MEADOW LAKE AIRPORT

Environmental Assessment

Meadow Lake Airport
Establishment of Turf Runway

FINAL Report
May 2013

Prepared for:

U.S. Department of Transportation
Federal Aviation Administration

This Environmental Assessment becomes a federal document when evaluated, signed, and dated by Responsible FAA Official.

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Responsible FAA Official

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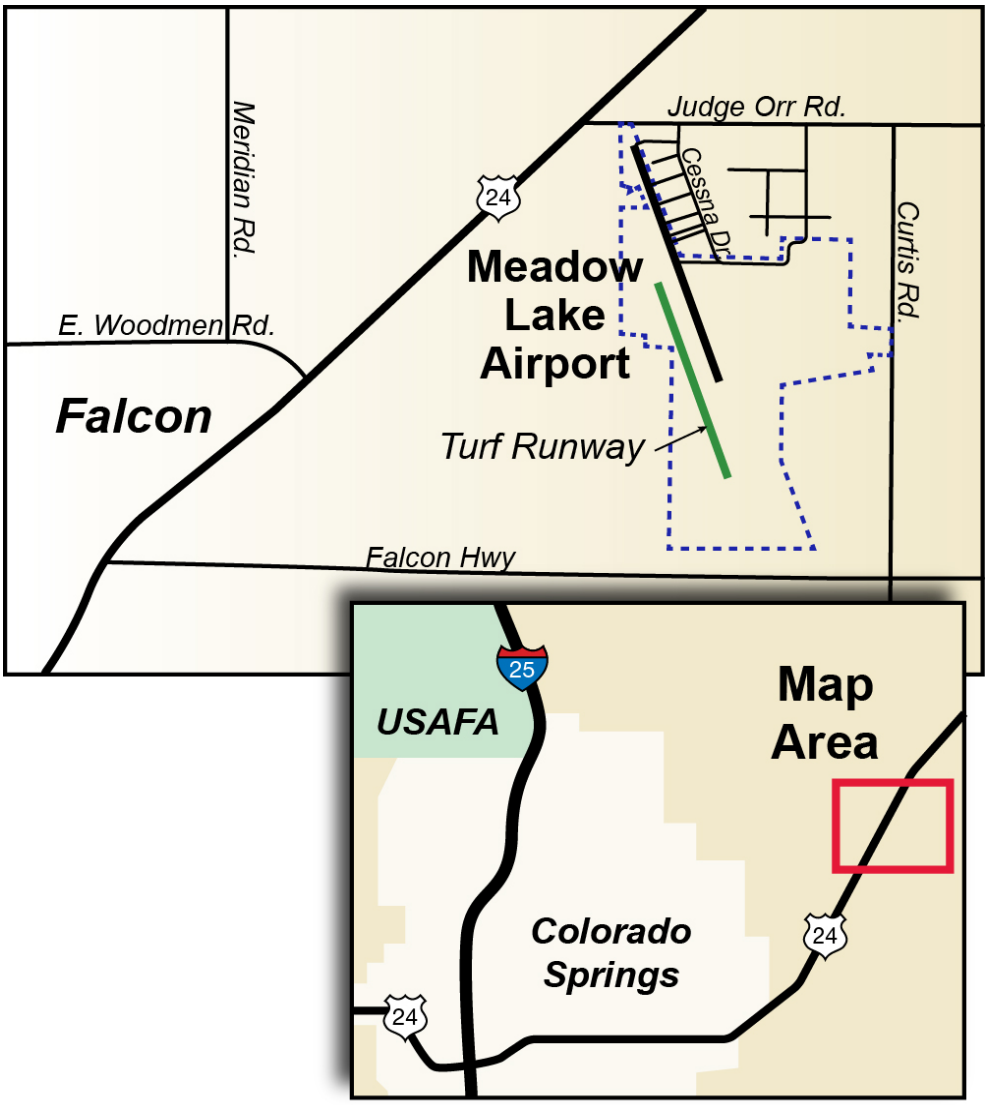
1.0 INTRODUCTION

The Meadow Lake Airport (FLY) is a privately owned airport located approximately ten miles north of the city of Colorado Springs near the town of Falcon, Colorado. FLY is situated along State Highway 24 as displayed in **Figure 1-1**. In 1989 FLY was designated as a General Aviation (GA) reliever airport to the Colorado Springs Municipal Airport.

Currently, FLY serves as a busy GA airport that has maintained more than 50,000 annual operations for the last twenty years. Operations have increased in the last five years to more than 100,000 annual operations. Additionally, FLY maintains a significant number of based aircraft, which has ranged from 160 to more than 400 aircraft in the last twenty years. FLY is owned and operated by the Meadow Lake Airport Association (MLAA), a 501.c4 non-profit corporation. MLAA is managed by a board of seven Directors.

FIGURE 1-1 - AIRPORT LOCATION MAP



Source: Jviation, Inc.

1.1 Background and History of the Proposed Action

The Federal Aviation Administration (FAA) Form 7480-1, to alter the airport and add a new Turf Runway, was submitted by FLY to the FAA in early 2011. The Letter of Determination stating FAA's no objection subject to several provision was dated August 8th, 2011. Among the provisions was the need to complete an Environmental Assessment (EA) prior to formal activation/opening of the runway. As such, this EA will meet the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures*.

1.2 Existing Airport Facilities and Environs

FLY sits at an elevation of 6,874 feet, approximately two miles northeast of Falcon, in El Paso County. The population of El Paso County in 2010 was approximately 627,096 residents. The number of rural residents residing within a mile of the airport is estimated to be around 250. Uniquely, a majority of the local residents surrounding the airport are avid aviation enthusiasts and pilots. Most of them operate "through-the-fence" at the airport, which allows the residents to maintain open access to the airport from their hangars and homes.

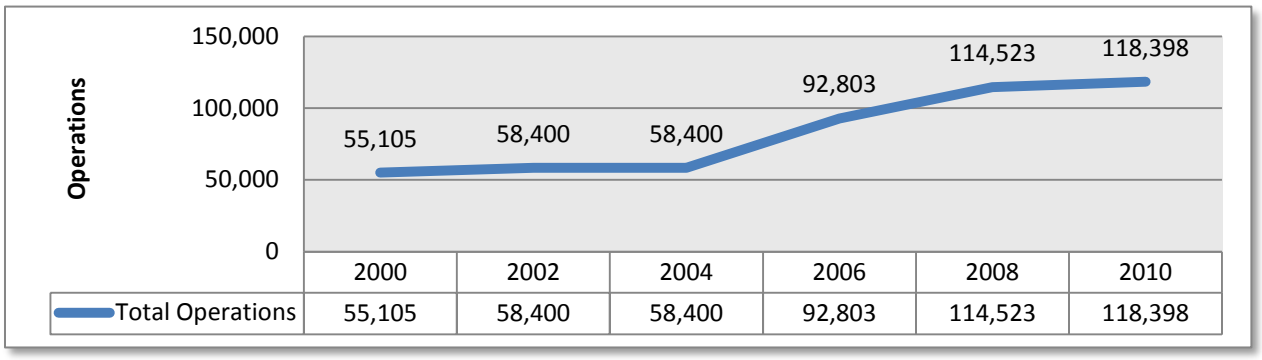
The airport encompasses 753 acres of land. The "through-the-fence" businesses adjacent to the airport offer a variety of services, including hangar rental, maintenance facilities, fuel, and flight instruction. Public access to the airport is via US Highway 24 east out of Colorado Springs, exit on Blue Gill drive.

The airport's current layout includes three runways; Runway 15/33 the primary paved runway; Runway 8/26, the crosswind runway; and Runway N/S, a glider runway. Runway N/S is currently open; however, it will be closed upon the approval of this EA and the establishment of the new Turf Runway.

1.3 Aviation Activity

The operational activity for FLY was derived from the FAA's Terminal Area Forecast (TAF) for the year 2010. The TAF shows total operations at FLY have continually increased since the FAA started to track operations in 2000, as depicted in **Figure 1-2**. Overall, FLY operations have increased by 215 percent from 2000 to 2010. This continuous growth is somewhat unusual in comparison to the national trend of other GA airports throughout the United States. The recent economic recession has had a significant impact on many airports throughout the nation and has resulted in a reduction in GA operations. It should be noted that the airport management believes the actual airport operations may be significantly less than what is reported by the TAF due to a decrease in Air Force training flights and the economic recession.

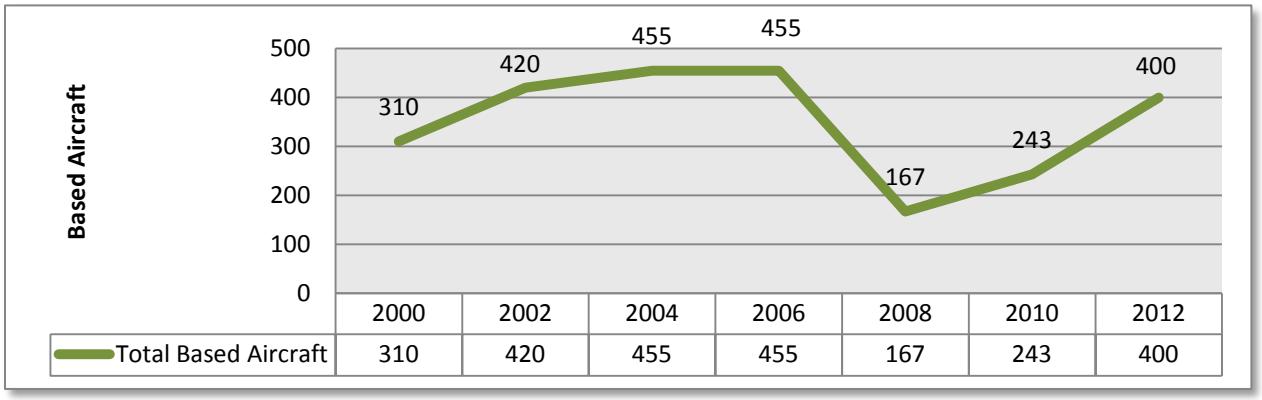
FIGURE 1-2 - FLY HISTORICAL OPERATIONS



Source: FLY Airport records, and FAA Terminal Area Forecasts, 2010

Because of a change in reporting methodology, the historical published based aircraft information at FLY is skewed. **Figure 1-3** depicts the change in published based aircraft from 2000 to 2010. Based aircraft from 2000 to 2006 represent airport management estimates. Starting in 2008, based aircraft counts came from N number (tail number) verification. Numbers in 2008 and 2010 were incomplete counts. A more accurate accounting of N numbers in 2012 resulted in approximately 400 known based aircraft at FLY. Of the total based aircraft at the airport, the airport management estimates that approximately two thirds of the aircraft are currently flyable. This 2012 count has not been published by the FAA at this time.

FIGURE 1-3 - FLY HISTORIC BASED AIRCRAFT



Source: FLY Airport records, FAA Terminal Area Forecasts, FAA National Based Aircraft Inventory Program, 2012

1.4 Requested Federal Actions

MLAA is the project sponsor for the Proposed Action, and the FAA is the federal lead agency for the Proposed Action. MLAA is requesting a federal action for environmental approval of the implementation of a Turf Runway. This EA is prepared in accordance to the guidelines provided in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures*, FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Action*, and the FAA *Environmental Desk Reference for Airport Actions*.

The establishment of the Turf Runway is the proposed action and the topic of this EA, as depicted in **Figure 1-4**.

GRAPHIC SCALE
300 0 300 600
(IN FEET)

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MEADOW LAKE AIRPORT
PROPOSED ACTION

DATE: APRIL 25, 2013

FIGURE 1-4

2.0 PURPOSE AND NEED

The Purpose and Need of this Environmental Assessment (EA) discusses the problem facing the proponent (the "Need"), the purpose of the action (the "Purpose"), and the proposed timeframe for implementing the action. The following sections describe, in detail, the Purpose and Need of the Proposed Action.

2.1 PURPOSE

The primary purpose of the proposed Turf Runway is to replace the existing glider runway. The existing glider runway's distance from the primary Runway 15/33 poses a safety concern as it is significantly closer than the FAA's recommended separation. The Turf Runway provides an increased safe operational area for glider aircraft (towed and launched) and propeller driven aircraft primarily being used for pilot training on unpaved surfaces. Additionally, the new Turf Runway would allow for more operational flexibility and increased space both on the ground and in the air, which better supports existing glider operations.

2.2 NEED

The need for the proposed Turf Runway is to accommodate the growing and very active glider community at FLY. The glider operations at the airport have increased significantly in the recent past and the airport anticipates continued growth. The establishment of the Turf Runway would allow for the glider and unpaved training operations to function separately from the very active GA traffic on the primary runway while still providing a safe and compatible operating area.

2.3 FORECAST

This EA is supplemented with an aviation forecast to support the Purpose and Need of the Proposed Action per FAA Advisory Circular (AC) 150/5070-6B: *Airport Master Plans.* Aviation forecasts should be: realistic, based upon the latest available data, reflect current conditions at the airport, and provide adequate justification for airport planning and development. It is important to note that forecasts are approximations of future activity based on historical information and current trends.

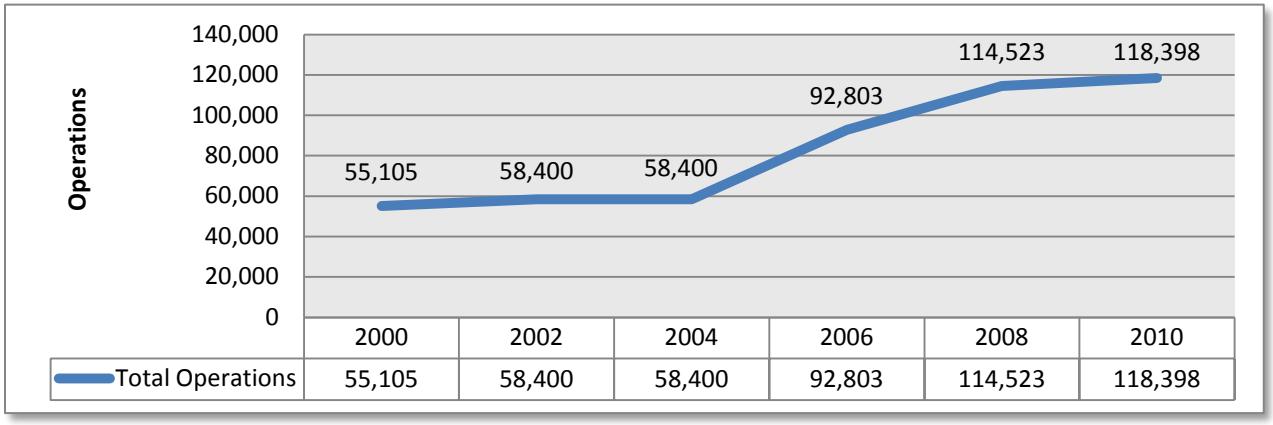
2.3.1 Forecasting Aviation Activity Measures and Metrics

2.3.1.1 Airport Operations

One of the key factors in a typical forecast is the type and level of aviation demand generated at an airport, which is usually measured by aircraft operations. An operation is defined as either a take-off or landing of aircraft. From such operational information, the runway and taxiway requirements for a specific airport can be developed.

The most accurate data source for many GA airports that do not have a local Air Traffic Control Tower (ATCT) is the FAA's Terminal Area Forecast (TAF) which keeps a record of historical data and offers projections for future growth. **Figure 2-1** depicts the historic operational information for FLY from 2000 to 2010. As mentioned previously, it should be noted that the airport management believes the operational numbers presented in the TAF may be significantly higher than the actual operations.

FIGURE 2-1 - FLY HISTORICAL OPERATIONS



Source: FLY Airport records, and FAA Terminal Area Forecasts, 2010

2.3.1.2 Demographic and Economic Factors

The demand for aviation is largely a function of demographic and economic activity, given there is a causal relationship. When preparing forecasts, socioeconomic data, demographics, disposable income, and geographic attributes should all be considered. Socioeconomic data was collected from Woods & Poole Economics, an independent consulting firm that specializes in long-term economic and demographic projections. Woods & Poole has a database for every county in the United States, with forecasts through 2040 for more than 900 variables.

According to Woods & Poole, the Western Region, which consists of the Southwest, Rocky Mountain (including Colorado), and Far West Regions, will experience the most growth of any region in the nation over the next 30 years. The population in the Western Region is forecasted to increase by 45.9 million between 2008 and 2040. By the year 2040, 36 percent of all Americans are expected to reside in the west, up from 24 percent in 1970 and 33 percent in 2008. It is also expected to generate 29.1 million jobs from 2007 to 2040, with a projected total U.S. job gain of 39 percent. Moreover, Woods & Poole specifically predicts that El Paso County, Colorado will grow between 0.92 percent and 2.25 percent annually through 2040.

2.3.2 National Aviation Forecasts

The FAA prepares a national aviation forecast each year which attempts to project commercial and GA activity levels. These activity levels, in turn, are used by the FAA as a variable to assist in determining funding needs for airports throughout the nation. One of the most commonly used forecast documents is the TAF which provides forecast information for active airports in the National Plan of Integrated Airport Systems (NPAIS). The most recent TAF is for the fiscal years 2011 through 2030. It takes into account the *FAA Aerospace Forecasts, Fiscal Years 2011-2031*.

2.3.3 Forecasting Methodologies

The forecasting methodology used to prepare the FLY operations forecast was slightly irregular when compared to typical forecast methodology because the Turf Runway will only be used by a small segment of the GA community. The proposed Turf Runway would only have a minimal affect on other aviation activity at FLY, including operations on the primary Runway 15/33 and crosswind runway 8/26.

The three most commonly used forecasting methodologies for a typical airport like FLY are: Time Series Trend Analysis, Regression Analysis, and Market Share Analysis. A Time Series Trend Analysis, also known as a Trend or Linear Analysis, uses historic patterns of activity and projects this trend into the future. Regression Analysis is a statistical technique that ties aviation demand (dependent variable), such as operations, to demographic and economic measures (independent variables), such as population and income. Market Share Analysis assumes a top-down model and uses a relationship between national, regional, and local forecasts to predict the trends at the individual airport.

Of the traditional methods, the Regression Analysis relates to the current situation at FLY more so than the other two methods as it takes into account economic and demographic aspects. However, the FAA TAF forecast growth is also available as a forecast tool. The TAF forecast for GA operations includes both business and recreational flying. FLY activity is more slanted towards recreational flying which is influenced by discretionary income. After analysis, the preferred forecast method chosen for this EA is an average of the FAA TAF forecast growth and Total Earnings Growth (Regression Analysis) because together the two forecasts reflect both the local and national growth trends.

A similar strategy was used in the forecast prepared in the Meadow Lake Airport's Airport Layout Plan (ALP) Update[1], completed in 2008. The ALP Update's forecast was developed through the use of Historical Colorado Springs and El Paso County Per Capita Personal Income (PCPI) data, which were then regressed for the forecast periods. From this the based aircraft were projected from the anticipated increase in PCPI. The forecast also took into account data from the TAF. The ALP Update's forecasted operations are depicted in **Table 2-1**.

[1] Airport Development Group, Inc., Airport Layout Plan Report, 2008.

TABLE 2-1 – 2008 ALP UPDATE FORECASTED GA OPERATIONS

Year	GA Operations
2005	91,000
2010	100,471
2015	122,474
2025	135,221

Source: Airport Development Group, Inc., Airport Layout Plan Report, 2008.

2.3.4 FLY Operations Forecast

The TAF forecasts growth at FLY to be 1.69 percent annually starting in 2011. Total Earnings growth in El Paso County is estimated to have increased 0.45 percent in 2010, with forecast growth of 1.22 percent in 2011, increasing to 2.84 percent in 2012, before stabilizing near 2.64 percent in future years. Starting in 2013 the average growth in operations at FLY is estimated at 2.13 percent annually through 2022 which is the average growth rate when comparing the TAF and the Total Earnings Growth forecast.

2.3.4.1 Operations Forecast – No Action

The growth in total operations at FLY, with no action, is projected to grow from 118,398 in 2010 to 151,284 in 2022. Glider operations would primarily occur on the existing N/S runway. Information from the probable users and airport management were used to estimate glider operation in 2012. Operations will include both winch and tow plane launches on the N/S runway, with glider landings on the N/S runway, and tow plane landings on Runway 15/33. Total glider and tow plane operations are estimated at 2,300 in 2012. Without facility improvements, glider activity is forecast to grow at the same rate as other aviation activity at FLY. Yearly forecasts without the new Turf Runway are shown in **Table 2-2.**

TABLE 2-2 - NO ACTION FORECAST

No Build								
Year	Glider Operations				Other Operations	% Change	Total Operations	% Change
	Winch	Winch % Change	Tow	Tow % Change				
2006							92,803	1.98%
2007							94,644	1.98%
2008							114,523	21.00%
2009							116,440	1.67%
2010							118,398	1.68%
2011							120,118	1.45%
2012	**300**		**2,000**		**120,551**		**122,851**	**2.28%**
2013	306	2.13%	2,043	2.13%	123,117	2.13%	125,160	1.88%
2014	313	2.13%	2,086	2.13%	125,738	2.13%	127,824	2.13%
2015	320	2.13%	2,130	2.13%	128,415	2.13%	130,545	2.13%
2016	326	2.13%	2,176	2.13%	131,148	2.13%	133,324	2.13%
2017	333	2.13%	2,222	2.13%	133,940	2.13%	136,162	2.13%
2018	340	2.13%	2,269	2.13%	136,791	2.13%	139,060	2.13%
2019	348	2.13%	2,318	2.13%	139,703	2.13%	142,020	2.13%
2020	355	2.13%	2,367	2.13%	142,676	2.13%	145,043	2.13%
2021	363	2.13%	2,417	2.13%	145,713	2.13%	148,131	2.13%
2022	**370**	**2.13%**	**2,469**	**2.13%**	**148,815**	**2.13%**	**151,284**	**2.13%**

Source: Jviation, Inc., 2012

2.3.4.2 Operations Forecast – Establishment of Turf Runway

The use of the proposed Turf Runway will be primarily by gliders and their tow planes, with occasional use by propeller driven aircraft equipped for off-pavement takeoffs and landings, i.e. bush airplanes. Operations by these bush airplanes are forecast to be primarily training and currency activities. An immediate increase in glider activity is forecast with the opening of the Turf Runway, with future growth mirroring the growth rate of other aviation activities at FLY. User input and airport management information supports a forecast doubling in glider activity in the first year of operation, i.e. 2,300 operations increasing to 4,600.

Operations by bush aircraft on the Turf Runway are forecast to move from the other airport runways and would not be an increase in overall activity. Forty based aircraft or approximately 12 percent (40 out of 338) of the based aircraft at FLY are equipped for takeoffs and landings on unpaved surfaces. The average annual operations by these aircraft are estimated to be similar to the average for other based aircraft at FLY. It is estimated that these aircraft will move 10 percent of their operations to the Turf Runway for training and currency, with future growth similar to overall activity growth at FLY. Yearly operations forecast are shown in **Table 2-3**.

TABLE 2-3 – WITH NEW TURF RUNWAY FORECAST

With Turf Runway										
Year	Glider Operations				Powered Turf Traffic		Other Airport Operations		Total Operations	
	Winch	Winch % Change	Tow	Tow % Change	Traffic	% Change	Other	% Change	Total	% Change
2007									94,644	1.98%
2008									114,523	21.00%
2009									116,440	1.67%
2010									118,398	1.68%
2011									120,118	1.45%
2012	**300**		**2,000**		**1,200**		**119,351**		**122,851**	**2.28%**
2013	600	100.00%	4,000	100.00%	1,226	2.13%	121,892	2.13%	127,717	3.96%
2014	613	2.13%	4,085	2.13%	1,252	2.13%	124,486	2.13%	130,436	2.13%
2015	626	2.13%	4,172	2.13%	1,278	2.13%	127,136	2.13%	133,213	2.13%
2016	639	2.13%	4,261	2.13%	1,306	2.13%	129,843	2.13%	136,048	2.13%
2017	653	2.13%	4,352	2.13%	1,333	2.13%	132,606	2.13%	138,944	2.13%
2018	667	2.13%	4,444	2.13%	1,362	2.13%	135,429	2.13%	141,902	2.13%
2019	681	2.13%	4,539	2.13%	1,391	2.13%	138,312	2.13%	144,922	2.13%
2020	695	2.13%	4,635	2.13%	1,420	2.13%	141,256	2.13%	148,007	2.13%
2021	710	2.13%	4,734	2.13%	1,450	2.13%	144,263	2.13%	151,158	2.13%
2022	**725**	**2.13%**	**4,835**	**2.13%**	**1,481**	**2.13%**	**147,334**	**2.13%**	**154,375**	**2.13%**

Source: Jviation, Inc., 2012

TABLE 2-4 – SUMMARY OF MEADOW LAKE FORECAST

Year	Glider Operations	Powered Turf Traffic	Other Airport Operations	Total Operations	% Change in Total Operations from 2012
2022 (No Action)	2,839	NA	148,815	151,284	23.1%
2022 (With Turf Runway)	5,560	1,481	147,334	154,375	25.7%

Source: Jviation, Inc., 2012

3.0 ALTERNATIVE ANALYSIS

The National Environmental Policy Act of 1969 (NEPA), per Section 102(2)(E), implemented by the Council on Environmental Quality (CEQ), and FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures,* requires Federal projects to evaluate and discuss the consequences of the proposed action, alternatives, and the no action alternative. It is also allowed that only the proposed action and the no action alternative be discussed when there are no unresolved conflicts concerning the evaluated environmental resources, as is the case at FLY. This Alternative Analysis section will describe the Proposed Action and the No Action Alternative, and will discuss the ability of each to meet the Purpose and Need, as described in Chapter 2.0, *Purpose and Need.*

3.1 PROPOSED ACTION

The Proposed Action is the preferred alternative as no other "action" alternatives were evaluated (FAA Order 1050.1E, paragraph 405d). The Proposed Action is the establishment of a new Turf Runway at FLY to be used primarily for glider aircraft, their tow planes, and some non-pavement landing training. The existing glider runway will be closed with the approval of this EA and establishment of the new Turf Runway. This will allow for both private and airport supported future development of the west side of the airport, while continuing to support the existing glider community.

3.2 ALTERNATIVES

In order to meet NEPA requirements, CEQ, Section 102(2)(E), this EA must evaluate both the No Action Alternative and the Proposed Action. The No Action Alternative would preserve the existing environmental condition at the airport; however, it fails to satisfy the Purpose and Need, as it leaves the airport with little opportunity to develop the west side of the airport while maintaining a runway for glider operations. As such, the establishment of the new Turf Runway is the preferred and Proposed Action.

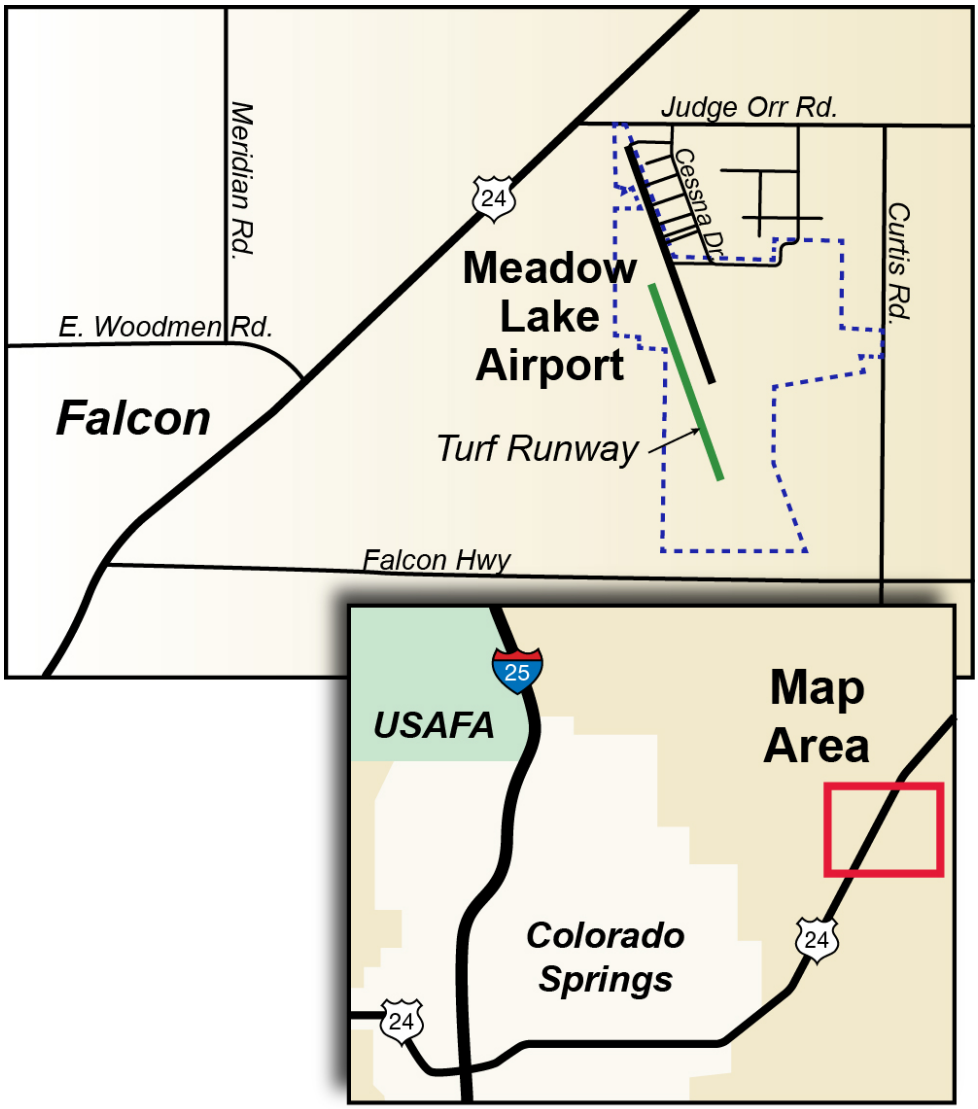
4.0 AFFECTED ENVIRONMENT

The environmental documents FAA Orders 1050.1E, *Environmental Impacts: Policies and Procedures*, and 5050.4B: *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions* require the analysis and description of the existing environmental conditions of the potentially affected geographic area. This EA will succinctly describe the existing environmental conditions at the Meadow Lake Airport (FLY).

4.1 PROJECT LOCATION AND VICINITY

FLY is located approximately ten miles north of the City of Colorado Springs near the town of Falcon, Colorado, along State Highway 24. The Proposed Action would occur at FLY as depicted in **Figure 4-1**.

FIGURE 4-1 - AIRPORT LOCATION MAP



Source: Jviation, Inc.

4.2 Existing Environmental Resources

The following environmental categories have been inventoried for existing environmental conditions.

4.2.1 Air Quality

The U.S. Environmental Protection Agency (EPA) is the oversight agency for the Clean Air Act (CAA), which, in addition to the NEPA is the predominant statute that regulates actions with the potential to affect air quality. The CAA established National Ambient Air Quality Standards (NAAQS) for six pollutants, specifically termed "criteria pollutants". The potential air quality pollutants include: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter ($PM_{2.5}$ and PM_{10}), sulfur dioxide (SO_2), and lead (Pb).

4.2.1.1 Existing Conditions

In accordance with the CAA, all areas within the State of Colorado are designated with respect to the NAAQS as being in attainment, nonattainment, maintenance, or unclassifiable. An area with air quality better than the NAAQS is designated attainment, while an area with air quality worse than the NAAQS is designated nonattainment. The airport is located in El Paso County which is designated by the EPA as being in attainment for all criteria pollutants.

4.2.2 Climate

Greenhouse Gases (GHGs) are regulated under NEPA and the Council on Environmental Quality (CEQ). GHG's include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6), as defined in Executive Order 12514 *Federal Leadership in Environmental, Energy, and Economic Performance.*

4.2.2.1 Existing Conditions

Research has shown there is a direct correlation between fuel combustion and GHG emissions. In terms of U.S. contributions, the General Accounting Office (GAO) reports that "domestic aviation contributes about 3 percent of total carbon dioxide emissions, according to EPA data," compared with other industrial sources, including the remainder of the transportation sector (20 percent) and power generation (41 percent)[2]. The International Civil Aviation Organization (ICAO) estimates that GHG emissions from aircraft account for roughly 3 percent of all anthropogenic GHG emissions globally.[3] Climate change due to GHG emissions is a global phenomenon, so the affected environment is the global climate.

[2] U.S. Government Accountability Office, *Aviation and Climate Change.* GAO Report to Congressional Committees, (2009).
[3] Alan Melrose. "European ATM and Climate Adaptation: A Scoping Study," in *ICAO Environmental Report.* (2010).

The scientific community is continuing efforts to better understand the impact of aviation emissions on the global atmosphere. The FAA is leading and participating in a number of initiatives intended to clarify the role that commercial aviation plays in GHG emissions and climate. The FAA, with support from the U.S. Global Change Research Program and its participating federal agencies (e.g., NASA, NOAA, EPA, and DOE), have developed the Aviation Climate Change Research Initiative (ACCRI) in an effort to advance scientific understanding of regional and global climate impacts of aircraft emissions. The FAA also funds the Partnership for Air Transportation Noise & Emissions Reduction (PARTNER) Center of Excellence research initiative to quantify the effects of aircraft exhaust and contrails on global and U.S. climate and atmospheric composition. Similar research topics are being examined at the international level by ICAO.[4]

4.2.3 Coastal Resources

Coastal Resources are governed by the Coastal Barriers Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990; the Coastal Zone Management Act (CZMA), as amended; and Executive Order (E.O.) 13089, Coral Reef Protection. The CBRA primarily prohibits federal financial assistance for development located within a Coastal Barrier Resources System that contains undeveloped coastal barriers along the Atlantic and Gulf coasts and the Great Lakes. The CZMA and the National Oceanic and Atmospheric Administration (NOAA) offer regulations to ensure development is consistent with approved coastal zone management programs. Finally, E.O. 13089 requires federal agencies to ensure their authorizations, funding, and actions would not degrade the conditions of coral reef ecosystems.

4.2.3.1 Existing Conditions

There are no coastal resources located in the vicinity of FLY, as it is located in Colorado, a state that does not contain any coastal resources.

4.2.4 Compatible Land Use

The compatibility of land promotes the safety, health and welfare of both airport users and surrounding neighbors by protecting airspace and ensuring appropriate use of land within and surrounding airport property boundaries. Generally speaking, noise impacts and safety generated by airports and aircraft operations are a primary consideration in land use planning around airports. Typically, development actions that may change aviation related noise impacts and land uses include fleet mix changes or the number of aircraft operations, air traffic changes, and new approaches. Noise impacts are discussed thoroughly in **Section 4.2.12**. In addition to the effects of noise on land use compatibility, the FAA requires the analysis of compatibility of land uses in the vicinity of an airport to ensure safe aircraft operations can continue, as well as the protection of defined airspace around airports like FLY.

[4] Lourdes Q. Maurice and David S. Lee. *Chapter* 5: *Aviation Impacts on Climate.* Final Report of the International Civil Aviation Organization (lCAO) Committee on Aviation and Environmental Protection (CAEP) Workshop. October 29th-November 2nd 2007, Montreal. http://www.icao.int/icaonetlcnfrstlCAEP/CAEP SG_20082/docs/Caep8_SG2_ WPI0.pdf

4.2.4.1 Existing Conditions

The zoning surrounding FLY is maintained by El Paso County and depicted in **Figure 4-2**. The zoning designations, as defined in the El Paso County Land Development Code, Chapter 3 and 4, surrounding the airport are:

- **A-35: Agricultural District**. The A-35 zoning district is a 35 acre district primarily intended to accommodate rural communities and lifestyles, including the conservation of farming, ranching and agricultural resources.

- **RR-2.5: Residential Rural District**. The RR-2.5 zoning district is a 2.5 acre district intended to accommodate low density, rural, single family residential development.

- **RR-5: Residential Rural District.** The RR-5 zoning district is a 5 acre district intended to accommodate low density, rural, single-family residential development.

- **R-4 (Obsolete)**: The R-4 district is established to provide more flexibility and latitude of design; to provide for a greater variety of principal and accessory uses in the development of land; to address the advantages resultant from technological change; and, to encourage initiative and creative development of parks, recreation areas, and open space.

- **PUD: Planned Unit Development**. The PUD district is a versatile zoning mechanism to encourage innovative and creative design and to facilitate a mix of uses, including residential, business, commercial, industrial, recreational, open space, and other selected secondary uses.

- **GA-O: General Aviation Overlay District**. The GA-O district is intended to apply to land within and surrounding airports to protect those airports using non-instrument runways for GA purposes.

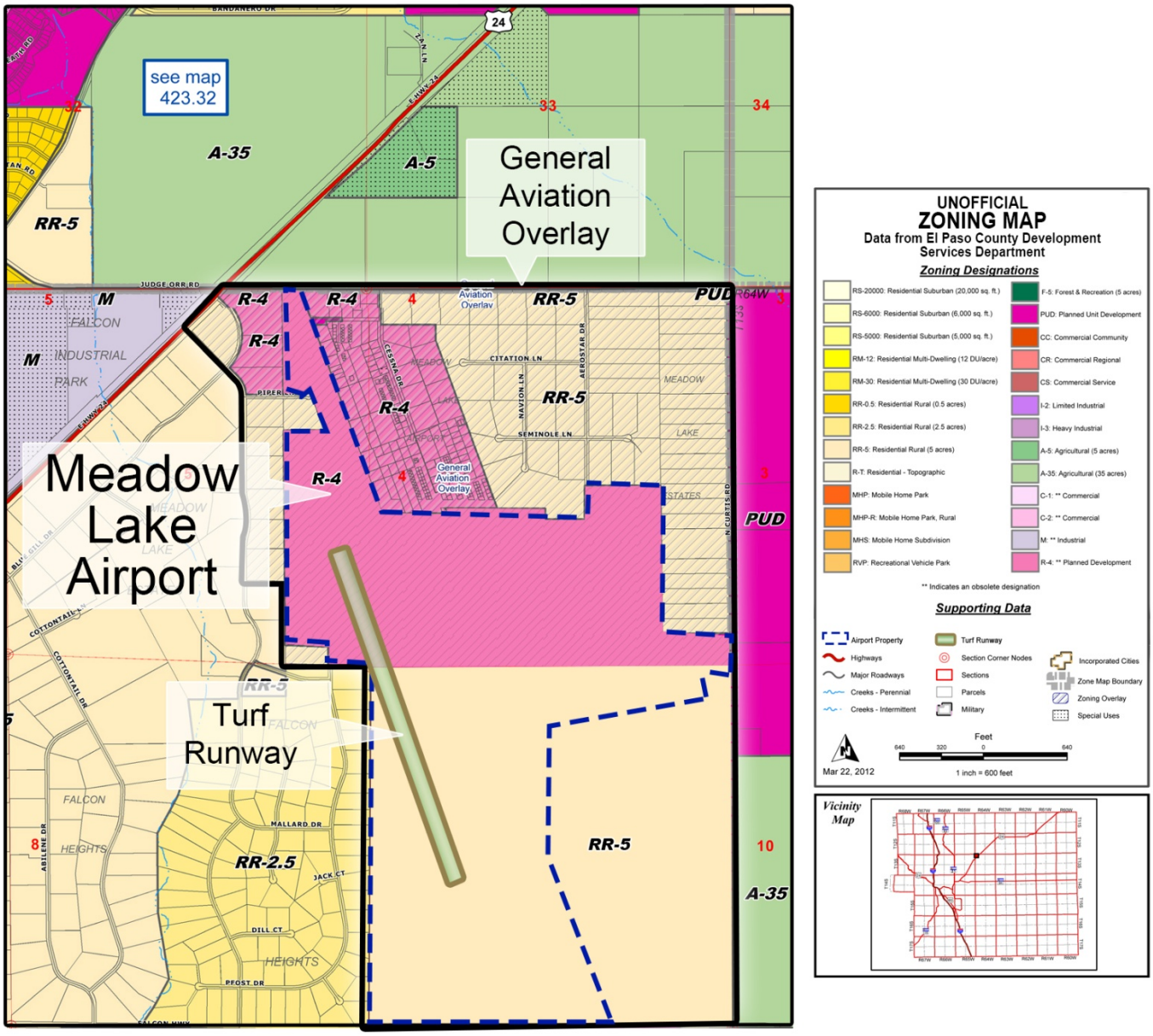
    - **Use Restrictions:** No building or land may be used and no building may be erected, converted, or structurally altered except in accordance with the following requirements.

        - **Meadow Lake Airport GA-O Uses**. The following uses are allowed in the non-residential area of the FLY included in the GA-O district, in addition to those uses allowed in the underlying base zoning district:

            - Aero club facilities
            - Aircraft maintenance facilities
            - Airfields and landing strips
            - Airport terminals, related supporting facilities
            - Aviation control towers
            - Hangars and tie-down facilities
            - Navigation instruments and aids
            - Aviation related businesses

Currently the airport is zoned as R4 and RR5 with a GAO District encompassing the entire airport, as shown in **Figure 4-2**. Typically residential zoning designations in the vicinity of an airport have the potential to be incompatible with aviation uses; however, these areas are also included in the General Aviation Overlay District, which maintains compatible land use on and around the airport.

FIGURE 4-2 - EL PASO COUNTY ZONING



Source: El Paso County, Development Services Department, *Zoning Designations*, 2012

4.2.5 Department of Transportation Act: Section 4(f)

The Department of Transportation (DOT) Act, Section 4(f) provisions commonly govern impacts in this category; however, it was recodified and renumbered as Section 303(c) of 49 U.S.C, which provides that the Secretary of Transportation will not approve any program or project that requires the use of any public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land from a historic site of national, state, or local significance, as determined by the officials having jurisdiction thereof, unless there is no feasible and prudent alternative to the use of such land and such program, and the project includes all possible planning to minimize harm resulting from the use. This section will continue to refer to Section 4(f) as the criteria referenced.

4.2.5.1 Existing Conditions

FLY is located in an area that is primarily considered a rural area. **Table 4-1** depicts the Section 4(f) properties located within a 5 mile radius of FLY. The nearest identified Section 4(f) property is the Falcon Day Care, located approximately 0.4 miles southwest of the airport.

TABLE 4-1 - 4(F) PROPERTIES

Site	Type	Distance to Airport
Falcon Day Care	School	0.4 miles
Jews for Jesus	Church	1.2 miles
Family of Faith Lutheran Church	Church	1.2 miles
Antler Creek Golf Course	Golf Course	1.3 miles
Woodman Hills Elementary School	School	1.3 miles
Town and Country Preschool	School	1.5 miles
Falcon High School	School	1.6 miles
Pikes Peak Community College- Falcon Campus	School	1.7 miles
Hope Montessori Academy	School	1.9 miles
Falcon Elementary School	School	1.9 miles
Meridian Ranch Elementary School	School	2.1 miles
St. Benedict Catholic Church	Church	2.4 miles
Falcon Congregation – Jehovah's	Church	2.5 miles
Meridian Point Church	Church	2.6 miles
Falcon Middle School	School	2.8 miles
Westminster Presbyterian	Church	2.8 miles
Falcon Baptist Church	Church	3.1 miles
Grace Community Church	Church	3.3 miles
Sagecreek Community Church	Church	3.5 miles
Pikes Peak School of Expeditionary Learning	School	3.6 miles
Black Squirrel Creek Bridge	Historic	4.7 miles

Source: Google Earth, 2012

4.2.6 Farmlands

The Farmland Protection Policy Act (FPPA) regulates federal actions with the potential to convert important farmland to non-agricultural uses. Important farmland includes all pasturelands, croplands, and forests considered to be prime, unique, or of statewide or locally important lands. "Prime" farmland can be defined as "land having the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimal use of fuel, fertilizer, pesticides, or products." "Unique" farmland can be defined as "land that is used for producing high-value food and fiber crops with a special combination of soil quality, location, growing season, and moisture necessary to produce high quality crops or high yields of them economically." Finally, farmland considered to be of statewide and local importance is defined as "land that has been designated as 'important' by either a state government (State Secretary of Agriculture or higher office) or by county commissioners or an equivalent elected body." The State Conservationist representing the Natural Resource Conservation Service (NRCS) must agree with the designation.

4.2.6.1 Existing Conditions

Land on and surrounding the airport has not been mapped by the NRCS; however, it has been mapped by the American Farmland Trust (Trust), as depicted in **Figure 4-3.** The Trust defined "high-quality" farmland by combining the U.S. Department of Agriculture's (USDA) "prime farmland" designation (land most suitable for producing food, feed, forage, fiber and oilseed crops) with the Trust's unique farmland definition (land used to grow vegetables, grapes and horticultural crops, including fruits, nuts and berries, that have unique soil and climatic requirements).

Because farmland conversion is taking place in every state, **Figure 4-3** identifies high-quality farmland that is important relative to statistical benchmarks established for each state. In addition to identifying the most intense areas of high quality farmland conversion in the nation, **Figure 4-3** also identifies where conversion was most intense within each given state.

The map designations were determined based on two threshold tests:

1. High-quality farmland included mapping units that in 1997 had greater than their statewide mapping unit averages of prime or unique farmland; and

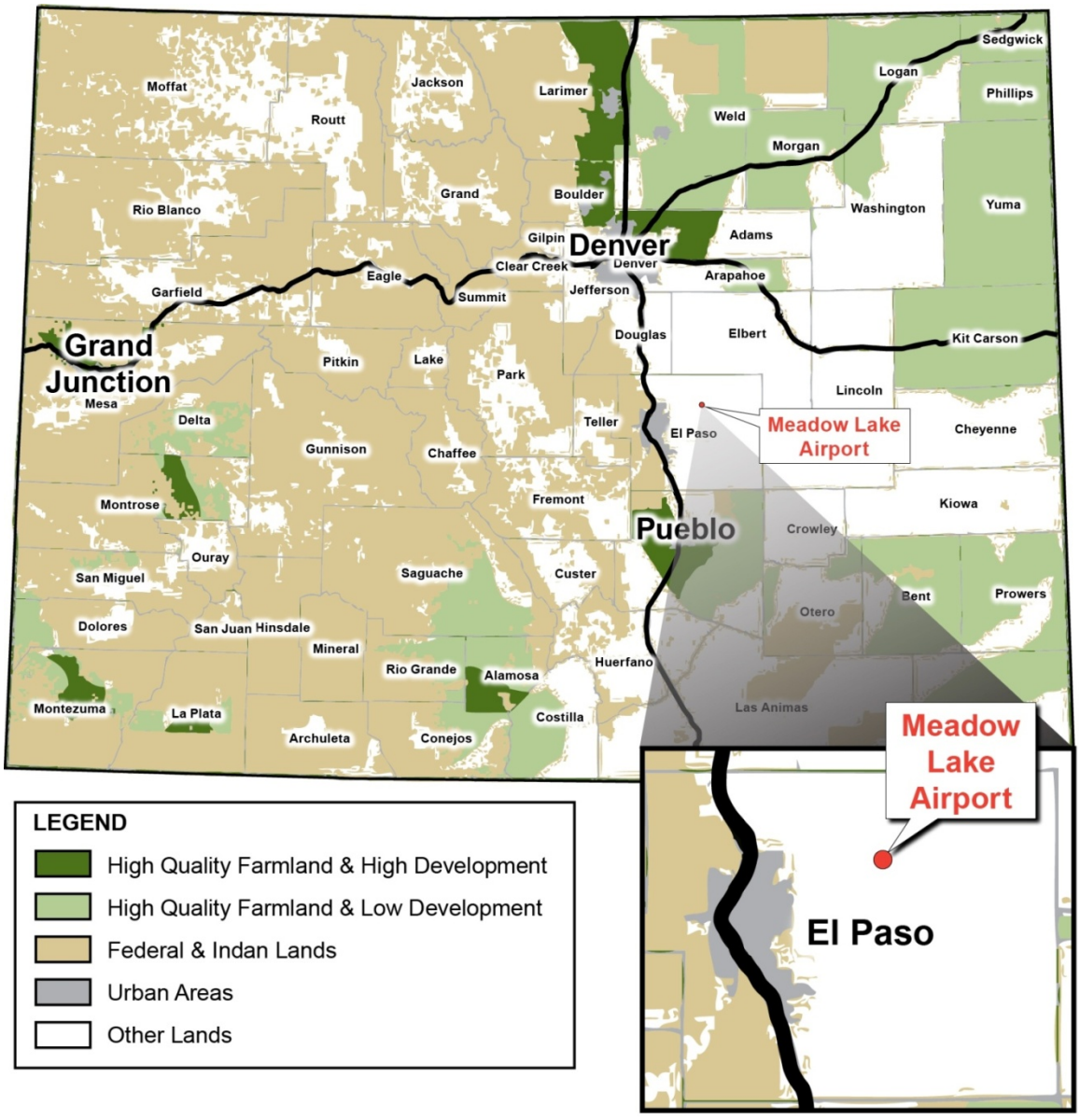
2. High development included mapping units that experienced a rate of development greater than their statewide mapping unit average, providing it had at least 1,000 acres developed between 1992 and 1997.

Figure 4-3 highlights in dark green those mapping units with a greater percentage of high quality farmland than the average mapping unit within that state, a rate of development higher than the average mapping unit in the state, and more than 1,000 acres developed between 1987 and 1997.

Mapping units shaded in light green exceeded the average amount of high quality farmland found in mapping units within their state, but they experienced a lower rate of development than the average mapping unit in their state, or had less than 1,000 acres of development. Dark green areas on the map signal rapid development and a potential threat to high quality farmland. One should take care in interpreting the map, remembering that high-quality farmland areas are relative to their state benchmarks.

FLY is located in an area designated as "Other" which does not display the characteristics of high quality farmland.

FIGURE 4-3 - COLORADO FARMLAND MAP



Source: Jviation, Inc., and American Farmland Trust, www.farmland.org, 2012

4.2.7 Fish, Wildlife and Plants

Fish, wildlife and plants are regulated and protected by a significant number of acts and regulations to include:

- Section 7 of the Endangered Species Act (ESA), as amended, requires federal agencies to complete consultation and coordination for federal actions to determine if an action has the potential to affect any threatened or endangered species. Consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) is required, as appropriate, to ensure that any action the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally listed endangered or threatened species or result in the destruction or adverse modification of critical habitats.

- The Magnuson-Stevens Act requires federal agencies to consult with the NMFS with regard to any action authorized, funded, or undertaken that may adversely affect any essential fish habitat identified under the Act.

- The Sikes Act, as amended, requires actions to be consistent with any State Wildlife Conservation Plans and Department of Defense plans where the plans exist.

- The Fish and Wildlife Conservation Act encourages actions to follow state programs for fish and wildlife resources, and to conserve and promote conservation of non-game fish and wildlife and their habitats.

- The Migratory Bird Treaty Act prohibits federal agencies from intentionally taking migratory bird, their eggs, or nests. Taking can be defined as "pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting."

4.2.7.1 Existing Conditions

Threatened, endangered, and candidates to be listed as threatened or endangered, within the project area, as defined by the U.S. Fish and Wildlife Service's *Information, Planning, and Conservation System* (IPaC) are depicted in **Table 4-2.** The region surrounding FLY is primarily open grass fields with some residential and rural development.

TABLE 4-2 - THREATENED AND ENDANGERED SPECIES

Species	Scientific Name	Status
Birds		
Least tern	Sterna antillarum	Endangered
Piping Plover	Charadrius melodus	Threatened
Mexican Spotted Owl	Strix occidentalis lucida	Threatened
Whooping crane	Grus Americana	Endangered
Fishes		
Arkansas darter	Etheostoma cragini	Candidate
Greenback Cutthroat trout	Oncorhynchus clarki ssp. Stomias	Threatened
Pallid sturgeon	Scaphirhynchus albus	Threatened
Flower Plants		
Ute ladies'-tresses	Spiranthes diluvialis	Threatened
Western Prairie Fringed Orchid	Platanthera praeclara	Threatened
Mammals		
Gunnison's prairie dog	Cynomys gunnisoni	Candidate
North American wolverine	Gulo gulo luscus	Candidate
Preble's Meadow Jumping mouse	Zapus hudsonius preblei	Threatened

Source: Department of the Interior, U.S. Fish and Wildlife Service. *IPAC System – Natural Resources of Concern, 2012*

4.2.8 Floodplains

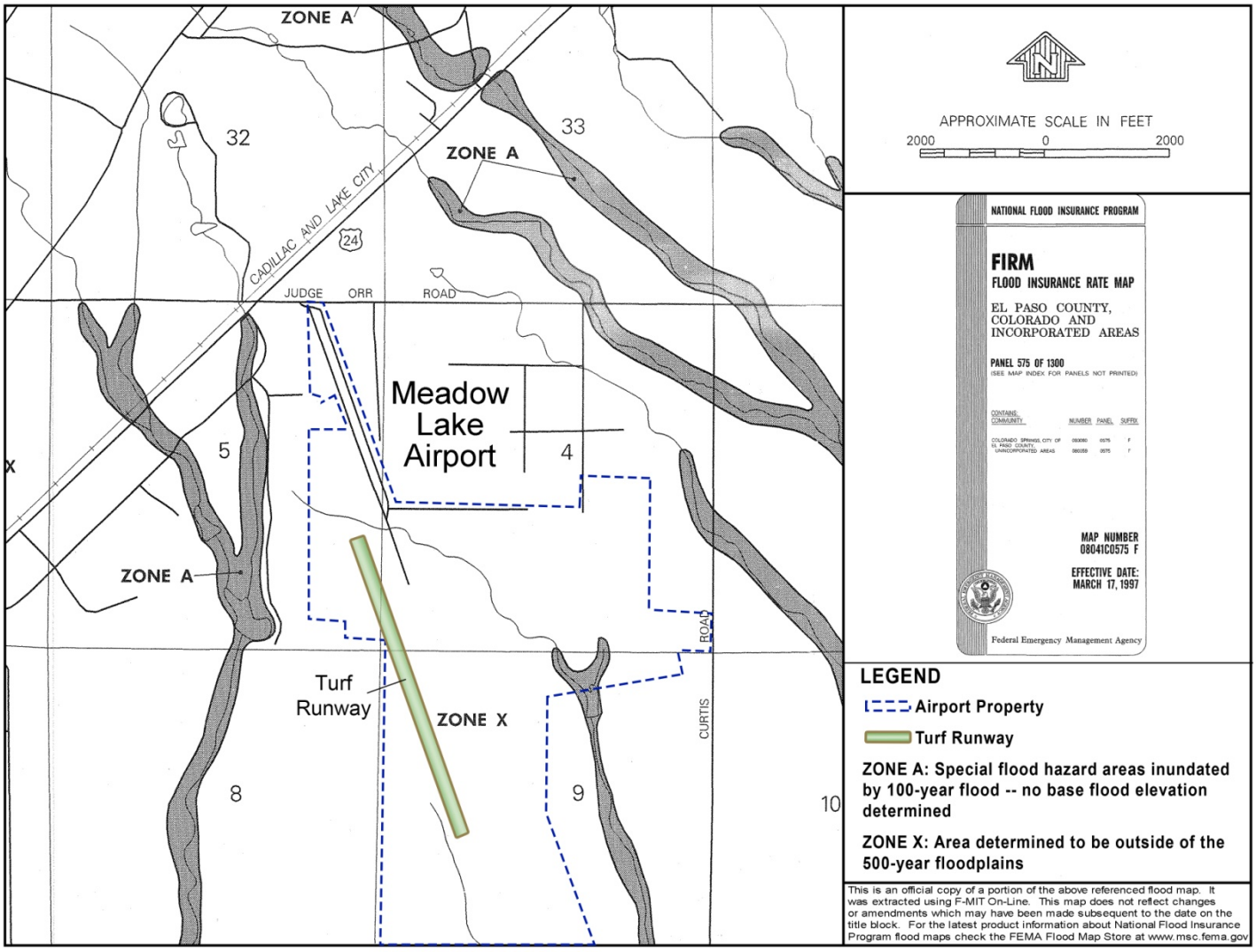
Executive Order 11988, *Floodplain Management*, directs federal agencies to take action to reduce the risk of flood loss, minimize the impacts of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by floodplains. DOT Order 5650.2, *Floodplain Management and Protection*, contains policies and procedures for implementing Executive Order 11988. Through these, agencies are required to analyze and determine that there are no practical alternatives to a project, before taking any action that would encroach on a base floodplain based on a 100 year flood.

4.2.8.1 Existing Conditions

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) is depicted in **Figure 4-4.** The airport property and a significant portion of the area surrounding the airport are designated as Zone X. Zone X is defined as "areas determined to be outside of the 500-year floodplains".[5] Some areas in the vicinity of the airport are designated as Zone A which is defined as "special flood hazard areas inundated by 100-year flood – No base flood elevation determined".[6]

[5] Federal Emergency Management Agency, Flood Insurance Rate Map, 2012
[6] Federal Emergency Management Agency, Flood Insurance Rate Map, 2012

FIGURE 4-4 – FLOOD INSURANCE RATE MAP



Source: Federal Emergency Mangement Agency, *Flood Insurance Rate Map*, Map Number 08014C0575 F, 1997

4.2.9 Hazardous Materials, Pollution Prevention, and Solid Waste

A significant number of laws govern the handling and disposal of hazardous materials, chemicals, and wastes. Two statutes most importantly regulating actions to construct and operate facilities and navigational aids are the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA or Superfund) and the Community Environmental Response Facilitation Act of 1992. RCRA governs the generation, treatment, storage, and disposal of hazardous wastes. CERCLA provides for consultation with natural resource trustees and the cleanup of any release of a hazardous substance into the environment.

Executive Orders (E.O.) 12088 and 12580 offer additional directives to the handling and disposal of hazardous materials, chemicals, substances, and wastes. E.O. 12088, *Federal Compliance with Pollution Control Standards*, as amended, directs federal agencies to comply with applicable pollution standards, in the prevention, control, and abatement of environmental pollution. It also directs consultation with the EPA, state, interstate, and local agencies concerning the best techniques and methods available for the prevention, control, and abatement of environmental pollution. E.O. 12590, *Superfund Implementation*, as amended, requires federal agencies to allow the opportunity for public comment before removal action is taken.

NEPA requires the consideration of hazardous material, pollution prevention, and solid waste impacts for any federally funded, approved, and constructed activities. It is also required that the appropriate level of review for hazardous materials or wastes to be used, generated, or disturbed by the proposed action, be taken. It is also recommended that, to the extent practicable, pollution prevention should be considered in the proposed action, addressed in the environmental consequences section, and disclosed in the record of decision to the extent to which pollution was considered.

For the purpose of this EA, hazardous materials, hazardous waste, and hazardous substance can be defined as:

- Hazardous Material: any substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. This includes hazardous substances and hazardous waste.

- Hazardous Waste: a waste is considered hazardous if it is listed in, or meets the characteristics described in 40 CFR Part 261, including ignitability, corrosively, reactivity, or toxicity.

- Hazardous Substance: any element, compound, mixture, solution, or substance defined as a hazardous substance under the CERCLA and listed as 40 CFR Part 302. If released into the environment, hazardous substances may pose substantial harm to human health of the environment.

4.2.9.1 Existing Conditions

The nearest landfill to FLY is the Colorado Springs Landfill located approximately five miles south of the airport. The landfill is one of three landfills located in El Paso County, with the other two located in Fountain, approximately 17 miles southwest of FLY.

The EPA has three hazardous waste sites located within five miles of the airport reporting to the EPA. **Table 4-3** provides additional information for the reporting facilities.

TABLE 4-3 - EPA HAZARDOUS WASTE REPORTING SITES

Site Name	Environmental Interest Type	Reporting For	Distance to Airport
Maddox Holdings LLC	CESQG (Active)	Hazardous Waste	1.0 miles
Walmart Supercenter #4335	SQG (Active	Hazardous Waste	2.1 miles
Falcon School District	Air Minor (Inactive) CESQG (Active)	Hazardous Waste	2.5 miles

Source: U.S. Environmental Protection Agency, *MyEnvironment Map*, 2012

4.2.10 Historical, Architectural, Archaeological, and Cultural Resources

The National Historic Preservation Act (NHPA) of 1966, as amended, establishes the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places (NRHP) within the National Park Service (NPS). Section 110 of the NHPA governs the responsibilities of federal agencies to preserve and use historic buildings; designate an agency Federal Preservation Office (FPO); identify, evaluate, and nominate eligible properties under the control or jurisdiction of the agency to the National Register. Section 106 of the NHPA requires federal agencies to consider the effects of their undertaking on properties on or eligible for inclusion on the NRHP. Compliance with Section 106 requires consultation with the ACHP, the State Historic Preservation Officer (SHPO), and the Tribal Historic Preservation Officer (THPO) if there is a potential for adverse effects to historic properties on or eligible for listing on the NRHP. Consultation with other federal, state, and local agencies, tribes, private sector, and the public may also be required.

4.2.10.1 Existing Conditions

The National Register of Historic Places lists one property within the vicinity of the airport. The closest property to the airport is the Black Squirrel Creek Bridge which is located approximately 4.7 miles northeast of the airport.

According to the Native American Consultation Database there are five federally recognized Indian tribes or Native Hawaiian organizations with an interest to El Paso County, to include:

- Arapahoe Tribe of the Wind River Reservation, Wyoming
- Cheyenne and Arapaho Tribes, Oklahoma
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana
- Northern Arapaho Tribe of Indians of the Wind River Reservation
- Northern Cheyenne Indians of the Tongue River Reservation, Montana

4.2.11 Light Emissions and Visual Effects

Potential impacts due to light emissions or visual impacts associated with a federal action should be assessed. Considerations should be given to impacts on people and properties to determine significant impacts. Because of the relatively low levels of light intensity compared to background levels associated with most air navigation facilities and other airport development actions, light emissions impacts are unlikely to have an adverse impact on human activity or the use of characteristics of the protected properties. Visual and aesthetic impacts can be widely defined and are inclined to subjectivity. Public involvement and consultation with federal, state, and local agencies may help determine the extent of light emissions and visual impacts.

4.2.11.1 Existing Conditions

The existing lighting at FLY includes the runway lighting (medium intensity runway edge lighting on Runway 15/33) and lighting used for navigation. The navigational lighting includes 4-light precisions approach path indicators (PAPI) on both runway ends of Runway 15/33. There are also other minimal lighting sources related to the parking lot areas, aprons and hangars.

4.2.12 Natural Resources and Energy

Executive Order 13123, *Greening the Government through Efficient Energy Management*, supports the expansion and use of renewable energy within facilities and activities. It also requires federal agencies to reduce the use of petroleum, total energy use and associated air emissions, and water consumption in facilities. In addition, the FAA encourages the development of facilities that demonstrate high standards of design including principles of sustainability. To satisfy the requirements set forth by NEPA, the FAA must evaluate the airport's effort in conserving resources, pollution prevention, minimization on aesthetic effects, and addressing public sensitivity to these concerns.

The FAA must also evaluate airport projects for significant impacts on energy supply and natural resources. Typical airport actions that have the potential to cause impacts on natural resources and energy supply include: airside/landside expansion; land acquisition for aviation-related use, new or relocated access roadways, remote parking facilities and rental car lots; significant changes in air traffic and airfield operations; and significant construction activity.

4.2.12.1 Existing Conditions

The effect an airport may have on natural resources and energy supply can be related to the amount of energy and resources required for aircraft, ground support vehicles, airport and airfield lighting, hangar buildings, and motor vehicles. Meadow Lake Airport has very few airport-owned vehicles and facilities to contribute to the use of natural resources and energy supply. Additionally, a majority of the most frequent users of the airport live directly adjacent to the airport, which reduces commute distance and the associated energy consumption.

4.2.13 Noise

Noise associated with airport activity is often a controversial topic and of specific importance to the FAA in examining a proposed action. Airport development projects that have the potential to change the airport runway configuration(s), aircraft operations and movements, aircraft types, or aircraft flight characteristics can change the future airport-related noise levels. In order to accurately assess the existing noise levels and potential for change, the FAA developed a computer model that simulates aircraft activity and resulting noise at an airport.

4.2.13.1 Noise Methodology

The model, Integrated Noise Model (INM-Version 7.0c), produces a prediction of aircraft day/night noise levels (DNLs) and the potential for significant impacts. A significant noise impact would occur if noise sensitive areas were to experience an increase in noise of DNL 1.5 decibels (dB) or more at or above DNL 65 dB noise exposure when compared to existing conditions. When calculating DNLs, noise events that occur at night (between the hours of 10:00 pm and 7:00 am) are given a 10 dB penalty to account for the increased sensitivity during the night time hours.

This EA will provide noise exposure contours for DNL values of 65, 75, and 85 dBs. Areas within contour levels above 65 dB are considered by the FAA to be exposed to significant aircraft sound levels. The DNL contours developed for FLY consider the following factors:

- Aircraft arrival and departure profiles
- Runway layout
- Runway use
- Flight corridors
- Operational activity within each flight corridor
- Fleet mix and associated number of operations (for an annual average 24-hour day)
- Distribution of operations between the daytime (7:00 a.m. to 10:00 p.m.) and night time hours (10:00 p.m. to 7:00 a.m.)

4.2.13.2 Baseline Runway Layout

FLY has three runways; Runway 15/33, 8/26, and N/S. Runway 15/33 is 6,000 feet long and 60 feet wide. Runway 8/26 is 2,084 feet long and 35 feet wide. Runway N/S is 1,800 feet long and 15 feet wide.

4.2.13.3 Existing Runway Use and Flight Tracks

Runway usage is an essential component in noise analysis as runways with more usage typically result in greater noise levels. The existing (i.e. Year 2011) runway use, as depicted in **Table 4-4**, was developed from data provided by FLY's airport management personnel and comparisons to the runway usage at the Colorado Springs Airport, the nearest towered airport. This data indicates the majority of arrivals and departures at FLY are on Runway 15 and 33 (96 percent). Additionally, it was indicated that approximately 5 percent of the daily operations occur during the nighttime hours.

TABLE 4-4 - EXISTING RUNWAY USE

Runway	Arrivals	Departures	Touch and Go's
15	65%	65%	67%
33	31%	31%	33%
8	1%	1%	0%
26	2%	2%	0%
N	1%	1%	0%
S	1%	1%	0%
Total	**100%**	**100%**	**100%**

Source: FLY Airport Management and Jviation, Inc.

4.2.13.4 Existing Aircraft Operational Activity

Aircraft noise is evaluated using average daily conditions; however, operations are typically reported annually. As such, the annual operations as reported in the FAA's TAF were used to develop a base year (2011) average day operations (annual operations/365 days). **Table 4-5** depicts the annual operations and average day operations, as well as aircraft group; GA propeller, helicopter, and tow plane.

TABLE 4-5 - EXISTING AIRPORT OPERATIONS AND FLEET MIX

Group	INM Aircraft	Aircraft Type	Average Day Ops	Annual Ops
GA Propeller	GASEPF	GA Single Eng Fix Prop	59.98	21,892.05
	GASEPV	GA Single Eng Variable Prop	59.98	21,892.05
	PA28	Piper Warrior	59.98	21,892.05
	CAN 206T	Cessna 206	59.98	21,892.05
	BEC58P	Beech Baron, Cessna 310 & 414	59.94	21,879.76
	PA30	Piper Twin Comanche	11.11	4,054.08
	DHC6	Beech Super King Air	11.11	4,054.08
Helicopter	R44	Robinson R44	3.37	1,228.51
	S-70	Blackhawk	3.37	1,228.51
	EC130	Eurocopter EC-130	1.14	417.69
	S-65	Skycrane	1.14	417.69
Tow Plane	GASEPF	Piper Super Cub Substitution	5.49	2,002.47
		Total	**336.58**	**122,851.00**

Source: FLY Airport Management, Jviation, Inc., and the FAA Terminal Area Forecast, 2012

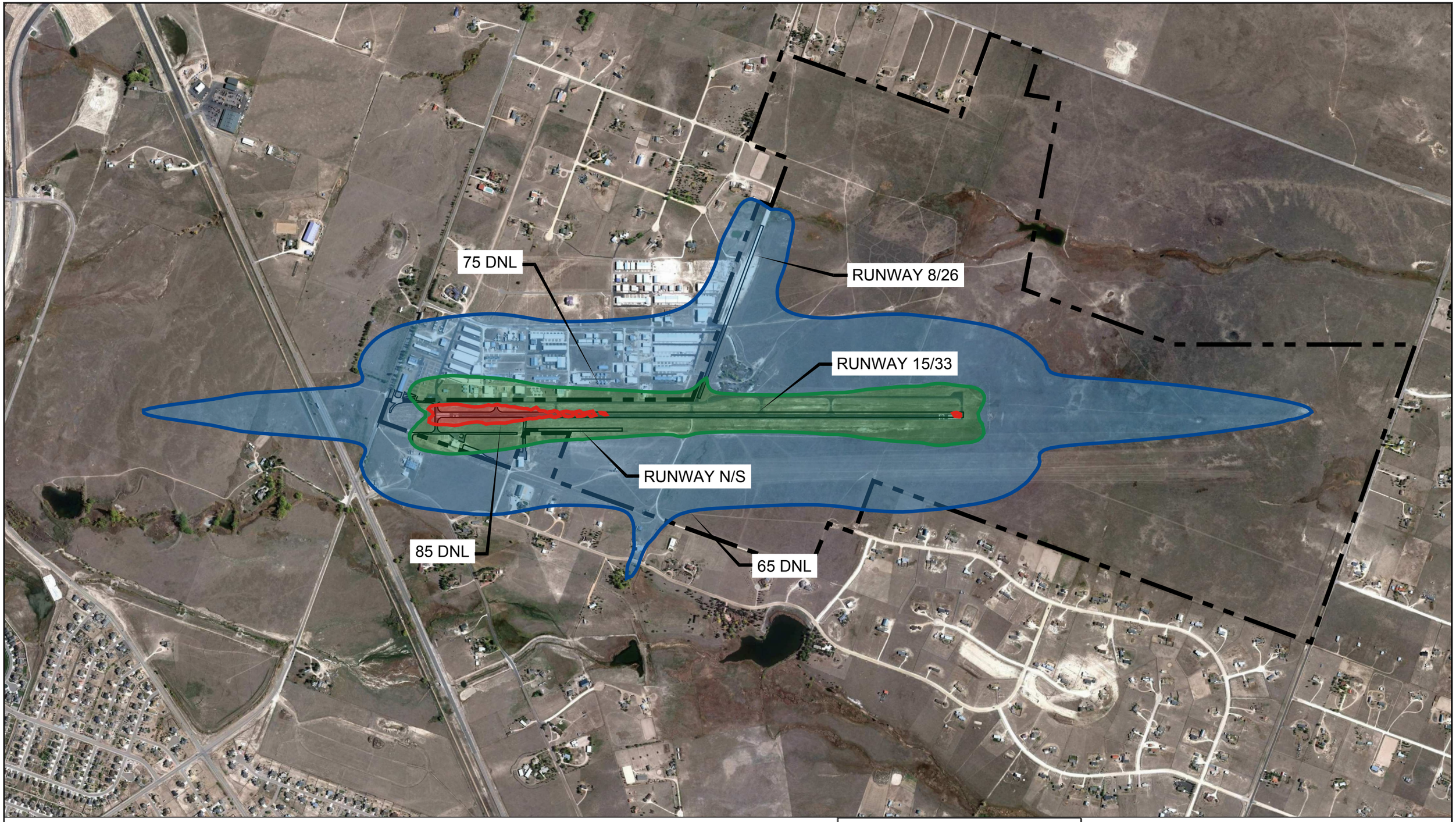
4.2.13.5 Existing Conditions

The extent of 65, 75, and 85 DNL noise contours for the year 2011, the base year and existing condition, are depicted in **Figure 4-5**. As shown, nearly the entire 65, 75 and 85 DNL noise contours lie within the airport property boundaries. Approximately 0.25 square miles of 65-74 DNL and 0.02 square miles of 75-84 DNL extend beyond the airport property. **Table 4-6** provides the size, in square miles, of each contour interval.

TABLE 4-6 - AREA (SQUARE MILES) WITHIN THE 65, 75, AND 85 DNL CONTOURS

Year	65-74 DNL	75-84 DNL	85+ DNL	TOTAL
2012 – Existing Condition	**0.585**	**0.128**	**0.009**	**0.722**

Source: Jviation, Inc.



GRAPHIC SCALE
500 0 500 1000
(IN FEET)

PROPERTY LINE*
*ESTIMATED

85+ DNL
75-84 DNL
65-74 DNL

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MEADOW LAKE AIRPORT
EXISTING NOISE CONTOURS
2012

DATE: JUNE 1, 2012

FIGURE 4-5

4.2.14 Socioeconomic Impacts, Environmental Justice, and Children's Health and Safety Risks

49 CFR part 24, *Uniform Relocation Assistance and Real Property Acquisition Policies Act* of 1970, as amended, regulates the acquisition of real property or displacement of persons as a result from federal projects and projects involving federal funding. Principal social impacts to be considered are these associated with relocation or other community disruption, transportation, planned development, and employment.

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, and the accompanying Presidential Memorandum, and Order DOT 5610.2, *Environmental Justice*, require public involvement by minority and low-income populations and analysis, including demographic analysis, that identifies and addresses potential impacts on these populations that may be disproportionately high and adverse.

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, directs federal agencies, as appropriate, to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children.

Airport development actions have the potential to create social impacts, health and safety risks to children, and socioeconomic impacts to include moving homes or businesses; dividing or disrupting established communities; changing surface transportation patterns; disrupting orderly, planned development; and creating a notable change in employment.

4.2.14.1 Existing Conditions

The demographic information and social profile for the affected environment gives a relevant idea of the economy of the region surrounding the airport. The population and unemployment history for the City of Falcon and Peyton have not been consistently recorded over the past 20 years; therefore, the population and unemployment history for this demographic profile uses data from the City of Colorado Springs, El Paso County, and the State of Colorado. The demographics and social profile of the area surrounding FLY are described in **Sections 4.2.14.2** and **4.2.14.3**.

4.2.14.2 Population

The City of Colorado Springs has experienced a slightly smaller population increase over the last 20 years in comparison to El Paso County and the State of Colorado as depicted in **Table 4-7**. Colorado Springs has grown by 50 percent since 1990, while El Paso County and Colorado have grown by 58 percent and 53 percent.

TABLE 4-7 - HISTORICAL POPULATION CHANGE

	1990	1995	2000	2005	2010
City of Colorado Springs	280,430	328,782	361,901	384,409	419,353
Percent Change	--	17%	10%	6%	9%
El Paso County	397,014	469,693	519,802	569,322	627,096
Percent Change	--	18%	11%	10%	10%
Colorado	3,294,394	3,811,074	4,338,801	4,662,534	5,050,870
Percent Change	--	16%	14%	7%	8%

Source: State of Colorado, Department of Local Affairs, County and Municipal Population Estimates, 2012

4.2.14.3 Unemployment

The City of Colorado Springs has experienced an increase in unemployment rates by 39 percent from 1990 to 2010, which is similar to the increase is El Paso County's unemployment rate (as depicted in **Table 4-8**). However, the State of Colorado experienced a higher increase in unemployment, by 71 percent, over the same time frame. The most drastic incline in unemployment rates experienced by all three divisions occurred between 2000 and 2010. This is likely a direct result of the national economic recession experienced throughout the U.S.

TABLE 4-8 - HISTORICAL UNEMPLOYMENT RATES

	1990	1995	2000	2005	2010
City of Colorado Springs	7%	4.4%	2.9%	5.4%	9.7%
Percent Change	--	-37%	-34%	86%	80%
El Paso County	7.1%	4.4%	2.9%	5.4%	9.8%
Percent Change	--	-38%	-34%	86%	81%
Colorado	5.2%	4.0%	2.8%	5.1%	8.9%
Percent Change	--	-23%	-30%	82%	75%

Source: U.S. Bureau of Labor Statistics, 2012

4.2.15 Water Quality

The Federal Water Pollution Control Act (Clean Water Act), as amended, establishes water quality standards, controls discharges, develops waste treatment management plans and practices, prevents or minimizes the loss of wetlands, identifies location with regard to an aquifer or sensitive ecological area such as a wetlands area, and regulates other issues concerning water quality.

The U.S. Fish and Wildlife Coordination Act requires consultation with the USFWS and applicable state agencies if the potential to impound, divert, control, or otherwise modify the waters of any stream or other body of water exists. The Safe Drinking Water Act, as amended, requires federal agencies to consult with the EPA if the potential to contaminate an EPA designated sole principal drinking water resource exists.

A National Pollutant Discharge Elimination System (NPDES) permit under Section 402 of the Clean Water Act is required for point-source discharges into waters of the U.S. A Section 404 permit is required to place dredged or fill material in water of the U.S., including jurisdictional wetlands. Additionally, a Section 10 permit, under the River and Harbors Act of 1899, is required for obstruction or alternation of navigable waters.

4.2.15.1 Existing Conditions

FLY potentially contributes to five different watersheds to include: Big Sandy, Bijou, Chico, Fountain, and Kiowa. All five of the watersheds are located in Colorado. The Big Sandy watershed is monitored by the National Park Service Water Resources Division, the Colorado Department of Publish Health and Environment, and The Rivers of Colorado Water Watch Network. The Bijou watershed is monitored by the Colorado Department of Public Health and Environment, The Rivers of Colorado Water Watch Network, and the Littleton/Englewood Wastewater Treatment Plant. The Chico watershed is monitored by the Colorado Department of Public Health and Environment and The Rivers of Colorado Water Watch Network. The Fountain watershed is monitored by the Colorado Department of Public Health and Environment, The Rivers of Colorado Water Watch Network, and the EPA National Aquatic Resource Survey Data. The Kiowa watershed is monitored by the Colorado Department of Public Health and Environment and The Rivers of Colorado Water Watch Network. Lastly, the Airport's surface water is managed by the Upper Black Creek Ground Water Management District.

FLY obtains the required permits for construction projects in addition to implementing and requiring the use of Best Management Practices by airport staff and contract/construction staff.

4.2.16 Wetlands

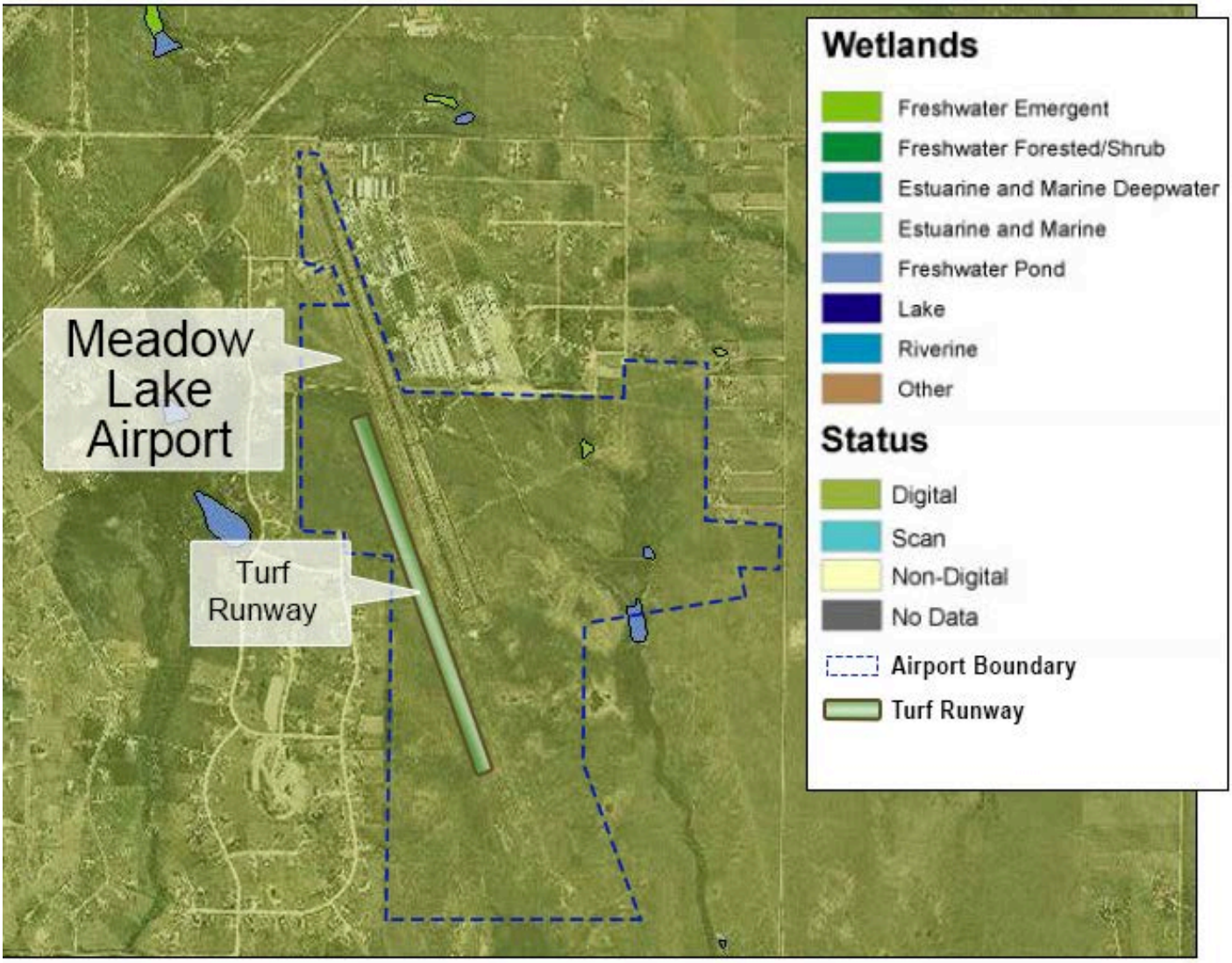
Executive Order (E.O.) 11990, *Protection of Wetlands*; Order DOT 5660.1A, *Preservation of the Nation's Wetlands*; the Rivers and Harbors Act of 1899; and the Clean Water Act, Section 404, regulates activities that may impact wetlands. Federal agencies are required by E.O. 11990 to minimize the destruction, loss, or degradation of wetlands; they must also protect, preserve, and enhance the nation's wetlands throughout the planning, construction, funding, and operations of transportation facilities and projects. Order DOT 5660.1A requires that transportation facilities protect and enhance wetlands through planning, construction, and operation.

The Clean Water Act, Section 404, governs the dredging and filling of navigable waters of the U.S. Section 404 defines Navigable Waters of the U.S. as *"waters that are subject to the ebb and flow of the tide and/or are used, have been used in the past, or may be susceptible to used to transport interstate or foreign commerce."* Navigable Waters, according to Section 404, includes wetlands connected or adjacent to navigable waters of the U.S. The Army Corp of Engineers (Corp) is the permitting agency for dredge or fill activities of wetlands. The Corp defines wetlands as "*areas that surface or groundwater inundate or saturate at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.*" The Corp includes swamps, marshes, bogs and similar areas in wetlands.

4.2.16.1 Existing Conditions

An initial wetlands inventory was completed through the use of the U.S. Fish and Wildlife Service's *National Wetlands Inventory Wetlands Mappe*r. The Mapper depicted the potential for wetlands to exist on the airport as depicted in **Figure 4-6.** A site visit was completed by the U.S. Army Corp of Engineers on December 7th, 2011. From this it was found that further wetland delineation was not needed as the airport property was significantly composed of uplands.

FIGURE 4-6 - MEADOW LAKE WETLANDS INVENTORY



Source: U.S. Fish and Wildlife Service, *National Wetlands Inventory, Wetlands Mapper*, 2012

4.2.17 Wild and Scenic Rivers

The Wild and Scenic Rivers Act, as amended, designates rivers and those eligible to be designated in the Wild and Scenic Rivers System. Wild and Scenic Rivers are designated as "*rivers having remarkable scenic, recreational, geological, fish, wildlife, historic, or cultural values.*" The Department of the Interior (National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management) and the Department of Agriculture (U.S. Forest Service) are the oversight agencies for the Wild and Scenic Rivers System. Federal agencies with jurisdiction over lands the border upon, or are adjacent to any designated rivers, are required to take the necessary actions to protect the rivers, as stated in Section 12 of the Wild and Scenic Rivers Act.

4.2.17.1 Existing Conditions

The Cache la Poudre River (Poudre) is the only river designated as being Wild and Scenic in the state of Colorado. The Poudre is located east of the Continental Divide, in the northern Front Range of Colorado. The main and south forks of the Poudre originate in Rocky Mountain National Park, then flow north and east through the Roosevelt National Forest. The river eventually passes through the City of Fort Collins, and then joins the South Platte River east of Greeley. The Poudre is located approximately 90 miles north of FLY.

5.0 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*, requires the discussion of all reasonably foreseeable environmental consequences of the Proposed Action. The focus of this analysis is upon resources that would be directly, indirectly, and cumulatively affected by the Proposed Action. Additionally, any adverse environmental effects that cannot be avoided if the Proposed Action is implemented and mitigated must be discussed.

5.1 AIR QUALITY

Following the air quality assessment process described in the FAA's *Air Quality Procedures for Civilian Airports and Air Force Bases* (referred to as the Air Quality Handbook), if a proposed action would result in "direct" air pollutant emissions; is located within a non-attainment or maintenance area; and the action is not exempt from the assessment process or presumed to conform to the Clean Air Act (CAA), the action must be evaluated further to determine if there is a potential for the action to cause, or contribute to the severity of, violations of the National Ambient Air Quality Standards (NAAQS).

The proposed project, to include both alternatives, would occur in an attainment area as designated by the U.S. Environmental Protection Agency (EPA) for all criteria pollutants as discussed in **Section 4.2.1**. From this, the General Conformity Rules of the CAA, as amended, are not applicable. Section 2.3.4 of the Air Quality Handbook requires the comparison of actions resulting in air quality with NAAQS if the pollutant levels have the potential to exceed NAAQS. The Air Quality Handbook counsels that *"the number of passengers at larger commercial airports and the level of general aviation and air taxi operations at smaller airports are likely to be good indicators of potential pollutant concerns. For airports, a main pollutant of concern from an air quality standpoint is CO. Cars and aircraft (especially GA) emit moderate amounts of CO while they are idling or taxing, respectively. Significant road congestion or airport ground delays could potentially 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. For deciding whether or not a NAAQS assessment should be considered, the total number of airport passengers and general aviation/air taxi operations should be evaluated. If the level of annual enplanements exceeds 1,300,000, the level of general aviation and air taxi activity exceeds 180,000 operations per year or a combination thereof, a NAAQS assessment should be considered."*

The recorded operations in 2011 (the last full calendar year of operations) at FLY were 118,398 operations, significantly lower than the threshold levels that recommend the completion of an emissions inventory.

5.1.1 Alternative 1 – No Action

Operations at FLY would increase in Alternative 1, without the establishment of the Turf Runway. As forecasted in **Section 2.3.4.1,** operations are forecasted to reach 151,284 operations by 2022 in the No Action Alternative. Operations resulting from Alternative 1 would not exceed the advised thresholds to require further air quality comparisons. Additionally, no construction would be associated with Alternative 1; therefore, no construction air quality impacts would be present. As such, Alternative 1 does not have the potential to cause, or contribute to the severity of, violations of the NAAQS or create any additional air quality concerns.

5.1.2 Alternative 2 – Establishment of Turf Runway

Operations at FLY would also increase in Alternative 2, with the establishment of the Turf Runway as described in **Section 2.3.4.2**. Operations are forecasted to be 154,375 in the year 2022. As such, the operations would remain significantly lower than the threshold requiring air quality comparison to determine the potential to exceed NAAQS. Additionally, no construction would be associated with Alternative 2; therefore, no construction air quality impacts would be present. As such, Alternative 2 does not have the potential to cause, or contribute to the severity of, violations of the NAAQS or create any additional air quality concerns.

5.2 CLIMATE

Although there are no federal standards for aviation-related Greenhouse Gas (GHG) emissions, it is well-established that GHG emission can affect climate.[7] The Council on Environmental Quality (CEQ) has indicated that climate should be considered in National Environmental Policy Act (NEPA) analysis. As noted by CEQ; however, "*it is not currently useful for NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such, linkage is difficult to isolate and to understand*".[8]

FAA Order 1050.1E, Change 1, Guidance Memo #3[9] states that "*GHG emissions should be quantified under the following circumstance:*

1) *When there is reason to quantify emissions for air quality purposes, then metric tons of CO_2 equivalent (MT CO_2e) should also be quantified and reported in the NEPA documentation; or*

2) *When fuel burn is computed and reported in the NEPA document, quantification of MT CO_2e calculated from the fuel burned should also be included in the document."*[10]

[7] *Massachusetts v. E.P.A.*, 549 U.S. 497, 508-10, 521-23 (2007)
[8] *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*, CEQ (2010)
[9] Federal Aviation Administration, *Order 1050.1E, Change 1, Environmental Impacts: Policies and Procedures, Memo #3*, 2006
[10] Ibid

As described in **Section 4.2.1**, FLY is located in an attainment area as designated by the EPA; therefore, an air quality emissions analysis is not required, nor is fuel burn computed as part of this EA. The Inventory of U.S. Greenhouse Gas Emissions and Sinks from 1990 to 2009[11] report that two percent of the total U.S. 2009 CO_2 emissions were from aviation sources. As such, the increase in operations and associated CO_2 emissions resulting from both Alternatives is considered insignificant.

5.3 Coastal Resources

Coastal Zones are those waters and their bordering areas in states along the coastlines of the Atlantic and Pacific Oceans, the coastlines of the Gulf of Mexico, and the shorelines of the Great Lakes. These zones include islands, beaches, transitional and intertidal areas, and salt marshes. The Proposed Action would take place in Colorado, a state without any coastlines. As such, there are no coastal resources located in the vicinity of the FLY; therefore, neither the Proposed Action nor the No Action Alternative would have the potential to impact any coastal resources.

5.4 Compatible Land Use

Section 4.2.4 discusses the land uses and zoning of the areas on and surrounding the airport. As mentioned and depicted in **Figure 5-1**, the airport is primarily zoned as a Planned Unit Development (PUD). PUD allows for a mix of uses including residential, business, commercial, and industrial, recreation, open space, and other selected secondary uses.

5.4.1 Alternative 1 – No Action

Alternative 1, the no action alternative, maintains the existing land use and zoning conditions at the airport. As such, it is presumed that compatible land uses would remain as a result from Alternative 1.

5.4.2 Alternative 2 – Establishment of Turf Runway

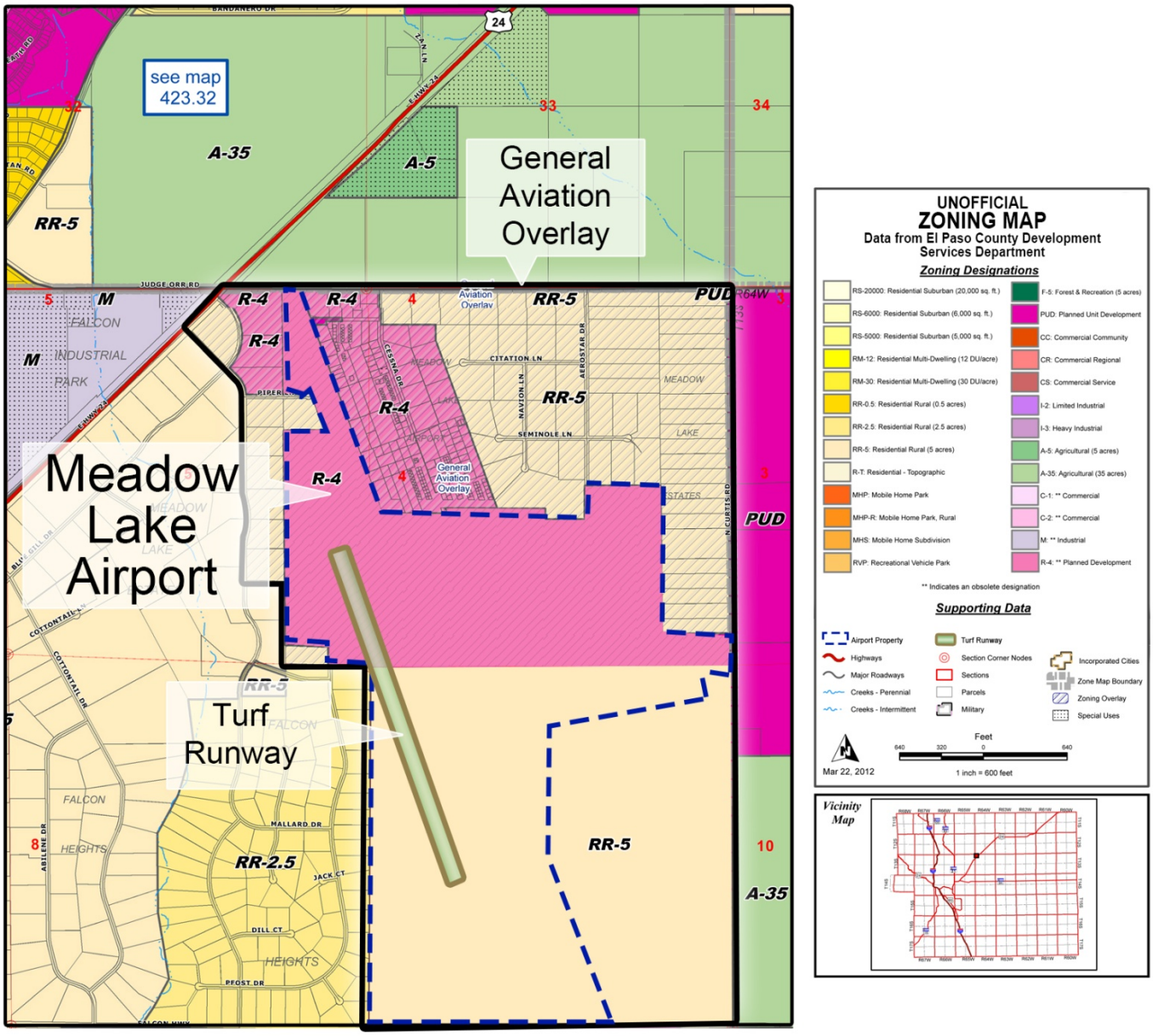
Alternative 2, the establishment of the Turf Runway, would maintain the existing land use and zoning conditions on and surrounding the airport. The areas surrounding the airport are zoned to prevent incompatible development in the future. Alternative 2 will produce a slight change in the existing noise contours; however, compatible land uses would be preserved. The change in aircraft noise will be discussed in more detail in **Section 5.13.**

As such, Alternative 2 would not change the compatibility of the existing and planned land uses in the vicinity of the airport; therefore, would have no significant compatible land use impacts.

Additionally, a letter was sent to the El Paso County Development Services Department (see **Appendix A**) requesting their concurrence with the Turf Runway. The County found the Turf Runway to be in compliance with the use and zoning designated for the airport property.

[11] Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks from 1990-2009, April 15 2011

FIGURE 5-1 - EL PASO COUNTY ZONING



Source: El Paso County, Development Services Department, *Zoning Designations*, 2012

5.5 Construction Impacts

Local, state, tribal, or federal ordinances and regulations address the impacts of construction activities, including construction noise, dust and noise from heavy equipment traffic, disposal of construction debris, and air and water pollution. Many of the specific types of impacts that could occur and permits or certificates that may be required are covered in the descriptions of other appropriate impact categories.

5.5.1 Alternative 1 – No Action

Alternative 1 does not include any construction; therefore, it would not create any construction impacts.

5.5.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 does not include any construction; therefore, it would not create any construction impacts.

5.6 Department of Transportation Act: Section 4(f)

Department of Transportation (DOT) Act, Section 4(f) lands are most commonly known as publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land from a historic site of national, state, or local significance as determined by the officials having jurisdiction thereof.

FLY is located in an area that is primarily considered a rural area. **Table 5-1** depicts the Section 4(f) properties located within a 5 mile radius of FLY. The nearest identified Section 4(f) property is the Falcon Day Care, located approximately 0.4 miles southwest of the airport.

TABLE 5-1 - 4(F) PROPERTIES

Site	Type	Distance to Airport
Falcon Day Care	School	0.4 miles
Jews for Jesus	Church	1.2 miles
Family of Faith Lutheran Church	Church	1.2 miles
Antler Creek Golf Course	Golf Course	1.3 miles
Woodman Hills Elementary School	School	1.3 miles
Town and Country Preschool	School	1.5 miles
Falcon High School	School	1.6 miles
Pikes Peak Community College- Falcon Campus	School	1.7 miles
Hope Montessori Academy	School	1.9 miles
Falcon Elementary School	School	1.9 miles
Meridian Ranch Elementary School	School	2.1 miles
St. Benedict Catholic Church	Church	2.4 miles
Falcon Congregation – Jehovah's	Church	2.5 miles
Meridian Point Church	Church	2.6 miles
Falcon Middle School	School	2.8 miles
Westminster Presbyterian	Church	2.8 miles
Falcon Baptist Church	Church	3.1 miles
Grace Community Church	Church	3.3 miles
Sagecreek Community Church	Church	3.5 miles
Pikes Peak School of Expeditionary Learning	School	3.6 miles
Black Squirrel Creek Bridge	Historic	4.7 miles

Source: Google Earth, 2012

5.6.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to existing Section 4(f) properties in the vicinity of the airport. As such, Alternative 1 would not have the potential to impact any land considered to be of Section 4(f) significance.

5.6.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 would not involve any construction or changes to existing Section 4(f) properties in the vicinity of the airport. As such, Alternative 2 would not have the potential to impact any land considered to be of Section 4(f) significance.

5.7 FARMLANDS

Land on and surrounding the airport has not been mapped by the NRCS; however, it has been mapped by the American Farmland Trust (Trust), as depicted in **Figure 5-2.** The Trust defined "high-quality" farmland by combining the U.S. Department of Agriculture's (USDA) "prime farmland" designation (land most suitable for producing food, feed, forage, fiber and oilseed crops) with the Trust's unique farmland definition (land used to grow vegetables, grapes and horticultural crops, including fruits, nuts and berries, that have unique soil and climatic requirements).

Because farmland conversion is taking place in every state, **Figure 5-2** identifies high-quality farmland that is important relative to statistical benchmarks established for each state. In addition to identifying the most intense areas of high quality farmland conversion in the nation, **Figure 5-2** also identifies where conversion was most intense within each given state.

The map designations were determined based on two threshold tests:

1. High-quality farmland included mapping units that in 1997 had greater than their statewide mapping unit averages of prime or unique farmland; and

2. High development included mapping units that experienced a rate of development greater than their statewide mapping unit average, providing it had at least 1,000 acres developed between 1992 and 1997.

Figure 5-2 highlights in dark green those mapping units with a greater percentage of high quality farmland than the average mapping unit within that state, a rate of development higher than the average mapping unit in the state, and more than 1,000 acres developed between 1987 and 1997.

Mapping units shaded in light green exceeded the average amount of high quality farmland found in mapping units within their state, but they experienced a lower rate of development than the average mapping unit in their state, or had less than 1,000 acres of development.

Dark green areas on the map signal rapid development and a potential threat to high quality farmland. One should take care in interpreting the map, remembering that high-quality farmland areas are relative to their state benchmarks.

FLY is located in an area designated as "Other" which does not display the characteristics of high quality farmland.

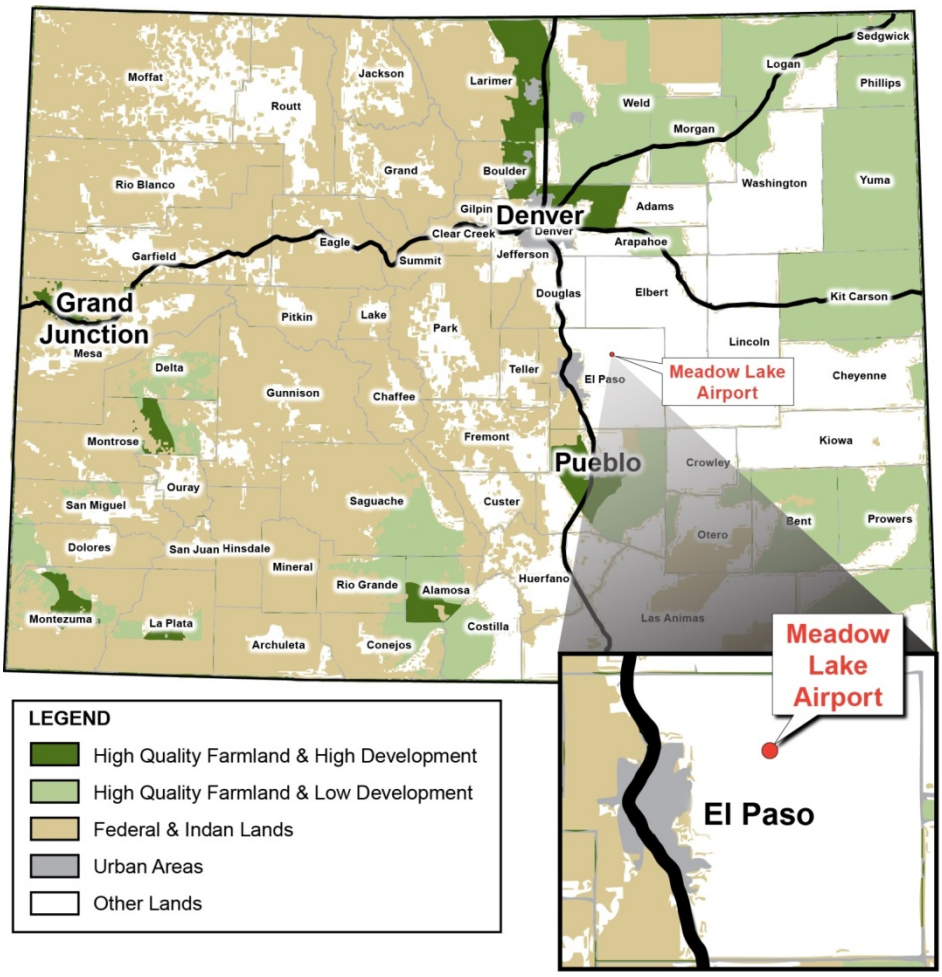
5.7.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to have impacts on any land considered to be farmland.

5.7.2 Alternative 2 – Establishment of Turf Runway

No area on or surrounding the airport is determined to be prime farmland, nor is any area zoned for agricultural use. Additionally, Alternative 2 would not involve any construction or changes to existing land use in the vicinity of the airport. Therefore, Alternative 2 does not have the potential to impact areas designated as prime, unique, or locally important farmlands.

FIGURE 5-2 - COLORADO FARMLAND MAP



Source: Jviation, Inc., and American Farmland Trust, www.farmland.org, 2012

5.8 Fish, Wildlife and Plants

Threatened, endangered, and candidates to be listed as threatened or endangered, within the project area, as defined by the U.S. Fish and Wildlife Service's *Information, Planning, and Conservation System* (IPaC) are depicted in **Table 5-2.** The region surrounding FLY is primarily open grass fields with some residential and rural development.

TABLE 5-2 - THREATENED AND ENDANGERED SPECIES

Species	Scientific Name	Status
Birds		
Least tern	Sterna antillarum	Endangered
Piping Plover	Charadrius melodus	Threatened
Mexican Spotted Owl	Strix occidentalis lucida	Threatened
Whooping crane	Grus Americana	Endangered
Fishes		
Arkansas darter	Etheostoma cragini	Candidate
Greenback Cutthroat trout	Oncorhynchus clarki ssp. Stomias	Threatened
Pallid sturgeon	Scaphirhynchus albus	Threatened
Flower Plants		
Ute ladies'-tresses	Spiranthes diluvialis	Threatened
Western Prairie Fringed Orchid	Platanthera praeclara	Threatened
Mammals		
Gunnison's prairie dog	Cynomys gunnisoni	Candidate
North American wolverine	Gulo gulo luscus	Candidate
Preble's Meadow Jumping mouse	Zapus hudsonius preblei	Threatened

Source: Department of the Interior, U.S. Fish and Wildlife Service. *IPAC System – Natural Resources of Concern, 2012*

5.8.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to have impacts on any existing biotic resources to include threatened and/or endangered species.

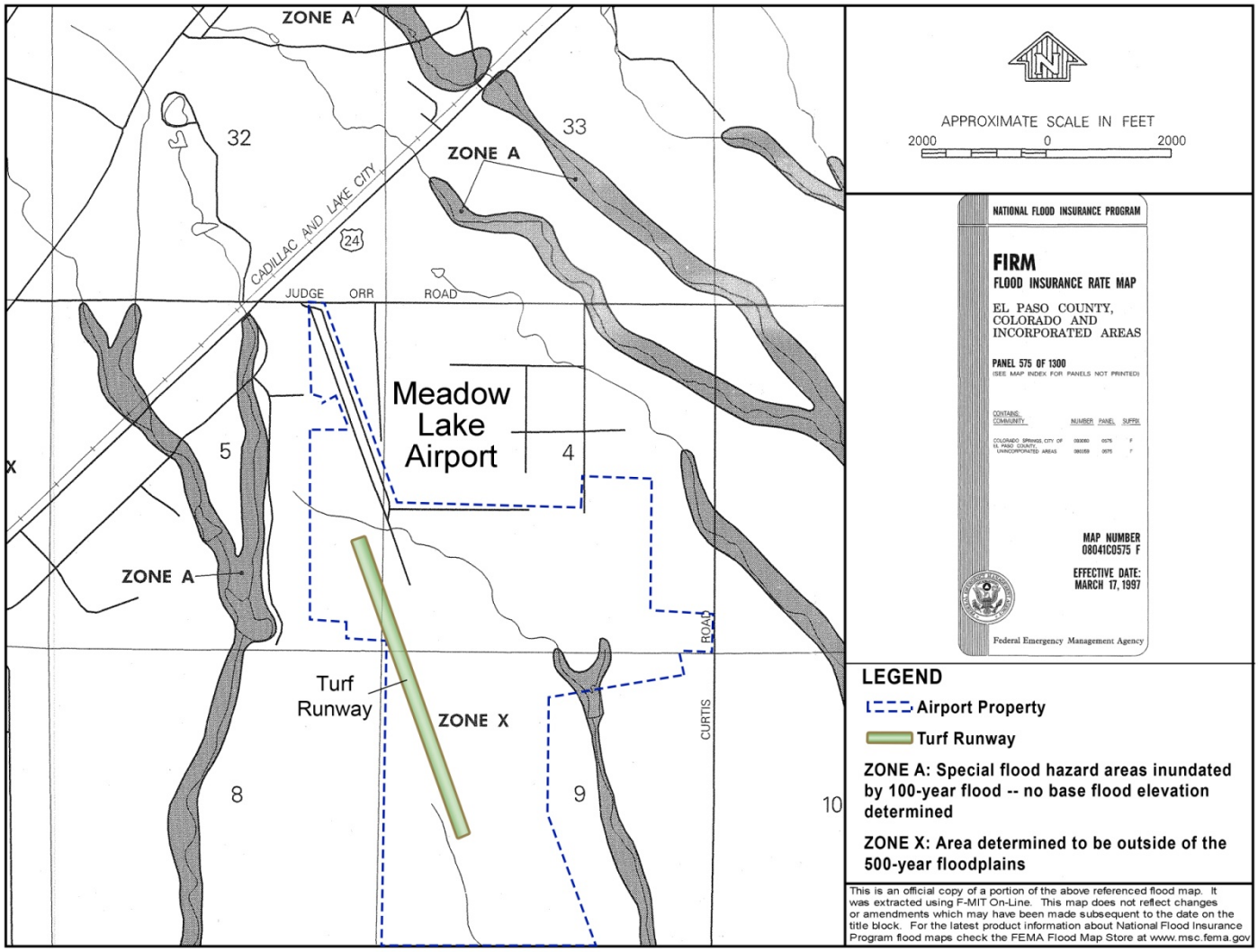
5.8.2 Alternative 2 – Establishment of Turf Runway

The establishment of the Turf Runway would result in aircraft using a portion of the airport that has not previously used for aircraft landings and take-offs. However, the area of the airport where the Turf Runway will be established has historically been mowed and disturbed through existing airport operations. Coordination with the USFWS was completed via email on November 22, 2011, as found in **Appendix A**. The USFWS determined that it is highly unlikely that any Federally-protected species would be found on the project site and concludes that the project would not affect any species protected by the Endangered Species Act.

5.9 FLOODPLAINS

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) is depicted in **Figure 5-3.** The airport property and a significant portion of the area surrounding the airport are designated as Zone X. Zone X is defined as "areas determined to be outside of the 500-year floodplains"[12]. Some areas in the vicinity of the airport are designated as Zone A which is defined as "special flood hazard areas inundated by 100-year flood – No base flood elevation determined".[13]

FIGURE 5-3 – FLOOD INSURANCE RATE MAP



Source: Federal Emergency Mangement Agency, *Flood Insurance Rate Map*, Map Number 08014C0575 F, 1997

5.9.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to impact any floodplains.

[12] Federal Emergency Management Agency, Flood Insurance Rate Map, 2012
[13] Ibid

5.9.2 Alternative 2 – Establishment of Turf Runway

The area in which the Turf Runway will be established is in an area designated as being in Zone X, which are areas determined to be outside of the 500-year floodplains. From which, it is presumed that Alternative 2 would not create any significant impacts to floodplains of any type nor would it encroach on a base floodplain.

5.10 Hazardous Materials, Pollution Prevention, and Solid Waste

The nearest landfill to FLY is the Colorado Springs Landfill located approximately five miles south of the airport. The landfill is one of three landfills located in El Paso County, with the other two are located in Fountain, approximately 17 miles southwest of FLY.

The EPA has three hazardous waste sites located within five miles of the airport reporting to the EPA. **Table 5-3** provides additional information for the reporting facilities.

TABLE 5-3 - EPA HAZARDOUS WASTE REPORTING SITES

Site Name	Environmental Interest Type	Reporting For	Distance to Airport
Maddox Holdings LLC	CESQG (Active)	Hazardous Waste	1.0 miles
Walmart Supercenter #4335	SQG (Active	Hazardous Waste	2.1 miles
Falcon School District	Air Minor (Inactive) CESQG (Active)	Hazardous Waste	2.5 miles

Source: U.S. Environmental Protection Agency, *MyEnvironment Map*, 2012

5.10.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to impact hazardous materials or create pollution and solid waste.

5.10.2 Alternative 2 – Establishment of Turf Runway

Alterative 2 would not impact any of the hazardous waste sites referenced in **Table 5-3**, as the Turf Runway would be established on airport property, while all the referenced sites are located at least one mile from the airport. Further, the establishment of the Turf Runway would not include any construction that would have the potential to disturb buried or unknown hazardous waste sites. As such, it is found that Alternative 2 would not have the potential to handle or dispose of any hazardous materials, chemicals, substances, or wastes.

5.11 Historical, Architectural, Archaeological, and Cultural Resources

The National Register of Historic Places lists one property within the vicinity of the airport. The closest property to the airport is the Black Squirrel Creek Bridge which is located approximately 4.7 miles northeast of the airport.

5.11.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to impact any historic properties included in or eligible for the NRHP.

5.11.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 would not involve the disturbance of any previously undisturbed land. In addition, no known cultural resources exist near or on airport property as the nearest NRHP listed property is 4.7 miles southeast of the airport.

A Section 106 Report to satisfy the NHPA Section 106 requirements is included as **Appendix B**. The Report was sent by the FAA to the State Historic Preservation Officer (SHPO) for review and approval. The SHPO responded on April 25, 2013, recommending a finding of no adverse affect under Section 106. The response letter can be found in **Appendix B** following the Section 106 Report.

5.12 Light Emissions and Visual Effects

Various lighting systems are essential for safe and efficient airport operations. Lighting systems are used for safe ground movement, specialized lighting systems, and aircraft navigation and operations. These light sources may cause disturbances to sensitive land uses such as homes, parks, or recreational areas. Special consideration should be given to the sensitive areas when evaluating the impacts of a proposed action.

The airports effects on natural resources and energy supply are primarily related to the amount of energy and resources required for aircraft, ground support vehicles, airport and airfield lighting, hangar buildings, and motor vehicles. Meadow Lake Airport has very few airport-owned vehicles and facilities to contribute to the use of natural resources and energy supply. Additionally, a majority of the most frequent users of the airport live directly adjacent to the airport, which reduces commute distance and the associated energy consumption.

5.12.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to create any additional light emissions or visual effects.

5.12.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 would not change any of the existing light emissions at the airport as the Turf Runway would be unlit and used for daytime operations. As such, Alternative 2 would not have the potential to create any light or visual-related impacts to the airport and surrounding communities.

5.13 Natural Resources and Energy Supply

Airport development actions have the potential to change energy requirements or the use of consumable natural resources. The FAA must evaluate potential impacts on supplies of energy and natural resources needed to build and maintain airports.

The airports effects on natural resources and energy supply are primarily related to the amount of energy and resources required for aircraft, ground support vehicles, airport and airfield lighting, terminal and hangar buildings, and motor vehicles.

5.13.1 Alternative 1 – No Action

Alternative 1 has the potential to increase fuel demand as the operations increase; however, the increased demand would be small and accommodated by the existing supplier and facilities. As such, Alternative 1 would not result in a significant impact. Furthermore, there are no known mineral or energy sources at FLY; therefore, it is not anticipated that any natural resources would be affected nor would there be a significant increase in demand for energy supplies.

5.13.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 has the potential to increase fuel demand as aircraft operations increase; however, the increased demand would be small and accommodated by the existing supplier and facilities. As such, Alternative 2 would not result in a significant impact. Furthermore, there are no known mineral or energy sources at FLY; therefore, it is not anticipated that any natural resources would be affected nor would there be a significant increase in demand for energy supplies.

5.14 Noise

When comparing no action and action alternatives that result in changes in aircraft activity or airfield operations, the FAA defines, in FAA Order 5050.4B, a significant noise impact occurs if an action increases aircraft noise levels within the no action 65 DNL contour 1.5 dB or more at any noise sensitive site. Noise sensitive areas, as defined in FAA Order 5050.4B, are areas where aircraft noise interferes with the area's typical activities or uses. Noise sensitive areas include residential neighborhoods; educational, health, and religious facilities; and outdoor recreational, cultural, and historic sites. Noise sensitive sites are the individual locations within these areas (e.g., a single-family residence within a neighborhood).

5.14.1 Methodology

The model, Integrated Noise Model (INM-Version 7.0c), produces a prediction of aircraft day/night noise levels (DNLs) and the potential for significant impacts. A significant noise impact would occur if noise sensitive areas were to experience an increase in noise of DNL 1.5 decibels (dB) or more at or above DNL 65 dB noise exposure when compared the existing conditions. When calculating DNLs, noise events that occur at night (between the hours of 10:00 pm and 7:00 am) are given a 10 dB penalty to account for the increased sensitivity during the night time hours.

This EA will provide noise exposure contours for DNL values of 65, 75, and 85 dBs. Areas within contour levels above 65 dB are considered by the FAA to be exposed to significant aircraft sound levels. The DNL contours developed for FLY consider the following factors:

- Aircraft arrival and departure profiles
- Runway layout
- Runway use
- Flight corridors
- Operational activity within each flight corridor
- Fleet mix and associated number of operations (for an annual average 24-hour day)
- Distribution of operations between the daytime (7:00 a.m. to 10:00 p.m.) and night time hours (10:00 p.m. to 7:00 a.m.)

5.14.2 Baseline Runway Layout

Presently, FLY has three runways; Runway 15/33, 8/26, and N/S. Runway 8/26 is 2,084 feet long and 35 feet wide. Runway 15/33 is 6,000 feet long and 60 feet wide. Runway N/S is 1,800 feet long and 15 feet wide. Alternative 1, the No Action Alternative will incorporate the existing configuration in developing the noise contours; while, Alternative 2, will incorporate the Turf Runway. In Alternative 2, the existing Runway N/S will be closed and replaced with the Turf Runway. The Turf Runway will be 5,000 feet long and 200 feet wide.

5.14.3 Runway Use

Runway usage is an essential component in noise analysis as runways with more usage typically result in greater noise levels. The runway use for Alternative 1, the No Action Alternative is depicted in **Table 5-4**. The runway use for Alternative 2, the Establishment of the Turf Runway is depicted in **Table 5-5**. Both runway usage tables were developed from data provided by FLY's airport management personnel and comparisons made to runway usage at the Colorado Springs Airport, the nearest towered airport. This data indicates the majority of arrivals and departures at FLY are on Runway 15 and 33 (96 percent). Additionally, it was indicated that approximately 5 percent of the daily operations occur during the nighttime hours

TABLE 5-4 - ALT. 1 RUNWAY USAGE

Runway	Arrivals	Departures	Touch and Go's
15	65%	65%	67%
33	31%	31%	33%
8	1%	1%	0%
26	2%	2%	0%
N	1%	1%	0%
S	1%	1%	0%

Source: FLY Airport Management and Jviation, Inc.

TABLE 5-5 - ALT. 2 RUNWAY USAGE

Runway	Arrivals	Departures	Touch and Go's
15	65%	65%	67%
33	31%	31%	33%
8	1%	1%	0%
26	2%	2%	0%
N	1%	1%	0%
S	1%	1%	0%

Source: FLY Airport Management and Jviation, Inc.

5.14.4 Alternative 1 – No Action

Aircraft noise is evaluated using average daily conditions; however, operations are typically reported annually. As such, annual operations as described in **Section 2.3.4.1** were used to develop the average day operations (annual operations/365) for Alternative 1 – No Action in the forecasted year 2022. **Table 5-6** depicts annual operations and average day operations, as well as aircraft group; GA propeller, helicopter, and tow plane.

TABLE 5-6 – ALT. 1 AIRPORT OPERATIONS AND FLEET MIX

Group	INM Aircraft	Aircraft Type	Average Day Ops	Annual Ops
GA Propeller	GASEPF	GA Single Eng Fix Prop	73.86	26,958.81
	GASEPV	GA Single Eng Variable Prop	73.86	26,958.81
	PA28	Piper Warrior	73.86	26,958.81
	CAN 206T	Cessna 206	73.86	26,958.81
	BEC58P	Beech Baron, Cessna 310 & 414	73.82	26,943.68
	PA30	Piper Twin Comanche	13.68	4,992.37
	DHC6	Beech Super King Air	13.68	4,992.37
Helicopter	R44	Robinson R44	4.14	1,512.84
	S-70	Blackhawk	4.14	1,512.84
	EC130	Eurocopter EC-130	1.41	514.37
	S-65	Skycrane	1.41	514.37
Tow Plane	GASEPF	Piper Super Cub Substitution	6.76	2,465.93
		Total	**414.48**	**151,284.00**

Source: FLY Airport Management, Jviation, Inc., and the FAA Terminal Area Forecast, 2012

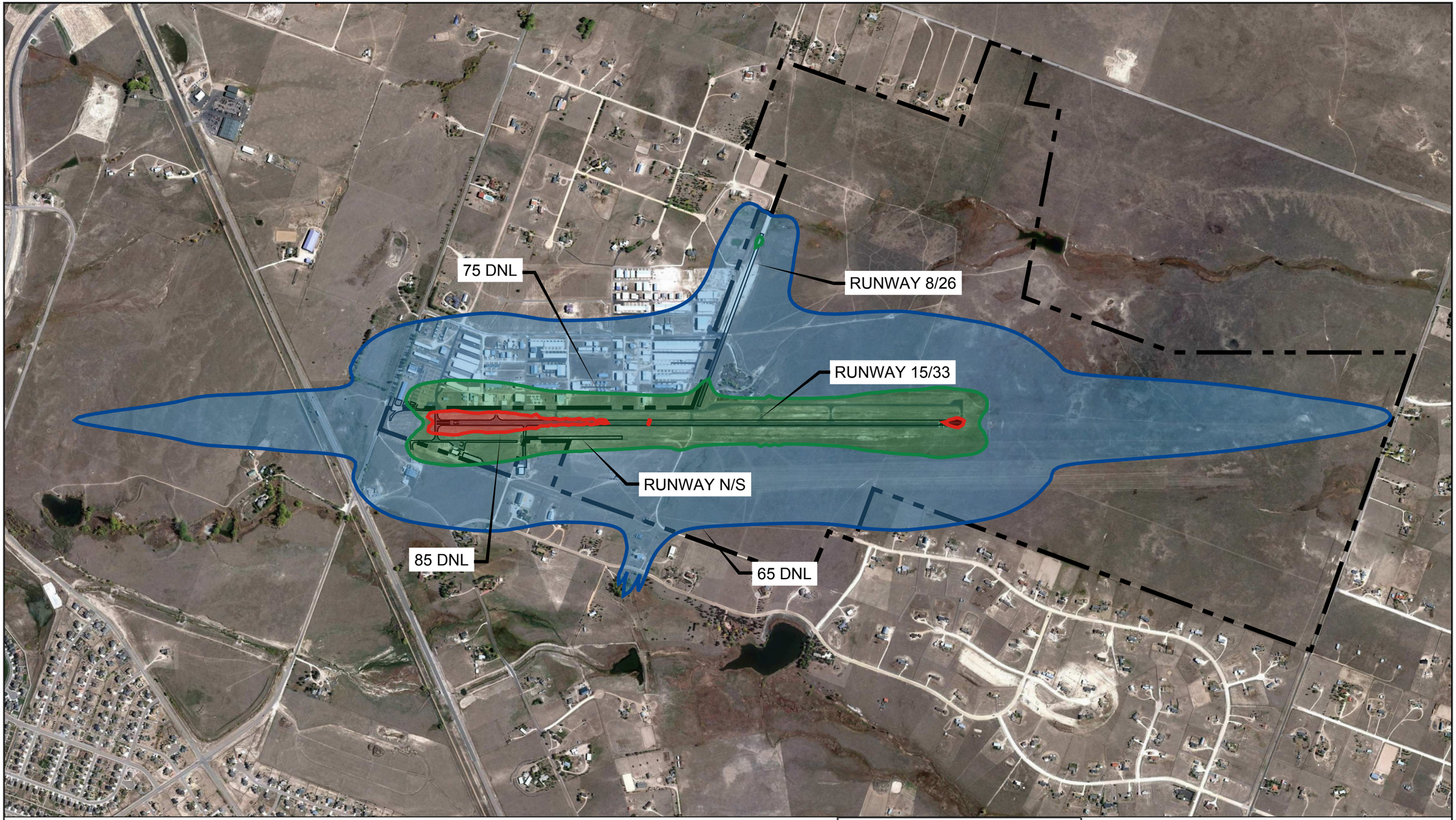
Figure 5-4 depicts the extent of 65, 75, and 85 DNL noise contours for the year 2022 in Alternative 1 – No Action. As shown, a majority of the 65 and nearly all of 75, and 85 DNL noise contours lie within the airport property boundaries. Approximately 0.32 square miles of 65-74 DNL and 0.32 square miles of 75-84 DNL extends beyond the airport property. **Table 5-7** provides the size, in square miles, of each contour interval.

TABLE 5-7 – ALT. 1 - AREA (SQUARE MILES) WITHIN THE 65, 75, AND 85 DNL CONTOURS

Year	65-74 DNL	75-84 DNL	85+ DNL	TOTAL
2022 – No Action	**0.6978**	**0.1491**	**0.0121**	**0.8589**

Source: Jviation, Inc.

The FAA has identified, in Order 5050.4B that a significant noise impact occurs if the aircraft noise analysis indicates that the proposed action results in an increase within the 65 DNL contour of 1.5 dB or greater at any noise sensitive site. The 65-74 DNL that lies outside of the airport property boundary increases 30 percent and the 75-84 DNL increases by 32 percent with the forecasted growth of operations without the proposed Turf Runway. However, there are no known noise sensitive areas within the forecasted contours and no new residences will be exposed to any noise above 65 DNL. As such, it is assumed that no significant noise impacts are expected as a result of Alternative 1.



GRAPHIC SCALE
500 0 500 1000
(IN FEET)

PROPERTY LINE*
*ESTIMATED

85+ DNL
75-84 DNL
65-74 DNL

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MEADOW LAKE AIRPORT
ALTERNATIVE 1
NO ACTION
2022

DATE: JUNE 1, 2012

FIGURE 5-4

5.14.5 Alternative 2 – Establishment of Turf Runway

Annual operations as described in **Section 2.3.4.2** were used to develop the average day operations (annual operations/365) for Alternative 2 – Establishment of Turf Runway in the forecasted year 2022. **Table 5-8** depicts annual operations and average day operations, as well as aircraft group; GA propeller, helicopter, and tow plane.

TABLE 5-8 – ALT. 2 AIRPORT OPERATIONS AND FLEET MIX

Group	INM Aircraft	Aircraft Type	Average Day Ops	Annual Ops
GA Propeller	GASEPF	GA Single Eng Fix Prop	74.02	27,015.63
	GASEPV	GA Single Eng Variable Prop	74.02	27,015.63
	PA28	Piper Warrior	73.80	26,938.44
	CAN 206T	Cessna 206	73.80	26,938.44
	BEC58P	Beech Baron, Cessna 310 & 414	73.59	26,861.25
	PA30	Piper Twin Comanche	12.69	4,631.25
	DHC6	Beech Super King Air	12.69	4,631.25
Helicopter	R44	Robinson R44	4.19	1,528.31
	S-70	Blackhawk	4.14	1,512.88
	EC130	Eurocopter EC-130	1.35	494.00
	S-65	Skycrane	1.35	494.00
Tow Plane	GASEPF	Piper Super Cub Substitution	17.30	6,313.94
		Total	**422.95**	**154,375.00**

Source: FLY Airport Management, Jviation, Inc., and the FAA Terminal Area Forecast, 2012

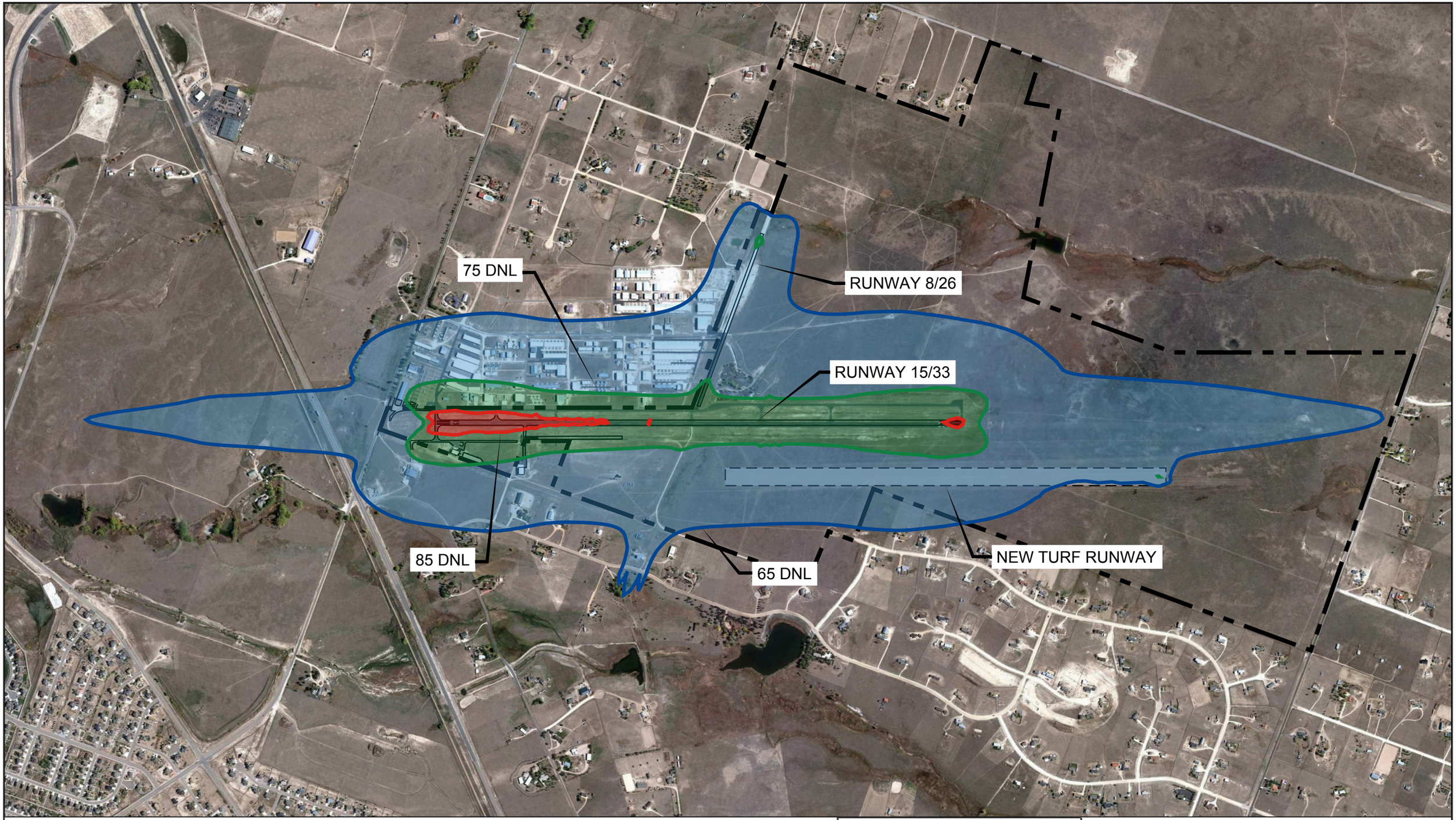
Figure 5-5 depicts the extent of 65, 75, and 85 DNL noise contours for the year 2022 in Alternative 2 – Establishment of Turf Runway. As shown, a majority of the 65 and nearly all of 75, and 85 DNL noise contours lie within the airport property boundaries. Approximately 0.31 square miles of 65-74 DNL and 0.03 square miles of the 75-84 DNL extends beyond the airport property which is a decrease in area of 1.2 percent and 0.03 percent from Alternative 1. The decrease is a result of some of the existing traffic moving to the Turf Runway which is more centrally located on airport property and moves traffic further from the property line. **Table 5-9** provides the size, in square miles, of each contour interval.

TABLE 5-9 – ALT. 2 - AREA (SQUARE MILES) WITHIN THE 65, 75, AND 85 DNL CONTOURS

Year	65-74 DNL	75-84 DNL	85+ DNL	TOTAL
2022 – With Turf Runway	**0.7032**	**0.1483**	**0.0119**	**0.8635**

Source: Jviation, Inc.

The FAA has identified, in Order 5050.4B that a significant noise impact occurs if the aircraft noise analysis indicates that the proposed action results in an increase within the 65 DNL contour of 1.5 dB or greater at any noise sensitive site. The establishment of the Turf Runway results in a decrease in noise levels above 65 DNL that lie outside the airport property boundary. This results in an improved noise situation at FLY. Fewer off airport properties and no new residences will be exposed to noise levels above 65 DNL as a result of Alternative 2. As such, it is assumed that no significant noise impacts are expected as a result of Alternative 2.



GRAPHIC SCALE
500 0 500 1000
(IN FEET)

PROPERTY LINE*
*ESTIMATED

85+ DNL
75-84 DNL
65-74 DNL

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MEADOW LAKE AIRPORT
ALTERNATIVE 2
NEW TURF RUNWAY
2022

DATE: JUNE 1, 2012

FIGURE 5-5

5.15 Secondary (Induced) Impacts

Secondary (induced) impacts are a result of actions and occur later in time and are farther removed in distance, but are still reasonably foreseeable, according to 40 CFR, Section 1508.8. This differs from cumulative impacts which result from the accumulation of separate past, present, and future reasonably foreseeable actions. Cumulative impacts are discussed in **Section 5.20** of this document. Secondary (induced) or indirect impacts may result from major development projects that induce changes such as shifts in patterns of population movement and growth; public service demands; and changes in business and economic activity to the extent influenced by the airport development.

5.15.1 Alternative 1 – No Action

Alternative 1 does not change the existing conditions at the airport and would therefore not have the potential to induce any changes such as shifts in patterns of population movement and growth; public service demands; and changes in business and economic activity to the extent influenced by the airport development.

5.15.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 results from the existing demand for an improved glider runway. Per **Section 2.3.4.2**, the establishment of the turf runway may potentially increase operations but not significantly more than the growth anticipated without the Turf Runway. There is a potential for the Turf Runway to induce private development on the west side of the airport associated with the glider operations. Currently hangar facilities are all located on the east side of the airport which is inconvenient and unsafe for glider operators as they have to cross an active runway for access. Private development on the west is anticipated to accommodate the glider community and improve their operational efficiency and safety. The development would remain on airport property and would be accessed via Falcon Highway a public road that experiences normal levels of traffic. It is not anticipated that the development would create a significant increase in traffic and would likely be heaviest on the weekends when the traffic on Falcon Highway is reduced without the business commuters. As such, is not anticipated that Alternative 2 would induce any significant changes such as shifts in patterns of population movement and growth; public service demands; and changes in business and economic activity to the extent influenced by the airport development.

5.16 Socioeconomic Impacts, Environmental Justice, and Children's Health and Safety Risks

Airport development actions have the potential to create social impacts, health and safety risks to children, and socioeconomic impacts, including moving homes or businesses; dividing or disrupting established communities; changing surface transportation patterns; disrupting orderly, planned development; and creating a notable change in employment. The local demographic information and social profile gives a relevant idea of the economy of the region surrounding a project.

5.16.1 Population

The City of Colorado Springs has experienced a slightly smaller population increase over the last 20 years in comparison to El Paso County and the State of Colorado as depicted in **Table 5-10**. Colorado Springs has grown by 50 percent since 1990, while El Paso County and Colorado have grown by 58 percent and 53 percent.

TABLE 5-10 - HISTORICAL POPULATION CHANGE

	1990	1995	2000	2005	2010
City of Colorado Springs	280,430	328,782	361,901	384,409	419,353
Percent Change	--	17%	10%	6%	9%
El Paso County	397,014	469,693	519,802	569,322	627,096
Percent Change	--	18%	11%	10%	10%
Colorado	3,294,394	3,811,074	4,338,801	4,662,534	5,050,870
Percent Change	--	16%	14%	7%	8%

Source: State of Colorado, Department of Local Affairs, County and Municipal Population Estimates, 2012

5.16.2 Unemployment

The City of Colorado Springs has experienced an increase in unemployment rates by 39 percent from 1990 to 2010, which is similar to the increase is El Paso County's unemployment rate (as depicted in **Table 5-11**). However, the State of Colorado experienced a higher increase in unemployment, by 71 percent, over the same time frame. The most drastic incline in unemployment rates experienced by all three divisions occurred between 2000 and 2010. This is likely a direct result of the national economic recession experienced throughout the U.S.

TABLE 5-11 - HISTORICAL UNEMPLOYMENT RATES

	1990	1995	2000	2005	2010
City of Colorado Springs	7%	4.4%	2.9%	5.4%	9.7%
Percent Change	--	-37%	-34%	86%	80%
El Paso County	7.1%	4.4%	2.9%	5.4%	9.8%
Percent Change	--	-38%	-34%	86%	81%
Colorado	5.2%	4.0%	2.8%	5.1%	8.9%
Percent Change	--	-23%	-30%	82%	75%

Source: U.S. Bureau of Labor Statistics, 2012

5.16.3 Alternative 1 – No Action

Alternative 1, the No Action Alternative, would not change the existing conditions at FLY or change existing businesses operating at FLY. Therefore, it would not have the potential to result in: the acquisition or conversion of residential properties to airport property; significant adverse impacts to businesses or socioeconomic resources; the disruption of local traffic patterns that would substantially reduce the levels of service to the roads in the surrounding communities; disproportionate and adverse human health or environmental effects of its programs, policies, and activities to minority and low-income populations; negative impacts that would affect low income or minority populations at a disproportionately higher level than that of other population segments; or environmental health risks and safety risks that may disproportionately affect children.

5.16.4 Alternative 2 – Establishment of Turf Runway

Alternative 2, the establishment of the Turf Runway, would not negatively impact the existing businesses operating at FLY. The Turf Runway would allow for existing glider associated businesses to operate in a safer and more open environment which would be a positive impact to their business and clients. The Turf Runway would remain on airport property and would not require the acquisition of any land or change to surrounding communities. Therefore, it would not have the potential to result in: the acquisition or conversion of residential properties to airport property; significant adverse impacts to businesses or socioeconomic resources; the disruption of local traffic patterns that would substantially reduce the levels of service to the roads in the surrounding communities; disproportionate and adverse human health or environmental effects of its programs, policies, and activities to minority and low-income populations; negative impacts that would affect low income or minority populations at a disproportionately higher level than that of other population segments; or environmental health risks and safety risks that may disproportionately affect children.

5.17 Water Quality

FLY potentially contributes to five different watersheds to include: Big Sandy, Bijou, Chico, Fountain, and Kiowa. All five of the watersheds are located in Colorado. The Big Sandy watershed is monitored by the National Park Service Water Resources Division, the Colorado Department of Publish Health and Environment, and The Rivers of Colorado Water Watch Network. The Bijou watershed is monitored by the Colorado Department of Public Health and Environment, The Rivers of Colorado Water Watch Network, and the Littleton/Englewood Wastewater Treatment Plant. The Chico watershed is monitored by the Colorado Department of Public Health and Environment and The Rivers of Colorado Water Watch Network. The Fountain watershed is monitored by the Colorado Department of Public Health and Environment, The Rivers of Colorado Water Watch Network, and the EPA National Aquatic Resource Survey Data. The Kiowa watershed is monitored by the Colorado Department of Public Health and Environment and The Rivers of Colorado Water Watch Network. Lastly, the airport's surface waters are managed by the Upper Black Squirrel Creek Ground Water Management District.

5.17.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not have the potential to create any impound, divert, drain, control, or otherwise modify waters of any stream or other body of water; nor would they have the potential to contaminate any aquifer designated by the EPA as a sole or principal drinking water resource.

5.17.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 would not involve any construction, grading or disruption of the existing water flow at FLY. As such, Alternative 2 would not have the potential to create any impound, divert, drain, control, or otherwise modify waters of any stream or other body of water; nor would they have the potential to contaminate any aquifer designated by the EPA as a sole or principal drinking water resource.

5.18 WETLANDS

An initial wetlands inventory was completed through the use of the U.S. Fish and Wildlife Service's *National Wetlands Inventory Wetlands Mapper*. The Mapper depicted the potential for wetlands to exist on the airport as depicted in **Figure 5-6.** A site visit was completed by the U.S. Army Corp of Engineers on December 7th, 2011, as depicted in **Appendix A**. From this it was found that further wetland delineation was not needed as the airport property was significantly composed of uplands.

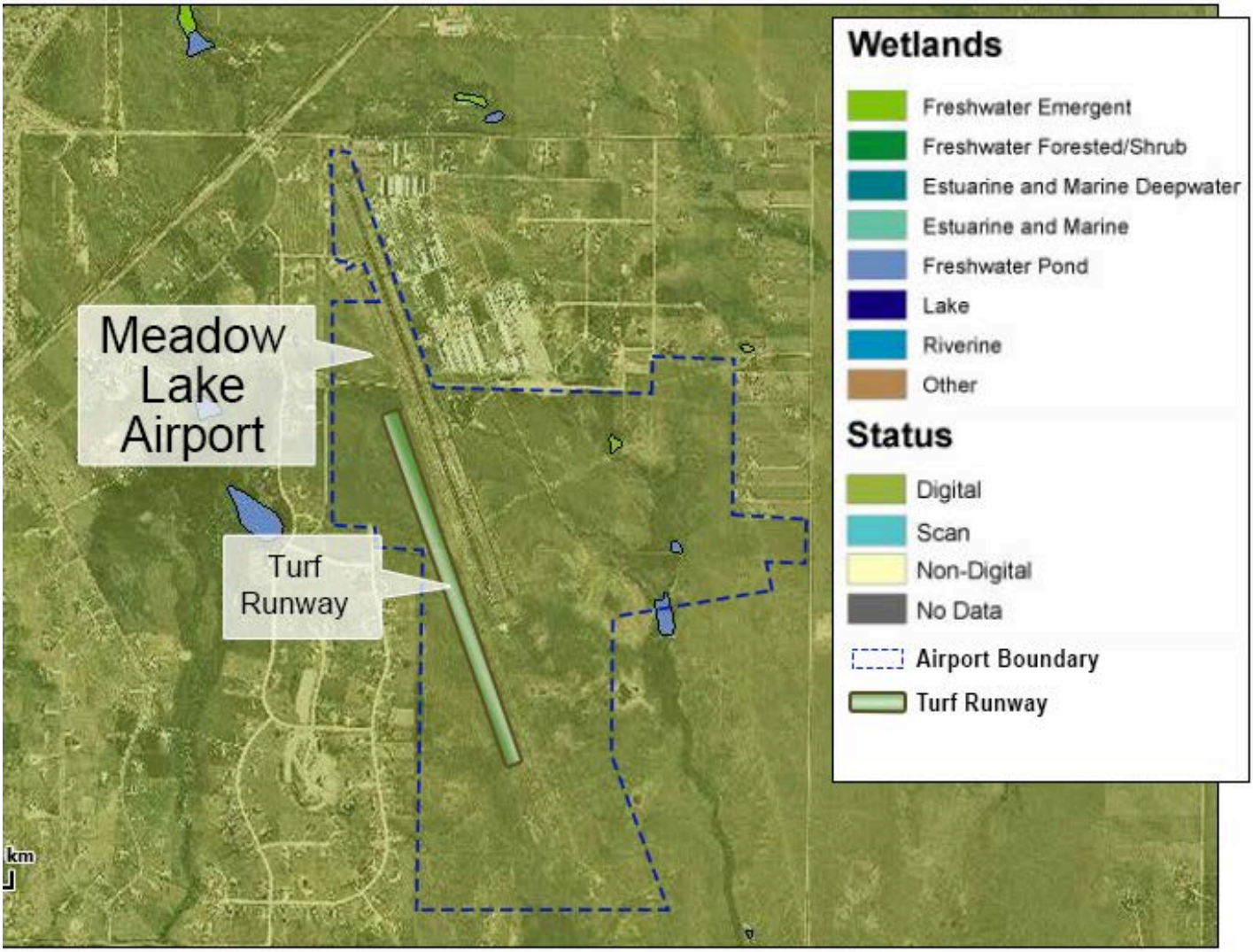
5.18.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport. As such, Alternative 1 would not involve the discharge of dredged or fill material, or any excavation associated with a dredged or fill project, either temporary or permanent, in an aquatic site, which may include ephemeral and perennial streams, wetlands, lakes, ponds, drainage ditches and irrigation ditches, nor would it include any work in an aquatic site. Therefore, Alternative 1 would not have the potential to result in the destruction, loss, or degradation of wetlands.

5.18.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 would not involve any construction or changes to land that may be considered a wetland. Furthermore, the U.S. Army Corp of Engineers determined that project site consists entirely of uplands and a Department of the Army Section 404 permit is not required. As such, Alternative 2 would not involve the discharge of dredged or fill material, or any excavation associated with a dredged or fill project, either temporary or permanent, in an aquatic site, which may include ephemeral and perennial streams, wetlands, lakes, ponds, drainage ditches and irrigation ditches, nor would it include any work in an aquatic site. Therefore, Alternative 2 would not have the potential to result in the destruction, loss, or degradation of wetlands.

FIGURE 5-6 - MEADOW LAKE WETLANDS INVENTORY



Source: U.S. Fish and Wildlife Service, *National Wetlands Inventory, Wetlands Mapper*, 2012

5.19 Wild and Scenic Rivers

The Cache la Poudre River (Poudre) is the only river designated as being Wild and Scenic in the state of Colorado. The Poudre is located east of the Continental Divide, in the northern Front Range of Colorado. The main and south forks of the Poudre originate in Rocky Mountain National Park, then flow north and east through the Roosevelt National Forest. The river eventually passes through the City of Fort Collins, and then joins the South Platte River east of Greeley. The Poudre is located approximately 90 miles north of FLY.

5.19.1 Alternative 1 – No Action

Alternative 1 does not have the potential to affect a Wild and Scenic River, a river or river segment under study for inclusion in the Wild and Scenic River System, a Nationwide Rivers Inventory river segment, or an otherwise eligible river, as the nearest Wild and Scenic River is more than 90 miles from FLY.

5.19.2 Alternative 2 – Establishment of Turf Runway

Alternative 2 does not have the potential to affect a Wild and Scenic River, a river or river segment under study for inclusion in the Wild and Scenic River System, a Nationwide Rivers Inventory river segment, or an otherwise eligible river, as the nearest Wild and Scenic River is more than 90 miles from FLY.

5.20 Cumulative Impacts

Cumulative impacts are impacts a proposed action may have on resources when added to impacts on a resources due to past, present, and reasonably foreseeable actions within a defined time and geographic area. The Council on Environmental Quality (CEQ), under NEPA regulations (40 CFR 1508.7) defines a cumulative impact as an "*impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time.*"

Cumulative impacts must be evaluated to asses a proposed action's direct and indirect impacts on a particular resource, in combination with the effects on the same resource due to past, present, and reasonably foreseeable actions. It must be determined whether the proposed action would cause any significant cumulative effects. The airport has experienced very little development in the recent past; however, future development is scheduled. In accordance with the airports most current Capital Improvement Plan (CIP), the most notable future projects include:

- 2012: Implement Access Control
- 2012: Construct Taxiway B Loop, phase I
- 2013: Construct Taxiway B Loop, phase II
- 2013: Construct Westside Transient Apron, phase I
- 2015: Construct Westside Transient Apron, phase II

5.20.1 Alternative 1 – No Action

Alternative 1 would not involve any construction or changes to the existing conditions on and surrounding the airport; therefore, it is assumed that when compared to the impacts of past, present, and reasonably foreseeable future projects, Alternative 1 would have limited potential for significant cumulative impacts

5.20.2 Alternative 2 – Establishment of Turf Runway

When compared to the impacts of past, present, and reasonably foreseeable future projects, Alternative 2 would have limited potential for significant cumulative impacts. All of the projects identified would be independent to that of Alternative 2; therefore, no cumulative impacts would be anticipated.

5.21 Summary of Environmental Impacts

After a thorough analysis of both alternatives' potential for environmental impacts, it is found that there will be no significant adverse impacts as a result of Alternative 1 – No Action and Alternative 2 – Establishment of Turf Runway. **Table 5-12** summarizes the impacts associated with both alternatives.

TABLE 5-12 - IMPACTS SUMMARY

	Impact Categories	Alt. 1 – No Action	Alt. 2 – Turf Runway
1	Air Quality	None	None
2	Climate	None	None
3	Coastal Resources	None	None
4	Compatible Land Use	None	None
5	Construction Impacts	None	None
6	Department of Transportation Act:: Section 4(f)	None	None
7	Farmlands	None	None
8	Fish, Wildlife and Plants	None	None
9	Floodplains	None	None
10	Hazardous Materials, Pollution Prevention, and Solid Waste	None	None
11	Historical, Architectural, Archaeological, and Cultural Resources	None	None
12	Light Emissions and Visual Effects	None	None
13	Natural Resources and Energy Supply	None	None
14	Noise	None	None
15	Secondary (induced) Impacts	None	None
16	Socioeconomic Impacts, Environmental Justice, and Children's Health and Safety Risks	None	None
17	Water Quality	None	None
18	Wetlands	None	None
19	Wild and Scenic Rivers	None	None
20	Cumulative Impacts	None	None

Source: Jviation, Inc.

6.0 LIST OF PREPARERS

6.1 LEAD AGENCY

The FAA is the lead agency for the preparation of this FINAL EA.

Federal Aviation Administration
FAA Denver Airports District Office
26805 E. 68th Ave. Suite 224
Denver, CO 80249

6.2 PRINCIPAL PREPARERS

The following people were primarily responsible for the preparation of this FINAL EA.

Jviation Inc.
Morgan Einspahr, Environmental Planner
Dave Nafie, Senior Planner
Alan Wiechmann, Sr. Consultant
Craig Sparks, Sr. Consultant

7.0 CONSULTATION AND COORDINATION

This section contains records of correspondence with agencies to include reference to attached letters and comments, and public coordination letters and comments.

7.1 PUBLIC INVOLVEMENT

As stated in FAA Order 1050.1E and as required through NEPA and CEQ regulations, federal agencies are required to: obtain information from the public regarding environmental concerns surrounding a proposed action, fully assess and disclose potential environmental impacts resulting from the proposed action and alternatives, and provide the public with and allow for comments on the information. Additionally, the FAA is committed to making complete, open, and effective public participation as essential part of their actions, programs, and decisions.

Public involvement must be provided for, to the extent practicable, throughout the Environmental Assessment process. Early coordination is recommended, though the extent will depend on the complexity, sensitivity, degree of federal involvement, and anticipated environmental impacts of the proposed action. The FAA has tailored the public involvement process to match the complexity of the proposed action.

7.1.1 Public Notice

The preparation of the EA was advertised in The Gazette[14] preceding a public meeting on February 28th, 2012. An informational presentation was given at the public meeting discussing the establishment of the Turf Runway and the EA process.

7.1.2 Notice of Availability

The DRAFT EA's Notice of Availability was advertised in the Gazette[15] on March 13th, 27th and April 10th, 2013, as depicted in **Appendix C**, which included the opportunity for requests for a Public Hearing. The DRAFT EA was made available for review and comments from March 13th to April 12th, 2013 (30 days) with copies distributed to the following locations:

High Prairie Library
7035 Old Meridian Rd.
Falcon, CO 80831

FAA Northwest Mountain Region
Denver Airport District Office
26805 E. 68th Avenue, Suite 224
Denver, CO 80249-6361

[14] The Gazette, February 24, 2012
[15] The Gazette, March12, 27, and April 10, 2013

7.2 AGENCY NOTIFICATION AND COORDINATION

Early coordination with various agencies was completed throughout the development of the EA. The agencies identified in **Table 7-1** were sent a notification letter, asking for comments and concerns with the Proposed Action. The agencies that received a notification letter are depicted in **Appendix A**.

TABLE 7-1 - AGENCY COORDINATION STATUS

Agency	Response Status
U.S. Fish and Wildlife Service **Colorado Field Office** **P.O. Box 25486** **Denver, CO 80225-0486** **Adam Misztal (Adam_Misztal@fws.gov)**	Sent email dated November 21, 2011 Email response was November 21, 2011 No concerns were found
U.S. Army Corps of Engineers **Southern Colorado Regulatory Offices** **200 South Santa Fe, Suite 301** **Pueblo, Colorado 801003-4270**	Site Visit Completed on December 11th, 2011 Response letter received March 20, 2012 No concerns were found
El Paso County Planning and Zoning Division **El Paso County Development Services Department** **Attn: Mike Hrebenar** **2880 International Circle, Suite 110** **Colorado Springs, CO 80910**	Sent letter dated January 2, 2013 Response letter received January 7, 2013 No concerns were found
Department of Natural Resources, Division of Wildlife **Attn: Sabrina Hurwitz** **4255 Sintin Rd.** **Colorado Springs, CO 80907**	Sent letter dated May 10, 2012 Response letter received March 23, 2012 No concerns were found
Colorado Department of Public Health and Environment **Air Pollution Control Division** **Attn: Paul Tourangeau** **4300 Cherry Creek Drive South** **Denver, CO 80246-1530**	Sent letter dated May 10, 2012 No response received, assumed concurrence
Colorado Department of Public Health and Environment **Water Quality Control Division** **Attn: Steve Gunderson** **4300 Cherry Creek Drive South** **Denver, CO 80246-1530**	Sent letter dated May 10, 2012 No response received, assumed concurrence

7.3 SECTION 106 COORDINATION

In addition to the above mentioned agencies, a Section 106 Report was prepared in accordance with the National Historic Preservation Act, as depicted in **Appendix B**. The Report was distributed along with a notification letter and coordination was completed with the following:

Ed Nichols
State Historic Preservation Officer
Colorado Historical Society
1200 Broadway
Denver, CO 80203

8.0 ABBREVIATIONS

A-35 – Agriculture District

AC – Advisory Circular

ALP – Airport Layout Plan

CAA – Clean Air Act

CBRA - Coastal Barriers Resources Act

CEQ – Council on Environmental Quality

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

CH_4 - Methane

CO – Carbon Monoxide

CO_2 – Carbon Dioxide

CZMA - Coastal Zone Management Act

dB – Decibel

DNL - Day/night Noise Levels

DOE – Department of Energy

DOT – Department of Transportation

EA – Environmental Assessment

EO – Executive Order

EPA – Environmental Protection Agency

ESA - Endangered Species Act

FAA – Federal Aviation Administration

FEMA - Federal Emergency Management Agency

FIRM - Flood Insurance Rate Map

FLY – Meadow Lake Airport

FPO - Federal Preservation Office

FPPA – Farmland Protection Policy Act

GA – General Aviation

GA-O – General Aviation Overlay District

GAO - General Accounting Office

GHG – Greenhouse Gases

HFCs – Hydrofluorocarbons

ICAO - International Civil Aviation Organization

INM - Integrated Noise Model

IPaC - Information, Planning, and Conservation System

MLAA – Meadow Lake Airport Association

NAAQS – National Ambient Air Quality Standards

NASA – National Aeronautics and Space Administration

NEPA – National Environmental Policy Act

NHPA - National Historic Preservation Act

NMFS - National Marine Fisheries Service

N_2O – Nitrous Oxide

NO_2 – Nitrogen Dioxide

NOAA – National Oceanic and Atmospheric Administration

NPDES - National Pollutant Discharge Elimination System

NRHP - National Register of Historic Places

NPIAS – National Plan of Integrated Airport Systems

NPS - National Park Service

NRCS - Natural Resource Conservation Service

O_3 – Ozone

PAPI - Precisions Approach Path Indicators

Pb - Lead

PCPI – Per Capita Personal Income

PFCs - Perfluorocarbons

PM – Particulate Matter

PUD – Planned Unit Development

RCRA - Resource Conservation and Recovery Act

RR-2.5 – Residential Rural District

RR-5 – Residential Rural District

SARA - Superfund Amendments and Reauthorization Act

SF_6 - Sulfur Hexafluorid

SHPO - State Historic Preservation Officer

SO_2 – Sulfur Dioxide

TAF – Terminal Area Forecast

THPO - Tribal Historic Preservation Officer

USDA - U.S. Department of Agriculture

USFWS - U.S. Fish and Wildlife Service

9.0 REFERENCES

40 CFR Part 261, 1976, U.S. Environmental Protection Agency, *Resource Conservation and Recovery Act*

40 CFR Part 302, 1985, U.S. Environmental Protection Agency, *Designation, Reportable Quantities, and Notification*

Airport Development Group, Inc., 2008, Airport Layout Plan Report

Alan Melrose, 2010, "*European ATM and Climate Adaptation: A Scoping Study," in ICAO Environmental Report*

American Farmland Trust, 2012, *www.farmland.org*

Council on Environmental Quality, 2010, *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*

General Accounting Office, 2009, *Aviation and Climate Change, GAO Report to Congressional Committees*

El Paso County, Development Services Department, *Zoning Designations*, 2012

Executive Order 11990, *Protection of Wetland*s, 42 FR 26961

Executive Order 11988, *Floodplain Management,* 1977, 42 FR 26951, 3 CFR

Executive Order 11990, 1977, *Protection of Wetland*s, 42 FR 26961

Executive Order 12088, 1978, *Federal Compliance with Pollution Control Standards*, as amended, 43 FR 47707

Executive Order 12514, 1985, *Federal Leadership in Environmental, Energy, and Economic Performance*

Executive Order 12590, 1987, *Superfund Implementation*, as amended, 52 FR 2923

Executive Order 12898, 1994, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* 59 FR 7629

Executive Order 13045, 1997, *Protection of Children from Environmental Health Risks and Safety Risks*, 62 FR 5137

Executive Order 13089*, Coral Reef Protection,* 63 FR §§ 32703-32703

Executive Order 13123, 2000, *Greening the Government through Efficient Energy Management*

Federal Aviation Administration, Aerospace Forecast Fiscal Years 2011-2031

Federal Aviation Administration, Advisory Circular (AC) 150/5070-6B: *Airport Master Plans*

Federal Aviation Administration, 2007, *Environmental Desk Reference for Airport Actions*

Federal Aviation Administration, Order 1050.1E, *Environmental Impacts: Policies and Procedures*

Federal Aviation Administration, Order 1050.1E, *Environmental Impacts: Policies and Procedure,* Paragraph 405d

Federal Aviation Administration, Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, April 26, 2006

Federal Aviation Administration, 2010, *FAA Terminal Area Forecast*

Federal Emergency Management Agency, 2007, *Flood Insurance Rate Map, Adams County*

Lourdes Q. Maurice and David S. Lee, 2007, *Chapter* 5: *Aviation Impacts on Climate.* Final Report of the International Civil Aviation Organization (lCAO) Committee on Aviation and Environmental Protection (CAEP) Workshop

Massachusetts v. E.P.A., 549 U.S. 497, 508-10, 521-23 (2007)

National Park Service, U.S. Department of the Interior, 2012, *National Register of Historic Places*, El Paso County

State of Colorado, Department of Local Affairs, 2012, *County and Municipal Population Estimates*

U.S. Code, 1899, the Rivers and Harbors Appropriation Act of 1899, Public Law 92-500, 33 UCS §1151

U.S. Code, 1958*, Fish and Wildlife Coordination Act of 1958,* Public Law 85-624, 16 USC §661-666c

U.S. Code, 1958*, Fish and Wildlife Coordination Act of 1958,* Public Law 85-624, 16 USC. §§661-666c

U.S. Code, 1966*, The National Historic Preservation Act* (NHPA) of 1966, Public Law 89-665, 16 USC 470

U.S. Code, 1966, *U.S. Department of Transportation Act, section 4(f),* recodified as § 303(c) of 49 USC.

U.S. Code, 1968, *The Wild and Scenic Rivers Act of 1968*, Public Law 90-542, 16 USC 1271-1287

U.S. Code, 1969, *The National Environmental Policy Act of 1969*, Public Law 91-190, 42 USC §§ 4321-4347

U.S. Code, 1970*, The Clean Air Act of 1970,* Public Law 91-604, 42 USC §7401

U.S. Code, 1972, *Coastal Zone Management Act of 1972*, Public Law 92-583, 16 USC §§ 1451-1456

U.S. Code, 1973, *Endangered Species Act of 1973*, Public Law 93-205, 16 USC §§1531-1544

U.S. Code, 1974, *Sikes Act Amendments of 1974,* Public Law 93-452

U.S. Code, 1974, *The Safe Drinking Water Act*, as amended, Public Law 93-523, 42 USC §300f-300j

U.S. Code, 1976, *Resource Conservation and Recovery Act,* Public Law 94-580, 42 USC § 6901

U.S. Code, 1980, *The Comprehensive Environmental Response, Compensation, and Liability Act*, Public Law 96-510, 42 USC §9601

U.S. Code, 1981, *The Farmland Protection Policy Act*, Public Law 97-98, 7 USC. §§4201-4209

U.S. Code, 1981*, Migratory Bird Treaty Act of 1981,* 16 USC §§703-712

U.S. Code, 1982*, Coastal Barriers Resources Act of 1982*, as amended, Public Law 97-348, 16 USC §§ 3501-3510

U.S. Code, 1986, *Superfund Amendments and Reauthorization Act of 1986*, Public law 107-296, 6 USC

U.S. Code*,* 1990, *Clean Air Act*, Public Law 91-604, 42 USC §§ 7401-7671

U.S Code, 1992, *Community Environmental Response Facilitation Act of 1992*, Public Law 102-426, 42 USC §9601

U.S Code, 1996, *The Magnuson-Stevens Act*, Public Law 94-265, 16 USC §1801

U.S. Code, 2006, *Uniform Relocation Assistance and Real Property Acquisition Policies Act* of 1970, 42 USC §61

U.S. Bureau of Labor Statistics, 2011

U.S. Census Bureau, 2010, Population Division

U.S. Department of the Interior, U.S. Fish and Wildlife Service, 2012, *IPAC System – Natural Resources of Concern, El Paso County*

U.S. Department of Transportation, 1978, Order 5660.1A, *Preservation of the Nation's Wetlands*

U.S. Department of Transportation, 1979, Order 5650.2, *Floodplain Management and Protection*

U.S. Department of Transportation, 1997, Order 5610.2, *Environmental Justice in Minority and Low-Income Populations*

U. S. Environmental Protection Agency, 2011, *Inventory of U.S. Greenhouse Gas Emissions and Sinks from 1990-2009*

U.S. Environmental Protection Agency, 2012, *MyEnvironment Map*

U.S. Fish and Wildlife Service, 2012, *National Wetlands Inventory, Wetlands Mapper*

U.S. Forest Service, 2010, *Cache la Poudre River*

Woods and Poole Economics, 2010, *Historical and forecast socioeconomic data*

10.0 APPENDICES

Appendix A: Agency Coordination Letters and Response

Appendix B: Section 106 Coordination

Appendix C: Notice of Availability

APPENDIX A: AGENCY COORDINATION LETTERS AND RESPONSE

From: Adam_Misztal@fws.gov
To: Morgan Einspahr
Subject: Re: 2012-TA-0094 Meadow Lakes Airport EA
Date: Tuesday, November 22, 2011 3:22:44 PM

Morgan,

These comments are provided under the authority conferred to the U.S. Fish & Wildlife Service (Service) by the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.). It is highly unlikely that any Federally-protected species would be found on the project site. Therefore it is our conclusion that this project will not affect any species protected by ESA.

Adam Misztal
Fish and Wildlife Biologist
USFWS, ES, Colorado Field Office
P. O. Box 25486, DFC (MS 65412)
Denver, CO 80225-0486
303-236-4753; Fax 303-236-4005
(134 Union Blvd., Suite 670)
(Lakewood, CO)

Morgan Einspahr
<Morgan.Einspahr@jviation.com>
11/21/2011 10:07 AM

To "adam_misztal@fws.gov" <adam_misztal@fws.gov>
cc
Subject Meadow Lakes Airport EA

Adam,

Attached is a very rough exhibit showing the location of the proposed project. Also attached is the species list I received from the FWS site

The project is a new turf runway at the Meadow Lake Airport. There won't be actual construction but rather grading and mowing, for a glider only runway.

The approximate lat and long are:
Lat: 38◦ 56'17.92" N
Long: 104◦ 34'11.36" W

Let me know if there is anything else you need. I greatly appreciate the help with this!

Sincerely,

Morgan

Jviation, Inc.
Morgan Einspahr
Environmental Planner

Direct 720.544.6517
Email Morgan.Einspahr@jviation.com
Cell 303.947.2391

900 S. Broadway, Suite 350
Denver, CO 80209
Main 303.524.3030
Fax 303.524.3031
jviation.com
[attachment "USFWS TES Report.pdf" deleted by Adam Misztal/R6/FWS/DOI]
[attachment "Google earch image.pdf" deleted by Adam Misztal/R6/FWS/DOI]

From: Carpenter, Joshua G SPA
To: Morgan Einspahr
Subject: RE: Meadow Lake EA Wetlands (UNCLASSIFIED)
Date: Tuesday, December 20, 2011 9:36:04 AM

Classification: UNCLASSIFIED
Caveats: NONE

Morgan,

This email is sufficient for my needs. I will get back to you soon with a letter stating that you do not need a permit.

Thanks,
Josh

-----Original Message-----
From: Morgan Einspahr [mailto:Morgan.Einspahr@jviation.com]
Sent: Monday, December 19, 2011 8:47 AM
To: Carpenter, Joshua G SPA
Subject: Meadow Lake EA Wetlands

Good morning Joshua,

Sorry for the slow reply email regarding our visit to the Meadow Lake Airport. The funding for the EA was pushed back several months so it's been pushed to the back burner lately.

What exactly do you need from me for us to get an official letter stating we do not need to complete a field survey for wetlands as non exist in the project location. Is an email OK, or do you need a signed letter?

Your advice would be appreciated!

Morgan

Jviation, Inc.
Morgan Einspahr
Environmental Planner

Direct 720.544.6517
Email Morgan.Einspahr@jviation.com
Cell 303.947.2391

900 S. Broadway, Suite 350
Denver, CO 80209
Main 303.524.3030
Fax 303.524.3031

DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
200 SOUTH SANTA FE, SUITE 301
PUEBLO, COLORADO 81003-4270
(719) 543-9459
FAX (719) 543-9475

March 20, 2012

REPLY TO
ATTENTION OF:

Regulatory Division
Southern Colorado Regulatory Office

SUBJECT: Jurisdictional Determination – Meadow Lake Airport Association

Morgan Einspahr
Jviation, Incorporated
900 South Broadway
Suite 350
Denver, Colorado 80209

Dear Ms. Einspahr:

I am writing this letter concerning your request for a jurisdictional determination on behalf of Meadow Lake Airport Association for the Meadow Lake Airport turf runway located in Section 9, T13S-R64W, El Paso County, Colorado. We have assigned Action No. SPA-2011-00563-SCO to this project. Please refer to this number in all future correspondence concerning this project.

Based on the information provided, we have determined that the project site consists entirely of uplands and a Department of the Army Section 404 permit is not required.

If you have any questions, please contact me at (719) 543-6914 or by e-mail at Joshua.G.Carpenter@usace.army.mil. At your convenience, please complete a Customer Service Survey on-line available at http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

Joshua G. Carpenter
Senior Project Manager

JVIATION®

January 2, 2013

El Paso County Planning and Zoning Division
El Paso County Development Services Department
Attn: Mike Hrebenar
2880 International Circle, Suite 110
Colorado Springs, CO 80910

RE: Establishment of Turf Runway at Meadow Lake Airport

Dear Mr. Mike Hrebenar:

Jviation, Inc. is assisting the Meadow Lake Airport in completing an Environmental Assessment (EA) for the establishment of a new Turf Runway per the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Action*.

Meadow Lake Airport submitted FAA Form 7480-1, Notice of Landing Area Proposal, to alter the airport to add a new turf runway in early 2011. In a Letter of Determination dated August 8, 2011, the FAA had no objection subject to several provisions including the need to complete an EA prior to formal activation/opening of the runway.

The proposed action is the establishment of the Turf Runway. Enclosed for your reference is a description and history of the proposed action, the Purpose and Need statement, historical and forecasted operations, and a description of the assessed alternatives.

To assist us in completing this EA, we are requesting your comments concerning the potential for impacts as a result of the establishment of the Turf Runway no later than **two weeks of receiving this letter**. *If no comments are received we will assume concurrence with the proposed project.* Please contact me with any questions or concerns you may have regarding this project.

Per FAA requirements, a draft of the EA will be released for public comment in the late winter at which point you will be afforded the opportunity to provide additional comments on the EA findings.

We appreciate your assistance.

Sincerely,

Morgan Einspahr

Jviation, Inc.
Morgan Einspahr
Environmental Planner

Main 303.524.3030
Fax 303.524.3031
900 S. Broadway | Suite 350 | Denver, CO | 80209
JVIATION.COM

Morgan Einspahr

From: Mike Hrebenar [MikeHrebenar@elpasoco.com]
Sent: Monday, January 07, 2013 3:03 PM
To: Morgan Einspahr
Subject: Meadow Lake Airport

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Red Category

Morgan,

El Paso County is in receipt Environment Assessment (EA) pertinent to Meadow Lake Airport – Establishment of Turf Runway. On November 29, 2012 the El Paso County Board of Commissioners approved a General Aviation – Overlay (GA-O) for the southern portion of Meadow Lake Airport. The approval of the GA-O establishes the necessary zoning required for establishment of the turf runway. El Paso County has no further comments on the EA.

Thanks,

Mike Hrebenar
EPC Development Services Department

JVIATION®

May 10, 2012

Department of Natural Resources, Division of Wildlife
Attn: Joe Padia
6060 Broadway,
Denver, CO 80216

RE: Establishment of Turf Runway at Meadow Lake Airport

Dear Mr. Joe Padia:

Jviation, Inc. is assisting the Meadow Lake Airport in completing an Environmental Assessment for the establishment of a new Turf Runway per the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Action.*

FAA Form 7480-1 to alter the airport to add a new turf runway was submitted by FLY to FAA in early 2011. The Letter of Determination stating FAA's no objection subject to several provision was dated Aug 8, 2011. Among the provisions was the need to complete an Environmental Assessment (EA) prior to formal activation/opening of the runway. This EA will meet the provisions of the above Letter of Determination and the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures.*

The establishment of the Turf Runway is the proposed action and the topic to be discussed in the EA.

Enclosed for your reference is a description and history of the proposed action, the Purpose and Need statement, historical and forecasted operations, and a description of the assessed alternatives.

To assist us in completing this Environmental Assessment, we are requesting your comments concerning the potential for impacts as a result of the establishment of the Turf Runway no later than **June 11th, 2012**. *If no comments are received we will assume concurrence with the proposed project.* Please contact me with any questions or concerns you may have regarding this project.

We appreciate your assistance.

Sincerely,

Morgan Einspahr
Environmental Planner

Main 303.524.3030
Fax 303.524.3031
900 S. Broadway | Suite 350 | Denver, CO | 80209
JVIATION.COM
ENGINEERING & PLANNING

JVIATION®

May 10, 2012

Colorado Department of Public Health and Environment
Air Pollution Control Division
Attn: Paul Tourangeau
4300 Cherry Creek Drive South
Denver, CO 80246-1530

RE: Establishment of Turf Runway at Meadow Lake Airport

Dear Mr. Paul Tourangeau:

Jviation, Inc. is assisting the Meadow Lake Airport in completing an Environmental Assessment for the establishment of a new Turf Runway per the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Action.*

FAA Form 7480-1 to alter the airport to add a new turf runway was submitted by FLY to FAA in early 2011. The Letter of Determination stating FAA's no objection subject to several provision was dated Aug 8, 2011. Among the provisions was the need to complete an Environmental Assessment (EA) prior to formal activation/opening of the runway. This EA will meet the provisions of the above Letter of Determination and the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures.*

The establishment of the Turf Runway is the proposed action and the topic to be discussed in the EA.

Enclosed for your reference is a description and history of the proposed action, the Purpose and Need statement, historical and forecasted operations, and a description of the assessed alternatives.

To assist us in completing this Environmental Assessment, we are requesting your comments concerning the potential for impacts as a result of the establishment of the Turf Runway no later than **June 11th, 2012**. *If no comments are received we will assume concurrence with the proposed project.* Please contact me with any questions or concerns you may have regarding this project.

We appreciate your assistance.

Sincerely,

Morgan Einspahr
Environmental Planner

Main 303.524.3030
Fax 303.524.3031
900 S. Broadway | Suite 350 | Denver, CO | 80209
ENGINEERING & PLANNING
JVIATION.COM

JVIATION®

May 10, 2012

Colorado Department of Public Health and Environment
Water Quality Control Division
Attn: Steve Gunderson
4300 Cherry Creek Drive South
Denver, CO 80246-1530

RE: Establishment of Turf Runway at Meadow Lake Airport

Dear Mr. Steve Gunderson:

Jviation, Inc. is assisting the Meadow Lake Airport in completing an Environmental Assessment for the establishment of a new Turf Runway per the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Action.*

FAA Form 7480-1 to alter the airport to add a new turf runway was submitted by FLY to FAA in early 2011. The Letter of Determination stating FAA's no objection subject to several provision was dated Aug 8, 2011. Among the provisions was the need to complete an Environmental Assessment (EA) prior to formal activation/opening of the runway. This EA will meet the provisions of the above Letter of Determination and the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures.*

The establishment of the Turf Runway is the proposed action and the topic to be discussed in the EA.

Enclosed for your reference is a description and history of the proposed action, the Purpose and Need statement, historical and forecasted operations, and a description of the assessed alternatives.

To assist us in completing this Environmental Assessment, we are requesting your comments concerning the potential for impacts as a result of the establishment of the Turf Runway no later than **June 11th, 2012**. *If no comments are received we will assume concurrence with the proposed project.* Please contact me with any questions or concerns you may have regarding this project.

We appreciate your assistance.

Sincerely,

Morgan Einspahr

Morgan Einspahr
Environmental Planner

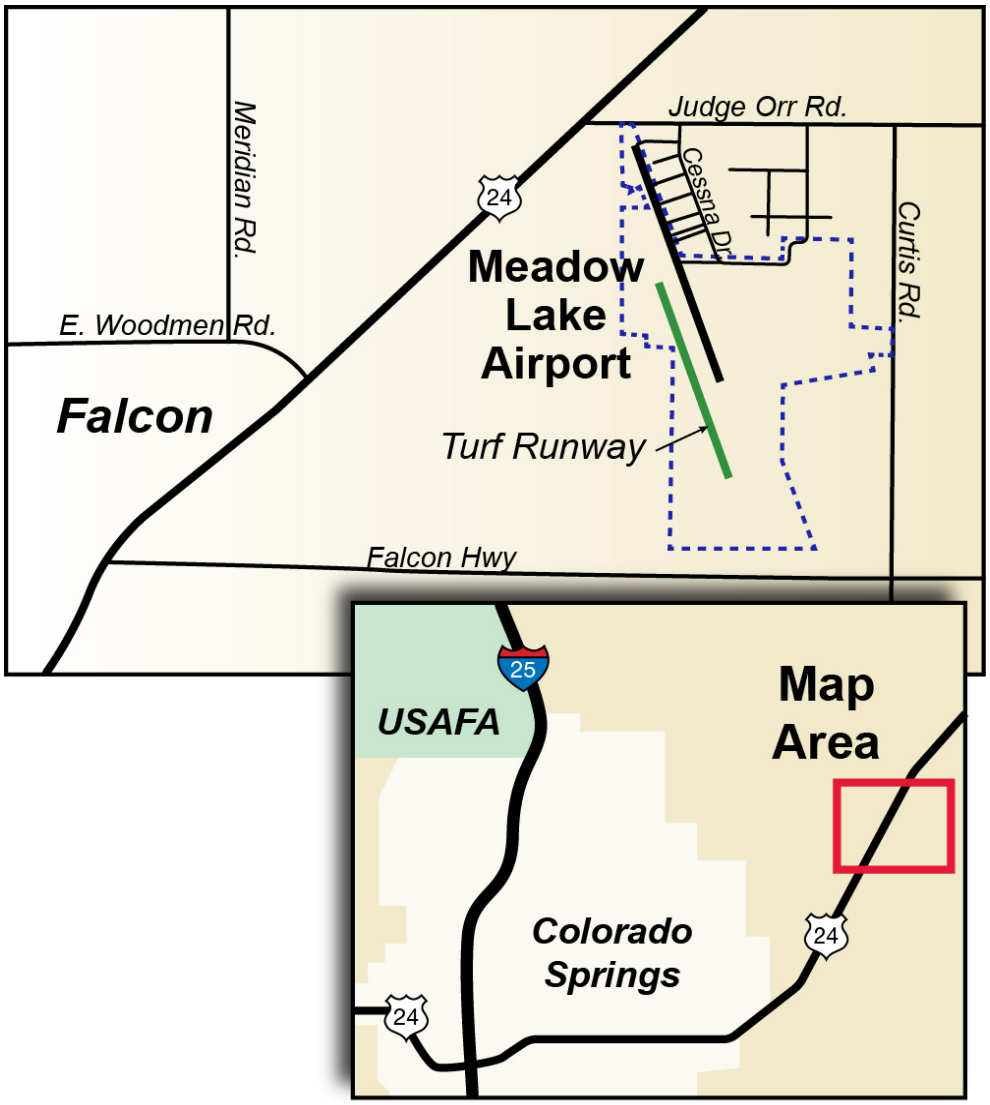
Main 303.524.3030
Fax 303.524.3031
900 S. Broadway | Suite 350 | Denver, CO | 80209
JVIATION.COM
ENGINEERING & PLANNING

Meadow Lake Airport – Establishment of Turf Runway

Township: 13S
Range: 64W

The Meadow Lake Airport (FLY) is a privately owned airport located approximately ten miles east of the city of Colorado Springs near the town of Falcon, Colorado. FLY is situated along State Highway 24 as displayed in **Figure 1**.

FIGURE 1 - AIRPORT LOCATION MAP



Source: Jviation, In.

Background and History of the Proposed Action

The Federal Aviation Administration (FAA) Form 7480-1, to alter the airport and add a new turf runway, was submitted by FLY to the FAA in early 2011. The Letter of Determination stating FAA's no objection subject to several provision was dated August 8th, 2011. Among the provisions was the need to complete an Environmental Assessment (EA) prior to formal activation/opening of the runway. As such, this EA will meet the requirements set forth in FAA Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures*.

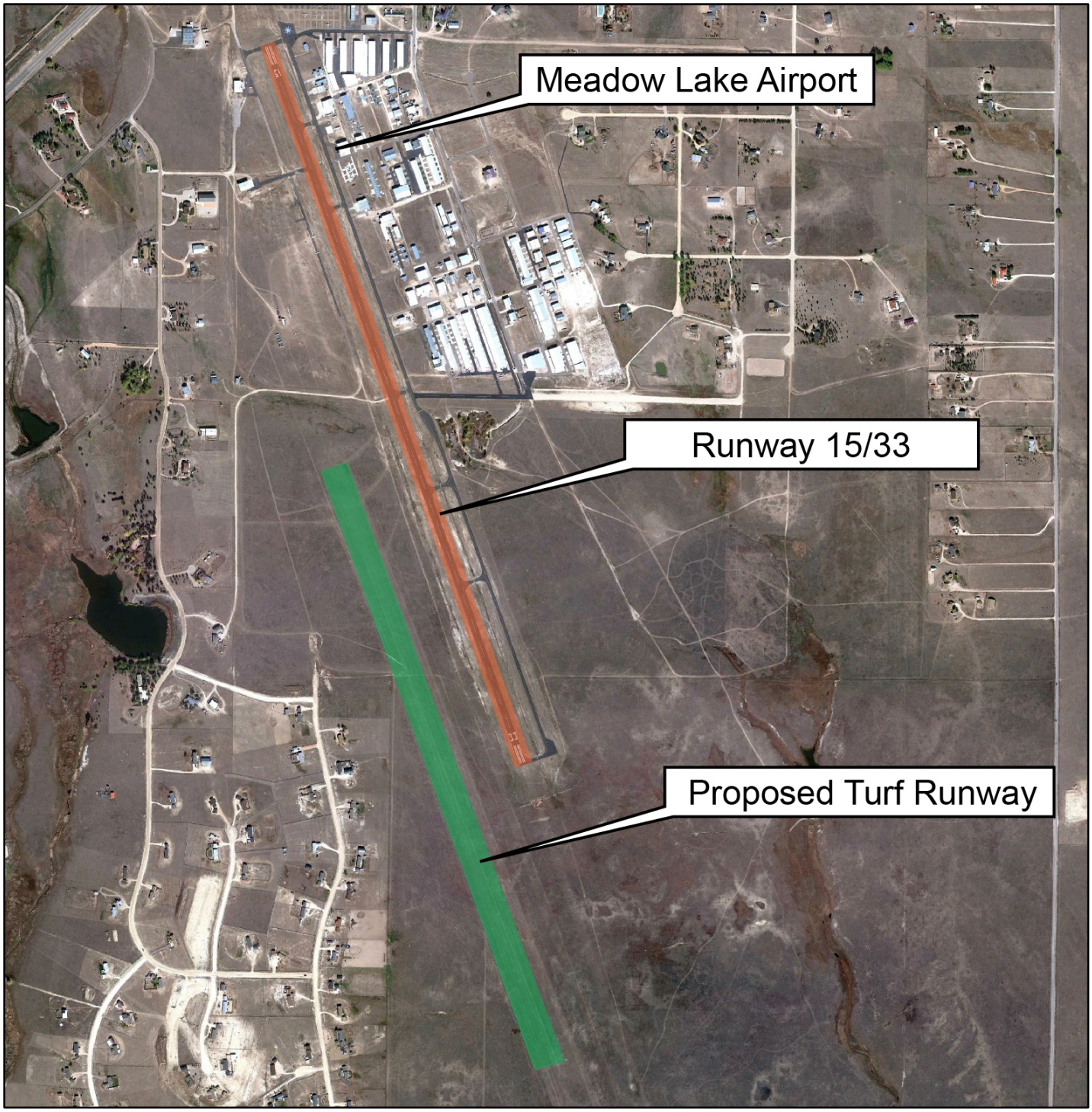
Existing Airport Facilities and Environs

FLY sits at an elevation of 6,874 feet, approximately one mile southeast of Falcon, in El Paso County. The population of El Paso County in 2010 was approximately 627,096 residents. The number of rural residents residing within a mile of the airport is estimated to be around 250 residents. Uniquely, a majority of the local residents surrounding the airport are avid aviation enthusiasts and pilots. Most of them operate "through-the-fence" at the airport, which allows the residents to maintain open access to the airport from their hangars and homes.

The airport encompasses 753 acres of land. The "through-the-fence" businesses at the airport offer a variety of services including hangar rental, maintenance facilities, fuel, and flight instruction. Access to the airport is via State Highway 24 east out of Colorado Springs, exit Judge Orr Rd. east, and south on Cessna Drive.

The airport's current layout includes three runways; Runway 15/33 the primary paved runway; Runway 8/26 the crosswind runway; and Runway N/S a glider runway. Runway N/S is currently open; however, it will be closed upon the approval of this EA and the establishment of the new Turf Runway.

FIGURE 2 - PROPOSED PROJECT LOCATION



Source: Jviation, In.

PURPOSE AND NEED

The Purpose and Need of this Environmental Assessment (EA) discusses the problem facing the proponent (the "Need"), the purpose of the action (the "Purpose"), and the proposed timeframe for implementing the action. The following sections describe, in detail, the Purpose and Need of the Proposed Action.

PURPOSE

The primary purpose of the proposed Turf Runway is to replace the existing glider runway. The existing glider runway's distance from the primary Runway 15/33 poses a safety concern as it is significantly closer than the FAA's recommended separation. The Turf Runway provides an increased safe operational area for glider aircraft (towed and launched) and propeller driven aircraft primarily being used for pilot training on unpaved surfaces. Additionally, the new Turf Runway would allow for more operational flexibility and increased space both on the ground and in the air, which better supports existing glider operations.

NEED

The need for the proposed Turf Runway is to accommodate the growing and very active glider community at the Meadow Lake Airport. The glider operations at the airport have increased significantly in the recent past and the airport anticipates continued growth. The establishment of the Turf Runway would allow for the glider and unpaved training operations to function separately from the very active general aviation traffic on the primary runway while still providing a safe and compatible operating area.

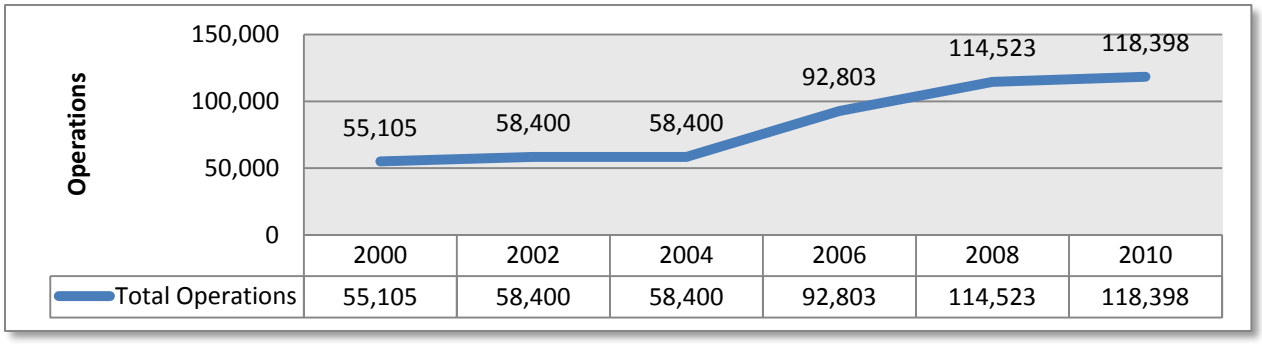
HISTORICAL AND FORECASTED OPERATIONS

One of the key factors in a typical forecast is the type and level of aviation demand generated at an airport which may be measured by aircraft operations. An operation is defined as either a take-off or landing of aircraft. From the operational information, the runway and taxiway requirements for a specific airport can be developed.

HISTORICAL OPERATIONS

The most accurate data source for many GA airports that don't have a local Air Traffic Control Tower is the FAA's Terminal Area Forecast (TAF) which keeps a record of historical data and offers projections for future growth. **Figure 3** depicts the historic operational information for the Meadow Lake Airport from 2000 to 2010.

FIGURE 3 - FLY HISTORICAL OPERATIONS



Source: FLY Airport records, and FAA Terminal Area Forecasts, 2010

FORECASTED OPERATIONS

The TAF forecast for general aviation operations includes both business and recreational flying. FLY activity is more slanted towards recreational flying which is influenced by discretionary income. After analysis, the preferred forecast method chosen for this EA is an average of the FAA TAF forecast growth and Total Earnings Growth (Regression Analysis) because the together the two forecasts reflect both the local and national growth trends.

A similar strategy was used in the forecast prepared in the Meadow Lake Airport's Airport Layout Plan (ALP) Update[1] completed in 2008. The ALP Update's forecast was developed through the use of Historical Colorado Springs and El Paso County Per Capita Personal Income (PCPI) data and the TAF data.

[1] Airport Development Group, Inc., Airport Layout Plan Report, 2008.

The TAF forecast growth is 1.69 percent annually at FLY starting in 2011. Total Earnings growth in El Paso County is estimated to have increased 0.45 percent in 2010, with forecast growth of 1.22 percent in 2011, increasing to 2.84 percent in 2012 before stabilizing near 2.64 percent in future years. Starting in 2013 the average growth in operations at FLY is estimated at 2.13 percent annually through 2022 which is the average growth rate when comparing the TAF and the Total Earnings Growth forecast. The forecasted operations are depicted in **Table 1**.

TABLE 1 - FLY FORECASTED OPERATIONS

No Build				With Turf Runway		
Year	**Total Operations**	**% Change**		**Year**	**Total Operations**	**% Change**
2002	58,400			2002	58,400	
2003	58,400	0.00%		2003	58,400	0.00%
2004	58,400	0.00%		2004	58,400	0.00%
2005	91,000	55.82%		2005	91,000	55.82%
2006	92,803	1.98%		2006	92,803	1.98%
2007	94,644	1.98%		2007	94,644	1.98%
2008	114,523	21.00%		2008	114,523	21.00%
2009	116,440	1.67%		2009	116,440	1.67%
2010	118,398	1.68%		2010	118,398	1.68%
2011	120,118	1.45%		2011	120,118	1.45%
2012	122,851	2.28%		2012	122,851	2.28%
2013	125,160	1.88%		2013	127,717	3.96%
2014	127,824	2.13%		2014	130,436	2.13%
2015	130,545	2.13%		2015	133,212	2.13%
2016	133,324	2.13%		2016	136,048	2.13%
2017	136,162	2.13%		2017	138,944	2.13%
2018	139,060	2.13%		2018	141,902	2.13%
2019	142,020	2.13%		2019	144,922	2.13%
2020	145,043	2.13%		2020	148,007	2.13%
2021	148,131	2.13%		2021	151,158	2.13%
2022	**151,284**	2.13%		**2022**	154,375	2.13%

Source: FLY Airport records, and FAA Terminal Area Forecasts, 2010

ALTERNATIVE ANALYSIS

The National Environmental Policy Act of 1969 (NEPA), per Section 102(2)(E), implemented by the Council on Environmental Quality (CEQ), and FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures,* requires Federal projects to evaluate and discuss the consequences of the proposed action, alternatives, and the no action alternative. It is also allowed that only the proposed action and the no action alternative be discussed when there are no unresolved conflicts concerning the evaluated environmental resources, as is the case at FLY. This Alternative Analysis section will describe the Proposed Action and the No Action Alternative, discuss the ability of each to meet the Purpose and Need and compare the expected environmental impacts of each.

PROPOSED ACTION

The Proposed Action is the preferred alternative as no other "action" alternatives were evaluated (FAA Order 1050.1E, paragraph 405d). The Proposed Action is the establishment of a new Turf Runway at the Meadow Lake Airport to be used primarily for glider aircraft, their tow planes, and some non-pavement landing training. The existing glider runway will be closed with the approval of this EA and establishment of the new Turf Runway. This will allow for both private and airport supported future development of the west side of the airport while continuing to support the existing glider community.

ALTERNATIVES

In order to meet NEPA requirements, CEQ, Section 102(2)(E), this EA must evaluate both the No Action Alternative and the Proposed Action. The No Action Alternative would preserve the existing environmental condition at the airport; however, it fails to satisfy the Purpose and Need, as it leaves the airport with little opportunity to develop the west side of the airport while maintaining a runway for glider operations. As such, the establishment of the new Turf Runway is the preferred and Proposed Action.

APPENDIX B: SECTION 106 COORDINATION

U.S. Department
of Transportation
Federal Aviation Administration

Denver Airports District Office
26805 E. 68th Avenue, Room 224
Denver, Colorado 80249
303-342-1250; FAX303-342-1260

August 27, 2012

Ed Nichols
State Historic Preservation Officer
Colorado Historical Society
1300 Broadway
Denver, CO 80203

Subject: Determination of Eligibility and Effects
Meadow Lake Airport (FLY)
Establishment of Turf Runway - Environmental Assessment

Dear Mr. Nichols,

This letter and the enclosed materials constitute a request for concurrence with Determinations of Eligibility and Effects for the project referenced above. The Federal Aviation Administration and the Meadow Lake Airport propose to establish a new Turf Runway. The runway will primarily be utilized by glider aircraft (towed and launched) and propeller driven aircraft primarily being used for pilot training on unpaved surfaces. The establishment of the Turf Runway will not encompass any construction or grading of the designated landing area as the existing terrain is preferred.

The Historical Resource Evaluation was prepared by Jviation Inc. in accordance with Section 106 of the National Historic Preservation Act of 1966 and the implementing regulations found in 36 CFR Part 800 (see Attachment). The evaluation concludes that the proposed action would have no effect on any cultural resources, and no additional investigations are recommended. Accordingly, we find that our federal undertaking would have no effect on historic properties.

FAA requests your review and comment on the survey as well as concurrence with a finding of ***No Historic Properties Affected*** for the proposed designation of a turf runway at Meadow Lake Airport.

If you have questions or require additional information in order to complete your review, please contact me at 303-342-1265.

Sincerely,

Hans Anker, P.E.
Project Manager
Civil Engineer/Environmental Specialist
FAA Denver Airports District Office

Attachment: Historical Resource Evaluation, Section 106 Report

MEADOW LAKE AIRPORT

Historic Resource Evaluation

Section 106 Report

The following Section 106 Report has been prepared by Morgan Einspahr, Environmental Planner at Jviation Inc. It was prepared in accordance with Section 106 of the *National Historic Preservation Act* of 1966, as amended, for the Colorado State Historic Preservation Officer. The Report has been completed for the consideration of the Proposed Action, the establishment of a Turf Runway at the Meadow Lake Airport, near Falcon, Colorado. A field survey was not completed as there is no construction proposed with this action and the area to be established as a Turf Runway is previously disturbed from mowing and other airport operations.

Regulatory Context

The National Historic Preservation Act (NHPA) of 1966, as amended, establishes the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places (NRHP) within the National Park Service (NPS). Section 110 of the NHPA governs the responsibilities of Federal agencies to preserve and use historic buildings; designate an agency Federal Preservation Office (FPO); identify, evaluate, and nominate eligible properties under the control or jurisdiction of the agency to the National Register. Section 106 of the NHPA requires Federal agencies to consider the effects of their undertaking on properties on or eligible for inclusion on the NRHP. Compliance with Section 106 requires consultation with the ACHP, the State Historic Preservation Officer (SHPO), and the Tribal Historic Preservation Officer (THPO) if there is a potential for adverse effects to historic properties on or eligible for listing on the NRHP. Consultation with other federal, state, and local agencies, tribes, private sector, and the public may also be required.

Section 106 applies to proposed actions that are considered "undertakings" and have the potential to affect a NRHP listed property. An undertaking, as defined by the FAA in the *Airport's Desk Reference* (2007), is a project or funded program under the direct or indirect jurisdiction of a federal agency that:

- the agency carries out;
- is carried out by or on behalf of a federal agency;
- is carried out with federal assistance; or
- requires a federal permit, license, or approval.

The NRHP considers properties eligible to be listed through criteria based on age, integrity, and significance.

- Age and Integrity: generally includes properties at least 50 years old and exhibit the look of the original property.
- Significance: the property is associated with significant events, activities, or development; significant lives of associated people; significant architectural history, landscape history, or

engineering achievements; or has the potential to produce significant information through archeological investigations.

Significance Criteria

As stated in FAA Order 1050.1E, Appendix A, Section 11.2b, the FAA official determines whether the Proposed Action is an "undertaking" as defined in 36 CFR 800.16(y). The FAA also determines whether the Proposed Action is a type of activity that has the potential to cause adverse effects on historic properties eligible for or listed on the NRHP. If the FAA determines, and the SHPO does not object, that an undertaking does not have the potential to have an effect on historic properties, a historical or cultural survey is not necessary and the FAA may issue a determination that the Proposed Action has no effect. If an undertaking may have an adverse effect, an Area of Potential Effect (APE) and the historical or cultural resources within the APE must be identified. An adverse effect may be found if the proposed action may alter the property's historic characteristics such as:

- physically destroy the property;
- alter the property so severely that it would not meet the requirement of the Secretary of the Interior's "Standards for Treatment of Historic Properties (36 CFR part 68);
- remove the property from its historic location;
- introduce an atmospheric, audible, or visual feature to the area that would diminish the integrity of the property's setting, provided that setting contributes to the property's historical significance; or
- through transfer , sale, or lease, diminishes any long-term preservation of a property's historic significance that federal ownership or control would preserve.

Area of Potential Effect (APE)

As stated in FAA Order 1050.1E, it is the FAA's responsibility to determine the APE. The determination is generally made in consultation with the appropriate SHPO and THPO. APE means the geographic area within which an undertaking may cause changes in the character or use of historic properties, if any such properties have been identified within the APE. The APE for the Proposed Action has been identified as the Meadow Lake Airport property, specifically; the area designated for the new Turf Runway, as depicted in Attachment 1, APE Map.

Affected Environment

The Meadow Lake Airport sits at an elevation of 6,874 feet, approximately one mile southeast of Falcon, in El Paso County. The population of El Paso County in 2010 was estimated to be approximately 627,096 residents. The number of rural residents residing within a mile of the airport is estimated to be around 250 residents. Uniquely, a majority of the local residents surrounding the airport are avid aviation enthusiasts and pilots. Most of them operate "through-the-fence" at the airport, which allows the residents to maintain open access to the airport from their hangars and homes.

The airport encompasses 753 acres of land. The "through-the-fence" businesses at the airport offer a variety of services including hangar rental, maintenance facilities, fuel, and flight instruction. Access to the airport is via State Highway 24 east out of Colorado Springs, exit Judge Orr Rd. east, and south on Cessna Drive.

The airport's current layout includes three runways; Runway 15/33 the primary paved runway; Runway 8/26 the crosswind runway; and Runway N/S a glider runway. Runway N/S is currently open; however, it will be closed upon the approval of this EA and the establishment of the new Turf Runway.

Buildings or Structures 50 Years Old or Older within the APE

The Meadow Lake Airport opened in 1969, which makes the oldest facilities on the airport 43 years old as of 2012. As such, no structures are older than 50 years.

Inventory Method

An analysis of NRHP listed properties in El Paso County, as depicted in **Table 1**, was completed on June 4th, 2012 by Jviation Inc. A site survey was not completed as the project does not include any construction. Additionally, the site has been previously disturbed by mowing and other airport activities.

Inventory Results and National Register Evaluations

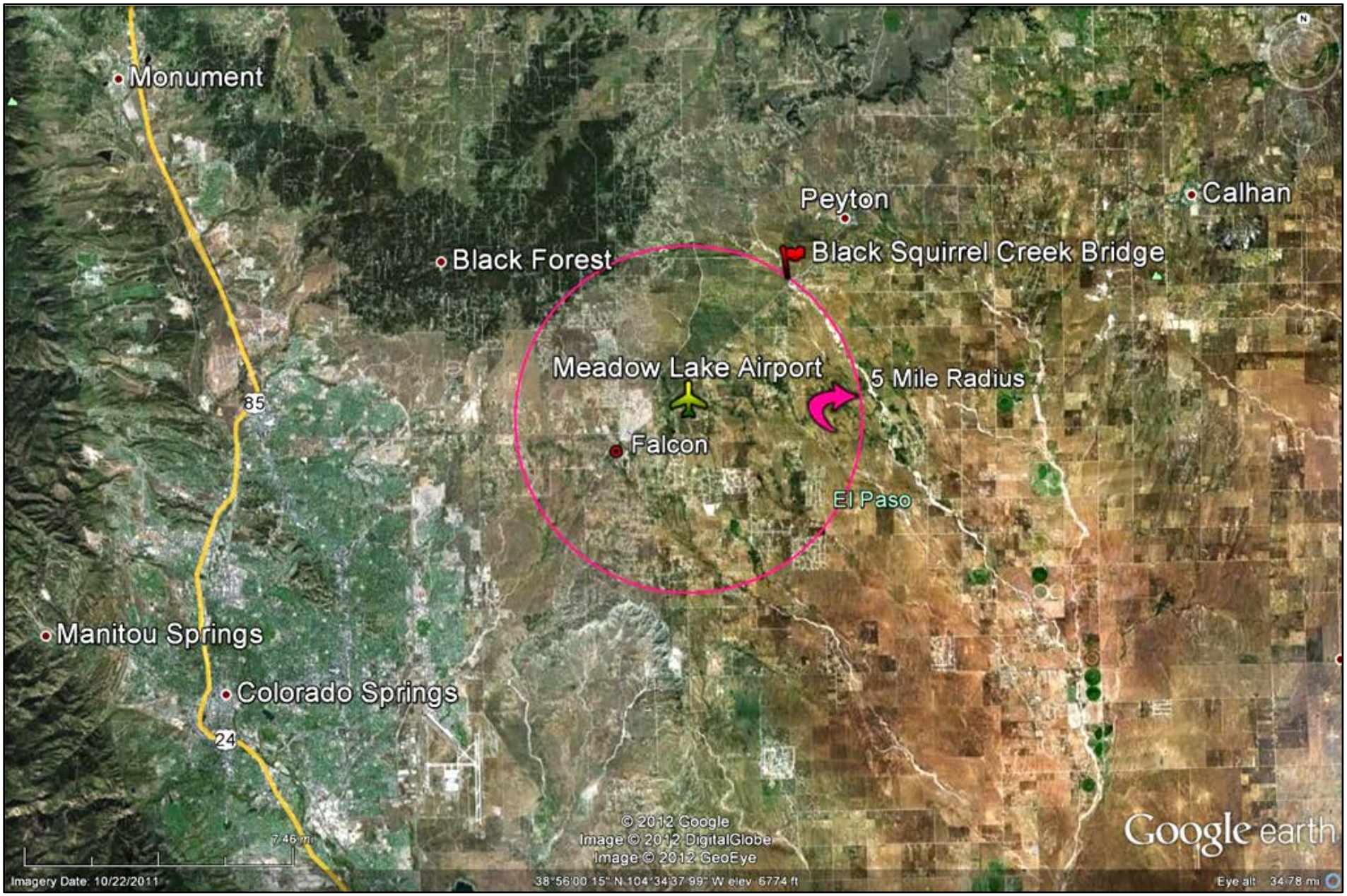
One property was found within the vicinity of the airport, as depicted in **Figure 1** (listings in Black Forest, Colorado Springs, Manitou Springs, Cascade, Calhan, and Ramah were excluded as they are significantly outside of the APE). The nearest property to the Meadow Lake Airport is the Black Squirrel Creek Bridge which is located approximately 4.7 miles northeast of the airport. The Bridge was listed on the NRHP in 2002 for its historic significance in transportation and engineering.

TABLE 1 – EL PASO COUNTY: NRHP LISTED PROPERTIES

Property Name	Address	Date Added to Registry	Distance to Airport
Black Squirrel Creek Bridge	U.S. 24 at Milepost 327.22, Falcon	2002	4.7 miles

Source: National Register of Historic Places, Colorado – El Paso County, 2012

FIGURE 1 - AIRPORT VICINITY MAP



Archaeological Resources in the APE

The area within the APE (see Attachment 1) has been subject to various disturbances through mowing and other airport operations none of which produced archeological resources. From these previous activities, it is found that there is little potential for archaeological resources to be present within the APE.

Proposed Action

The proposed action is the establishment of a Turf Runway at the Meadow Lake Airport. The runway will primarily be utilized by glider aircraft (towed and launched) and propeller driven aircraft primarily being used for pilot training on unpaved surfaces. The Turf Runway will not encompass any construction or grading of the designated landing area as its existing rough terrain is preferred. The primary purpose of the proposed Turf Runway is to replace the existing glider runway. The existing glider strip hinders the development of the west side of the airport. The new Turf Runway would allow for more flexibility and increased space, which better supports existing glider operations. Additionally, the new Turf Runway will increase the level of safety of the operational area due to increased space.

Finding of Effect

The project components of the Proposed Action would be at the Meadow Lake Airport and would not affect any historic architectural resources in the APE. As described above, no buildings or structures in the APE are more than 50 years old and no known archaeological resources exist within the APE. Further, there is no construction proposed with this action and the APE is previously disturbed ground due to mowing and other airport activities. As such, the Proposed Action would have no effect on historic or archaeological resources listed in or eligible for listing in the NRHP.

HISTORY Colorado

July 25, 2012

Morgan Einspahr
Jviation
900 S. Broadway, Suite 350
Denver, Colorado 80209

Re: Meadow Lake Airport (CHS #7229)

Dear Ms. Einspahr:

Thank you for your correspondence dated and received July 19, 2012 regarding the review of the above-mentioned project under Section 106 of the National Historic Preservation Act (Section 106). After review of the submitted information, we are not able to concur with the recommended findings in your letter.

We request additional information in regards to the Area of Potential Effects (APE). The submission states that no construction is proposed, but the APE map appears to show the turf runway being construction on open land. Were the indirect effects (noise, visual, and atmospheric) considered in the drawing of the APE? Also, the letter states that the FAA is responsible for determining the APE. Was FAA consulted and did they recommend this APE? What other consulting parties were contacted besides our office?

We request the name and contact information for the FAA contact for this project. Our office needs to write the lead Federal agency with our formal comments under Section 106.

If unidentified archaeological resources are discovered during construction, work must be interrupted until the resources have been evaluated in terms of the National Register criteria, 36 CRF 60.4, in consultation with this office.

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings.

Please note that our compliance letter does not end the 30-day review period provided to other consulting parties. If we may be of further assistance, please contact Amy Pallante, our Section 106 Compliance Manager, at (303) 866-4678.

Sincerely,

Edward C. Nichols
State Historic Preservation Officer

From:	Morgan Einspahr
To:	"dan.corson@state.co.us"
Cc:	"Kevin.Luey@faa.gov"
Subject:	Meadow Lake EA -SHPO Coordination
Date:	Thursday, April 25, 2013 11:20:50 AM
Attachments:	FLY Section 106 Report.pdf Response from SHPO.pdf document2012-08-27-100106.pdf IMG_2243.jpeg

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Hi Dan,

Attached is the Section 106 report, letter previously sent by the FAA and a response letter we received from the SHPO last year. There was some confusion with the original package as the cover letter was missing, thus the response letter from your office. The cover letter and package was then resent to Amy Pallante on 8/27/2012 by Hans Anker. I also attached a couple pictures of the area and can provide a copy of the Draft EA (it's rather larger) if needed.

We did not do any survey as the area does not contain any structures and the project does not include any construction.

Please let me know what else you may need for your review.

I GREATLY appreciate your help with this!

Sincerely,

Morgan

HISTORY Colorado

April 25, 2012

Kevin Luey
Civil Engineer/Environmental Specialist
Denver Airports District Office
26805 E. 68th Avenue, Room 224
Denver, CO 80249

Re: Meadow Lake Airport (CHS #7229)

Dear Mr. Luey,

Thank you for your correspondence regarding the review of the above-mentioned project under Section 106 of the National Historic Preservation Act (Section 106).

According to our records, we do not have complete information on the Area of Potential Effects (APE) from the FAA, as stipulated in 36 CFR 800.4(a)(1). However, assuming a large APE, we would recommend a finding of *no adverse effect* [36 CFR 800.5(b)] under Section 106. We believe the flying of the gliders may have a noise affect on historic properties located within the APE, but that noise effect would not be adverse.

If unidentified archaeological resources are discovered during construction, work must be interrupted until the resources have been evaluated in terms of the National Register criteria, 36 CRF 60.4, in consultation with this office.

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings.

Please note that our compliance letter does not end the 30-day review period provided to other consulting parties.

If we may be of further assistance, please contact Amy Pallante, our Section 106 Compliance Manager, at (303) 866-4678.

Sincerely,

Edward C. Nichols
State Historic Preservation Officer

cc: Morgan Einspahr

APPENDIX C: NOTICE OF AVAILABILITY

AFFIDAVIT OF PUBLICATION

STATE OF COLORADO
COUNTY OF EL PASO

I, Nicole Jones, being first duly sworn, deposes and says that she is the Legal Sales Representative of THE COLORADO SPRINGS GAZETTE, LLC., a corporation, the publishers of a daily public newspaper, which is printed and published daily in whole at the city of Colorado Springs in the County of El Paso, and the State of Colorado, and which is called The Gazette; that a notice of which the annexed is an exact copy, cut from said newspaper, was published in the regular and entire editions of said newspaper **3 time(s) to wit, March 13, 27, April 10, 2013.**

That said newspaper has been published continuously and uninterruptedly in said County of El Paso for a period of at least six consecutive months next prior to the first issue thereof containing this notice; that said newspaper has a general circulation and that it has been admitted to the United States mails as second-class matter under the provisions of the Act of March 3, 1879 and any amendment thereof, and is a newspaper duly qualified for the printing of legal notices and advertisement within the meaning of the laws of the State of Colorado.

Nicole Jones
Legal Sales Representative

Subscribed and sworn to me this **April 10, 2013,** at said City of Colorado Springs, El Paso County, Colorado. My commission **expires April 5, 2015.**

Lora Ramirez
Notary Public

The Gazette

LORA RAMIREZ NOTARY PUBLIC STATE OF COLORADO My Commission Expires 04-05-2015

Notice of Availability
Meadow Lake Airport Association
DRAFT Environmental Assessment

The Meadow Lake Airport Association and the Federal Aviation Administration (FAA) announce that a draft Environmental Assessment (Draft EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the following FAA Orders: 1050.1E, Environmental Impacts: Policies and Procedures; and 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions.
The Draft EA analyzes and assesses the environmental, social, and economic impacts of establishing a turf runway to be used for glider and aircraft operations at the Airport. The runway would be located south west of the existing Runway 15/33. The EA discusses reasonable alternatives in a manner that complies with all applicable federal, state and local environmental laws and regulations.
The DRAFT EA will be available for public review and comment for 30 days, ending April 12th, 2013 at the following locations:
High Prairie Library
7035 Old Meridian Rd
Falcon, CO 80831

FAA Northwest Mountain Region
Denver Airports District Office
26805 E. 68th Avenue, Suite 224
Denver, CO 80249-6361
Further, we are providing an opportunity for a public hearing. A public hearing will only be held if a request is made. In the event a request for a public hearing is made by April 12th, a Notice of Public Hearing will be published in this same newspaper.
Written comments concerning the DRAFT EA may be submitted to Jviation Inc., Ms. Morgan Einspahr, 900 S. Broadway, Suite 350, Denver CO 80209 or by e-mail: Morgan.einspahr@jviation.com. All comments submitted by e-mail must be received by 5:00 pm on April 12th, 2013. All mailed comments must be postmarked by April 12th, 2013.

Published in CS Gazette March 13, 27, April 10, 2013.