

Napa County

1195 THIRD STREET
SUITE 310
NAPA, CA 94559



Agenda

SPECIAL MEETING

Wednesday, July 1, 2026

9:00 AM

**Board of Supervisors Chambers
1195 Third Street, Third Floor
Napa, CA 94559**

Airport Land Use Commission

District 1, Kara Brunzell
District 2, Walter Brooks (Vice-Chair)
District 3, Molly Moran Williams
District 4, Pete Richmond
District 5, Megan Dameron (Chair)
Aviation Expertise, Todd Walker
Aviation Expertise, Milton Gaines

Dana Morrison, ALUC Executive Officer
Wendy Atkins, ALUC Staff Liaison
Mckayla McMahon, County Counsel
Angie Ramirez Vega, Meeting Clerk
Aime Ramos, Meeting Clerk

How to Watch or Listen to the Napa County Airport Land Use Commission Meetings

The Napa County Airport Land Use Commission will continue to meet quarterly starting with the first Wednesday in February and also as needed.

The Napa County Airport Land Use Commission meets at 1195 Third Street, Suite 310, Napa, California 94559. The meeting room is wheelchair accessible. Assistive listening devices and interpreters are available through the Clerk of the Airport Land Use Commission. Requests for disability related modifications or accommodations, aids or services may be made to the Clerk of the Airport Land Use Commission's office no less than 72 hours prior to the meeting date by contacting (707) 253-4417 or meetingclerk@countyofnapa.org.

The Napa County Airport Land Use Commission realizes that not all County residents have the same ways to stay engaged, so several alternatives are offered. Remote Zoom Participation for members of the public is provided for convenience only. In the event that the Zoom connection malfunctions for any reason, the Airport Land Use Commission reserves the right to conduct the meeting without remote access:

Please watch or listen to the Airport Land Use Commission meeting in one of the following ways:

1. Attend in-person at the Board of Supervisors Chambers, 1195 Third St, Third Floor
2. Watch online at <https://napa.legistar.com/calendar.aspx> (click the "In Progress" link in the "Video" column).
3. Watch on Zoom using the attendee link: <https://countyofnapa.zoom.us/j/87621457786>. Make sure the browser is up-to date.
4. Listen on Zoom by calling 1-669-900-6833 (Meeting ID: 876-2145-7786).

If you are unable to attend the meeting in person and wish to submit a general public comment or a comment on a specific agenda item, please do the following:

1. Email your comment to meetingclerk@countyofnapa.org. Emails will not be read aloud but will still become part of the public record and shared with the Airport Land Use Commission.
2. Use the Zoom attendee link: <https://countyofnapa.zoom.us/j/87621457786>. Make sure the browser is up-to date. When the Chair calls for the item on which you wish to speak, click "raise hand". Please limit your remarks to three minutes.
3. Call the Zoom phone number: 1-669-900-6833. (Meeting ID: 876-2145-7786). When the Chair calls for the item on which you wish to speak, press *9 to raise hand. The clerk will give you permission to speak when it is your turn. Please limit your remarks to three minutes.

****Please note that phone numbers in their entirety will be visible online while speakers are speaking****

For more information, please contact us via telephone at (707) 253-4417 or send an email to meetingclerk@countyofnapa.org.

ANY MEMBER OF THE AUDIENCE DESIRING TO ADDRESS THE COMMISSION:

ON A MATTER ON THE AGENDA

Please proceed to the podium when the matter is called and, after receiving recognition from the Chair, give your name and your comments or questions. In order that all interested parties have an opportunity to speak, please be brief and limit your comments to the specific subject under discussion. Time limitations shall be at the discretion of the Chair or Commission, but is generally limited to three minutes.

ON A MATTER NOT ON THE AGENDA

Public comment is an opportunity for members of the public to speak on items that are not on the agenda but are within the subject matter jurisdiction of the Commission. Public comment is limited to three minutes per speaker, subject to the discretion of the Chair. Comments should be brief and focused, and speakers should be respectful of one another who may have different opinions. Please remember this meeting is being recorded and broadcasted live via ZOOM. The County will not tolerate profanity, hate speech, abusive language, or threats. Also, while public input is appreciated, the Brown Act prohibits the Commission from taking any action on matters raised during public comment that are not on the agenda.

- 1. CALL TO ORDER; ROLL CALL**
- 2. PLEDGE OF ALLEGIANCE**
- 3. PUBLIC COMMENTS AND RECOMMENDATIONS (10 Minutes)**

The Commission invites public comments and recommendations concerning current problems and future prospects of a planning nature which are within the jurisdiction of the Airport Land Use Commission. Anyone who wishes to speak to the Commission on such a matter, if it is not on the agenda, may do so at this time

- 4. APPROVAL OF MINUTES**

The Clerk of the Commission request approval of Minutes for the meeting held on: April 15, 2026 (Commissioners Kara Brunzell and Molly Moran Williams were excused)

- 5. AGENDA REVIEW**
- 6. DISCLOSURES**
- 7. PUBLIC HEARING ITEMS**

- A. CITY OF NAPA ANNEXATION / PRE-ZONING OF BIOMASS GASIFICATION FACILITY - AIRPORT LAND USE CONSISTENCY DETERMINATION (P25-00305). The Project is located south of 820 Levitin Way, Napa (APN: 057-090-087) and 600 Tower Road, Napa (APN 057-110-025). The properties are located on the southwest corner of the intersection of Tower Road and Devlin Road and to the north of the terminus of Tower Road, in Napa County, Airport Compatibility Zones B1 and B2. [26-328](#)

Staff Recommendation: Approve the Special Conditions Exception request and find the project consistent with the Airport Land Use Compatibility Plan (ALUCP) subject to the recommended Conditions of Approval.

Staff Contact: Wendy Atkins; wendy.atkins@countyofnapa.org

Applicant: City of Napa (Chris Jones); (707) 257-9460; chrisjones@cityofnapa.org

- Attachments:** [Attachment A Recommended Findings](#)
[Attachment B Recommended Conditions of Approval](#)
[Attachment C ALUC Application for Land Use Action](#)
[Attachment D Graphics](#)
[Attachment E Public Comments](#)

8. ADMINISTRATIVE ITEMS

9.. STAFF AND COMMISSIONER COMMENTS AND REPORT

10. ADJOURNMENT

I HEREBY CERTIFY THAT THE AGENDA FOR THE ABOVE STATED MEETING WAS POSTED AT A LOCATION FREELY ACCESSIBLE TO MEMBERS OF THE PUBLIC AT THE NAPA COUNTY ADMINISTRATIVE BUILDING, 1195 THIRD STREET, NAPA, CALIFORNIA ON 6/18/26 BY 3:00 P.M. A HARDCOPY SIGNED VERSION OF THE CERTIFICATE IS ON FILE WITH THE CLERK OF THE COMMISSION AND AVAILABLE FOR PUBLIC INSPECTION.

ANGIE RAMIREZ VEGA (By e-signature)
 Angie Ramirez Vega, Clerk of the Commission



Napa County

Board Agenda Letter

1195 THIRD STREET
SUITE 310
NAPA, CA 94559
www.napacounty.gov
Main: (707) 253-4580

Airport Land Use Commission

Agenda Date: 7/1/2026

File ID #: 26-328

TO: Airport Land Use Commission
FROM: Dana Morrison, Airport Land Use Commission (ALUC) Executive Officer
REPORT BY: Wendy Atkins, ALUC Staff Liaison
SUBJECT: City of Napa Renewable Resources Project 2.0

RECOMMENDATION

CITY OF NAPA ANNEXATION / PRE-ZONING OF BIOMASS GASIFICATION FACILITY - AIRPORT LAND USE CONSISTENCY DETERMINATION (P25-00305). The Project is located south of 820 Levitin Way, Napa (APN: 057-090-087) and 600 Tower Road, Napa (APN 057-110-025). The properties are located on the southwest corner of the intersection of Tower Road and Devlin Road and to the north of the terminus of Tower Road, in Napa County, Airport Compatibility Zones B1 and B2.

Staff Recommendation: Approve the Special Conditions Exception request and find the project consistent with the Airport Land Use Compatibility Plan (ALUCP) subject to the recommended Conditions of Approval.

Staff Contact: Wendy Atkins; wendy.atkins@countyofnapa.org

Applicant: City of Napa (Chris Jones); (707) 257-9460; chrisjones@cityofnapa.org

EXECUTIVE SUMMARY

The Project seeking ALUC review proposes the annexation of a 2.87-acre parcel (APN 057-090-087), and the construction of a new Biomass Conversion Facility (BCF). The Project would increase permitted throughput at the existing Napa Recycling and Compost Facility to an average of 1,000 tons per day (1,500 tons peak) to meet new state regulatory demands. In addition, the Project proposes to use a portion of the parcel to the north located at 600 Tower Road (APN 057-110-025) for inert (concrete, dirt, and gravel) materials processing and storage. These proposed expansions beyond the existing Diversion Facilities are subject to ALUCP review as these uses were not entitled, established or existing prior to the adoption of the 2024 ALUCP.

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The Airport Land Use Commission's (ALUC) Consistency Determination does not meet the definition of a "project" as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and, therefore, CEQA is not applicable. The ALUC is only making a finding of consistency with regards to airport compatibility regulations and is not responsible for approving or undertaking the project. The City of Napa is the Lead Agency responsible for carrying out the project and the City of Napa has prepared a Draft Environmental Impact Report (January 2026, State Clearinghouse #2023110393). The City of Napa will determine if any additional required CEQA findings need to be made before taking final action on the proposed City of Napa Renewable Resources Project 2.0.

BACKGROUND AND DISCUSSION

Owner: City of Napa, Attention: Chris Jones, P.O. Box 660, Napa, CA 94559

Discussion: On February 20, 1991, the Napa County Conservation, Development and Planning Commission approved Use Permit Application No. U-90-29. On March 20, 1991, the ALUC approved the Napa County Conservation, Development and Planning Commission Use Permit Consistency Determination for Use Permit No. U-90-29. The project consisted of the establishment of a recyclable materials transfer center to include sorting, packing, and preparation for transport of various recyclable materials including outdoor composting of organic waste, and relocation of existing administration facilities and truck storage/maintenance of normal collection operations.

On August 15, 2012, the ALUC approved the City of Napa Annexation/Pre-Zoning of a Materials Diversion Facility (P12-00224-ALUC). The action consisted of the annexation and rezoning of six contiguous properties as PQ-P:AC (Quasi-Public, Public : Airport Compatibility Overlay) District.

The current Napa Renewable Resources Project 1.0 (NRRP 1.0) located at the Napa Materials Diversion Facility (NMDF) was approved in 2013 (Notice of Determination was filed in 2014) and through subsequent addenda. As a result of NRRP 1.0, a Conditional Use Permit (CUP) was issued by the City of Napa Planning Commission per Resolution PC-2013-15 (approved on November 7, 2013). This is the current CUP for the six core parcels owned by the City that make up the existing NMDF. Prior to the 2013 approval, a Mitigated Negative Declaration (MND) was prepared pursuant to the provisions of CEQA. The 2013 MND for NRRP 1.0 analyzed covered composting, a 20,000 tons per year (tpy) Anaerobic Digestion Facility (ADF), a 1.0-megawatt (MW) biomass gasification facility (BGF), installation of improved stormwater treatment facilities, and solar panels on the roof of the NMDF building and shop building. The 2013 MND also allowed food waste and co-collected food waste to be received at the facility, increased the permitted maximum storage of organics onsite at any one time from 60,000 cubic yards (cy) to 90,000 cy, and changed facility hours to 24-hour operations to operate the blowers for covered composting and operating and the future ADF.

The six core parcels owned by the City that make up the existing NMDF were annexed into the City of Napa through approval by the Local Agency Formation Commission (LAFCO) of Napa County on March 4, 2014. These six parcels have since been legally merged into a single parcel and are awaiting a new APN number from Napa County.

In 2014, the First Technical Addendum (July 2, 2014) to the 2013 MND was approved, which increased the peak design capacity of the approved ADF from 20,000 to 25,000 tpy, clarified the feedstocks for composting, and institutionalized the historical product depackaging operations.

In 2016, a Second Technical Addendum (May 24, 2016) to the 2013 MND Addendum addressed an increased peak daily tonnage, a shift from the initial 500 tpd to 760 tpd. Furthermore, this addendum responded to

specific inquiries from the Bay Area Air Quality Management District (BAAQMD), providing additional analysis for the electric sort line and organics processing equipment replacing diesel-powered machinery.

The current proposed Project under review for compatibility is an expansion of the existing NMDF located at 820 Levitin Way (APNs 057-110-049, 057-110-052, 057-110-065, 057-110-066, 057-110-067, 057-110-068). The existing facility is a legally established land use which receives and processes all solid waste, compostable, and recyclable materials generated within the City of Napa that are collected by Napa Recycling and Waste Services and has been located at the site for approximately 35 years and receives up to 760 tons per day as allowed under their existing Solid Waste Facility Permit 28-AA-0030.

In 2023, the City of Napa purchased the 2.87-acre parcel immediately south of the existing Diversion Facility (APN: 057-090-087-000) where the new BCF is proposed. In order to deter birds from the existing NMDF site and the proposed BCF, Napa Recycling and Waste Services will install a long-range acoustic deterrent (LRAD). The LRAD system may reduce the number of birds onsite, the opportunity for bird strikes on airplanes, and the potential for aircraft crashes. The LRAD is a mobile speaker that broadcasts loud noise and/or bird calls to deter birds from the site. In addition, the Project proposes to use a portion of the parcel to north 600 Tower Road (APN 057-110-025) for inert (concrete dirt, and gravel) materials processing and storage. The Project would increase permitted throughput to an average of 1,000 tons per day (1,500 tons peak) to meet new state regulatory demands. These proposed expansions beyond the existing Diversion Facilities are subject to ALUCP review as these uses were not entitled, established or existing prior to the adoption of the 2024 ALUCP.

While the Project provides greater flexibility in developing and implementing processes and operations that ultimately divert organics from the landfill, decreases GHG emissions, increases the recovery of materials and energy from waste, and allows the facility to operate more efficiently and economically, the Project is incompatible with the ALUCP.

The applicant has requested a Special Condition Exception of the Napa Countywide Airport Land Use Compatibility Plan (ALUCP). Section 3.2.4 of the ALUCP states as follows:

Special Conditions Exception: The policies and criteria set forth in this ALUCP are intended to be applicable to all locations within an Airport Influence Area. However, there may be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site. After due consideration of all the factors involved in such situations and consultation with Airport management, the ALUC may find a normally incompatible use to be acceptable.

Under the Special Condition Exception, the ALUC may consider the Project's following benefits:

1. Reduces greenhouse gases and produces carbon-negative byproducts.
2. Limits number of employees (up to three employees at a given time), which makes it less likely that an employee is inside the building and allows for faster egress from the building in the event of a potential aircraft crash.
3. Incorporates special building measures to reduce risks to building occupants in the event of an aircraft crash.
4. Avoids increased bird attraction to the area by using non-attractive woody feedstock. An LRAD system will be installed, which may reduce the number of birds onsite.
5. Complies with national standards, as the Federal Aviation Administration issued a Determination Letter,

which concluded that the proposed structure does not exceed obstruction standards and does not present a hazard to air navigation and no risk to national security.

Details Related to Incompatibility.

Airport Land Use Consistency Factors:

1. Location - The Biomass Gasification Facility, is proposed to be constructed on a 2.87-acre parcel APN 057-090-087, south of the existing Napa Materials Diversion Facility (NMDF) located at 820 Levitin Way. Access to the parcel is located off of Devlin Road. In addition, the Project proposes to use a portion of the 8.32-acre parcel to the north located at 600 Tower Road, APN, 057-110-025) for inert (concrete, dirt, and gravel) materials processing and storage. Access to the parcel is located off of Trower Road. All aspects of the proposed Project are located within Airport Land Use Compatibility Zones B1 and B2. Airport Land Use Compatibility Zone B1 is characterized by aircraft overflying a low altitudes on final approach and straight-out departures-typically only 200 to 400 feet above the runway elevation. Zone B2 is characterized by aircraft on direction turning on 1L/19R to avoid turning over adjacent runway. Aircraft -especially smaller, piston-powered aircraft-turning base to final on landing approach or initiating turn to en route direction on departure; aircraft altitude typically less than 500 feet above runway, particularly on landing. The proposed Project was reviewed by the Federal Aviation Administration (FAA), who, determined that the Project could be compatible with current and future airport operations and flight patterns. The project was referred to the Napa County Airport Manager for comments. On May 12, 2026, a response was received providing support for the goals of the proposed Napa Renewable Resources Project (NRRP) and its plan to divert landfill disposal of local organic waste, reducing GHG emissions, and producing carbon-negative byproducts. However, the Airport Manager proposed that the potential risk from bird strikes to aircraft should also be a goal of the expansion. As recommended by the Airport Manager, Condition of Approval No. 2.0(a), has been included which states as follows:

“The Napa Renewable Resources Project (NRRP) 2.0 project shall complete a wildlife hazard assessment (WHA) leading to a wildlife hazard management plan (WHMP), to include baseline data, data after the imminent NRRP 1.0 modifications expected to reduce wildlife attractant and assess data after the proposed City of Napa NRRP 2.0 Project is implemented at the recycling facility. The WHMP will be prepared using the same biological expertise as the Napa County Airport WHMP. The airport will update its 2017 plan. The plans will identify relevant species and populations posing a danger to aircraft in the area, characterize the habitat, water, and food sources that are attractants to significant animal and bird populations, and identify recommended approaches based on data to coordinate habitat modification, hazing, and depredation activity. The scope of work for the Airport WHMP will adhere to FAA Advisory Circular 150-5200-33C and 150-5200-38.”

2. Land Use - The parcels are located in Airport Compatibility Zones B1 and B2. In the ALUCP, a ‘Power Plant’ is defined as “primary, peaking, renewable energy, bio-energy” is noted as an incompatible use in the B1 and B2 Compatibility Zones. This type of use is a Risk-Sensitive Land Use and not allowed in portions of an Airport environs regardless of the number of occupants associated with the use. Further, peaking, and renewable energy power plants; electrical substations; and other utilities are considered Critical Community Infrastructure, [ALUCP Chapter 3.4.9.(c)] and pertains to facilities where the damage or destruction of which would cause significant adverse effects to public health and welfare

beyond the immediate vicinity of the facility.

The ALUCP defines “Incompatible” to mean that the use should not be permitted under any normal circumstances. Limited exceptions are possible for site-specific special circumstances. The intent of this criterion is to facilitate evacuation of a building if it were to be hit by an aircraft.

Chapter 5 [Exhibit 5-1, Notes (6)] of the ALUCP states that “No proposed use shall be allowed that would create an increased attraction for wildlife and that is inconsistent with FAA rules and regulations including, but not limited to FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants On or Near Airports and Advisory Circular 150/5200-34A, Construction or Establishment of Landfills near Public Airports. Of particular concern are landfills and certain recreational or agricultural uses that attract large flocks of birds which pose bird strike hazards to aircraft in flight. See Policy 3.5.3.” The proposed Project will result in less incompatibility than the existing Napa Materials Diversion Facility because organics are proposed to be processed “in-vessel” with the Anaerobic Digestion Facility, the woody feedstock does not attract birds, and it would not increase the bird attraction to the site. In addition, the Project proposes to install a LRAD wildlife deterrent system.

Furthermore, Condition of Approval No. 2.0(a) has been included to require that the NRRP 2.0 shall complete a wildlife hazard assessment (WHA) leading to a wildlife hazard management plan (WHMP). The plans will identify relevant species and populations posing a danger to aircraft in the area, characterize the habitat, water, and food sources that are attractants to significant animal and bird populations, and identify recommended approaches based on data to coordinate habitat modification, hazing, and depredation activity.

ALUCP Chapter 3.2.4 (Special Conditions Exception) states that there may be specific situations where a normally incompatible use can be considered compatible because of terrain, specific location, or other extraordinary factors or circumstances related to the site. In considering any such exceptions, the ALUC shall take into account the need for special measures to reduce the risks to building occupants in the event that the building is struck by an aircraft. In general, the risks to building occupants can be reduced by making the potential for a crashing aircraft to intrude into the building less likely, enhancing the building’s fire control measures, and/or enabling faster egress from the building in the event of an aircraft crash. Potential special measures for the Project could include using concrete walls, limiting the number and size of windows, upgrading the strength of the building roof, avoiding skylights, enhancing the fire sprinkler system (e.g., dividing fire sprinkler system into zones so that if one zone is compromised the others are functional), limiting buildings to a single story to enable faster evacuation of buildings, and increasing the number of emergency exits. The applicant has proposed the following special measures as part of the Special Conditions Exception request:

- Concrete walls separating wood chip storage/drying area from the gasification hall.
- Electrical and control room would have one hour minimum fire rated walls.

- A roof structure supported by structural steel with typical Z purlines and metal sheeting (currently propose but not finalized design).
- Limited window and no skylights.
- A minimum of two emergency exits per area.
- A sprinkler system enhanced by additional safety measures such as gas and flame detectors. These detectors trigger an alarm and the gasification process is immediately shut down and all gas is sent to emergency flares. There would also be an automated building exhaust system that would be triggered by these alarms for the building.

Included in the application is a Special Conditions Exception request and a description of special measures included with the Project. Provided the ALUC approves the Special Conditions Exception and makes specific findings as to why to exception is being made and that the land use will neither create a safety hazard to people on the ground or aircraft in flight nor result in excessive noise exposure for the proposed use, and make findings as to the nature of the extraordinary circumstances that warrant the policy exception, the Project may be deemed compatible with the ALUCP.

3. Concentrations of People - Exhibit 5-1 indicates that the Maximum Sitewide Average Intensity (people/area) for Compatibility Zone B1 as 50, and B2 as 100. Intensity criteria apply to all nonresidential uses including ones shown as “Normally Compatible” (green) and “Conditional” (yellow). Usage intensity calculations shall include all people (e.g., employees, customers/visitors) who may be on the property at any single point in time, whether indoors or outdoors. The usage intensities shall be calculated in accordance with the methodologies cited in Section 3.4. For the Project to be consistent with the maximum Sitewide Average Intensity, the APNs would be limited as follows:
 - 820 Levitin Way 2.87-acre parcel APN 057-090-087 would be limited to a maximum of 57 people (2.87 x 50), the proposed BCF will have up to three employees and 10 to 20 customers circulating through the parcel at a time, which is less than the maximum and would be considered conditionally compatible.
 - 600 Tower Road, APN 057-110-025 8.32-acre would be limited to a maximum of 416 people (8.32 x 50), this parcel is used for storage and typically has no employees onsite.

The proposed project, as designed and as conditioned and allowed under the Special Conditions Exception, can be found to be compatible with the concentration of people requirements noted in the ALUCP.

4. Building Height-ALUCP Chapter 3.52(b) restricts building height to 35-feet or as similarly provided by local ordinance. In addition, as is the case with all other local agencies subject to Napa County ALUC oversight (Napa County and the five incorporated cities/town), the City’s land use regulations allow a process for structures to exceed height limits within an Airport Influence Area subject to a Consistency Determination by the ALUC.

The Project involves the construction of a new 45 foot tall Biomass Gasification Facility. The Project will be designed to comply with all FCC construction requirements, technical standards, interference

protection, power limitations, and radio frequency standards.

A Federal Aviation Administration Determination of No Hazard to Air Navigation, was issued on July 29, 2025, which concluded that the proposed structure does not exceed obstruction standards and does not present a hazard to air navigation. The proposed project, as designed, can be found to be compatible with building height requirements noted in the ALUCP.

5. Lighting and Glare - All exterior lighting for the Project would be located, designed, and shielded to confine direct rays (light) to the parcel with the lighting is located. Therefore, the Project would not create a new substantial source of light glare which would adversely affect day or nighttime views in the area.
6. Communications - As proposed, staff does not anticipate that the Project will affect airport communications. Electronic/ radio frequency output of telecommunication facilities are regulated by the FCC. FCC regulations do not enable local agencies to regulate electronic/ radio frequency aspects of these projects. The FCC is responsible for ensuring that all communication facilities subject to their regulations do not substantively impact FAA communication regulations for aviation. As stated above, the project will be designed to comply with all FCC construction requirements, technical standards, interference protection power limitations and radio frequency standards and there is no potential for conflict with the ALUCP.
7. Building Materials - The proposed project would include the use of appropriate building materials to be consistent with the surrounding industrial visual character and would comply with applicable City of Napa design Requirements and there is no potential for conflict with the ALUCP.
8. Overflight Easement - The ALUCP requires recordation of an overflight and aircraft hazard easement on all developing properties. As such, the current property owners, and future property owners will be aware that they are located in an Airport Influence Area. This will be included as a Condition of Approval No. 2.0(c) whereby there in no potential for conflict with the ALUCP.
9. Caltrans Aeronautics - ALUC staff referred the submittal materials to Caltrans Aeronautics on March 6, 2026, and Caltrans had no issues or comments on the project.
10. Processing - Subject to ALUCP Chapter 2.51, before a Local Agency either makes its general plan, specific plans, zoning ordinance, or district facilities master plan consistent with the ALUCP or Overrules the ALUC's adoption of the ALUCP or consistency determination on a Land Use Action for which referral to the ALUC is required as enabled by law, the Local Agency must refer all Major Land

Use Actions (see list in Policy 2.5.2) to the ALUC for review.

The ALUC defines Major Land Use Actions to include the following in Compatibility Zones B1 and B2:

- Pre-zoning associated with future annexation of land to a city.
- Nonresidential development having a building floor area of 10,000 sq. ft. or greater.
- Any other proposed Land Use Action or Airport Action not listed above as a Major Land Use Action which, as determined by the Local Agency, involves a question of compatibility with Airport activities.

General ALUC Review Process (Chapter 2.8)

Timing of Referral: The precise timing of the ALUC's review of a proposed Major Land Use Action may vary depending upon the nature of the specific project.

- a) Referrals to the ALUC should be made at the earliest reasonable point in time so that the ALUC's review can be duly considered by the Local Agency prior to when the agency formalizes its Actions. Depending upon the type of Action and the normal scheduling of meetings, ALUC review can be completed before, after, or concurrently with review by the local planning commission and other advisory bodies but must be accomplished before final action by the Lead Agency.

The proposed project has met the processing requirements set forth in the ALUCP.

Decision:

The Review Process for Major Land Use Actions under the ALUCP is detail in Chapter 2.10.4.

The ALUC has four choices of action when making consistency determinations on Major Land Use Actions reviewed in accordance with Policies 2.5.1:

- a) Approve the Special Conditions Exception and determine the project consistent with the Airport Land use Compatibility Plan subject to the recommended conditions of approval.
- b) Approve the Special Conditions Exception and determine the project consistent with the Airport Land use Compatibility Plan, subject to compliance with such conditions as the ALUC may specify. Any such conditions should be limited in scope and described in a manner that allows compliance to be clearly assessed.
- c) Continue the project to a future date if more information is found to be needed.
- d) Deny the Special Conditions Exemption, and determine the Project inconsistent with the ALUCP. In making a determination of inconsistency, the ALUC shall note the specific conflicts upon which the determination is based.
 - a. Subject to ALUCP Section 2.12, the following is the Process for Overruling the ALUC:
 - i. If the ALUCP determines that a proposed Land use Action is inconsistent with the

ALUCP, the ALUC must notify the Local Agency in writing and shall indicate the reasons for the inconsistency determination.

- ii. If a Local Agency wishes to proceed with a proposed Land use Action or Airport Action that the ALUC has determined to be inconsistent with the ALUCP, or if the Local Agency wishes to ignore a condition for consistency, the Local Agency must Overrule the ALUC determination in accordance with the provisions of state law.

ALUC Procedural Requirements:

1. Open Public Hearing.
2. Staff Report.
3. Public Comment.
4. Close Public Hearing.
5. Motion, second, discussion and vote on item.

Staff Recommendation:

Approve the Special Conditions Exception and determine the project consistent with the Airport Land use Compatibility Plan subject to the recommended conditions of approval.

Attachments

- A. Findings
- B. Application
- C. Project Description
- D. Special Conditions Exception
- E. Correspondence

¹ Napa Renewable Resources Project 2.0 Draft EIR, RCH Group, Inc, 2026, p. 2-2

² Group, Inc, 2026, p. 2-2

³ Group, Inc, 2026, p. 2-2

⁴ Group, Inc, 2026, p. 2-2

⁵ See Public Utilities Code Section 21670(a), 21676 and 21676.5 for specific procedures for overruling an ALUC. Further guidance is provided in the California Airport Land Use Handbook published by the California Division of Aeronautics (see beginning on page 5-15 of the 2011 edition). Chapter 1 of this ALUCP also summarizes the Overrule process to be followed by a Local Agencies in Napa County.

“A”

Recommended Findings

CITY OF NAPA ANNEXATION / PRE-ZONING OF BIOMASS GASIFICATION
FACILITY – AIRPORT LAND USE CONSISTENCY DETERMINATION (P25-00305).
Airport Land use Commission Hearing – July 1, 2026

Airport Land Use Commission Hearing – July 1, 2026

Recommended Findings

Napa Renewable Resources Project 2.0

Compatibility Determination P25-00305

South of 820 Levitin Way, Napa (APN: 057-090-087) and 600 Tower Road, Napa (APN 057-110-025)

Environmental:

The Airport Land Use Commission’s (ALUC) Consistency Determination does not meet the definition of a "project" as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and, therefore, CEQA is not applicable. The ALUC is only making a finding of consistency with regards to airport compatibility regulations and is not responsible for approving or undertaking the project. The City of Napa is the Lead Agency responsible for carrying out the project and the City of Napa has prepared a Draft Environmental Impact Report (January 2026) (State Clearinghouse #2023110393, the City of Napa will determine if any additional required CEQA findings need to be made before taking final action on the proposed City of Napa Renewable Resources Project 2.0.

Special Conditions Exception:

The ALUC has reviewed the Special Conditions Exception request in accordance with the requirements of the Airport Land Use Compatibility Plan (ALUCP) §3.2.4 and makes the following findings:

1. The ALUC has determined why the exception is being made.

Analysis: The ALUC has determined that the exception is being made because of specific location and circumstances related to the site. The Project is consistent with surrounding industrial uses, was long planned in the City’s General Plan, and cannot be accommodated within the existing Napa Materials Diversion Facility (NMDF) footprint.

The proposed Biomass Conversion Facility (BCF) use is consistent with the surrounding industrial land uses (NMDF to the north and Devlin Road Transfer Station to the south). The property south of NMDF proposed for the development of the BCF was purchased from the Napa-Vallejo Waste Management Authority (NVWMA) and could have been used to expand transfer station operations. The existing NMDF is constrained by existing operations and cannot support the development of a BCF on the existing site. A 1-megawatt (MW) BCF was approved in 2014 as part of the NRRP 1.0 project and associated California Environmental Quality Act (CEQA) Mitigated Negative Declaration. The City of Napa has been contemplating development of a BCF to the south of NMDF for several years and development is noted as a planned improvement in the City of Napa 2040 General Plan (page 4-18), as follows:

“Bio-Energy: Also known as “biomass gasification,” this planned technology improvement would take urban wood waste and the woody fraction of yard trimmings and convert them to a synthetic gas that in turn can produce renewable energy. Under

so-called “BioMat” legislation (SB 1122), up to 3 megawatts (MW) of bioenergy can be produced and sold back to the electrical grid at a floor price. The City is in the process of purchasing and ultimately developing a little over 3 acres of land to the south of the City’s current Materials Diversion Facility (MDF) from the Napa-Vallejo Waste Management Authority for the BioEnergy project. This is necessary as the current footprint of the City’s MDF does not have adequate space for the proposed 3 MW BioEnergy project. Beyond utilizing wood waste locally and providing a renewable energy source, the BioEnergy project would also produce a “Biochar” product from the solid ash that has value and agricultural benefits as a slow “time-release” source of nitrogen or possibly serve as a water filtration product for wastewater or drinking water systems.”

2. The ALUC has determined that the land use will not create a safety hazard to people on the ground.

Analysis: The ALUC has determined that the Project will not create a safety hazard to people on the ground because the proposed BCF is an industrial facility with limited onsite employees (up to three employees at a given time). In addition, the proposed BCF includes several special measures as part of the project design, including but not limited to:

- Concrete walls separating wood chip storage/drying area from the gasification hall.
- Electrical and control rooms would have one-hour minimum fire rated walls.
- A roof structure supported by structural steel with typical Z purlins and metal sheeting (currently proposed but not finalized design).
- Limited windows and no skylights.
- A minimum of two emergency exits per area.
- A sprinkler system enhanced by additional safety measures such as gas and flame detectors. These detectors trigger an alarm and the gasification process is immediately shut down and all gas is sent to emergency flares. There would also be an automated building exhaust system that would be triggered by these alarms for the building.

3. The ALUC has determined that the land use will not create a safety hazard to aircraft in flight.

Analysis: The ALUC has determined that the Project will not create a safety hazard to aircraft in flight with the implementation of Condition of Approval No. 2.0(b) and No. 2.0(c). Condition of Approval No. 2.0(a) states as follows:

“The Napa Renewable Resources Project (NRRP) 2.0 project shall complete a wildlife hazard assessment (WHA) leading to a wildlife hazard management plan (WHMP), to include baseline data, data after the imminent NRRP 1.0 modifications expected to reduce wildlife attractant and assess data after the proposed City of Napa NRRP 2.0 Project is implemented at the recycling facility. The WHMP will be prepared using the same biological expertise as the Napa County Airport WHMP. The airport will update its 2017 plan. The plans will identify relevant species and populations posing a danger to aircraft in the area, characterize the habitat, water, and food sources that are attractants to significant animal and bird populations, and identify recommended approaches based on data to coordinate habitat modification, hazing, and

degradation activity. The scope of work for the Airport WHMP will adhere to FAA Advisory Circular 150-5200-33C and 150-5200-38.”

Condition of Approval No. 2.0(c), states as follows:

AIRCRAFT OVERFLIGHT EASEMENT

Upon building permit submittal, the permittee shall submit verification that an aviation easement has been recorded on the property that provides for the right of aircraft operation, overflight and related noises, and for the regulation of light emissions, electrical emissions, or the release of substances such as steam or smoke which could interfere with aircraft operations.

4. The ALUC has determined that the Project will not result in excessive noise exposure for the proposed use.

Analysis: The machinery used in the process of converting biomass into energy, such as clippers, grinders, and generators, can create noise. The ALUC has determined that the Project will not create result in excessive noise exposure for the proposed use, with the implementation of Condition of Approval No. 2.0(b), which states as follows:

Noise associated with the BCF will not exceed the exterior noise limits described in Napa County Code Section 8.16.070, Table 8.16.070 Exterior Noise Limits, which is 75 dBA anytime.

5. The ALUC shall determine the nature of the extraordinary circumstances that warrant the policy exception.

Analysis: The ALUC has determined the nature of the extraordinary circumstances that warrant the policy exception. Environmentally, the Project advances state and local climate goals for landfill diversion, truck trip reduction, renewable energy generation, and carbon sequestration. Safety considerations have been addressed, including limited on-site occupancy, special safety measures, in-vessel organics processing, bird deterrence measures, and confirmation from the Federal Aviation Administration that the proposed BCF poses no hazard to air navigation, and as noted additional Conditions of Approval are recommended to ensure that there are viable measures to address wildlife hazard and noise concerns. Collectively, these factors demonstrate that special conditions apply and support ALUC approval of the requested exception.

“B”

Recommended Conditions of Approval and Final Agency Approval Memos

CITY OF NAPA ANNEXATION / PRE-ZONING OF BIOMASS GASIFICATION
FACILITY – AIRPORT LAND USE CONSISTENCY DETERMINATION (P25-00305).
Airport Land use Commission Hearing – July 1, 2026

Airport Land Use Commission Hearing – July 1, 2026

Recommended Conditions of Approval

Napa Renewable Resources Project 2.0

Compatibility Determination P25-00305

South of 820 Levitin Way, Napa (APN: 057-090-087) and 600 Tower Road, Napa (APN 057-110-025)

This permit encompasses and shall be limited to the project commonly known as Napa Renewable Resources Project 2.0 Compatibility Determination, located at south of 820 Levitin Way, Napa (APN: 057-090-087) and 600 Tower Road, Napa (APN: 057-110-025). Part I encompasses the Project Scope and general conditions pertaining to statutory and local code references, project monitoring, and the process for any future changes or activities. Part II encompasses the ongoing conditions relevant to the operation of the project. Part III encompasses the conditions relevant to construction and the prerequisites for a Final Certificate of Occupancy. It is the responsibility of the permittee to communicate the requirements of these conditions and mitigations (if any) to all designers, contractors, employees to ensure compliance is achieved.

When modifying a legally established entitlement related to this project, these conditions are not intended to be retroactive or to have any effect on existing vested rights except where specifically indicated.

PART I

1.0 Project Scope

The permit encompasses and shall be limited to:

The Project proposes the annexation of a 2.87-acre parcel (APN 057-090-087), and the construction of a new Biomass Conversion Facility (BCF). The Project would increase permitted throughput to an average of 1,000 tons per day (1,500 tons peak) to meet new state regulatory demands. In addition, the Project proposes to use a portion of the parcel to north 600 Tower Road (APN 057-110-025) for inert (concrete, dirt, and gravel) materials processing and storage.

PART II

2.0 OTHER CONDITIONS APPLICABLE TO THE PROJECT PERMITTING PROCESS

- a. The Napa Renewable Resources Project (NRRP) 2.0 project shall complete a wildlife hazard assessment (WHA) leading to a wildlife hazard management plan (WHMP), to include baseline data, data after the imminent NRRP 1.0 modifications expected to reduce wildlife attractant and assess data after the proposed City of Napa NRRP 2.0 Project is implemented at the recycling facility. The WHMP will be prepared using the same biological expertise as the Napa County Airport WHMP. The airport will update its 2017 plan. The plans will identify relevant species and populations posing a danger to aircraft in the area, characterize the habitat, water, and food sources that are attractants to significant animal and bird populations, and identify recommended approaches based on data to coordinate habitat modification, hazing, and depredation activity. The scope of work for the Airport WHMP will adhere to FAA Advisory Circular 150-5200-33C and 150-5200-38.
- b. Noise associated with the BCF will not exceed the exterior noise limits described in Napa County Code Section 8.16.070, Table 8.16.070 Exterior Noise Limits, which is 75 dBA anytime.
- c. **AIRCRAFT OVERFLIGHT EASEMENT**
Upon building permit submittal, the permittee shall submit verification that an avigation easement has been recorded on the property that provides for the right of aircraft operation, overflight and related noises, and for the regulation of light emissions, electrical emissions, or the release of substances such as steam or smoke which could interfere with aircraft operations.

“C”

Project Application for Land Use Action
Review Permit Application Packet

CITY OF NAPA ANNEXATION / PRE-ZONING OF BIOMASS GASIFICATION
FACILITY – AIRPORT LAND USE CONSISTENCY DETERMINATION (P25-00305).
Airport Land use Commission Hearing – July 1, 2026



PROJECT APPLICATION FOR LAND USE ACTION REVIEW

Project Identification No.

PROJECT PROPONENT (TO BE COMPLETED BY APPLICANT)

Date of Application	<u>12/5/2025</u>		
Applicant	<u>City of Napa</u>	Phone Number	<u>707-257-9460</u>
Mailing Address	<u>PO Box 660, Napa, CA 94559</u>		

Agent (if any)	<u>RCH Group</u>	Phone Number	<u>916-782-4427</u>
Mailing Address	<u>PO Box 516, Rancho Murieta, CA 95683</u>		

PROJECT LOCATION (TO BE COMPLETED BY APPLICANT)
Attach an accurately scaled map showing the relationship of the project site to the airport boundary and runways

Street Address	<u>820 Levitin Way</u>		
Assessor's Parcel No.	<u>057-090-087</u>	Parcel Size	<u>2.87 acres</u>
Subdivision Name	_____	Zoning Classification	<u>Industrial</u>
Lot Number	_____		

PROJECT DESCRIPTION (TO BE COMPLETED BY APPLICANT)
If applicable, attach a detailed site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees; include additional project description data as needed

Existing Land Use (describe)	<u>Vacant Land Industrial</u>		
---------------------------------	-------------------------------	--	--

Proposed Land Use (describe)	<u>Biomass Conversion Facility - 1.5 MW using wood to generate renewable electricity.</u>		
---------------------------------	---	--	--

For Residential Uses	Number of Parcels or Units on Site (exclude secondary units) _____		
For Other Land Uses	Hours of Use	<u>24 hours per day</u>	
	Number of People	Maximum Number	<u>3</u>
	On Site...	Method of Calculation	<u>Based on Syncraft's existing facilities</u>

Height Data	Height above Ground of Tallest Object (including antennas and trees)	<u>45</u>	ft.
	Highest Elevation (above sea level) of Any Object or Terrain on Site	<u>94</u>	ft.

Flight Hazards Does the Project Involve Characteristics that:

- Could Create Electrical Interference, Confusing Lights, Glare, Smoke, or Other Electrical or Visual Hazards to Aircraft Flight? Yes No
- Could Attract Birds or Other Wildlife to the Airport or Vicinity? Yes No

If Yes, Describe The EIR describes how these potential impacts are less than significant following CalTrans and FAA Guidance.

REFERRING AGENCY (TO BE COMPLETED BY SUBMITTING AGENCY STAFF)

Date Received	<u>12/5/2025</u>	Type of Project
Agency Name	<u>City of Napa</u> <u>Utilities Department</u>	<input type="checkbox"/> General Plan Amendment
Staff Contact	<u>Chris Jones</u>	<input type="checkbox"/> Zoning Amendment or Variance
Phone Number	_____	<input type="checkbox"/> Subdivision Approval
Agency's Project No.	<u>C2023-147</u>	<input checked="" type="checkbox"/> Use Permit
		<input type="checkbox"/> Public Facility
		<input type="checkbox"/> Other _____

Inter-Agency Coordination: Indicate neighboring agencies that have been notified of project.

City of Napa City of American Canyon County of Napa Other _____

ALUC REVIEW (TO BE COMPLETED BY ALUC STAFF / ATTACH ADDITIONAL PAGES IF NECESSARY)

Application Date Received _____ By _____

Receipt Is Application Complete? Yes No

If no, cite reasons _____

Airport Napa County Airport Angwin Airport – Parrett Field

Land Use Category/Categories _____

Compatibility Zones

Angwin Airport – Parrett Field A B - - C D1 D2 E

Napa County Airport A B1 B2 B3 C D1 D2 E

Land Use Acceptability Normally Compatible Conditional Incompatible

Sitewide Avg. Density/ Intensity Criteria Met? Yes No

Single-Acre Density/ Intensity Criteria Met? Yes No

Sound Attenuation Required? Yes No

Other Applicable Conditions Met? Yes No

Airspace Protection Compatibility	Height Acceptable?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	FAA Notified if Applicable?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Other Hazards to Flight Excluded?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other Requirements	Avigation Easement Required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Recorded Overflight Notification Required?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Executed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Special Site/Project Conditions	Infill Parcel?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Other (describe)	_____	

ACTIONS TAKEN (TO BE COMPLETED BY ALUC STAFF)

ALUC Staff Approve as Submitted Date _____

Action Refer to ALUC Include Conditions?

Conditions: _____

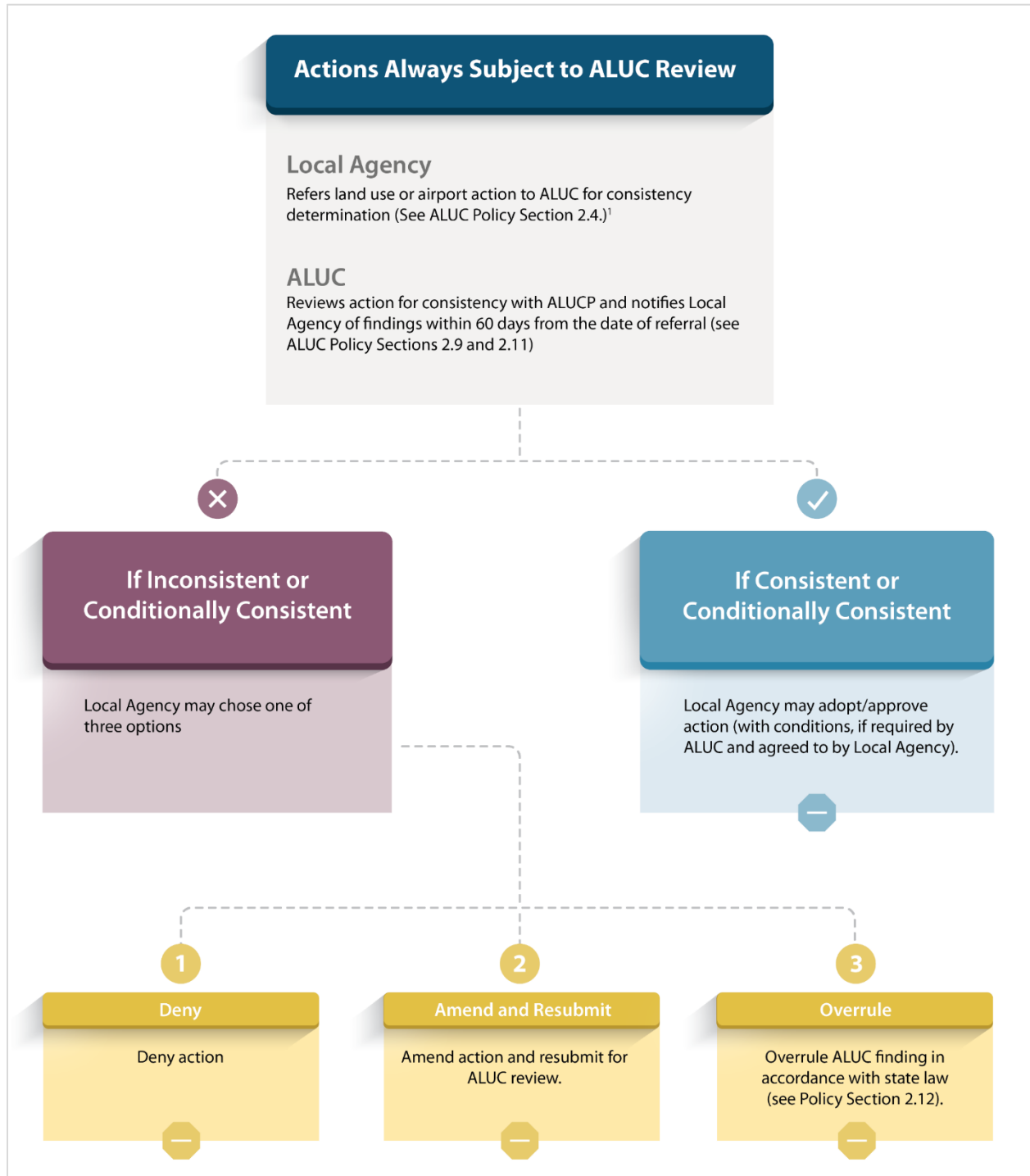
ALUC Consistent Date _____

Action Consistent with Conditions (list conditions / attach additional pages if needed)

Inconsistent (list reasons / attach additional pages if needed)

EXHIBIT F-1: ACTIONS ALWAYS SUBJECT TO ALUC REVIEW

See ALUC Policy Sections 2.4, 2.9, and 2.11.

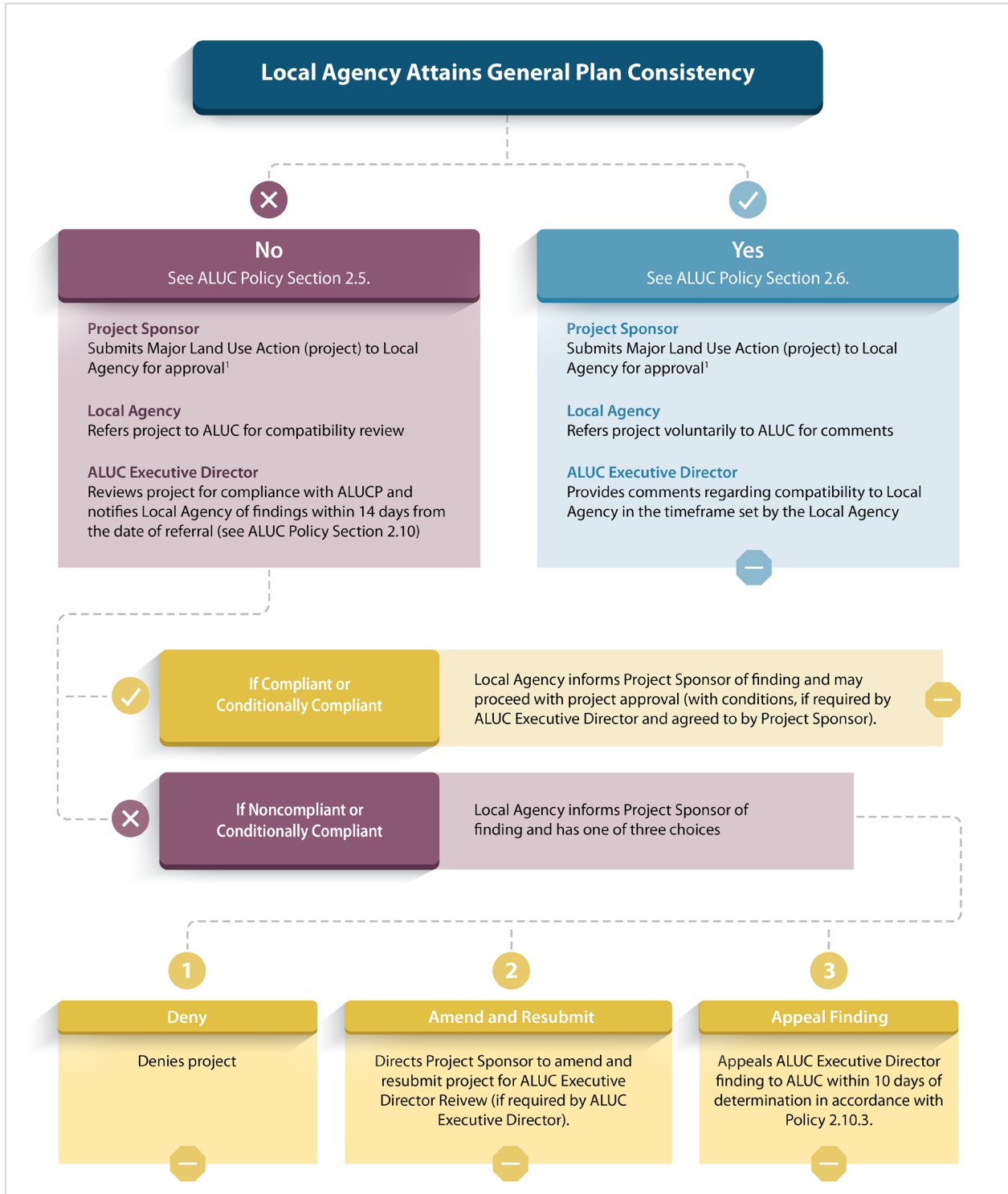


Notes:

1. Actions requiring mandatory referral to the Airport Land Use Commission (ALUC) include new or amended general plans, specific plans, facility master plans, airport master plans, zoning ordinances, rezoning of property, and building regulations, as well as Special Conditions Exceptions sought under Policy 3.2.4.
2. Source: Mead & Hunt, Inc. 2021

EXHIBIT F-2: MAJOR LAND USE ACTIONS SUBJECT TO ALUC REVIEW

See ALUC Policy Sections 2.5, 2.6, and 2.10.



Notes:

1. If project includes a proposed rezoning, it requires mandatory referral to the Airport Land Use Commission (ALUC) (see Exhibit F-1).
2. Source: Mead & Hunt, Inc. 2021



Utilities Department

April 6, 2026

Wendy Atkins
Planner II
County of Napa
1195 Third Street Suite 210
Napa, CA 94559

Dear Ms. Atkins,

The City of Napa is requesting a Special Condition Exception per Section 3.2.4 of the Napa Countywide Airport Land Use Compatibility Plan (ALUCP), adopted December 04, 2024, for the proposed Napa Renewable Resources Project (NRRP) 2.0. The NRRP 2.0 projects, including the proposed Biomass Conversion Facility (BCF), provide substantial benefits to the community. The proposed BCF site is located between similar existing facilities (the City of Napa's Material Diversion Facility (NMDF) and the Napa Vallejo Waste Management Authority's (NVWMA) Devlin Road Transfer Station). The following demonstrates that special conditions apply to the development of the proposed BCF.

Existing NMDF Site Constraints

The proposed BCF use is consistent with the surrounding land uses (NMDF to the north and Devlin Road Transfer Station to the south). The property south of NMDF proposed for development of the BCF was purchased from the NVWMA and could have been used to expand transfer station operations. The existing NMDF is constrained by existing operations and cannot support the development of a BCF on the existing site. A 1-megawatt (MW) BCF was approved in 2014 as part of the NRRP 1.0 project and associated California Environmental Quality Act (CEQA) Mitigated Negative Declaration. The City of Napa has been contemplating development of a BCF to the south of NMDF for several years and development is noted as a planned improvement in the City of Napa 2040 General Plan (page 4-18), as follows:

“Bio-Energy: Also known as “biomass gasification,” this planned technology improvement would take urban wood waste and the woody fraction of yard trimmings and convert them to a synthetic gas that in turn can produce renewable energy. Under so-called “BioMat” legislation (SB 1122), up to 3 megawatts (MW) of

bioenergy can be produced and sold back to the electrical grid at a floor price. The City is in the process of purchasing and ultimately developing a little over 3 acres of land to the south of the City's current Materials Diversion Facility (MDF) from the Napa-Vallejo Waste Management Authority for the BioEnergy project. This is necessary as the current footprint of the City's MDF does not have adequate space for the proposed 3 MW BioEnergy project. Beyond utilizing wood waste locally and providing a renewable energy source, the BioEnergy project would also produce a "Biochar" product from the solid ash that has value and agricultural benefits as a slow "time-release" source of nitrogen or possibly serve as a water filtration product for wastewater or drinking water systems."

Environmental Benefits

The Project would benefit the community environmentally by reducing greenhouse gas (GHG) emissions and reducing criteria air pollutant emissions from trucking. The proposed BCF supports local compliance with statewide mandates under Senate Bill (SB) 1383, supports local organic waste diversion goals, and aligns with California's climate and renewable energy objectives by reducing landfill-bound organic waste, reducing GHG emissions, and producing carbon-negative byproducts. The proposed BCF would:

- Divert wood waste from landfill disposal (roughly 16,000 tons per year); This reduces emissions from the wood breaking down within the landfill.
- Reduce truck traffic associated air quality and GHG emissions associated with trucking wood waste (eliminating approximately four truck shipments per day or roughly 1,500 truck shipments per year);
- Generate clean, renewable electricity to power NMDF operations and sell excess renewable energy to the grid (roughly 13,140 MW hours annually); and
- Produce biochar, a carbon-sequestering soil amendment that has agricultural benefits as a slow "time-release" source of nitrogen.

The overall NRRP 2.0 Project is one of the key pathways the City of Napa can reduce its GHG emissions. If the Project is implemented, GHG emissions would be reduced by 3,500 metric tons of carbon dioxide equivalents per year (See Table 3.6.2 of the Draft EIR) while generating clean renewable energy (electricity from the BCF and renewable natural gas from the proposed anaerobic digestion facility [ADF] on the existing NMDF site).

Hazards/Safety

Building Occupants

The BCF is an industrial facility with limited onsite employees (up to three employees at a given time). The overall building is not intended for building occupants but is intended to house feedstock and process equipment. BCF employees would primarily be at ground-level in control rooms and feedstock drying bunkers, or outside the building. The limited

number of employees make it less likely that an employee is inside the building and allow for faster egress from the building in the event of a potential aircraft crash.

As indicated in Chapter 3.2.4(b) of the ALUCP(*Special Conditions Exception*),” In considering such exceptions, the ALUC shall also take into account the need for special measures to reduce risks to building occupants in the event the building is struck by an aircraft. In general, the risks to building occupants can be reduced by making the potential for a crashing aircraft to intrude into the building less likely, enhancing the building’s fire control measures, and/or enabling faster egress from the building in the event of an aircraft crash.”

The proposed BCF includes several special measures as part of the project design, including but not limited to:

- Concrete walls separating wood chip storage/drying area from the gasification hall.
- Electrical and control rooms would have one hour minimum fire rated walls.
- A roof structure supported by structural steel with typical Z purlins and metal sheeting (currently proposed but not finalized design).
- Limited windows and no skylights.
- A minimum of two emergency exits per area.
- A sprinkler system enhanced by additional safety measures such as gas and flame detectors. These detectors trigger an alarm and the gasification process is immediately shut down and all gas is sent to emergency flares. There would also be an automated building exhaust system that would be triggered by these alarms for the building.

Birds

The BCF would not increase bird attraction to the project area compared to existing conditions because the woody feedstock does not attract birds. The FAA *Advisory Circular, Hazardous Wildlife Attractants on or Near Airports*, states that branches and woodchips generally do not attract wildlife that is hazardous to air travel.¹ Since the BCF uses woody feedstock only and such material is kept in biomass drying bunkers within the overall building, bird attraction is not an issue.

The proposed ADF on the NMDF site would not be considered an incompatible use as it would not increase such hazards because organics are processed “in-vessel” and would not increase bird attraction to the site. The ADF would reduce the amount of food waste being mixed in with the existing composting operations, reducing bird attractants.

In order to deter birds from the existing NMDF site and future expansion to the south, the City has authorized NRWS to purchase a long-range acoustic deterrent (LRAD) made by

¹ FAA, 2020. *Advisory Circular, Hazardous Wildlife Attractants on or near Airports*, February 21, 2020. https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5200-33C.pdf.

Genasys (model 500X-RE). The LRAD system may reduce the number of birds onsite, the opportunity for bird strikes on airplanes, and the potential for aircraft crashes. The LRAD is a mobile speaker that broadcasts loud noise and/or bird calls to deter birds from the site. For example, seagulls leave the site when hearing hawk calls (See **Attachment A** for more information on the LRAD). Genasys LRAD systems have been purchased as a bird deterrent by others to deter birds from entering restricted areas (See link - [Genasys Announces \\$1.0M LRAD-RT Order | Genasys](#)) and has been used by airports as a bird deterrent to prevent bird strikes (See link - [Singapore Changi Airport Orders Another Acoustic Bird-prevention System | Aviation International News](#)). The LRAD system would be manually operated by an operator utilizing a range of sounds and predator calls and deter birds away from the site.

Airspace Protection

The Project sponsor submitted FAA Form 7460 on June 3, 2025, and the FAA issued its Determination Letter on July 29, 2025. The FAA study evaluated the facility's structures, including their height and location, to determine if they posed a hazard to air navigation. The FAA concluded that the proposed structures do not exceed obstruction standards and do not present a hazard to air navigation. While no marking or lighting is required for aviation safety, the FAA recommended voluntary compliance with its guidelines. The FAA study also confirmed that the proposed BCF presented no risk to national security.

Conclusion

In conclusion, the proposed NRRP 2.0 Project qualifies for a Special Condition Exception under the Napa Countywide ALUCP due to unique site constraints, strong policy support, and substantial environmental benefits. The Project is consistent with surrounding industrial uses, was long planned in the City's General Plan, and cannot be accommodated within the existing NMDF footprint. Environmentally, it advances state and local climate goals for landfill diversion, truck trip reduction, renewable energy generation, and carbon sequestration. Safety considerations have been addressed, including limited on-site occupancy, special safety measures, in-vessel organics processing, bird deterrence measures, and confirmation from the FAA that the proposed BCF poses no hazard to air navigation. Collectively, these factors demonstrate that special conditions apply and that approval of the requested Special Condition Exception is justified.

Sincerely,



Chris Jones, PE
Senior Civil Engineer

Attachment A - Genasys LRAD Brochure



PRODUCT INFORMATION

500X-RE
(-BLK/-GRN/-GRY/-TAN)

LRAD-500X-RE remote electronics, long range communication system with dash mounted MP3 control module (available in either black, green, gray, or tan).

INCLUDED ACCESSORIES

Control Module	Remote MP3 control module with 2 to 16GB onboard storage memory
Record on the Fly Mic	Microphone with record and playback feature for immediate playback
MP3 Auxiliary Cable	Allows connection to any audio device with a headphone jack
USB Cable	USB cable for downloading files to the MP3 player
Normalizer Software	Audio Normalizer software for creating customized audio recordings on a PC
Soft Cover	Protective Soft Cover

OPTIONAL ACCESSORIES

Wireless Kit	Wireless operation of LRAD systems over ranges up to 300 meters, 35mm phone jack connects to a standard MP3 audio device (UHF, US only). Lightweight hypercardioid headset microphone is included
HD Action Camera	During LRAD operation, record High Definition, date/time stamped video and audio with this compact, rugged digital camera
Maxa Beam Kit	12 million candlepower in a lightweight, mounted searchlight, illuminates targets up to 3,500 meters away
Power Supply Module	External AC to DC power supply, 100-220VAC to 28VDC
Power Pack	Portable power pack with internal battery, charger, 24VDC, 21AH
Hitch Mount	Vehicle Mount - attaches to standard trailer hitch receiver (2in/5.08cm)
GPk Mount	Mounts to Objective Gunner Protection Kit (OGPK) for vehicle mounted operations
Shiprail Mount	Stainless steel rail mount
Hard Case	Watertight, dust proof, rugged enclosure for storage and transport
Medium Duty Tripod	Rugged lightweight tripod with optional hard transport and storage case

DIRECTIONALITY, POWER & RANGE

- › Powerful, intelligible voice communications up to 2,000 meters
- › Focused, directional broadcasts for targeted communication
- › Variable beam width for extended coverage
- › Safely communicate beyond standoff distances
- › Create instant acoustic standoff perimeter

FEATURES

- › Rugged, military tested construction
- › Low power requirements
- › All-weather use
- › Simple to operate – increased coverage with single operator
- › Safer alternative to non-lethal and kinetic measures
- › HD Camera (optional) – Quick connect/disconnect camera and mount for recording video and audio during LRAD operation. Includes 4GB micro SDHC for up to 210 minutes of date and time stamped recordings

MARKETS SERVED

- › Law Enforcement
- › Defense
- › Commercial Security
- › Critical Infrastructure Security
- › Maritime
- › Homeland Security
- › Fire Rescue & Incident Management
- › Port & Border Security
- › Emergency Warning
- › Mass Communication
- › Wildlife Preservation & Control

LRAD 500X-RE

Rugged, Long Range Communications

COMPACT, LONG RANGE COMMUNICATION SYSTEM

The LRAD 500X-RE is compact, lightweight and designed for applications ranging from fixed security installations to small/mid-sized vehicles and vessels. It can be easily transported to provide security and defense personnel a highly effective communication, hailing and warning capability.



The LRAD 500X-RE has been selected as the U.S. Navy and U.S. Army's AHD (acoustic hailing device) for small vessels and vehicles.

LRAD 500X-RE operators have the capability to issue clear, authoritative verbal commands, followed with powerful deterrent tones to modify behavior, enhance response capabilities and provide more time to scale the use of force if required.

The extended frequency range of the LRAD 500X-RE ensures voice commands will be clearly heard and understood.

ACOUSTIC PERFORMANCE

Maximum Peak Output	154dB SPL @ 1 meter, C-weighted
Maximum Continuous Output	149db SPL @ 1 meter, A-weighted
Sound Projection	+/- 15° @ 1kHz/-3dB
Communication Ranges	Maximum range up to 2,000 meters in ideal conditions. Operational range up to 650 meters over 88dB of background noise. Ranges based on continuous output.

ENVIRONMENTAL PERFORMANCE

Hot Operating Temperature	MIL-STD-810G, Method 501.5, Procedure II, Design type Hot, 60°C
Cold Operating Temperature	MIL-STD-810G, Method 502.5, Procedure II, Design type Basic Cold, -33°C
Hot Storage Temperature	MIL-STD-810G, Method 501.5, Procedure I, 70°C
Cold Storage Temperature	MIL-STD-810G, Method 502.5, Procedure I, -40°C
Operating Humidity	MIL-STD 810G, Method 507.5, Procedure II - Aggravated Cycle
Rain	MIL-STD-810G, Method 506.5, Procedure I, Blowing rain
Salt Fog	MIL-STD-810G, Method 509.5
Shipboard Vibration	MIL-STD-167-1A
Shipboard Shock	MIL-S-901D, Shipboard Shock, Class I, Shock grade B
Random Vibration	MIL-STD-810G, Method 514.6, Wheeled Vehicles
SRS Shock	MIL-STD-810G, Method 516.6, Procedure I, (Functional shock)

DESIGNED TO MEET MIL-STD-810G, MIL-STD-167-1A, MIL-S-901D.

MECHANICAL

Dimensions	25"W x 25"H x 12"D (63.5cm x 63.5cm x 30.5cm)
Weight	44 lbs. (19.96 kg) without accessories
Construction	Construction Molded cross-linked polyethylene, 6061 Aluminum, Optional Stainless Steel connectors

ELECTRICAL REQUIREMENTS¹

Power Consumption	Typical Power consumption 265 Watts (With tone) Normal power consumption 60 Watts (With voice content)
Power Input	12-28 VDC

¹ TYPICAL POWER WITH WARNING TONE. NORMAL POWER CONSUMPTION WITH VOICE CONTENT, SOUND PROJECTION IS WIDE AND VOICE BOOST IS OFF.

SAFETY²

MIL-STD-1474D

² DESIGNED TO MEET MIL-STD-1474D. STANDARD ESTABLISHES ACOUSTICAL NOISE LIMITS AND PRESCRIBES TESTING REQUIREMENTS AND MEASUREMENT TECHNIQUES FOR DETERMINING CONFORMANCE TO THE NOISE LIMITS SPECIFIED THEREIN.

ELECTROMAGNETIC COMPATIBILITY (EMC)³

FCC Part 15 class A radiated emissions

³ DESIGNED TO MEET REQUIREMENTS FOR THE CONTROL OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS OF SUBSYSTEMS AND EQUIPMENT.



Genasys - The Leader in Protective Communications

Genasys Protective Communications Solutions have a diverse range of applications, including predictive simulation to anticipate and understand the potential impact of emerging crises; emergency warning and mass notification for public safety; critical event management for commercial enterprises and government agencies; de-escalation for defense and law enforcement; as well as automatic detection of real-time threats. For more information, visit genasys.com.

CHAPTER 2

PROJECT DESCRIPTION

2.1 INTRODUCTION

This chapter of the Environmental Impact Report (EIR) presents a description of the Project that includes the Project background and site history, Project location and existing site characteristics, and Project elements. This chapter also provides a statement of Project objectives, the intended uses of the EIR, a list of public agencies that are expected to use this EIR, and a list of approvals and permits that may be required to implement the Project.

2.2 BACKGROUND AND SITE HISTORY

The Napa Materials Diversion Facility (NMDF) site is an 18.6-acre fully permitted Solid Waste Facility located at 820 Levitin Way¹ and currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The NMDF site also receives, and processes materials delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County) and by private (self-haul) customers. Current operations at the NMDF site include receiving, storing, processing, recycling, and composting waste materials from residential, commercial, and industrial sectors. The NMDF site operates under Solid Waste Facility Permit (SWFP) 28-AA-0030, which limits the facility to a maximum tonnage of 760 tons per day (tpd) and 386 waste hauling vehicles per day.

The proposed Napa Renewable Resources Project 2.0 (NRRP 2.0, the "Project") consists of an increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd, the construction and operation of a biomass conversion facility (BCF), and the construction and operation of an anaerobic digestion facility (ADF) as part of an initiative to enhance sustainable waste management at the NMDF site. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and would provide accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

The NMDF site was developed in the early nineties to answer the call of the California Integrated Waste Management Act of 1989 (AB 939) to divert 50% of the waste stream from disposal by 2000, which has been surpassed. The City and the operator (NRWS) maintain many local and state permits for the NMDF site. The County of Napa approved Use Permit U-90-29, and

¹ Assessor Parcel Number (APN): 057-110-049, -052, -065, -066, -067, and -068.

certified a Negative Declaration (ND) in 1991, that has been modified several times over the years; February 9, 1994 (93248-MOD), September 16, 1994 (93530-MOD), April 16, 1995 (94129-MOD), March 20, 1996 (95172-MOD), and August 20, 1997 (96468-MOD), and with each Use Permit Modification, an ND was certified pursuant to the provisions of the California Environmental Quality Act (CEQA). All these approvals occurred prior to the City of Napa purchasing the NMDF site and are no longer valid for current NMDF operations on the six core parcels that make up the existing NMDF.

The City of Napa has been highly successful since purchasing the NMDF site in 2004. The current Napa Renewable Resources Project 1.0 (NRRP 1.0) at the NMDF site was approved in 2013 (Notice of Determination was filed in 2014) and through subsequent addenda. As a result of NRRP 1.0, a Conditional Use Permit (CUP) was issued by the City of Napa Planning Commission per Resolution PC-2013-15 (approved on November 7, 2013). This is the current CUP for the six core parcels owned by the City that make up the existing NMDF. Prior to the 2013 approval, a Mitigated Negative Declaration (MND) was prepared pursuant to the provisions of CEQA. The 2013 MND for NRRP 1.0 analyzed covered composting, a 20,000 tons per year (tpy) ADF, a 1.0-megawatt (MW) biomass gasification facility (BGF), installation of improved stormwater treatment facilities, and solar panels on the roof of the NMDF building and shop building. The 2013 MND also allowed food waste and co-collected food waste to be received at the facility, increased the permitted maximum storage of organics onsite at any one time from 60,00 cubic yards (cy) to 90,000 cy, and changed facility hours to 24-hour operations to operate the blowers for covered composting and the future ADF.

The six core parcels owned by the City that make up the existing NMDF were annexed into the City of Napa through Local Agency Formation Commission (LAFCO) of Napa County on March 4, 2014. These six parcels have since been legally merged into a single parcel and are awaiting a new APN number from Napa County.

In 2014, the First Technical Addendum (July 2, 2014) to the 2013 MND was approved, which increased the peak design capacity of the approved ADF from 20,000 to 25,000 tpy, clarified the feedstocks for composting, and institutionalized the historical product depackaging operations.

In 2016, a Second Technical Addendum (May 24, 2016) to the 2013 MND Addendum addressed an increased peak daily tonnage, a shift from the initial 500 tpd to 760 tpd. Furthermore, this addendum responded to specific inquiries from the Bay Area Air Quality Management District (BAAQMD), providing additional analysis for the electric sort line and organics processing equipment replacing diesel-powered machinery.

In 2017, a Third Technical Addendum (January 13, 2017) to the 2013 MND Addendum addressed an increased peak daily tonnage of organic materials to 760 tpd (the current facility tonnage limit for all waste types).

In 2018, noteworthy revisions continued through a Fourth Technical Addendum (March 5, 2018) to the 2013 MND, which analyzed a Covered Aerated Static Pile (CASP) mass bed composting system with concrete slab, walls, and positive aeration system capable of composting 66,640 tpy, the modification of drainage pipelines to direct all stormwater on-site to a single detention pond

capable of processing 1,000 gallons per minute, the installation of roof structures that cover operations, and adjusting the peak design capacity of the approved ADF from 25,000 tpy to 44,000 tpy.

The approved ADF and BGF at NMDF site that were analyzed and approved through the 2013 MND and subsequent Addendums have not been constructed. In May 2023, the City of Napa applied for a \$10,000,000 grant with the Department of Resources Recycling and Recovery (CalRecycle) for funds to develop an ADF on the existing NMDF property. The City of Napa was awarded the grant in December 2023. This EIR analyzes the environmental impacts of the ADF even though it is covered through previous CEQA review and documentation. This conservative approach allows for an assessment of cumulative impacts to key resource areas, such as air quality, greenhouse gas (GHG) emissions, and traffic.

Currently, the City and NRWS are moving forward with Syncraft to design and build the BCF. Since the BCF would be larger than facility analyzed in the 2013 MND and would be developed outside of the current NMDF site, this EIR analyzes the BCF as a new Project element and does not rely on previous CEQA documentation.

2.3 PROJECT LOCATION AND EXISTING SETTING

The Project site includes the NMDF site located at 820 Levitin Way and adjacent parcels (see **Figure 2-1**). The NMDF site comprises approximately 18.6 acres, of which approximately 12 acres are used for organic material management operations such as composting and chip and grind; 1.2 acres for concrete recycling; 2.2 acres for soil stockpiling; 1.2 acres for material recovery facility (MRF) recyclables and product depackaging; and about 2.0 acres for support operations.

The existing site plan for NMDF site is shown in **Figure 2-2**. Existing improvements on the site include an organic material management operation, MRF, shop, administration office and parking, scales, recycling commodities storage area, wallboard stockpile, universal waste area, and inerts processing areas. The organic material management operation includes a biofilter, feedstock tipping area, green waste stockpile, two organics preprocessing buildings (one with a food waste depackager), processed compost feedstock stockpile, unprocessed and processed wood waste stockpiles, compost screening building, finished compost storage area, staging area for compost screening, compost curing area, CASP composting area, finished product storage area, and biochar machine. Stormwater infrastructure on site includes a stormwater filtration system, storage pond, settling pond, and retention pond.



Source: RCH Group; Google Earth Pro, 2023

Figure 2-1
Regional Site Location



Source: Edgar & Associates, 2023

Figure 2-2
Existing NMDF Site Plan

The Project would include a portion of the adjacent parcel to the south (formerly APN 057-090-060) located on the westerly side of Devlin Road between NMDF site to the north and Devlin Road Transfer Station to the south (See **Figure 2-1**). The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by Local Agency Formation Commission (LAFCO) of Napa County. A sphere of influence (SOI) amendment would also be required by LAFCO to process the annexation. The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). The resulting 2.87-acre parcel, referred to as the Southern Annexation Parcel in this EIR, excludes the wetlands that have been identified in previous studies on the parcel that was formerly known as APN 057-090-060 (now APN 057-090-088). The Southern Annexation Parcel is currently undeveloped and includes an area that received soil material from 2019 to 2022. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of the parcel to Public, Quasi-Public: Airport Compatibility Overlay District (PQ-P:AC) to be consistent with the existing NMDF site zoning, and a General Plan Amendment (GPA) to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The Project would also use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025) (See **Figure 2-1**). The 600 Tower Road Parcel would be used for inert materials processing and storage (relocated from the existing NMDF site). The parcel is currently used for container, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

Napa County airport is situated to the west/northwest of the Project site. Directly south of the airport, a range of facilities including hangars and parking are integrated into the airport's operations. Union Pacific Railroad runs adjacent to the western edge of the Project site, while Devlin Road runs adjacent to the eastern edge of the Project site (except for the Tower Road Parcel). Further east, opposite Devlin Road, lie several industrial parcels associated with the construction and building industry. The Project site is bordered to the north and northeast by industrial parcels used for equipment and vehicle storage and is bordered to the south and southeast by vacant land and the Devlin Road Transfer Station. Highway 29 is roughly 2,000 feet east of the Project site. The nearest residence is approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. The nearest school is Napa Junction Magnet Elementary School, approximately 1.8 miles south of the Project site.

2.4 PROJECT OBJECTIVES

Pursuant to State CEQA *Guidelines* 15124(b), the Project Description includes this statement of the project objectives. The objectives are intended to demonstrate the purpose of the Project. The primary objectives of the Project include the following:

- To expand the NMDF site operations and support regional recycling and waste management efforts through new operational methodologies.
- To increase the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (SB 32).
- To increase the NMDF site's efficiency, diversify operations, and operate more economically.
- Implement renewable energy solutions at the NMDF site to reduce reliance on non-renewable power sources and reduce GHG emissions.

2.5 PROJECT ELEMENTS

The Project evaluated in this EIR consists of several changes to NMDF site's existing operations and permits including but not limited to the SWFP and BAAQMD air quality permits. The Project would increase material processing capabilities while enhancing sustainable waste management at the NMDF site. Elements of the Project include:

- Increasing the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd;
- Constructing and operating a BCF on the Southern Annexation Parcel;
- Constructing and operating an ADF on the existing NMDF site; and
- Using a portion of the 600 Tower Road Parcel to the north for relocating existing NMDF inert materials processing and storage.

2.5.1 INCREASED PERMITTED TONNAGE LIMIT

The NMDF site operates under SWFP 28-AA-0030², which limits the facility to a maximum tonnage of 760 tpd and 386 waste hauling vehicles per day. The NMDF site currently has days when waste tonnage would exceed 760 tons if not for the daily limit. Such peak days are typically the result of heavy vehicles delivering inerts (rock/dirt) or seasonal peaks for organics (e.g. grape pomace, leaf fall season, etc.). The Project would increase the overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.). It is expected that the new waste received under the proposed tonnage increase would be delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County), as is the case under the existing condition.

In addition to the existing overall maximum tonnage limit of 760 tpd, the NMDF site is limited to a peak daily tonnage for organic materials and transfer processing (MRF recyclables and CDI) of 500 tpd and 360 tpd, respectively. The NMDF site proposes to eliminate these waste subcategory limits with the Project along with the overall tonnage limit increase.

The increase in tonnage limits and elimination of waste subcategory limits would assist in accommodating increased demands from new state regulations such as SB 1383³, improved processing at the NMDF site due to recent equipment upgrades, as well as intermittent high tonnage days for inerts and seasonal fluctuations for organics (grape pomace).

The NMDF site does not propose to increase its permitted daily waste hauling vehicles limit since peak days are typically due to heavy trucks bringing in large loads, which results in less waste hauling vehicles to meet peak daily tonnage limits.

2.5.2 BIOMASS CONVERSION FACILITY AND ANNEXATION OF SOUTHERN PARCEL

NRWS proposes the construction and operation of a BCF on the Southern Annexation Parcel to address the growing challenge of processing woody waste. These waste streams include tree trimmings, source-separated construction and demolition (C&D) wood, and compost overs. The BCF aims to convert wood waste into renewable energy, thereby providing a long-term, sustainable alternative to landfill disposal and open pile burning.

A large impetus for this effort was the closure of many conventional biomass energy facilities that considerably increased the cost of diverting wood waste, particularly compost overs, from landfill disposal. NRWS's primary outlet—DTE in Woodland—has seen its capacity to accept

² <https://www2.calrecycle.ca.gov/PublicNotices/Documents/8200>

³ California Department of Resources Recycling and Recovery (CalRecycle), <https://calrecycle.ca.gov/organics/slcp/>, accessed Sept. 26, 2023.

ground wood waste substantially reduced due to a statewide shift toward processing forest and agricultural waste, both of which are prioritized for wildfire mitigation and air quality improvements. As a result, the majority of Napa’s ground wood now ends up in the landfill.

In recent years, securing beneficial reuse pathways for wood waste has become increasingly difficult and costly. NRWS seeks to establish a reliable, cost-effective, and environmentally responsible outlet for approximately 15,000 tons of woody biomass per year for the next 20-plus years. To address this challenge, NRWS has explored a wide range of biomass conversion technologies over several years, including pyrolysis, hydrogen production, and gasification. After in-depth evaluation, gasification⁴ emerged as the most suitable technology to meet both the throughput and energy needs of the NMDF. The proposed BCF would serve the needs of NMDF by:

- Diverting wood waste⁵ from incineration or landfill disposal;
- Reducing truck traffic associated air quality and GHG emissions associated with trucking wood waste;
- Generating clean, renewable electricity to power NMDF operations and selling excess renewable energy to the grid; and
- Producing biochar, a carbon-sequestering soil amendment.

The proposed BCF responds to statewide mandates under SB 1383, supports local organic waste diversion goals, and aligns with California’s climate and renewable energy objectives by reducing landfill-bound organic waste, cutting GHG emissions, and producing carbon-negative byproducts.

In California, there are about two dozen active biomass to energy plants in operation. These plants are fueled primarily by wood waste and agricultural residues. Gasification typically refers to conversion in an oxygen- or air-deficient environment to produce fuel gases (e.g., synthesis gas, also known as “syngas”). The fuel gases are principally carbon monoxide, hydrogen, methane, and lighter hydrocarbons, but depending on the process used, can contain significant amounts of carbon dioxide and nitrogen, the latter mostly from air. Gasification also produces liquids (tars, oils, and other condensates) and solids (char, ash) from solid feedstocks.

The BCF would be developed on the Southern Annexation Parcel, which is currently undeveloped and includes an area that received soil material from 2019 to 2022. The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by LAFCO of Napa County. A SOI amendment would also be required by LAFCO to process the annexation. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of

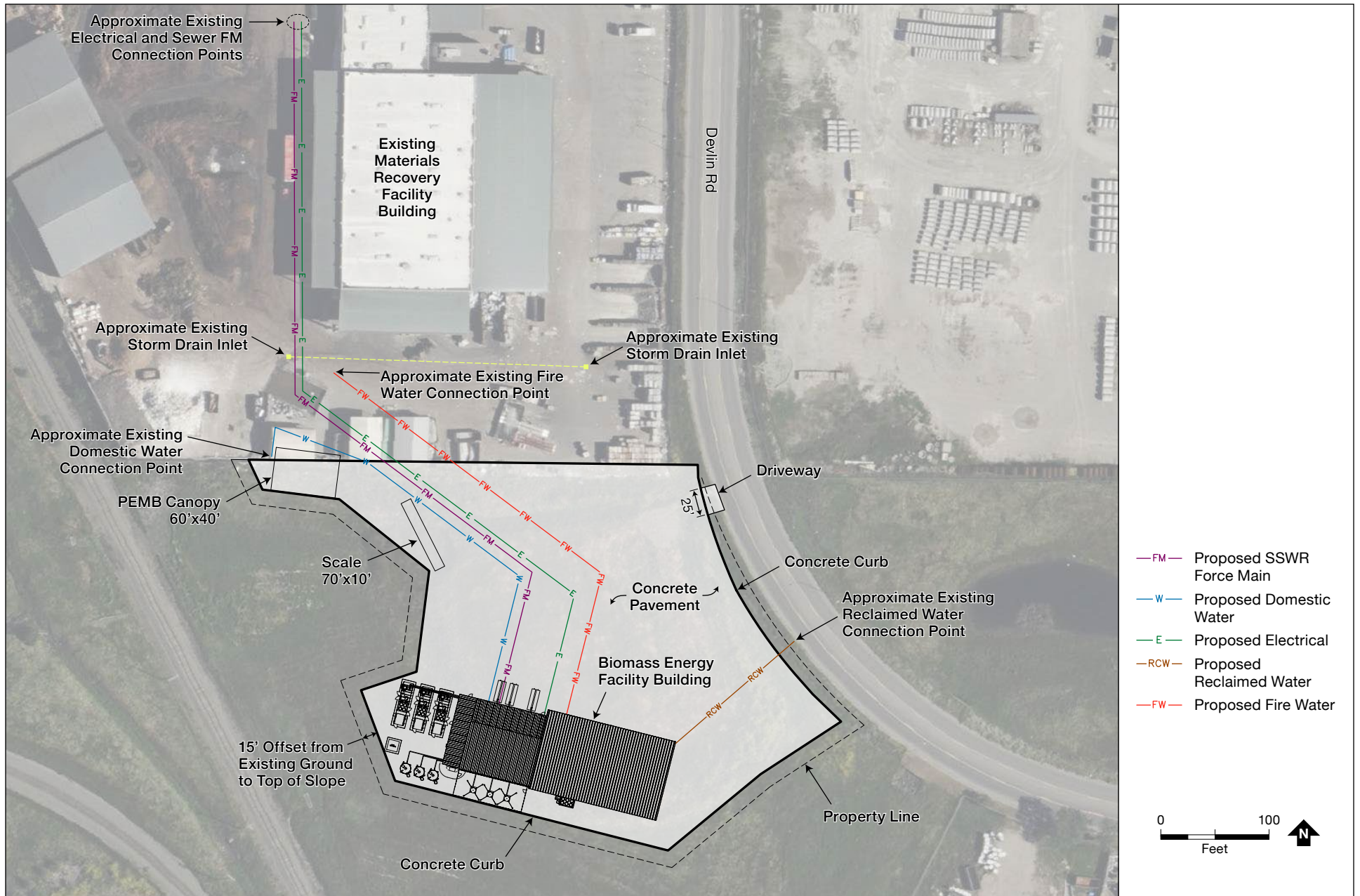
⁴ The Project does not meet the California definition (PRC Section 40106) for gasification and is thus referred to as a Biomass Conversion Facility (BCF). The word “gasification” is used in describing the technology in the context of the Federal EPA definition of gasification (40 CFR part 258).

⁵ Treated Wood Waste (TWW) is disposed of and not diverted per California Department of Toxic Substances Control (DTSC) regulations.

the parcel to PQ-P:AC to be consistent with the existing NMDF site zoning, and a GPA to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

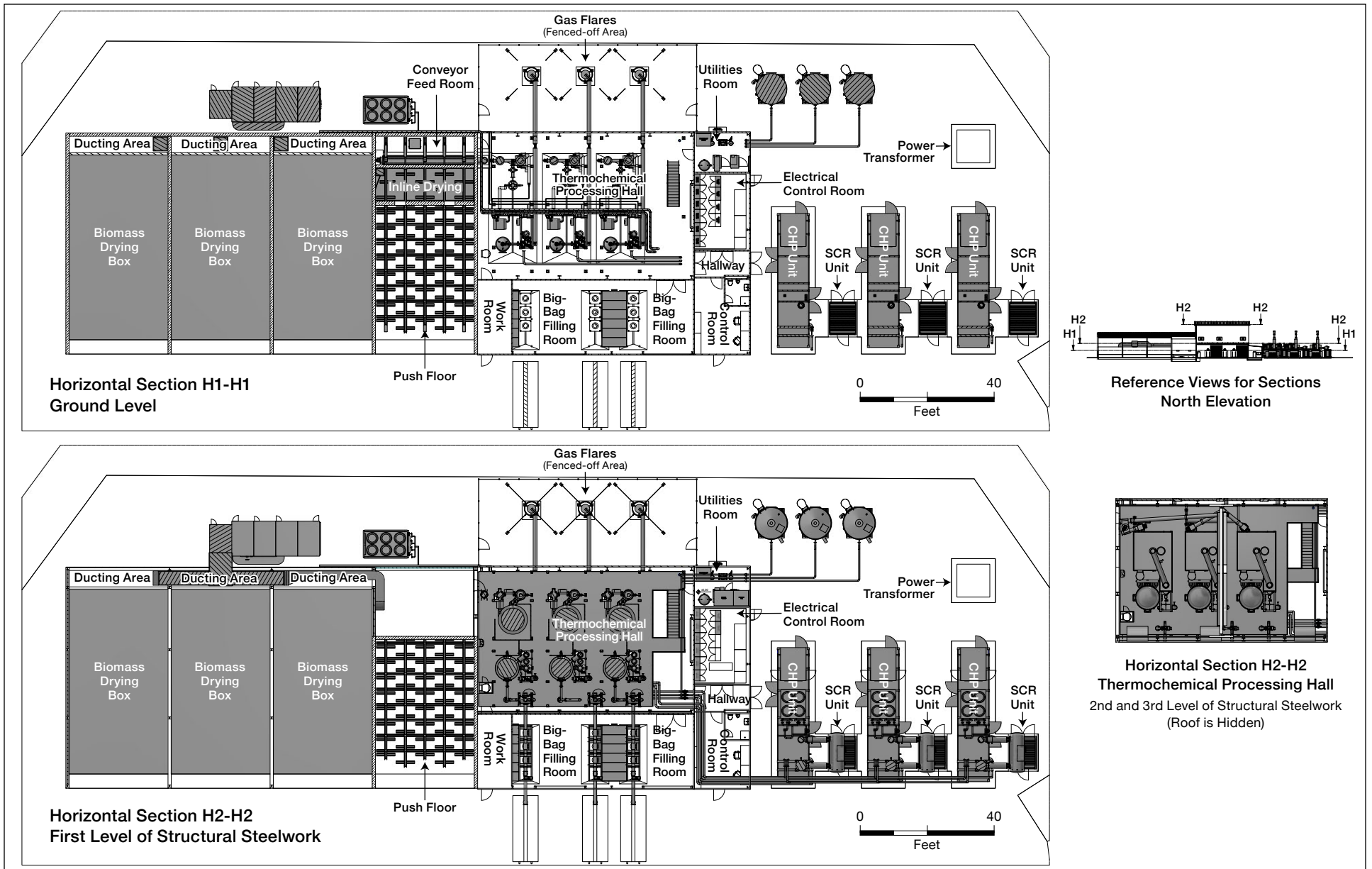
The BCF is designed to generate 1.5 MW of renewable electricity to be used onsite to power NMDF operations, with excess electricity exported to the local electrical grid. The technology provider for the BCF is currently proposed to be Syncraft, a proven European biomass technology provider with multiple operational facilities. The BCF would process approximately 16,000 tons of wood waste per year, enabling NRWS to process 5,000 to 6,000 tons of compost overs annually into suitable biomass feedstock, eliminating the need for offsite disposal and avoiding approximately four truck shipments per day or roughly 1,500 truck shipments per year. Approximately 3,300 tpy of biochar would be generated from the biomass conversion process, which would be marketed and distributed to agricultural and environmental applications that align with carbon sequestration goals. The site plan for the BCF is shown in **Figure 2-3** and the equipment layout is shown in **Figure 2-4**.

The BCF includes feed hoppers, gasifiers, biochar handling equipment, gas clean-up equipment, three 500-kilowatt (kW) output syngas-fueled engines by Jenbacher, and flares. Material handling operations would include the transfer of feedstock to the grinder and an oscillating screen, loading the dryer, and handling and loadout of the biochar. The syngas produced by the gasifier would be captured in a closed vent system and used as fuel for the three Jenbacher engines to produce electricity. Syngas that cannot be combusted in the engine would be disposed of in a limited-use flare assigned to each engine. The BCF building is currently proposed at roughly 45 feet in height at the highest point.



Source: Cunningham Engineering, 2025

Figure 2-3
Biomass Conversion Facility Site Plan



Source: Syncraft, 2025

Figure 2-4
Biomass Conversion Facility Equipment Plan

2.5.3 ANAEROBIC DIGESTION FACILITY

Approved ADF

The existing NMDF site was approved for an ADF through the 2013 CEQA MND and subsequent Addendums. The ADF has not been constructed at NMDF. In May 2023, the City of Napa applied for a \$10,000,000 grant with CalRecycle for funds to develop an ADF on the existing NMDF property. The City of Napa was awarded the grant in December 2023.

The approved ADF to be constructed at the existing NMDF site would require an approximately 22,000 square-foot footprint and would process up to 44,000 tpy of high biomethane potential material such as food waste supplemented with green waste to maintain a solid matrix that is suitable for a plug flow system. The food waste would come from commercial, multi-family dwellings (MFD), residential and self-haul (RSH) sources, and industrial sources. The green waste would be from commercial, MFD, and RSH sources. The amount of tonnage processed through the ADF is ultimately determined by the ratio of high methane producing food waste compared to green waste.

Proposed ADF

The ADF vendor selected by the City is Zero Waste Energy, LLC (ZWE), who is proposing the installation of a Thöni Environmental Engineering Wet Digestion system—specifically, a semi-dry, plug-flow digester. Thöni is a respected vendor with over 30 years of experience and more than 170 facilities operating across 20 countries. As noted previously, the City secured a \$10 million grant through CalRecycle’s Organics Infrastructure Grant Program to support this effort. The proposed ADF would require 32,000 tpy of high biomethane potential feedstock or 44,000 tpy of low biomethane potential feedstock and would generate over 440,000 diesel gallon equivalents (dge) of renewable natural gas (RNG) annually, which would be used to fuel collections vehicles at NMDF. The proposed ADF would serve the needs of NMDF by offering:

- High flexibility with a wide range of organic input materials;
- A compact footprint with seamless integration with NMDF’s current organic pre-processing systems and upcoming grant-funded organics depackager;
- Low labor requirements;
- Production of consistent RNG to fuel collection vehicles; and
- Digestate suitable for blending into the CASP composting process.

At 32,000 tpy of high biomethane potential feedstock, the proposed ADF is currently projected to use the following mix of feedstock:

- 13,000 tpy of foodwaste;
- 9,000 tpy of greenwaste; and

- 10,000 tpy of grape pomace.

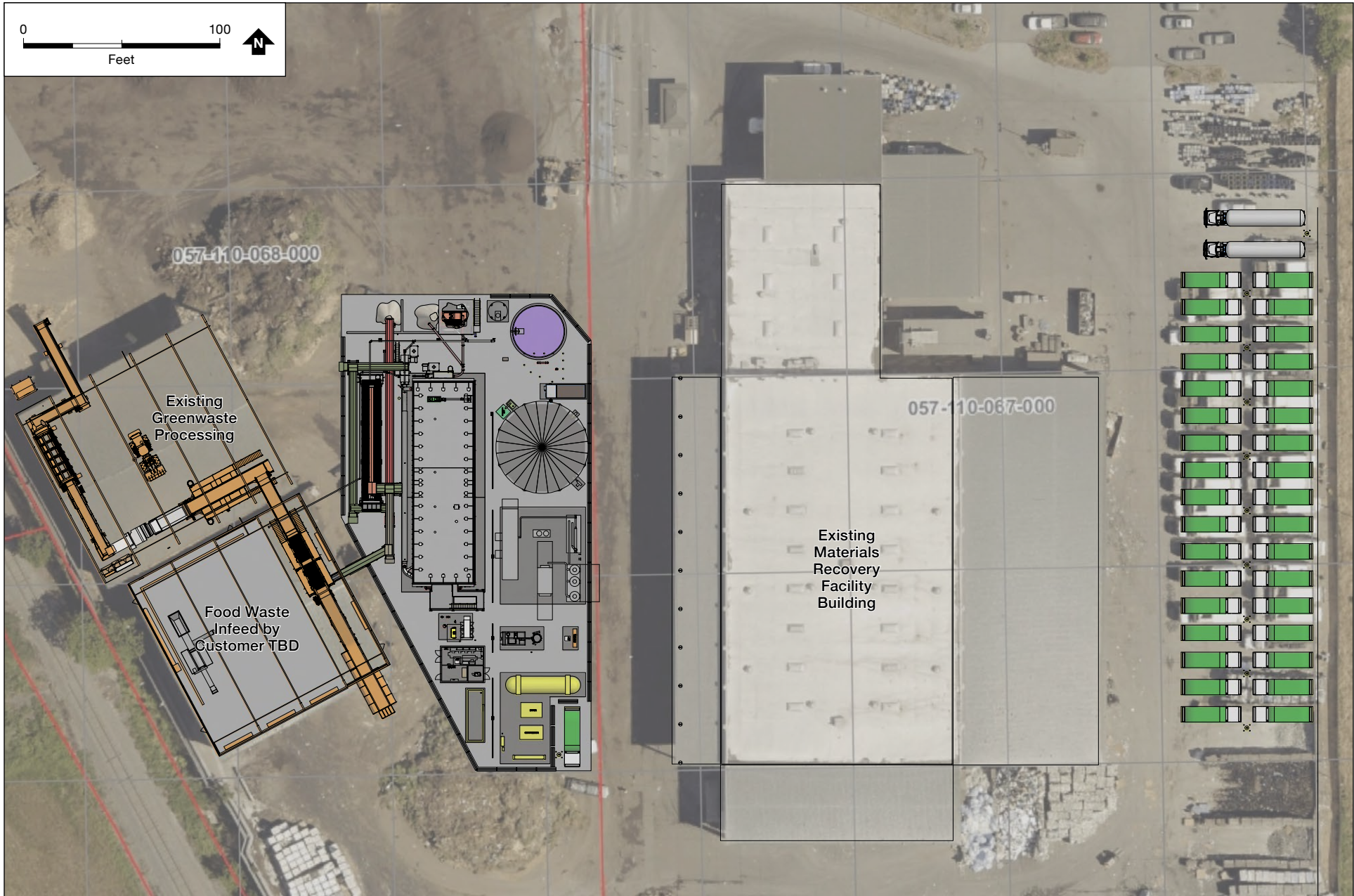
The proposed ADF would be sited between the existing MRF building and existing organics processing buildings in an approximately 22,000 square foot area as shown in **Figure 2-5**. The proposed ADF includes conveyors, receiving hoppers, a digestate sieve, the digester itself, a flare, a boiler, an emergency generator, biogas upgrading and fueling station equipment, and various other pieces of ancillary equipment and infrastructure as shown in **Figure 2-6** and uses a continuous plug-flow system to produce biogas and digestate.

The AD system accepts preprocessed feedstock materials and the loading process is highly automated. Pre-processed feedstocks are conveyed to a walking floor loading bunker with speed regulated to meter feedstock to the digester via an infeed piping. From the loading bunker, the feedstock would be charged to a dual-shaft mixer that further homogenizes the feedstock and has the capability to add stored winery waste and digestate press water. Following mixing, the feedstock is hydraulically pumped through a heat exchanger tube that pre-heats the feedstock while it is pumped to the front of the AD system. The AD system uses a single plug-flow biological reactor where feedstock is loaded one on end, mixed with paddles, and digestate is unloaded on the other. Although the waste would be homogeneous, the stirrers have capacity to handle difficult materials and perform well with a variety of feedstocks.

The digestion process inside the AD system is based on an anaerobic, thermophilic, biological process that is characterized as High Solids Anaerobic Digestion. The digester has a process temperature of approximately 131°F and an average dry substance content of >25%. Process temperature will be maintained via a process hot water system. The residence time of the feedstock in the digester is approximately 21 days but may range from 19 to 36 days depending on the volume of input material processed.

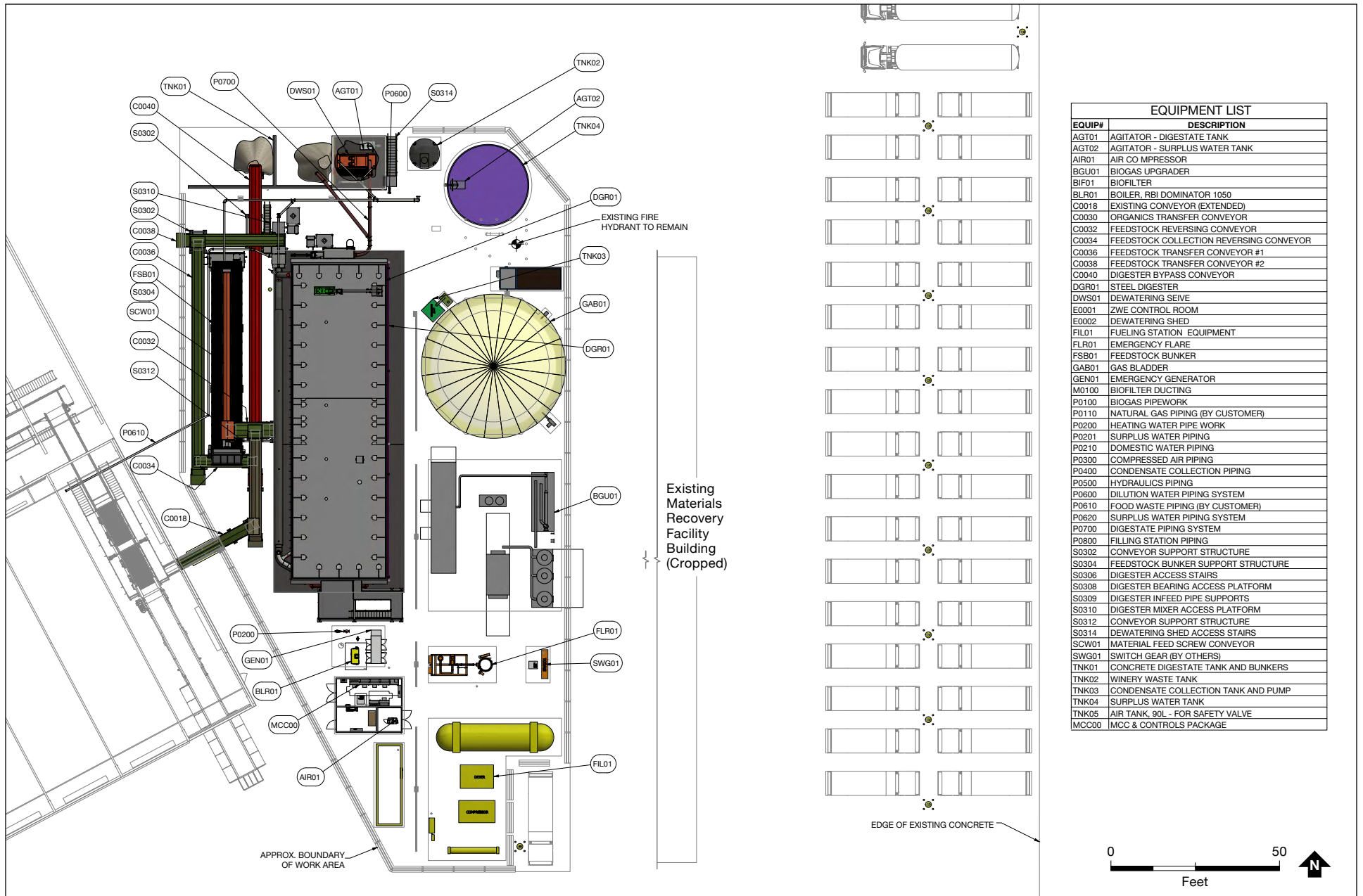
The high solids AD system generates and stores biogas. Biogas is captured in the headspace of the digester and piped to a biogas storage buffer. Biogas is a biological by-product of anaerobic digestion and is comprised primarily of methane and carbon dioxide. The biogas is collected until methane content reaches 22% at which point the purged biogas is combined with some of the stored biogas and sent to the burner/boiler system. The stored biogas would then be routed to a biogas conditioning system where impurities like hydrogen sulfide and water are removed. The resulting RNG would be boosted to 3600 pounds per square inch (psi) and dispensed in an onsite time-fill fueling system which will supply NMDF collection vehicles.

Digestate would be extracted from AD system by a hydraulic pump to a dewatering station where it will be processed by a vibrating screen that separates the liquid and solid fractions. Recovered liquids, or “press water” is stored in concrete vault below the dewater system. Press water would be recirculated and mixed with incoming feedstock at the digester mixer or pumped to a truck for use as a liquid fertilizer. Recovered solids are temporarily stored in a bunker adjacent to the dewatering system. Solid digestate would be transferred by NRWS to the existing CASP system located at the NMDF for further processing.



Source: Zero Waste Energy, 2024

Figure 2-5
Anaerobic Digestion Facility Site Plan



Source: Zero Waste Energy, 2024

Figure 2-6
Anaerobic Digestion Facility Equipment Plan

2.5.4 UTILIZATION OF A PORTION OF THE NORTHERN PARCEL

The Project would use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025) (See **Figure 2-7**). The 600 Tower Road Parcel would be used for inert materials processing and storage. The parcel is currently used for containers, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

2.6 SITE ACCESS AND PARKING

The NMDF site is accessed via Levitan Way from Tower Road. The 600 Tower Road Parcel to the north is accessed via Tower Road at the end of the cul-de-sac and can also be accessed through the existing NMDF site. The proposed BCF on the Southern Annexation Parcel to be annexed into the City would be accessed via a new driveway off of Devlin Road (see **Figure 2-3**) and existing NMDF access at Levitan Way (see **Figure 2-2**).

The NMDF site's administration office currently provides parking. The BCF on the Southern Annexation Parcel to be annexed into the City would be completely paved and would include additional parking spaces for staff and visitors. The 600 Tower Road Parcel would remain as is for inert materials processing and storage.

2.7 PROJECT EMPLOYMENT

The Project would create temporary construction jobs and would also create permanent professional positions. The Project is expected to create 6 permanent professional positions for operating the ADF and BCF. NRWS would aim to provide jobs to a qualified, professional group of staff members that would best implement the goals and mission of the Project.

2.8 HOURS OF OPERATION

The NMDF site operates 24 hours per day, seven days per week for commingled and source separated recyclables processing and CASP composting. Future ADF operations are permitted to operate 24 hours per day per the SWFP. The proposed BCF would operate 24 hours per day, seven days per week. Mixed waste processing at the NMDF site is limited to 6 a.m. to 6 p.m. NMDF is closed New Year's Day, Easter, Thanksgiving, and Christmas. Receipt of refuse/waste/feedstock is permitted 7 days per week with commercial vehicles limited to 5 a.m. to 5 p.m. and public vehicles limited to 8 a.m. to 5 p.m. The Project does not propose any changes to NMDF hours of operation.



Source: RCH Group; Google Earth Pro, 2025

Figure 2-7
600 Tower Road Parcel

2.9 CONSTRUCTION

The Project would require construction activities on the Southern Annexation Parcel for development of the BCF and on the existing NMDF site for development of the ADF. To be conservative, it was assumed that the BCF and ADF would be constructed simultaneously for approximately 19 months. Construction phases would consist of site preparation, construction of footings/retaining walls, earthwork/rough grading, underground utilities, building construction/equipment installation, paving, and architectural coating. Approximately 4,864 cubic yards of material would be exported from the Southern Annexation Parcel during the earthwork phase, requiring a total of 608 truck trips. The existing NMDF site area for the ADF is currently paved and would receive new concrete for foundations. It is estimated that an average daily construction crew of 25 employees would be present on-site during construction. Construction would occur 7:00 a.m. to 7:00 p.m. Monday through Fridays and 8:00 a.m. to 5:00 p.m. on weekends, consistent with the City of Napa Municipal Code Section 8.08.025.

Other construction activities on the NMDF site would consist of moving existing equipment and storage areas to other areas of the NMDF site. These activities could happen with or without the Project. The 600 Tower Road Parcel would not require construction activities and would continue to be used for storage.

2.10 REGULATORY REQUIREMENTS, PERMITS AND APPROVALS

The City of Napa would be required to approve the Project prior to development of the Project. The City would use information contained in this EIR during the decision-making process. Permits and approvals from other agencies would be necessary prior to the development of the Project. Known entitlements, permits, and approvals required for the Project are identified below.

City of Napa:

- Certification of Final EIR;
- Adoption of a Mitigation Monitoring and Reporting Plan (MMRP), Findings, and Statement of Overriding Considerations (if necessary); and
- Approval of the Conditional Use Permit, Site Plan, Pre-Zoning, GPA and Other City permits such as Building and Grading Permits.

Other Governmental Agency Approvals:

- Annexation Approvals (including SOI amendment) from LAFCO and the County of Napa;
- Revisions to SWFP from CalRecycle;
- The BAAQMD requires an Authority to Construct/ Permit to Operate (ATC/PTO) for new or modified equipment that emits air pollution related to the operation of the Project (ADF and BCF); and
- The San Francisco Bay Regional Water Quality Control Board (RWQCB) requires a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water

Discharges Associated with Construction and Land Disturbance Activities. Operation of the expanded NMDF would be subject to coverage under the NPDES Industrial Permit.

2.11 REFERENCES

CalRecycle. Solid Waste Facility Permit, Facility Number 28-AA-0030.

City of Napa. 2020. *Notice of Preparation (Notice) of an Environmental Impact Report (EIR) and Notice of Zoom Scoping Meeting for Napa Renewable Resources Project 2.0 (NRRP 2.0)*. November 15, 2023.

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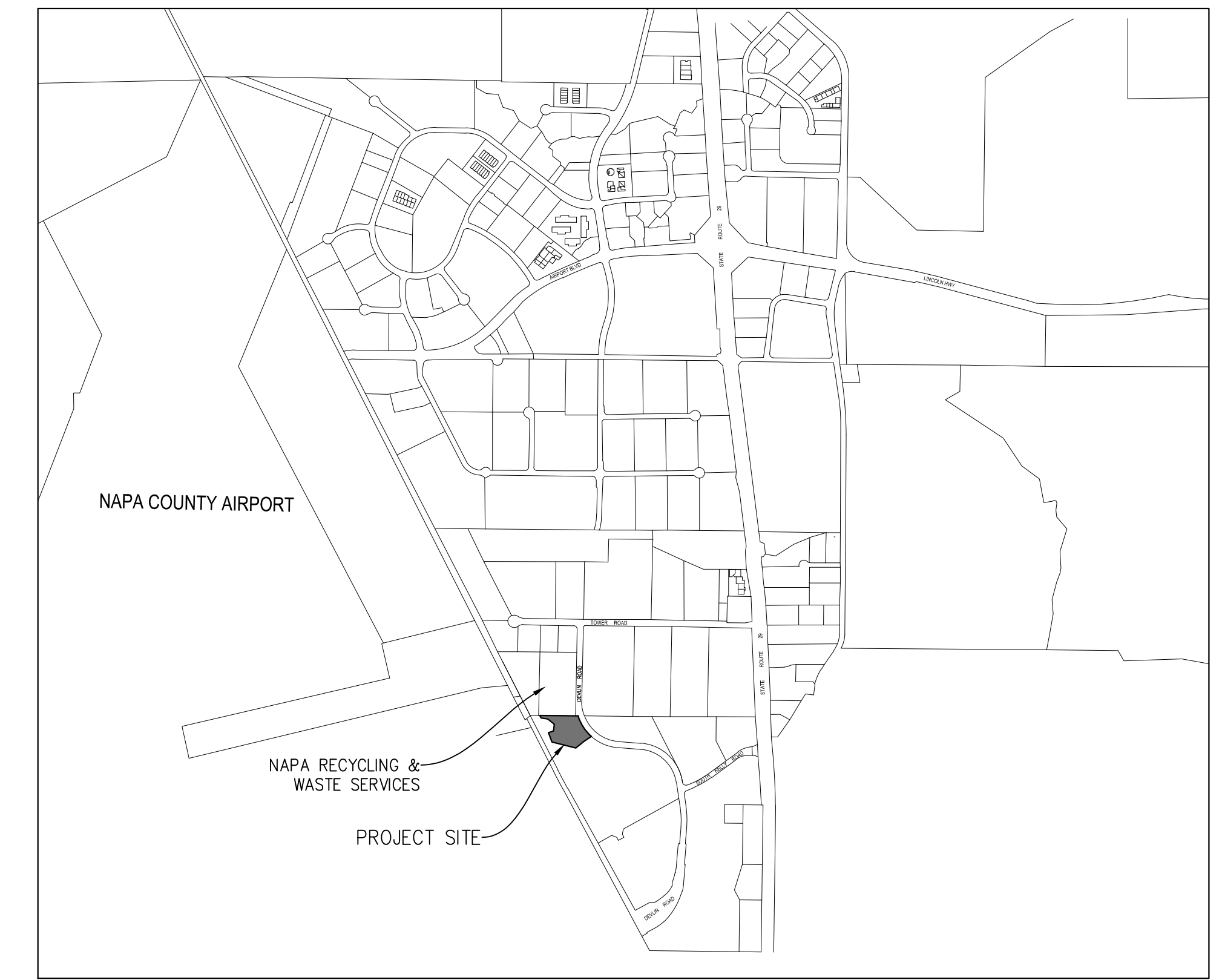
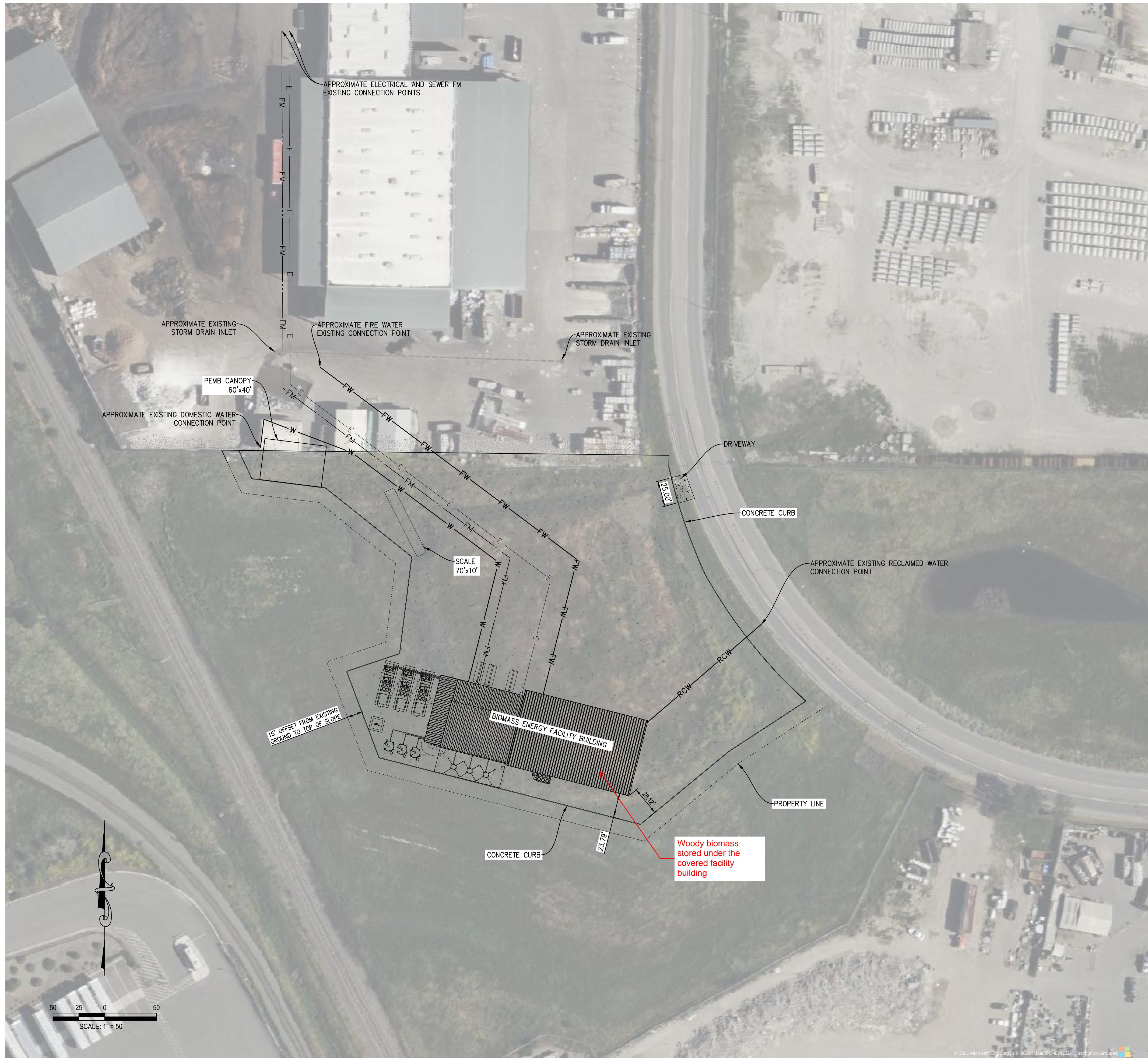
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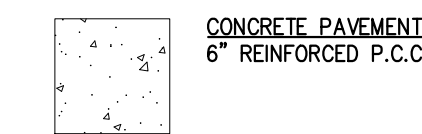
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VICINITY MAP: NTS

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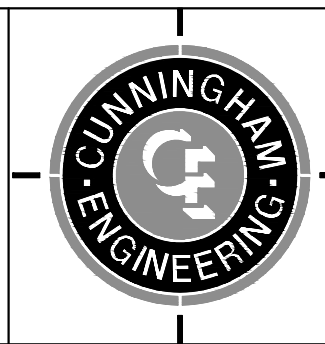
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- PROPOSED SSWR FORCE MAIN
- PROPOSED DOMESTIC WATER
- PROPOSED ELECTRICAL
- PROPOSED RECLAIMED WATER
- PROPOSED FIRE WATER

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CHECKED	SG					
		NO.	BY	DATE	REVISION	APP'D/DATE

DESIGN ENGINEER
BY STEVEN J. GREENFIELD
DATE 2025/XX/XX P.E. C50880



CECWEST.COM
Project Planning ■ Civil Engineering ■ Landscape Architecture
Sacramento Office: 2120 20th Street, Suite Three, Sacramento, CA 95818, (916) 455-2026
Davis Office: 2940 Spafford Street, Suite 200, Davis, CA 95618, (530) 758-2026

PRELIMINARY SITE PLAN
NAPA BIOMASS ENERGY

CIVIL : SITE PLAN

SCALE
AS SHOWN

DATE: 04/11/2025
PROJECT NO: 2070.00.01

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Public Comments

CITY OF NAPA ANNEXATION / PRE-ZONING OF BIOMASS GASIFICATION
FACILITY – AIRPORT LAND USE CONSISTENCY DETERMINATION (P25-00305).
Airport Land use Commission Hearing – July 1, 2026

Atkins, Wendy

From: Gutierrez, Jesse
Sent: Tuesday, February 10, 2026 2:41 PM
To: Bordona, Brian; Dooley, Jason; Morrison, Dana; Parker, Michael; Belov, Alexei
Cc: Crosby, Jamison; Atkins, Wendy; McMahon, Mckayla
Subject: DEIR Napa Renewable Resources Project 2.0 Statement of Support

Hi everyone,

Jamison asked me to share our team's supporting statement acknowledging the climate and resiliency benefits of Napa's Renewable Resources Project. 2.0.

Napa County proudly supports the Napa Renewable Resources Project 2.0 as a bold, forward-looking investment that exemplifies regional leadership in climate action, environmental stewardship, and sustainable infrastructure. This project brings significant benefits to the region and community by expanding resource recovery and organics diversion, deploying anaerobic digestion and biomass gasification, and installing approximately 2,500 solar panels to generate on-site renewable energy. Together, these improvements reduce greenhouse gas emissions, landfill disposal, and long-distance hauling while building local energy resilience and lowering reliance on non-renewable energy sources. NRRP 2.0 directly advances the goals of Napa County's proposed Regional Climate Action and Adaptation Plan (RCAAP), specifically Measure SW-6: Support Waste-to Energy Facilities and Measure BE-3: Increase Renewable Energy Generation. The project supports region wide efforts by strengthening community resilience in the face of climate change, improving the energy efficiency of municipal facilities, and accelerating the transition away from fossil fuels. By producing renewable electricity and carbon-negative renewable natural gas to support cleaner, electric and low-carbon municipal vehicle fleets, the project delivers broad environmental benefits and positions The City of Napa, Napa County, and the region as a model for integrated, forward-looking climate action.

Let me know if you have any questions.

Jesse



A Tradition of Stewardship
A Commitment to Service

Jesse Gutiérrez

Principal Planner - Sustainability
Planning, Building, & Environmental Services
Napa County

Phone: 707-299-1362

1195 Third Street, Suite 210
Napa, CA 94559

www.countyofnapa.org

Atkins, Wendy

From: Chris Jones <chrisjones@cityofnapa.org>
Sent: Thursday, May 14, 2026 5:16 PM
To: Atkins, Wendy
Subject: RE: P25-00305 City of Napa NRRP 2.0 Additional Information
Attachments: July 2025 Permit - tonnage and vehicle counts.xlsx

Categories: Planning

[External Email - Use Caution]

600 tower road has typically no one and is used for storage.

Customers may drop off materials at the southern parcel. There may be 10-20 people circulating at a time. We're limited to The MDF parcels will be merged after annexation into a single parcel if that helps. 600 tower road will always be separate as the City does own it. Attached which was included in the submitted documents were vehicle counts entering the current facility. The highest day averaged 30 vehicles an hour but people don't usually stay onsite for an hour. Typical max queue is 7-8 vehicles at a time.

Chris Jones, P.E.

Utilities Department, City of Napa

Office (707) 257-9460

Mobile (310) 344-5676

Email chrisjones@cityofnapa.org

From: Atkins, Wendy <wendy.atkins@countyofnapa.org>
Sent: Thursday, May 14, 2026 4:58 PM
To: Chris Jones <chrisjones@cityofnapa.org>
Subject: P25-00305 City of Napa NRRP 2.0 Additional Information

[EXTERNAL]

Hi Chris,

I have a couple more questions regarding the NRRP 2.0 project.

Can you please provide an estimate of how many people are on the 820 Levitin Way (APN 057-090-087) at a time? I know you stated that there will be no more than three employees, but will there be any customer or visitors on the site. I need to confirm that the intensity is less than 57 people.

Also, can you estimate the number of people that are on the 600 Tower Road (APN 057-110-025) at a time? I need to confirm that the intensity is less than 416 people.

Thank you!



A Tradition of Stewardship
A Commitment to Service

Department of Public Works
Napa County Airport

2000 Airport Road
Napa, CA 94558
www.napacounty.gov/airport

Main: (707) 253-4300
Fax: (707) 253-4330

Steven E. Lederer
Director

May 18, 2026

Ms. Wendy Atkins
Planner II
County of Napa
1195 Third Street Suite 210
Napa, CA 94559

Project: City of Napa Special Condition Exception to ALUCP for the proposed Napa Renewable Resources Project (NRRP) 2.0

Dear Ms. Atkins,

The City of Napa is proposing to expand the Napa Renewable Resources Project on land that has been determined as incompatible to the intent of the Airport Land Use Compatibility Plan as adopted (ALUCP). Their project includes the development of a Biomass Conversion Facility (BCF) to process green waste. The City of Napa has requested a special exception to the ALUCP in a letter dated April 6, 2026, and has identified one form of hazing as a bird deterrent.

The Napa County Airport maintains a Wildlife Hazard Management Plan (WHMP) to reduce the risk of birds, deer, coyotes, and other wildlife found in and around the airport. The current airport plan is attached. The Napa County Airport has identified the existing recycling center as a bird attractant and the City acknowledges that bird populations habituate the facility, most notably in spring and winter. They have added spikes and netting to deter birds from building nesting sites. I met with the City of Napa and its facility operator (Napa Recycling & Waste Services or NRWS) on April 20th and toured their facility on April 30th. It was extensively populated with birds, some smaller (<4 lbs) and some larger (>4lbs), such as seagulls that could damage aircraft, and there is no consistent and coordinated program to reduce bird populations.

However, the facility is under near term construction to pre-process organic material under as part of the City's 2014 NRRP 1.0 to divert landfill disposal of organic waste, reduce GHG emissions and produce natural gas through anaerobic digestion (AD). The AD process will change existing operations such that commercial food waste, a bird attractant will be processed in an enclosure, thereby reducing the attractant. The post-processed digestate are no longer an attractant based on experience with current operations accepting digestate from South San Francisco. The AD facility is expected to be online in late summer/early fall 2027.

The Federal Aviation Administration (FAA) Advisory Circular 150-5200-33C, referenced by the applicant, recommends a separation distance of 10,000 feet from airports serving turbine-powered aircraft for any of the hazardous wildlife attractants found in Chapter 2 [e.g. Waste Disposal Operations] This distance is to be maintained between the closest point of the airport's aircraft operations area and the hazardous wildlife attractant. In the current situation, the Airport is only separated from the facility, originally constructed in 1993, by a railroad easement and a service road of less than 300 feet combined.

I am supportive of the goals of the proposed Napa Renewable Resources Project (NRRP) 2.0 and its plan to divert landfill disposal of local organic waste, reducing GHG emissions, and producing carbon-negative byproducts. Mitigating the known risks from bird strikes to aircraft should also be a goal of this proposed Project. I propose that the project be conditioned as follows,

"The Napa Renewable Resources Project (NRRP) 2.0 project shall complete a wildlife hazard assessment (WHA) leading to a wildlife hazard management plan (WHMP), to include baseline data, data after the imminent NRRP 1.0 modifications expected to reduce wildlife attractant and assess data after the proposed City of Napa NRRP 2.0 Project is implemented at the recycling facility. The WHMP will be prepared using the same biological expertise as the Napa County Airport WHMP. The airport will update its 2017 plan. The plans will identify relevant species and populations posing a danger to aircraft in the area, characterize the habitat, water, and food sources that are attractants to significant animal and bird populations, and identify recommended approaches based on data to coordinate habitat modification, hazing, and depredation activity. The scope of work for the Airport WHMP will adhere to FAA Advisory Circular 150-5200-33C and 150-5200-38."

This proposal is a common-sense approach to risk mitigation and allows both agencies to work together on this important issue. I propose that:

- The City of Napa (and its facility operator NRWS) and the Napa County Airport jointly develop two scopes of work and award the project to a single qualified professional firm. The completed plans will exist side by side.
- The City of Napa will complete a WHA and develop a WHMP with recommendations that take into account NRRP 1.0 and NRRP 2.0 Project implementation. The Napa County Airport will submit its updated WHMP to the FAA for acceptance.
- The City of Napa will pay for its wildlife hazard assessment and WHMP, and the Napa County Airport will pay for its WHMP update.

Thank you and please feel free to contact me with any questions,

Mark Witsoe

Mark Witsoe, A.A.E./CAE
Napa County Airport Manager

Enc. APC Wildlife Hazard Management Plan

**WILDLIFE HAZARD MANAGEMENT PLAN
NAPA COUNTY AIRPORT**



For Submission to:

Federal Aviation Administration
Western-Pacific Region
15000 Aviation Blvd.
Lawndale, CA 90261

Prepared for:

Napa County Airport
2030 Airport Road
Napa, California 94558

June 2017

Prepared by:

**Mead
& Hunt**

1360 19TH Hole Drive, Suite 200
Windsor, California 95492



U.S. Department
of Transportation
**Federal Aviation
Administration**

Western Pacific Region
American Samoa, Arizona, California, Guam, Hawaii, Nevada

P.O. Box 92007
Los Angeles, California
90009

June 27, 2017

Mr. Martin Pehl
Airport Manager
Napa County Airport
2030 Airport Road
Napa, California 94558

Dear Mr. Pehl:

Wildlife Hazard Management Plan
Napa County Airport
Napa, California

We accept the Napa County Airport's (APC) Wildlife Hazard Management Plan, which was developed for the airport by Mead & Hunt Inc..

The main goal is to operate the airport in a safe and serviceable condition. This includes the control of wildlife hazards. The first step was to conduct a Wildlife Hazard Assessment to identify what types of hazards are on and in the vicinity of the airport. Developing this Wildlife Hazard Management Plan was the next step. Take zero tolerance towards all wildlife that can cause harm and damage to people and aircraft.

As a reminder, the Wildlife Hazard Working Group should meet at least once a year, more often if necessary. You don't need to limit the meetings to airport staff. Invite some of the airport tenants. They may be seeing things that you don't. When you conduct the meetings, be sure to document them. It can help track whether the on-going wildlife mitigation efforts are working or not. If the techniques being used, are not working, modify them.

Should you have any questions or comments regarding this letter, please do not hesitate to contact me at (310) 725-3636 or via email at elizabeth.louie@faa.gov.

Sincerely,

ORIGINAL SIGNED BY:
ELIZABETH LOUIE

Elizabeth Louie
Airport Certification Safety Inspector

cc: Ms. Lisa Harmon, Mead & Hunt
Mr. Ron Biaoco, SFO ADO
Ms. Camille Garibaldi, SFO ADO

EXECUTIVE SUMMARY

Napa County (County), the owner and operator of the Napa County Airport (APC, or “the airport”), prepared this Wildlife Hazard Management Plan (WHMP) in accordance with the requirements set forth in Title 14 of the Code of Federal Regulations (CFR) Part 139.337(e). The WHMP was developed based on the results of the airport’s 2016 Wildlife Hazard Assessment (WHA). Pursuant to Federal Aviation Administration (FAA) regulations, the County will convene a Wildlife Hazard Working Group (WHWG) every 12 consecutive calendar months, at a minimum, and review and update the plan as circumstances warrant. All changes made to the WHMP will be sent to the FAA, Western Pacific Region, for acceptance.

Pursuant to FAA guidance, the WHMP addresses wildlife attractants within the critical zone for wildlife hazards, which is defined as the area within 10,000 feet of aircraft movement areas and within 5 miles of approach/departure corridors, because attractants in this area could support wildlife that poses a hazard to aircraft operations. The WHMP outlines and prioritizes airport-specific wildlife hazard management measures and includes target dates for their completion. APC staff will manage the habitat on and near the airfield in a manner that will discourage hazardous wildlife. APC staff will disperse hazardous wildlife when it is observed, provide advisories to pilots and air traffic control, and make operational changes as necessary to address hazardous wildlife.

The WHMP outlines the roles and responsibilities of airport staff and others involved in wildlife management. It identifies the protocol for monitoring, documenting, and reporting potential wildlife hazards, implementing procedures, and reporting wildlife strikes at APC. As described in the WHMP, APC staff will identify and respond in a timely manner to hazardous wildlife and situations that are identified or reported to the Airport Wildlife Coordinator (AWC).

The WHMP describes wildlife hazard control measures for birds and mammals. To implement the WHMP, APC staff will maintain equipment to disperse wildlife and perform non-lethal and lethal control of wildlife. APC Airport Operations personnel will be properly trained to identify wildlife and to use wildlife control and management equipment safely and efficiently. Special federal- and state-issued permits are required to control most wildlife species that are afforded some type of protection under federal or state regulations. The WHMP identifies the laws and regulations governing the take or harassment of particular wildlife species. Copies of the federal- and state-issued depredation permits, wildlife control activity documentation, and wildlife control and management training records will be maintained at APC and incorporated into the WHMP.

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Attachments

- A FAA Guidance/Regulations, ACRP Documents, and Regulatory Agency Contact Information
- B Depredation Permit
- C Airport Wildlife Observation Log Sample
- D Airport Layout Plan

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1.0 INTRODUCTION

Mead & Hunt, Inc. (Mead & Hunt) conducted a Wildlife Hazard Assessment (WHA) at the Napa County Airport (APC or “the airport”) from October 2014 to September 2015. The purpose of the WHA was to identify potential hazards to aircraft operations and human safety associated with the presence and movement of wildlife on and within the Federal Aviation Administration’s (FAA’s) critical zone for wildlife hazard management, which is defined as the area within 10,000 feet of aircraft movement areas and within 5 miles of the airport’s approach and departure surfaces. The data obtained during the WHA indicated that a Wildlife Hazard Management Plan was necessary.

The WHA identified several wildlife attractants/habitats on and within 5 miles of APC including airfield turf within the runway safety areas (RSAs) and weedy vegetation outside the RSAs, Fagan Marsh and other perennial saltmarsh habitats, the Napa River and the Napa-Sonoma Marsh Wildlife Area (NSMWA), the Napa County Sanitation Wastewater Treatment Facility, Fagan Slough, Fagan Creek and Marsh, the Napa Recycling and Waste Transfer station, Eagle Vines Golf Club, and an active heron and egret rookery. Each of these features or facilities attracted wildlife to the immediate airport vicinity (see **Figure 1-1**).

Several species of birds and mammals that could pose hazards to aircraft operations were observed during the 12-month monitoring period. The avian species observed to pose the greatest risk to aircraft operations at APC were:

- **Waterfowl:** Canada geese and various duck species
- **Gulls**
- **Swallows**
- **Shorebirds:** Killdeer and Great blue heron
- **Songbirds:** Western meadowlark
- **Doves and Pigeons:** Mourning dove and various pigeons
- **Raptors:** Turkey vulture, Red-tailed hawk, Northern harrier, and American kestrel
- **Blackbirds and Starlings:** Brewer’s blackbird, Red-winged blackbird, and European starling

The mammals observed to pose the greatest risk were deer and coyote, all of which were observed within the Air Operations Area (AOA) and on airport property in the absence of a complete and secure perimeter fence.

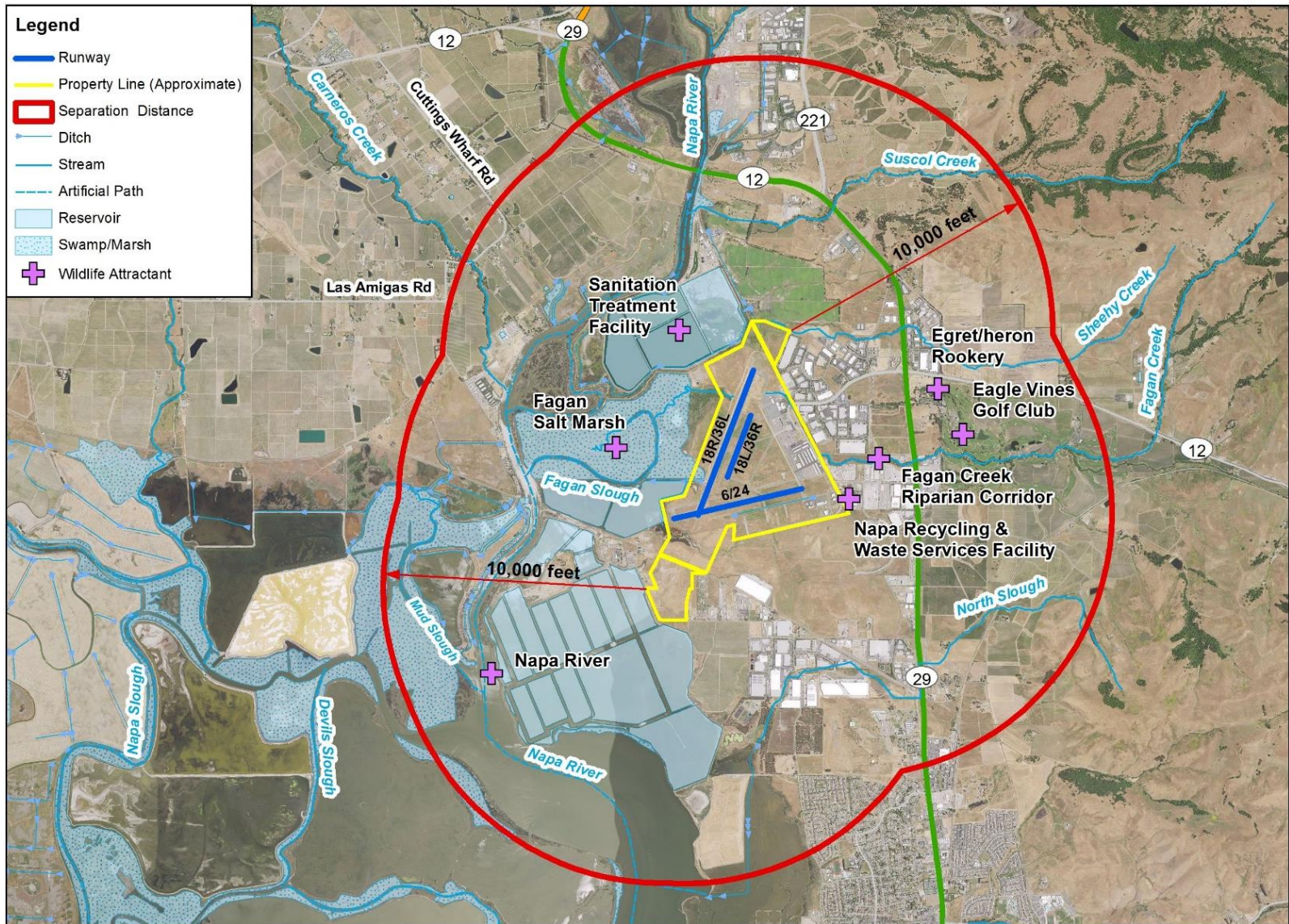
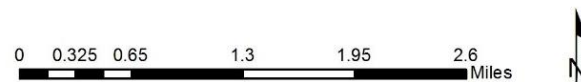


Figure 1-1.
FAA Critical Zone (10,000-foot Separation Distance) and Observed Wildlife Attractants



1.1 Project Background and Need

APC is a general aviation airport that does not hold an Airport Operating Certificate from the FAA in accordance with 14 CFR Part 139. However, FAA guidance pertaining to wildlife management is set forth at Title 14 CFR 139.337(b), which aims to reduce the potential for wildlife strikes to occur and requires the operator of a certificated airport to conduct a WHA if a “triggering event” has occurred. A triggering event includes the following:

1. An air carrier aircraft experiences multiple wildlife strikes;
2. An air carrier aircraft experiences substantial damage from striking wildlife;
3. An air carrier aircraft experiences engine ingestion of wildlife; or
4. Wildlife of size or in numbers capable of causing any of the previous events is observed to have access to airport flight patterns or aircraft movement areas.

According to the FAA database, 89 wildlife strikes have been reported at APC, 19 of which resulted in aircraft damage.

Although APC is not a certificated airport, it is a federally obligated airport and receives funds from the FAA to undertake capital improvements. To accept federal funding, the County must agree to certain terms and conditions, known as grant assurances. Grant Assurance No. 19 states that airports “shall be operated at all times in a safe and serviceable condition.” Wildlife management is a safety issue. The WHMP will help the County comply with Grant Assurance No. 19 by enhancing safety during airport operations.

The County completed a WHA for the airport from 2014 to 2015. The WHA identified the presence of several species on and near the airport, and the qualified Airport Wildlife Biologist determined that a WHMP would be warranted. The FAA concurred with the recommendation in its 2016 WHA acceptance letter and instructed the airport to develop a WHMP.

1.2 Wildlife Hazard Management Plan Objectives

The WHMP was prepared in accordance with 14 CFR Part 139 and applicable agency guidance. The WHMP will be reviewed by a Wildlife Hazard Working Group (WHWG) every 12 consecutive calendar months to identify any changes in site conditions or wildlife behavior. If the WHWG determines that revisions are necessary, the plan will be updated and submitted to the FAA for acceptance. When potential changes are solely the result of updates, changes, and revisions to FAA Advisory Circulars (ACs) or CertAlerts, changes to the WHMP are not necessary unless requested by the FAA.

1.3 Objectives of the WHMP

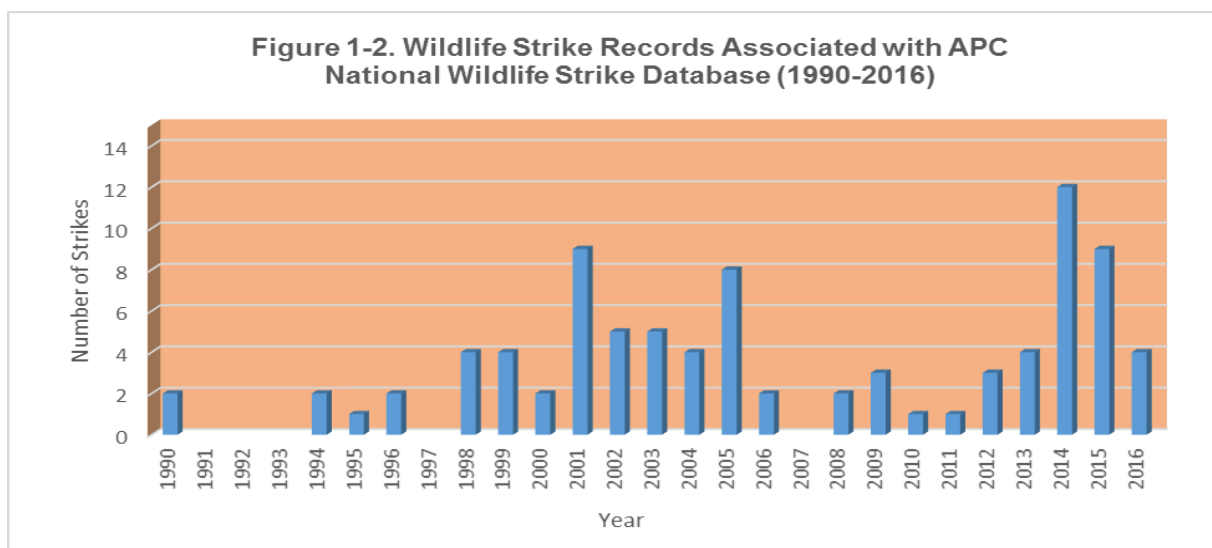
The objectives of this WHMP are to:

1. Identify key participants and individuals associated with the WHMP at APC and their responsibilities;
2. Identify priorities and actions to avoid or mitigate wildlife hazards at APC; and
3. Identify guidelines by which the wildlife control program will be conducted and evaluated.

1.4 Napa County Airport Strike History

The FAA's National Wildlife Strike Database was reviewed in February 2017. According to the FAA database, 89 wildlife strikes have been reported at APC since 1990 (**Figure 1-2**). Over forty percent of the strikes have occurred during the last decade. However, wildlife strike reporting is voluntary, and the data shown may not accurately reflect the number of wildlife strikes that has occurred. Of the 89 strikes, 19 resulted in aircraft damage.

- **Substantial damage:** Four reported wildlife strikes resulted in substantial damage to aircraft. One strike was associated with each of the following: mule deer, ducks, turkey vulture, and an unknown medium-sized bird.
- **Minor damage:** Eleven reported strikes resulted in minor damage. The strikes were associated with a turkey vulture (two strikes), rock pigeons (two strikes), gulls (two strikes), ducks (one strike), hawks (one strike), American kestrel (one strike), and unknown medium-sized birds (two strikes).
- **Unknown damage:** Four strikes resulted in damage of an unknown extent. One strike was associated with each of the following: sparrow, gull, gadwall, and an unidentified bird.



Source: [FAA Wildlife Strike Database, accessed January 2017. Available at: http://wildlife.faa.gov/database.aspx](http://wildlife.faa.gov/database.aspx)

1.5 Hazardous Wildlife Observed

WHA field surveys were conducted for a 12-month period from October 2014 through September 2015. Wildlife was observed from 15 survey locations throughout WHA field studies. As shown in Table 1-1, nine locations (Points 1 through 9) were located on airport property, and six were located off site to observe wildlife associated with specific features within the FAA critical zone for wildlife features (Points 10 through 15).

Table 1-1 Summary of Wildlife Hazard Assessment Monitoring Locations Napa County Airport	
Monitoring Point	Location/View
On-site Locations	
1	View of Runway 18R/36L, taxiways, infield vegetation, ramp area and surrounding habitats.
2	View of Runway 18R/36L, taxiways, infield vegetation, ramp area, and surrounding habitats.
3	View of Runway 18R/36L, Runway 6/24, infield vegetation, approach/departure corridor, and surrounding habitats.
4	View of Runway 18R/36L, Runway 6/24, infield vegetation, approach/departure corridor, and adjacent salt marsh habitats.
5	View of Runway 6/24, Runway 18R/36L, tower area, infield vegetation, adjacent saltmarsh and surrounding grassland.
6	View of Runway 6/24, infield vegetation, ramp and apron areas, the tower area, hangars and buildings, and surrounding habitat.
7	View of taxiways, approach/departure corridor, ramps, hangars and other buildings, infield area.
8	View of taxiways, approach/departure corridor, ramps, hangars and other buildings, and infield area.
9	View of sanitation/oxidation ponds to the north, approach/departure corridor, and surrounding AOA habitats.
Off Site Locations	
10	View of approach/departure corridor, open grassland, and woodland habitats.
11	View of Eagle Vines golf course and associated water features.
12	View of open grassland, former salt evaporation ponds and the Napa-Sonoma Marshes Wildlife Area and wetlands.
13	View of wetlands and surrounding habitats.
14	View of open grassland and wetlands to the south.
15	View of waste transfer station, adjacent buildings, and surrounding habitats.

1.5.1 Survey Results

A total of 119 bird species were documented on or near APC during the 12-month survey period associated with the WHA. The species were organized into guilds (or groups) based on similar characteristics or behavior. Several species within these guilds have the potential to cause damaging wildlife strikes due to their size (body mass) or abundance. Several species of mammals were also observed during the 12-month survey period.

The most commonly observed avian guilds identified included waterfowl (47%), shorebirds (19%), blackbirds and starlings (12%), gulls (9%), swallows (5%), sparrows and finches (4%), songbirds (2%), raptors (1%), and doves and pigeons, corvids, and other birds (<1%). The species associated with these guilds must be addressed during wildlife management activities due to the potential hazard they pose to aviation based on of their size, flocking behavior, location relative to aircraft operations, and/or behavior.

Based on the data obtained during the WHA, the most hazardous birds observed at APC include:

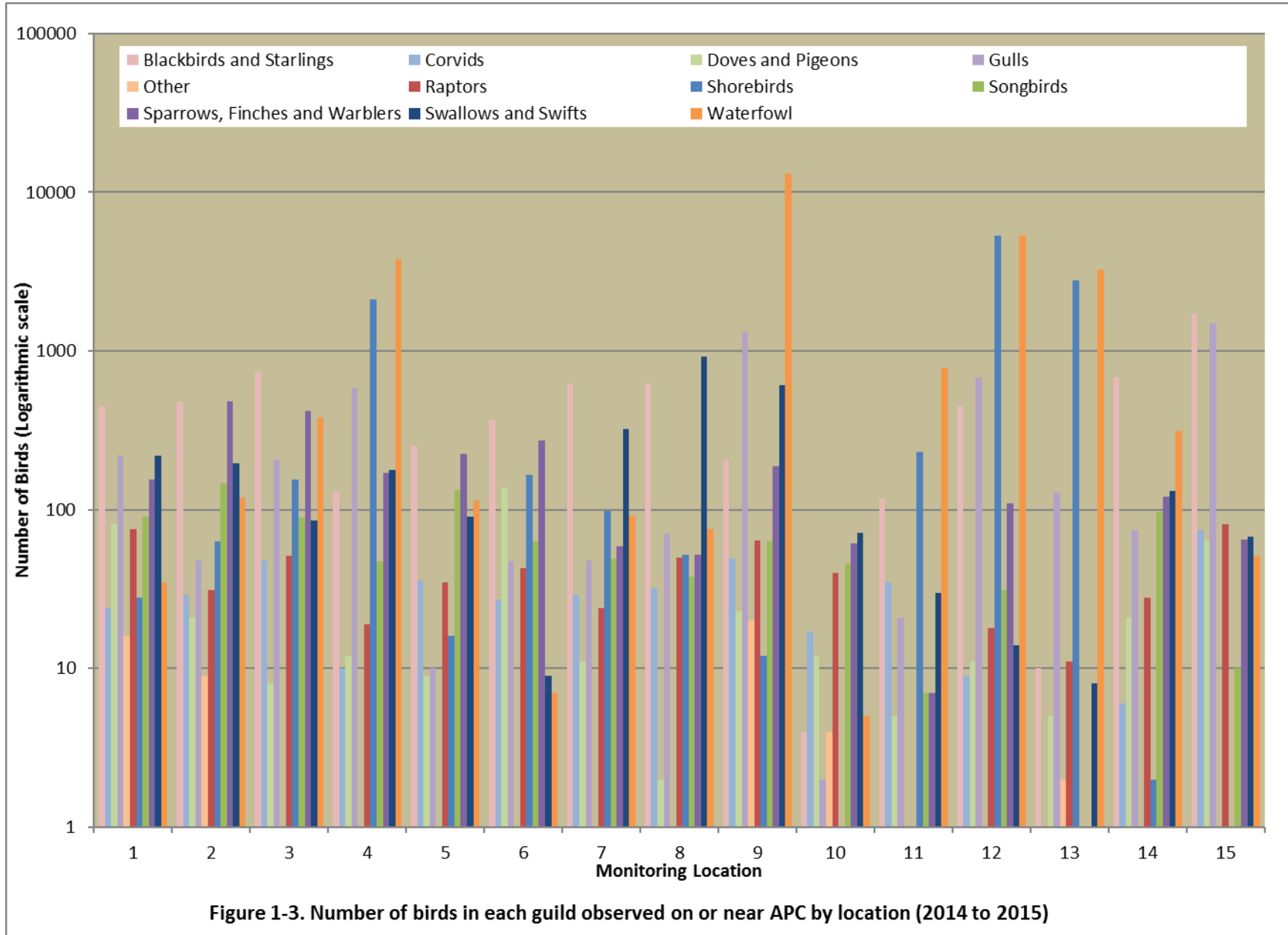
- **Waterfowl:** Canada geese and various duck species
- **Gulls**
- **Swallows**
- **Shorebirds:** Killdeer and Great blue heron
- **Songbirds:** Western meadowlark
- **Doves and Pigeons:** Mourning dove and various pigeons
- **Raptors:** Turkey vulture, Red-tailed hawk, Northern harrier, and American kestrel
- **Blackbirds and Starlings:** Brewer's blackbird, Red-winged blackbird, and European starling

Several mammal species were also observed on and near the airport. Mammals pose a heightened threat to aircraft operations because they are struck during takeoffs and landings. The most hazardous mammals observed at the airport included deer and coyote, both of which were observed within the AOA.

1.5.2 Wildlife Abundance and Location

Points 1 through 9 provided a view of the AOA and a view of wildlife observed in aircraft movement locations. **Figure 1-3** shows the number of birds in each guild observed on or near each monitoring point at APC during the WHA surveys. The WHA monitoring locations and the relative percentage of birds in each guild observed on or near each location are shown in **Figure 1-4**. Waterfowl and shorebirds were the most abundant guilds, with the number of observations exceeding 1,000 and even 10,000 at Points 4, 9 (only waterfowl), 12, and 13. Point 9 was the point from which the greatest number of birds was observed. Point 9 provided a view of the adjacent sanitation/treatment facility from which thousands of waterfowl and an elevated number of gulls were observed. Similarly, Point 4 provided views of adjacent marshes in addition to the infield, and Points 12 and 13 provided views of adjacent marshes. Although the waterfowl and shorebirds are largely at locations off site, the abundant waterfowl attracted to the off-site features occurs within the critical area and APC airspace.

Within the AOA, guilds with flocking birds were observed in the highest numbers: Blackbirds and starlings, sparrows, finches, and warblers, swallows and swifts, and doves and pigeons. These guilds were often observed in long grass areas in close proximity to aircraft movement areas. Large numbers of gulls were observed from Point 15, which provided a view of the adjacent waste Napa Recycling and Waste Services Facility off site.



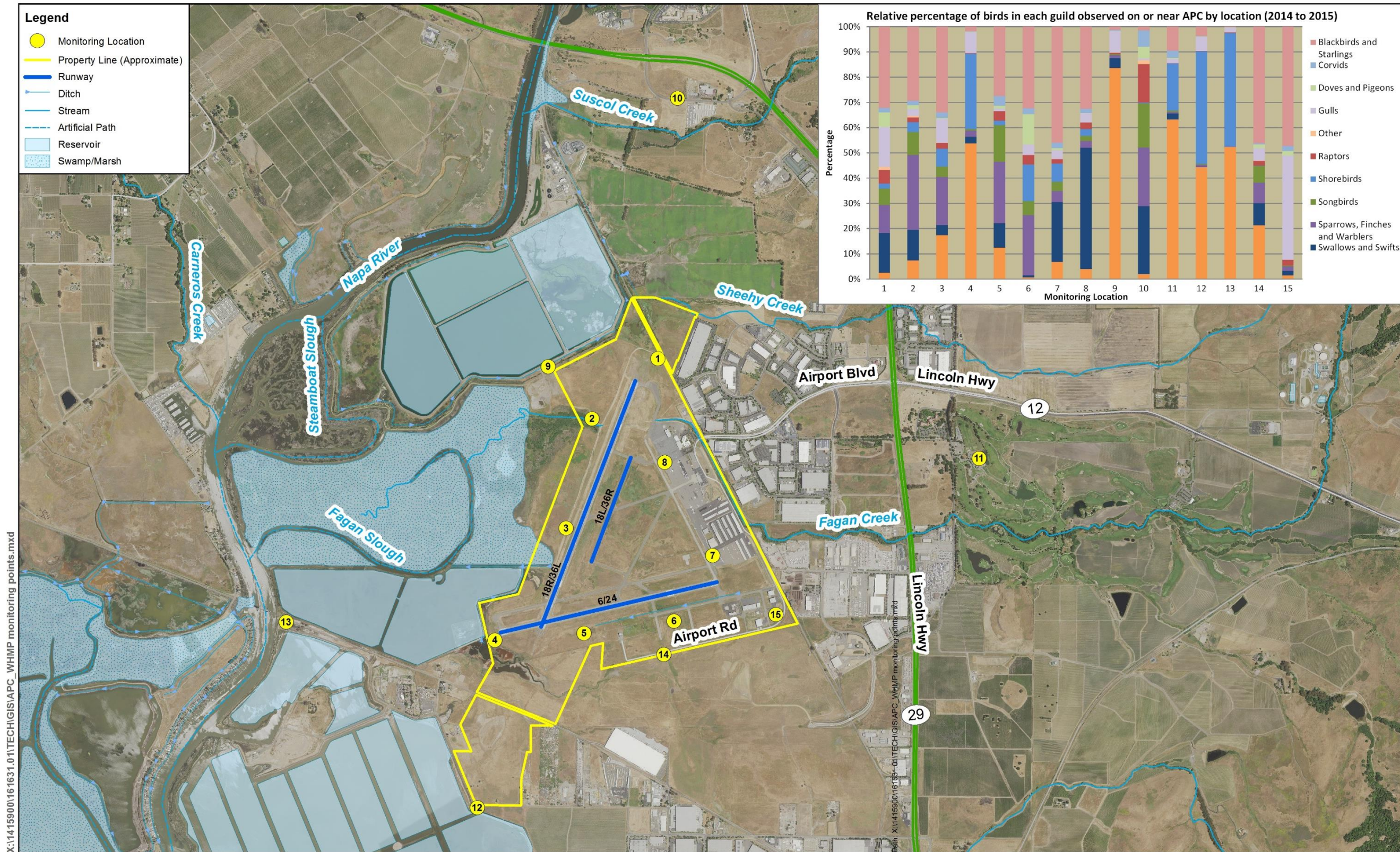


Figure 1-4. WHA Monitoring Locations and Relative Percentage of Birds Observed from Each Location Napa County Airport

0 500 1,000 2,000 3,000 4,000 Feet

1.6 Recommendations Outlined in the Wildlife Hazard Assessment Report

Based on wildlife strike records for the airport and the presence of hazardous wildlife observed during the 12-month survey period, hazardous wildlife is present on and near APC that poses risks to airport operations. The four general recommendations outlined in the WHA report to reduce the risk of wildlife strikes, which serve as the foundation for this WHMP, are:

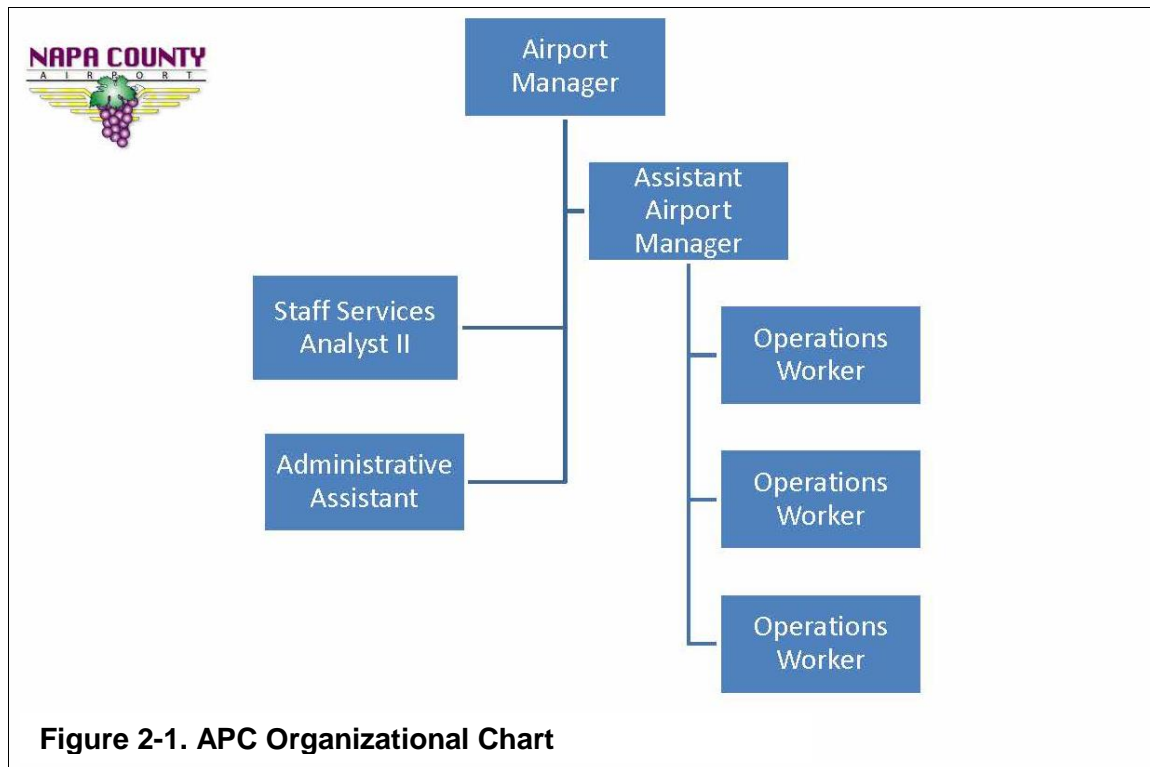
- Develop a wildlife hazard program that includes a management structure and dedicated staff (WHA Section 6.2);
- Develop and implement ongoing wildlife hazard management policies and procedures that can be incorporated into daily operations(WHA Section 6.3);
- Implement site-specific recommendations (WHA Section 6.4); and
- Implement species-specific recommendations and management techniques (WHA Section 6.5).

The recommendations presented in the WHA report were intended to reduce the risk of wildlife strikes during aircraft operations at APC.

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2.0 AUTHORITY AND RESPONSIBILITY

Napa County airport management includes an Airport Manager, Assistant Airport Manager, operations staff (three positions) and administrative staff (two positions) (**Figure 2-1**). Section 2 describes the roles and responsibilities of airport staff as they are associated with wildlife management.



2.1 Airport Manager

The Airport Manager has direct supervision and control over all matters associated with the WHMP. The Airport Manager or designee will be responsible for the following actions:

1. Prepare and implement the WHMP.
2. Coordinate the WHWG, which is responsible for reviewing the WHMP every 12 consecutive calendar months or more frequently, if needed. The WHWG may include the following representatives:
 - a. Airport Manager
 - b. Assistant Airport Manager/Airport Wildlife Coordinator
 - c. Airport Operations Staff
 - d. Supporting WHWG Members
 - 1) FAA Tower Manager and Airport District Office
 - 2) Fixed Base Operators (FBOs) and Airport Tenants
 - 3) Local Pilots

- 4) California Department of Transportation (Caltrans) Division of Aeronautics
 - 5) Napa County Department of Planning, Building & Environmental Services
 - 6) City of Napa Community Development Department
 - 7) City of American Canyon Community Development Department
 - 8) Napa Recycling and Waste Services Staff Member/Representative
 - 9) Napa Sanitation District Staff Member/Representative
 - 10) FAA-Qualified Airport Wildlife Biologist (QAWB)
3. Review and update the WHMP every 12 consecutive calendar months.
 4. Provide public relations support for wildlife control activities as necessary.
 5. Participate in WHWG meetings.
 6. Provide resources for ongoing wildlife hazard management activities described in the WHMP.

2.2 Airport Wildlife Coordinator

The Assistant Airport Manager will serve as the Airport Wildlife Coordinator (AWC) at the direction of the Airport Manager. The AWC will be responsible for daily wildlife hazard management activities and maintaining records of wildlife hazard management actions and events. The AWC will serve as a liaison to other County departments and staff and regulatory agencies for issues associated with wildlife management. The AWC will be responsible for the following actions associated with WHMP implementation.

1. Supervise, coordinate, and monitor wildlife control activities identified in the WHMP.
2. Implement wildlife control and management measures including habitat maintenance/modification, non-lethal, and lethal control activities.
3. Alleviate all attractants deemed an imminent hazard and, if necessary, coordinate a runway closure to remedy wildlife hazards.
4. Determine and respond to wildlife hazard conditions for all hours of airport operation and document any control action that is taken in the airport's wildlife control database.
5. Log all known wildlife strikes on FAA Form 5200-7 and forward strike reports to the FAA as necessary. Develop and maintain a wildlife control database for the airport that includes wildlife observations and control actions, strike data, and other pertinent wildlife-related information.
6. Issue a Notice to Airmen (NOTAM) when wildlife cannot be removed or otherwise mitigated.
7. Conduct routine inspections of areas critical to wildlife hazard management and maintain a record of the action.

8. Harass wildlife from critical areas when appropriate as outlined in Section 6.0.
9. Participate in WHWG meetings when requested.
10. Develop and enforce a “No Feeding” policy for implementation on the Airport.
11. Obtain materials and maintain depredation permits necessary to control migratory birds, game, and non-game animals from federal or state wildlife agencies.
12. Ensure that operations staff members responsible for wildlife control in the AOA are properly trained in accordance with FAA regulations. Such training includes radio communications, driving on the AOA, and safe use of firearms and pyrotechnics.
13. Maintain inspection and training records related to wildlife control and management training.
14. Oversee the recorded actions in the wildlife section of the wildlife control database.
15. Ensure that APC personnel, pilots, and private operators are familiar with the requirements and procedures of reporting wildlife strikes by making wildlife strike report forms (FAA Form 5200-7) readily available.
16. Oversee routine inspections of areas critical to wildlife hazard management and make sure that recommended and recorded actions are undertaken within reasonable timeframes.
17. Encourage pilots to issue pilot reports (PIREPs) relating to wildlife hazards on or near the airport.
18. Work with Napa County Department of Planning, Building & Environmental Services and the American Canyon Community Development Department to monitor proposed off-site projects and land use changes and provide technical assistance to address issues and concerns associated with wildlife hazard management.
19. Review design plans for proposed facilities to minimize wildlife attraction. As examples, review designs to identify potential opportunities for nesting and perching, landscape designs for their potential to provide food sources, and avoid the creation of open water sources.
20. Obtain necessary permits and authorizations (e.g. federal/state depredation permits, Section 404, etc.).

2.3 Airport Operations Staff

The Airport Operations staff members will assist the AWC and will perform the following wildlife hazard management actions at the direction of the AWC:

The Airport Operations staff members will assist the AWC and will perform the following wildlife hazard management actions at the direction of the AWC:

1. Perform habitat maintenance/modification, non-lethal and lethal control, fence repair, and other wildlife control and management activities as necessary.
2. Inspect the runway and AOA twice each day.
3. Monitor wildlife activities and report significant or abnormal activities to the AWC.
4. Enforce a “No Feeding” policy on airport property.
5. Participate in WHWG meetings as requested.

2.4 Wildlife Hazard Working Group Supporting Members

Several agencies and individuals will serve as supporting members of the APC WHWG. While these supporting members play a role in wildlife hazard management at APC, their advice or cooperation is solicited at the discretion of the Airport Manager or designated AWC. The WHWG supporting members, including those not explicitly identified on Table 2-1, are exempt from the training requirements as detailed in Section 8.0 unless they are required to directly participate in wildlife control measures.

**Table 2-1: Summary of Wildlife Hazard Working Group Supporting Members
Responsibilities for Napa County Airport**

WHWG Supporting Member	Responsibilities
Federal Aviation Administration	<p>On-site Tower Staff:</p> <ol style="list-style-type: none"> 1. The FAA Tower Manager shall work with the AWC to identify and communicate wildlife hazards observed on the airport. 2. Communicate/instruct FAA tower staff to communicate with pilots when wildlife is observed. 3. Alert airport operations staff of wildlife strikes and their locations so that remains can be removed quickly from the AOA and sent to the Smithsonian’s Feather ID lab for identification and to coordinate strike reporting. <p>Western Pacific Region:</p> <ol style="list-style-type: none"> 1. Assist the AWC in reviewing any new construction plans for potential wildlife hazards to aircraft. 2. Review funding requests for capital improvements associated with wildlife hazard management.

**Table 2-1: Summary of Wildlife Hazard Working Group Supporting Members
Responsibilities for Napa County Airport**

WHWG Supporting Member	Responsibilities
Local Pilots	<ol style="list-style-type: none"> 1. Issue a PIREP if a potential strike hazard occurs. 2. Report potentially hazardous wildlife to the AWC. 3. Report wildlife strikes on FAA Form 5200-7.
California Department of Transportation, Division of Aeronautics	<ol style="list-style-type: none"> 1. Assist the AWC in reviewing any new construction plans for potential wildlife hazards to aircraft. 2. Review changes and review the WHMP every 12 consecutive calendar months.
Napa County Department of Planning, Building & Environmental Services	<ol style="list-style-type: none"> 1. Participate in WHWG meetings upon request. 2. Notify and coordinate city land use changes with the AWC.
City of Napa Community Development Department	<ol style="list-style-type: none"> 1. Participate in WHWG meetings upon request. 2. Notify and coordinate county land use changes with the AWC.
City of American Canyon Community Development Department	<ol style="list-style-type: none"> 1. Participate in WHWG meetings upon request. 2. Notify and coordinate city land use changes with the AWC.
Napa Recycling and Waste Services Staff	<ol style="list-style-type: none"> 1. Participate in WHWG meetings upon request. 2. Notify AWC of significant operational changes.
Napa Sanitation District Staff	<ol style="list-style-type: none"> 1. Participate in WHWG meetings upon request. 2. Notify AWC of significant operational changes.
FAA-Qualified Airport Wildlife Biologist	<ol style="list-style-type: none"> 1. Participate in WHWG meetings as requested. 2. Continue to perform wildlife monitoring and management at the airport.

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3.0 MANAGEMENT ACTIONS

Airport wildlife hazard management usually involves the implementation of an integrated wildlife damage management program. An integrated wildlife hazard management program is a science-based program that includes ongoing administrative and technical measures, as well as short-term operational measures to reduce immediate or critical risks as they are observed and long-term measures to reduce risks over time.

An integrated airport wildlife hazard management program must include both on-site and off-site habitat modification measures to address the specific features that were found to attract wildlife to the airport and its critical airspace, as well as the use of targeted harassment and population-management measures to address individuals or species that do not respond to habitat modification or pose an imminent or critical threat to aircraft operations.

3.1 Wildlife Population Management

The County, as the airport operator, will implement an adaptive and integrated wildlife control and management program at APC. In general, the program will consist of the measures identified in this section and the methods described in several Airport Cooperative Research Program (ACRP) technical reports (see **Attachment A**):

1. Effective habitat management and modification measures are described in ACRP Synthesis 52, *Habitat Management to Deter Wildlife at Airports* and ACRP 125 *Balancing Airport Stormwater and Bird Hazard Management* (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_052.pdf).
2. Non-lethal wildlife control measures (e.g., harassment, deterrence, and exclusion) are described in ACRP Synthesis 23: *Bird Harassment, Repellent, and Deterrent Techniques for Use on and Near Airports* (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf).
3. Lethal wildlife control (trapping, toxicants/fumigants, and shooting) as described in ACRP Synthesis 39: *Airport Wildlife Population Management* (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).
4. Additional information is available in ACRP Report 32: *Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports* (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_032.pdf).

3.1.1 Prey Management

Small mammals and invertebrates such as voles, mice, rats, lagomorphs (rabbits), mesomammals (cats, skunks, opossums, and raccoons), insects, and earthworms can pose indirect hazards to airport operation by attracting predators and must be managed. Jackrabbits were observed regularly during WHA field surveys. The implementation of appropriate vegetation management measures (e.g., maintaining grass at a height of 6 to 12 inches) will make these species less visible to predators. For more information, refer to Section 6.4.1 of the WHA report.

APC staff will continue to monitor prey populations and implement appropriate measures to control these species should they become more abundant and attract additional wildlife to APC and its vicinity. Data obtained during periodic spotlighting surveys, the results of small mammal trapping, and game camera photographs can be used as a baseline against which to compare supplemental monitoring data and to estimate mammal populations. Specific actions will be taken when increasing numbers of predators, such as raptors or coyotes, are observed on the airfield. Prey population control measures will be taken to reduce the prey base and overall attractiveness of the airfield as described in ACRP Synthesis 39: *Airport Wildlife Population Management*.

Earthworms are often brought to the surface following heavy rains, where they pose an attraction to many species of birds, particularly gulls, shorebirds, starlings, and blackbirds. Appropriate vegetation management will control most of this prey population; however, airport personnel will continue to monitor earthworm populations and remove earthworms from paved surfaces following storms. If they appear to be a major attraction to potentially hazardous species, then additional measures (sweeping or chemical applications) will be taken to minimize this attraction as detailed in ACRP Synthesis 39, *Airport Wildlife Population Management*.

Insects can attract wildlife species to turf areas at APC, particularly swallows, western meadowlarks, killdeer, blackbirds, and starlings. Insect populations will be monitored periodically by airport wildlife control personnel to determine whether they are present in sufficient numbers to warrant a targeted control action. Measures such as maintaining turf at the FAA-recommended height of 6 to 12 inches and preventing turf to seed will reduce the number of insects and discourage turf use by killdeer and starlings, which prefer short grass habitat. If pesticide applications are warranted, the Napa County Agricultural Commissioner can assist in selection of the best pesticide and/or control method.

To address insect populations, APC staff will:

- Monitor insect prey species populations and document management and control measures; and
- Take appropriate actions to reduce insect prey populations should prey become more abundant and attract additional predator species to the airport.

3.1.2 Zero-Tolerance Policy

APC staff will adopt a “zero-tolerance” policy for hazardous wildlife species in the airport environment. A “zero-tolerance” designation in the airport environment denotes an unacceptably high risk to safe aircraft operations. The presence of wildlife species that pose a risk to aircraft operations warrants an immediate management action to remove them from the AOA using appropriate techniques (e.g., harassment, lethal take, and capture/relocate). A zero-tolerance policy should be applied to the hazardous birds (particularly large or flocking species) and mammals (especially large mammals). Species identified at APC that must not be tolerated include:

- Canada goose
- Gadwall
- Mallard

- Northern pintail
- California gull
- Cliff swallow
- Barn swallow
- Western meadowlark
- Killdeer
- American robin
- Mourning dove
- Great blue heron
- Turkey vulture
- Red-tailed hawk
- Northern harrier
- American kestrel
- Brewer's blackbird
- Red-winged blackbird
- European starling
- Deer
- Coyote

Specific details of wildlife and wildlife attractants observed on and near APC and specific recommendations species-specific management methods, controls, and techniques are described in Section 5 of the WHA. The remainder of this section of the WHMP provides APC staff with specific actions pertinent to each wildlife control and management area. Table 3-1 identifies the priority for implementing management measures to reduce wildlife hazards at APC.

Table 3-1: APC Management Measures and Priorities to Reduce Wildlife Hazards

Management Area	Priority	Target Date	Completion Date
Habitat Management Measures			
a. Vegetation (Turf) Management	Critical	Summer 2017	Ongoing
b. Landscaping	Low	Winter 2017	Ongoing
c. Water Management	Moderate	Fall 2017	Ongoing
d. Airport Infrastructure	Moderate	Fall 2017	Ongoing
Non-lethal and Lethal Wildlife Control Measures			
a. Exclusion (complete fence; inspect and maintain fence and gates)	Critical	Autumn 2017	Ongoing
b. Repellents/Deterrents	Low	Winter 2017	Ongoing
c. Harassment with pyrotechnics	Critical	Spring 2017	Ongoing
d. Toxicants/Fumigants	Low	Winter 2017	Ongoing
e. Capture	Low	Winter 2017	Ongoing
f. Lethal Control/Shooting	Moderate	Fall 2017	Ongoing
Administrative Measures			
a. Designate an Airport Wildlife Coordinator	Critical	Summer 2017	Summer 2017

Table 3-1: APC Management Measures and Priorities to Reduce Wildlife Hazards

Management Area	Priority	Target Date	Completion Date
b. Record all Wildlife Strikes in the FAA Wildlife Strike Database	High	Autumn 2017	Ongoing
c. Develop a WHWG	Moderate	Fall 2017	Fall 2017
d. Maintain and renew Federal Depredation Permit	Critical	Summer 2017	Ongoing
e. Airport User Communications	High	Summer 2017	Ongoing
f. WHMP Annual Review	Moderate	Summer 2018	Annually
g. Wildlife Control Training	High	Summer 2017	
h. Develop electronic database to track actions taken by airport staff and USDA	High	Summer 2017	Annually
Monitor Land/Facilities			
a. Review Proposed Projects and Land Use Changes within the Critical Zone for Wildlife Hazards	High	Summer 2017	Ongoing
b. Monitor Section of Fagan Creek/Culverts that Crosses the AOA for the presence of hazardous wildlife.	High	Summer 2017	Ongoing
c. Monitor nearby Napa Waste and Recycling Services Facility for the presence of hazardous wildlife.	High	Summer 2017	Ongoing
d. Monitor Off-site Facilities that Attract Hazardous Wildlife to the Airport Vicinity and Airspace of the Airport: <ul style="list-style-type: none"> • Fagan Marsh Ecological Reserve • County Sanitation Ponds • Eagles Vines Golf Course • Transfer Station (Devlin Road) 	Moderate	Fall 2017	Ongoing

3.2 Habitat Management

Habitat management includes the physical manipulation, exclusion, and/or removal of areas that attract wildlife. The primary goal of habitat management is to modify and maintain the airport environment so it is fairly uniform and generally unattractive to hazardous species. Although the potential secondary effects of habitat modification must be considered, such actions often provide the most effective long-term solution for excluding or discouraging wildlife populations from the airport.

APC is located in an area designated by the U.S. Fish & Wildlife Service (USFWS) as critical habitat for vernal pool fairy shrimp (*Branchinecta lynchi*). Any vernal pool located on APC property, regardless of the presence of vernal pool fairy shrimp, is considered critical habitat. A 2009 wetland delineation indicated

that less than one acre of vernal pools were present and limited to areas south of Runway 6/24 near the southern airport boundary.

APC staff will implement the following habitat management measures and monitor the modified habitats carefully to ensure they do not create new or additional wildlife attractants. Data pertaining to habitat modification methods and measures is available in ACRP Synthesis 52 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_052.pdf).

3.2.1 Vegetation Management

Vegetation provides food and cover for wildlife. The habitat of greatest concern on APC property is turf grass that is not maintained at the FAA-recommended height of 6 to 12 inches (refer to Section 6.4.1 of the WHA). The type and diversity of vegetation, as well its height, are important factors that can affect the extent to which wildlife is attracted to an area. FAA CertAlert No. 98-05, "Grasses Attractive to Hazardous Wildlife" (https://www.faa.gov/airports/airport_safety/certalerts/media/cert9805.pdf) states, "airport operators should ensure that grass species and other varieties of plants attractive to hazardous wildlife are not used on the airport." In addition, "grasses that produce large seeds and are known to be attractive to wildlife will be avoided when planting new areas."

Vegetation throughout the airfield will be managed and maintained in accordance with FAA AC 150/5200-33 (current series), "Wildlife Hazard Attractants On and Near Airports" (http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf). Grass throughout the AOA will be maintained at a height of 6 to 12 inches. Due to the large amount of grasslands in and around the airfield that must be maintained by airport personnel, the associated cost, equipment, and personnel demands may limit the airport's ability to maintain all grass areas consistently throughout the airport property. Prioritization should be given to the AOA, RSAs, and runway arrival/departure corridors.

To manage vegetation at APC, staff members will:

1. Maintain airfield turf at recommended heights of 6 to 12 inches.
2. Ensure that turf consists of desirable grass species that do not produce large seeds and promotes a dense and uniform turf per FAA guidance set forth in CertAlert 98-05 (https://www.faa.gov/airports/airport_safety/certalerts/media/cert9805.pdf).
3. Control broadleaf weedy vegetation.
4. Reduce bare areas where possible.

Critical habitat for vernal pool fairy shrimp is known to occur in the AOA. APC staff and regulatory agencies must work closely to identify specific areas in which mowing may not be permitted and identify a solution that is supportive of both protected species and the traveling public.

3.2.2 Landscaping

Landscaping at an airport can affect business, contribute to the overall impression that an area has on visitors, and needs to be aesthetically pleasing. However, landscaping can also provide habitat for wildlife. Raptors, corvids, songbirds, and mammals frequently use shrubs and trees as hunting perches, roost/nest areas, or shelter. Landscaping must coincide with an airport operator's greater responsibility of safety. The most effective approach to reducing such attractions in the AOA includes the following measures:

- Remove all unnecessary trees, shrubs, and weeds, and establish a non-seeding or small-seeded endophytic stand of grass.
- Minimize the use of ornamental trees and bushes, and prune or remove ornamental trees and shrubs that attract nesting or feeding birds.
- When identifying new landscaping materials, include plant species and cultivars that are not attractive to hazardous wildlife.
- Space individual trees or shrubs so crowns do not overlap when mature.
- Offset rows of vegetation to allow wind to circulate between individual plants and reduce thermal cover, roosting structure, and nesting habitat for potentially hazardous wildlife species.
- Trim the interior branches of the trees every five years to reduce potential roosting sites and restrict thermal roosting cover.

The AWC will review or consult with an FAA-qualified Airport Wildlife Biologist to review on-site landscaping material and determine whether it is attractive to hazardous wildlife. The AWC will remove species that produce edible fruits, nuts, and berries if they are observed to attract hazardous wildlife. The AWC will review all proposed on-site landscaping plans in an effort to prevent potential conflicts. Additional resources regarding native plant materials and their potential to create wildlife habitat might also be available from local nurseries and botanists associated with the Napa County Community College or the University of California's cooperative extension program.

3.3 Water Management

Water is attractive to a variety of wildlife species. Standing water and poorly drained habitat often attract large-bodied and flocking wildlife. At APC, few open water sources were observed in the AOA, except after large rain events. Stormwater drainage structures (pipes) that extend off-site from the airport property should be equipped with end guards to discourage wildlife use. Airport management will review existing drainage features to ensure that runways, taxiways, and aprons have enough camber to prevent the pooling of water. Pools that persistently remain after a rain event must be removed with squeegees, brushes, or other methods until the areas can undergo structural improvements.

3.3.1 Stormwater Drainage

To address hazards associated with stormwater management and drainage on and within the critical zone for APC, staff will:

1. Monitor stormwater drainage areas and facilities for their effectiveness per ACRP Report 125, (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_125.pdf).
2. Retrofit stormwater drainage structures with end guards to prevent entry of wildlife onto the airport property (AIP funding may be required to implement this project).
3. Evaluate intermittent standing water if persistent longer than 48 hours following a 10-year storm event to improve drainage or consider exclusion alternatives.

3.3.2 Pooled Water on Runways, Taxiways, Aprons

Pooled water on runways, taxiways, and aprons can attract wildlife to aircraft movement areas. The FAA warns against the presence of water in these areas, especially if it remains for periods of 48 hours or more. To prevent the accumulation of water near aircraft movement areas, APC staff will:

1. Ensure that drainage facilities associated with runways, taxiways, and aprons include sufficient camber to prevent water from collecting or pooling following a storm event.
2. Remove standing water if it remains longer than 48 hours using brooms or other methods.

3.4 Airport Infrastructure

Wildlife can use airport structures, including equipment and towers, for roosting, nesting, and perching. Prior to the construction or modification of structures, existing buildings and other structures to determine whether they provide nesting, perching, or roosting opportunities for birds or other wildlife. If crevices, or holes are observed to that would attract, provide access to, or shelter for wildlife, the structures will be repaired/retrofitted to exclude small mammals, such as rodents. Installing false ceilings and covering structural elements, such as steel I-beams in hangars and other facilities, will help to eliminate potential indoor roosting and nesting sites, and these items should be included in the County's design requirements for airport and tenant-owned structures. For existing structures and buildings, anti-perching devices, netting, and other deterrents should be installed to discourage wildlife use. In addition, the AWC will review proposed building designs to consider their potential to attract or harbor wildlife, and alert project proponents of potential conflicts in an effort to avoid potential retrofits or control measures following construction.

APC contains numerous structures, including hangars (operated by the County, FBOs, and others), an administrative building, aviation support structures, numerous runway signs and lights, utility lines, instrument landing system equipment, and other aviation aids, that can offer perching, roosting, and nesting opportunities for birds. In addition, airfield structures such as runway and taxiway lights, ramp and taxiway signs, and light poles are often used as hunting and loafing perches for birds such as raptors, songbirds, and gulls. Lights can also attract insects and predatory bats, nighthawks, and owls. Swallows

construct mud nests that adhere to walls or structures. Swallow nests were observed at APC under the bridge near the airport entrance and under the on-site drainage structure culverts associated with Fagan Creek.

The airport property is not equipped with a complete and secure perimeter fence, and wildlife can easily gain access to the AOA including deer, coyote, and other mammals. The plastic mesh fence at the airport's western boundary does not comply with the FAA recommendations set forth in CertAlert No. 16-03, "Recommended Wildlife Exclusion Fencing" (https://www.faa.gov/airports/airport_safety/certalerts/media/part-139-cert-alert-16-03.pdf) or FAA guidance for wildlife fence construction presented in FAA AC 150/5200-13, "Airport Design" (refer to Section 6.4.2 of the WHA report). Several portions of the existing fence and security gates include gaps or excessive clearance through which wildlife can pass, and these areas should be reduced or repaired.

3.4.1 Airport Structures

The AWC and Operations staff will:

1. Monitor all airport structures for wildlife use and attraction. If necessary, take appropriate measures to modify structures and appropriate non-lethal or, if necessary, lethal measures to remove the wildlife. Refer to ACRP Synthesis 23 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf), and ACRP Report 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).
2. Install anti-perching devices on permanent structures that routinely attract hazardous wildlife. Equip structures that routinely attract birds with barrier products such as tension wires, electrified wires, spikes, coils, or porcupine wire.
3. Discourage the nesting of hazardous birds by screening-off roof crevices, performing active harassment techniques, and removing or modifying potential or active nest sites in accordance with federal and state permits or authorizations.
4. Prevent swallows from nesting in the bridge and culverts that cross the eastern portion of Fagan Creek. The application of anti-graffiti paints, such as Kynar or Teflon can create a slippery surface to discourage nest building (see Section 5.1.6 of the WHA report).
5. Provide a complete perimeter fence to exclude wildlife. The fence will comply with FAA guidance described in FAA CertAlert 16-03 (https://www.faa.gov/airports/airport_safety/certalerts/media/part-139-cert-alert-16-03.pdf) and AC 150.5200-13. Ideal fence construction would include a chain-link fence with a consistent height of 8 feet, 3-foot barbed wire outriggers, and a buried apron to prevent digging by coyotes and other wildlife. Federal funding and environmental approvals may be required to implement fence improvements.
6. Reduce the clearance associated with fence gates to 3 inches or less to prohibit entrance onto airport property, and close all airport perimeter gates when not in use.

3.4.2 On-Site Construction

Construction activities have the potential to attract hazardous wildlife through the creation of litter/trash, the creation of temporary sedimentation ponds, and soil stabilization measures. To prevent the creation of wildlife attractants associated with airport construction, APC staff will:

1. Evaluate potential wildlife hazards associated with proposed construction projects.
2. Revegetate bare areas exposed during construction activities with an appropriate ground cover or turf grass that will not attract potentially hazardous wildlife.
3. Establish specifications to be used for on-site construction projects to address the presence of open water, soil stabilization measures (including seed mixtures) and trash generated during construction activities.

3.4.3 Leased Facilities

To prevent tenants from creating inadvertent wildlife hazards during leasehold construction or subsequent operations, APC staff will:

1. Formulate policies for lease agreements pertaining to wildlife hazard management, such as policies associated with refuse management, outdoor break areas, etc.
2. Monitor all leased hangars and facilities for wildlife use and attraction. If necessary, take appropriate action (exclusion, harassment, and deterrence) and/or lethal measures to remove the attraction and/or wildlife. Refer to ACRP Synthesis 23 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf) and 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).
3. Adopt a “No Feeding” policy and a leash-only dog policy.
4. Enforce garbage/trash handling and storage policies.

3.4.4 Garbage/Trash Handling and Storage

Trash and debris can attract numerous bird species, especially gulls, pigeons, American crows, ravens, blackbirds, and starlings. APC staff shall conduct inspections and collect trash and foreign object debris (FOD) from the airfield, especially after high winds. The AWC will remind Airport Operations personnel and tenants to cover and close trash receptacles at all times. In addition, the public or airport employees will not be allowed to feed birds or mammals around the airport.

To address risks associated with trash handling and storage, APC staff will:

1. Ensure that all garbage/trash receptacle areas are maintained and garbage collection lids are closed.

2. Ensure all tenants and airport patrons adhere to garbage/trash maintenance policies.

3.4.5 Feeding Wildlife/Handouts/Pets

Domestic animals and the unauthorized feeding of wildlife can pose hazards to aircraft operations. To reduce potential hazards, APC staff will:

1. Establish and enforce a “No Feeding” policy on the airport.
2. Post signs to inform tenants and airport users about the policy.
3. Prohibit the use bird feeders of all kinds.
4. Establish and enforce a leash-only policy for dogs throughout the airport. Dogs can easily stray onto the AOA when chasing potential prey, such as jackrabbits, ground squirrels, and other small prey species.

3.5 Non-Lethal and Lethal Wildlife Control Measures

In addition to the habitat modification and management measures, an effective wildlife control program must also include non-lethal and lethal control measures to manage specific species, guilds, and individuals that pose hazards to aviation.

3.5.1 Exclusion

Exclusion measures, such as the construction of a complete and secure perimeter fence, can prevent wildlife from entering the airport property (see Section 6.4.2 of the WHA report). Other exclusion measures can be implemented to make airport structures unsuitable for behaviors (perching and roosting) through the installation of anti-perching devices or nets. Specific details are provided in ACRP Synthesis 23 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf).

APC staff will perform the following measures to exclude wildlife:

1. Construct a complete and secure perimeter fence to exclude wildlife. As previously measured, the current fence is incomplete, and the plastic mesh fence was observed to be ineffective in excluding deer and coyotes. AIP funding will likely be required to implement this project, as well as compliance with the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and necessary permits/authorizations.
2. Monitor the existing fence weekly and make prompt repairs as necessary.
3. Remove vegetation on and near the perimeter fence to provide a clear view of the fence base.
4. Identify animal encroachment locations (burrows) beneath the perimeter fence and fill or repair the burrows.

5. Ensure all fence gates are closed, maintain a gap of 3 inches or less between the gate and the ground. If it is not possible to maintain a gap of 3 inches or less, take action to lower fence gates or install speed bumps or gate brushes to remove the gaps.

3.5.2 Repellents/Deterrents

Repellent methods are used to address specific wildlife that is abundant or occupies specific locations on the airport. Primary repellents cause involuntary withdrawal or escape behavior in animals through taste, odor, or irritation. Secondary repellents induce an undesirable physiological effect such as gastric malaise. Guilds often managed through the use of repellents include blackbirds/starlings, waterfowl, gulls, and corvids. Repellents are not usually cost effective and are used only in unusual circumstances.

Specific details are provided in ACRP Synthesis 23

(http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf).

APC staff will:

1. Use appropriate repellents/deterrents per ACRP Synthesis 23 as necessary.
2. Ensure repellent/deterrence use does not result in effects on non-target wildlife.

3.5.3 Harassment

Harassment methods, such as the use of vehicles, pyrotechnics, propane gas cannons, and bioacoustics, are used when hazardous wildlife occupies aircraft movement areas or when wildlife is present in undesirable numbers (see Section 6.5 of the WHA report). The goal of such measures is to manipulate the behavior of birds and other wildlife in an effort to disperse them from an area or resource. Specific details are provided in ACRP Synthesis 23 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf).

APC staff will perform the following:

1. Procure appropriate training to perform harassment
2. Procure and maintain hand-held pyrotechnics launchers (15mm or 12-gauge) and a variety of screamers, bangers, and shell crackers.
3. Use pyrotechnics when necessary in accordance with the guidance set forth in ACRP Synthesis 23.

3.5.4 Toxicants/Fumigants

Toxicants and fumigants are used to manage specific species or guilds that pose a hazard to aviation, and they are used most frequently to reduce populations of prey species. Specific details are provided in ACRP Synthesis 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).

APC staff will:

1. Use appropriate lethal methods to remove problematic wildlife (birds, rodents, earthworms, and insects) per ACRP Synthesis 39 as necessary.
2. Ensure that pesticide applications comply with regulations promulgated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), California Department of Pesticide Regulation, and by the Napa County Agricultural Commissioner.

3.5.5 Capture

Capture or trapping includes both non-lethal measures (capture and relocate) and lethal measures, such as the use snap-traps snares, or the use of live trap followed by euthanasia. Capture methods are used to target individuals, such as a coyote, or to reduce prey populations, such as rodents and mesomammals. Specific details associated with capture methods are provided in ACRP Synthesis 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf). The U.S. Department of Agriculture may also provide assistance with trapping and relocation at airports.

APC staff will perform the following in the event that capture methods are determined to be necessary:

1. Consult with the U.S. Department of Agriculture.
2. Use appropriate lethal and non-lethal trapping methods to remove problematic wildlife (small and large mammals) per ACRP Synthesis 39 as necessary.
3. Follow recommended snap and live-trap protocols consistent with California Department of Fish and Wildlife (CDFW) regulations.

3.5.6 Shooting

As described in Section 6.5 of the WHA, shooting with live ammunition is a measure of last resort. However, this form of lethal management may be necessary to address hazardous wildlife identified as “zero tolerance” species and when an imminent hazard is present. In addition, lethal management may be required when wildlife does not respond to non-lethal measures or as a supplemental measure to reinforce non-lethal control methods. All shooting must be conducted in a manner that complies with applicable federal, state, and local regulations. Specific details are provided in ACRP Synthesis 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).

Only appropriately trained personnel will perform this lethal control in accordance with federal Migratory Bird Treaty Act (MBTA), and in accordance with federal and state-issued depredation permit conditions to remove problematic game and non-game wildlife. Additional details are provided in ACRP Synthesis 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).

3.6 Administrative Actions

Effective wildlife control and management plans include constant and consistent communication among all airports users including: airport staff, FAA tower staff, FBOs, pilots, and other airport users and stakeholders (see Section 6.3.4 and 6.3.5 of the WHA report). It is paramount that all users acknowledge the importance of reducing wildlife hazards and communicate wildlife hazards when they are observed. Airport Operations personnel involved in wildlife management and control must receive recurring wildlife control training annually and document such efforts. (Specific actions in this area are addressed in Chapters 6 through 8 of the WHMP.)

3.7 Proposed Land Use Changes

Incompatible land uses are described in FAA AC 150/5200-33 (current series), “Wildlife Hazard Attractants on and Near Airports” (http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf). Such uses include, but are not limited to: putrescible waste landfills (and in some instances, transfer stations and other solid waste disposal facilities), wetlands, agriculture, water reservoirs, sewage ponds, parks with artificial ponds, golf courses, hunting leases, sludge disposal sites, feed lots and slaughterhouses, and wildlife refuges, sanctuaries, and production areas.

The AWC will actively monitor and participate in proposed land use decisions within the critical zone that may inadvertently create or increase wildlife hazards to aircraft operations. The AWC will provide technical and/or operational assistance in addressing issues or concerns associated with a proposed project or land use change.

The Safety and Standards Branch of the FAA Western-Pacific Region and the local Airports District Office (ADO) can provide technical guidance to airport operators in addressing land use compatibility issues. Proposed projects that would likely increase wildlife presence within flight zones (general and critical) will be discouraged when the authority to do so is available. These types of land use changes will be monitored and addressed by working with the local zoning and planning authorities prior to discretionary approvals.

The County is responsible for implementing policies and ordinances associated with land use changes and development projects. Policy implementation and project analyses include establishing conformance to local goals for development, adopted growth management goals, open space and agricultural preservation, and identifying environmental consequences. The cities of Napa and American Canyon may also propose land use changes for areas that are outside of city boundaries but within the critical area for wildlife hazards. The AWC will serve as the liaison between APC and the cities of Napa and American Canyon and Napa County to review proposed projects that have the potential to affect land use on the airport and within the critical zone and to prevent the development of new or inadvertent wildlife attractants.

To address this area, APC staff will:

1. Monitor land use changes on the airport and in the surrounding area and evaluate effects on wildlife attraction per FAA AC 150/5200-33. If changes result in an increased wildlife hazards, determine measures to prevent an increase in wildlife attraction.

2. Coordinate with County and City planning and zoning authorities and nearby landowners in the critical zone to minimize wildlife attraction due to habitat changes or human activity.
3. Work with the ALUC to address wildlife hazards in subsequent versions of the Airport Land Use Compatibility Plan for the Napa County Airport.

4.0 REQUIREMENTS FOR FEDERAL, STATE AND LOCAL WILDLIFE CONTROL PERMITS

4.1 Depredation Permits

4.1.1 Federal Depredation Permit for Migratory Birds

The federal MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the USFWS. Even though the MBTA does not include provisions for unauthorized take, it recognizes that some migratory birds may be killed by aircraft despite implementing measures to avoid a take.

The USFWS acknowledges that large populations of certain bird species can cause damage to aircraft and threaten human safety, and it provides regulations and permits to perform the controlled take of certain species in specific areas and at specified times, including the control of migratory birds at airports.

To manage migratory birds at APC, the County currently holds a USFWS Migratory Bird Depredation Permit to take or kill migratory birds, their eggs, parts, and active nests. The County's depredation permit addresses: Canada goose, cliff and barn swallow, killdeer, some duck species, American robin, mourning dove, great blue heron, and turkey vulture.

To continue to comply with federal depredation permit requirements, APC staff will:

1. Renew the County's federal depredation permit from the USFWS annually, and revise its conditions to address additional species identified in the WHA (FAA CertAlert No. 13-01).
2. Consult with the USFWS, United States Department of Agriculture-Wildlife Services (USDA-WS), and QAWB to identify the species and number of individuals that can be taken in association with the depredation permit.

Additional details associated with federal depredation permits for airports are presented in in FAA CertAlert No. 13-01, "Federal and State Depredation Permit Assistance" (http://www.faa.gov/airports/airport_safety/certalerts/media/cert1301.pdf).

4.1.2 State-Issued Depredation Permit for Game and Non-Game Species

The CDFW implements the California Fish and Game Code and other regulations that affect wildlife management at airports. California Fish and Game Code Sections 3470-3472.2 specifically address the management of wildlife at certificated airports. The code allows for the taking of birds by the operator of a certificated airport in accordance with its federal depredation permit.

State wildlife laws administered by the CDFW include jurisdiction over game and non-game species to include resident and migratory birds, mammals, reptiles, amphibians, and state-listed threatened or endangered species in California that necessitate obtaining a California state-issued permit for

depredation. Wildlife categories (Table 4-1) include migratory and resident, game and non-game, and threatened and endangered species. (Please note that most of these species were not identified during field surveys, but may be present. Wildlife management personnel will understand the category for the species that require management to determine the applicable laws and permit requirements.

Table 4-1: Wildlife Categories in California

Category	Species	State Permit or Endorsement Required	State Permit or Endorsement Obtained	Federal Permit or Endorsement Required	Federal Permit or Endorsement Obtained
Resident Game Birds	Quail, Wild Turkey, Pheasant	Yes	No	No	N/A
Migratory Game Birds	Wild Ducks and Geese, Coots, Gallinules, Snipe, Rails, Mourning Doves	Endorsement	No	Endorsement	No
Migratory Nongame Birds	All species except game birds, resident nongame birds, and domestic and exotic birds (including Hawks, Gulls, Vultures, Herons, Egrets)	No	N/A	Permit	No
Depredation Order Birds ⁽¹⁾	American Crow, Magpies, Blackbirds, Cowbirds	No	N/A	No	N/A
Game Mammals	Deer, Rabbits, Hares, and Squirrel	Yes	N/A	No	N/A
Furbearers	Badger, Beaver, Fox, Mink, Muskrat, Otter, Raccoon, and Striped Skunk	Yes	N/A	No	N/A
Nongame Mammals	Bobcat, Coyote, Mountain Lion,	No	N/A	No	N/A
Feral Domestic Mammals	Dogs, Cats, Livestock	No - Call local Animal Control Department	N/A	No	N/A
Fully Protected Wildlife ⁽²⁾	Threatened and Endangered Species	Yes	No	Permit	No
Notes:					
¹ May be taken without permits "when concentrated in such numbers and manner as to constitute a health hazard or other nuisance" (50 CFR §21.43).					
² Any person may take threatened or endangered wildlife in defense of his life or the life of others.					

To comply with these requirements, APC staff will:

1. Obtain a state-issued depredation permit or pursue agreed-upon alternate procedures (between APC and/or CDFW) for game and non-game species (FAA CertAlert No. 13-01; http://www.faa.gov/airports/airport_safety/certalerts/media/cert1301.pdf) for lethal measures outside of approved hunting seasons.
2. Consult with the CDFW and the QAWB to identify the species and number of individuals that can be taken in association with the permit.

The County currently holds a federal migratory bird depredation permit for wildlife hazard management. When such permits are procured, they will need to be renewed periodically. A copy of the federal depredation included in **Attachment B** of the WHMP.

4.1.3 County Regulations/Guidelines

Wildlife control activities must also comply with County guidelines.

To comply with these requirements, APC staff will:

1. Understand County guidelines and coordinate wildlife control and management activities with these entities.
2. Obtain any local permits, if required, to comply with local regulations.

4.2 Pesticide Use

4.2.1 Federal Regulations

Any person using restricted-use pesticides, applying any pesticides to the land of another, or applying any pesticides for hire, must be a chartered or permitted applicator or work under the direct supervision of such, and then only use pesticides covered by the charter or permit. For example, if APC uses a rodenticide to manage rodents or herbicides to manage vegetation, then APC and its contractor must comply with FIFRA (detailed in Section 3 of the WHA).

If the use of pesticides is deemed necessary, APC staff will:

1. Comply with FIFRA requirements and responsibilities for pesticide use.
2. Comply with FIFRA requirements for pesticide storage.

4.2.2 State Regulations

In California, the Department of Pesticide Regulation (DPR) is responsible for enforcement of federal pesticide laws in California. DPR in turn delegates primary enforcement authority to the County Agricultural Commissioners (CAC). The licensing of pesticide applicators and regulations is the responsibility of the DPR. The DPR registers pesticide products, enforces pesticide label compliance, trains and licenses professional applicators and other prospective users of certain pesticides, and assesses the potential impact of agricultural chemicals. The required pesticide licensing and certification

is provided by the DPR. CAC is responsible for the enforcement of pesticide related laws and regulations at the local level.

Only licensed pesticide operators will be allowed to apply restricted-use pesticides for the removal of blackbirds, starlings, rodents, rabbits, insects, earthworms, and weeds. To obtain the necessary license for pesticide application, a person must pass an exam administered by DPR. All personnel that use restricted-use chemicals will obtain a pesticide applicator's charter or permit or be under the direct supervision of an applicator. All APC personnel using pesticides will strictly adhere to the pesticide label and will follow U.S. Environmental Protection Agency (EPA), CAC, and County regulations and guidance. APC staff are encouraged to regularly consult with CAC staff regarding pesticide use regulations.

5.0 RESOURCES FOR PLAN IMPLEMENTATION

Wildlife control and management supplies and equipment can be purchased from numerous vendors. The County will maintain an adequate supply of equipment for wildlife control and management for use by trained personnel. The AWC will ensure that designated wildlife response vehicles are equipped with the supplies necessary to facilitate a timely response to potential wildlife hazards. Personnel responding to wildlife hazards will maintain radio communications with the ATCT during normal business hours and use UNICOM or the common traffic advisory frequency (CTAF) when the tower is closed. Wildlife control patrols must operate within the movement areas according to FAA guidelines. Basic supplies to be maintained in wildlife control vehicles are summarized in Table 5-1.

Table 5-1: Supplies to be Maintained in Wildlife Control Vehicle

Category	Supplies
Identification	Field guides for wildlife identification
	Binoculars
Wildlife Control	Pyrotechnic launchers
	Pyrotechnic ammunition (e.g., screamers, bangers, etc.)
	Air pellet pistol/rifle and ammunition (non-lead)
	Catch pole
	Have-a-Heart Livetraps (large, medium, and small)
	Rat/mouse snap traps
	Snare
	Birdstrike collection kit
Safety Equipment	First-aid Kit
	Hearing and eye protection
	Fire extinguisher
	Mylar tape
	Shovels and buckets
	Latex gloves
	Alcohol wipes
	Garbage and plastic bags
Reporting	Airport Wildlife Observation and Wildlife Hazard Continual Monitoring and Report Checklist
	FAA Form 5200-7, Bird/Other Wildlife Strike Report
	Guidebooks for addressing aircraft/wildlife hazards at airports (ACRP Synthesis 23, ACRP Synthesis 39, ACRP Synthesis 52, ACRP Report 125)

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6.0 PROCEDURES TO BE FOLLOWED DURING AIRCRAFT OPERATIONS

6.1 Personnel Responsible for Implementing Procedures

Personnel involved in wildlife control and management include:

- The AWC;
- Airport Operations staff; and
- Other APC staff trained in wildlife control techniques, wildlife identification, and safe airport operations.

These individuals will monitor and respond to wildlife hazards on the airfield to the extent practicable while maintaining a secure environment for safe airport operations. All personnel will be equipped with radios and will maintain clear radio communications with FAA tower personnel and other airport staff. As part of the daily protocol, Airport Operations personnel will be responsible for conducting all physical inspections of movement areas, the airport fence, and other areas critical to wildlife hazard management.

6.2 Physical Inspections of the Movement Area and Other Areas Critical to Wildlife Hazard Management

APC Airport Operations personnel will routinely monitor the AOA for hazardous wildlife and attractants as part of their airfield duties. Airport Operations personnel will record any hazardous wildlife observed and any wildlife control and management actions performed, and the AWC will include this data in the wildlife section of the airport wildlife control database.

Airport operations personnel will:

1. Monitor wildlife during runway, airport, and security inspections.
2. Undertake control actions as required.
3. Record pertinent wildlife observations and wildlife control actions on appropriate forms so the AWC can record the data in the airport wildlife control database.

In addition, Airport Operations personnel will provide vegetation/habitat management, perimeter fence repair, and garbage removal as needed to minimize wildlife attractions.

6.3 Wildlife Hazard Control Measures

Each wildlife hazard will be analyzed by AWC or Airport Operations personnel to identify a practical solution (see Section 6.5 of the WHA report). In most cases, the initial response for most species will include non-lethal measures (harassment, deterrence, habitat management, and enclosure) as described in detailed in ACRP Synthesis 23 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_023.pdf) and supplemented by lethal measures as necessary (shooting and chemicals) as described in ACRP Synthesis 39 (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_syn_039.pdf).

Persistence and employee innovation are central to a successful wildlife control program. Airport Operations personnel will select and implement wildlife control techniques according to their biological, sociological, economical, and political effectiveness.

- Most wildlife control techniques are most effective when they are used infrequently and in conjunction with other methods.
- The wildlife control method or measure selected in a specific situation will depend largely on the situation and the species involved.

The AWC and Airport Operations staff will perform the following routine wildlife hazards management duties in accordance with applicable FAA regulations:

1. Conduct runway sweeps at least once per day and record the presence of any dead animals that could be associated with a wildlife strike on FAA Form 5200-7.
2. Document wildlife that is observed or other wildlife-related activities (notable hazards, animals killed or dispersed, and unusual wildlife behavior) on the Airport Wildlife Observation Log, a sample of which is included in **Attachment C**.
3. Provide the Airport Wildlife Observation Log to the AWC for review and documentation. The AWC will record any hazardous wildlife observations, wildlife-related activities, and wildlife strikes reported by FAA tower staff, pilots, or FBOs in the wildlife section of the wildlife control database.

Airport Operations personnel will use a radio-equipped vehicle to perform these duties and will possess adequate wildlife control materials (see Table 5-1). In addition Airport Operations personnel involved in direct wildlife control should be aware of potential diseases wildlife can carry and take appropriate precautions.

6.4 Communication between Wildlife Control Personnel, the Tower, and Local Air Traffic

Effective communication between airport personnel, FAA tower staff, and air traffic is essential for the implementation of this WHMP and for the safety of all air traffic. All airport personnel conducting wildlife control and management will carry radios and will have proper training in monitoring and transmitting on UNICOM, and/or CTAF and communicating with the ATCT.

If an immediate wildlife hazard exists that may affect the safety of air traffic, the AWC or appropriate designee will coordinate the ATCT and, if necessary, request the delay of arriving or departing air traffic until the threat is removed. Generic or blanket advisories concerning wildlife shall not be issued in lieu of specific hazard advisories, including the type of bird, location, and direction of movement, if known.

6.4.1 APC Communications Protocol

The communications protocol for APC personnel should include the following:

1. Procedures for appropriate staff to alert pilots of potential hazards prior to takeoff and landing
Prior to the initiation of any wildlife control measure, Airport personnel will coordinate all wildlife control activities with tower staff to ensure that actions do not affect flight safety.
2. Procedures for alerting Airport Operations staff to address hazards that require immediate attention.
3. Procedures for airport personnel to notify the AWC of pertinent wildlife-related information for inclusion in a specific NOTAM when persistent wildlife cannot be removed or otherwise mitigated in accordance with FAA AC 150/5200-28 (current series), "Notices to Airmen (NOTAMs) for Airport Operators" (https://www.faa.gov/documentlibrary/media/advisory_circular/150-5200-28f.pdf)
4. Communication procedures through which the AWC can alert FBOs regarding any wildlife strikes or observations of wildlife activity at the airfield.
5. Procedures for airport operations personnel to provide FBOs with important information so that they may post or distribute the information.

6.4.2 FAA Tower Procedures

Air traffic control personnel should review the proper wildlife procedures and phrases addressed in FAA Order 7110.65, "Air Traffic Control." At a minimum, the communication protocol and procedures should address the following situations:

1. Procedures to report wildlife hazards to pilots in the traffic pattern.

2. Procedures for appropriate airport staff to alert pilots of potential hazards prior to takeoff or landing. If a wildlife hazard is observed by airport ground personnel, the ATCT will be contacted by radio immediately. The location, species, number observed, activity, and potential direction of travel will be relayed to the ATCT, so pilots can be properly informed, and appropriate action taken.
3. Procedures for alerting airport operations staff to address wildlife hazards that require immediate attention.
4. Documentation procedures.

A sample communication protocol is presented in Section 6.3.1 of the WHA.

7.0 EVALUATION AND REVIEW OF THE WILDLIFE HAZARD MANAGEMENT PLAN

7.1 Effectiveness of the Plan

APC staff will follow the recommendations set forth in 14 CFR Part 139.337 regarding regular evaluation of the WHMP and its effectiveness. The WHMP will be reviewed every 12 consecutive calendar months, at a minimum, and any time a triggering event occurs as defined in CFR Part 139.337(b)(1–3). The WHMP review and evaluation should include representatives from all airport departments involved in wildlife control and management efforts (see Section 2.1). It is recommended that the QAWB associated with the WHA be involved in the review process. In most cases, the WHWG will review the WHMP to evaluate its implementation and effectiveness and to provide recommendations for refinements or modification.

7.2 Aspects of the Wildlife Hazards to be Re-evaluated

The WHMP, existing wildlife hazards, and wildlife control and management actions and strategies will be examined annually for their effectiveness. APC staff will:

1. Evaluate wildlife observations documented on the Airport Wildlife Observation Log (sample included as **Attachment C**) gathered during daily runway sweeps and other airport activities on a monthly basis.
2. Evaluate monthly wildlife control and management activities documented on the Airport Wildlife Observation Log.
3. Evaluate annual wildlife strikes both on the AOA and within 5 miles of the AOA and determine potential attractants. After this evaluation, make recommendations to reduce the attraction.
4. Evaluate overall wildlife hazard control and management plan effectiveness and adjust strategies as necessary to minimize hazards.

The effectiveness of a WHMP to reduce wildlife hazards both on and near an airport and the re-evaluation of all facets of damaging/non-damaging strikes from year to year requires accurate and consistent reporting. This WHMP underscores the need for staff commitment to document all wildlife strikes that occur within the separation distances described in Sections 1-2 and 1-3 of FAA AC 150/5200-33 (current series) (http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf) to better identify, understand, and reduce threats to safe aviation.

APC staff will report all wildlife strikes using FAA Form 5200-7 (either hard copy or electronic means) available on the FAA Wildlife Mitigation website (<http://www.faa.gov/documentLibrary/media/form/faa5200-7.pdf>). If a positive wildlife identification cannot be made by APC, then wildlife remains will be sent to the Smithsonian Institute for specific wildlife identification (FAA AC 150/5200-32) (see http://www.faa.gov/airports/airport_safety/wildlife/smithsonian/ for methods). Fees for this service are paid for by the FAA and are provided at no cost to the airport. The remains should be accompanied by FAA Form 5200-7 and sent to the following address:

Feather Identification Lab
Smithsonian Institution
NHB, E600, MRC 116
10th & Constitution Ave, NW
Washington, D.C. 20560-0116

8.0 AIRPORT PERSONNEL WILDLIFE CONTROL TRAINING PROGRAM

Airport personnel must be provided with the knowledge and skills needed to implement the measures identified in the WHMP (see Section 6.2.4 of the WHA report). The Airport Manager will ensure that staff members participate in a wildlife control training program every 12 consecutive calendar months. The training can be conducted by a QAWB or certified airport “train the trainer” staff. Recurrent training requirements as described in 14 CFR 139.303 should equip personnel actively involved in wildlife hazard control and management with sufficient resources needed to comply with the requirements in this WHMP. In addition, pesticide user training and certification must also comply with regulations administered by the CAC.

To comply with these requirements, the Airport Manager will:

1. Ensure all wildlife control and management personnel receive the required training from a QAWB or airport “train the trainer” staff.
2. Perform recurrent training in-house with qualified personnel or by using a QAWB annually.
3. Document and maintain training completion as part of the WHMP.

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9.0 FEDERAL AND STATE-LISTED THREATENED AND ENDANGERED SPECIES, AND SPECIES OF SPECIAL CONCERN

The Endangered Species Act (ESA) directs all federal agencies to work together to conserve endangered and threatened species and to use their authorities to further the purposes of the Act. Section 7 of the Act, called "Interagency Cooperation," is the mechanism by which federal agencies ensure that their actions, including those actions they fund or authorize, do not jeopardize the existence of listed species. Section 7 of the Act also describes procedures for responding to requests by state wildlife agencies to facilitate and encourage habitats for state-listed threatened and endangered species or species of special concern that occur on airports and may pose a threat to aviation safety. The FAA decision to require an airport operator to develop, submit for approval, and implement a WHMP is considered a federal action, as defined in the ESA, and it is subject to Section 7 consultation with the USFWS if federally listed threatened or endangered species are present.

The USFWS (<https://www.fws.gov/idaho/promo.cfm?id=177175746>) and CDFW (http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/) maintain updated lists of endangered, threatened, and species of concern at both the federal and state levels (see **Sections 9-1 and 9-2**). The ESA and CDFW protect animal and plant species potentially threatened with extinction. These acts classify species as endangered or threatened:

- An endangered species is defined as "any species or subspecies that is in danger of extinction throughout all or a significant portion of its range."
- A threatened species is defined as "any species or subspecies that is in danger of becoming an endangered species within the foreseeable future throughout or over a significant portion of its range."

Once listed, a threatened or endangered species or their habitat cannot be taken or harassed without a special permit. APC Airport Operations personnel must be familiar with these species and their potential occurrence at the airport. Seven bird species with special status were identified on APC during WHA field surveys including Swainson's hawk (state-threatened), golden eagle and white-tailed kite (fully-protected state species), burrowing owl and northern harrier (state species of special concern), and double-crested cormorant and ferruginous hawk (state watch list). Additionally, transient or migratory individuals may present hazards to air traffic at APC, and permits are required prior to the implementation of wildlife control measures against these species. In most cases, regulatory agencies will not issue permits or authorize the lethal removal of federal- or state-listed threatened and endangered species (see FAA Cert Alert 13-01, "Federal and State Depredation Permit Assistance" at http://www.faa.gov/airports/airport_safety/certalerts/media/cert1301.pdf). The regional USFWS and CDFW office can provide additional information as necessary. Airport operations personnel must be able to identify protected species, and APC must maintain the appropriate permits to conduct wildlife hazard management actions when necessary.

Critical habitat for listed species is also regulated by the USFWS, U.S. Forest Service, and CDFW, and these regulations can affect proposed habitat modification measures.

9.1 Procedures for Managing Federally Listed Species on Airports

Section 7 of the ESA, as amended, applies to federal agency actions and sets forth requirements for consultation to determine if the proposed action may “affect” an endangered or threatened species. If an agency determines that an action may “affect” a threatened or endangered species, then Section 7(a)(2) requires each agency, generally the lead agency, to consult with the USFWS and/or the National Marine Fisheries Service (NMFS), as appropriate, to ensure that any action the agency authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally listed endangered or threatened species or result in the destruction or adverse modification of critical habitat. (The effects on fish, wildlife, and plants include the destruction or alteration of habitat and the disturbance or elimination of fish, wildlife, or plant populations). If a species has been proposed for federal listing as threatened or endangered, or a critical habitat has been proposed, Section 7(a) (4) states that each agency shall confer with the USFWS and/or NMFS. (Refer to the USFWS and NMFS document, *Endangered Species Consultation Handbook: Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act*, March 1998 (https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf)).

Seven special-status species were observed at APC during the wildlife hazard assessment and all were avian species. Similarly, APC is located in an area designated by the USFWS as critical habitat for vernal pool fairy shrimp (*Branchinecta lynchi*). Any vernal pool located on APC property, regardless of the presence of vernal pool fairy shrimp, is considered critical habitat. A 2009 wetland delineation indicated that less than one acre of vernal pools were present and limited to areas south of Runway 6/24 near the southern airport boundary. Any activities that would disturb vernal pools are subject to Section 7 of the Endangered Species Act.

Section 9 prohibits a federal agency from taking, without an incidental take permit, any endangered species. Where a conservation plan has been developed pursuant to a Section 10 permit (incidental take permit), the FAA must ensure an impact analysis is conducted in accordance with NEPA and ensure that the analysis is consistent with the predicted impacts described in the conservation plan. Under the Magnuson-Stevens Act, federal agencies must consult with the NMFS with regard to any action authorized, funded, or undertaken that may adversely affect any essential fish habitat identified under the Act. The consultation procedures are generally similar to ESA consultation requirements.

To comply with federal and state requirements, APC staff will:

1. Contact the USFWS office regarding the presence of federally listed or proposed species or designated or proposed critical habitat occurring on or near the airport.
2. Provide training to APC staff responsible for wildlife control activities so they can identify listed species when they are present on or near the airport.
3. Alert the proper authorities if any federally listed threatened or endangered species is noted during daily runway sweeps, other airfield activities or observed within the critical zone.

9.2 Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports

The AOA is an artificial environment that is created and maintained specifically to support aircraft operations. Because an AOA can be markedly different from the surrounding native landscapes, it may attract wildlife species that do not normally occur in an area or occur only infrequently. Some wildlife species may occur on the airport in higher numbers than the number that occur naturally in the region because the airport offers habitat features that the species prefer. Such species could include state-designated threatened and endangered species or species of special concern.

Many state wildlife agencies have requested that airport operators facilitate and encourage habitat on airports for state-listed threatened and endangered species or species of special concern. Managing the on-airport environment to facilitate or encourage the presence of hazardous wildlife species can create conditions that are incompatible with, or pose a threat to, aviation safety. Airport operators should not promote the presence of these species or their habitats on airport property if their presence would pose hazards to aircraft operations. FAA CertAlert 06-07, "Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports" (http://www.faa.gov/airports/airport_safety/certalerts/media/cert0607.pdf) addresses this issue.

To comply with these requirements, APC staff will:

1. Voluntarily comply with FAA CertAlert 06-07.
2. Routinely maintain the airport property with aviation safety as a priority and prevent the creation of habitat for or presence of state-listed species.

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10.0 NATIONAL ENVIRONMENTAL POLICY ACT REVIEW

FAA Order 1050.1F: Environmental Impacts: Policies and Procedures identifies the WHMP approval as exempt from NEPA review in the absence of extraordinary circumstances. However, individual measures included in the plan may be subject to NEPA review prior to implementation should they trigger an extraordinary circumstance, require federal funding, or other federal agency approvals. If specific measures included in this plan require federal funding or federal agency approvals, the County may be required to prepare an environmental evaluation in accordance with NEPA.

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Attachment A. FAA Guidance/Regulations and ACRP Documents

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Attachment A. FAA Guidance/Regulations, ACRP Documents, and Regulatory Agency Contact Information

Advisory Circulars (available at http://www.faa.gov/regulations_policies/advisory_circulars/)

- AC 150/5200-28F: Notices to Airmen (NOTAMs) for Airport Operators
- AC 150/5200-32B: Reporting Wildlife Aircraft Strikes
- AC 150/5200-33B: Hazardous Wildlife Attractants On or Near Airports
- AC 150/5200-36A: Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports

CertAlerts (available at http://www.faa.gov/airports/airport_safety/certalerts/)

- CertAlert No. 97-09: Wildlife Hazard Management Plan Outline
- CertAlert No. 98-05: Grasses Attractive to Hazardous Wildlife
- CertAlert No. 06-07: Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports
- CertAlert No. 13-01: Federal and State Depredation Permit Assistance
- CertAlert No. 16-03: Recommended Wildlife Exclusion Fencing

ACRP Documents (available at <http://onlinepubs.trb.org/onlinepubs/acrp/>)

- ACRP Synthesis 23: *Bird Harassment, Repellent, and Deterrent Techniques for Use on and Near Airports*
- ACRP Synthesis 39: *Airport Wildlife Population Management*
- ACRP Synthesis 52: *Habitat Management to Deter Wildlife at Airports*
- ACRP Report 32: *Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports*
- ACRP Report 125: *Balancing Airport Stormwater and Bird Hazard Management*

Wildlife Control

https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs/sa_airport/ct_airport_hazards

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Attachment B. Depredation Permit

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DEPARTMENT OF THE INTERIOR
 U.S. FISH AND WILDLIFE SERVICE
 Migratory Bird Permit Office
 2800 Cottage Way - Room W-2606 - Sacramento, CA 95825
 Tel: 916-978-6183 Fax: 916-978-6183
 Email: permitsR8MB@fws.gov

2 AUTHORITY-STATUTES
 16 USD 703-712

REGULATIONS
 50 CFR Part 13
 50 CFR 21.41

FEDERAL FISH AND WILDLIFE PERMIT

1 PERMITTEE

NAPA COUNTY AIRPORT
 2030 AIRPORT RD
 NAPA, CA 94558
 U.S.A.

3 NUMBER
MB105156-0

4 RENEWABLE
 YES
 NO

5 MAY COPY
 YES
 NO

6 EFFECTIVE
 05/13/2016

7 EXPIRES
 04/30/2017

8 NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business)
 MARTIN PEHL
 AIRPORT MANAGER

9 TYPE OF PERMIT
 DEPREDATION AT AIRPORTS

10 LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED
 Activities authorized and records maintained at the address in Block 1.
 NAPA COUNTY

11 CONDITIONS AND AUTHORIZATIONS

A GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. You are authorized to take the migratory birds specified below to relieve or prevent injurious situations impacting human safety. All take must be done as part of an integrated wildlife damage management program that emphasizes non-lethal management techniques. You may not use this authority for situations in which migratory birds are merely causing a nuisance. *You must ensure that you are in compliance with all applicable laws as stated in Condition B and the attached Standard Conditions for Migratory Bird Depredation Permits.*

This authority excludes Bald eagles, Golden eagles, and threatened/endangered species. *Harassment and/or removal of endangered/threatened species and/or Bald and Golden eagles require additional permits from Migratory Bird Permit Office and/or Ecological Services Office.*

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12 REPORTING REQUIREMENTS

ANNUAL REPORT DUE 05/10
 You must submit a report to your Regional Migratory Bird Permit Office even if you had no activity. Report form is at www.fws.gov/forms/3-202-9.pdf

ISSUED BY

Olivia Barz

TITLE

Wildlife Biologist, Pacific Southwest Region

DATE

05/13/2016

(1) The following may be lethally taken:

100 of each: Canada Goose

50 of each: Cliff Swallow, Barn Swallow, California Gull, and Western Meadowlark

25 of each: Killdeer, Gadwall, Mallard, American Robin, and Mourning Dove

7 of each: Northern Pintail

5 of each: Great Blue Heron and Turkey Vulture

E. You may use the following methods of take: (1) firearms with non-toxic shot; (2) registered animal drugs (excluding nicarbazin), pesticides and repellents; and (3) falconry abatement. When using firearms, you may use rifles or air rifles to shoot any bird when you determine that the use of a shotgun is inadequate to resolve the injurious situation. Paintball guns are prohibited.

Anyone who takes migratory birds under the authority of this permit must follow the American Veterinary Medical Association Guidelines on Euthanasia when euthanization of a bird is necessary (http://www.avma.org/issues/animal_welfare/euthanasia.pdf).

F. You are authorized in emergency situations only to take, trap, or relocate any migratory birds, nests and eggs, including species that are not listed in Condition D (except Bald eagles, Golden eagles, or endangered or threatened species) when the migratory birds, nests, or eggs are posing a direct threat to human safety. A direct threat to human safety is one which involves a threat of serious bodily injury or a risk to human life.

You shall use the FAA Emergency Procedures when declaring an emergency. Specifically, Title 14 of the Code of Federal Regulations (14 CFR) part 91, section 91.3 allows deviations from regulations during emergencies and allows the pilot in command (PIC) to make the best decision to ensure safety of all personnel during these contingencies.

Anyone who takes migratory birds under the authority of this permit must follow the American Veterinary Medical Association Guidelines on Euthanasia when euthanization of a bird is necessary (http://www.avma.org/issues/animal_welfare/euthanasia.pdf).

You must report any emergency take activity to your migratory bird permit issuing office to **916-978-6183** and to **Olivia_baez@fws.gov** within 72 hours after the emergency take action. Your report must include the species and number of birds taken, method, and a complete description of the circumstances warranting the emergency action.

G. You are authorized to salvage and temporarily possess migratory birds found dead or taken under this permit for (1) disposal, (2) transfer to the U.S. Department of Agriculture, (3) diagnostic purposes, (4) purposes of training airport personnel, (5) donation to a public scientific or educational institution as defined in 50 CFR 10.12, (6) donation to persons authorized by permit or regulation to possess them, or (7) donation of migratory game birds only to a public charity (those suitable for human consumption). Any dead Bald eagles or Golden eagles salvaged must be reported within 48 hours to the National Eagle Repository at (303) 287-2110 and to the migratory bird permit issuing office at 916-978-6183 or permitsr8mb@fws.gov. The Repository will provide directions for shipment of these specimens.

H. You may not salvage and must immediately report to U.S. Fish and Wildlife Service Office of Law Enforcement (USFWS OLE) any dead or injured migratory birds that you encounter that appear to have been poisoned, shot, electrocuted, have collided with industrial power generation equipment, or were otherwise killed or injured as the result of potential criminal activity. See USFWS OLE contact information below.

I. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age.

As the permittee, you are legally responsible for ensuring that your subpermittees are in compliance with the terms and conditions of this permit, are qualified to perform these authorized activities and adhere to the terms of your permit. You are also responsible for maintaining current records of anyone you have designated as a subpermittee, including copies of letters you have provided to the subpermittees authorizing them to conduct the permitted activities on your behalf.

The following subpermittees are authorized: any person who is (1) employed by or under contract to you for the activities specified in this permit, or (2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

J. You and any subpermittee(s) must comply with the attached Standard Conditions for Migratory Bird Depredation Permits. *These standard conditions are a continuation of your permit conditions and must remain with your permit.*

For suspected illegal activity, immediately contact USFWS Law Enforcement at: 916-569-8444 (Sacramento) or 650-876-9078 (Burlingame).



Standard Conditions Migratory Bird Depredation Permits 50 CFR 21.41

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 21.41 are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. The standard conditions below are a continuation of your permit conditions and must remain with your permit. If you have questions regarding these conditions, refer to the regulations or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, or to obtain contact information for your issuing office, visit: <http://www.fws.gov/migratorybirds/mbpermits.html>.

1. To minimize the lethal take of migratory birds, you are required to continually apply non-lethal methods of harassment in conjunction with lethal control.
[Note: Explosive Pest Control Devices (EPCDs) are regulated by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). If you plan to use EPCDs, you require a Federal explosives permit, unless you are exempt under 27 CFR 555.141. Information and contacts may be found at <http://www.atf.gov/explosives/how-to/become-an-fel.htm>.]

2. Shotguns used to take migratory birds can be no larger than 10-gauge and must be fired from the shoulder. You must use nontoxic shot listed in 50 CFR 20.21(j).
3. You may not use blinds, pits, or other means of concealment, decoys, duck calls, or other devices to lure or entice migratory birds into gun range.
4. You are not authorized to take, capture, harass, or disturb bald eagles or golden eagles, or species listed as threatened or endangered under the Endangered Species Act found in 50 CFR 17, without additional authorization.

For a list of threatened and endangered species in your state, visit the U.S. Fish and Wildlife Service's Threatened and Endangered Species System (TESS) at: <http://www.fws.gov/endangered>.

5. If you encounter a migratory bird with a Federal band issued by the U.S. Geological Survey Bird Banding Laboratory, Laurel, MD, report the band number to 1-800-327-BAND or <http://www.reportband.gov>.
6. This permit does not authorize take or release of any migratory birds, nests, or eggs on Federal lands without additional prior written authorization from the applicable Federal agency, or on State lands or other public or private property without prior written permission or permits from the landowner or custodian.
7. Unless otherwise specified on the face of the permit, migratory birds, nests, or eggs taken under this permit must be:
 - (a) turned over to the U.S. Department of Agriculture for official purposes, or
 - (b) donated to a public educational or scientific institution as defined by 50 CFR 10, or
 - (c) completely destroyed by burial or incineration, or
 - (d) with prior approval from the permit issuing office, donated to persons authorized by permit or regulation to possess them.

8. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of designation letters you have provided.
9. You and any subpermittees must carry a legible copy of this permit, *including these Standard Conditions*, and display it upon request whenever you are exercising its authority.
10. You must maintain records as required in 50 CFR 13.46 and 50 CFR 21.41. All records relating to the permitted activities must be kept at the location indicated in writing by you to the migratory bird permit issuing office.
11. Acceptance of this permit authorizes the U.S. Fish and Wildlife Service to inspect any wildlife held, and to audit or copy any permits, books, or records required to be kept by the permit and governing regulations.
12. You may not conduct the activities authorized by this permit if doing so would violate the laws of the applicable State, county, municipal or tribal government or any other applicable law.

(DPRD - 12/3/2011)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Migratory Bird Permit Office
2800 Cottage Way, Room W-2606
Sacramento, California 95825-0509



May 13, 2016

Napa County Airport
2030 Airport Rd.
Napa, CA 94558

To Martin Pehl,

This letter is regarding your Federal Migratory Bird Depredation Permit, permit number MB105156. Your permit is enclosed. We would like to take this time to notify you of a partial denial of your Depredation Permit application. For simplification, this letter only addresses the partially denied activities.

In your renewal application received on July 22, 2015, you proposed to lethally remove 25 Northern Pintails. We partially deny your proposed actions by authorizing you to lethally remove seven Northern Pintails.

We determine the amount of birds authorized for lethal removal and trap and relocation by analyzing the potential population impacts for each species that could occur due to the activities authorized on this permit. Our determinations are to ensure the conservation of each species.

You may request a reconsideration under 50 CFR 13.29 (a)(4). However, under condition H of your permit, you are authorized to take additional species and species numbers under emergency situations only, excluding Bald eagles, Golden eagles, and threatened and endangered species.

If you have any questions, you may contact me at Olivia_baez@fws.gov.

Sincerely,

Olivia Baez
Wildlife Biologist

Attachment C. Airport Wildlife Observation Log

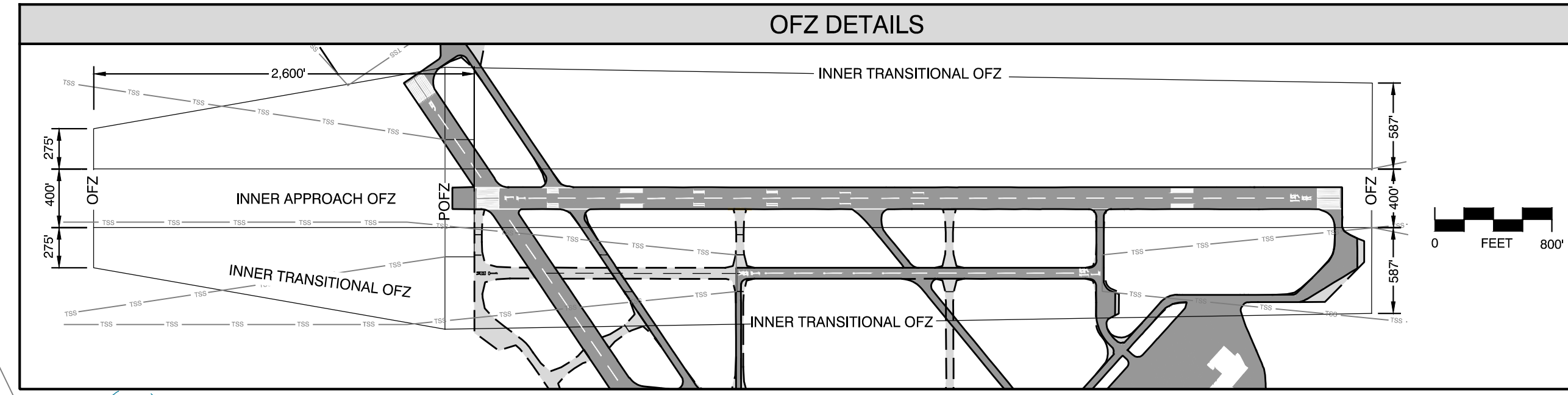
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Attachment D. Airport Layout Plan

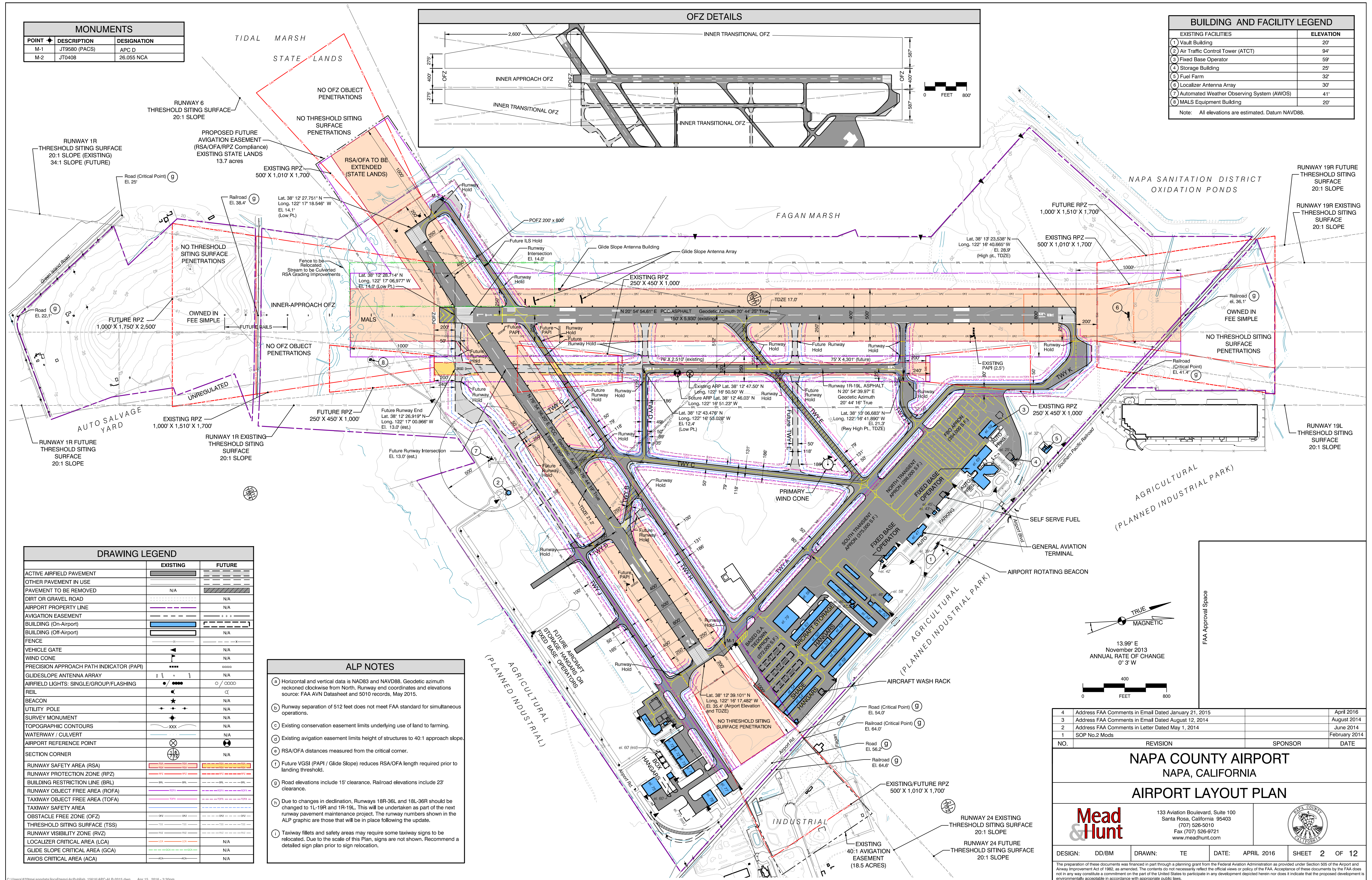
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MONUMENTS		
POINT	DESCRIPTION	DESIGNATION
M-1	JT9580 (PACS)	APC D
M-2	JT4048	26,055 NCA



BUILDING AND FACILITY LEGEND	
EXISTING FACILITIES	ELEVATION
1 Vault Building	20'
2 Air Traffic Control Tower (ATCT)	94'
3 Fixed Base Operator	59'
4 Storage Building	25'
5 Fuel Farm	32'
6 Localizer Antenna Array	30'
7 Automated Weather Observing System (AWOS)	41'
8 MALS Equipment Building	20'

Note: All elevations are estimated. Datum NAVD88.



DRAWING LEGEND		
	EXISTING	FUTURE
ACTIVE AIRFIELD PAVEMENT	[Symbol]	[Symbol]
OTHER PAVEMENT IN USE	[Symbol]	[Symbol]
PAVEMENT TO BE REMOVED	[Symbol]	[Symbol]
DIRT OR GRAVEL ROAD	[Symbol]	[Symbol]
AIRPORT PROPERTY LINE	[Symbol]	[Symbol]
AVIGATION EASEMENT	[Symbol]	[Symbol]
BUILDING (On-Airport)	[Symbol]	[Symbol]
BUILDING (Off-Airport)	[Symbol]	[Symbol]
FENCE	[Symbol]	[Symbol]
VEHICLE GATE	[Symbol]	[Symbol]
WIND CONE	[Symbol]	[Symbol]
PRECISION APPROACH PATH INDICATOR (PAPI)	[Symbol]	[Symbol]
GLIDESLOPE ANTENNA ARRAY	[Symbol]	[Symbol]
AIRFIELD LIGHTS: SINGLE/GROUP/FLASHING	[Symbol]	[Symbol]
REIL	[Symbol]	[Symbol]
BEACON	[Symbol]	[Symbol]
UTILITY POLE	[Symbol]	[Symbol]
SURVEY MONUMENT	[Symbol]	[Symbol]
TOPOGRAPHIC CONTOURS	[Symbol]	[Symbol]
WATERWAY / CULVERT	[Symbol]	[Symbol]
AIRPORT REFERENCE POINT	[Symbol]	[Symbol]
SECTION CORNER	[Symbol]	[Symbol]
RUNWAY SAFETY AREA (RSA)	[Symbol]	[Symbol]
RUNWAY PROTECTION ZONE (RPZ)	[Symbol]	[Symbol]
BUILDING RESTRICTION LINE (BRL)	[Symbol]	[Symbol]
RUNWAY OBJECT FREE AREA (ROFA)	[Symbol]	[Symbol]
TAXIWAY OBJECT FREE AREA (TOFA)	[Symbol]	[Symbol]
TAXIWAY SAFETY AREA	[Symbol]	[Symbol]
OBSTACLE FREE ZONE (OFZ)	[Symbol]	[Symbol]
THRESHOLD SITING SURFACE (TSS)	[Symbol]	[Symbol]
RUNWAY VISIBILITY ZONE (RVZ)	[Symbol]	[Symbol]
LOCALIZER CRITICAL AREA (LCA)	[Symbol]	[Symbol]
GLIDE SLOPE CRITICAL AREA (GCA)	[Symbol]	[Symbol]
AWOS CRITICAL AREA (ACA)	[Symbol]	[Symbol]

- ALP NOTES**
- Horizontal and vertical data is NAD83 and NAVD88. Geodetic azimuth reckoned clockwise from North. Runway end coordinates and elevations source: FAA AVN Datasheet and 5010 records, May 2015.
 - Runway separation of 512 feet does not meet FAA standard for simultaneous operations.
 - Existing conservation easement limits underlying use of land to farming.
 - Existing aviation easement limits height of structures to 40:1 approach slope.
 - RSA/OFA distances measured from the critical corner.
 - Future VGSI (PAPI / Glide Slope) reduces RSA/OFA length required prior to landing threshold.
 - Road elevations include 15' clearance. Railroad elevations include 23' clearance.
 - Due to changes in declination, Runways 16R-36L and 18L-36R should be changed to 1L-19R and 1R-19L. This will be undertaken as part of the next runway pavement maintenance project. The runway numbers shown in the ALP graphic are those that will be in place following the update.
 - Taxiway fillets and safety areas may require some taxiway signs to be relocated. Due to the scale of this Plan, signs are not shown. Recommend a detailed sign plan prior to sign relocation.

4	Address FAA Comments in Email Dated January 21, 2015	April 2016	
3	Address FAA Comments in Email Dated August 12, 2014	August 2014	
2	Address FAA Comments in Letter Dated May 1, 2014	June 2014	
1	SOP No.2 Mods	February 2014	
NO.	REVISION	SPONSOR	DATE
NAPA COUNTY AIRPORT			
NAPA, CALIFORNIA			
AIRPORT LAYOUT PLAN			
Mead & Hunt		133 Aviation Boulevard, Suite 100 Santa Rosa, California 95403 (707) 526-5010 Fax (707) 526-9721 www.meadandhunt.com	
DESIGN:	DD/BM	DRAWN:	TE
DATE:	APRIL 2016	SHEET:	2 OF 12