111 E. COMMERCIAL STREET
WILLITS, CALIFORNIA 95490
(707) 459-4601 TEL
(707) 459-1562 FAX

WILLITS CITY COUNCIL
SPECIAL MEETING AGENDA
MARCH 28, 2015 ♦ 12:30 P.M. ♦ WILLITS CENTER FOR THE ARTS
71 EAST COMMERCIAL STREET – GREAT ROOM

1. **OPENING MATTERS** – a) Call to Order; b) Roll Call

2. ***NOTICED PUBLIC HEARING*** **– CONDUCT PUBLIC HEARING AND CONSIDER ADOPTION OF A MITIGATED NEGATIVE DECLARATION ON THE FOLLOWING MATTER:**

CASE: REACH Air Medical Services Base

APPLICANT: REACH Air Medical Services

PROPERTY OWNER: City of Willits

REQUEST: Obtain a 0.34 acre leasehold at the Willits Municipal Airport to establish a local base for air ambulance services. The base will include an approximately 1,850 square foot modular building, four paved automobile parking spaces, and a 400 square foot helicopter parking position.

LOCATION: 2.8± miles northwest of the City of Willits city center, lying at the terminus of Poppy Drive (CR# 623), 0.1± mile east of its intersection with Madrone Drive (CR# 609), located at 1310 Poppy Drive; APN's 037-160-62, 037-160-51 and 038-020-32.

ENVIRONMENTAL DETERMINATION: The request has been processed through the City's Environmental Review Process and it has been determined that a Mitigated Negative Declaration can be recommended. Environmental concerns including aesthetics, air quality, biological resources, geology, soils and seismicity, and noise are addressed in the Initial Study.

3. **ADJOURNMENT**

I hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda was posted on the bulletin board at the main entrance of the City of Willits City Hall, located at 111 East Commercial Street, Willits, California, not less than 24 hours prior to the meeting set forth on this agenda.

Dated this 26th day of March, 2015.
Cathy Sanders, Deputy City Clerk

AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE

The meeting room is wheelchair accessible and disabled parking is available. If you are a person with a disability and need disability-related modifications or accommodations to participate in this meeting, please contact Adrienne Moore at (707) 459-7120 or Fax (707) 459-1562. Requests for such modifications or accommodations must be made at least two full business days prior to the meeting.

ADDITIONAL MEETING INFORMATION FOR INTERESTED PARTIES

Materials related to an item on this Agenda submitted to the Willits City Council, Planning Commission, or Community Development Agency after distribution of the agenda packet are available for public inspection at City Clerk's office at 111 E. Commercial Street, Willits, during normal business hours.

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NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that on Saturday, March 28, 2015, at 12:30 p.m., or as soon thereafter as the matter may be heard, the Willits City Council will conduct a Public Hearing at the Willits Center for the Arts, 71 East Commercial Street, Willits, California on the following matter:

CASE: REACH Air Medical Services Base

APPLICANT: REACH Air Medical Services

PROPERTY OWNER: City of Willits

REQUEST: Obtain a 0.34 acre leasehold at the Willits Municipal Airport to establish a local base for air ambulance services. The base will include an approximately 1,850 square foot modular building, four paved automobile parking spaces, and a 400 square foot helicopter parking position.

LOCATION: 2.8± miles northwest of the City of Willits city center, lying at the terminus of Poppy Drive (CR# 623), 0.1± mile east of its intersection with Madrone Drive (CR# 609), located at 1310 Poppy Drive; APN's 037-160-62, 037-160-51 and 038-020-32.

ENVIRONMENTAL DETERMINATION: The request has been processed through the City's Environmental Review Process and it has been determined that a Mitigated Negative Declaration can be recommended. Environmental concerns including aesthetics, air quality, biological resources, geology, soils and seismicity, and noise are addressed in the Initial Study.

Your comments regarding the proposed project are invited. Written comments should be submitted no later than 5:00 p.m. on March 27, 2015, to:

City Clerk
City of Willits
111 East Commercial Street
Willits, CA 95490

Additional information regarding the above matter may be obtained by contacting the Willits Community Development Department at (707) 459-4601, Monday through Friday, 9:00 a.m. to 5:00 p.m., or via email at planning@willitscity.com.

Oral comments may be presented to the Willits City Council during the public hearing. If you challenge the project in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Willits City Clerk at, or prior to, the public hearing. All persons are invited to appear and present testimony in this matter.

Cathy Sanders, Deputy City Clerk

Posted: February 20, 2015

INITIAL STUDY

1.	**Project Title:**	REACH Air Lease
2.	**Lead Agency Name and Address:**	City of Willits 380 E. Commercial Street Willits, CA 95490
3.	**Contact Person and Telephone:**	Adrienne Moore, City Manager (707) 459-7120
4.	**Project Location:**	1310 Poppy Drive, Willits, CA 95490 Located on Ells Field – Willits Municipal Airport See **Figure 1**
5.	**Project Sponsor's Name and Address:**	REACH Air Medical Services 451 Aviation Boulevard Santa Rosa, CA 95403
6.	**General Plan Designation(s):**	Does not appear to have a general plan designation. The General Plan indicates that a specific plan is to be developed.
7.	**Zoning Designation(s):**	Does not appear to have a zoning designation. The General Plan indicates that a specific plan is to be developed.

8. Description of Proposed Project

REACH proposes to obtain a 0.34-acre leasehold on the Willits Municipal Airport from the City of Willits. This leasehold will be used as a local base for REACH's air ambulance service. The facility will consist of the following:

- A modular office building of approximately 1,850 square feet
- Four paved automobile parking spaces including one handicap space
- A 20-foot by 20-foot paved helicopter parking position
- The area surrounding the helicopter parking position will be stabilized with either rolled crushed aggregate (gravel) or asphaltic concrete or a mixture of both

Utilities will be extended from adjacent areas on the Airport.

The facility will be staffed 24-hours per day, 365 days per year. Staff will consist of one pilot and two-flight medical crew. Pilots serve a 12-hour shift, while medical staff serve a 24-hour shift. Morning shift changes will occur between 6 A.M. to 10 A.M. Evening shift changes will occur between 6 P.M. and 10 P.M.

An on-call aircraft mechanic will inspect the helicopter at the beginning of each morning shift. It is expected that the mechanic will leave the site following the inspection. Routine minor maintenance (e.g. oil and filter changes) will be conducted either at the parking pad or in the adjacent box hangar. Routine major

maintenance will be performed at REACH's facilities at the Charles M. Schulz – Sonoma County Airport in Santa Rosa, California. Should a mechanical problem arise when the helicopter is parked at the Willits Municipal Airport, repairs will likely be made in the box hangar adjacent to the REACH facility.

The facility will serve as the base for one helicopter. The helicopter is an Airbus EC 135. This helicopter is equipped with a single main rotor (see **Figure 2**). It is anticipated that an average of one flight per day will occur (e.g., one departure and one arrival) initially. This is expect to grow to an average of 1.5 flights per day. However, the number of flights on any particular day will vary depending upon the demand for services. Arrivals and departures will be along the extended runway centerline. Arriving helicopters will descend to a spot on the runway abeam the helicopter parking position. The helicopter will then turn and hover-taxi to the parking pad. Departing helicopters will hover-taxi from the parking pad to the runway and then depart along the runway's extended centerline (see **Figure 3**). Upon passing the end of the runway, the helicopter will begin turning in the direction of its destination.

REACH's helicopter is powered by a turbine engine that burns Jet A, the most common fuel for nonmilitary jets. Fuel will come off-site from a fuel vendor. A 5,000-gallon fuel truck will be parked at the airport for use by REACH only. This truck would be filled every 4-6 weeks by a fuel vendor. REACH will obtain the required permit for this fuel service from the County Environmental Health Department. The fuel would be available for REACH aircraft only.

Most patient services will occur away from the Airport. One common off-airport location is the designated helicopter landing site adjacent to the Little Lake Fire Protection District Substation No. 541 on Baechtel Road. However, some patients may be loaded onto the helicopter at the Airport. It is expected that this will occur about twice each month. Some of these may be transfers from the Frank R. Howard Memorial Hospital in Willits. When this hospital opens its new facility in spring 2015, some transfers will be made from the helipad being constructed at the new site. Depending upon the medical needs of the patient, some emergency transports will involve an ambulance arriving at the Airport with lights and siren.

It is important to understand that this environmental document addresses the environmental impacts of the facilities that will be created if the lease is approved. No environmental review is required to introduce regular helicopter operations at the Airport. Helicopter operators have a right to use the Airport; no approvals are required. In this way, airports are like roads; no approval is required for individuals to use either type of transportation facility.

9. Surrounding Land Uses and Setting

The project site is located about three miles north-northwest of the center of the City of Willits on Ells Field – Willits Municipal Airport. The Airport is located adjacent to the eastern border of the Brooktrails subdivision. The Airport is part of the City of Willits, but surrounding lands are under the jurisdiction of the County of Mendocino. Direct access to the site is gained from Poppy Drive, which ends at the Airport. Sherwood Road is the major arterial serving the area. It connects to Highway 101 southeast of the project site.

The area in the vicinity of the project site is hilly with the terrain generally falling to the east. The principal vegetation communities are Douglas fir-tan oak, annual grassland, and chaparral. The project site is a level area that was created when the Airport was constructed. A box hangar and aircraft parking apron lie immediately north of the project site. The balance of the hangars and other airport facilities lie further

north. The Airport's sole runway lies about 275 feet east of the proposed helicopter parking position. Single-family residences on large lots lie west of the project site. The areas north, south, and east of the Airport remain largely in their native state.

10. Other Public Agencies Whose Approval is Required

The City of Willits (not the project proponent) must obtain approval of the conditions in the lease from the Federal Aviation Administration (FAA). This approval is required due to contractual agreements between the City and FAA. The FAA will review the lease to ensure that the required standard provisions are included. This approval is not regulatory in nature.

Following construction of the REACH facility, the building, parking area, and helicopter parking position will be added to the Airport Layout Plan. The FAA must approve the update to the Airport Layout Plan.

No approval is required from the State of California. The airport permit for Willits Municipal Airport is issued by the California Division of Aeronautics. No amendment of the Airport's permit is required because only a helicopter parking position is proposed. If a helipad were proposed, an amendment to the permit would be required because a helipad functions as a runway; it must be included in the Airport permit.

11. Summary of Potential Environmental Effects

The only potentially significant environmental effect is noise impacts to residences west of the Airport due to use of a new helicopter parking position. Shifting the helicopter parking position further from the western property line of the Airport reduces the noise impact to less than significant levels.

REFERENCES

The following references are cited in the text that follows for the Initial Study.

1. Judgment by staff with Mead & Hunt, Inc.
2. California Scenic Highway Mapping System accessed on January 14, 2015 at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/
3. California Important Farmland Finder accessed on January 11, 2015 at: http://maps.conservation.ca.gov/ciff/ciff.html. State of California, Department of Conservation.
4. *Willits General Plan Revision – Vision 2020*, adopted August 12, 1992.
5. California Air Resources Board, Area Designations for State Ambient Air Quality Standards, accessed on January 16, 2015 at: http://www.arb.ca.gov/desig/adm/adm.htm
6. California Air Resources Board, Area Designations for National Ambient Air Quality Standards, accessed on January 16, 2015 at: http://www.arb.ca.gov/desig/adm/adm.htm
7. Personal communications with Jim Walker, Facilities Manager, REACH Air Medical Services in November and December 2014 and January 2015.
8. *Revised Biological Assessment, Ells-Willits Airport*, Jane Valerius Environmental Consulting and Wildlife Research Associates, October 2009.
9. California Natural Diversity Data Base (version 09/2014).
10. *A Cultural Resources Investigation of the Willits Airport Runway Safety Improvement Project, Located in Mendocino County, California*, Roscoe and Associates, August 2009.
11. Letter from Alecia Esquivel, Environmental Assistant, of the Redwood Valley Rancheria, dated November 23, 2004.
12. Willits NE Special Studies Zones map accessed on January 14, 2015 at: http://gmw.consrv.ca.gov/shmp/download/quad/WILLITS/maps/WILLITS_NE.PDF
13. *Figure C-5: Earthquake Hazard Areas*, Mendocino County Multi-Hazard Mitigation Plan accessed on January 14, 2015 at: http://www.co.mendocino.ca.us/oes/pdf/Earthquake_Hazard_Areas_11x17.pdf
14. Resource Conservation Service *Web Soil Survey* accessed on January 14, 2015 at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
15. California Department of Toxic Substances Control, EnviroStor Data Base accessed on January 14, 2015 at: http://www.envirostor.dtsc.ca.gov/public.
16. California Water Resources Control Board, GeoTracker data base was access on January 14, 2015 at: http://geotracker.waterboards.ca.gov/
17. Federal Emergency Management Agency, Flood Insurance Rate Map 06045C1125F, effective date June 2, 2011 accessed on January 14, 2015 at: https://msc.fema.gov/portal.
18. *Figure C-3: Dam Failure Hazard Areas*, Mendocino County Multi-Hazard Mitigation Plan accessed on January 14, 2015 at: http://www.co.mendocino.ca.us/oes/pdf/Dam_Failure_Hazard_Areas_11x17.pdf.
19. Personal communications with Dan Ramsey, Airport Manager, Willits Municipal Airport in December 2014.
20. Personal communication with Mark Cicali, Chief Pilot for REACH on January 15, 2015.
21. City of Willits Code of Ordinances accessed at: https://www.municode.com/library/ca/willits/codes/code_of_ordinances.
22. *Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*, US Fish and Wildlife Service, July 26, 2006
23. Personal communication with Angela M. Liebenberg, Environmental Scientist, California Department

of Fish and Wildlife, Coastal Conservation Planning on February 5, 2015.

24. Personal communication with William McIver, Fish and Wildlife Biologist Arcata office of the US Fish and Wildlife Service on February 5 and February 13, 2015.

DETERMINATION

(Completed by Lead Agency: City of Willits)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Adrienne Moore — Signature

2-20-15 — Date

Adrienne Moore, City Manager — Signatory Name

City of Willits — For

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

CATEGORY	Pg	ANALYSIS SUMMARY (See individual pages for details)				
		Potentially Significant Impact	*Less than Significant Impact with Project Mitigation*	*Less than Significant Impact*	*No Impact*	*Comments*
1. AESTHETICS	8	☐	☐	☒	☐	Minor new light source.
2. AGRICULTURE/FORESTRY RESOURCES	9	☐	☐	☐	☒	
3. AIR QUALITY	10	☐	☐	☒	☐	Minor new source of combustion gases.
4. BIOLOGICAL RESOURCES	12	☐	☐	☒	☐	Additional noise similar to existing levels
5. CULTURAL RESOURCES	17	☐	☐	☐	☒	
6. GEOLOGY/SOILS/SEISMICITY	19	☐	☐	☒	☐	Near fault zone
7. GREENHOUSE GAS EMISSIONS	21	☐	☐	☐	☒	May increase emissions in long term
8. HAZARDS/HAZARDOUS MATERIALS	22	☐	☐	☐	☒	
9. HYDROLOGY/WATER QUALITY	24	☐	☐	☐	☒	
10. LAND USE/LAND USE PLANNING	26	☐	☐	☐	☒	
11. MINERAL RESOURCES	27	☐	☐	☐	☒	
12. NOISE	28	☐	☒	☐	☐	Relocation of helicopter parking pad resolves potential noise impact
13. POPULATION/HOUSING	31	☐	☐	☐	☒	
14. PUBLIC SERVICES	32	☐	☐	☐	☒	
15. RECREATION	33	☐	☐	☐	☒	
16. TRANSPORTATION/TRAFFIC	34	☐	☐	☐	☒	
17. UTILITIES/SERVICE SYSTEMS	35	☐	☐	☐	☒	
18. MANDATORY FINDINGS OF SIGNIFICANCE	36	☐	☒	☐	☐	

ENVIRONMENTAL CHECKLIST

1. AESTHETICS

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway corridor?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

a, c, d): The modular building and helicopter parking position may be visible from three residents located southwest of the project site. Portions of the surrounding hillsides are visible from these residences. The proposed project will extend the developed area of the Airport's building area about 35 feet to the south. The proposed modular office will be consistent in appearance with the adjacent box hangar and other hangars on the Airport. The helicopter parking position will be similar to the aircraft tiedown positions, which currently exist.

b): Poppy Drive is not a designated state scenic highway corridor.

Sources: 1, 2

Mitigation

None required.

2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a – e): The project site does not contain any farmland or trees. The site is designated as "urban" in mapping prepared by California Farmland Mapping and Monitoring Program. The site is not covered by an agreement pursuant to the Williamson Act. The site is not zoned for farming or forestry uses.

Sources: 1, 3, 4

Mitigation

None required.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion

a – c): The project site is located in the Mendocino County Air Quality Management District. The area is currently listed as "nonattainment" for the State Annual Average PM10 standard and the 24-hour PM10 standard (suspended particulates). The area is in attainment or unclassified for all national pollutant standards. On an average day, the project will generate 10 vehicle trips by REACH staff and two helicopter operations (i.e., one departure and one arrival). Ultimately the number of operations are expected to increase to an average of three per day. Compliance with Mendocino County Air Quality Management District requirements to address particulates requires use of best management practices during construction.

d): The project will generate 10 vehicle trips and initially two and eventually three helicopter operations on an average day. The nearest sensitive receptor (a residence) is 275 feet from the proposed parking spaces and 350 feet from the helicopter parking position. With this volume of activity and distance from the nearest sensitive receptor, a "hot spot" analysis is not justified. Pollutant concentrations will be less than significant.

e): Due to the distance to the nearest receptors, odors from car or truck exhaust are not anticipated to be detectable. The helicopter is powered by a turbine jet engine. Jet fuel has a distinct odor. Depending upon the speed and direction of the wind, it is possible that the odor of jet fuel (Jet A) will be noticeable during the twice per day arrival and departure. Three residences may be close enough to the helicopter parking position to detect the smell of jet fuel.

Sources: 1, 5, 6

Mitigation

None required.

4. BIOLOGICAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

A Biological Assessment was prepared in 2009 for another project on the Airport. A biological reconnaissance was conducted and a formal wetland delineation was prepared as a part of this project. A copy of this Assessment is attached. No significant changes to the Airport are known to have occurred in the subsequent six years. **Figure 4**, taken from this Assessment, presents the vegetation types and wetlands located on the Airport. The project site has been added to the graphic. The site falls within the California annual grassland classification.

a): Table 2 in the Assessment summarizes the special status plant species potentially present on the Airport and Table 3 provides a similar summary for animal species. Special status species include those listed as:

- Threatened or endangered under the Federal Endangered Species Act

- Threatened, rare or endangered under the California Endangered Species Act
- California Rare Plant Rank 1B by the California Native Plant Society
- Subject to the Migratory Bird Treaty Act

Based upon Table 2 in the Assessment, one special status plant is located on the Airport: Sonoma canescent manzanita (*Arctostaphylos canescens* ssp. *Sonomensis*). This plant is identified as Rank 1B by the California Native Plant Society. This plant is present in three locations on the west side of the Airport and two locations on the south side of the Airport. None occur within the project site. Table 3 in the Assessment identifies two species of bird for which suitable habitat exists on the Airport: yellow warbler (*Dendroica petechial brewsteri*) and yellow-breasted chat *(Icteria virens)*. Both of these birds nest in riparian corridors which are not present on the project site.

City staff have indicated that some members of the community have expressed concern about potential impacts to the Northern spotted owl (*Strix occidentalis*), a Federally listed threatened species. The Assessment indicates that this species favors "dense coniferous and hardwood forest and shaded, steep-sided canyons." The Assessment indicates that suitable habitat is not present on the Airport. Therefore, it is concluded that the proposed project will not directly affect Northern spotted owl habitat because suitable habitat does not exist within the project site.

The California Natural Diversity Data Base (version 09/2014) indicates that in the early 1990s there were two sightings of the spotted owl less than a mile northeast of the Airport (1991, 1993) and five sightings short of a mile southeast of the project site (1990, 1991). The locations of these sightings are in areas that are overflown by fixed-wing aircraft flying a standard traffic pattern as defined by the FAA. At this point in the standard landing pattern (the *base leg*), fixed-wing aircraft can be expected to be at an altitude about 800 to 1,000 feet above the Airport's elevation (i.e., 3,363 feet MSL).

REACH's chief pilot indicates that he anticipates that REACH pilots landing at the Airport will commonly make a base entry about ½ mile from the end of the runway. This means that the helicopter will approach the Airport at a right angle to the runway and then turn towards the Airport about ½ mile from the end of the runway. This pattern is similar to the landing pattern used by smaller fixed-wing aircraft. The chief pilot expects that the helicopter will be descending through 1,000 feet above Airport elevation while on the base leg of the approach. This also mirrors the altitude currently used by fixed-wing aircraft.

Fixed-wing aircraft departing the Airport will typically follow the extended runway centerline until at least the end of the runway. The point at which fixed-wing aircraft make their initial turn will depend upon the destination, climb performance of the aircraft, and pilot preference. REACH's standard practice will be to initiate turns only after passing beyond the end of the runway. Both fixed-wing aircraft and the REACH helicopter may pass over the locations of the historical Northern spotted owl sightings depending upon the destination and other factors noted above. Due to differences in climb performance, the REACH helicopter is likely to be slightly higher than the fixed-wing aircraft; however, both can be expected to be around 1,000 feet above airport elevation.

From the information presented above, we can conclude that the three areas where historical sightings of the Northern spotted owl have occurred have been and will continue to be routinely overflown by fixed-wing aircraft. The REACH helicopter will also regularly overfly the northeastern location during arrivals. REACH may overfly all sites during departures depending upon the intended destination.

The document preparers contacted the biologist with the California Department of Fish and Wildlife, who is responsible for land animals in the geographic region of the project site, to enquire about potential

biological concerns and specifically to determine the level of concern about the Northern spotted owl. The biologist indicated that her agency would probably defer to the US Fish and Wildlife Service for evaluation of impacts to the Northern spotted owl. The state biologist indicated that the apparent level of potential biological impacts was so low that her agency might not make a formal response after receiving a copy of the initial study as part of CEQA review. This biologist also provided a copy of the auditory impact assessment document noted in the paragraphs that follow.

The appropriate biologist with the US Fish and Wildlife Service was then contacted by telephone. The federal biologist indicated that the project appeared to have such limited potential for impact on the Northern spotted owl that the agency would be unlikely to formally evaluate the project. He also indicated that the agency would not wish to involve itself in regulating the flight of medical helicopters generally. The document preparers requested that the biologist arrange for an official comment letter from his agency. He indicated that a letter will be provided by about April 4, 2015. This letter will be included with any other correspondence that arrives during the planned comment period for this project.

In 2006, the US Fish and Wildlife Service published guidance on assessing the auditory impact on the Northern spotted owl. The document indicates that "harassment" of the Northern spotted owl is likely to occur if any of the following three conditions would be created by the proposed project:

(a) The action-generated sound level substantially exceeds (i.e., by 20-25 dB or more as experienced by the animal) ambient conditions existing prior to the project;
(b) When the total sound level, including the combined existing ambient and action-generated sound, is very high (i.e., exceeds 90 dB, as experienced by the animal); or
(c) When visual proximity of human activities occurs close to (i.e., within 40 m of) an active nest site.

Single-event maximum sound levels were calculated for both existing fixed-wing operations and the new REACH operations over the three areas where the Northern spotted owl was historically present. The FAA's Integrated Noise Model was used to generate the data. The sites in which the Northern spotted owl was sited are located the following distances from the proposed REACH helicopter parking position:

- Owl Site 1: approximately 4,500 feet northeast with an assumed nest height of 1,685 feet MSL
- Owl Site 2: approximately 5,000 feet east-southeast with an assumed nest height of 1,440 feet MSL
- Owl Site 3: approximately 4,800 feet southeast with an assumed nest height of 1,740 feet MSL

The Airport's elevation is 2,063 feet MSL. Due to the sensitivity of the mapped data, a graphic depiction of the locations of the Northern spotted owl sightings is not provided.

Noise levels for helicopter arrivals and departures to and from the south were modeled. Due to the steep slope of the runway fixed-wing aircraft seldom arrive from or depart to the north. So only operations to and from the south were modeled. The touch and go operation mention is a training operation in which an aircraft lands, but does not stop before taking off again.

In modeling the sound levels it was assumed that the Northern spotted owl nest would be located 50 feet above ground level. The owl typically nests at least 15 above ground level and may nest 100 feet above ground level if a suitable cavity in a tree exists. No data is available on the elevation of the nesting sites in the areas where the presence of the owl is documented. In any case, nesting sites are subject to change over time. **Table 1** presents the estimated sound levels in decibels (dB).

Table 1

Maximum Sound Level Comparison

Note: All sound levels in decibels

Aircraft	Operation	Owl Site A	Owl Site B	Owl Site C
EC130 (REACH helicopter)	Depart to North	62.6	56.8	52.9
	Depart to South	63.0	61.6	64.2
	Arrive from North	72.0	61.9	58.0
	Arrive from South	65.5	68.4	69.8
Cessna 172 (single-engine fixed-pitch)	Touch & Go	55.3	52.7	55.2
	Arrive from South	53.6	54.1	54.4
	Depart to South	55.3	51.8	52.2
Beech Baron 58 (piston twin0	Arrive from South	68.3	68.8	69.1
	Depart to South	69.6	71.9	73.6
Single-engine Variable Pitch (e.g. Cessna 182)	Touch & Go	69.6	69.1	71.7
	Arrive to South	66.5	66.9	67.2
	Depart to South	69.9	68.5	69.5

Based upon the harassment criteria noted above the following conclusions can be reached:

(a) REACH's helicopter would generate sound levels similar to those by fixed-wing aircraft.
(b) No sites are exposed to sound levels higher than 90 dB currently or with the introduction of REACH's helicopter
(c) All aircraft activity are more than 1,000 feet above nesting sites.

Therefore, it is concluded that the project would not cause a significant impact on the Northern spotted owl.

b – c): **Figure 4** shows that the Airport contains both wetlands and riparian ("streams") habitat. The project site is located in California annual grassland habitat and will not directly affect either wetlands or riparian habitat. Since the project site was rough graded when the Airport was constructed, the general pattern of drainage will not be altered by the project. The project site is not hydrologically connected to any of the wetlands or streams on the Airport.

d): The project site is located inside the fenced perimeter of the Airport. No new fences or other barriers to the movement of land animals will be created. The project does not alter any stream or water body. No wildlife corridors or nursery sites were identified in the Biological Assessment. The project site was created by grading.

e – f): The City does not have a biologically oriented ordinance. No part of the Airport is part of a habitat conservation plan of any type.

Sources: 1, 8, 9, 20, 21, 22, 23, 24

Mitigation

None required.

5. CULTURAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Discussion

a – d): A Cultural Resources Investigation was prepared in 2009 for another airport project. This investigation included both a pedestrian survey, research, and data base search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center at Sonoma State University and a consultation with potentially interested tribal contacts provided by the California Native American Heritage Commission. The Area of Potential Effect for that project included the location of the proposed helicopter parking pad, but not the adjacent site for the modular building. However, given that the entire project site was created by grading the hillside to provide a level building site, the general conclusions of the investigation are presumed to apply to the entire site.

The Northwest Information Center indicated that the CHRIS database did not contain any references to cultural resources on the Airport. The Center indicated that the area was moderately sensitive for Native American artifacts and of low sensitivity for historic-period artifacts. The California Native American Heritage Commission indicated that there were no known cultural resources in the general area of the Airport. Only one letter from a tribal representative was received as part of the investigation. This letter was from Redwood Valley Reservation. It indicated that no known cultural resources existed on the Airport. However, the letter indicated that the tribe considered all of Mendocino County to be culturally sensitive and that undiscovered cultural sites may exist. The tribe's representative asked to be notified if any cultural artifacts were discovered during construction.

In 2004, the Sherwood Valley Rancheria was contacted in 2004 regarding potential impacts from the Airport's five-year capital improvement program. A letter from the Sherwood Valley Rancheria's Tribal Environmental Program staff indicated that there were no known cultural or archaeological sites in the Area of Potential Effect. However, the letter indicated that the tribe considered all of Mendocino County to be culturally sensitive and that undiscovered cultural sites may exist. The tribe's representative asked to be notified if any cultural artifacts were discovered during construction.

This Investigation concluded that:

> "During the course of this investigation, no significant cultural resources were identified and no further studies are recommended at this time."

To support a thorough review of the initial study on February 6, 2015, a Sacred Lands File and Native American Contacts List Request was submitted to the California Native American Heritage Commission. At the time of release of this initial study a response from the agency had not be received. When received, all suggested contacts will be provided with a copy of the initial study. Any tribes on the suggested contacts list will be invited to initiate discussions with the City over cultural concerns.

Sources: 1, 10, 11

Mitigation

None required.

6. GEOLOGY, SOILS, AND SEISMICITY

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion

a): The project site is located about one mile from the Alquist-Priolo Special Studies Zone associated with the Maacama fault. However, along with the Brooktrails subdivision and much of the City of Willits, the project site is susceptible to strong seismic ground shaking. Data does not indicate that the soils in the area are subject to liquefaction. The one-story modular structure does not require special design features to meet building codes.

b): The project site was graded when the Airport was constructed to provide a level building site. Standard erosion control measures are expected to be adequate to control soil erosion.

c – d): Because the project site is already man-altered, the Resource Conservation Service classifies the soil as “urban land” rather than a specific soil type. Soils in the area are well-drained loams with significant slopes. Many soils in the area have a limiting layer of weathered bedrock within about six feet of the

surface. Soils in the area vary in the degree to which they are expansive from low to moderate. Numerous structures exist on the Airport (including a two-story office). The box hangar adjacent to the project site has a Portland cement concrete floor. No indication exists that excessive soil expansion exists within the airports existing building area.

e): The project's office will be connected to a community sewage treatment system.

Sources: 1, 7, 12, 13

Mitigation

None required.

7. GREENHOUSE GAS EMISSIONS

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion

a, b): The principal sources of greenhouse gas emissions for this project will be fuel consumed by the helicopter and staff vehicles. Lighting and heating the modular building will also consume electricity (generated elsewhere) and potentially propane. Initial operations of the project will replace patient transfer activities already being provided by REACH (or other air ambulance services), but with helicopters based at more distant airports. Therefore, the initial level of use will either reduce greenhouse gas emissions or be neutral in terms of greenhouse gas emissions. In the longer term, patient transfer activities by REACH's helicopter may replace transfers that would otherwise occur using ambulances. The REACH helicopter uses more fuel than an ambulance on a per mile basis; therefore, if shift from use of ambulances to helicopters occurs, there would be a net increase in greenhouse gas emissions. The potential for this increase to occur is too speculative to permit quantification. However, any increase would contribute to the cumulative generation of greenhouse gases in Willits and Mendocino County.

No threshold exists to measure the significance of the greenhouse gas emissions for this small-scale development. The best that can be done is to evaluate the whether the project is consistent with land use policies and otherwise is efficient in the broadest sense. The project is proposed to be sited at an existing airport on a previously prepared building site. This minimizes the need for new construction. It is also consistent with the City's land use policies. Fueling for the helicopter will be from a truck based at the Airport. This avoids the need for routine diversions to other airports for fueling. Given the limited nature of the proposed project, no other evaluation criteria have been identified.

Sources: 1, 7

Mitigation

None required.

8. HAZARDS AND HAZARDOUS MATERIALS

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

a – b): The proposed project will not involve the use or transport of any acutely hazardous wastes. The fuels (gasoline, diesel fuel, Jet A fuel) and lubricants in the vehicles and helicopter will be the principal sources of hazardous materials. While vehicle and helicopter accidents are possible, they are not

reasonably foreseeable. The helicopter will receive a daily inspection by an FAA-certified aviation mechanic to ensure a high level of reliability.

c): The proposed project will not generate hazardous emissions or involve handling hazardous substances. The nearest school is Willits High School, which is 2.5 miles southeast of the project site.

d): The Airport does not have any have any hazardous waste sites or leaking underground storage tanks. A leaking underground storage tank had existed on the Airport, but it was remediated and the case is closed (RB Case #: 1TMC392).

e – f): The project is located on a public airport. Airport land use policies do not apply to on-airport aviation uses.

g): The project would not affect the ability of emergency response or evacuation plans to be implemented. The project would not constrain the ability to evacuate the Airport or surrounding areas. The availability of a medical helicopter in the Willits area could be an asset in many types of emergency response situations.

h): The project site is located in a rural area surrounded on three sides by wildlands. However, the project is similar to existing uses on the site. It would not uniquely expose employees to wildland fire hazards or expand the wildland interface. The Airport consists of large areas that are paved or have limited vegetation.

Sources: 1, 15, 16

Mitigation

None required.

9. HYDROLOGY AND WATER QUALITY

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of a site or area including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of a site or area including through the alteration of the course of a stream or river or, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion

a – f): The project site was rough graded when the Airport was constructed. Only limited grading will be required to construct the proposed facilities. The general pattern of drainage will not be altered nor will any stream be modified. Stormwaters will be accommodated via sheet flows to existing natural swales. No new drainage structures are proposed. Given the level project site, standard soil stabilization measures will be sufficient to protect downstream water quality.

g – h): The Airport is located in an area that is outside of the 500-year floodplain.

i): The Airport is not located within a dam inundation zone.

j): The project site is not located near the ocean or body of water; therefore, the project site is not subject to tsunamis or seiches. The project site is located on a level area near the top of the adjacent ridge. The upslope area is generally forested and has limited potential for mud flows.

Sources: 1, 17, 18

Mitigation

None required.

10. LAND USE AND LAND USE PLANNING

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

The project will occur on a site on the Willits Municipal Airport that is designated for aviation uses on the adopted Airport Layout Plan. Although the Airport is operated by the City of Willits, no land use policies for the facility are contained in the Willits general plan. Nor is the project site included in any form of conservation plan.

Sources: 4

Mitigation

None required.

11. MINERAL RESOURCES

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

a – b): The project site has not been identified as a possible source for minerals. The Airport is not a designated site for mineral extraction.

Sources: 1, 21

Mitigation

None required.

12. NOISE

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

a – d): Noise is the principal substantive concern for the proposed project. Note that noise impacts on the Northern spotted owl are assessed in Section 4 Biological Resources. This section limits its assessment to impact on people. In California, aviation noise effects are commonly quantified using Community Noise Equivalent Level (CNEL) contours. CNEL is the annual average sound level, in decibels, obtained by adding together all noise events, with the addition of 4.77 decibels to weight sound levels from 7 P.M. to 10 P.M. and 10 decibels to weight sound levels from 10 P.M. to 7 A.M. In effect, this weighting means that each aircraft operation in the evening is counted as the same as five daytime operations and each nighttime operation counts as the same as ten daytime operations. The weighing of evening and nighttime events accounts for the fact that noise events during these hours are more intrusive when ambient noise levels are lower and people are trying to sleep. The 24-hour CNEL is annualized to reflect noise generated by aircraft operations for an entire year and is identified by “noise contours” showing levels of aircraft noise.

The Mendocino County Airport Land Use Commission (ALUC) has responsibility for ensuring compatibility between the public-use airports in the county and other land uses. The ALUC’s policies are contained in the *Mendocino County Airport Land Use Plan*. The agency’s basic noise policy is contained in Policy 3.1.3:

> "Noise Exposure in Residential Areas — The maximum CNEL considered normally acceptable for residential uses in the vicinity of airports covered by this plan is 60 dBA."

Therefore, 60 dBA CNEL noise contour will be used as the threshold of significance for noise impacts in this analysis.

The FAA's Integrated Noise Model (INM) version 7.0d was used to develop the noise contours. This is the standard software used for civilian airports. Because the Airport does not have an aircraft control tower, an actual count of aircraft operations does not exist. Therefore, the FAA's Terminal Area Forecast for 2014 was used to establish the current annual number of aircraft operations (5,500 operations). An aircraft operation is either one landing or one departure. The mix of aircraft types was defined in consultation with the City's Airport Manager. **Table 1** presents the inputs to INM.

Table 1- Noise Model Operations Inputs

Aircraft		2014 Annual		2014 with REACH Annual	
		Itinerant	Local	Itinerant	Local
Twin Engine Propeller	Beech Baron	110	-	110	-
Single Engine Propeller	Cessna 172	1,298	1,122	1,298	1,122
	Cessna 182	147	128	147	128
	Fixed-Pitch Propeller	1,298	1,122	1,298	1,122
	Variable-Pitch Propeller	147	128	147	128
Helicopter	Eurocopter 135	-	-	730	-
	Subtotal	3,000	2,500	3,730	2,500
	TOTAL		5,500		6,230

Noise contours were first prepared for the Airport without the proposed project (see **Figure 5**). In this and subsequent CNEL noise contour graphics, the 55, 60, and 65 CNEL noise contours are shown. Because it is considered the threshold of significance, the 60 CNEL contour is in bold. Noise contours were then developed which added one daily departure and one daily arrival by the REACH helicopter (see **Figure 6**). This is the average annual activity level anticipated for the project. The addition of the project would expand the noise contours to the west. With the helicopter parking position in the originally proposed location the 60 CNEL noise contour extends over the residences located immediately west of the project site. This is considered a potentially significant effect.

To mitigate this noise impact, the benefit of shifting the helicopter parking pad closer to the runway was evaluated. In the alternative studied, the pad was shifted about 55 feet east and 20 feet north. The Northern shift is to place the pad slightly closer to the edge of existing pavement to minimize construction costs. This alternative location also meets FAA design standards. This shift in the pad's location resulted in a shift in the noise contours to the east. In **Figure 7** it can be seen that the shift in the pad's location moves the 60 CNEL to the Airport's property line. This alternative pad location would reduce the noise impacts to a level that is less than significant.

Single-event noise is sound as we experience it, it is sometimes termed the maximum noise level. There is no standard for single-event noise levels; however, to aid in understanding how the proposed project will compare to exiting airport operations, a single-event graphic was prepared. **Figure 8** compares the single-event noise levels generated by the REACH helicopter with a common single-engine propeller aircraft (Cessna 172) and twin-engine propeller aircraft (Beech Baron). The noise contours are for aircraft departures which are the loudest noise events. As can be seen in the graphic, at the residence closest to the parking pad, the REACH helicopter will be louder than the single-engine aircraft but quieter than the

twin-engine aircraft. Elsewhere along the departure path, the REACH helicopter will be about as loud as the single-engine aircraft.

Sources: 1, 19

Mitigation

Mitigation 12-1: Shift the helicopter parking pad such that the eastern edge of the pad is 210 feet west of the runway centerline.

13. POPULATION AND HOUSING

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a): It is not known whether the employees associated with the project will move to the City of Willits or surrounding areas. However, even if all of the employees do move to the area, the number is so small that the effect on area population will be insignificant.

b – c): No displacement of housing or people will occur as a result of the project.

Source: 1

Mitigation

None required.

14. PUBLIC SERVICES

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

a) i – v): The scale and location of the project are such that it will not require any change in the provision of public services or the creation of new/altered public facilities.

Source: 1

Mitigation

None required.

15. RECREATION

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a – b): The project will not directly increase the use of any park. Indirectly, new employees could incrementally increase the use of parks. However, the increase in use would be small and too speculative to attempt to quantify.

Mitigation

None required.

16. TRANSPORTATION AND TRAFFIC

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.)?	☐	☐	☐	☒

Discussion

a – b, d – g): The project will generate a maximum of seven vehicle trips at shift change: four inbound and three outbound. Access will be via existing two-lane streets. This volume of traffic is too small to have a significant effect on surrounding streets, other forms of travel or transit services. No congestion management plan exists for the area surrounding the project site. No roads will be created or altered as part of this project. No vehicle types will begin using the roads to the project site that do not already do so. The project does not conflict with any identified transportation-related plan of either the City of Willits or Mendocino County.

Sources: 1, 7, 20

Mitigation

None required.

17. UTILITIES AND SERVICE SYSTEMS

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

a – g): REACH has obtained approval for connections to the Brooktrails Township Community Services District for water and sewer service. Solid waste collection will be provided by Solid Wastes of Willits through a contract with Brooktrails Township Community Services District. Electricity, telephone, and cable service will be extended from a utility pole near the entrance to the Airport. The scale of this project is too small to effect requirements for water, wastewater treatment or solid waste disposal.

Source: 7

Mitigation

None required.

18. MANDATORY FINDINGS OF SIGNIFICANCE

Would the proposed project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Have impacts that would be individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☒
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

The only potentially significant effect is the increase in noise from operations at the helicopter parking pad on residences immediately west of the Airport.

Mitigation

Shifting the pad to the east makes potential noise impacts less than significant.

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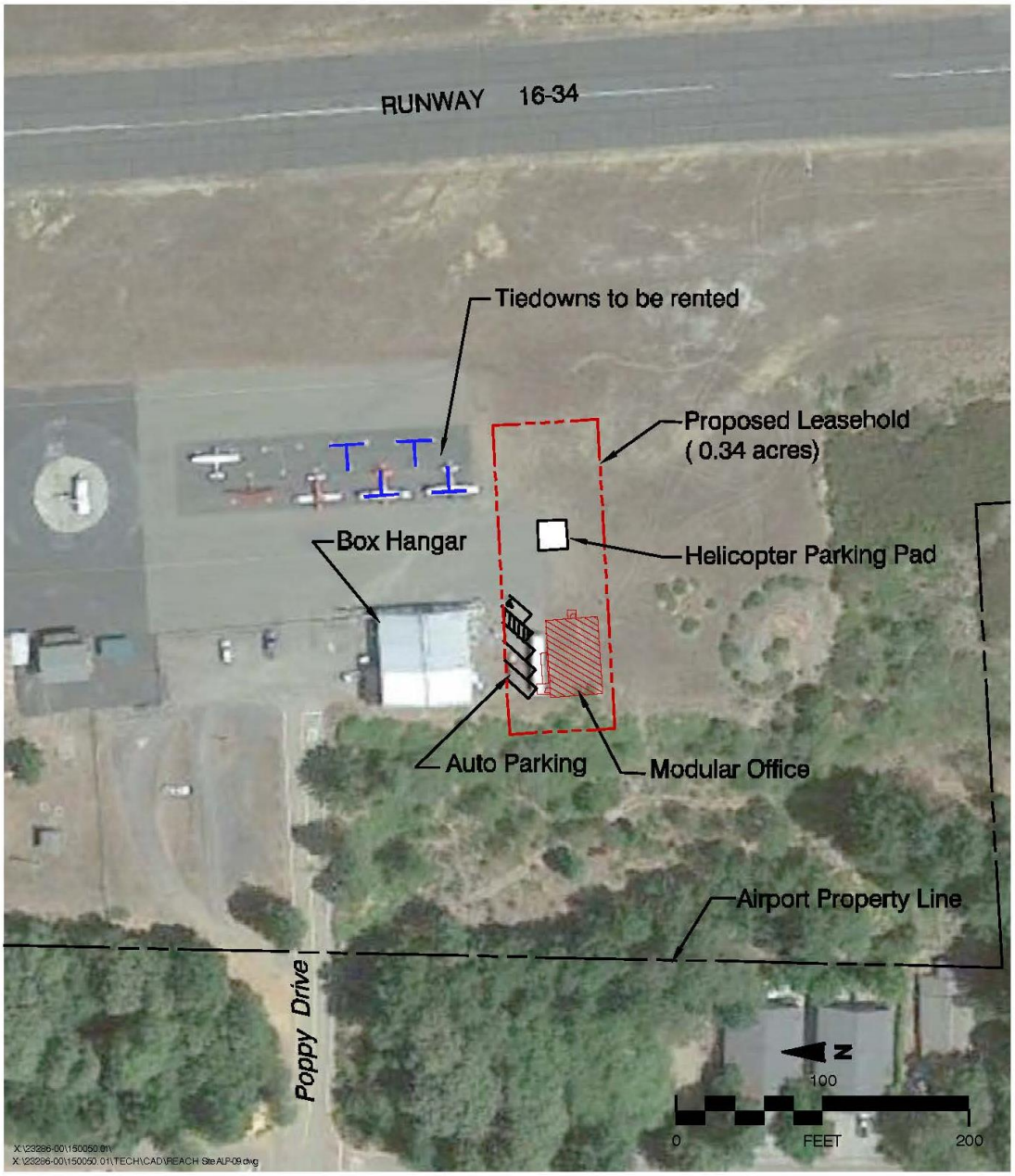

Source: Mead & Hunt, Inc. (January 2015), Google Earth (August 2013)

Figure 1

Proposed REACH Site

Willits Municipal Airport

Figure 2

EC 135 REACH Helicopter

Willits Municipal Airport

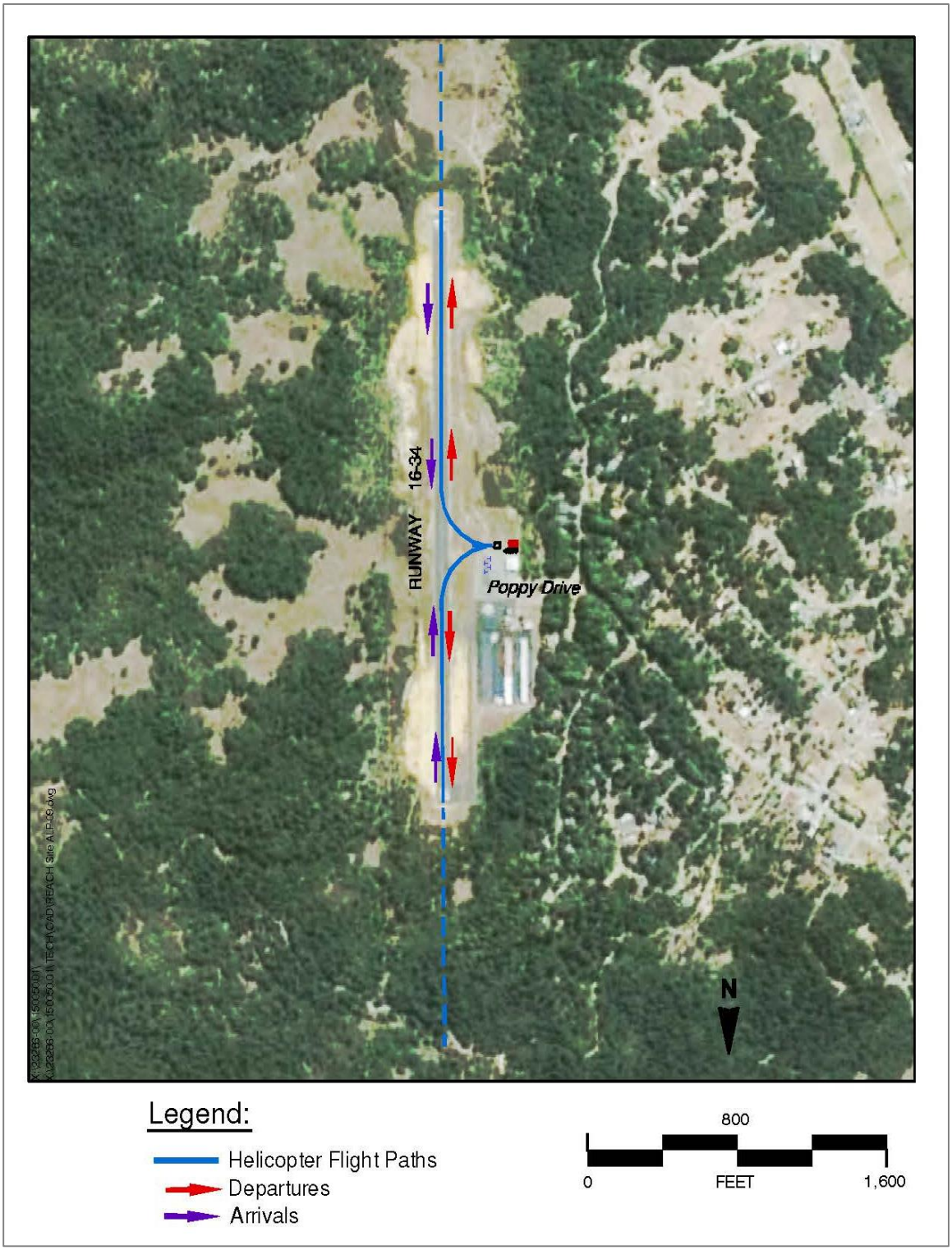

Figure 3

Helicopter Flight Paths

Willits Municipal Airport

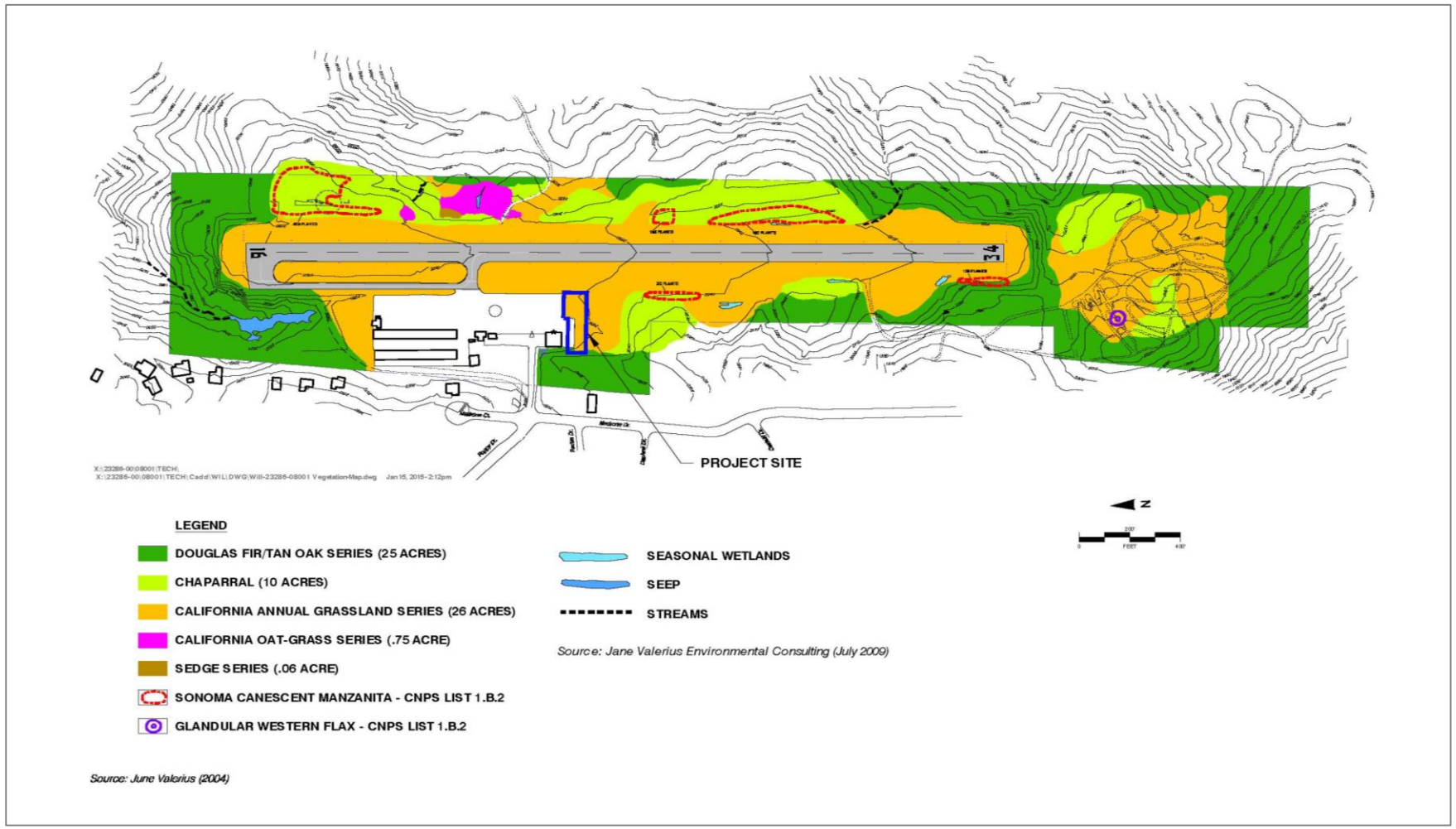

Figure 4

Vegetation Map

Willits Municipal Airport

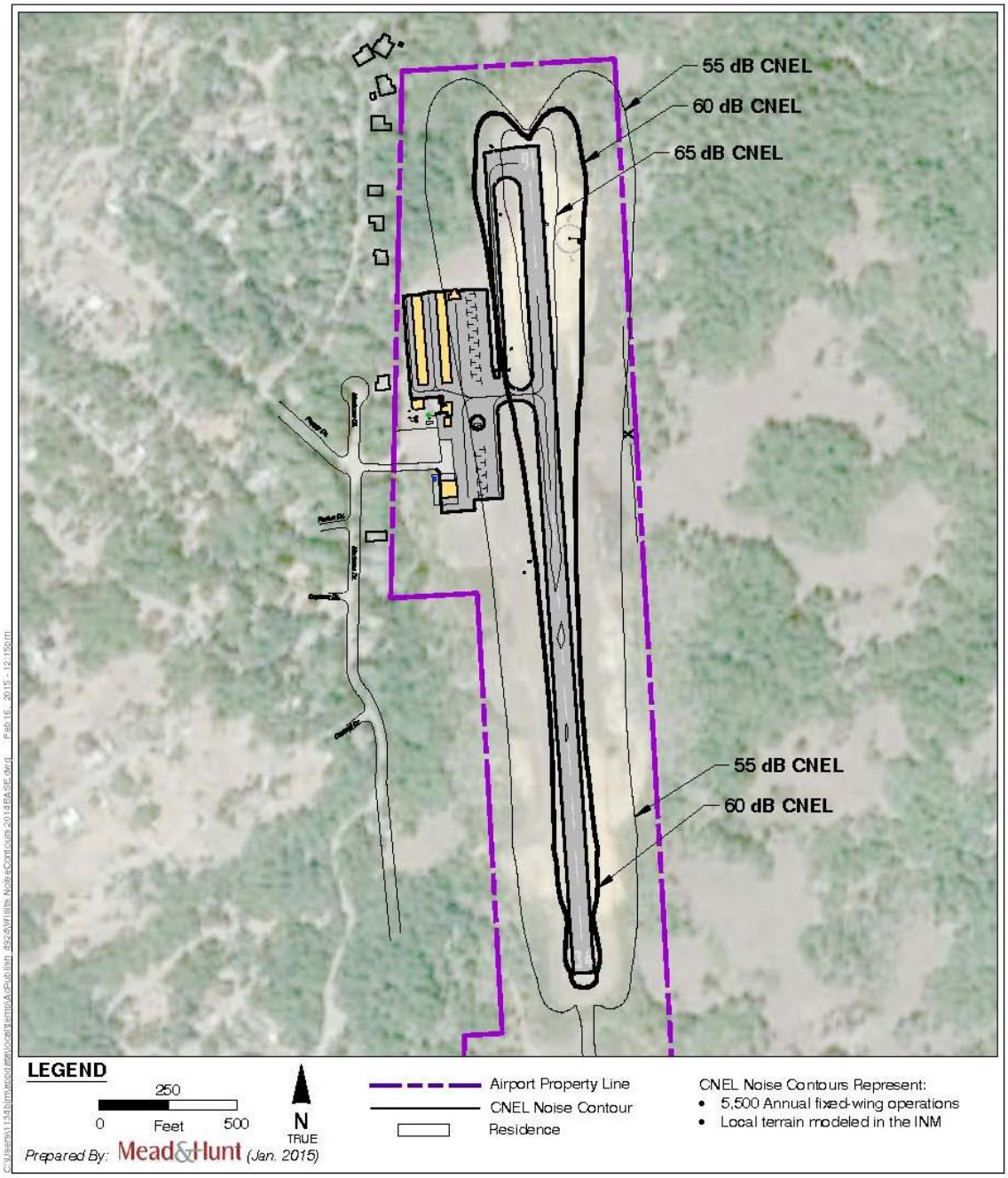

Figure 5

2014 Operations – Noise Contours

Willits Municipal Airport

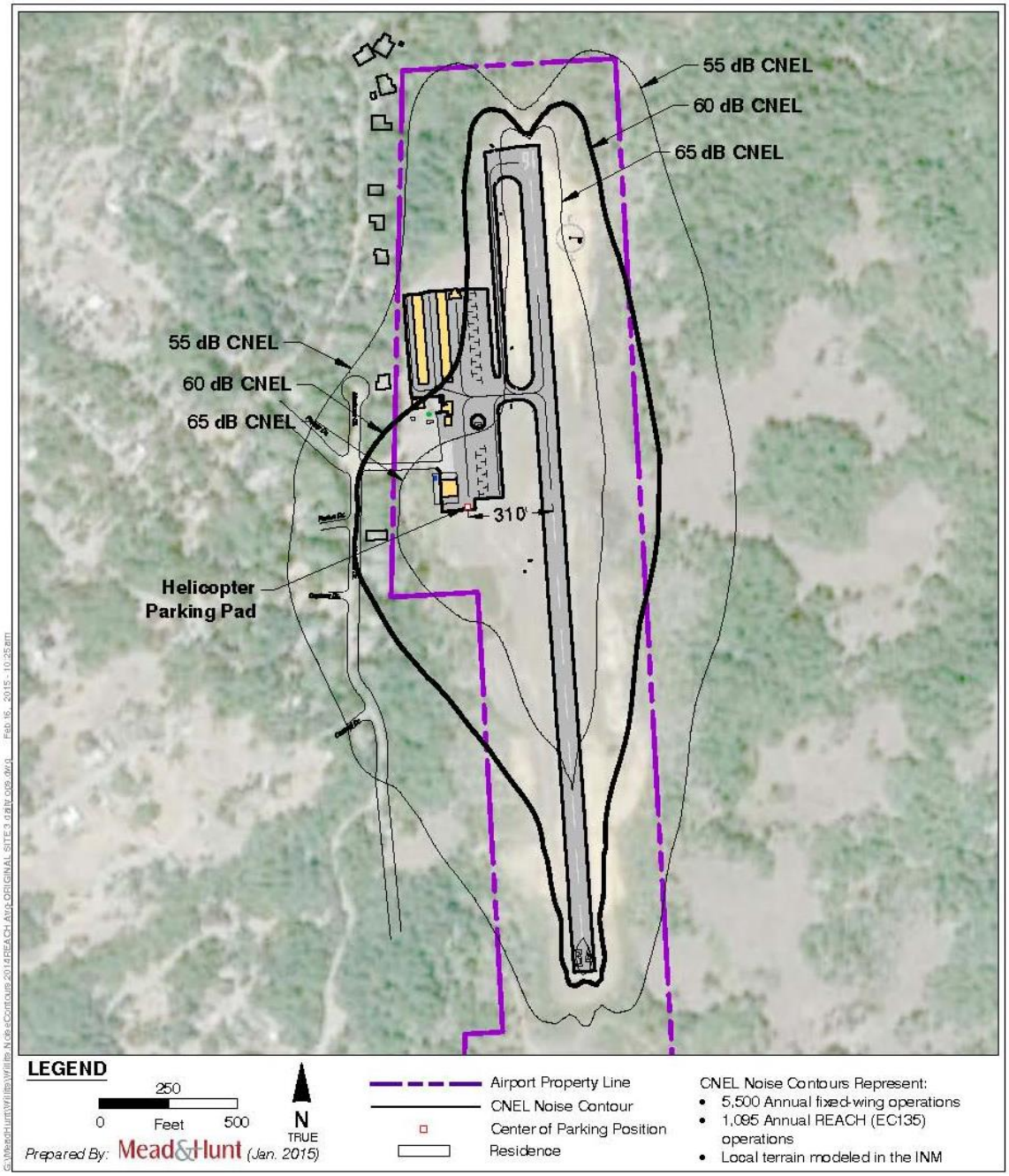

Figure 6

2014 Operations + REACH Average Day – Noise Contours Proposed Parking Position

Willits Municipal Airport

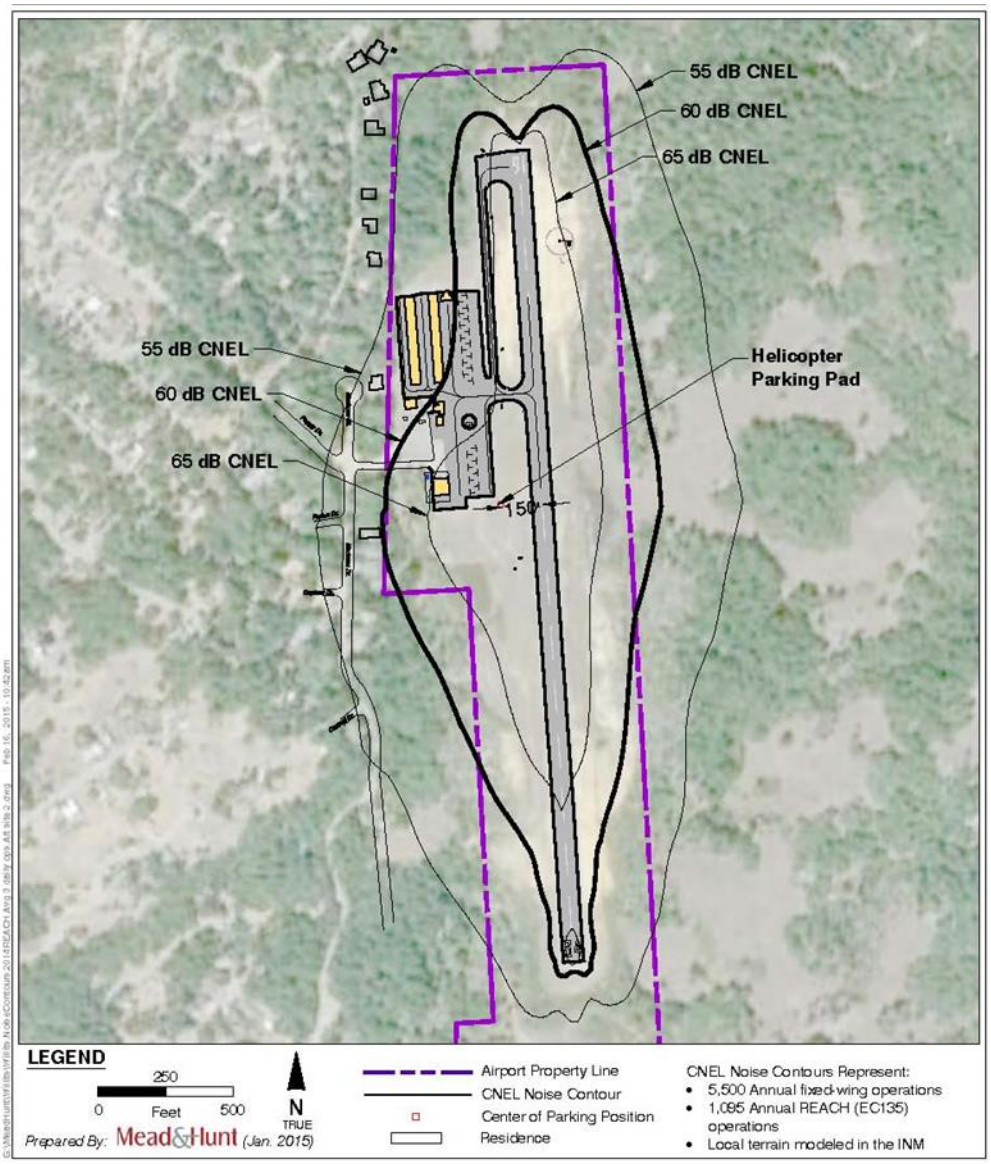

Figure 7

2014 Operations + REACH Average Day – Noise Contours Alternate Parking Position

Willits Municipal Airport

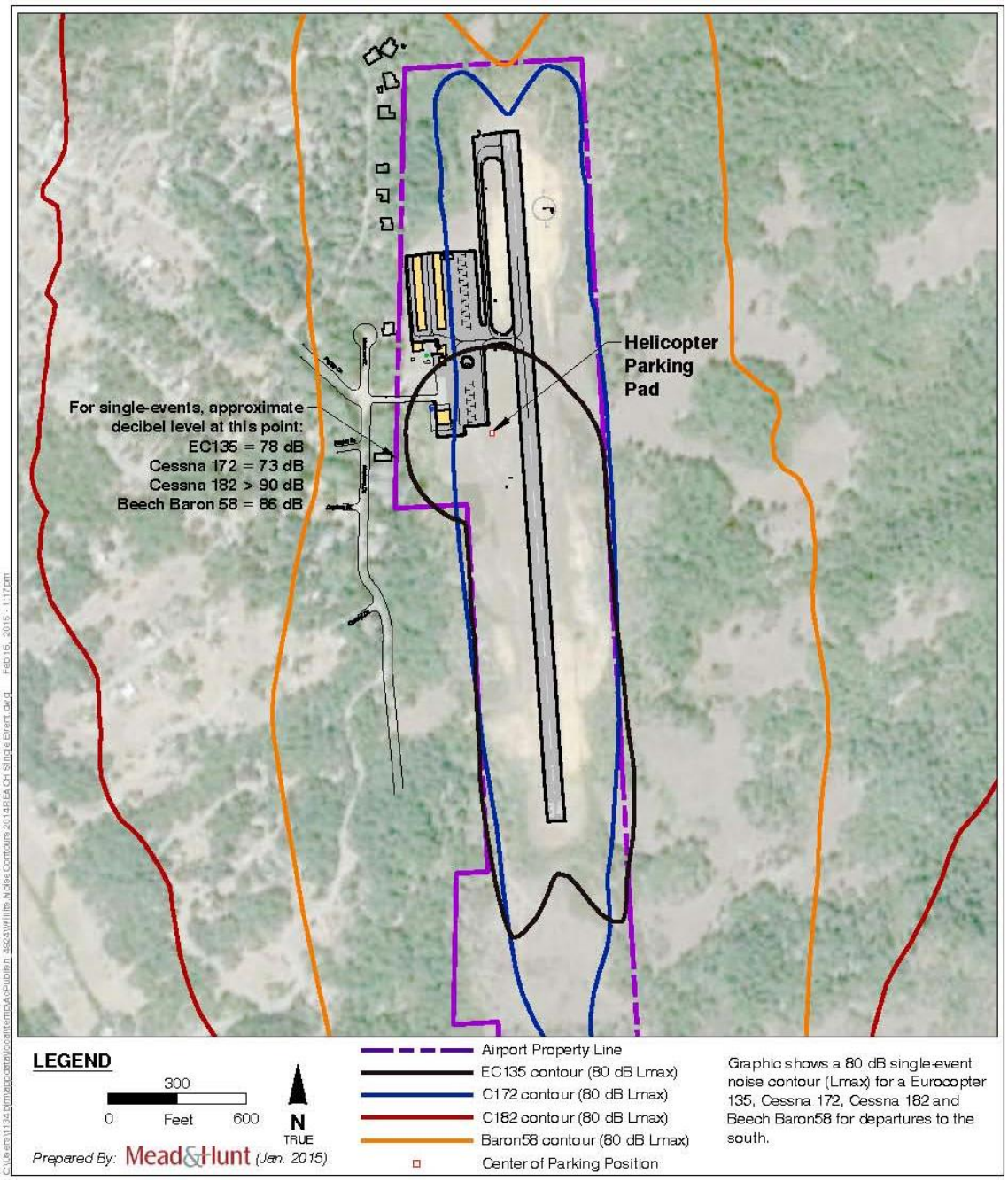

Figure 8

Single/Event Comparison

Willits Municipal Airport

REVISED
BIOLOGICAL ASSESSMENT

ELLS-WILLITS AIRPORT
WILLITS, MENDOCINO COUNTY

October 2009

BIOLOGICAL ASSESSMENT

ELLS-WILLITS AIRPORT

WILLITS, MENDOCINO COUNTY

October 2009

Prepared for:
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1119 Burbank Avenue
Santa Rosa, CA 95407
707-544-6273

And
Jane Valerius Environmental Consulting
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Sebastopol, CA 95472
707-824-4327

ELLS-WILLITS AIRPORT BIOLOGICAL ASSESSMENT
WILLITS, MENDOCINO COUNTY

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APPENDIX

A. EXECUTIVE SUMMARY

Introduction

This Biological Assessment was prepared in accordance with Section 7 of the federal Endangered Species Act (FESA) (16 U.S.C. 1536 (c)), and was created in support of a Biological Opinion from the U.S. Fish and Wildlife Service (Service) for repair of a slide at the City of Willits Ells Airport located north of the city. The slide is located at the northern end of the airport. At the slide face vegetation and loose soil will be removed and no excavation will occur. The proposed project area includes the northern portion of the site, and the two borrow areas located on the eastern portion of the site. An access route between the slope failure site and the two borrow areas will be created along the eastern edge of the runway, along the cleared shoulder. No grading or other preparation will be made as this area is level enough for construction equipment. The existing roadway in the northeastern corner of the project that leads to the bottom of the slope failure area will be cleared of vegetation that is now growing in the road. Only minor grading and clearing will be needed.

We reviewed information provided by the U.S. Fish and Wildlife Service (USFWS 2009), California Natural Diversity Data Base (CNDDB 2009), the California Department of Fish and Game (CDFG 2009) and the California Native Plant Society's (CNPS) on-line inventory of rare and endangered plants of California. Data base information was reviewed for the Willits and surrounding USGS quadrangles which cover the project area and surrounding general region. The 9-quadrangle search included the Willits, Willits Ridge, Brushy Mountain, Foster Mountain, Redwood Valley, Laughlin Range, Greenough Ridge, Burbeck and Longvale USGS quadrangles.

We evaluated the potential for occurrence for federally-listed, federal candidates for listing, and other special status plant species based on the vegetation communities and soils present on the site and reported occurrences of species in the vicinity of the project. As required by both federal and state guidelines, botanical surveys were conducted during the flowering period for each of the species with potential to occur on the site.

We evaluated the potential for occurrence of several federally-listed animal species, as well as non-federally-listed species, based on the habitats that are present on the site, and the connectivity between the site and locations in the area where the species' presence has been reported.

Also incorporated into this report is information from the *Preliminary Delineation of Waters of the United States, Including Wetlands, of the Willits Airport Project Site, Mendocino County, California* (Jane Valerius Environmental Consulting 2009). This Biological Assessment provides the background information necessary for the determination by the Service of any potential affects the proposed action may have on any special-status species or communities.

Summary of Impacts to Wetlands and Waters of the U.S.

Waters of the U.S., including wetlands, were mapped as part of a delineation of wetlands and waters of the U. S. as defined by the U. S. Army Corps of Engineers (USACE). The delineation was submitted to the USACE as part of the project application in a letter dated July 27, 2009. Mr. David Wickens with the USACE conducted a site visit to verify the delineation on October 1, 2009. A revised map was sent on October 21, 2009. The revised delineation has a total of 0.537

acres of waters of the United States, consisting of 0.493 acres of seasonal wetlands and seeps and 0.044 acres of (non-wetland) other waters, identified on the project site. Impacts to wetlands and waters will be avoided. However, there is the potential that one small wetland area could be impacted. This area, designated as SW-1, is approximately 0.009 acres in size and occurs at the northwestern corner of Borrow Site #1 at the base of the borrow site. If impacts cannot be avoided, fill of this small area can either be mitigated on-site by re-creating the wetland area after the soil material has been removed so that this would be a temporary loss (and not a permanent loss), or mitigating at a suitable off-site location. Because wetlands are considered an attraction for birds the Federal Aviation Administration (FAA) does not favor wetland creation at airports. However, given that this is a small, seasonal wetland it does not provide any substantial habitat for birds or other wildlife species and re-creation of the area would not provide an attraction for birds. Authorization for the placement of fill and mitigation for the fill can be permitted under the USACE's nationwide permit program. Erosion control measures described below will be implemented to protect the other wetlands and waters on the site from construction related activities or potential erosion or sedimentation within downstream creeks and drainages.

Summary of Impacts to Federally-Listed and other Special-Status Plant Species

A search of the USFWS list for Mendocino County identified two federally listed plants, Burke's goldfields (*Lasthenia burkei*) and few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*). No reported occurrences were found for these species within the region of the study area. No individuals were detected during the appropriately timed surveys. Habitats on the site that could support federally listed species include seasonal wetland areas, such as meadows, seeps and vernal pools. All areas that had the potential to be impacted by the project were surveyed.

Two CNPS special status plant species were observed on the site: Sonoma canescent manzanita (*Arctostaphylos canescens* ssp *sonomensis*) and Glandular western flax (*Hesperolinon adenophyllum*). These are both listed as CNPS List 1B.2 plants. Sonoma canescent manzanita occurs in 5 locations comprising a total of 730 plants observed. The largest population, a total of 450 plants, occurs in the proposed Borrow Site #2 and approximately 100 plants occur in the proposed Borrow Site #1. The remaining 180 plants are outside of the proposed construction area. Glandular western flax occurs in the southern portion of the airport site and will not be impacted by the proposed project. Impacts to Sonoma canescent manzanita will be mitigated by replanting this species in the borrow areas after soil material has been removed.

Summary of Impacts to Federally-Listed and other Special-Status Animal Species

Federally listed or federal species of concern potentially occurring in the area are steelhead central California ESU, California red-legged frog, northwestern pond turtle, Pacific fisher, and bird species listed protected under the federal Migratory Bird Treaty Act. A review of special-status animal lists created by the USFWS, the CDFG, and the CNDDB revealed that 10 special-status animal species are known from the area (CNDDB 2009) and an additional 4 species were evaluated for their occurrence on the site based on the habitats present. Based on the current site conditions, only one group of species have potential to occur on the Willits Airport project site as follows:

Several species of passerines (perching birds) and raptors (birds of prey) may use the chaparral, or the Douglas fir-tan oak habitats to nest on the site. The federal Migratory Bird Treaty Act and Fish and Game Codes 3503 and 3503.5 protects the nests, eggs and young of passerines and raptors during the nesting season, which occurs, roughly, March 1 through August 31.

It is recommended that removal of any potential habitat, such as trees, plants, and grasslands, occur outside the nesting season. If not feasible, then a pre-construction bird surveys is required. If the habitat is not occupied, then no further action is required. If birds are present, a buffer of 100 feet as determined by a qualified biologist in consultation with CDFG is required to prevent take of passerines and their young.

Summary of Impacts to Critical Plant Habitat and Special Natural Communities

No federal critical plant habitat was listed for the study area. However, two special natural vegetation communities, valley oak woodland and vernal pools, were reported in the CNDDB (CNDDB 2009) as occurring in the vicinity of the project. Valley oak woodland does not occur on the project site. One of the wetland areas on the site supports vernal pool plant species and qualifies as a vernal pool. The vernal pool-type wetland will not be impacted by the proposed slide repair project.

Although not reported in the general vicinity of the project area in the CNDDB, a small area of California oatgrass bunchgrass grassland occurs near the southwestern corner of Borrow Site #2 and a larger area of this vegetation type occurs just south of the borrow site (see Figure 2, Vegetation Communities map). This community is a special natural community (CDFG 2003) that is either known or believed to be of high priority for inventory in the California Natural Diversity Data Base. This community type will not be impacted by the proposed project.

Species Considered Not Present in the Project Area

The following plant communities reported occurring in the region of the project do not occur on the site: closed-cone coniferous forest, coastal prairie, coastal bluff scrub, upper montane coniferous forest, bogs and fens, riparian forest, or freshwater marshes and swamps. No specialized substrates, such as sandy or alkaline soils nor thermal springs occur on the site. Based on a lack of presence of these substrates and communities, the following plant species, endemic to these communities, are not expected to occur on the property: grass alisma (*Alisma gramineum*), scabrid alpine tarplant (*Anisocarpus scabridus*), Nuttalls' ribbon-leaved pondweed (*Potamogeton epihydrus* ssp. *nuttallii*) and great burnet (*Sanguisorba officinalis*).

The following wildlife habitats reported occurring in the region or having potential to occur in the region (USFWS 2009) do not occur on the site: riparian habitat, riverine, freshwater marsh, or sand dunes. Based on a lack of suitable habitat wildlife species not expected to occur are presented in Appendix A.

Summary of Reasonable and Prudent Measures to Minimize Take and Mitigate for Impacts

To prevent take of special-status biological resources the following are recommended:

- Prior to removal of any trees within the breeding season (Feb. 1-Aug. 31), a qualified biologist shall survey the tree for nesting birds to prevent "take" of individuals.

- Best management practices for stormwater, erosion and sediment control will be implemented to protect waters of the U.S., including wetlands and prevent the placement of “fill” material into these areas without any authorization.

- Native perennial grassland to be protected and preserved shall be fenced and appropriately signed to ensure no construction or disturbance within this area.

- Sonoma canescent manzanita will be replanted on the borrow sites after soil material is removed.

B. PROJECT DESCRIPTION

Project Sponsor

The Ells - Willits Airport project is proposed by City of Willits. The contact person is:

Name: Ms. Marilyn Harden, Airport Manager, Willits
Address: 111 East Commercial Street, Willits, CA 95490
Telephone number: (707) 459-7120
Email: marilyn@willitscity.com

Project Description

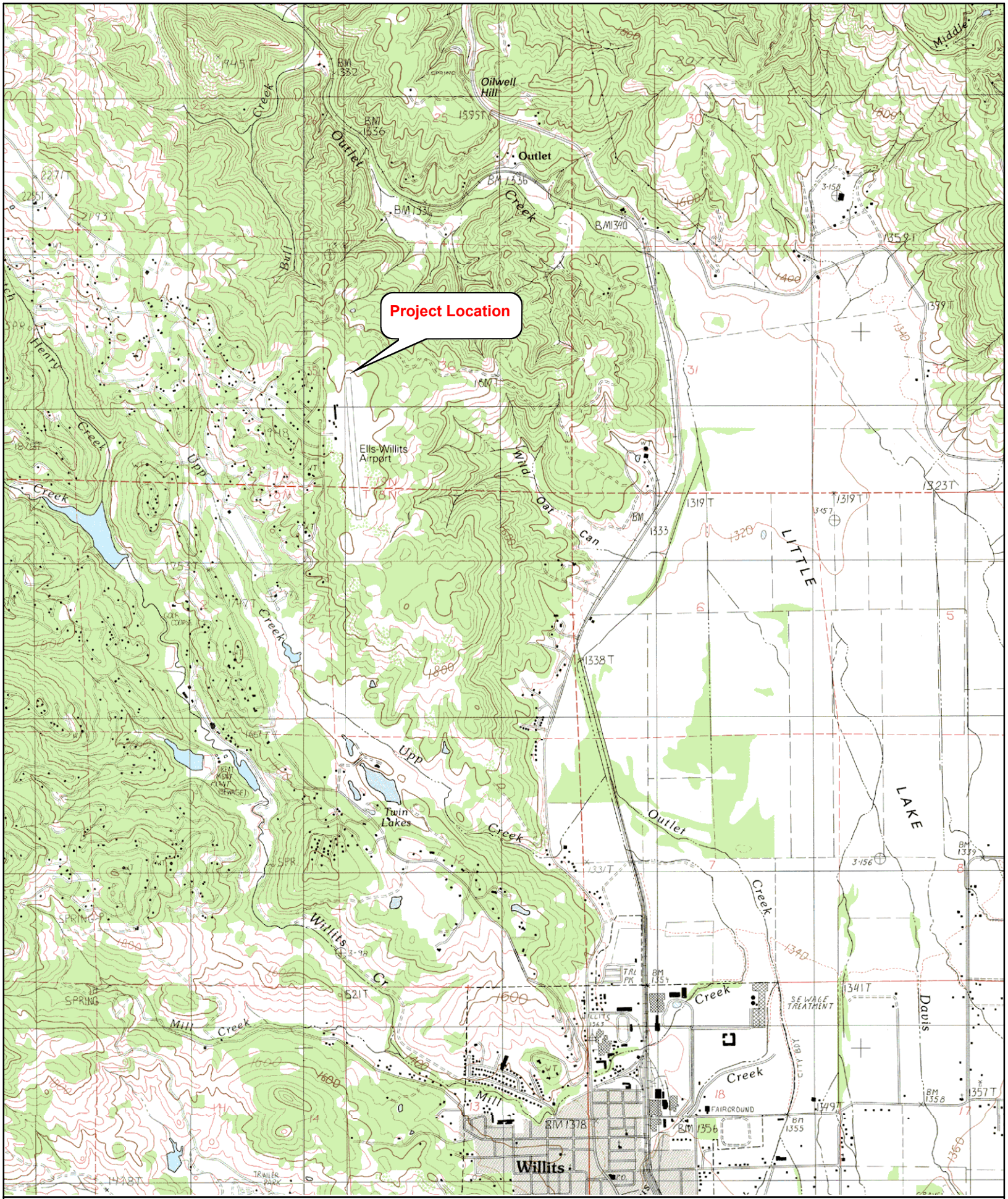
1. *Location*: The polygon-shaped property is located north of the Town of Willits, on the west side of Highway 101, in Mendocino County (Figure 1). The 75-acre parcel (APN 037-160-51-05, 037-160-62-00 and 038-020-32-05) is atop a hill that was leveled to an elevation of 2,063 feet in the northern portion and 2,023 feet in the southern portion of the site. Vegetation communities within the project area were mapped (Figure 2). The excess spoils piles were placed on the eastern side of the site (Figure 3- proposed plan). Surrounding land uses in the area consist of mainly of rural residences and forested, undeveloped land.

2. Action Area: The action area includes the northern portion of the site, and two borrow areas, Borrow Site # 1, located on the southeast side of the airport, and Borrow Site #2, located on the northeast side of the airport (Figure 2). The northern portion of the site encompasses about 1.5 acres of slope repair. Borrow Area #1 encompasses 2.5 acres and Borrow Area #2 encompasses 2 acres. An access route between the slope failure site and the two borrow areas will be created along the eastern edge of the runway, along the cleared shoulder. No grading or other preparation will be made as this area is level enough for construction equipment. The existing roadway in the northeastern corner of the project that leads to the bottom of the slope failure area will be cleared of vegetation that is now growing in the road. Only minor grading and clearing will be needed.

3. Proposed Action: The proposed action is to repair a slide on the northern end of the Willits Airport Runway. At the existing slide face vegetation and loose soil will be removed. No additional excavation will occur other than to stabilize the soils. A series of compacted earth benches will be created to stabilize the slope. Approximately 7,500 cubic yards will be removed from the southeastern borrow area (#1) and approximately 25,500 cubic yards will be removed from the northeastern borrow area (#2). Stormwater best management practices to prevent sedimentation into Bull Creek are part of the project and will be designed as part of the Storm Water Prevention Plan to control erosion both during and after construction. Please refer to Impacts and Mitigation Measures for more details on these practices.

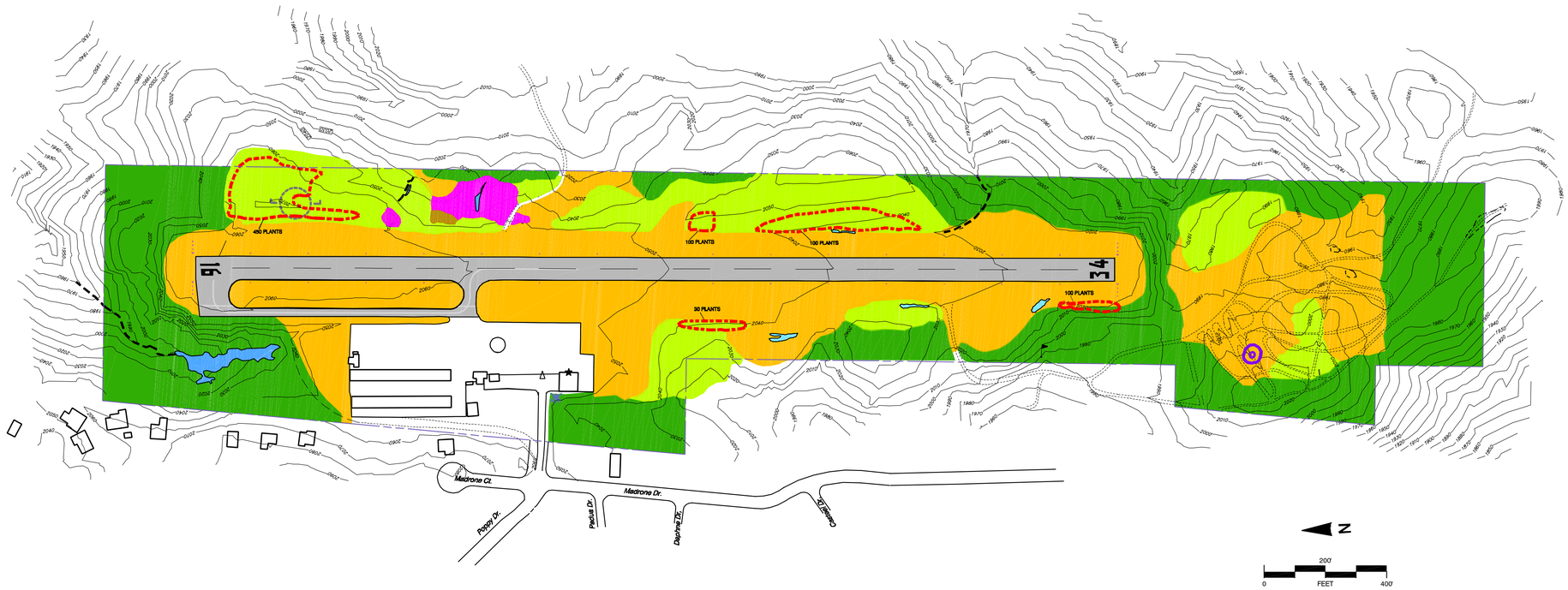
Project Alternatives

Three alternatives were reviewed. A geotechnical investigation was conducted by SHN Consulting Engineers & Geologists in 2002. SHN's report, *Alternatives for Slope Failure Mitigation, North Runway, Willits Airport*, issued in June 2003 identified three possible alternatives: 1) Compacted earth fill; 2) reinforced earth fill; and 3) Hilfiker retaining wall system. All three alternatives were similar in their ability to provide a stable, long-term means of stabilizing the slope from erosion or slides. The compacted earth fill alternative was selected because it was the least expensive.



Name: WILLITS
Date: 7/27/2009
Scale: 1 inch equals 2500 feet

Location: 10 0468923 E 4365955 N NAD83
Caption: Figure 1 - Project Location



LEGEND

- DOUGLAS FIR/TAN OAK SERIES (25 ACRES)
- CHAPARRAL (10 ACRES)
- CALIFORNIA ANNUAL GRASSLAND SERIES (26 ACRES)
- CALIFORNIA OAT-GRASS SERIES (.75 ACRE)
- SEDGE SERIES (.06 ACRE)
- SONOMA CANESCENT MANZANITA - CNPS LIST 1.B.2
- GLANDULAR WESTERN FLAX - CNPS LIST 1.B.2
- SEASONAL WETLANDS
- SEEP
- STREAMS

Source: Jane Valerius Environmental Consulting (July 2009)

WILLITS-ELLS FIELD
WILLITS, CALIFORNIA

FIGURE 2 - VEGETATION MAP

MEAD & HUNT
133 Aviation Boulevard, Suite 100
Santa Rosa, California 95403
(707) 526-5010
Fax (707) 526-9721
www.meadhunt.com

DESIGN:	DD	DRAWN:	HH	DATE:	July 2009	SHEET	1	OF	1

X:\23286-00\08001\TECH\Cadd\WIL\DWG\Will-23286-08001 Vegetation-Map.dwg Aug 14, 2009 - 8:31am

BORROW SITE #2

BORROW SITE #1

SLOPE STABILIZATION

N

150'

0 FEET 300'

LEGEND

CONSTRUCTION AREA

PROJECT AREA

HAUL ROAD

Figure 3
Proposed Plan

Source: Mead & Hunt (August 2009)

C. STUDY METHODOLOGY

Literature Search, Survey Dates, Surveying Personnel, and Consultation to Date

Literature Review: Jane Valerius reviewed the USFWS list of federal endangered and threatened species that occur or may be affected by projects in Mendocino County, the CNDDB and the CNPS on-line rare plant inventory for special status plants for the Willits and surrounding eight USGS quadrangles. No previous reports have been prepared for this project.

Wildlife Research Associates reviewed the U.S. Fish and Wildlife Service (USFWS) electronic list of Endangered and Threatened Species (http://www.fws.gov/arcata/specieslist/search.asp) from the Arcata office for the Willits and Burbeck topographic quadrangles and for Mendocino County. We also reviewed critical habitats for Mendocino County through the USFWS (http://ecos.fws.gov/docs/imf/pdf/). We used *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988) for characterizing wildlife habitats. Wildlife Research Associates also analyzed records from the biological literature (e.g. Federal Register, etc.), and the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDB 2009) for the Longvale, Burbeck, Greenough Ridge, Willits Ridge, Willits, Laughlin Range, Brushy Mountain, Foster Mountain and Redwood Valley 7.5-minute topographic quadrangles that encompass the area around the proposed project site.

Site Surveys: Jane Valerius Environmental Consulting conducted botanical surveys on April 21, and May 22, June 23, 2009. Meandering transects were walked so that the entire parcel was surveyed. The botanical surveys focused on determining the presence or absence of the special status plants identified in Section E, Special-Status Species and their Habitats. As required by the USFWS and CDFG guidelines, the surveys were floristic in nature, and all plants observed were recorded and identified to determine its rarity status. In some cases a plant sample was taken to be analyzed in the office for identification to species or subspecies. Plant identification and nomenclature was based on The Jepson Manual (Hickman 1993). A list of plant species observed on the site is provided as Appendix B.

Wildlife Research Associates biologist Trish Tatarian conducted a site visit on April 21, 2009. The entire parcel, including the proposed borrow-areas and the adjacent wooded areas, was assessed for the potential for special- status animals to occur on the site or use the site for migratory purposes. All trees and shrubs were evaluated for suitable bird nesting and bat roosting habitat using 8 x 42 roof-prism binoculars, noting presence of cavities, old bird nests and squirrel nests. The reconnaissance-level site visit was intended only as an evaluation of on-site and adjacent habitat types, and no special-status species surveys were conducted as part of this survey.

Wetland Delineation: The delineation of potential Section 404 waters of the United States and potential wetlands (as a subcategory of waters) was based on the 1987 *Wetlands Delineation Manual* (Environmental Laboratory 1987). Fieldwork to delineate wetlands and waters was conducted on April 21, 2009 by Jane Valerius, botanist (Jane Valerius Environmental Consulting) and Joel Butterworth, soil and wetland scientist (Valley Environmental Consulting, LLC) under contract to Mead & Hunt, Inc. Please refer to the *Preliminary Delineation of Waters of the United States, Including Wetlands, Willits Airport Project, Willits, Mendocino County, CA* (Jane Valerius Environmental Consulting 2009A) for more details on methodology. A verification site visit by Mr. David Wickens with the USACE was conducted on October 1, 2009. A revised delineation map was submitted to the USACE on October 21, 2009.

Impact Assessment Methodology

We examined the on-site vegetation communities, present and past occurrence locations of special-status species within close proximity of the proposed project areas, and habitats for special-status plant and animal species. Based on the current site conditions, we evaluated the potential for occurrence on the site for special-status biological resources and used the project description to determine any potential direct or indirect effects.

We based our determination of whether the proposed project may result in adverse impacts to special-status species, based on guidelines established by the USFW under Section 7(a) of the Federal Endangered Species Act (FESA), in which a project that may have an adverse effect impact on listed biological resources must be assessed. FESA states that, "each federal agency shall…insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered or threatened or result in the destruction or adverse modification of habitat of such species." Thus, components of the proposed project were deemed to have an adverse impact on special-status biological resources if they could result in effects as described in the above statement to any listed species or its habitat.

D. ENVIRONMENTAL BASELINE

The project area is located within the North Coast Bioregion (Welsh 1994). This bioregion is located the area from southwestern Oregon to the southern extent of the mixed hardwood forest with redwood in southern Monterey County and is defined by the transition from Coast Range montane forest to the dry interior of the Sacramento Valley Bioregion as represented by chaparral and oak-digger pine plant communities (Welsh 1994). Habitats within this bioregion are primarily mesic (moist) habitats, such as freshwater marsh and redwood forests, and xeric (dry) habitats, such as chaparral and blue oak woodland, and are typical of a Mediterranean type climate.

Located at the northwestern portion of Little Lake Valley, the study area is located within the northwestern portion of the Willits 7.5-minute topographic quadrangle, within section 36 (Township 19N and Range 14W). The Willits airport project site is located on a saddle at the northern end of Little Lake Valley. Four creeks have their headwaters originating downstream from the project site. Drainages on the southeast side of the airport flow into Wild Oat Canyon, while those on the northeast side flow into Outlet Creek, those on the northwest side flow into Bull Creek and those drainages on the southwest side of the project area flow into Upp Creek.

The 50.1-acre rectangular-shaped project site is located west of Highway 101 and east of Poppy Drive on a ridge at elevations between 1,935 feet in the southwest to 2,070 feet in the northeast. Slopes are nearly level in the central portion of the site, and are cut to almost 50% on the perimeter. Rural residences are located west and north of the site south with open lands to the east.

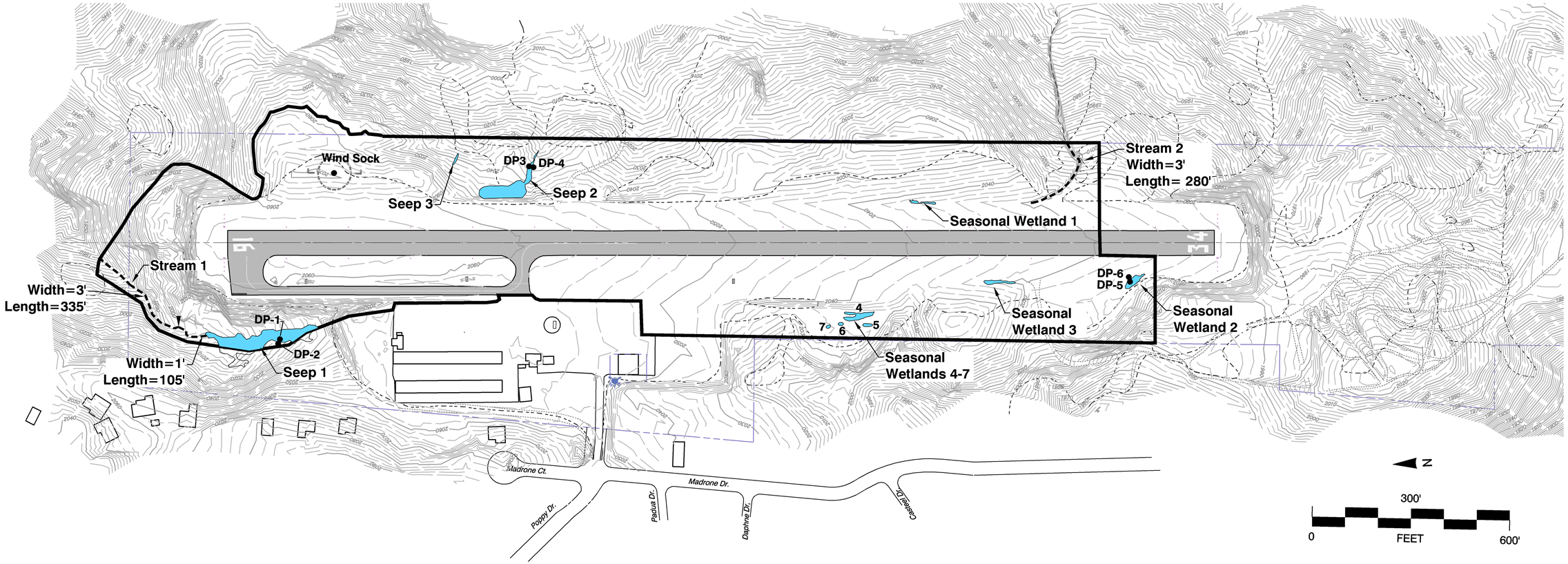
Wetlands and Waters of the U.S.: Natural hydrology on the site is primarily influenced by direct precipitation, surface runoff and subsurface seepage that surfaces on the eastern portion of the site. Two (2) seasonal drainages occur within the project area and flow downhill from the mesa. Runoff flows via several unnamed intermittent drainageways directly to Outlet Creek, located in the northeastern portion of the site. Outlet Creek flows northerly roughly 22 miles to the middle fork Eel River, a perennial stream. From that point, the Eel River flows northwesterly roughly 118 river miles to the Pacific Ocean, just south of Eureka.

Drainages on the northwest portion of the project site drain into Bull Creek, a perennial creek that then flows into Outlet Creek.

On the southeast side of the project site, surface runoff flows via several unnamed intermittent drainages to Wild Oat Canyon Creek, an intermittent stream, which then flows into Outlet Creek.

On the southwest portion of the site, surface runoff flows via several unnamed intermittent drainages to Upp Creek, an intermittent stream, which then flows into Mill Creek, also an intermittent stream. Mill Creek is a tributary to Outlet Creek, a perennial stream which flows through Little Lake Valley, within which Willits exists.

Seven seasonal wetlands and three seep wetlands were mapped for the project site along with two streams (Figure 4). The seasonal wetlands appear to be artificially created as a result of the cutting and filling work that was done to construct the airport. All occur in shallow depressions or swale-like ditches. A total of 0.537 acre of waters of the United States (consisting of 0.493 acre of seasonal wetlands and seeps and 0.044 acre of [non-wetland] other waters) were identified on the project site (Table 1).



LEGEND

- Seasonal Wetlands (wetland)
- Seeps (wetland)
- Streams (other waters)
- DP ● Delineation data point
- Project Area Boundary
- ' Stream width dividing point

Notes:

1) Delineation field work conducted by Jane Valerius (Jane Valerius Environmental Consulting) and Joel Butterworth (Valley Environmental Consulting, LLC) on April 21, 2009 using GPS and aerial photograph interpretation methods. Seep 1 mapped by professional land surveyor.

2) Delineation map prepared by Mead & Hunt, Inc., 133 Aviation Boulevard Suite 100, Santa Rosa, CA 95403-8279.

3) Delineation prepared for City of Willits, California.

Feature	Acreage
Seasonal Wetland 1	0.009
Seasonal Wetland 2	0.024
Seasonal Wetland 3	0.017
Seasonal Wetland 4	0.033
Seasonal Wetland 5	0.005
Seasonal Wetland 6	0.003
Seasonal Wetland 7	0.002
Seep 1	0.247
Seep 2	0.149
Seep 3	0.004
Stream 1	0.025
Stream 2	0.019
Total	0.537

Figure 4 - Preliminary Delineation of Waters of the United States, Including Wetlands, of the Willits Airport Project Area, Willits Revised October 2009

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Table 1. Acreages of Preliminary Jurisdictional Waters of the United States, Including Wetlands, in the Willits Airport Project Area

Wetlands	
Jurisdictional Feature	**Acres**
Seasonal wetland 1	0.009
Seasonal wetland 2	0.024
Seasonal wetland 3	0.017
Seasonal wetland 4	0.033
Seasonal wetland 5	0.005
Seasonal wetland 6	0.003
Seasonal wetland 7	0.002
Seep 1	0.247
Seep 2	0.149
Seep 3	0.004
Subtotal 0.493	
Other Waters of the United States	
Jurisdictional Feature	
Stream 1	0.025
Stream 2	0.019
Subtotal	**0.044**
Total Waters of the United States	**0.537**

***Vegetation Communities*:** The Willits Airport project site supports seven (7) vegetation communities and includes (1) California annual grassland; (2) California oatgrass; (3) sedge series; (4) chaparral; (5) vernal pool; (6) wetland seep and (7) Douglas fir-tanoak. Figure 2 provides a map of the vegetation communities and locations of the special status plants found on the site during the 2009 surveys.

<u>*California Annual Grassland*</u>: This community is the dominant vegetation on the site and surrounds the airfield on all sides. A rich diversity of native and exotic grasses and forbs make up the plant community. Native forbs include several clovers: bull clover, (*Trifolium furcatum*), Pinole clover (*Trifolium bifidum*), Gray's clover (*Trifolium barbigerum*) and dwarf sac clover (*Trifolium depauperatum*), as well as goldfields (*Lasthenia californica*), valley tassels (*Castilleja attenuata*), and pygmy weed (*Crassula connata*). Exotic forbs include mouse-eared chickweed (*Cerastium glomeratum*), hairy cat's ears (*Hypochaeris radicata*) and smooth cat's ears (*Hypochaeris glabra*). California oat grass (*Danthonia californica*) grows with exotic grasses,

soft chess (*Bromus hordeaceus*), hedgehog dogtail grass (*Cynosurus echinatus*), six-weeks fescue (*Vulpia bromoides*) and rattail fescue (*Vulpia myuros var. myuros*).

On the edges of the airfield both on the east and west side are wet ditches where runoff water accumulates on hard-packed soil below raised soil mounds. In these areas hydrophytic vegetation is dominant and is most evident by the occurrence of slender rush (*Juncus tenuis)*, toadrush (*Juncus bufonius*) and pennyroyal (*Mentha pulegium*). Surrounding these ditches are depressions where popcornflower (*Plagiobothrys stipitatus* var *micranthus*) and white-tip clover (*Trifolium varigatum*) occur.

To the east of the airfield on a gradual eastern facing slope California Annual Grassland occupies the lower slopes bordered by Douglas-fir (*Pseudotsuga menziesii*) and madrone (*Arbutus menziesii*) below. Within that area is a seep dominated by a dense stand of spreading rush (*Juncus patens*). In the north part of this grassland is a seep adjacent to the stream dominated by seep-spring monkey-flower (*Mimulus guttatus*). Other native species observed in this area are slender annual fireweed (*Epilobium minutum*), cream cups (*Platystemon californicus)*, white-tip clover (*Trifolium varigatum*), and red maids (*Calandrinia ciliata*).

California Oatgrass series: On the upper slopes of the east facing grassland mentioned above is a large area of native grassland dominated by California oatgrass with purple needlegrass (*Nasella pulcra*) and blue wildrye (*Elymus glaucus*). Directly above the spreading rush seep is a dense stand of California oatgrass. Native forbs in this grassland include blue-eyed grass (*Sisyrinchium bellum*) and hairy woodrush (*Luzula comosa*). Exotic grasses within the native grassland include soft chess and hedge-hog dogtail grass. Slight depressions in this grassland support goldfields, short-spurred plectritus (*Plectritus brachystemon*) and butter-and-eggs (*Triphysaria erianthus*).

Sedge series: On the northwestern edge of the California oatgrass grassland described above is an almost pure stand of two-toothed sedge (*Carex serratodens*) with some velvet grass (*Holcus lanatus*). This area qualifies as a wetland as defined by the U. S. Army Corps of Engineers and has been mapped as wetland seep 2.

Chaparral: Although this community does not fit into any description in the Manual of California Vegetation (Sawyer and Keeler-Wolf 1995) as a specific series, it deserves mention because it is a distinct community and has a listed species as a component of the community. The upslope area to the east of the airfield is a managed and converted landscape evidenced by piles of downed large woody debris and vegetation that is smaller than normal for the species. The plant community that occupies the large berm area known as Borrow Site #2 is made up primarily of bracken fern (*Pteridium aquilinum* var *pubescens*) and three species of manzanita: Stanford's manzanita (*Arctostaphylos stanfordiana*), common manzanita (*A. manzanita*) and Sonoma canescent manzanita (*A. canescens* ssp *sonomensis*). See below, under Special-Status Species, for more details.

Borrow Site #1 has received similar management and supports common manzanita, Stanford manzanita, and Sonoma canescent Manzanita, as well as Douglas fir and French broom (*Genista monspessulana)* that are all less than one meter tall. Much of the ground is bare; however, where there is ground cover vegetation native plant specie such as miniature lupine (*Lupinus bicolor*), *Lotus micranthus*, *Lotus humistratus*, and rancheria clover (*Trifolium albopurpureum*) were observed.

Vernal Pool: This community, a wetland type, occurs within the California Annual Grassland. To the west of the airfield in the southern portion of the project site is a low-lying area below the level of the airfield. This area is flat and accumulates water seasonally and supports hydrophytic vegetation. It is dominated alternately by native pale spikerush (*Eleocharis macrostachya*) and exotic pennyroyal and loosestrife (*Lythrum hyssopifolium*). Included in this community are exotic toadrush (*Juncus bufonius*) and native hedge-hyssop (*Gratiola ebracteata*), purslane speedwell (*Veronica peregrina* ssp *xalapensis*), popcornflower (*Plagiobothrys stipitatus* var *micranthus*) and white-tip clover. Much of the soil in this area is bare and cracked. The vernal pool area is surrounded by California Annual Grassland dominated by Mediterranean barley (*Hordeum marinum* ssp *gussoneanum*).

Wetland Seep 1/Rush and Sedge Dominated: This community is a wetland type occurring within the Douglas-fir/tanoak woodland. Within the woodland is a narrow wet seep and riparian channel. Native sedges and rushes dominate this site and include soft rush (*Juncus effusus var pacificus*), Coville's rush (*Juncus covillei*) rush and spreading rush (*Juncus patens*), as well as a rich and diverse community of sedges that include *Carex praegracilis, C. tumulicola, C. bolanderi, C. feta* and *C. hassii.* Giant horsetail (*Equisetum telmateia ssp braunii*) dominates the more shaded areas along with bracken (*Pteridium aquilinum*) and giant chain fern (*Woodwardia fimbriata).* Other herbaceous natives include mush monkey-flower (*Mimulus moschatus*) and bittercress (*Cardamine oligosperma*). Exotics in the seep area include pennyroyal, bull thistle (*Cirsium vulgare*), and prickly sow thistle (*Sonchus asper*).

Douglas-fir /Tanoak series: On the north and northwest sides of the airfield is a Douglas fir and tanoak woodland with some madrone in the overstory. The woodland is comprised of a dominance of native species. Native understory shrubs include wood rose (*Rosa gymnocarpa*), creeping snowberry (*Symphoricarpos mollis*) and black-cap raspberry (*Rubus leucodermis*), poison oak (*Toxicodendron diversilobum*) and Stanford manzanita (*Arctostaphylos stanfordiana*). Understory herbaceous plants outside of the seep are made up of native grasses and forbs and include California fescue (*Festuca californica*), sword fern (*Polystichum minutum*), Western heart's ease (*Viola ocellata*), star flower (*Trientalis latifolia*) and wood strawberry (*Fragaria vesca*). This woodland has been managed to reduce large woody debris that may exceed the height of the airfield and consequently there is downed woody debris in the area. The areas to the east of the airfield are likely historically comprised of this vegetation type but have been altered to support mostly the three manzanitas mentioned above and bracken fern. Sonoma canescent manzanita was located here as well.

***Wildlife Habitats*:** Wildlife attracted to *grassland habitat, including annual and perennial grasslands,* use the habitat for a variety of functions, from nesting to foraging. Reptiles and amphibians, such as western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*) and Pacific slender salamander (*Batrachoseps attenuatus*), feed on invertebrates found within and beneath fallen logs within the habitat. Seed-eating and insect-eating species of birds and mammals, such as California quail (*Callipepla californica*), and mourning dove (*Zenaidura macroura*) will also occupy this habitat. Insect-eaters such as scrub jay (*Aphelocoma coerulescens*) use the habitat for foraging only. Western bluebirds (*Sialia mexicana*) observed on the site, will forage in the grasslands and nest in the adjacent trees. Grasslands are important foraging grounds for many aerial and ground foraging insect-eating bat species, including myotis (*Myotis* spp.) and pallid bat (*Antrozous pallidus*). Other mammal species such as California vole (*Microtus californicus*), Botta's pocket gopher (*Thomomys bottae*), and brush rabbit (*Sylvilagus bachmani*), evidence of which were observed on the site, also forage and nest within grasslands. Small rodents attract raptors (birds of prey) such as owls that hunt at night, as well as diurnal raptors such as red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*),

among others. Larger mammals, such as black-tailed deer (*Odoicoileus hemionus californicus*) use grasslands for grazing, while gray fox (*Urocyon cinereoargenteus*) will hunt small mammals in the grasslands.

The trees present within the *Douglas fir-tan oak* vary in size between 12 inches and 36 inches diameter at breast height (dbh) and provide habitat for a variety of species, including foraging and nesting habitat for passerines, roosting habitat for bats, and refugia for reptiles such as lizards and snakes. Smaller passerines, such as black-capped chickadee (*Poecile atricapillus*), bushtit (*Psaltriparus minimus*) and acorn woodpecker (*Melanerpes formicivorus*) observed on the site may nest and forage in the woodlands. No large cavities that may support the larger raptors, such as great horned owl (*Bubo virginianus*), were observed in any of the trees in the mixed oak woodland. Several cavities large enough to support the small western screech-owl (*Megascops kennicottii*) were observed. Other species observed nesting on the site include spotted white-tailed kite (*Elanus leucurus*), spotted towhee (*Pipilo maculatus*), dark eyed junco (*Junco hyemalis*) and California towhee (*Pipilo crissalis*). Oak trees on the lower east-facing slopes provide potential nesting habitat for purple martin (*Progne subis*) and other swallows, such tree swallows (*Tachycineta bicolor*). Several of the trees were of a diameter large enough to support roosting bats species, and 7 trees were found to contain suitable cavities or crevices for colonial species, such as long-eared myotis (*Myotis evotis*), long-legged myotis (*Myotis volans*), Yuma myotis (*Myotis yumanensis*), California myotis (*Myotis californicus*), big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasionycteris noctivagans*) and pallid bat (*Antrozous pallidus*), a California Special Concern (CSC) species.

The *chaparral* habitat is a mature stand and ranges in height between 3 feet and 5 feet with a sparse canopy and small leaves that offers no protection from predation. Excellent habitat for reptiles, such as western fence lizards (*Sceloporus occidentalis*), rattlesnakes (*Crotalus viridis*) and northern alligator lizards (*Gerrhonotus coeruleus*), occurs in this habitat, as well as suitable nesting habitat for birds. Chipmunks (*Tamias* sp.) will also forage and nest in this habitat. Ground nesting birds, such as California quail, and wild turkey (*Meleagris gallopavo*) may nest at the base of the shrubs if predator levels are not high. Passerines, such as California towhee, dark-eyed junco, and spotted towhee, will forage in the habitat on insects and grass seeds.

The *wetland seep/rush and sedge dominated* area on the northwest and north side of the project area, including sedge, vernal pool located on the southern and eastern portion of the site are relatively small. The wetland seep forms the headwaters to the tributary to Upp Creek and supports rough-skinned newt (*Taricha granulosa*), slender salamander (*Batrachoseps attenautus*) and may support other amphibians such as Pacific chorus frog (*Pseudacris regilla*) and western toad (*Bufo boreas*). Mammals common in this habitat are meadow voles (*Microtus californicus*) along the edges of the marsh area, raccoons foraging on eggs and invertebrates, striped skunk, and gray fox (*Urocyon cineroargenteus*). This habitat provides important foraging and drinking areas for aerial and ground feeding insectivorous bats, such as *Myotis* species and pallid bats (*Antrozous pallidus*).

Wildlife Movement Corridors: Wildlife movement includes migration (*i.e.*, usually one way per season), inter-population movement (*i.e.*, long-term genetic flow) and small travel pathways (*i.e.*, daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in gene flow between populations.

These linkages between habitat types can extend for miles between primary habitat areas and occur on a large scale throughout California. Habitat linkages facilitate movement between populations located in discrete areas and populations located within larger habitat areas. The mosaic of habitats found within a large-scale landscape results in wildlife populations that consist of discrete sub-populations comprising a large single population, often referred to as a meta-population. Even where patches of pristine habitat are fragmented, such as occurs with coastal scrub, the movement between wildlife populations is facilitated through habitat linkages, migration corridors and movement corridors. Depending on the condition of the corridor, genetic flow between populations may be high in frequency, thus allowing high genetic diversity within the population, or may be low in frequency. Low frequency genetic flow can potentially lead to complete isolation, and if pressures are strong, potential extinction (McCullough 1996; Whittaker 1998).

There are no barriers to movement for any terrestrial animal species on this site. The open space of the site may allow deer, fox and raccoon to move through the area. The activities of the runway are not considered a barrier to movement. The construction of the project will not create a barrier and may provide additional habitat not present in the current erodible state.

E. SPECIAL-STATUS SPECIES AND THEIR HABITAT

Special-Status Species Reviewed for the Ells - Willits Airport Project

For the purposes of this Biological Assessment for the Ells - Willits Airport proposed project, special-status species include those that are federally listed as Endangered, Threatened or Proposed for federal listing (candidate) under the USFWS. Other species also evaluated in this Biological Assessment include non-listed federal and California Special Concern species (CSC) and those species that fall under the jurisdiction of the USFWS such as the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711), and the CDFG, such as CEQA Section 15380(d).

Impacts to special-status species were assessed if: (1) those species occurred in habitats similar to those of the Ells - Willits Airport project area, and (2) were known to occur within the project area represented on the Willits and Burbeck 7.5-minute topographic quadrangles and within 3 miles, as depicted on the same quadrangles.

Wetlands. A total of 0.493 acre of wetlands (i.e., seasonal wetlands and seeps) and 0.044 acre of other waters of the United States (i.e., streams) were delineated (Table 1).

Federally Listed Plant Species: A review of the USFWS (USFWS 2009), and the CNDDB (CNDDB 2009) of reported occurrences of species in the region revealed that 2 federally listed plants have potential to occur in the area southern Mendocino County. Communities on the site that may support special status plants include chaparral, coniferous forest, cismontane woodland, meadows and seeps, and valley and foothill grassland which include both native and non-native grassland on the site. All areas that had the potential to be impacted by the project were surveyed

State Listed and CNPS listed Plant Species: A review of the CDFG lists, the CNDDB (CNDDB 2009) and 18 special-status plant species have potential to occur in the area. Please refer to Table 2 for a list of these species. A total of 17 species had some potential to occur in the vicinity of the project site, based on the presence of potential habitat.

Table 2: Special-Status Plant Species Potentially Occurring within the Proposed Project Site

Scientific Name Common Name	Status Federal/State/ CNPS List	Habitat and Notes	Potential for Occurrence
Federally-Listed Species			
Lasthenia burkei Burke's goldfields	FE/CE/1B	Meadows and seeps (mesic), vernal pools. Flowers April-June	None. Not observed during surveys.
Navarretia leucocephala ssp. *pauciflora* Baker's navarretia	FE/CT/1B	Vernal pools (volcanic ash flow). Flowers May-June.	None: Not observed during surveys.
State Listed and CNPS listed Species			
Alisma gramineum Grass alisma	-/-/L2	Marshes and swamps (assorted shallow freshwater). Flowers	None: No habitat on site.

Scientific Name Common Name	Status Federal/State/ CNPS List	Habitat and Notes	Potential for Occurrence
		June-August.	
Anisocarpus scabridus Scabrid alpine tarplant	-/-/L1B	Upper montane coniferous forest on open stony ridges, metamorphic scree slopes of mountain peaks and cliffs in or near red fir forests. Flowers July-August.	None: No habitat on site.
Arctostaphylos canescens ssp. *sonomensis* Sonoma canescent manzanita	-/-/L1B	Chaparral, lower montane coniferous forest-sometimes serpentinite. Flowers January-June.	High: Present in borrow areas.
Astragalus agnicidus Humboldt County milkvetch	-/CE/L1B	Broadleafed upland forest, North Coast coniferous forest/ openings, disturbed areas, sometimes roadsides. Flowers April-September.	None: Not observed during surveys.
Calystegia collina ssp. *tridactylosa* Coast range bindweed	-/-/L1B	Chaparral, cismontane woodland-rocky, gravelly, openings in serpentinite. Flowers April-June.	None: Not observed during surveys.
Cryptantha excavata Deep scarred cryptantha	-/-/L1B	Cismontane woodland-sandy, gravelly dry streambanks. Flowers April-May.	None: Not observed during surveys.
Fritillaria roderickii Roderick's fritillary	-/CE/L1B	Coastal bluff scrub, coastal prairie, grassland. Flowers March-May.	None: Not observed during surveys.
Gilia capitata ssp. *pacifica* Pacific gilia	-/-/L1B	Coastal bluff scrub, chaparral (openings), coastal prairie, grassland. Flowers April-August.	None: Not observed during surveys.
Hesperolinon adenophyllum Glandular western flax	-/-/L1B	Chaparral, cismontane woodland, grassland – usually serpentinite. Flowers May-August.	High. This species is present in the southern portion of the airport but does not occur in the construction area.
Horkelia tenuiloba Thin-lobed horkelia	-/-/L1B	Broadleafed upland forest, chaparral, grassland-mesic openings, sandy. Flowers May-July.	None: Not observed during surveys.
Limnanthes bakeri Baker's meadowfoam	-/CR/1B	Meadows and seeps, marshes and swamps (freshwater), grasslands (vernally mesic), vernal pools. Flowers April-May.	None: Not observed during surveys.
Lupinus milo-bakeri Milo Baker lupine	-/CT/1B	Cismontane woodland (often along roadsides), grassland. Flowers June-September.	None: Not observed during surveys.
Navarretia leucocephala ssp. *bakeri* Baker's navarretia	-/-/1B	Cismontane woodland, lower montane coniferous forest, meadows and seeps, grasslands, vernal pools/mesic. Flowers April-	None: Not observed during surveys.

Scientific Name Common Name	Status Federal/State/ CNPS List	Habitat and Notes	Potential for Occurrence
		July.	
Plagiobothrys lithocaryus Mayacamas popcorn-flower	-/-/L1B	Chaparral, cismontane woodland, grassland (mesic). Flowers April-May.	None. Not observed during surveys.
Pleuropogon hooverianus North Coast semaphore grass	-/CT/L1B	Broadleafed upland forest, meadows and seeps, North Coast coniferous forest/open areas, mesic. Flowers April-August.	None: Not observed during surveys.
Potamogeton epihydrus ssp. *nuttallii* Nuttalls' ribbon-leaved pondweed	-/-/L2	Marshes and swamps (assorted shallow freshwater). Flowers July-September.	None: No habitat on site. Not observed during surveys.
Sanguisorba officinalis Great burnet	-/-/L2	Bogs and fens, broadleafed upland forest, meadows and seeps, marshes and swamps, North coast coniferous forest, riparian forest on rocky serpentine seepage areas and along stream borders. Flowers July-October.	None: No habitat on site. Not observed during surveys.
Viburnum ellipticum Oval-leaved viburnum	-/-/L2	Chaparral, cismontane woodland, lower montane coniferous forest. Flowers May-June.	None: Not observed during surveys.

NOTES:

U.S. FISH AND WILDLIFE SERVICE

FE = federally listed Endangered
FT = federally listed Threatened

CALIFORNIA DEPT. OF FISH AND GAME

CE = California listed Endangered
CR = California listed as Rare
CT = California listed as Threatened

CALIFORNIA NATIVE PLANT SOCIETY

List 1: Plants of highest priority
List 1A: Plants presumed extinct in California
List 1B: Plants rare and endangered in California and elsewhere
List 2: Plants rare and endangered in California but more common elsewhere
List 3: Plants about which additional data are needed

The following plant communities do not occur on the site: closed-cone coniferous forest, coastal prairie, coastal salt marsh, marshes and swamps, upper montane coniferous forest, coastal bluff scrub, coastal prairie, bogs and fens and riparian forest. No specialized substrates, such as sandy or alkaline soils nor thermal springs occur on the site. Based on a lack of presence of these substrates and communities, the following plant species, endemic to these communities, are not expected to occur on the property: grass alisma (*Alisma gramineum*), scabrid alpine tarplant

(*Anisocarpus scabridus*), Nuttalls' ribbon-leaved pondweed (*Potamogeton epihydrus* ssp. *nuttallii*) and great burnet (*Sanguisorba officinalis*).

No federally listed plants were observed on the project site. Therefore, no further action is required.

However, two special status plant species, Sonoma canescent manzanita and glandular western flax, both listed as CNPS List 1.B.2 plants (1B = rare threatened or endangered in California and elsewhere, .2 = fairly endangered in California) were observed on the site. Sonoma canescent manzanita occurs along the east and west sides of the runway (see Figure 2, the Vegetation Communities map) in five different areas. Borrow site #2 supports 450 individuals and Borrow Site #1 supports 100 individuals. The existing borrow sites have been managed for the removal of large woody debris and this has created habitat for Sonoma canescent manzanita. A few mature plants were examined just to the east of Borrow Site 2 that stood approximately 15 feet tall; however, the great majority of plants were less than 18 inches tall. No individuals were observed in the chaparral stand located on the south side of the airport. A few small populations were located on the west side of the airfield and are shown on the vegetation map.

Glandular western flax occurs in the southern portion of the airport, in area that appears to be used for motorcycle recreation. This area will not be impacted by the proposed project.

Federally Listed Animal Species: A review of the USFWS list for federally listed species potentially occurring in the area, as reported on the Willits, Burbeck, Longvale, Greenough Ridge, Willits Ridge, Laughline Range, Brushy Mtn, Foster Mtn and Redwood Valley topographic quadrangles, reveals 10 species; however, of these 10 species, only 2 species have the potential to occur in the vicinity based on the habitats present; another two species, Central California coast steelhead (*Oncorhynchus mykiss*) and California red-legged frog (*Rana draytonii*), although not expected to occur on the site, are also discussed due to their prominence in today's regulatory environment (please refer to Table 3). We have included several additional species that have potential to occur on or near the site based on the habitats present, and include nesting passerines and raptors, protected under the federal Migratory Bird Treaty Act. The occurrence of these groups in the immediate vicinity of the project site is discussed under the *Special-Status Species, Status, General Ecology and Project Area Occurrence*, below, and the potential effects of the construction of the project on these species are discussed in the Effects Determination chapter.

State Listed Animal Species: Of the 50 special-status animal species potentially occurring in Mendocino County, 10 species were identified as reported occurring in the vicinity of the project area (CNDDB 2009).

Table 3: Potentially Occurring Special-Status Animal Species in the Project Area

Common Name Scientific Name	Status USFWS/ CDFG	Habitat Affinities and Reported Localities in the Project Area	Occurrence Potential
Federally-Listed Species			
Fish			

Common Name Scientific Name	Status USFWS/ CDFG	Habitat Affinities and Reported Localities in the Project Area	Occurrence Potential
steelhead central California ESU *Oncorhynchus mykiss irideus*	FT/-	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cold water and well oxygenated waters.	None: no suitable habitat present.
Amphibians			
California red-legged frog *Rana draytonii*	FT/-	Prefers semi-permanent and permanent stream pools, ponds and creeks with emergent and/or riparian vegetation. Occupies upland habitat especially during the wet winter months.	None: no suitable habitat present.
Birds			
Cooper's hawk *Accipiter cooperii*	MBTA/CSC	Nests in coniferous forests and riparian corridors.	None: no suitable nesting habitat present on the site.
Northern goshawk *Accipiter gentilis*	MBTA/CSC	Within and in vicinity of coniferous forest. Uses old nests and maintains alternate nest sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffery pine and aspens are typical nest tress.	None: no suitable nesting habitat present on the site.
sharp-shinned hawk *Accipiter striatus*	MBTA	Nests in coniferous forests and riparian corridors.	None: no suitable nesting habitat present on the site.
Yellow warbler *Dendroica petechia brewsteri*	MBTA/CSC	Nests in riparian corridors	Moderate: suitable nesting habitat present on the site
Yellow-breasted chat *Icteria virens*	MBTA/CSC	Nests in riparian corridors	Low: suitable nesting habitat present on the site
Northern spotted owl *Strix occidentalis*	FT	Dense coniferous and hardwood forest, shaded, steep sided canyons.	None: no suitable nesting habitat present on the site
State-Listed Species			
Amphibians			
foothill yellow-legged frog *Rana boylii*	-/CSC	Prefers permanent stream pools, and creeks with emergent and/or riparian vegetation.	None: no suitable habitat present.
Reptiles			
northwestern pond turtle *Actinemys marmorata marmorata*	SC/CSC	Prefers permanent, slow-moving creeks, streams, ponds, rivers, marshes and irrigation ditches with basking sites and a vegetated shoreline. Requires upland sites for egg-laying.	None: no suitable habitat present.

Common Name Scientific Name	Status USFWS/ CDFG	Habitat Affinities and Reported Localities in the Project Area	Occurrence Potential
Mammals			
Sonoma tree vole *Arborimus pomo*	-/CSC	North coast fog belt from Oregon to Sonoma County, in Douglas fir, redwood and montane hardwood-conifer forests.	None: no suitable habitat present on the site.
Humboldt marten *Martes americana humboldtensis*	-/CSC	Occurs only in the coastal redwood zone form Oregon south to Sonoma County.	None: no suitable habitat present on the site.
Pacific fisher *Martes pennanti*	FC/CSC	Occurs in intermediate to large tree stages of coniferous forester and deciduous riparian areas with high percent canopy closure.	None: no suitable habitat present on the site.
American badger *Taxidea taxus*	-/CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	None: no suitable habitat present on the site.

U.S. FISH AND WILDLIFE SERVICE

FE = federally listed Endangered
FT = federally listed Threatened
SC[1] = federal Species of Concern
MBTA = Migratory Bird Treaty Act.

CALIFORNIA DEPT. OF FISH AND GAME

CE = California listed Endangered
CT = California listed as Threatened
CSC = California Special Concern species

Critical Habitat: Mendocino County supports several square miles of Critical Habitat for a variety of species, including northern spotted owl (*Strix occidentalis*), whose habitat units occur solely on federal lands, marbled murrelet (*Brachyramphus marmoratus*), western snowy plover (*Charadrius alexandrinus nivosus*) and tidewater goby (*Eucyclogobius newberryi*). None of these species or their critical habitat occurs within 4 miles of the proposed project site.

Special-Status Species, Status, General Ecology and Project Area Occurrence

The following is a discussion of the special-status species, their status and habitat requirements, that are known or are considered to have potential to be present in the vicinity of the project area, based on the reported occurrences in the CNDDB (2007). We have also included those species that are prominent in today's regulatory environment, including freshwater shrimp and California red-legged frog.

Central California coastal steelhead (*Oncorhynchus mykiss*)
Status. federally listed Threatened

General Ecology and Distribution. Steelhead enter streams from the ocean when rains have increased the stream flows (Moyle 2002). Spawning typically occurs in tributaries to mainstream rivers, after which they return to the ocean. A key characteristic of all breeding streams is cool temperatures, typically between 0° Celsius (winter) and 26°-27° C (summer) (Moyle 2002).

Project Area Occurrence. Although perennial freshwater streams occur on the site, no reported occurrences for the species are listed within this portion of Mendocino County (CNDDB 2009). The intermittent drainages on the site flow into several creeks that ultimately flow into the Eel River, 22 miles north of the project site.

California Red-legged Frog (*Rana draytonii*) (CRF)
Status. Federally listed Threatened, California Special Concern species and Fully Protected under CDFG code 5050.

General Ecology and Distribution. California red-legged frogs breed primarily in ponds, but will also breed in slow moving streams, or deep pools in intermittent streams. Inhabited ponds are typically permanent, at least 2 feet (0.6 meters) in depth, and contain emergent and shoreline vegetation. Sufficient pond depth and shoreline cover are both critical, because they provide means of escape from predators of the frogs (Stebbins 1985, Tatarian 2008). Non-breeding CRF have been found in both aquatic and upland habitats. Although the majority of individuals prefer dense, shrubby or emergent vegetation, closely associated with deep (>0.7 meters) still, or slow moving water, some individuals use habitats that are removed from aquatic habitats (Tatarian 2008).

Shaffer et al. (2004) found that R. *aurora* and R. *draytonii* overlap over a several-km region south of Elk Creek in southern Mendocino County (Fig. 1). They found only pure *R. aurora* from Big River north, only pure *R. draytonii* from Mills Creek south (Shaffer et al. 2004).

Project Area Occurrence. No suitable breeding habitat occurs on the site, and no reported occurrences are listed within this portion of Mendocino County. Therefore, no impacts to this species will occur from this project.

Nesting Passerine Birds – including western bluebird, California quail and acorn woodpeckers, among others

Status: Protected under the Federal Migratory Bird Treaty Act and Fish and Game Code 3503.

General Ecology and Distribution: As early as February, passerines begin courtship and once paired, they begin nest building, often around the beginning of March. Nest structures vary in shapes, sizes and composition and can include stick nests, mud nests, matted reeds and cavity nests. For example, black phoebes may build a stick nest under the eaves of a building. Depending on environmental conditions, young birds may fledge from the nest as early as May and, if the prey base is large, the adults may lay a second clutch of eggs. The nesting season occurs from March 1 to the end of August, or when the young have fledged.

Project Area Occurrence: Several passerine (perching birds) species may nest on the site in the various habitats, including acorn woodpeckers in the oak woodlands, and California quail in the chaparral. If work is to occur during the nesting season, a nesting bird survey shall be conducted before removal of any of these habitats to ensure no take of individual will occur.

Other Nesting Raptors – including Coopers hawk, Sharp-shinned hawk, white-tailed kite, American kestrel

Status: Protected under the Federal Migratory Bird Treaty Act and Fish and Game Code 3503.5, and California fully protected species

General Ecology and Distribution: Raptors nest in a variety of substrates including, cavities, ledges and stick nests. For example, Cooper's hawks are small bird hunters, hunting on the edges of forests in broken forest and grassland habitats where passerines forage for seeds and insects. Nests occur in heavily forested areas near a water source. Research sites on nesting Cooper's hawks rarely show the nests more than a quarter of a mile away from water, whether it is a cattle tank, stream or seep (Snyder and Snyder 1975). Trees typically used by Cooper's hawks include cottonwoods, coast live oaks and black oaks (Call 1978), as well as second growth conifer stands or deciduous riparian areas. The breeding season occurs in late March-June, depending on the climate, with young fledging by mid-July. The nesting season occurs from March 1 to the end of August, or when the young have fledged

Project Area Occurrence: No nests large enough to support nesting raptors were observed during the field survey. There is a high likelihood that Cooper's hawk and sharp-shinned hawk may nest in the Douglas fir-tan oak forest habitat surrounding the project site.

Roosting bats – including pallid bat, silver-haired bat, Myotis species and others

Status: California Species of Concern and Fish and Game Code 5050

General Ecology and Distribution : Bats that use trees fall into three categories; 1) solitary, obligate tree-roosting bats that roost in the foliage or bark such as Western red-bat (*Lasiurus blossevillii*), a California Special Concern (CSC) species, or hoary bat (*Lasiurus cinereus*), 2) frequent tree-roosting bats that form colonies of varying size in tree cavities, such as silver-haired bats (*Lasionycteris noctivagens*), and 3) more versatile bat species that will use a wide variety of roosts from buildings to bridges to trees, such as various *Myotis* species, pallid bat (*Antrozous pallidus*), another CSC species, and others. Solitary-roosting bats consist either of single males or females either alone or with young. Colonial-roosting bats form maternity colonies in cavities or crevices where young are left behind while females forage, then return to nurse their young.

Project Area Occurrence: No trees suitable for roosting bats were observed within or adjacent to the project area.

F. EFFECTS DETERMINATION

The previous chapter described the known or potential presence and distribution of special-status biological resources potentially occurring on the project site and provided an overall context for assessing impacts to biological resources from each project. This chapter identifies the potential effects to special-status species by project construction, and describes mitigation measures to ensure that project implementation does not adversely affect any listed species or its habitat, or any candidate species that may be listed during the life of the project.

Direct effects and mitigation measures are presented per species. *Indirect, Interrelated, Interdependent and Cumulative Effects* are discussed jointly for the species.

F1. Direct Impacts to Wetlands and Waters of the U.S.

Project Direct Impact 1: A total of 615 linear feet of other waters of the U.S. occur on the site. The project has been designed to avoid impacts to drainages. Implementation of the best management practices for sediment and erosion control (see below) are designed to avoid impacts to any of the on-site and off-site streams

The project will avoid impacts to any wetlands. However, there is the potential for the project to impact approximately 0.009 acres of one small seasonal wetland (SW-1) at the base of the borrow site #1 if this area cannot be avoided during construction. This seasonal wetland area could be re-established after the soil material has been excavated and this would be considered a temporary loss. Placement of fill could be authorized under the USACE's nationwide permit program under Section 404 of the Clean Water Act. A permit from the USACE would be required along with a Section 401 water quality certification or waiver from the California Regional Water Quality Control Board (RWQCB).

Project Mitigation 1: If impacts to seasonal wetland SW-1 cannot be avoided then mitigation to compensate for the temporary loss of 0.009 acres of seasonal wetland would be required. One option for mitigation would be to re-establish the wetland after the soil material has been removed. This seasonal wetland occurs as a depression within a drainage ditch at the base of the borrow site. The wetland could be re-created by creating a similar depression and allowing water to collect from the water shed area in the same way it is currently being collected. The same or similar wetland plants would be planted and the site would be monitored for a minimum of 5 years. A detailed mitigation plan would be developed as part of the nationwide permit application. The mitigation plan would include:

- A description of the existing wetland and a description of the plan to re-create the new wetland area after construction is completed.
- A seeding and planting plan for the newly created wetland.
- Performance criteria to determine when and how the wetland will be successfully re-established.
- A monitoring program to include weeding, watering, and vegetation data collection to demonstrate that the wetland area is meeting the performance and success criteria.

- Monitoring shall be for a minimum of 5 years. An annual report shall be submitted to the USACE and RWQCB. Final success will be based on the wetland area meeting the same functions and values of the existing wetland area and having a dominance of wetland plants, presence of wetland hydrology and wetland soils such that it meets the USACE definition of a wetland.

- A contingency plan in the event that the newly created wetland does meet the performance and success criteria.

If reestablishment of the seasonal wetland on-site is not feasible because of FAA considerations then a suitable off-site alternative for creating new wetlands as compensation would be another alternative. A mitigation plan with the above information would need to be prepared and approved by the USACE and RWQCB. The newly created wetland would have to have the same or similar functions and values and be in-kind establishment.

Stormwater Best Management Practices (BMPs). No debris or sediment shall fall into the waters of the U.S. Proposed erosion and sediment control BMPs include seeding, mulching, erosion control blankets, and sediment retention devices. An erosion control plan will be developed as part of the Storm Water Pollution Prevention Plan (SWPPP) that covers erosion control during construction and a post-construction stormwater management plan with best management practices detailed for the project will be provided as part of the Section 401 water quality certification for the project. The Section 401 water quality certification is part of the Section 404 permit requirements from the U. S. Army Corps of Engineers for the placement of fill into waters of the U. S.

Unless properly protected, the slopes of the contoured sites could be subject to erosion rates that are significantly higher than those that occur under existing conditions. In the wooded areas on the project site, the current erosion rates are most likely very low, due to the amount of duff layer present and because of rainfall interception by the tree canopy. Without precautions, the fill slopes could erode, and the resulting sediment could enter the drainageways where it could eventually reach downstream receiving waters, including the tributary to the Eel River. The sediment could degrade the quality of receiving waters and adversely affect aquatic organisms.

A storm water pollution prevention plan and the erosion control plan will be required for the project and will take into consideration the site conditions and address any concerns sufficiently. In general, the following BMPS will be required at a minimum:

- Require the project proponent to have a Professional Engineer (civil) or a qualified erosion control specialist periodically inspect the BMP installation work.

- Remove and properly dispose of accumulated sediment from behind the silt fences and fiber rolls when it reaches one-third the height of the barrier. Repair the erosion control blanket and reseed as required.

- During the vegetation establishment period, periodically inspect the condition and performance of the BMPs and make corrective actions as required.

BMPs to prevent erosion into the tributary to Bull Creek on the west side of the slide area are included and applies to the proposed fill slope to protect the aforementioned perennial stream and wetland:

- If practicable, design the fill slope such that a minimum 10- to 20-foot setback is maintained between the toe of the fill and the stream and wetland.

- Install temporary construction barrier fencing at the outer edge of the work area to preclude inadvertent equipment intrusion into the stream and wetland.

- Install a silt fence on-contour along the downslope perimeter of the work area. The fence should be supported with T-bar fence posts or their equivalent, rather than wood stakes. The silt fence material should be backed with hardware cloth. The fabric should be installed in minimum 6-inch deep trenches, or as specified by the manufacturer.

- Assuming that native topsoil (i.e., "A" horizon) exists in the borrow areas, salvage the topsoil there such that a 6- to 12-inch thick layer can be applied to the finish subgrade of the fill slope.* (The plant litter layer/debris also should be retained as much as practicable.) Stockpile the topsoil such that it is no more than 5 feet deep and protect it from water and wind erosion as required.

- Apply the salvaged topsoil to the subgrade and incorporate it approximately 3 to 6 inches into the subgrade material by chiseling with dozer-mounted ripper shanks.

- Track walk the finished grade up and down the slope with a dozer. The track walking should be executed such that the surface soil is loose and does not have a "glazed" appearance.

- Broadcast a mix of native perennial and naturalized, non-native grass seed onto the soil. The mix (possibly also including forbs and a legume) and seeding rates should be determined through consultation with a qualified botanist.

- Install 7.5 inch diameter, 100% biodegradable fiber rolls (e.g., burlap-encased Earth Saver rice "Straw Wattles") on-contour. The spacing of the fiber rolls and of the wood stakes should be according to the manufacturer's specifications for the slope conditions. The fiber rolls should be inserted into minimum 3-inch deep trenches. The ends of adjoining wattles should overlap a minimum of 18 inches, side by side, not top and bottom. (The fiber rolls will be abandoned in-place to decompose.)

- Install 100% biodegradable erosion control blankets, such as North American Green S150BN or SC150 BN (depending on the slope gradient) according to the manufacturer's specifications.

- Require the project proponent to have a Professional Engineer (civil) or a qualified erosion control specialist periodically inspect the BMP installation work.

- During the vegetation establishment period, periodically inspect the condition and performance of the BMPs and make corrective actions as required.

- Remove and properly dispose of accumulated sediment from behind the silt fence and fiber rolls when it reaches one-third the height of the barrier. Repair the blanket and reseed as required.

* If a sufficient amount of native topsoil is not available, a 6- to 12-inch thick layer of municipal compost should be applied to the subgrade and incorporated approximately 6 inches into the

subgrade material by chiseling with dozer-mounted ripper shanks. This material then should be track walked.

Additional BMPs to prevent erosion into the small tributary to Bull Creek located on the east side of the access road are as follows:

- Blade the access road such that it is outsloped approximately 3%.
- Construct water bars along the road at approximate 50-foot intervals to intercept the runoff and discharge it to vegetated areas.
- Install fiber rolls on-contour on the outside slope of the road. (These will need to be "staggered" to allow their installation to be on-contour.)
- Install at silt fence as required at the base of the road, where it turns to the west, to contain runoff that runs along the road.

This is a less than significant impact with the above mitigation measures incorporated.

F2. Direct Impacts to Nesting Birds

Project Direct Impacts 2: Individuals nesting in the Douglas fir-tan oak forest, chaparral, or non-native grasslands on the site could be taken if construction occurs during the nesting season (February through August).

Project Mitigation 2: The following mitigation measures should be followed in order to avoid or minimize impacts to birds that may potentially nest in the trees:

1) Grading or removal of nesting trees should be conducted outside the nesting season, which occurs between approximately February 15 and August 15.
2) If grading between August 15 and February 15 is infeasible and groundbreaking must occur within the nesting season, a pre-construction nesting bird (both passerine and raptor) survey of the grasslands and adjacent trees shall be performed by a qualified biologist within 7 days of ground breaking. If no nesting birds are observed no further action is required and grading shall occur within one week of the survey to prevent "take" of individual birds that could begin nesting after the survey.
3) If active bird nests (either passerine and/or raptor) are observed during the pre-construction survey, a disturbance-free buffer zone shall be established around the nest tree(s) until the young have fledged, as determined by a qualified biologist.
4) The radius of the required buffer zone can vary depending on the species, (i.e., 75-100 feet for passerines and 200-300 feet for raptors), with the dimensions of any required buffer zones to be determined by a qualified biologist in consultation with CDFG.
5) To delineate the buffer zone around a nesting tree, orange construction fencing shall be placed at the specified radius from the base of the tree within which no machinery or workers shall intrude.
6) After the fencing is in place there will be no restrictions on grading or construction activities outside the prescribed buffer zones.

This is a less than significant impact with the above mitigation measures incorporated:

F3. Direct Impacts to State Species of Concern

Project Direct Impact 3: The proposed project could result in the removal of approximately 550 individuals of Sonoma canescent manzanita (*Arctostaphylos canescens* ssp. *sonomensis*). A total of 730 individuals of this species were observed in the Ells-Willits airport project area. Sonoma canescent manzanita stands within the project area are distributed primarily along the east side of the runway (see vegetation map) in areas that have been managed for the removal of large woody debris. It appears that Sonoma canescent manzanita may be a pioneer species that establishes itself prior to the re-establishment of the Douglas fir-tanoak forest. It likely makes a refuge for small trees in an exposed landscape. As these trees develop they eventually shade out the manzanita within the canopy and the manzanita remains on the margins. Present management appears to have favored this species.

Project Mitigation 3: Approximately 550 individuals of Sonoma canescent manzanita will potentially be removed by the excavation of the two borrow sites. Another 180 individuals occur in other areas that will not be impacted by the proposed project. Since this species appears to favor areas where the Douglas fir-tanoak forest have been cleared for allowing clearance for airplanes there is opportunity to replace the 550 individuals and more by re-planting on the borrow sites after the soil material has been removed. Mitigation shall include:

- A six-inch layer of the top soil material from the borrow sites will be removed and stockpiled. After the soil material has been removed from the borrow sites the six-inches of top soil material will be replaced. This will allow for any root material and microrhizae to be replaced and aid in re-establishment of the impact manzanita stands.
- Collection of seeds from the plants to be removed prior at the appropriate time for seed collection, which would be in the summer (June to September).
- Seeds will be propagated in a greenhouse and the individuals grown will be re-planted after the borrow material has been removed.
- A minimum of 660 individuals will be replanted into the borrow areas to replace the plants that will be removed as a result of the soil excavation. This will allow for an 80 percent survival rate and ensure that at a minimum 550 plants survive and replace the individuals that will be removed as a result of construction.
- The plants will be maintained by weeding and watering for a minimum of two (2) years. The plants will be monitored for a minimum of five (5) years and information on survival rates, general success, health and vigor of the mitigation efforts will be reported in an annual report to be submitted to the California Department of Fish and Game (DFG).
- A detailed mitigation plan will be prepared and approved by DFG. The plan will include a set of performance criteria on which the mitigation will be considered successful.
- A contingency plan in the event that the plantings are unsuccessful will be provided. This will be included in a detailed mitigation plan to be approved by DFG for the project.

This is a less than significant impact with the above mitigation measures incorporated.

F4. Indirect Effects

The proposed slide repair and use of borrow areas will not induce growth in the area or increase the population density significantly. No pattern of land use will change. The proposed project will

not change the hydrological processes, such as infiltration capacity, and surface runoff. No sediment load, or organic matter input, will occur to the nearby creeks or streams.

F5. Interrelated Effects

No interrelated effects would occur as the result of this project.

F6. Interdependent Effects

No interdependent effects would occur from this proposed project.

F7. Cumulative Effects

The proposed project will result in the cumulative loss of seasonal wetlands, Sonoma canescent manzanita and some bird nesting habitat in the area. However, mitigation is proposed for seasonal wetlands and the Manzanita on site and no net loss of acreage or individuals will occur.

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Fig. 5: Grassland along access road.

Fig. 6: Borrow Site #1 looking northeast.

Fig. 7: Drainage on southeast corner.

Fig. 8: Borrow site 2 looking north.

Fig. 9: Access road to slide repair. .

Fig. 10: Wetland seep in northwest corner.

APPENDIX A

SPECIAL STATUS WILDLIFE SPECIES WITH NO POTENTIAL TO OCCUR ON THE PROJECT SITE

APPENDIX A: SPECIAL-STATUS SPECIES WITH NO POTENTIAL TO OCCUR IN THE PROJECT AREA
(Federally Listed/Proposed Threatened and Endangered Species for Mendocino County, with Candidates Included)

Common Name *Scientific Name*	Status USFWS/ CDFG	Habitat Affinities
Invertebrates		
Black abalone *Haliotis cracherodii*	PE	Inhabits the Pacific Ocean.
Lotis blue butterfly *Lycaeides argyrognomon lotis*	E	Inhabits
Behren's silverspot *Speyeria zerene behrensii*	FE	Prefers coastal terrace prairie, and known from a single source population at Point Arena.
Fish		
Tidewater goby *Eucyclogobius newberryi*	FE	Occurs in areas of precipitous coastlines that preclude the formation of lagoons at stream mouths have created three natural gaps in the distribution of the goby
Coho salmon - Central Ca coast *Oncorhynchus kisutch*	FE	Occurs from Punta Gorda, in northern California, to the San Lorenzo River, in Santa Cruz County, and includes coho salmon populations from several tributaries of San Francisco Bay (e.g., Corte Madera and Mill Valley Creek).
Northern California steelhead *Oncorhynchus mykiss*	FT	Inhabit streams where dissolved oxygen concentration is at least 7 parts per million. In streams, deep low-velocity pools are important wintering habitats. Spawning habitat consists of gravel substrates free of excessive silt
California coastal Chinook salmon *Oncorhynchus tshawytscha*	FT	Critical habitat for this ESU occurs from the Klamath River south to the Russian River.
Amphibians		
Tailed frog *Ascaphus truei*		Inhabits clear, rocky, swift, cool streams in forested habitats. In the West this frog is found primarily in older forest of Douglas Fir, Pine, and Spruce.
Reptiles		
Loggerhead turtle Caretta caretta	FT	Inhabits the Pacific Ocean

Common Name *Scientific Name*	Status USFWS/ CDFG	Habitat Affinities
Green turtle Chelonia mydas (incl. agassizi)	FT	Inhabits the Pacific Ocean
Leatherback turtle Dermochelys coriacea	FE	Inhabits the Pacific Ocean
Olive Ridley sea turtle Lepidochelys olivacea	FT	Inhabits the Pacific Ocean
Birds		
Marbled murrelet *Brachyramphus marmoratus*	FT	Nests in mature and old-growth forests, large core areas of old-growth, low amounts of edge habitat, in proximity to the marine environment.
Western snowy plover *Charadrius alexandrinus californicus*	FT	Nests typically occur in flat, open areas with sandy or saline substrates. Vegetation and driftwood are usually sparse or absent.
Yellow-billed cuckoo *Coccyzus americanus*	FC	Typically nests in meandering riparian systems with healthy hydraulics that is constantly eroding and depositing and creating young riparian habitat.
California brown pelican *Pelecanus occidentalis californicus*	FE	Nests on rocky protected areas in bays and along the coast of California.
Short-tailed albatross *Phoebastris albatrus*	FE	Inhabits the Pacific Ocean.
Northern spotted owl *Strix occidentalis caurina*	FT	Nests in dense coniferous and hardwood forest, shaded, steep sided canyons.
Mammals		
Point Arena mountain beaver *Aplodontia rufa nigra*	FE	Live in underground burrows dug in forest openings and dense thickets, feeding on various plants, including nettles, blackberry, poison oak, and coyote brush. Found on cool, moist, north-facing slopes in moderately dense coastal scrub.
sei whale *Balaenoptera borealis*	FE	Inhabits the Pacific Ocean
fin whale *Balaenoptera physalus*	FE	Inhabits the Pacific Ocean
Steller (=northern) sea-lion *Eumetopias jubatus*	FT	Inhabits the Pacific Ocean

Common Name *Scientific Name*	Status USFWS/ CDFG	Habitat Affinities
Pacific fisher, West Coast DPS *Martes pennanti*	FC	Intermediate to large-tree stages of coniferous forests & deciduous riparian areas with high percentage of canopy closure. This species uses cavities, snags, logs & rocky area for cover and denning. Needs large areas of mature, dense forest.
humpback whale *Megaptera novaengliae*	FE	Inhabits the Pacific Ocean
sperm whale *Physeter macrocephalus*	FE	Inhabits the Pacific Ocean

APPENDIX B

PLANT SPECIES OBSERVED ON THE WILLITS AIRPORT PROJECT SITE

APPENDIX B: Plants observed on the Willits Airport Project Site. April through June 2009.

Family	Scientific Name	Common Name	Exotic[a]
Equisetaceae - Horsetail			
	Equisetum arvense	Common Horsetail	
	Equisetum telmateia ssp. *braunii*	Giant Horsetail	
PTEROPHYTA - Ferns and other non-seed plants			
Pteridaceae - Brake Fern			
	Pentagramma triangularis ssp. *triangularis*	Goldenback Fern	
Blechnaceae - Deer Fern			
	Woodwardia fimbrita	Giant Chain Fern	
Dennstaedtiaceae- Bracken			
	Pteridium aquilinum	Bracken Fern	
Dryopteridaceae -Wood Fern			
	Athyrium filix-femina	Lady Fern	
	Dryopteris arguta *Polystichum munitum (P. imbricans)*	Wood Fern Western Sword Fern	
CONIFEROPHYTA - Conifers			
Pinaceae - Pine			
	Pinus ponderosa	Ponderosa piine	
	Pseudotsuga menziesii	Douglas Fir	
ANTHOPHYTA - Dicotyledones			
Anacardiaceae - Sumac			
	Toxicodendron diversilobum	Poison Oak	
Apiaceae - Carrot			
	Daucus pusillus	Rattlesnake Weed	
	Osmorhiza chilensis	Sweet Cicley	
	Sanicula crassicaulis	Gamble Weed	
	Torilis arvensis	Japanese Hedge Parsley	x
Asteraceae - Aster			
	Achillea millefolium	Yarrow	
	Achyrachaena mollis	Blow Wives	
	Anthemis cotula	Mayweed	
	Artemisia douglasiana	Mugwort	
	Baccharis pilularis	Coyote Brush	
	Baccharis salicifolia	Seep-Willow	
	Carduus pycnocephalus	Italian Thistle	x*
	Centaurea melitensis	Napa Thistle, Tocalote	x*
	Centaurea solstitialis	Yellow Star-Thistle	x*
	Cirsium vulgare	Bull Thistle	x
	Filago californica	California cottonrose	
	Filago gallica	Narrowleaf cottonrose	x
	Gnaphalium purpureum	Cudweed	
	Hypochaeris glabra	Smooth Cat's Ear	x

Family	Scientific Name	Common Name	Exotic[a]
	Hypochaeris radicata	Hairy Cat's Ear	x
	Lactuca serriola	Prickly Lettuce	x
	Lasthenia californica	Goldfields	
	Leontodon taraxicoides	Hawkbit	
	Leucanthemum vulgare	Ox-Eye Daisy	
	Madia exigua	Litter Tarweed	
	Madia gracilis	Slender Tarweed	
	Madia madioides	Woodland Tarweed	
	Madia sativa	Coast Tarweed	
	Microseris douglasii	Douglas microseris	
	Senicio jacobaea	Tansy Ragwort	
	Soliva sessilis	Soliva	
	Sonchus asper	Sow Thistle	x
Boraginaceae - Borage			
	Myosotis discolor	Blue Scorpion Grass	x
	Plagiobothrys stipitatus var. *micranthuss*	Slender popcornflower	
Brassicaceae - Mustard			
	Brassica rapa	Field Mustard	x
	Cardamine californica	Milk Maids	
	Cardamine oligosperma	Bitter cress	
	Lepidium nitidum	Shining Peppergrass	
Campanulaceae - Bluebell			
	Githopsis specularioides	Common bluecup	
	Heterocodon rariflorum	Rareflower heterocodon	
Caprifoliaceae - Honeysuckle			
	Symphoricarpos mollis	Creeping Snowberry	
Caryophyllaceae - Pink			
	Cerastium glomeratum	Mouse-ear Chickweed	x
	Petrohagia prolifera		
	Silene gallica	Windmill Pink	x
Convolvulaceae - Morning-Glory			
	Calystegia purpurata ssp. *purpurata*	Pacific false bindweed	
	Calycanthus subacaulis ssp. *subacaulis*	Hill Morning Glory	
Crassulaceae - Stonecrop Family			
	Crassula connata	Pigmy Weed	
Ericaceae - Heath			
	Arbutus menziesii	Madrone	
	Arctostaphylos canescens spp. *sonomensis*	Sonoma Manzanita	
	Arctostaphylos manzanita ssp. *manzanita*	Manzanita	
	Arctostaphylos stanfordiana ssp. *stanfordiana*	Stanford Manzanita	
Fabaceae - Pea			
	Cytisus scoparius	Scotch Broom	x*
	Lathyrus angulatus	angled pea	

Family	Scientific Name	Common Name	Exotic[a]
	Lotus corniculatus	Bird's-foot trefoil	
	Lotus humistratus	Hill lotus	
	Lotus micranthus	Small flower lotus	
	Lotus pinnatus	Meadow bird's-foot trefoil	
	Lotus scoparius	California Broom	
	Lupinus bicolor	Miniature Lupine	
	Medicago polymorpha	California Burclover	x
	Trifolium albopurpureum var. *albopurpureum*	Rancheria Clover	
	Trifolium barbigerum	Gray's C;over	
	Trifolium bifidum var. *bifidum*	Pinole Clover	
	Trifolium depauperatum var. d*epauperatum*	Dwarf Sack Clover	
	Trifolium dubium	Shamrock Clover	x
	Trifolium furcatum	Bull Clover	
	Trifolium glomeratum	Clusted clover	
	Trifolium hirtum	Rose Clover	x
	Trifolium microcephalum	Small-headed Clover	
	Trifolium microdon	Square-head Clover	
	Trifolium subterraneum	Subterranean Clover	x*
	Trifolium variegatum	Whitetip Clover	
	Trifolium willdenovii	Tomcat Clover	
	Vicia sativa ssp. *sativa*	Spring Vetch	x
Fagaceae - Beech			
	Lithocarpus densiflous var densiflorusa	Tanoak	
	Quercus garryana var. *garryana*	Oregon Oak, Garry Oak	
	Quercus kelloggii	Black Oak	
	Quercus parvula var. *shrevei*	Shreve Oak	
Gentianaceae - Gentian			
	Centaurium muehlenbergii	Centaury	
	Cicendia quadrangularis	Oregon timwort	
Geraniaceae - Geranium			
	Erodium botrys	Broadleaf Filaree	x
	Erodium cicutarium	Red-stemmed Filaree	x
	Geranium dissectum	Cut-leaf Geranium	x
	Geranium molle	Dove-foot Geranium	x
Hypericaceae - St. John's Wort			
	Hypericum perforatum	Klamath Weed	x*
Lamiaceae - Mint			
	Mentha pulegium	Penny Royal	x*
	Pogogyne zizyphoroides	Sacramento pogogyne	
	Prunella vulgaris var. *lanceolata*	Self-Heal	
	Satureja douglasii	Yerba Buena	
	Stachys ajugoides var. *rigida*		
	Trichostema laxum	Turpentine weed	

Family	Scientific Name	Common Name	Exotic[a]
Linaceae - Flax			
	Hesperolinon micranthum	Dwarf Flax	
	Linum bienne	Common flax	x
Lythraceae - Loosestrife			
	Lythrum hyssopifolium	Loosestrife	x
Malvaceae - Mallow			
	Sidalcea diploscypha	Fringed checkerbloom	
Oleaceae - Olive			
	Fraxinus latifolia	Oregon Ash	
Onagraceae - Evening Primrose			
	Epilobium ciliatum ssp. *ciliatum*	Northern Willow Herb	
	Epilobium minutum		
Papaveraceae - Poppy			
	Eschscholzia californica	California Poppy	
	Platystemon californicus	Cream Cups	
Plantaginaceae - Plantain			
	Plantago erecta	Foothill plantain	
	Plantago lanceolata	English Plantain	x
Polemoniaceae - Phlox			
	Collomia heterophylla	Varied-Leaf Collomia	
	Linanthus bicolor	Bicolored Linanthus	
	Navarretia intertexta	Needle-leaved Navarretia	
	Navarretia squarrosa	Skunkweed	
	Phlox gracilis	Slender Phlox	
Polygalaceae - Milkwort			
	Polygala californica	California Milkwort	
Polygonaceae - Buckwheat			
	Rumex acetosella	Sheep Sorrel	x
Portulacaceae - Purslane (3 taxa)			
	Calandrinia ciliata	Red Maids	
	Claytonia exigua ssp. *glauca*	Serpentine springbeauty	
	Claytonia parviflora	Streambank springbeauty	
Primulaceae - Primrose			
	Anagallis arvensis	Scarlet Pimpernel	x
	Trientalis latifolia	Star Flower	
Ranunculaceae - Buttercup			
	Ranunculus occidentalis	Western Buttercup	
Rhamnaceae - Buckthorn			
	Ceanothus foliosus var. f*oliosus*	Wavyleaf ceanothus	
	Ceanothus integerrimus	Deer Brush	
	Ceanothus velutinus var. *hookeri*	Tabacco Brush	
Rosaceae - Rose			
	Agrimonia gryposepala	Common Agrimony	
	Aphanes occidentalis	Lady's Mantle	
	Fragaria vesca	Wood Strawberry	

Family	Scientific Name	Common Name	Exotic[a]
	Heteromeles arbutifolia	Toyon	
	Potentilla glandulosa ssp. *glandulosa*	Sticky Cinquefoil	
	Rosa canina	Dog Rose	
	Rosa gymnocarpa	Wood Rose	
	Rubus discolor	Himalayan Blackberry	x
	Rubus leucodermis	Western Raspberry	
	Rubus ursinus	California Blackberry	
Rubiaceae - Madder			
	Galium aparine	Goose Grass	x
	Galium californicum ssp. *californicum*	California Bedstraw	
	Galium parisiense	Wall Bedstraw	x
	Galium porrigens	Climbing Bedstraw	
Salicaceae - Willow			
	Salix lasiolepis	Arroyo Willow	
	Salix scouleriana	Scouler's Willow	
	Salix sitchensis	Sitka Willow	
Scrophulariaceae - Figwort			
	Castilleja attenuata	Valley Tassels	
	Castilleja exserta ssp exeerta	Purple Owl's Clover	
	Gratiola ebracteata	Hedge-hyssop	
	Mimulus guttatus	Large Monkeyflower	
	Mimulus moschatus	Mush Monkeyflower	
	Triphysaria eriantha ssp. *eriantha*	Butter-and-eggs	
	Triphysaria pusilla	Little owl's-clover	
	Verbascum thapsus	Wooly Mullein	x
	Veronica americana	American Brooklime	
	Veronica peregrina ssp. *xalapensis*	Purslane Speedwell	
Valerianaceae - Valerian			
	Plectritis brachystemon	Plectritis	
Verbenaceae - Vervain			
	Verbena lasiostachys var. *lasiostachys*		
Violaceae - Violet			
	Viola ocellata	Two-eyed Violet	
MONOCOTYLEDONES - Monocots			
Alismataceae - Water Plantain			
	Alisma sp.	Water plantain	
Cyperaceae - Sedge			
	Carex athrostachya	Long-bract Sedge	
	Carex bolanderi	Bolander's Sedge	
	Carex densa	Dense Sedge	
	Carex feta	Green-sheath sedge	
	Carex fracta	Fragile-sheath Sedge	
	Carex hassii	False Golden Sedge	

Family	Scientific Name	Common Name	Exotic[a]
	Carex hardfordii	Monterey Sedge	
	Carex praegracilis	Clustered Field Sedge	
	Carex preslii	Presl's Sedge	
	Carex serratodons	Two-toothed Sedge	
	Carex tumulicola	Foothill Sedge	
	Eleocharis macrostachya	Pale Spikerush	
Iridaceae - Iris			
	Sisyrinchium bellum	Blue-eyed Grass	
Juncaceae - Rush			
	Juncus bufonius	Toad Rush	
	Juncus covellei	Covelle's Rush	
	Juncus effusus var. *pacificus*	Soft rush	
	Juncus occidentalis	Western rush	
	Juncus patens	Common Rush	
	Juncus xiphioides	Iris-leaved rush	
	Luzula comosa	Wood Rush	
Lilaceae - Lily			
	Brodiaea terrestris	Ground Brodiaea	
	Calochortus vestae	Mariposa lily	
	Chlorogalum pomeridianum var. *pomeridianum*	Soap Plant	
	Dichelostemma capitatum ssp. *capitatum*	Blue Dicks	
	Trillium chloropetalum	Giant Trillium	
	Triteleia hyacinthina	White Brodiaea	
	Zigadenus micranthus var. *micranthus*	Death Camas	
Poaceae - Grass Family			
	Agrostis stolonifera	Creeping Bent	
	Aira caryophyllea	European Hairgrass	x
	Avena barbata	Slender Wild Oat	x
	Avena fatua	Wild Oat	x
	Briza minor	Little Quaking Grass	x
	Bromus diandrus	Ripgut Grass	x
	Bromus hordeaceus	Soft Chess	x
	Bromus madritensis ssp. *rubens*	Foxtail Chess	x
	Cynosurus echinatus	Hedgehog Dogtail Grass	x
	Danthonia californica var. *americana*	California Oat Grass	
	Deschampsia danthonioides	Annual Hairgrass	
	Deschampsia elongata	Slender Hairgrass	
	Elymus glaucus ssp. *glaucus*	Blue Wildrye	
	Festuca arundinacea	Tall Fescue	x
	Festuca california	California Fescue	
	Festuca pratensis	Meadow Fescue	x
	Holcus lanatus	Velvet Grass	
	Hordeum brachyantherum ssp.	Meadow Barley	

Family	Scientific Name	Common Name	Exotic[a]
	brachyantherum		
	Hordeum marinum ssp. *gussoneanum*	Mediterranean Barley	x
	Hordium vulgare	Barley	
	Nassella pulchra	Purple Needle Grass	
	Phalaris aquatica	Harding Grass	x
	Phleum pratense	Timothy Grass	x
	Poa annua	Annual Bluegrass	
	Poa trivialis	Rough Bluegrass	
	Polypogon monspeliensis	Rabbitfoot Grass	x
	Vulpia bromoides	Six's Weeks Fescue	x
	Vulpia microstachys var. *ciliata*	Eastwood fescue	
Typhaceae - Cattail			
	Typha latifolia	Broad-Leaved Cattail	

Note:
A = Exotic species followed by an asterix have the potential to become invasive.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

February 27, 2015

David Dietz
Mead & Hunt, Inc.
133 Aviation Blvd., Suite 100
Santa Rosa, CA 95403

Sent by Fax: ~~(707) 526-9721~~ Email: david.dietz@meadhunt.com
Number of Pages: 2

Re: Willets Municipal Airport: REACH Air Medical Leasehold, Mendocino County.

Dear Mr. Dietz,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez for

Katy Sanchez
Associate Government Program Analyst

Native American Contacts
Mendocino County
February 27, 2015

Round Valley Reservation/Covelo Indian
James Russ, President
77826 Covelo Road
Covelo , CA 95428
tribalcouncil@rvit.org
(707) 983-6126

Yuki ; Nomlaki
Pit River
Pomo
Concow
Wailaki; Wintun

(707) 983-6128 Fax

Sherwood Valley Rancheria of Pomo
Michael Fitzgerral, Chairperson
190 Sherwood Hill Drive
Willits , CA 95490
svradministrator@sbcglobal.
(707) 459-9690

Pomo

(707) 459-6936 Fax

Sherwood Valley Rancheria of Pomo
Cultural Resource Specialist
190 Sherwood Hill Drive
Willits , CA 95490
(707) 459-9690

Pomo

(707) 459-6936 Fax

Sherwood Valley Rancheria of Pomo
Hillary Renick, THPO
190 Sherwood Hill Drive
Willits , CA 95490
chishkinmen@gmail.com
(707) 459-9690
(707) 459-6936 - Fax

Pomo

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Willits Municipal Airport: REACH air Medical Leasehold, Mendocino County.

Cathy Sanders

From: Planning
Sent: Monday, March 02, 2015 2:00 PM
To: Cathy Sanders
Cc: Adrienne Moore
Subject: FW: REACH-PUBLIC COMMENT

Cathy,
Please see email below commenting on REACH project. I will continue to forward any written comments regarding this matter to be included in Council agenda packets. Thanks
Dusty

Dusty Duley
Contract Planner
City of Willits
Community Development Department
111 East Commercial Street
Willts, Ca 95490
(707) 459-4601

From: Gail Richards [mailto:grichards3@comcast.net]
Sent: Thursday, February 26, 2015 2:09 PM
To: Planning
Subject: REACH-PUBLIC COMMENT

PUBLIC HEARING - MARCH 28, 2015 - PUBLIC COMMENTS

No doubt this e-mail will be summarily discarded as not addressing environmental issues related to the proposed REACH Air Base at Willits Airport.

Be that as it may, I feel I cannot NOT comment from a different point of view, and just as valid.

The date was March 8, 2013. My husband was in the emergency room at Howard Memorial Hospital will a pulse rate of 30, and dropping. Carla Longchamp, MD was the attending physician on-call that day and it was she who informed me that he was in desperate need of a cardiologist. One of the nurses overheard the conversation and said, "I requested a helicopter for another less-critical patient. This gentleman needs it more." Within minutes, five EMTs arrived. Before I finished the paperwork and got home to throw some things in an overnight bag, that helicopter had him at Santa Rosa Memorial Hospital.

I will be forever grateful to REACH. Surely anyone else who has ever experienced a loved one needing emergency care, would be more than happy to see them stationed at Willits Airport too.

Perhaps there are those who object to the noise of helicopters. Living in the forest as I do, I find that noise a comfort. To me, they are guardian angels. They can see what I can't and would be a wonderful second pair of eyes. Imagine having the pilot calling Brooktrails Fire Dept., Little Lake Fire District, and CalFire with the following information, "I'm en route with a transport to Santa Rosa so this is just a quick heads-up, but I just spotted suspicious smoke up on Blue Lake Terrace. You might want to check it out."

Sometimes owls, noise, and dust need to be put aside to address human concerns.

Gail Richards
459-4860

Adrienne Moore

From:	Bob Whitney [BobWhitney@instawave.net]
Sent:	Tuesday, March 10, 2015 5:51 PM
To:	Adrienne Moore
Cc:	Planning; Cathy Sanders; Richard Tanner; Angela Liebenberg; Bill McIver
Subject:	REACH project at the Willits Airport and the Northern Spotted Owl
Attachments:	REACH NSO 12-29-14.pdf

Adrienne,
As you know, Keep the Code is a local Mendocino County environmental organization. Please accept this email as a comment on the proposed REACH project. Keep the Code hired Richard Tanner, Conservation Biologist, as an independent consultant to assess the potential environmental impact of the proposed REACH project at the Willits Airport on the Northern Spotted Owl (NSO).

The City of Willits has made an Environmental Determination "that a Mitigated Negative Declaration can be recommended." And it is highly likely that the Willits City Council will approve the project. However, although the Initial Study conducted an analysis of noise impacts on the Northern Spotted Owl and concluded "All aircraft activity are more than 1,000 feet above nesting sites", the study does not recommend that this operational assumption be a mitigation condition for the helicopter flight path. Furthermore, there are no proposed restrictions on landing or taking off from the northern end of the runway, which the vicinity is where some of the best NSO habitat is located.

Attached is a letter addressed from Richard Tanner to Keep the Code that we would like for the City to review, as well as to consider the following mitigations that he has recommended for the proposed flight path.

> A standard **800-foot vertical helicopter operational floor** will be implemented for flight over suitable NSO habitat within one mile of the airport to the northwest, north, northeast, east and southeast; and that the proposed air ambulance could fly below the 800-foot operational floor when taking off and landing in a southerly direction while over the airstrip without noise disturbance to the NSO.

We hope that the City concurs with us that there should be at least two mitigation conditions to the proposed REACH project that reduces potential impacts to the Northern Spotted Owl:

1. An operational floor (between *1,000 feet and 800 feet*) over NSO habitat within one mile of the airport; and

2. The helicopter air ambulance would fly below the operational floor when taking off and landing in a southerly direction while over the airstrip, and would not use the northerly area of the airstrip for air operations.

Please feel free to contact me or Richard Tanner with any questions. Thank you.
Best regards,
Bob Whitney, for Keep the Code
23801 Iris Terrace
Brooktrails Township, Willits, CA 95490
707-459-3906

TANNER
ENVIRONMENTAL SERVICES

December 29, 2014

Keep the Code
PO Box 131
Willits, CA 95490

Re.: Noise disturbance on the Northern Spotted Owl and Recommended Mitigations for the proposed REACH Project at the Willits Airport

To whom it may concern,

This is in response to the request from Keep the Code for an evaluation of potential impacts to the northern spotted owl (NSO) from the proposed REACH Project at the Willits Airport. The Willits Airport is located approximately 4 miles north of the city of Willits, Mendocino County, California. The NSO is a mid-sized forest dwelling owl which ranges from British Columbia to just north of San Francisco. Throughout most of its range, it is associated with large stands of late seral stage forests. It is also found in regenerated second growth forests, especially those with relict patches of old growth trees.

Your organization requested that I address the issue of noise disturbance to the NSO from helicopter traffic and, if appropriate, that I recommend mitigation measures. To assess potential impacts, I conducted research on NSO habitat suitability in proximity to the project area as well as known NSO activity centers. In addition, I referenced the US Fish and Wildlife Service's (USFWS) Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to NSO and Marbled Murrelets in Northwestern California, Arcata Fish and Wildlife Office, dated July 31, 2006 ("Guidance"). The Guidance applies to activities which have the potential to disturb the NSO as a result of substantially elevated sound levels or human presence near nests during the breeding season.

NSO Status near Willits Airport

The area around the Willits Airport to the northwest, north, east and south contains suitable foraging habitat for the NSO. Forest characteristics within this area are varied and include dense stands of young Douglas fir to mixed age stands ranging from 6-inches to approximately 24 inches Diameter at Breast Height (DBH), with a hardwood component in the understory. Small stands of potential NSO nesting/roosting habitat occurs in isolated locations especially in drainages to the east, north and northwest of the project area.

P.O. Box 1254
Alameda, California
94501

Telephone (805) 636-1806
TannerEnvironmental.com

The suitability of NSO habitat in proximity to the Willits Airport in the Little Lake Valley is confirmed in the USFWS letter dated March 30, 2006 addressed to Gene K. Fong of the Federal Highway Administration, California Division. USFWS states: "Suitable northern spotted owl nesting and foraging habitat occurs in the densely forested areas around the western and northwestern perimeter of Little Lake Valley, consisting of mixed north slope forest, Douglas-fir forest, mixed conifer forest, mixed evergreen forest, and some of the black oak and Garry oak woodland. Large stands occur at the extreme northern end of the valley, north of Outlet Creek, and west of U.S. Highway 101, just southwest of the Louisiana-Pacific mill site along the west side of U.S. Highway 101 (Figure 3-2, Appendix I of the BA).

According to the California Natural Diversity Database (CNDDB), there are 4 NSO Activity Centers located within 1 mile of the project area. These activity centers are associated with 2 distinct NSO territories.

- Two activity centers for NSO territory MEN378 are approximately 0.7 miles northeast of the airstrip on the south slope of Outlet Creek.
- Two activity centers for NSO territory MEN224 are approximately 0.6 and 0.7 miles east of the airstrip in Wild Oat Canyon.

The CNDDB has survey records for MEN378 from 1991 and 1993 but no more current survey records were available through the database. According to SHN Engineering's Technical Memorandum #4 for Mendocino Forest Products Company (January 2014), NSO Surveys conducted in 2013 at MEN224 detected a breeding pair of NSO's that produced at least two offspring.

Disturbance Assessment

The USFWS Guidance describes behaviors of the NSO that occur when disturbance effects rise to the level of take (i.e., harass), as defined in the Endangered Species Act. These behaviors include:

- Flushing an adult or juvenile from an active nest during the reproductive period.
- Precluding adult feeding of the young for a daily feeding cycle.
- Precluding feeding attempts of the young during part of multiple feeding cycles.

The Guidance methodology relies on a comparison of sound levels generated by the proposed action to pre-project ambient conditions. Disturbance may reach the level of take when at least one of the following conditions is met:

- Project-generated sound exceeds ambient nesting conditions by 20-25 decibels (dB).
- Project-generated sound, when added to existing ambient conditions, exceeds 90 dB.
- Human activities occur within a visual line-of-sight distance of 40 m or less from a nest.

The Guidance analysis relies on a comparison of project-generated sound levels against ambient conditions; and a comparison of project and pre-project sound levels within a matrix of estimated distances for which available data support a conclusion of harassment. The following are noise measures from the Guidance for a S-61 (Sikorsky) helicopter. Although the S-61 is a larger and louder helicopter, these levels provide a point of reference relative to the EC-135 helicopter to be used on the REACH project.

Measured Sound Source	Reported Decibel Value	"Standardized" Value At 50 ft.	Relative Sound Level
Helicopter S-61 (low end) (large, single rotor, loaded)	79 @ 500ft.	99	Very High
Helicopter S-61 (low end)	77 @ 800 ft.	101	Extreme
Helicopter S-61 (high end)	106 @ 100 ft.	112	Extreme

Conclusion

The REACH project at Willits Airport is a disturbance only project for the NSO because no suitable habitat will be eliminated or converted. Disturbance from this project will not result from construction but from the ongoing activity of the helicopter ambulance service provided by REACH. Based on the reported decibel levels from the Guidance, helicopter flights under 500ft above ground level could result in the noise disturbances approaching or above thresholds for take of the species.

Mitigation Measures

To avoid impacts and the potential for take of NSO, I recommend that REACH helicopters avoid flying low over suitable NSO habitat within one mile of the airport. This should include all areas with suitable habitat which have not been surveyed for NSO occupancy; however, this does not include non-forested areas within and immediately adjacent to the Willits Airport. The vertical buffer could be reduced for habitat which has been annually surveyed and is confirmed to be unoccupied or occupied by non-nesting NSO. This buffer or 'floor' for helicopter flights follows the findings of Delaney et al (1999) who studied the responses of Mexican spotted owls during military operations. This mitigation is not intended to interfere with helicopter operations, but is proposed to protect the NSO from harm.

My recommendation is as follows:

- A standard **800-foot vertical helicopter operational floor** will be implemented for flight over suitable NSO habitat within one mile of the airport to the northwest, north, northeast, east and southeast; and that the proposed air ambulance could fly below the 800-foot operational floor when taking off and landing in a southerly direction while over the airstrip without noise disturbance to the NSO.

If you have any questions or require additional information, please contact me directly.

Sincerely,

Richard G. Tanner

RICHARD G. TANNER

Conservation Biologist

Education

- BA, Zoology and Environmental Studies, University of California Santa Barbara, CA.
- MS, Natural Resources, Wildlife Management, Humboldt State University, Arcata, CA.

Affiliations

- Society for Conservation Biology, Member
- Association of Environmental Professionals, Member
- The Wildlife Society, Member and Former President, Humboldt Chapter, 1994-1995

Research Biologist

- Humboldt State University Foundation, Arcata, CA. 1989 – 1995.
- Master's Thesis: *Habitat Use by Northern Spotted Owls in Coastal Redwood Forests of Northwestern California.* Advisor: Dr. R. J. Gutierrez

Project Management/Biological Consulting, 2005 - 2014.

- Project Manager and Principal Investigator on extensive Spotted Owl demographic, habitat assessment, transmitting, banding and monitoring projects throughout California.

- Other special-status species monitoring and assessment has included the Mission blue butterfly, San Francisco garter snake, California red-legged frog, California Tiger Salamander, Southwestern willow flycatcher, southern rubber boa habitat, Bald Eagle, Peregrine Falcon, Desert tortoise and rare plants.

- Responsible for coordinating biological monitoring and assessment, budget oversight, data collection, analysis and report writing.

- Responsible for drafting numerous monitoring reports on results of biological surveys and assessments.

- Responsible for screening, hiring, training, and QA/QC oversight on Nesting Bird Surveys.

- Consulted with various public agencies, such as CalTrans, CDFW, USFWS, USFS, special districts, counties and cities throughout CA.

- Private clients have included the Golden State Land Conservancy, Southern California Edison, Santa Barbara Land Trust and Humboldt State University Foundation.

March 13, 2015

Cathy Sanders,
Willits City Clerk
111 E. Commercial Street
Willits, CA. 95490

RE: Initial Study; REACH Lease - Willits Municipal Airport - Comment

In reviewing the Initial Study by Mead & Hunt for the REACH Air Lease at Willits Municipal Airport, I find that there is a discrepancy in its Figures 6 and 7 with what is stated in the text. This discrepancy has resulted in an incorrect representation of the noise contours from the mitigated alternate helicopter parking position, causing an incorrect impression and misrepresenting the noise effects of that position. The Initial Study also fails to address all concerns that were brought by concerned citizens.

The discrepancy lays in the portrayal of noise contours that in the text are said to represent a different position than the Figures themselves show by measurement. In the Initial Study by Mead & Hunt for the REACH lease at Willits Municipal Airport. Figure 5 of the Initial Study pg. 41 portrays CNEL contours before REACH Project and Figure 7 portrays CNEL contours at helicopter position 150 feet west from the runway centerline. The actual proposed alternate helicopter parking position is at 210 ft. west from the runway center, and there are no Figures in this study that portray any noise contours at that position.

As to the proposed alternate helicopter parking position 210 ft. from the runway centerline referred to on page 30, and that it meets the Mendocino County Airport Land Commission (ALUC) policy as stated in the Initial Study;

"Noise Exposure in Residential Areas — The maximum CNEL considered normally acceptable for residential uses in the vicinity of airports covered by this plan is 60 dBA."

Figure 5 of the Initial Study pg. 41 portrays CNEL contours before REACH Project and Figure 7 portrays CNEL contours at helicopter position 150 feet west from the runway centerline. The actual proposed alternate helicopter parking position at 210 ft. west from the runway center, would have 60 dBA contours extending into the neighborhood. The proposed mitigated helicopter parking position at 210 ft. west from the runway center will expose people to noise levels in excess of standards established in the local General Plan, as well as increasing the CNEL in excess of 5 dBA of conditions before the project.

The Initial Study for the REACH Air Lease at Willits Municipal Airport also fails to address all concerns that were brought up by citizens prior to the study. Since regular helicopter noise, especially at night, would be a new condition at the Willits Airport, and will increase the noise produced at night there, this will be especially disturbing due to the quiet rural nighttime conditions that presently exist. This concern was raised but not addressed by the study.

As sleep disturbance is normally correlated to the Single Event Noise Equivalent Levels (SENEL). Figure 8 in the REACH Air Lease at Willits Municipal Airport Initial Study, page 44, represents the Single Event Noise as Mead & Hunt has calculated it for a departure to the south. The claim is that this event only produces 78 dBA at the Willits Airport property

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line. Unfortunately, they do not show the measurement. From their legend it appears to be 380 feet. My disagreement that this accurately represents the impact of the REACH operation with the proposed mitigation is based on the discrepancy and misrepresentation stated earlier. In addition, this Figure 8 only represents the departure to the south. More noise is generated in arrivals *"To the ground observer helicopters are most audible as the aircraft approaches a landing area"* (Environmental Noise Assessment Sutter Hospital/Luther Burbank Memorial Foundation Master Plan Santa Rosa, California 5th Draft, April 16, 2009, Updated July 21, 2009) Also no representation of the single event is shown for a north approach or take-off, where this direction of flight will have a potential for greater noise impact on sensitive receptors, due to the upward slope of the topography of that area. The proposed parking pad is situated approximately 30 feet lower in elevation from approximately 20 parcels along Maize Drive where the amphitheater effect can increase noise levels. The people in this area would also be affected by nighttime flights and the SENEL noise contours need to be known to establish if significant effects are caused.

Other qualified noise studies that were actually done at the sites have documented actual dBA levels that show different dBA levels that Mead & Hunt use in this calculated study.
A.) In the University of California's Environmental Impact Report by Harris, Miller, Miller & Hanson, Inc. (HMMH) for the UCSF Mission Bay Hospital, the SENEL contour, included the EC130. This is the equivalent of the EC135 as stated in the Integrated Noise Model of the FAA. The study results were produced with an on-site acoustical study by HMMH, and shows the EC130 95 dbA contour extending out 1,000 feet with sleep disturbances of 10% or more. (Helicopter Noise Analysis-UCSF Mission Bay. HMMH Report No. 302300. March 2008. Pg. 41)
B.) Another study analyzing the EC 135 published in Occupational Hygeine on-line;

> *"In EC 135 the noise levels outside the aircraft were 100.1 to 107.8 dB(A), with the highest exposure during refuelling of the helicopter. Because of the overlap of the ranges of the several results obtained at the different points (no significant differences) we assumed that the noise exposure at these points outside the helicopter is comparable."* (Does Modern Helicopter Construction Reduce Noise Exposure in Helicopter Rescue Operations? Thomas Küpper, Paul Jansing, Volker Schöffl, and Simone van Der Giet Ann Occup Hyg (2013) 57 (1): 34-42 first published online September 24, 2012 doi:10.1093/annhyg/mes048)

The noise level increases with take-off and approaches due to blade slap.

So how does Mead & Hunt justify their noise contours, which deviate considerably from other studies showing higher dBA ratings at similar distances than this Initial Study? An on-site noise evaluations is needed to accurately evaluate effects of the REACH project.

As sleep disturbance is mainly a concern of nighttime hours, the affects of the expansion of nighttime operations from the present Willits' Municipal Airport 1% of total flights per (5,500; page 29 of Initial Study) resulting in approximately 55 flights a year to the 20% of REACH's total flights predicted to be at night (information from Anna Blair at BTCSD meeting), resulting in an additional 146 (1 flight, 2 operation a day) to 219 (1.5 flights, 3 operations a day) has the potential to significantly affect sleep without further mitigation, such as moving the REACH helicopter parking position to the position displayed in Figure 7, 150 feet from the runway centerline, not 210 feet from the centerline, and directing night

flights south to minimize the effects of sleep disturbance to neighbors uphill of the airport. An on-site noise evaluation is necessary and would clarify the sufficiency of any mitigation.

As a health care provider, I have become aware of the relationship between chronic sleep disturbance and its links to hypertension, cardiovascular disease, diabetes, and depression, as well as reduced performance and quality of life. Noise and sleep disturbance effects children, as well as adults, and reduced performance and wakefulness for learning has compounding effects. Recent medical research supports this, and it is well documented in the literature.

The City of Willits Municipal Airport presently has trees which must be monitored, trimmed or removed to keep in compliance with federal aviation regulations regarding airport transitional surfaces, as stated in a letter from the State of California Department of Transportation dated November 25, 2013 to The City of Willits Manager, Paul Caylor (attached). Some of these trees are on the City of Willits' property, and many others are on individual lots and green belt parcels of Brooktrails Community Services District (BTCSD). Removing large trees results in damage to surrounding vegetation. This removal can result in increased propagation of sound waves. Mead & Hunt are aware of the tree penetration problem, as they presently are employed by the City of Willits in updating their Airport Layout Plan. Does the FAA and the City of Willits intend to enforce maintenance, trimming or removal of the trees that will be identified in the updated Airport Layout Plan on neighboring parcels as well as those on the City of Willits' property? If so, how will that contribute to an increase in noise levels to residents and sleep disturbance? When will the enforcement occur?

The last part of my comment concerns Biological Resources starting on page 12. On page 15 the Initial Study states that "All aircraft activity are more than 1,000 feet above nesting sites", but the study does not recommend that this operational assumption be a mitigation condition for the helicopter flight path. Nor does it acknowledge that most of the surrounding area is prime NSO habitat. Just saying there is no significant effect based on this operational assumption offers no safeguard. The minimum vertical floor for flight operations needs to be a mitigated condition to assure this protection to the NSO over all prime NSO habitat.

Respectfully,

Ramona Waldman

Ramona Waldman, RN, FNP-BC, CDE
28000 Poppy Drive
Willits, CA
ramonawaldman@gmail.com

encl: UCSF helicopter 95 dBA footprint

Caltrans Trees

cc: Adrienne Moore
City Manager – via email

Dusty Duley
Contract City Planner – via email

DEPARTMENT OF TRANSPORTATION
DIVISION OF AERONAUTICS – M.S. #40
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 654-4959
FAX (916) 653-9531
TTY 711
www.dot.ca.gov

Flex your power!
Be energy efficient!

Willits Municipal Airport ✓
Mendocino County
Suspense: December 30, 2013

RECEIVED
MAR 13 2015
CITY OF WILLITS

November 25, 2013

Mr. Paul Cayler, City Manager
Willits Municipal Airport
111 East Commercial Street
Willits, CA 95490-3103

Dear Mr. Cayler:

The California Department of Transportation (Caltrans), Division of Aeronautics, conducted a State permit compliance inspection and Federal Aviation Administration (FAA) Airport Master Record (Form 5010-1) update of the Willits Municipal Airport FAA Site No. 02455.1*A, on November 15, 2013. We appreciate the cooperation Mr. Dan Ramsey provided to us during our inspection. The updated information will be entered into State and FAA Airport Master Records.

The airport was evaluated using your current Airport Layout Plan and previous inspection letters. Our inspection revealed the following items, which we bring to your attention:

1. Trees north of Runway 16, penetrate the Federal Aviation Regulations (FAR) Part 77, 20:1 Approach Surface and must be removed or topped, as shown in enclosed Photo 1. Several other trees under the approach must be monitored and trimmed or removed, if they penetrate the Approach Surface.

2. Many large trees west of Runway 16/34 penetrate the FAR Part 77, 7:1 Transitional Surface. These trees have been identified as discrepancies in previous inspection letters. All trees west of Runway 16/34 that penetrate the FAR Part 77, Transitional Surface must be removed or topped, as shown in enclosed Photos 2 and 3. This repeat discrepancy could lead to permit action, including suspension of night operations, and expose the airport to liability in the event of an aircraft accident. Failure to remove the airspace obstructions could result in penalties to the owner of the obstructions pursuant to the California Public Utilities Code (PUC). The PUC, section 21659, states, in part:

   > 21659. (a) No person shall construct or alter any structure or permit any natural growth to grow at a height which exceeds the obstruction standards set forth in the regulations of the FAA relating to objects affecting navigable airspace contained in Title 14 of the Code of Federal Regulations, Part 77, subpart C…

3. Several trees east of Runway 16 abeam the threshold (pictured in enclosed Photo 4), as well as along the east side of Runway 16/34 (not pictured), penetrate the FAR Part 77, 7:1 Transitional Surface and must be removed to meet federal regulations and enhance operational safety. This is a repeat discrepancy.

DAS-OBM-125
INITIALS/DATE | DMR 11/25/2013 | M.D. 11/25/13 | MC 25 Nov 13

4. Both runway ends have deficient Runway Safety Areas (RSA) by at least 140 feet at both ends. As stated in Advisory Circular (AC) 150/5300-13, RSA standards cannot be modified or waived like other airport design standards. The dimensional standards remain in effect regardless of the presence of natural or man-made objects or surface conditions that might create a hazard to aircraft that leave the runway surface. It is Caltrans' understanding that a project has been planned to create the required RSA at the north (Runway 16) end of the airport. A similar plan must be developed for the RSA at the south (Runway 34) end of the airport. This is a repeat item.

It is Caltrans' objective to ensure that airports meet all current applicable FAA minimum design safety standards and AC criteria, FAR, PUC, section 21001 et seq., the California Code of Regulations, Title 21, section 3525-3560, and all required conditions depicted in your State Airport Permit issued by Caltrans. All referenced publications in this letter, including many FAA ACs, may be found on our website at www.dot.ca.gov/aeronautics.

Understanding the significant resource burden associated with operating a safe, secure, and utilitarian airport, Caltrans will continue to offer both financial and technical assistance to the County of Mendocino. The use of California Aid to Airports Program annual grant funds to correct safety discrepancies is considered an eligible expenditure.

Please notify us by December 30, 2013, of your intended or completed action concerning these items and provide us with photographic evidence documenting the results. If you have questions or require assistance, please contact me at (916) 654-5450 or via email at amy.choi@dot.ca.gov.

Sincerely,

Original signed by

AMY CHOI
Aviation Safety Officer

Enclosures

c: FAA, San Francisco Airports District Office

bc: Brad Mettam, District 1

Amy Choi:jv s:\\z\Aero Inspections 5010\ac-02455-1A_Willits Muni O28

Photo 1 – Trees in Approach Surface, Runway 16

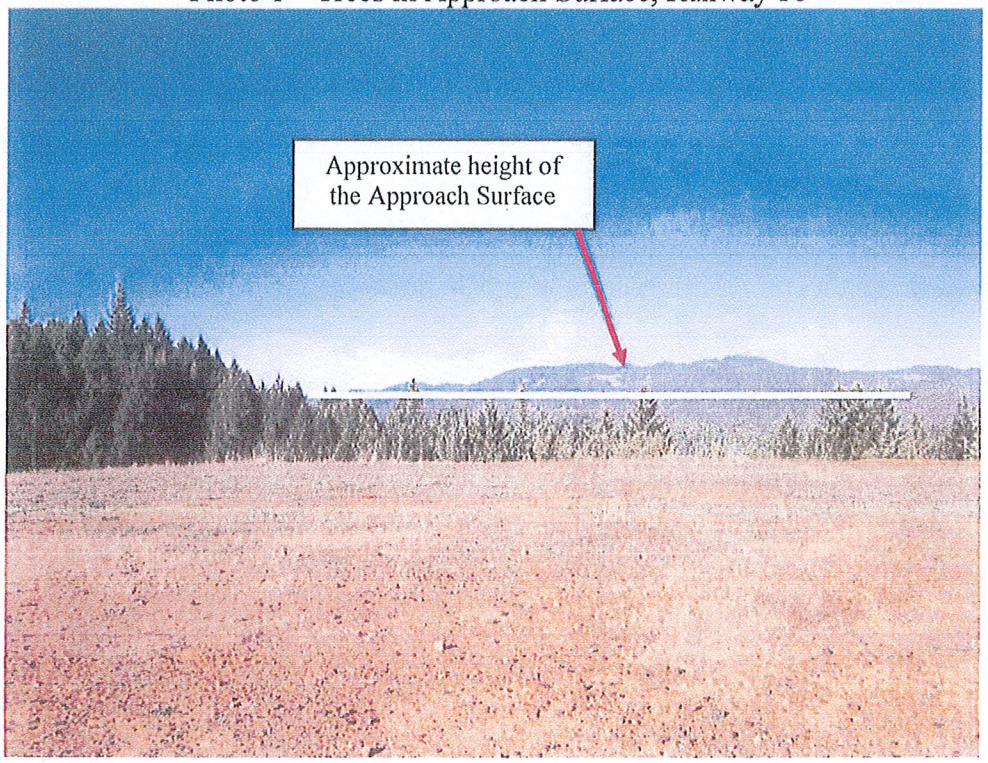


Photo 2 – Trees west of Runway 16/34 penetrate Transitional Surface.

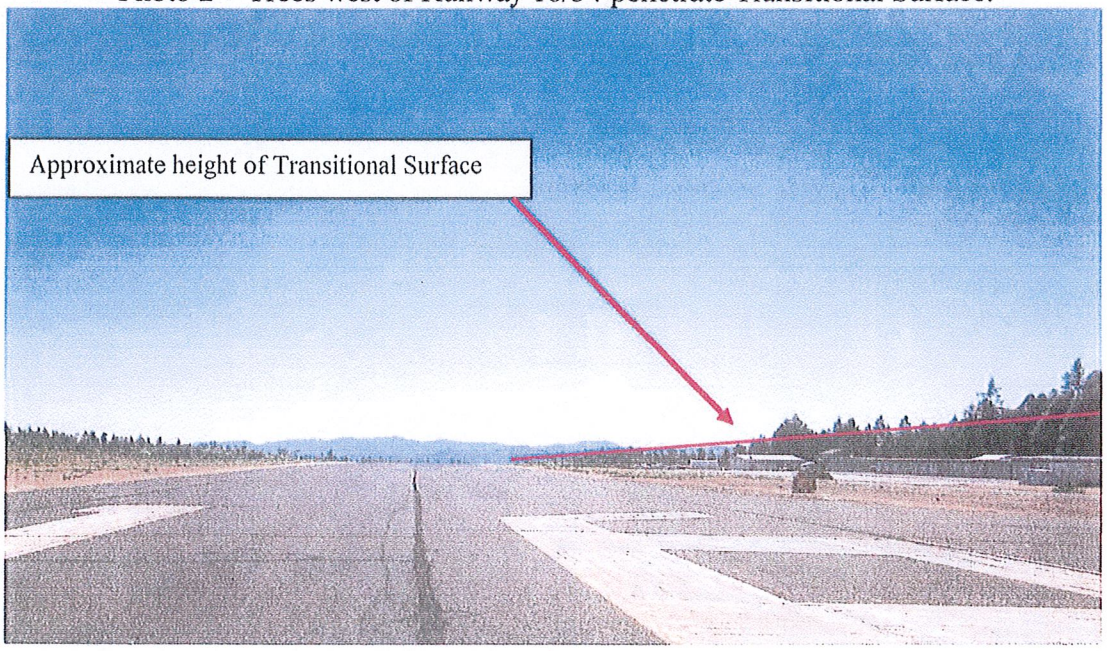


Photo 3 – Trees penetrate Transitional Surface west of Runway 16 Threshold.

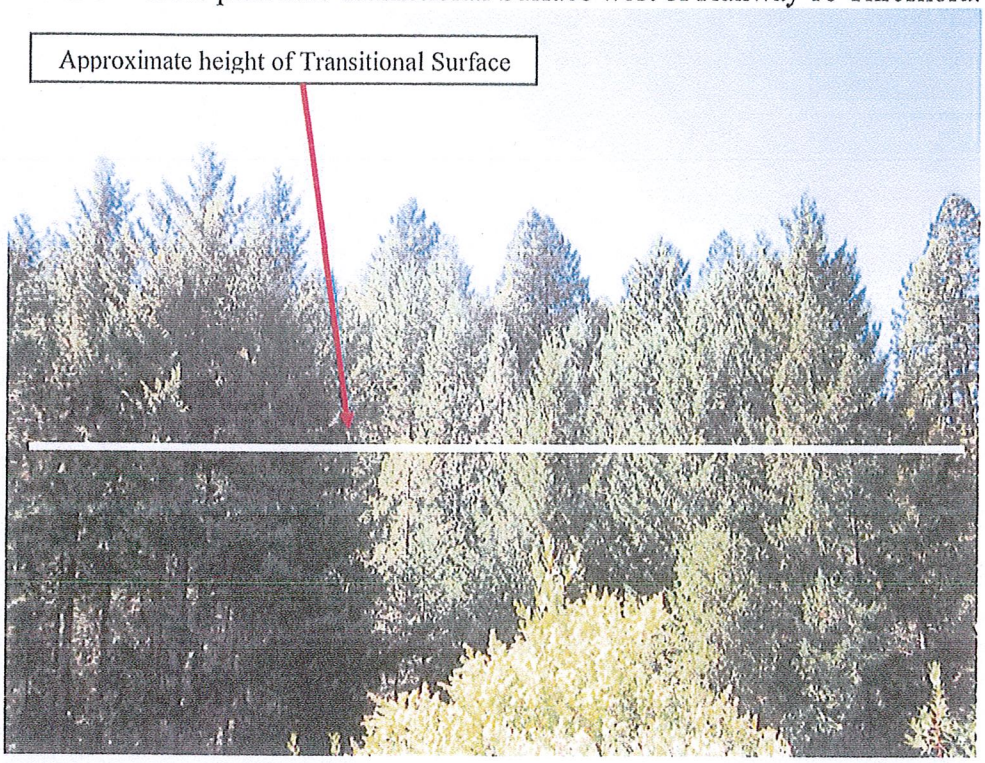
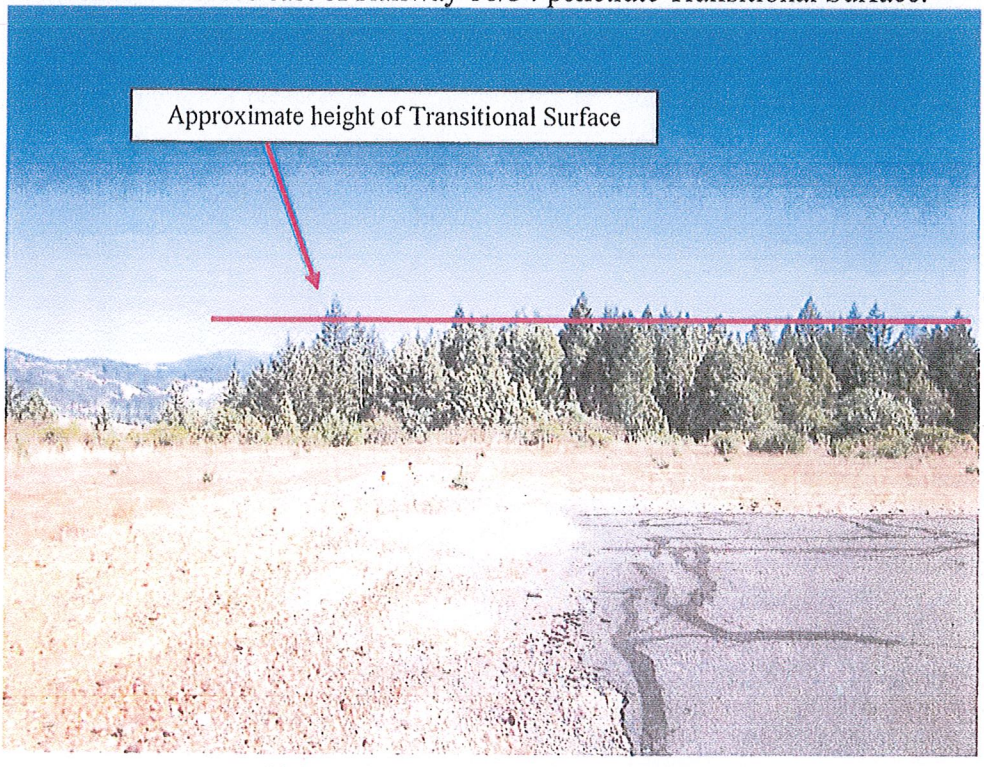


Photo 4 – Trees east of Runway 16/34 penetrate Transitional Surface.



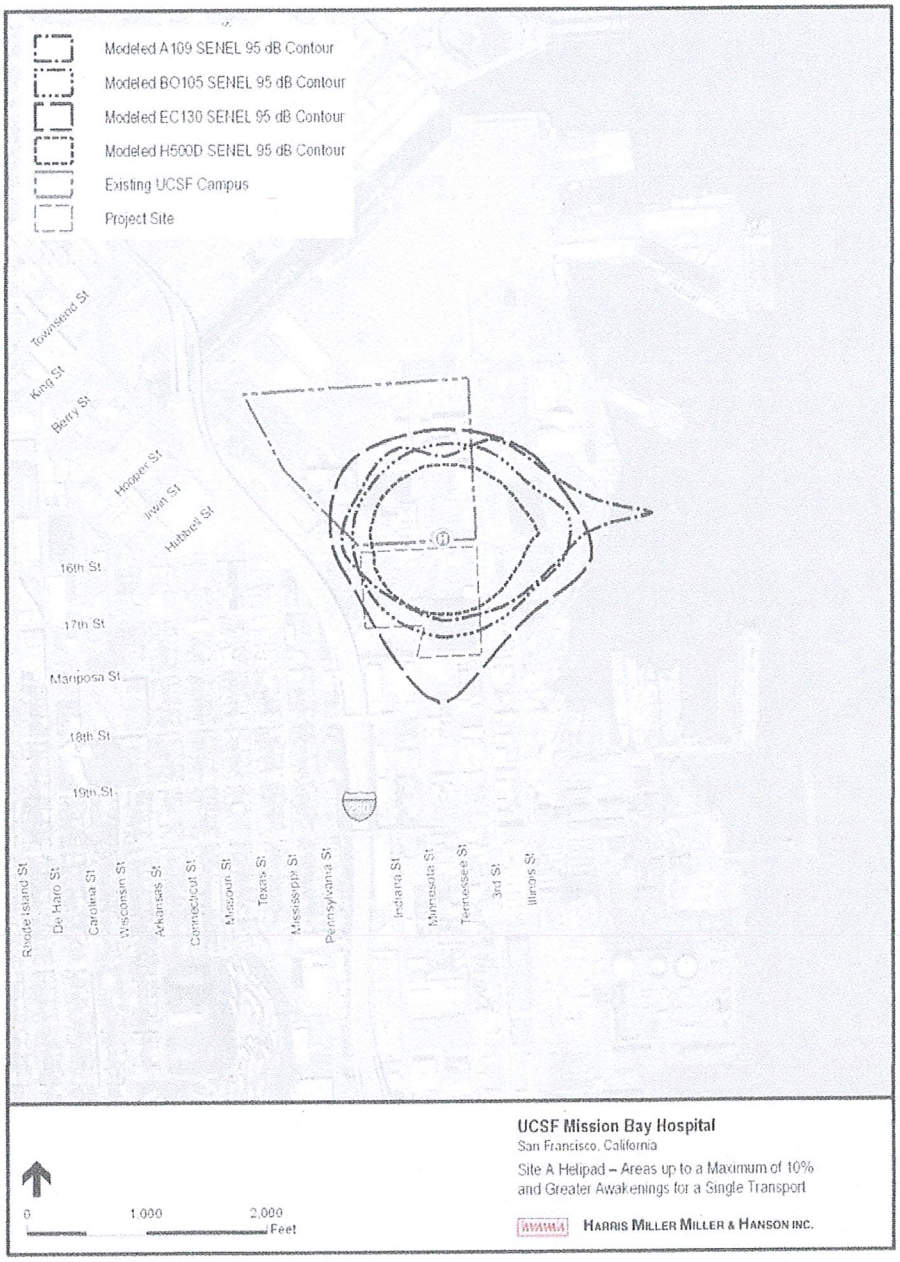


Figure 15 UCSF Site A Helipad - Areas up to a Maximum of 10% and Greater Awakenings for a Single Transport
Source: INM 7.0, HMMH

March 13, 2015

Cathy Sanders,
Willits City Clerk
111 E. Commercial Street
Willits, CA. 95490

RE: Initial Study; REACH Lease - Willits Municipal Airport

In the Initial Study by Mead & Hunt for the REACH lease at Willits Municipal Airport, Figure 7 on page 43 is claimed to be portraying a 55 foot eastward shift of the helicopter parking position from the original helicopter landing site portrayed in Figure 6 on page 42 (310 feet from the runway centerline). The 210 feet west of the runway centerline that is stated as the alternate helicopter parking position in the mitigation on page 30, contradicts the 150 feet from the runway centerline portrayed in Figure 7. So the contours in Figure 7 for the 60 dBA do not portray the true contours for the alternate position; 210 ft. from the runway centerline, but from a position 150 feet from the runway centerline. The contours shown in Figure 6 show the 60 dBA extending to the middle of Madrone Drive, and Figure 7 shows the 60 dBA contour at the airport property line, a distance of 145 feet (*Mendocino Record of Survey, Amended Map of Brooktrails Vacation Village, Case 2, Drawer 7, Page 2, Sheet # 121, dated March 1967*). A 55 foot shift east of the helicopter parking position will not move the CNEL contour eastward enough to accomplish the 60 dBA CNEL contour to the airport property line.

The proposed parking pad is also situated approximately 30 feet lower in elevation from approximately 20 parcels along Maize Drive. The slope of this hill will create an amphitheater effect with possible higher noise levels than on flat land.

In review of the 'Environmental Noise Assessment Sutter Hospital/Luther Burbank Memorial Foundation Master Plan Santa Rosa, California 5th Draft' (April 16, 2009; Updated July 21, 2009) by Illingworth and Rodkin, Inc.

"State CEQA Guidelines

The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. CEQA asks whether the proposed project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance, or applicable standards of other agencies?

- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? CEQA does not define what noise level increase would be considered substantial. Typically, in high noise

environments, if the Ldn due to the project would increase by more than 3 dBA at noise-sensitive receptors, the impact would be considered significant. Where the existing noise level is lower, a somewhat higher increase can be tolerated before significance occurs."

Figure 5 of the Initial Study pg. 41 portrays CNEL contours before REACH Project and Figure 7 portrays CNEL contours at helicopter position 150 feet from the runway centerline. Even in the position in Figure 7 there is a greater than 5 dBA increase in Ldn* (see below) dBA levels which could be significant even with that mitigation. In actuality, this Initial Study has proposed a position 210 ft. from the runway center, which would most likely cause that increase to be higher. In addition, on page 29 it is stated that the contours developed for the CNEL in Figure 7 were developed calculating 1 flight (2 operations) a day. The projected increase to 1.5 flights (3 operations) a day is not studied. Initial Studies under CEQA require that the effect of increased flights be included in the study. There is a high likelihood that the helicopter parking position at 210 ft. from the runway center will expose people to noise levels in excess of standards established in the local General Plan, and that likelihood would surely increase with the proposed increase in flights to 1.5 (3 operations) a day.

*

Ldn - The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am

CNEL - The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.

Ralph Waldman

Ralph Waldman
28000 Poppy Drive
Willits, CA.
ralphwaldman@gmail.com

cc: Adrienne Moore
City Manager – via email

Dusty Duley
Contract City Planner – via email

Adrienne Moore

From: Bob Whitney [BobWhitney@instawave.net]
Sent: Tuesday, March 17, 2015 5:20 PM
To: Bill McIver
Cc: Angela Liebenberg; Adrienne Moore
Subject: FW: Willits Airport REACH project_FWS technical assistance letter
Attachments: 15B0019-15TA0028_Willits Airport REACH Project_NSO.pdf

Bill,
The noise impacts of a REACH helicopter flying over the NSO habitat any time night and day is our primary wildlife impact concern. It is surprising that the USFWS representation of the endangered NSO and its habitat is so dismissive of the potential noise impacts to the flight pattern of the emergency air ambulance helicopter. I am very disappointed that you did not directly address this issue as articulated in the letter from Richard Tanner, and comment on the proposed mitigations for flight and altitude pursuant to USFWS standards. I realize that you are busy, but these remnant NSO populations are being extirpated by highway expansion, industrial development, airport expansion and rural residential subdivision.
It seems that you and others are dismissing the noise impacts to the NSO habitat because of the emergency air ambulance services of the proposed project. Although, I know that you are sincerely attempting to implement the ESA and protect listed species as best as you can. This type of rationalization and dismissal of habitat protection seems to me to be a significant cause of how the cumulative impact of human activity, all of us included, over time has gradually displaced endangered species.
Someone asked me the other day, is there some species that should become extinct? My response was that I hope not.
Best regards,
Bob Whitney
23801 Iris Terrace
Brooktrails Township, Willits, CA 95490
707-459-3906

From: Bill McIver <bill_mciver@fws.gov>
Date: Tuesday, March 17, 2015 4:46 PM
To: Dave Dietz <david.dietz@meadhunt.com>, Adrienne Moore <AMoore@WillitsCity.com>
Cc: Bob Whitney <BobWhitney@instawave.net>, Angela Liebenberg <angela.liebenberg@wildlife.ca.gov>
Subject: Willits Airport REACH project_FWS technical assistance letter

David & Adrienne,

This letter of technical assistance was signed today and will mail tomorrow.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arcata Fish and Wildlife Office
1655 Heindon Road
Arcata, California 95521
Phone: (707) 822-7201 FAX: (707) 822-8411

In Reply Refer To:
AFWO-15B0019-15TA0028

MAR 17 2015

Mr. David Dietz, Senior Project Planner
Mead & Hunt, Inc.
133 Aviation Boulevard, Suite 100
Santa Rosa, California 95403-8279

Subject: Comments on Initial Study and Biological Assessment for REACH Air Medical Services Leasehold at Willits Municipal Airport, Mendocino County, California

Dear Mr. Dietz:

This letter is Fish and Wildlife Service (Service) comments on an Initial Study and Biological Assessment for a proposed development of an air ambulance service facility at the Willits Municipal Airport, Mendocino County, California. The Service's responsibilities include administering the Endangered Species Act of 1973, as amended (Act). According to Section 3(19) of the Act, "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Incidental take is defined as take that is incidental to, but not the purpose of, carrying out an otherwise lawful activity. At issue is the potential for incidental take of the federally listed as threatened northern spotted owl (*Strix occidentalis caurina*) as a result of construction of the helipad.

REACH Air Medical Services (Santa Rosa, California) proposes to obtain a 0.34-acre leasehold at the Willits Municipal Airport, to be used as a local base for REACH's air ambulance service. The facility would consist of: a modular office building, approximately 1,850 square feet; four paved automobile parking spaces; a 400 square-foot paved helicopter parking space; and, an area surrounding the helipad consisting of gravel, asphalt, or both.

There are two known northern spotted owl territories (MEN0224 and MEN0378) with activity centers located approximately 0.7 and 0.6 mile, respectively, east of the airport. Habitat suitable for nesting and roosting by northern spotted owls generally occurs greater than 0.25 mile from the location of the aforementioned proposed facilities.

The airport is a developed facility, and therefore the Service's concerns regarding additional development of facilities associated with the medical helicopter service pertain primarily to noise associated with the building and development of these facilities. Because northern spotted owls are not likely to nest within 0.25 mile of the proposed helipad site (due to lack of nesting/roosting habitat), noise associated with the construction of these facilities are not likely to disturb an incubating owl.

Based on the above information, construction of the REACH air ambulance helipad at the Willits Municipal Airport is not likely to result in take of a northern spotted owl. We base our determination on habitat characteristics and distribution of northern spotted owls in and near the airport, the developed condition of the airport, and the types of noise generally expected to occur during construction of these facilities.

The Service is aware of proposed "mitigation strategies" that recommend minimum approach altitudes and routes for medical helicopters that would access this airport. However, we will not be commenting on these recommendations or offer recommendations that may constrain use and operation of essential emergency services such an air medical service for Willits and the surrounding communities.

All maps and data used to provide this technical assistance are on file at this office. If you have questions regarding this response, please contact Bill McIver at (707) 822-7201.

Sincerely,

Bruce Bingham
Field Supervisor

cc:
Ms. Adrienne Moore, City Manager, City of Willits, CA

Date: 17 March 2015

To: City Clerk
City of Willits
111 E. Commercial Street
Willits, CA 95490

From: Don and Maryl Morris
P.O. Box 1551
Willits, CA 95490

Subj: Public comments on the Initial Study for the proposed REACH air ambulance base at Ells Field - Willits Municipal Airport.

We're Brooktrails residents living 1/3 mile west of the Willits Airport.

After reviewing the Initial Study for the proposed REACH air ambulance base at Willits Municipal Airport prepared by Mead and Hunt (February 17 2015), we submit the following comments:

The Initial Study has significant errors, omissions and contradictions that must be rectified before the mitigated negative declaration is certified.

The Initial Study (pg. 3) asserts that "single-family residences on large lots lie west of the project site." In fact, multi-family residences on small lots lie west of the project site. The noise generated by the proposed air ambulance base will significantly affect four residential structures west of the project site on Madrone Drive - one tri-plex and three duplexes housing a total of nine families.

The portion of Brooktrails Subdivision west of the airport is zoned R-2: Two Family Residential, and C-1: Limited Commercial, creating a potential build-out to urban densities in the future.

Considering the potential of future growth, the lease agreement with REACH should include a condition requiring re-evaluation and additional mitigations if air ambulance traffic increases enough to generate cumulatively considerable impacts.

The Initial Study Figure 1 (pg. 37) is a scaled plan showing the proposed REACH leasehold, helicopter pad location, existing buildings, and the location of proposed parking and modular office.

However, there is not a corresponding figure showing the location of the alternate leasehold and helicopter pad location which is proposed as mitigation to reduce noise level below the threshold of significance at the airport/ residential interface.

This is a significant omission preventing comparison of the proposed helicopter parking pad location with the alternate parking pad location.

The Initial Study should include a scaled plan of the alternate parking pad as Figure 2.

The Initial Study proposes to mitigate the noise level to non-significance by shifting the proposed helicopter parking pad east toward the airport runway, but contradictory data in the document prevents the public from accurately determining the exact location of the alternate helicopter parking pad.

The discussion on noise mitigation (Section 12, pg. 29) asserts that "In the alternative studied, the pad was shifted 55 feet east and 20 feet north."

Figure 6 (pg. 42) shows the proposed parking pad location as 310 feet west of the runway centerline. Figure 7 (pg. 43) shows the alternate parking pad location as 150 feet west of the runway centerline and therefore 160 feet east of the proposed parking pad location (310' minus 150') not 55 feet as noted on page 29.

The Initial Study Mitigation Measure 12-1 (pg. 30) proposes to "shift the helicopter parking pad such that the eastern edge of the pad is 210 feet west of the runway centerline." This would supposedly be the alternate helicopter parking position.

However, based on Figure 7 (pg. 43), the alternate parking position is located 150 feet west of the runway centerline, not 210 feet.

Based on the numerical contradictions cited above, the Initial Study fails to adequately identify the exact location of the alternate helicopter parking pad where the average daily noise contours were modeled to justify the efficacy of Mitigation Measure M-1.

The Initial Study discussion of CNEL noise contours (pg. 29) refers to the graphic data presented on Figure 6: Proposed Parking Position (pg. 42) and Figure 7: Alternate Parking Position (pg. 43). Therefore, the data presented on figures 6 and 7 should govern in determining Mitigation Measure 12-1 (pg. 30) which should be revised to read, "shift the helicopter parking pad such that the eastern edge of the pad is 150 feet west of the runway centerline."

The Initial Study mitigated negative declaration should not be certified until the aforementioned corrections are made.

Don Morris
Maryl Morris
P.O. Box 1551
Willits, CA 95490

March 17, 2015

To: Adrienne Moore, Willits City Manager;

Re: Proposed Helicopter Pad at Brooktrails Airport

We are owners of property close to the proposed Helicopter pad at the Brooktrails Airport.
We are very much against having a helicopter pad so close to people's homes.
We feel that we are being dismissed as unimportant. Many times our property is referred to as "one of three residences to be disturbed by this project". Kind of sounds like, 'only 3, so they don't matter'.
That is not correct.
The properties that border the airport are zoned for multiple units. So, this is actually, directly affecting 7 – 9 families.

We constructed two very nice duplexes in 1997. Because they are very nice homes, we have never had a problem keeping them rented. We are very concerned that our property value will go down with a helicopter pad so close, and we may not be able to keep good renters. When that happens, the whole neighborhood eventually declines.
We do not feel moving 50 feet makes any difference at all. When you are talking about the noise of a helicopter 50 feet means nothing.
Reading the report and seeing the pictures is one thing, actually standing on the site and seeing how close the homes are, that's reality.
Please ask yourself, if you were looking for a rental, would you want to live next to a helicopter pad?
Of course you wouldn't, you would pass that rental by and look for something else.

The property does border an airport, of course their will be noise. Our tenants have never been annoyed by airport noise, they tell us it is only noisy some weekends in the summertime. The airport has never been an issue, because it's so small.

Now with a helicopter and a business operating 24/7 this will affect not only 9 + families, but the whole feel of the neighborhood.

We also feel that the sound of ambulances with sirens and red lights flashing any time of the day or night would not only be a nuisance, but dangerous as well, to all Brooktrails residence, mainly because it is not necessary.
There are better alternatives available.
Wouldn't a helicopter pad near the New Hospital make more sense?
Why would you want Ambulances driving up and down Sherwood Road?
There is already a pad near the Hospital, wouldn't it make more sense to keep these noisy landing pads together, rather than one here and one over there.

We are very much in favor of the "Reach" Emergency Helicopters, they provide a much needed service.
With all the smart minds involved in this project, we are sure a solution can be reached that would work for everyone.

Thank you for your time.

Sincerely,
Leo and Carol Cid

March 21, 2015

To Whom It May Concern:

I Leo Cid, own property on Madrone Dr, probably the closest residential property to this helicopter project.
I am very concerned about the impact it will have on my property and the four families that live there.
I built these properties with a lot of pride, they are clean and quite and the people love them, they are some of the nicest rentals in Brooktrails.
These are my retirement. I built them for Income,
also a place to live when I get older.
I do not want to hear the noise of helicopters in my retirement.

I worry about good renters not wanting to live there because of the noise and I worry about the property values going down.
At my age I don't need my property values going down,
their already down low enough.
Somebody needs to convince me this will not impact my properties with unacceptable noise and that the property value will not go down.

Would YOU consider renting or owning/buying my duplex with a helicopter pad 300 ft. away?

Thank You,
Leo Cid

Law Office of Rose M. Zoia

50 Old Courthouse Square, Suite 401
Santa Rosa, California 95404
707.526.5894 . fax 267.381.6097
rzoia@sbcglobal.net

March 25, 2015

Adrienne Moore
City Manager
City of Willits
111 East Commercial Street
Willits, CA 95490

Re: REACH Air Lease, Willits Airport
Initial Study/Mitigated Negative Declaration Comment Letter

Dear Ms. Moore:

Please accept these comments on behalf of Keep the Code on the Initial Study/Mitigated Negative Declaration for the REACH Air Lease Project at Willits Airport.

Curiously, the Initial Study claims that

> No environmental review is required to introduce regular helicopter operations at the Airport. Helicopter operators have a right to use the Airport; no approvals are required. In this way, airports are like roads; no approval is required for individuals to use either type of transportation facility.

(IS:2.) Yet, by preparing an Initial Study, it also acknowledges that helicopter operations of landing and taking off do create a significant adverse environmental impact and is a discretionary project subject to CEQA review. The City acknowledges the need for CEQA review by completing the Initial Study as well as in email correspondence from Adrienne Moore to the undersigned dated October 27, 2014, and January 30, 2105.

The Initial Study states that "[i]t is anticipated that an average of one flight per day will occur (e.g., one departure and one arrival) initially. This is expect (sic) to grow to an average of 1.5 flights per day. However, the number of flights on any particular day will vary depending upon the demand for services." (IS:2.)

The total helicopter flights per day and per year are critical limits to mitigate for significant adverse impacts, both individual and cumulative, from helicopter noise as indicated elsewhere in the Initial Study. However, there are no recommended mitigations or conditions of project approval that limit the daily or annual helicopter flights.

With respect to the surrounding land use, the Initial Study states that "[s]ingle-family residences on large lots lie west of the project site." (IS:2.) In fact, the referenced lots average about one-quarter of an acre and include multi-residential units as well as single-family residential units.

The California Environmental Quality Act (CEQA) requires a "accurate stable and finite" description of the project and its environs.[6] That is not the case here.

Inadequate Analysis of Biological Impacts to Northern Spotted Owl (NSO)

The Initial Study acknowledges that in the early 1990s, there were two NSO sightings less than one (1) mile northeast of the Airport and five sightings short of a mile southeast of the Airport and that the locations of the sightings are in areas that are overflown by aircraft flying a standard traffic pattern. The standard landing pattern at that point can be expected to be at an altitude about 800 to 1,000 feet above the Airport's elevation. REACH's chief pilot states that he anticipates REACH pilots will approach the Airport at a right angle to the runway and then turn towards the Airport about one-half (½) mile away from the end of the runway. The chief pilot expects that the helicopter will be descending through 1,000 feet above Airport elevation while on the base leg of the approach. (IS:13.)

The Initial Study also acknowledges that "the REACH helicopter may pass over the locations of the historical Northern spotted owl sightings depending upon the destination and other factors . . . ." (IS:13.) In particular,

[6] *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

(USFWS letter, p. 2.) On March 10, 2015, Keep the Code provided both the USFWS and the City with a letter from Richard Tanner, conservation biologist and recognized NSO expert dated December 29, 2014. Mr. Tanner's letter is attached hereto. This biologist's letter provides a summary review of the NSO status near the Willits Airport, an assessment of the noise disturbance to NSO habitat from the helicopter flight operations and concludes that

> The REACH project at Willits Airport is a disturbance only project for the NSO because no suitable habitat will be eliminated or converted. Disturbance from this project will not result from construction but from the ongoing activity of the helicopter ambulance service provided by REACH. Based on the reported decibel levels from the Guidance, helicopter flights under 500ft above ground level could result in the noise disturbances approaching or above thresholds for take of the species.

(Tanner letter, p. 3.)

Mr. Tanner further proposes mitigation measures:

> To avoid impacts and the potential for take of NSO, I recommend that REACH helicopters avoid flying low over suitable NSO habitat within one mile of the airport. This should include all areas with suitable habitat which have not been surveyed for NSO occupancy; however, this does not include non-forested areas within and immediately adjacent to the Willits Airport. The vertical buffer could be reduced for habitat which has been annually surveyed and is confirmed to be unoccupied or occupied by non-nesting NSO. This buffer or 'floor' for helicopter flights follows the findings of Delaney et al (1999) who studied the responses of Mexican spotted owls during military operations. This mitigation is not intended to interfere with helicopter operations, but is proposed to protect the NSO from harm.
>
> * * *
>
> A standard 800-foot vertical helicopter operational floor will be implemented for flight over suitable NSO habitat within one mile of the

CEQA requires the preparation of an Environmental Impact Report (EIR) when there is substantial evidence in the record to support a fair argument that the project may have a significant effect on the environment. If a fair argument based on substantial evidence is established, an EIR must be prepared.[7] A negative declaration may be prepared only if there is no substantial evidence of a significant adverse impact.[8] "Substantial evidence" is defined as "fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact."[9] Here, there is expert opinion that the project may create significant impacts to the NSO and, thus, the negative declaration is improper.

Inadequate Analysis of Noise Impacts

The Initial Study states

> The addition of the project would expand the noise contours to the west. With the helicopter parking position in the originally proposed location the 60 CNEL noise contour extends over the residences located immediately west of the project site. This is considered a potentially significant effect. Mitigation 12-1: Shift the helicopter parking pad such that the eastern edge of the pad is 210 feet west of the runway centerline."

(IS:29-30.) However, as other commentators have pointed out, there seems to be disparity in the project diagram in the Initial Study and there may be a potential conflict with aircraft landing safety with this proposed westerly relocation.

The Initial Study further states

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[7] *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307; *Friends of B. Street v. Hayward* (1980) 106 Cal.App.3d 988, 1003; Pub. Res. Code § 21080, subds. (c)(1), (2).

[8] *Friends of B Street, supra*; Pub. Res. Code § 21080, subd. (c); CEQA Guidelines (14 Cal. Code Regs.) § 15064, subd. (f)(3).

[9] Pub. Res. Code § 21080 subd. (e)(1).

pad location would reduce the noise impacts to a level that is less than significant.

(IS:29 [emphasis supplied]. Figure 6 shows that the proposed helicopter parking position would be 310 feet from the centerline of the runway. Figure 7 shows the alternate helicopter parking position as 150 feet from the centerline of the runway. Thus, these two figures indicate that the recommended mitigation for noise impacts to the residential neighborhood to the west is to move the helicopter parking position 160 feet to the east, not 55 feet to the east as stated on page 29 of the Initial Study.

Also, Mitigation 12-1 recommends a shift of the helicopter parking pad such that the eastern edge of the pad is 210 feet west of the runway centerline. This confusion needs to be corrected and clarified. Query if moving the helicopter parking pad such that the eastern edge of the pad is 210 feet west of the runway centerline would be adequate to mitigate for noise impacts to the residential neighborhood to the west?

There is substantial evidence in the record to support a fair argument that the project may create significant noise impacts.

Expanded Water Usage Issue

As reiterated in the Initial Study, a project creates a significant impact if there are not sufficient water supplies available to serve the project from existing entitlements and resources, or if new or expanded entitlements are needed. (IS:35.) The "No Impact" response is incorrect as explained below.

On October 15, 2014, Brooktrails Community Service District (BTCSD) received an application from REACH Air Ambulance Service for Expanded or New Water and Sewer Connection for a water service connection outside the district boundaries to the adjacent Willits Municipal Airport for REACH's proposed new facility at the airport.

On October 17, 2014, the State Water Resources Control Board Compliance Order No. 02_03_14R_002 addressed to the BTCSD in part ordered that, "[e]ffective immediately upon its receipt of this Order, the System shall not make

Inadequate Mandatory Findings of Significance Analyses

The Initial Study incorrectly answers the following issues:

1. Would the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

and

2. Would the proposed project have impacts that would be individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

With respect to #1, the NSO community and habitat in the vicinity is diminishing over time due to loss of forestland from timberland conversion to the east and infill of residences on vacant lots within the Brooktrails Township development to the west. Furthermore, the two letters regarding the NSO from the USFWS and Mr. Tanner both state that there are two known NSO territories detected within one mile of the airport. Mr. Tanner's letter provides further detail explaining that each NSO territory has two previously detected Activity Centers. The most recent information on one of the NSO territories, MEN378, is from 1993. In the other NSO territory, MEN224, a breeding pair of NSOs produced at least two offspring as recently as Spring 2013. The Initial Study lacks sufficient and current information on these two Activity Centers and two NSO territories to reach a conclusion that there will be no significant adverse impact to the NSO and its habitat. Unless impact avoidance mitigation measures are adopted as recommended in Mr. Tanner's letter, an NSO survey is needed to determine if there is suitable NSO habitat within one mile of the airport, including determining

TANNER
ENVIRONMENTAL SERVICES

December 29, 2014

Keep the Code
PO Box 131
Willits, CA 95490

Re.: Noise disturbance on the Northern Spotted Owl and Recommended Mitigations for the proposed REACH Project at the Willits Airport

To whom it may concern,

This is in response to the request from Keep the Code for an evaluation of potential impacts to the northern spotted owl (NSO) from the proposed REACH Project at the Willits Airport. The Willits Airport is located approximately 4 miles north of the city of Willits, Mendocino County, California. The NSO is a mid-sized forest dwelling owl which ranges from British Columbia to just north of San Francisco. Throughout most of its range, it is associated with large stands of late seral stage forests. It is also found in regenerated second growth forests, especially those with relict patches of old growth trees.

Your organization requested that I address the issue of noise disturbance to the NSO from helicopter traffic and, if appropriate, that I recommend mitigation measures. To assess potential impacts, I conducted research on NSO habitat suitability in proximity to the project area as well as known NSO activity centers. In addition, I referenced the US Fish and Wildlife Service's (USFWS) Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to NSO and Marbled Murrelets in Northwestern California, Arcata Fish and Wildlife Office, dated July 31, 2006 ("Guidance"). The Guidance applies to activities which have the potential to disturb the NSO as a result of substantially elevated sound levels or human presence near nests during the breeding season.

NSO Status near Willits Airport

The area around the Willits Airport to the northwest, north, east and south contains suitable foraging habitat for the NSO. Forest characteristics within this area are varied and include dense stands of young Douglas fir to mixed age stands ranging from 6-inches to approximately 24 inches Diameter at Breast Height (DBH), with a hardwood component in the understory. Small stands of potential NSO nesting/roosting habitat occurs in isolated locations especially in drainages to the east, north and northwest of the project area.

P.O. Box 1254
Alameda, California
94501

Telephone (805) 636-1806
TannerEnvironmental.com

Measured Sound Source	Reported Decibel Value	"Standardized" Value At 50 ft.	Relative Sound Level
Helicopter S-61 (low end) (large, single rotor, loaded)	79 @ 500ft.	99	Very High
Helicopter S-61 (low end)	77 @ 800 ft.	101	Extreme
Helicopter S-61 (high end)	106 @ 100 ft.	112	Extreme

Conclusion

The REACH project at Willits Airport is a disturbance only project for the NSO because no suitable habitat will be eliminated or converted. Disturbance from this project will not result from construction but from the ongoing activity of the helicopter ambulance service provided by REACH. Based on the reported decibel levels from the Guidance, helicopter flights under 500ft above ground level could result in the noise disturbances approaching or above thresholds for take of the species.

Mitigation Measures

To avoid impacts and the potential for take of NSO, I recommend that REACH helicopters avoid flying low over suitable NSO habitat within one mile of the airport. This should include all areas with suitable habitat which have not been surveyed for NSO occupancy; however, this does not include non-forested areas within and immediately adjacent to the Willits Airport. The vertical buffer could be reduced for habitat which has been annually surveyed and is confirmed to be unoccupied or occupied by non-nesting NSO. This buffer or 'floor' for helicopter flights follows the findings of Delaney et al (1999) who studied the responses of Mexican spotted owls during military operations. This mitigation is not intended to interfere with helicopter operations, but is proposed to protect the NSO from harm.

My recommendation is as follows:

- A standard **800-foot vertical helicopter operational floor** will be implemented for flight over suitable NSO habitat within one mile of the airport to the northwest, north, northeast, east and southeast; and that the proposed air ambulance could fly below the 800-foot operational floor when taking off and landing in a southerly direction while over the airstrip without noise disturbance to the NSO.

If you have any questions or require additional information, please contact me directly.

Sincerely,

Richard G. Tanner

March 26, 2015

City Clerk
City of Willits
111 East Commercial Street
Willits, California 95490

Regard: REACH project

Please do not allow a permanent REACH helicopter base at Ells Field, Willits. It will greatly increase sound pollution, air contamination and disturb the peacefulness of the area. The base will have a negative impact on humans and animals. While the degree of detriment may vary from different humans to species of birds and animals, I strongly believe that the sensitive among us will suffer at the very least.

When I moved to Brooktrails three years ago I thought I was moving to a quiet environment, relatively free of pollution and noise. I thought the residents and it's governing boards appreciated, respected, understood and would do anything to preserve the natural beauty of the area. Brooktrails is advertised on the BTCSD web page as "an environment.. where you can see the stars at night and breath clean air." I hope I was not mistaken. This area is unique and every effort should be taken to preserve it's simplicity within nature.

The REACH base in Brooktrails will taint the inherent beauty and serenity of this area in many ways. Yes, we live near an airport, but small private planes that come and go, is an entirely different situation than having a full-time for profit business move onto the airport. The helicopter is an entirely different vehicle than the small plane and is more bothersome. I am not against the REACH helicopters utilizing the airport for emergency medical transportation when it is justified, but I am absolutely against the building and utilization of a REACH base in Brooktrails.

The Board should realize that the "Initial Study" for the "REACH Air Lease" (aka STUDY) does not report the full logistics of the area and has several errors and omissions. Furthermore, all of the conclusions of the STUDY are by the staff of Mead & Hunt, Inc. with some conclusions by REACH personnel. I don't know what the protocol is in these situations, but certainly there should be another party who is not invested in the outcome either way, making informed decisions and judgments about the criteria, at the very least a fact-checker.

While I am not a scientist, nor is it my area of expertise to analyze airports, I have studied Mead & Hunt's determinations and am perplexed why this STUDY was accepted and approved by the Willits City Manager. I hope my findings and concerns will open your eyes to the inconsistencies and minimizing so that you may clearly understand the impact of the REACH base.

The following are my findings and concerns:

AIR POLLUTION

The base requires a 5,000 gallon fuel truck containing Jet A. Jet A is a kerosene based fuel that contains lead, which has been banned in California for the use in cars. The U.S. EPA recognizes lead as a neurotoxin. Not only will the helicopter emissions contaminate the area, but when the helicopter is refueled, inevitably fuel particles will be leaked into the air and/or spilled on the ground.

In December 2014, the Center for Environmental Health (CEH), won a legal agreement with 30 companies that sell and/or distribute lead-containing aviation gas at 23 small California airports, calling on the companies to provide safer alternative fuels. While Ells Field may be considered a small airport, adding the REACH base will certainly increase the lead poisoning in the area.

The CEH has provided maps for those 23 airports. I have attached copies of web pages with this information.

The maps document in a frightening outline how poisonous the areas around the airports are from the contaminants in the jet fuel. While these airports are not Ells Field specifically, you can certainly imagine that adding the Jet-A truck along with the helicopter to the area will increase our toxicity. I enclose the San Luis Obispo County Regional Airport, as a specific example.

To clarify about the lead in the Jet-A, I quote part of the article;

"Lead is a stunningly toxic chemical linked to serious health problems for children and adults, including reduced IQ and damage to the nervous system, kidney function, the immune system, reproductive and developmental systems and the cardiovascular system. Between 1974 and 1995, the use of leaded gas for cars was gradually phased out. But today small propeller planes and some helicopters are still allowed to use leaded aviation gas (avgas). Currently, leaded avgas is the largest source of lead air pollution in the US, causing emissions of over 500 tons of lead per year. Recent research has found that children living near general aviation airports have higher blood lead levels than children living farther away."

A 2011 Duke University study found that kids living within 1,640 feet of an airport where leaded avgas is used have higher blood lead levels than other children, with elevated lead levels in blood found in kids as far as 3,280 feet away.

Furthermore, the STUDY does not say if the fuel truck will remain stationary or will drive to where the helicopter is parked to refuel. Presumably the truck will drive to the helicopter. This means that a probable diesel emitting tanker truck will be started up one to several times per day to refuel the helicopter, drive to the heli-pad and probably remain running while it is refueling, or turn off it's engine, only to be started again, then return to it's parking position.

This scenario will release more toxins into the air and will affect the surrounding household in Brooktrails.

The large refueling truck carrying thousands of gallons of Jet-A will also be driving thru Brooktrails on a regular basis to refuel the base truck. The STUDY estimates every 4-6 weeks. I assume that estimate is for helicopter usage of 1x per day since it seems the STUDY is using that minimal estimate for most of it's calculations, even though they foresee 3 trips per day. I ask the Board to consider what the actual amount of refueling will be with the REACH base in full operation and the actual number of trips by the refueling tanker thru the streets of Brooktrails.

DIESEL FUEL exposure, no matter how minimal is of great concern as well. A quote from the CA EPA, "diesel is considered to be a toxic air contaminant based on its potential to cause cancer, premature death, and other health problems. The most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems." I was exposed to a running diesel truck two decades ago and developed terrifying symptoms of a painful heart attack. I was rushed to the emergency room and given nitrates, only to realize my suffering was due to truck emissions. Diesel exhaust is dangerous.

The STUDY does not say if other non Willits based REACH helicopters will land and refuel at Ells Field? Once established, will REACH be able to fuel their helicopters as many times as they deem necessary?

The STUDY is clearly underestimating the "fueling" needs and I ask the board to really understand the impact it will have on Brooktrails residents, especially the environmentally sensitive, the elderly, and the children.

The STUDY assesses Category #3, AIR QUALITY, as having a "less than significant impact," on Points D and E.

I would like to know what clarifies Point E? The question; does this project "create objectionable odors affecting a substantial number of people?" In their comment section, they say "odors from car or truck exhaust are not anticipated to be detectable," and that the three residences that are closest to the helicopter pad MAY detect the smell of jet fuel, depending on the speed and direction of the wind. I ask the Board to consider that three residences having to "smell" jet fuel is three too many. Also, I have seen mother's walking with their baby strollers by that area a great deal, so the potential for contamination is far greater than the 3 households.

It seems the STUDY concludes that "smell" is the only acceptable gauge of air pollution? I ask the Board to look at the map I have attached to see how air pollution from an airport affects the surrounding residential area. The California Environmental Protection Agency Air Resources Board, has information about air pollution. "We can see some air pollutants such as reddish-brown haze in smog; however, other air pollutants, including some of the most dangerous, are invisible. Very small amounts of these pollutants can cause serious health and environmental problems. Air pollution damages crops, reduces property values, and is harmful to humans -- especially children and the elderly."

Does the STUDY take into account that the helicopter may run for various periods of time while sitting on the runway, exhausting the jet fuel? Emergency helicopters are sometimes kept running for minutes while waiting to load or unload an individual from an ambulance.

Also, when the mechanic checks the helicopter each morning, does that include starting up and running the engine, and for how long? How many times will the helicopter be started due to mechanical problems?

Adding to the air pollution are the employee vehicles and ambulances that will be driving to and from the airport. This effects all of Brooktrails, although will have greater impact for those of us near the airport, and for those of us who live on the hills leading up to the airport. I live between two of the roads that are commonly used for transportation to the airport. The STUDY says "on an average day, the project will generate 10 vehicle trips by REACH staff." I ask the Board investigate what justifies the estimate of 10 vehicle trips per day? Does that estimate include the jet refueling truck, the ambulances, personal visitors, trips to obtain mechanical parts and/or personnel meetings?

Their justification for Point D is the following statement. "The nearest sensitive receptor (a residence) is 275 feet from the proposed parking spaces and 350 feet from the helicopter parking position. With this volume of activity and distance from the nearest sensitive receptor, a "hot spot" analysis is not justified. Pollutant concentrations will be less than significant." Again, a complete under analysis of the FACTS. The vehicles will be driving the roads of Brooktrails and each trip will have an impact on

the residents. Those of us who live on the roads to and from the airport WILL BE IMPACTED and the residents along the runway WILL BE IMPACTED, especially those of us living close to the proposed base.

According to the Mendocino county Air Quality Index there are quite a few days considered "moderate" and "unhealthy for sensitive groups" during the year. Those of us close to the airport will experience further pollution, however, as far as I know, there will be no monitor in the area to advise us when the pollution reaches the next "AQI Level of Health Concern" from the pollution generated by the base. We enjoy fresh air and quiet summers here and keep our windows open. The proposed base will allow contaminates into our homes and upset the safety we have here.

Another thing which I find interesting is the REACH company job description for it's Ells Field Nurse, states the following under "environmental conditions." "The Flight Nurse may be exposed to routine office noises, moderate electrical or mechanical hazards and frequent exposure to an aircraft hanger environment where the Flight Nurse may be exposed to loud aircraft noise, fumes, gases, odors, dust particles and mechanical/electrical and chemical hazards." The Nurse is required to wear "protective equipment," such as; HEPA mask and hearing protection.

What are these hazards and why are they not a concern for the residents of Brooktrails? While the Nurse is paid and will be choosing exposure to these hazards, the residents in the area, did not choose to live among these hazards when moving here. And why are they not honestly included in the STUDY?

NOISE PROBLEM

The STUDY is really confusing with regard to it's noise mitigation measures. Category 12, "Noise" has been deemed "Less than significant impact with project mitigation," specifically, "relocation of helicopter parking pad resolves potential noise impact."

Apparently, the STUDY considers a 20 foot move North and 55 feet east from the proposed helicopter pad sufficient to hinder noise levels from the helicopter. The STUDY presumes that the only people to be affected are the 3 houses closest to the heli-pad. As if, there is a sound wall between those three houses and the rest of Brooktrails.

There is no sound wall, and the sound of the helicopter carries into the neighboring community.

The current airplane pattern is different than the proposed helicopter pattern. The airplanes must approach and depart the designated runway per FAA flight regulations of Ells Field. Once the plane lands, the noise is substantially lessoned, even during the short taxi to park.

However, the proposed flight pattern of the helicopter puts it very close to our homes. And, helicopters do not have to follow the same rules as the planes. They can fly wherever they want. I have proof of this myself. On February 28, at 5:50 am, I was awakened by a helicopter which was flying near my home. Within a minute I was outside, and I videotaped a REACH helicopter flying very low over my home and my neighbors homes, before it flew north then back again to land at the airport. Not only was it very loud, but frightening, as it was not even close to the runway and outside of the airport boundary. The helicopter barely rose above the tree line. An hour later, the helicopter left and I recorded that as well. Since there is no control tower at Ells Field, there is no way to police the aircraft. Is this fly-over of homes next to the airport, the new landing approach?

With that fly in and out, I was able to personally gauge the nuisance of the helicopter. The helicopter sound is allot louder than the private planes AND, they fly at night, and I could hear the helicopter as it sat at the airport for several minutes before it turned the engine off, presumably allot farther away then the proposed heli-paid since there is none at this time.

I do not agree with the STUDY's determination on Category #12, NOISE. Category b, says there is "no impact" from "exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels." The helicopter does not stop the engine upon landing, so the noise of the engine and the main rotor blade will continue from the current runway, to the proposed heli-pad and then will go on for a certain duration, presumably to load a patient and/or mechanics check. The same goes for Category d. There is no night traffic at Ells Field currently, and presumably night traffic will increase by helicopter and by ambulance.

The STUDY utilizes the 24-hour CNEL to measure the current and proposed noise at Ells Field. I would like to point out several mathematical inconsistencies.

TABLE 1 - Noise Model Operations Inputs; documents 730 annual trips by REACH and is explained in the paragraph below that their CNEL noise contour is for the one daily departure and arrival, which is the "average annual activity level anticipated for the project." However, according to the key on the images (Figure #6-#8), the CNEL is calculated using an estimate of 1,095 annual REACH operations which is 1.5 per day.

The STUDY confirms in several areas that they project up to 3 arrivals and departures per day "in the future." I would ask the Board to consider another estimate using 3x per day as the true criteria. Three operations per day equals 2,190 per year which is almost twice the amount of current "forecasted" operations for the airport.

I am also confused by the graphics. The STUDY has created 3 different maps for the various CNEL noise contours. Figure #6 shows the "originally proposed" helicopter pad at 310 feet west of the runway. Then in Figure #7, it shows the shift in the pad's location to the proposed mitigation site. Per the explanation, the pad is shifted 55 feet east, which should now equal 255 feet west of the runway, yet in the diagram, it is noted as 150 feet. A third number, the "Mitigation" is to "shift the pad such that the eastern edge of the pad is 210 feet west of the runway centerline." A fourth measurement for the heli-pad was introduced in the opening paragraph #9 as "the airport's sole runway lies about 275 feet east of the proposed" heli-pad. Admittedly, there may be an airport CNEL algorithm here I do not understand. However, if the math is wrong, I am bringing it to the Board's attention.

Is the heli-pad, 275, 255, 210 or 150 feet west of the center runway?

I also wonder why the CNEL is being measured from the EASTERN EDGE of the pad and not the WESTERN EDGE, which is closest to our homes? The STUDY documents the paved helicopter parking position to be 20 foot by 20 foot. The CNEL noise contour line should be adjusted by 20 feet to the west. This would be another area that the board should investigate. The STUDY is clearly minimizing encroachment.

The size of the Airbus EC135 is 33 feet long. Presumably, the noise generated from the aircraft would begin at it's tail section, which is 13 feet longer than the diameter of the heli-pad.

Also, is the calculation for the CNEL taking into account night time usage, which adds decibels to weight sound levels according to time? This would have a significant impact on the measure for the Spotted Owl and humans.

Either way, I ask the board to remember that CNEL noise contours are decibels measured, however, it does not take into account the abruption of life that living in this area will now be.

Another noise the STUDY has not documented is the noise from repairs to the helicopter. I do not know what they are, but I imagine there are noises similar to a mechanics shop.

Another noise that the board should consider is the ground ambulance. It's siren is measured at 110 decibels, far exceeding the safe threshold. While, REACH may say that they can utilize the airport for medical transportation, which includes the ground ambulance, having a base at Ells Field will increase feasibility.

BIOLOGICAL CONCERNS

I now ask the Board to think about the surrounding natural habitat that will be affected by the REACH helicopter base. Specifically, the threatened Northern Spotted Owl (SPOW.) I myself, have been a citizen scientist for Audubon since 1999 and have counted and lived among the SPOW, here and in Marin county. There are only about 2,100 pairs of this beautiful bird that have survived the negative impacts to their environment. We should take every care to help them and take every precaution to not harm them.

The STUDY relies on studies from the 1990's, and are using nesting locations from that era for their data. The spotted owls move their nest sites. Also, they are not a stationary animal. I have heard the male barking at night on the outskirts of the airport. So while the study relies on decades old nesting criteria to make a decision, I am informing the board that the owls active around the airport.

The STUDY informs us that the REACH helicopter flight path is "expected to be around 1,000 feet above airport elevation." If this is true, then why did the REACH helicopter fly just above our tree line in Brooktrails? This would of had an affect on the SPOW and the Western Screech Owls, another owl species. The owls are hunting at night and establishing and guarding their territory.

I also ask the board to consider that the devastation of Little Lake Valley and the new freeway will have an affect on the SPOW. If we add another negative factor, it may add to the growing number of threats to the bird.

Also, the 2009 biological assessment that the STUDY sites as evidence was to evaluate the slide area at the north end of the airport. The study was based on three visits to the airport in April, May and June of 2009. The study does not specifically address how the proposed buildings, helicopter, fuel truck, traffic, parking and heli-pad will affect the surrounding plant and animal communities. There are plant species of concern at the airport, i.e. the Sonoma canescent manzanita. There is a stand close to the proposed REACH area.

HAZARDS AND HAZARDOUS MATERIALS

The STUDY has determined that there will be "no impact." If I understand their reasoning, they are side-stepping the residents of Brooktrails as an impact zone. They consider the airport boundary as the impact zone and since it is currently an airport, they find no hazards from the proposed project.

As I have mentioned, I believe, the Jet fuel on-site tanker should be considered something that could create a "significant hazard to the public or environment." The jet fuel being transferred either from tanker to tanker or tanker to helicopter has the possibility of being spilled.

What type of medical waste will they have and how long will they store it and where and when will they discard?

What other chemicals will be on site; such as motor oil, anti-freeze, cleaning fluids, etc? The STUDY does documents "oil changes" at Ells Field. Where and how will they store it, for how long, and who will discard it away from the premises?

GREENHOUSE GAS EMISSIONS

Another discrepancy in the STUDY. The overall judgement "environmental factors potentially affected" under this category is considered "no impact" although a conflicting opinion is attached "may increase emissions in long term." Since when is "long term" considered not to have an impact on humans and animals? And what is considered "long term?" The STUDY has conflicting data.

I do not understand the logic behind this determination, which was solely "judged" by Mead & Hunt, Inc. and Jim Walker, Facilities Manager for REACH. I also do not understand how the "initial operations will either reduce greenhouse emissions or be neutral." The STUDY is for Ells Field operations, not other airports or hospitals in the vicinity. How the operation will "reduce" emissions in Ells Field is perplexing to me. It does say "any increase would contribute to the cumulative generation of greenhouse gases in Willits and Mendocino County," but goes no further, sighting "no threshold exists to measure the significance of the greenhouse gas emissions for this small-scale development."

I believe there is a way, and I hope the Board will agree with me. At the very least, REACH should not be making a judgment of this kind and are clearly minimizing impacts.

Shouldn't carbon dioxide, methane, nitrous oxide and hydrofluorocarbon emissions be considered greenhouse gas emissions? At a minimum, just the employee vehicles alone, should have some sort of impact.

OTHER CONCERNS and/or QUESTIONS

Is the Board aware that the property values closest to the airport will most likely deflate? Those of us who are directly impacted by the extra noise, especially at night, and the added pollution, will most likely have homes we will not be able to sell at full market value.

How will the placement of the office building, helicopter and the jet fuel truck impact Brooktrails residents as the township's emergency evacuation meeting place?

If there is an emergency, such as a fuel spill, how will the residents in close proximity to the airport be notified in an expedient way? Is the Brooktrails Fire Department trained and equipped for a hazmat spill?

The STUDY indicates routine major maintenance will be performed at Charles M. Schulz airport. I assume this means another helicopter trip in and out of Ells Field for this purpose that is not included in medical transportation numbers.

Ells Field, as far as I know, does not have a security system. I believe there is one camera at the entrance. Will there be increased security for the medical supplies, mechanic shop and fuel tank? When the crew is off on a mission, who is guarding the base?

Since the STUDY has omissions and errors, residents of Brooktrails, the Boards of Willits and Brooktrails may not fully grasp the implications and dangers of this base. I ask that you investigate the objections I have pointed out and reissue a new study which is honest, free of error and documents EVERY danger and the harmful effects it will have for the inhabitants, with the full scope of REACH air and ground traffic studied and not minimized.

People like me who are environmentally sensitive will suffer. If this base and its on-site fuel truck, mechanics garage and heli-pad were here 3 years ago, I never would of purchased a home in Brooktrails. If you allow this base to be built, I will suffer from it. If you would like to ask me about how my health will be impacted, I would be happy to talk to you privately.

The Board must consider the sensitive human population, just as it would consider the sensitive bird and plant species in the area.

The community needs to heal, not exhaust ourselves from the inability to appreciate what we have here. Within two years, we will have a freeway, the altered/destroyed Little Lake Valley wetlands, potentially the spraying of pesticides and a polluting helicopter business in Brooktrails which is not far from Little Lake Valley logistically. Our trees are not getting enough water due to the drought, so you add more stressors to the environment and what do we have?

Please protect our environment, not destroy it. Once destroyed, it cannot be reversed.

As REACH points out, they don't have to ask permission to use Ells Field. Allow them use of the airport on a transitory basis, but do not allow them to add another one of their stations to Ells Field.

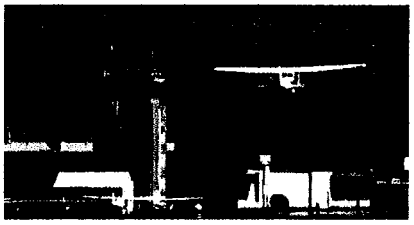
The REACH base is far too close to Brooktrails and there is no room in our quiet and safe community for what it proposes; an 1,850 square feet office building, four paved parking spaces, a 400 square foot heli-pad, a tanker holding 5,000 gallons of flammable and toxic fuel, a mechanics shop inside the existing hangar, a minimum of 20 cars per day back and forth from the airport and an unknown amount more for supporting personnel, an average of 2,190 helicopter ambulance flights per year, an unknown number of helicopter flights for other reasons, a huge refueling tanker driving thru Brooktrails at least 12 times per year, medical waste, hazardous materials, greenhouse gas emissions and physical and psychological disruption to the lives of the residents as well as birds and mammals.

The REACH base is just not a good fit for the sensitive nature of Brooktrails. Please, do not approve the REACH base.

I very much appreciate your time.

S. Colletta
scolletta@earthlink.net
Brooktrails
707 841-1264

Map: California Neighborhoods Affected by Lead from Aviation Fuel

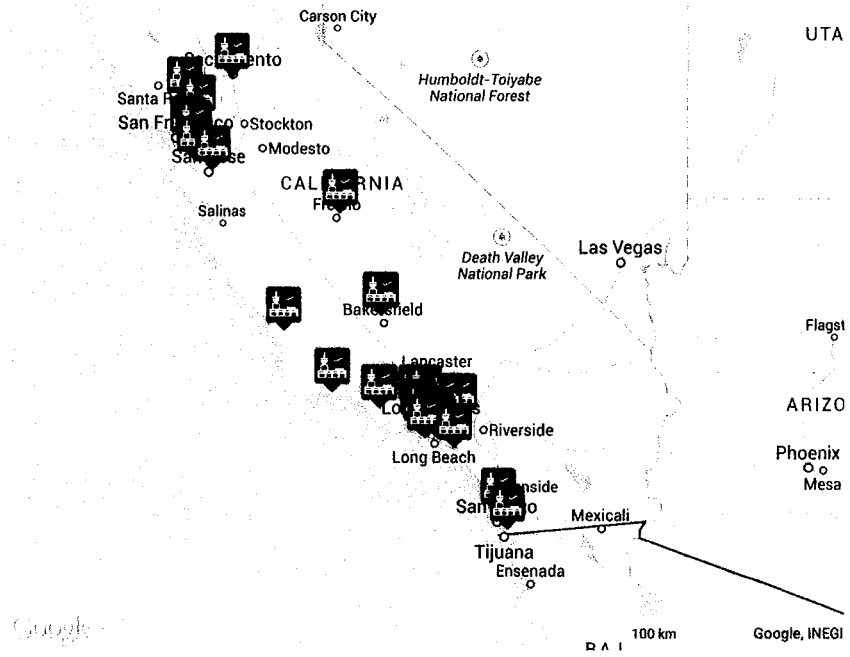


If you live near an airport, either a small regional airport or a large airport that is also used by small planes, you know that air quality problems are a daily reality. Lead pollution from small airplanes that continue to use lead-based fuel is a major problem, since lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system.

CEH took legal action in California to address the pollution problem from lead-based aviation fuel, and we have reached a **ground-breaking legal agreement** to help alleviate lead pollution around 23 California airports. We also expect our legal action will prompt the aviation industry to adopt lead-free fuel more quickly, sparing the air around airports nationwide.

Do you live near one of the airports on the map below?

Click on the airport icon to see a map of the neighborhood around the California airports with significant lead emissions. (*Airport list is below the map*)



Take Action Now!

CALL THE SENATE AT
(202) 224-3121
ASK FOR YOUR SENATOR'S OFFICE, AND ASK THEM TO OPPOSE THE FRANK LAUTENBERG CHEMICAL SAFETY LEGACY ACT OF 2015

Did You Know?

ESTIMATED REGISTERED SYNTHETIC CHEMICALS

80,000

PERCENTAGE OF CHEMICALS FOR WHICH EPA HAS REQUIRED SAFETY TESTING

0.25%

2 of 2

- **Bob Hope Airport** (BUR- Burbank)
- **Brackett Field** (POC- La Verne)
- **Brown Field Municipal Airport** (SDM- San Diego)
- **Buchanan Field** (CCR- Concord)
- **Camarillo Airport** (KCMA- Camarillo)
- **El Monte Airport** (EMT- El Monte)
- **Fresno Yosemite International Airport** (FAT- Fresno)
- **Hayward Executive** (HWD- Hayward)
- **John Wayne Airport** (SNA- Santa Ana)
- **Long Beach Airport** (LGB- Long Beach; formerly Daugherty Field)
- **Los Angeles International Airport** (LAX- Los Angeles)
- **Meadows Field** (BFL- Bakersfield)
- **Montgomery Field** (MYF- San Diego)
- **Napa County Airport** (APC- Napa)
- **Oakland International Airport** (OAK- Oakland)
- **Palo Alto Airport** (PAO- Palo Alto)
- **Reid-Hillview Airport** (RHV- San Jose)
- **Sacramento Executive Airport** (SAC- Sacramento)
- **San Luis Obispo County Regional Airport** (SBP- San Luis Obispo)
- **Santa Barbara Municipal Airport** (SBA- Santa Barbara)
- **Santa Monica Municipal Airport** (SMO- Santa Monica)
- **Van Nuys Airport** (VNY- Van Nuys)
- **Zamperini Field** (TOA- Torrance)

If you live near a small airport that is not on our list, contact CEH (**caroline@ceh.org**) for more information. You can also **sign up for our mailing list** to stay informed on this, and also receive many other health tips for your children and families.

Leaded Gas: Out of Cars But Still in Planes

If you were driving a car before 1995, you may remember that cars sometimes used "regular" (leaded gasoline). Leaded gasoline was the only gasoline available between the 1920s and the early 1970s. Between 1974 and 1995, the use of leaded gas for cars was gradually phased out. The **US Environmental Protection Agency** called this "one of the one of the great environmental achievements of all time," noting that "thousands of tons of lead have been removed from the air, and blood levels of lead in our children are down 70 percent. This means that millions of children will be spared the painful consequences of lead poisoning, such as permanent nerve damage, anemia or mental retardation."

While cars were required to use unleaded fuel after 1995, today small propeller planes (often called general aviation planes) and some helicopters are still allowed to use leaded aviation gas (avgas). Currently, leaded avgas is the **largest source of lead air pollution in the US**,causing emissions of over 500 tons of lead per year. **Recent research** has found that children living near general aviation airports have higher blood lead levels than children living farther away, and studies have linked high childhood lead levels to a host of serious health problems./