analysis has not been completed, but has a goal of initiation in 2012. Use of Best Management Practices is expected to avoid contributions to that impairment from implementation of the proposed project.

Wetlands

Several areas of wetland habitat are present within the project area, primarily associated with the riparian habitats of the streams (See **Figure 12-1**). An 11-acre, Type 6 shrub-carr wetland area lies within airport property north of the Vermillion River. This wetland is supported by runoff from the surrounding land and flows south into the Vermillion River. The proposed runway extension would not result in any direct impacts to wetland habitat.

The realignment of Cedar Avenue would avoid a new crossing of the Vermillion River, but could require a new or widened crossing of the unnamed tributary. From available information, it is believed that impacts to wetlands associated with that tributary would be avoided. Delineation of wetland habitat in the project area will be compared to the preliminary project design to identify measures to avoid and minimize impacts to wetlands and determine the potential extent of any wetland impact.

Wetlands in the project area are regulated by the U.S. Army Corps of Engineers at the federal level and the Minnesota Board of Water and Soil Resources, Minnesota Department of Natural Resources, and the Minnesota Pollution Control Agency at the state level. The City of Lakeville and Eureka Township have accepted responsibility for the administration of the Minnesota Wetland Conservation Act of 1991 within their respective boundaries. Impacts to wetlands would require permits from one or more of these agencies.

Cumulative Effects. Cumulative effects to the designated trout streams and fish could result from changes in water quality or quantity due to project construction.

Proposed Treatment of Topic in EIS:
This topic is potentially significant and information beyond what is in the EAW will be included in the EIS. The EIS will further define the streams and wetlands and quantify impacts based on preferred alternatives. Wetland delineations will be performed to characterize wetland types, functions and values. A wetland replacement concept plan will also be described in the EIS.

13. **Water use.** Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? ____Yes _X_No

    If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.

The Minnesota County Well Index identifies one well within the project area, a well located at the Airlake Airport (Unique Well No. 235585). The MAC has record of 15 wells currently (2010) at the Airlake Airport. All of the wells are owned and maintained by airport tenants (those owning hangars on leased sites).

The proposed project will not require new wells or changes in public water supply. If temporary water appropriation is needed for construction, permit applications will be submitted.

The proposed project includes a low vulnerability portion of the Drinking Water Supply Management area (DWSSMA) for the City of Lakeville. Project construction activities will include Best Management Practices to avoid contamination of the drinking water supply.

Proposed Treatment of Topic in EIS:
This topic is minor but Best Management Practices (BMPs) to avoid contamination of the drinking water supply during construction will be addressed in the EIS.

14. Water-related land use management district. Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? _X_ Yes __No
If yes, identify the district and discuss project compatibility with district land use restrictions.

The project is located within the Vermillion River Watershed Joint Powers Organization (VRWJPO), which has established buffer standards for the Vermillion River and its tributaries. The protection goals of the VRWJPO include protection and improvement of buffers along the Vermillion River and its tributaries to protect the world-class trout fishery.

The Vermillion River and the southern tributary of South Creek have 100-year designated floodplains defined by the Federal Emergency Management Association as shown on **Figure 14-1**. The extension of the runway would extend the Runway Protection Zone over floodplain of the Vermillion River, but would not require alteration or changes to the floodplain. The Cedar Avenue realignment would cross floodplain areas along the Vermillion River and the south tributary of South Creek. These crossings could result in fill material within the floodplain. If floodplain fill is identified during project design, the fill would require mitigation in accordance with VRWJPO requirements.

None of the waterways are designated wild or scenic rivers.

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary. Additional details quantifying floodplain impacts and on how floodplain mitigation will be achieved will be discussed.

15. Water surface use. Will the project change the number or type of watercraft on any water body?
__Yes X No

If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

The project will not change the number or type of watercraft on any water body.

Proposed Treatment of Topic in EIS:
This topic is minor and will not be discussed in the EIS.

16. Erosion and sedimentation. Give the acreage to be graded or excavated and the cubic yards of soil to be moved: 27 acres; TBD cubic yards. Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.

The runway extension would disturb approximately seven acres of land, and would not occur on areas of the site that are steep or highly erodible. The Cedar Avenue and 225th Street relocations would require grading of up to 20 acres. The roadway relocations would occur on soils that are not highly erodible or on steep slopes, but will cross three trout streams and one impaired water and will require additional erosion control to ensure protection of those sensitive resources.

Erosion and sediment control measures would be implemented to protect wetlands, lakes, ponds, and streams from erosion and sedimentation. Because this project would disturb one or more acres of land area, coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for

Construction Activity #MN R100001 would be required from the Minnesota Pollution Control Agency to ensure that potential damage from erosion and sedimentation would not adversely impact water quality. This permit requires both temporary directives used primarily during construction, as well as permanent requirements. A Storm Water Pollution Prevention Plan (SWPPP) would be developed in accordance with NPDES requirements as part of the final design plans. Below is a summary of the typical requirements and techniques that could be applied. The SWPPP would specifically identify which Best Management Practices (BMPs) will be used and what purpose they will serve in minimizing potential short-term and long-term erosion and sedimentation that could adversely affect water quality.

- Use of horizontal slope grading and other techniques to reduce erosion (construction phasing).
- Implementation of temporary protection controls to protect exposed soil areas, such as temporary wood chip cover, seeding and mulching, silt fences, and stabilization of steep slopes.
- Ditch bottoms must be stabilized within 100 feet of any water of the state.
- Prior to any connection of a pipe or outfall structure to a water of the state, temporary energy dissipation methods to control the outfall water must be implemented.
- Sediment control BMPs will be in -place on all down gradient perimeters before up gradient construction disturbance begins.
- There will be minimization of vehicle soil tracking onto paved surfaces.
- Temporary sedimentation basins must be provided prior to any runoff leaving the construction sites.

Proposed Treatment of Topic in EIS:
Significant impacts are not expected, but information beyond what is in the EAW will be included in the EIS. Additional information will include specific requirements for erosion control to allow discharge to an impaired water, including special requirements related to the NPDES and SWPPP.

17. Water quality: surface water runoff

a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any storm water pollution prevention plans.

Storm water management on the airport includes treatment of runoff in grassed swales and by overland flow. Storm water treatment ponds are not used because of the attractant to waterfowl and other wildlife and the related hazards to aviation. All runoff from developed portions of the airport flows generally to the north and to the South tributary of South Creek.

The MAC maintains a Storm Water Pollution Prevention Plan (SWPPP) and a Spill Prevention Control and Countermeasures Plan (SPCCP) for MAC-owned facilities at the airport. The MAC has a general storm water discharge permit from the Minnesota Pollution Control Agency. In addition, the MAC maintains a Water management Plan for the airport that includes best management practices for protecting storm water conveyances, wetlands, and groundwater.

Runoff from the extended runway would continue to be treated in grassed swales and by overland flow. All runoff from the extended runway would continue to be directed to the South tributary of South Creek. Relocation of Cedar Avenue would require an additional plan to treat runoff and the preparation of a SWPPP. The MAC will coordinate with Dakota County in the preparation of the SWPPP for the roadway reconstruction.

Chemicals used in deicing activities at airports are of concern because of the potential effects on receiving water bodies. Airport tenants and/or FBOs conduct little aircraft deicing at the Airlake Airport. Most aircraft can be stored inside heated hangars prior to takeoff or cannot fly when icing conditions exist, which eliminates the need for glycol use. The MAC may use some minor amounts of urea on the runway during icing conditions. The amount used varies annually. Salt is not used due to its corrosive nature. Sand is used on a limited basis, depending on weather conditions. Given these minor uses, the potential impact on water quality from the airport is minimal.

Salt and sand is used in winter on Cedar Avenue. The amount of sand and salt used is not expected to change with the Cedar Avenue realignment.

The proposed storm water management system would be designed to meet the requirements of the Minnesota Pollution Control Agency (MPCA) National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for Construction Activity and the Vermillion River Watershed. The Vermillion River Watershed Joint Powers Organization requires "Development that creates one acre or more of new impervious surface must incorporate volume control practices into the design sufficient to hold the runoff volume for the 2-year 24-hour storm at pre-development conditions." The Minnesota Stormwater Manual would be used to select the most appropriate BMPs based on the ability to effectively treat and manage storm water runoff in accordance with regulatory agency requirements.

The increased volume of runoff that would result from the proposed project would be managed using grassed swales, overland flow, and other best management practices that avoid ponding of water that could result in wildlife use and aviation hazards.

b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.

Currently, runoff from the runway is routed to adjacent ditches where it infiltrates or it is routed to the south tributary of South Creek. Approximately 85 percent of the current airport property contributes runoff in this direction. The remainder of the airport property is primarily agricultural, and storm water infiltrates, or is routed to the south and into the Vermillion River through existing ditches or drain tile. Cedar Avenue is currently a rural section, and storm water runoff is directed to ditches along the roadside, which flow toward either the Vermillion River, or the south tributary of South Creek. The Vermillion River flows into Pool 3 of the Mississippi River

Cumulative Effects. Cumulative effects to the designated trout streams and fish could result from changes in water quality or quantity due to project construction.

Proposed Treatment of Topic in EIS:

This topic is potentially significant and information beyond what is in the EAW will be included in the EIS. The EIS will describe the treatment and management of surface water runoff throughout the airport, including treatment of runoff from adjacent properties (i.e., industrial park). Additional information will include a comparison of the quantity and quality of surface water runoff before and after the project. Additional information on permanent controls to treat and manage surface water runoff and protections of the downstream resources will be included in the EIS.

18. Water quality: wastewaters

a. Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.

The Airlake Airport lies outside the city limits of Lakeville and, for the most part, does not have sanitary sewer or water service. The MAC maintenance building and the FBO are connected to the Lakeville city sewer and water system and stubs for both the watermain and the sanitary sewer were extended to the south under the runway for future connection. Treatment of sanitary wastes is provided by the Lakeville Wastewater Treatment Plant.

There are 15 remaining wells and six holding tank septic systems owned and maintained by aircraft storage tenants. Tenants with illegal sandpoint wells or drain fields are required to remove or abandon them consistent with Minnesota Department of Health rules. Consistent with MAC 1988 Sanitary Sewer and Water Policy, no new wells or holding tanks have been allowed at the airport.

b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies, and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.

The sanitary sewage produced by the airport is processed by the City of Lakeville at its wastewater treatment facility. Six airport storage tenants maintain holding tank systems that collect waste from their individual hangars. These systems hold waste until it is pumped and removed for treatment. The proposed project would not result in any increase in volume or change in character of sanitary wastes.

c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary.

This project will not increase the amount of waste discharged.

d. If the project requires disposal of liquid animal manure, describe disposal technique and location and discuss capacity to handle the volume and composition of manure. Identify any improvements necessary. Describe any required setbacks for land disposal systems.

The project will not require the disposal of animal wastes.

Proposed Treatment of Topic in EIS:

This topic is minor, and will not be discussed further in the EIS.

19. Geologic hazards and soil conditions

a. Approximate depth (in feet) to ground water: 10 minimum 25 average to bedrock: 51 minimum 100 average

Describe any of the following geologic site hazards to ground water and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measures to avoid or minimize environmental problems due to any of these hazards.

Surficial geology in the project area is composed of Quaternary deposits of sand, loamy sand, and gravel. These sediments are Mixed Outwash from the Des Moines Lobe deposits, although there is a

considerable admixture of rocks typical of the Superior Lobe. The main channel of the Vermillion River is associated with Floodplain Alluvium, which is poorly bedded, but well-sorted sediments deposited by modern streams during flood stage. Alluvium is chiefly sand in the Vermillion River drainage.

Bedrock geology is composed of the Prairie Du Chien Group, which includes dolostone of the Shakopee Formation in the upper half to two-thirds. This upper layer is thin bedded and sandy or oolitic, and contains thin beds of sandstone and chert. Oneota Dolomite composes the lower portion of the unit. Oneota Dolomite is massive to thick bedded and is generally not oolitic or sandy, except for the transitional zone just above the Jordan Sandstone. Based on information from the Minnesota Department of Health Well and Boring Records, bedrock composed of shale and limerock was observed at 72 feet below ground surface in MDN Unique well number 235585 which is located at the FBO.

Based on information from the Minnesota Department of Health Well and Boring Records, groundwater was observed at 17 feet below ground surface in well number 235585. The Quaternary Hydrogeology Map for Dakota County indicates a water table elevation between 925 and 950 feet above sea level. Ground elevations in the project area are around elevation 955, which would indicate a depth to groundwater between 5-30 feet below ground surface.

Although the Prairie Du Chien Formation has karst qualities, there are no known sinkholes, shallow limestone formations, or karst conditions observed on, or adjacent to the site according to the Minnesota Department of Natural Resource's Karst Features Database. If any of these features are encountered on the site, appropriate action would be taken to mitigate impacts, such as soil erosion, storm water management, and groundwater protection.

b. Describe the soils on the site, giving NRCS (SCS) classifications, if known. Discuss soil granularity and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.

The Soil Survey for Dakota County (Web Soil Survey 2.2, National Cooperative Soil Survey, Version 6, August 21, 2008) provides soils information with regards to the project. The following table lists the soils found within the study area with their family or higher taxonomic class. **Figure 19-1** depicts the soil types across the project area.

Table 19-1
Soil Classification Taxonomy

Soil Symbol	Soil Name	Family or Higher Taxonomic Classification	Drainage Class	Hydric Soil
2B	Ostrander loam, 1 to 6 percent slopes	Fine-loamy, mixed, superactive, mesic Typic Hapludolls	Well Drained	Not Hydric
2C	Ostrander loam, 6 to 12 percent slopes	Fine-loamy, mixed, superactive, mesic Typic Hapludolls	Well Drained	Not Hydric
39B	Wadena loam, 2 to 6 percent slopes	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludolls	Well Drained	Not Hydric
41B	Estherville sandy loam, 2 to 6 percent slopes	Sandy, mixed, mesic Typic Hapludolls	Somewhat Excessively Drained	Not Hydric
98	Colo silt loam, occasionally flooded	Fine-silty, mixed, superactive, mesic Cumulic Endoaquolls	Poorly Drained	Hydric

Table 19-1 Soil Classification Taxonomy				
129	Cylinder loam	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Aquic Hapludolls	Somewhat Poorly Drained	Not Hydric
208	Kato silty clay loam	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Endoaquolls	Poorly Drained	Hydric
213B	Klinger silt loam, 1 to 5 percent slopes	Fine-silty, mixed, superactive, mesic Aquic Hapludolls	Somewhat Poorly Drained	Not Hydric
250	Kennebec silt loam	Fine-silty, mixed, superactive, mesic Cumulic Hapludolls	Moderately Well Drained	Not Hydric
252	Marshan silty clay loam	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Endoaquolls	Poorly Drained	Hydric
255	Mayer silt loam	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, calcareous, mesic Typic Endoaquolls	Poorly Drained	Hydric
318	Mayer loam, swales	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, calcareous, mesic Typic Endoaquolls	Very Poorly Drained	Hydric
378	Maxfield silty clay loam	Fine-silty, mixed, superactive, mesic Typic Endoaquolls	Poorly Drained	Hydric
411A	Waukegan silt loam, 0 to 1 percent slopes	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludolls	Well Drained	Not Hydric
411B	Waukegan silt loam, 1 to 6 percent slopes	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludolls	Well Drained	Not Hydric
415B	Kanaranzi loam, 2 to 6 percent slopes	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludolls	Well Drained	Not Hydric
539	Palms muck	Loamy, mixed, euic, mesic Terric Haplosaprists	Very Poorly Drained	Hydric
857A	Urban land-Waukegan complex, 0 to 1 percent slopes	Not Classified	N/A	Unknown
1029	Pits, gravel	Not Classified	N/A	Unknown

The project area is dominated by loam soils, which includes some silty loam and sandy loam classifications. Below the surface, most of the area is underlain by sands and gravels. Soils along the Vermillion River and the tributary to South Creek are poorly or somewhat poorly drained hydric soils, but most of the project area is composed of well-drained, nonhydric soils.

The “Sensitivity of the Prairie Du Chien-Jordan Aquifer to Pollution” map (Geologic Atlas Dakota County, Minnesota, 1990) identifies the project area as having high sensitivity to groundwater contamination. This is due to the soils being chiefly sand and gravel with minimal drift protection and no bedrock confining layer. A high sensitivity rating indicates that water-borne surface contaminants can reach the aquifer within weeks to years.

Groundwater contamination would be prevented during construction by following the Storm Water Pollution Prevention Plan and having spill kits available. Following construction, all site runoff will be routed through vegetated swales or other storm water treatment system.

References

Balaban, N.H. and Hobbs, Howard C. “Geologic Atlas Dakota County, Minnesota. Atlas C-6” Minnesota Geological Survey. 1990.

Proposed Treatment of Topic in EIS:
This topic is minor and will not be discussed in the EIS.

20. Solid wastes, hazardous wastes, storage tanks

a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.

Solid Wastes
Solid wastes generated at the airport consist of typical mixed municipal waste and are collected by a licensed hauler and removed to a permitted disposal facility. The proposed project would not result in any changes to the amount or character of solid wastes generated at the airport. Temporary waste and construction debris would be generated during construction activities. It is anticipated that these would consist of typical construction materials, which will be disposed of by the contractor in an approved facility.

Hazardous Wastes
Hazardous wastes at the Airport are limited to those generated by routine vehicle maintenance. The proposed project would not result in any changes to the amount or character of wastes generated at the Airport.

b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission.

Construction of the proposed project would include the use of asphalts and heavy oils. Construction vehicles would require gasoline, diesel fuel, antifreeze, and lubricants. If these products are used, they will be disposed of in accordance with city, county, state, and federal regulations.

c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.

There are a total of four underground storage tanks (USTs) used for fuel storage at the airport. The airport FBO has two 12,000-gallon underground storage tanks for aviation fuel. The MAC has two 1,000-gallon USTs, one for diesel and one for unleaded fuel for MAC-owned and -operated vehicles. The MAC has one 250-gallon aboveground storage tank (AST) used for airport storage tenant used oil. An FBO subtenant has one 250-gallon AST for used oil.

The proposed project would not result in any changes to the fueling system at the airport. Temporary fuel storage tanks may be present during construction but would be removed upon completion.

Prior to construction, the contractor will develop an Emergency Response Plan. This plan would provide instructions for actions to be taken should an accidental release of hazardous materials occur. For this

project, this would most likely be petroleum from construction vehicles or machinery. The plan would include plans for locating spill kits, and instructions for notifying the Minnesota State Duty Officer (1-800-422-0798 or 651-649-5451) for any reportable spills.

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary.

21. Traffic. Parking spaces added N/A Existing spaces (if project involves expansion) N/A Estimated total average daily traffic generated No change in daily traffic Estimated maximum peak hour traffic generated (if known) and time of occurrence No change in daily traffic

Provide an estimate of the impact on traffic congestion on affected roads and describe any traffic improvements necessary. If the project is within the Twin Cities metropolitan area, discuss its impact on the regional transportation system.

That segment of Cedar Avenue along the east side of the airport carries a daily traffic volume of approximately 9,800 vehicles (Dakota County, 2008). The proposed project will not result in any increase in traffic. However, future growth in airport operations would result in a small increase in vehicular traffic at the airport. The Twin Cities Metropolitan Council's Regional Traffic Model predicts traffic on Cedar Avenue will increase to approximately 10,900 vehicles per day by 2030, considering anticipated growth.

Construction on the airport and related to the Cedar Avenue and 225th Street realignments would result in temporary increases in traffic during construction. Access to the airport and along Cedar Avenue would be maintained throughout construction.

References: Dakota County, 2008. Environmental Assessment for Cedar Avenue Corridor Transitway, 138th Street to County Highway 70.

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary. The EIS will include discussion of the proposed and ultimate roadway cross sections with respect to anticipated traffic through the project area. The EIS will also discuss the additional travel time and potential additional fuel usage that could result from the additional length of Cedar Avenue over time in comparison to the benefits of the runway extension.

22. Vehicle-related air emissions. Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts. Note: If the project involves 500 or more parking spaces, consult *EAW Guidelines* about whether a detailed air quality analysis is needed.

The proposed project is located in an attainment area for ozone, particulate matter (PM10, PM2.5), nitrogen dioxide, sulfur oxides, and lead and is within the Twin Cities maintenance area for carbon monoxide (CO). For airports, CO is a main pollutant of concern from an air quality standpoint).

Federal Aviation Administration (FAA) guidelines state that a comparison of the proposed project's resulting air quality with National Ambient Air Quality Standards (NAAQS) should be considered if pollutant levels are likely to exceed the NAAQS. The level of general aviation and corporate operations at General Aviation (GA) airports like Airlake is a primary indicator of the potential for air quality

concerns. Although GA aircraft emit moderate amounts of CO while they are taxiing, current and anticipated future operation levels and airport ground delays would not cause CO emissions to approach the NAAQS. Actions that would not increase airport capacity, lead to increased congestion of roadways or airfields, or relocate aircraft or vehicular activity closer to sensitive receptors are not likely to exceed the NAAQS for CO.

FAA guidance in Order 1050.1E, Section 2.4b, states that procedures for air quality analyses are provided in the FAA report "Air Quality Procedures for Civilian Airports and Air Force Bases". Figure 1 in that report states that a NAAQS assessment is required if a project at an airport would have forecasted activity of more 180,000 annual GA operations. The most aggressive operational forecast defined in the airport's Long Term Comprehensive Plan (MAC, 2007) predicts up to 133,461 annual GA operations by 2025). This is considerably less than the cited thresholds suggesting that these levels would not result in exceedance of the NAAQS.

Proposed Treatment of Topic in EIS:
This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary.

23. Stationary source air emissions. Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing) and any greenhouse gases (such as carbon dioxide, methane, nitrous oxide) and ozone-depleting chemicals (chloro-fluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.

There are no stationary air emission sources associated with the Airlake Airport or the proposed project.

Proposed Treatment of Topic in EIS:
This topic is not relevant and will not be addressed in the EIS.

24. Odors noise and dust. Will the project generate odors, noise or dust during construction or during operation? X Yes __No

If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

Odor
Operation of the airport does not generate odors. Odors generated during construction would be minor and would be mitigated by maintaining construction equipment to the manufactures specifications and using appropriate fuel additives.

Dust
Operation of the airport does not generate dust. Fugitive dust generated by heavy equipment during construction would be minimized by enforcing Best Management Practices during construction including minimizing the periods and extent of exposed and/or graded areas, watering disturbed areas during periods of high winds or high levels of construction activity, and minimizing the use of vehicles on unpaved surfaces.

Noise

A noise analysis for the Airlake Airport was conducted as part of the June 2008 Airlake Airport Long Term Comprehensive Plan Update which included the future runway extension and associated forecast operations. The noise analysis determined that existing and planned land uses around the Airlake Airport are compatible with the runway extension project considering airport noise impacts as outlined in both the Federal Aviation Administration land use guidelines and the Metropolitan Council land use guidelines. The 2025 preferred alternative forecast 75 and 70 DNL contours and the majority of the 65 DNL contour are contained on airport property. A small area of industrial/utility land use is within the 65 DNL contour to the northwest of the airport. The 60 DNL contour encompasses small areas of agricultural, undeveloped, industrial/utility, and retail/commercial land uses adjacent to airport property. The 55 DNL noise contour encompasses eight single-family homes northwest of the airport east of Dodd Road immediately north of County Road 70 and five single-family homes northwest of the airport west of Dodd Road immediately north of County Road 70 on Independence Avenue, 214th Street and Idaho Avenue. Therefore it is anticipated that operation of the airport will be consistent with all Federal, State, and Metropolitan Council land use and noise guidelines.

Similarly, noise generated by construction would not be expected to adversely affect uses on or adjacent to the airport. Noise generated during construction would be minimized by enforcing Best Management Practices including restrictions on work hours and maintenance of mufflers on equipment.

Proposed Treatment of Topic in EIS:

This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW with updates or revisions to current conditions as necessary.

25. Nearby resources. Are any of the following resources on or in proximity to the site?

a. Archaeological, historical or architectural resources? ___ Yes _X_No
b. Prime or unique farmlands or land within an agricultural preserve? X Yes _No
c. Designated parks, recreation areas or trails? ___ Yes _X_No
d. Scenic views and vistas? __Yes X No
e. Other unique resources? __Yes X No

If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.

Historical/Archaeological/Architectural Resources

There are no known cultural resources on or near the project area.

Proposed Treatment of Topic in EIS:

This topic is minor, but will be discussed briefly in the EIS using information in addition to that in the EAW. Review of readily available resources will be made to identify any known cultural resources in the project area. Coordination with the State Historic Preservation Office (SHPO) will be conducted to confirm the avoidance of impacts to resources listed or eligible for listing on the National Register of Historic Places.

Prime or unique farmlands

Most of the soils in the project area are identified as Prime Farmland or Prime Farmland, if drained (see **Figure 25-1**). However, construction of the proposed project will not remove substantial areas of agricultural use from prime farmland soils. The area of the runway extension is within prime farmland soils, but is not under agricultural production. The area of the instrument landing system relocation and

the southern segment of the Cedar Avenue realignment would remove some areas from agricultural use on MAC-owned property. The northern segment of the Cedar Avenue realignment would also transect areas of prime farmland that are already zoned for and expected to change from agricultural to industrial use. The 225th Street realignment would also transect prime farmland soils, but agricultural use of those areas would be expected to remain.

Proposed Treatment of Topic in EIS:

This topic is minor, but will be discussed briefly in the EIS using information in addition to that in the EAW. Consultation with the U.S. Department of Agriculture Natural Resources Conservation Service will be conducted to determine if the Farmland Protection Policy Act applies to the proposed project and to evaluate the significance of the conversion of the prime and important farmland soils.

Recreation Areas

There are no designated recreational areas within or in the vicinity of the proposed project area. However, the Metropolitan Council 2030 Regional Parks Policy Plan identifies two regional trail search corridors in the vicinity of the project area, the Lake Marion Greenway Regional Trail and the Chub Creek Greenway Regional Trail. These trails could follow tributaries of the Vermillion River and be developed in the project vicinity.

Proposed Treatment of Topic in EIS:

This topic is currently not relevant but will be addressed in the EIS if the alignment of these or other trails or recreation areas are identified in or near the project area.

Scenic views or vistas

There are no designated scenic views or vistas associated with the property in the vicinity of the proposed project area.

Proposed Treatment of Topic in EIS:

This topic is not relevant and will not be addressed in the EIS.

26. Visual impacts. Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks? _ Yes X No

If yes, explain.

The project proposes to relocate approach lights for the runway extension. The existing approach lighting system would be reinstalled off the end of the extended runway. The lights would not be placed nearer any residential use. Therefore they will not change or create adverse visual impacts or glare outside of the immediate area.

Proposed Treatment of Topic in EIS:

This topic is minor, but will be discussed briefly in the EIS using the same information as in the EAW.

27. Compatibility with plans and land use regulations. Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency? X Yes __No.

If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

Long Term Comprehensive Plan
The Long Term Comprehensive Plan (LTCP) for the Airlake Airport was published in June 2007. It is a 20-year planning document, extending from 2005 to 2025 and describes the anticipated growth and development needs of the airport over that period. The proposed project is prescribed by and consistent with the LTCP.

Metropolitan Council Regional 2030 Transportation Policy Plan

The Airlake Airport Runway and Extension project is identified as a mid-term project (2016-2020) in the MAC Capital Improvement Plan and the Aviation chapter of the Metropolitan Council's regional 2030 Transportation Policy Plan and is concistent with Metropolitan Council plans and policies.

Water Management Plan – Airlake Airport
The Water Management Plan prepared for the Airlake Airport in 1999 includes goals and objectives to maintain and develop storm water management systems to accommodate existing and proposed land use plans for the airport; preserve and use natural storage and retention areas to accommodate and improve airport storm water management; maintain or improve both surface water and groundwater quality; manage storm water runoff to confirm with watershed requirements, Met Council's Interim Strategy to Reduce Non-Point Source Pollution to All Metropolitan Water Bodies, and Minnesota Pollution Control Agency's BMPs manual; prevent and control flooding; control erosion and sedimentation; promote groundwater recharge; manage and protect wetlands in accordance with local, State, and Federal requirements; protect and enhance fish and wildlife habitat while minimizing conflicts with aircraft operations; and work cooperatively with local communities, watershed management organizations, and other governmental agencies toward a common goal of protecting water resources and improving water quality. The proposed project will include consideration of these goals and objectives as the surface water management facilities are designed and Best Management Practices employed.

Eureka Township Comprehensive Land Use Plan
The Eureka Township Comprehensive adopted in 2003 includes an Airport Overlay (AP) to avoid development of incompatible land uses. The Township is currently working to update its Comprehensive Plan. The new plan acknowledges the airport height and safety restrictions and recommends a focus on commercial and industrial land uses on land near the airport. Both of these identify the Township's goals to maintain land use compatibility.

Lakeville Comprehensive Land Use Plan
The Lakeville Comprehensive Land Use Plan (2008) states that the Airlake Airport is an amenity to the Lakeville community, benefiting economic development of existing and planned commercial and industrial areas. It is a goal of the City that the Airlake Airport be developed to serve the needs of the region and community and as an incentive for economic development. The City expects the airport to remain a reliever, but intends to promote the airport to attract high-quality industrial development. The comprehensive plan recognizes the need to regulate land uses within and surrounding the Airlake Airport to ensure they are compatible with its function.

Proposed Treatment of Topic in EIS:

This topic is minor, but will be discussed briefly in the EIS in conjunction with land use and zoning.

28. Impact on infrastructure and public services. Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? X Yes __No.

If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)

The extension of the runway would require the realignment of Cedar Avenue and a segment of 225th Street. Besides these realignments, there would be no change in infrastructure or public services.

Proposed Treatment of Topic in EIS:

This topic is potentially significant. The roadway realignments are included in the description of the proposed project and will be evaluated as a connected action in the EIS.

29. Cumulative impacts. Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement. Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative impacts. Describe the nature of the cumulative impacts and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to cumulative impacts *(or discuss each cumulative impact under appropriate item(s) elsewhere on this form).*

Of the potential effects of the proposed project, including the realignment of Cedar Avenue and 225th Street in addition to the runway extension and instrument landing system relocation, the primary potential issue of concern is related to the world-class fishery in the Vermillion River and protection of the water quality and thermal characteristics that support that fishery. Although not directly related to the airport expansion, development of commercial and industrial uses along Cedar Avenue, and the realigned Cedar Avenue, are also of concern to the Vermillion River Watershed Joint Power Organization because of the potential changes in surface water runoff and the resulting affects to the Vermillion River.

Proposed Treatment of Topic in EIS:

This topic is potentially significant. The EIS will include discussion of the potential cumulative effects to the Vermillion River and the associated fishery from the anticipated area development over the 20-year period corresponding to the 20-year airport planning period.

30. Other potential environmental impacts. If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

Environmental impacts outside of those previously addressed in this EAW are not anticipated.

31. Summary of issues. *Do not complete this section if the EAW is being done for EIS scoping; instead, address relevant issues in the draft Scoping Decision document, which must accompany the EAW.* List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

This section has not been completed because this document has been prepared for EIS scoping. Please refer to the Scoping Decision Document for a discussion of relevant issues.

RGU CERTIFICATION. The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9b and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

_____ _____

RGU Official Date

Environmental Assessment Worksheet was prepared by the staff of the Environmental Quality Board at the Administration Department. For additional information, worksheets or for *EAW Guidelines*, contact: Environmental Quality Board, 658 Cedar St., St. Paul, MN 55155, 651-296-8253, or http://www.eqb.state.mn.us

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