

STAFF REPORT

SUBJECT: Mizuno Hays Road Preserve Dedication and Preserve Management Plan

RECOMMENDED ACTION: Motion to SJCOG, Inc. to 1) Approve the Conservation Easement Dedication and 2) Approve of the Preserve Management Plan (PMP) for the Preserve Site

SUMMARY:

The Mizuno Hays Road Properties are a total of 79 +/- acres in size of the considered parcels. A development project is dedicating a conservation easement of approximately 10.46 +/- acres to SJCOG, Inc. for the habitat program. The location of the property is in the Central Zone east of the City of Tracy and south of the City of Manteca on the east side of the San Joaquin River. The potential preserve is adjacent to existing SJCOG, Inc. Central Zone preserves, as also shown in the attachment 1 and 2.

With the dedication, SJCOG, Inc. staff has written this draft Preserve Management Plan (PMP) to reflect the existing Preserve Management Plans (PMP) of the row and field crop preserves in the Central Zone for economy of scale for species under the SJMSCP. The draft PMP was written with the intent of purchasing a larger portion of the property (approximately 35-50 acres) soon (mid/late 2017) to compliment the dedication. The PMP has no specific enhancements for areas on the referenced property but future enhancements can be included later which will be compatible with on-going farming activities in cooperation with the land owner to restore habitat for various species since there have been historical records of Swainson's hawks and other species near the property in the California Natural Diversity Database (CNDDB) through a supplemental restoration plan.

RECOMMENDATION:

A motion to recommend the SJCOG, Inc. Board to 1) approve the conservation easement dedication and 2) approve the draft preserve management plan (PMP).

FISCAL IMPACT:

SJCOG, Inc. will be provided an overall easement on approximately 10.5 +/- acres of row and field crop habitat easement land under the SJMSCP. Also, SJCOG, Inc. will be provided an endowment to be set for the preserve as the project proceeds in the amount of roughly \$44,067.03 (10.5 acres x \$4,196.86 per acre 2017 endowment) for land management and enhancements as required under the SJMSCP permits.

The future easement acquisition will be brought to SJCOG, Inc. for approval later.

BACKGROUND:

The Mizuno Hays Road properties are located east of the City of Tracy and south of the City of Manteca on the east side of the San Joaquin River in the Central Zone. The conservation easement dedication (and future acquisition) will cover the existing agricultural lands which are actively farmed to serve as mitigation for development impacts under the SJMSCP to row and field crop habitat for the betterment of species covered under the SJMSCP.

The Preserve Management Plan (PMP) (attachment 3) drafted by ICF reflect the existing Preserve Management Plans (PMP) of the row and field crop preserves in the Central Zone for economy of scale for species under the SJMSCP. Currently, there are no enhancements planned to the landscape but any additional future enhancements planned on the property not displayed in Table 1 would be brought back as a supplemental PMP in the future to be completed in cooperation with the land owner. The land owners display very good stewardship practices and there are very little invasive species within the fields on premises.

Table 1 – Enhancements for Row and Field Crop/Riparian Preserves

Enhancement Potential Under SJMSCP	Y	N	N/A
Use of Herbicides, pesticides and/or rodenticide in accordance with Sect. 5.4.5(M) & 5.4.7.1	X		
Create, expand or restore riparian area to enhance nesting		X	
Plant elderberry plants for VELB		X	
Enhance foraging habitat using native grass and forb species (Appendix N)		X	
Install roosting or nest sites and platforms		X	
Fencing of riparian areas			X
Install bat boxes			X
Maintain water quality within creeks and wetlands (e.g. red-legged frog habitat)			X
Create burrowing owl burrows		X	
Eliminate invasive and undesirable species	X		
Plant vegetation (e.g. tules, blackberry thickets & cattails for tricolor blackbird/GGS)		X	

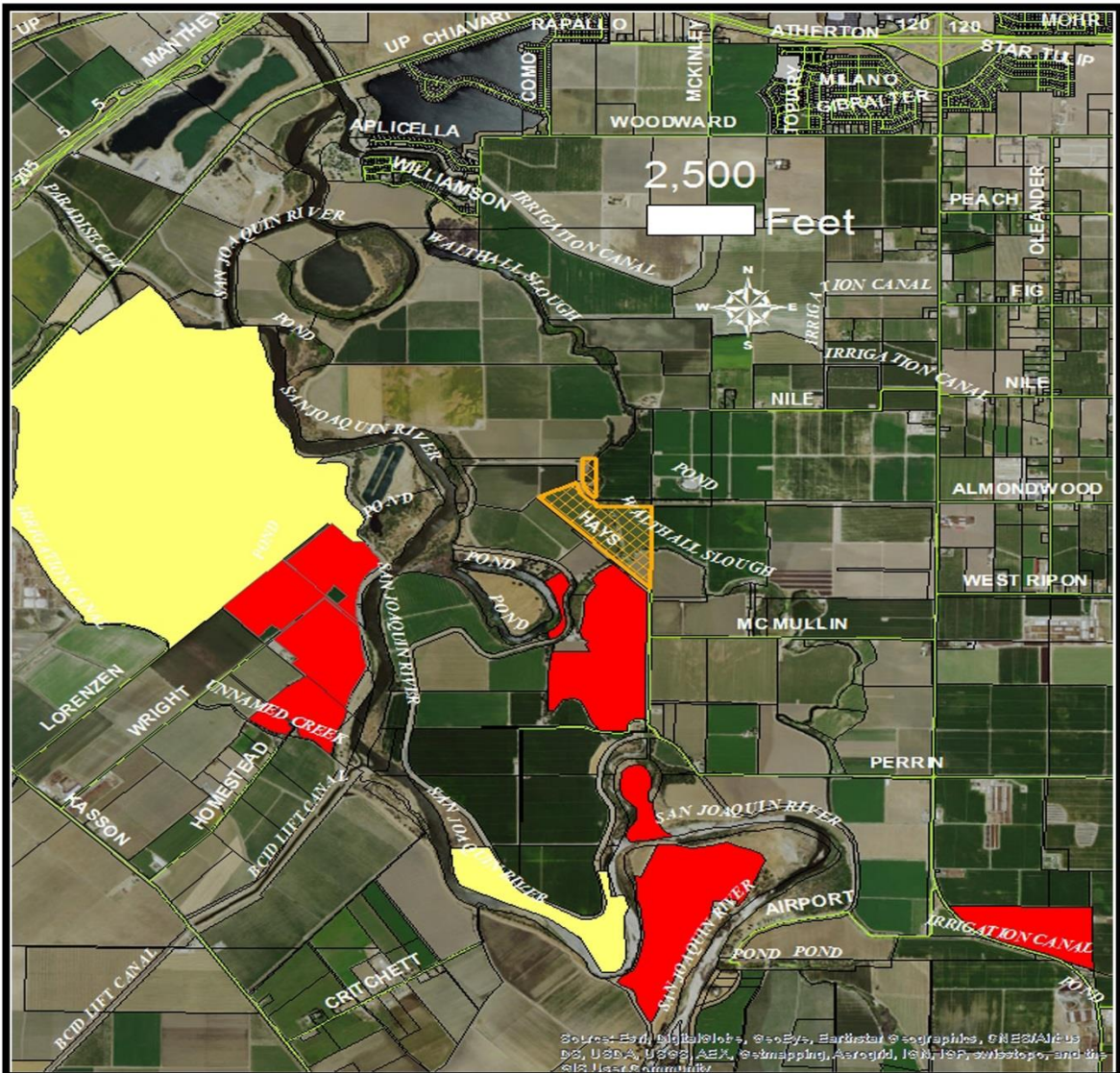
COMMITTEE ACTIONS:

- Habitat Technical Advisory Committee: Recommended Approval
- SJCOG, Inc. Board – Action Required

ATTACHMENTS:

1. Overview Preserve Location Map
2. Preserve Location Map
3. Preserve Management Plan

Prepared by: Steven Mayo, Program Manager

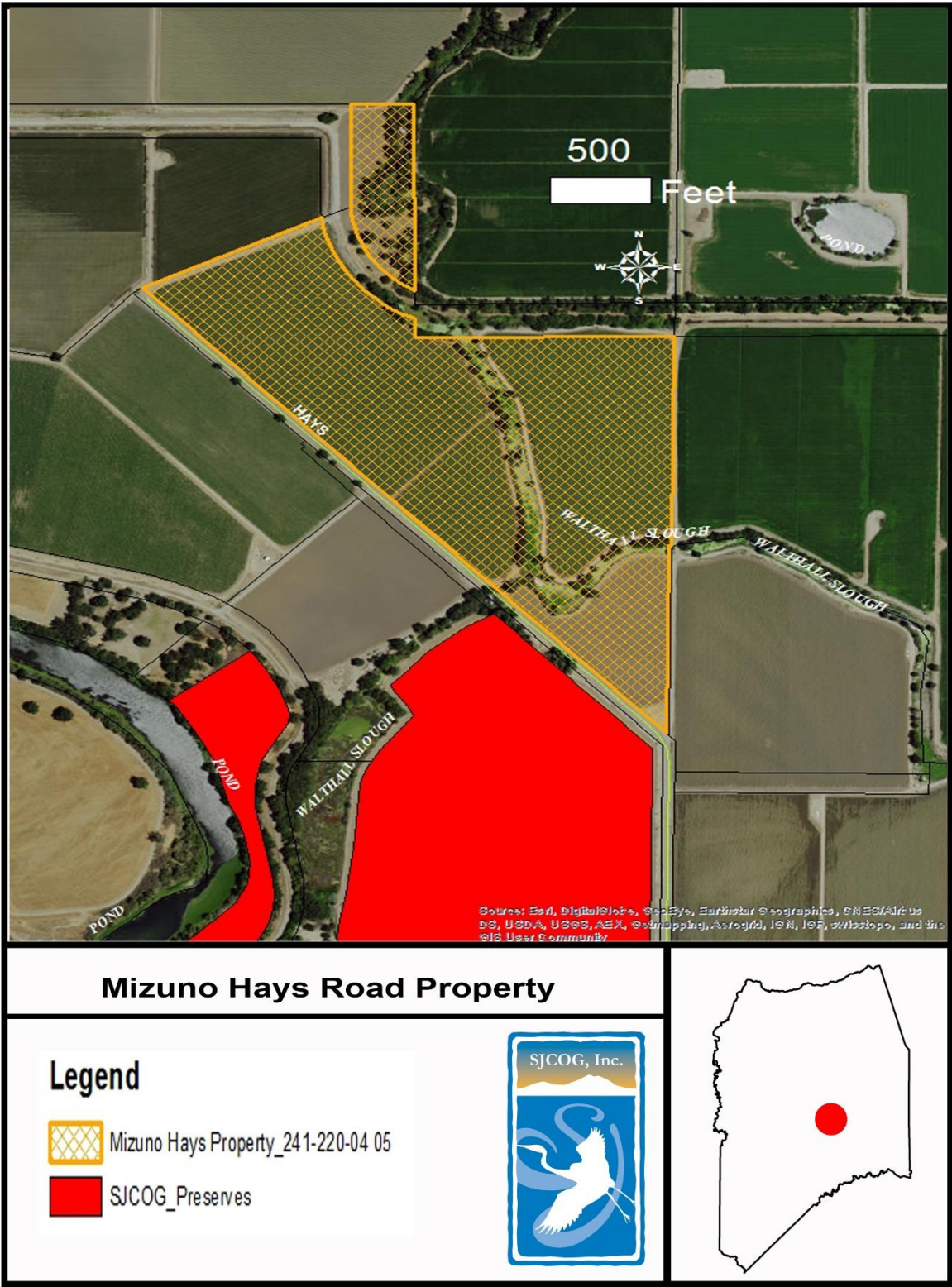


Mizuno Hays Road Property

Legend

-  Mizuno Hays Property_241-220-04 05
-  SJCOC_Preserves





ATTACHMENT 3

PRESERVE MANAGEMENT PLAN FOR THE MIZUNO HAYS ROAD PRESERVE

PREPARED FOR:

SJCOG, Inc.
555 East Weber Street
Stockton, CA 95202
Contact: Steve Mayo
209.235.0600

PREPARED BY:

ICF International
630 K Street, Suite 400
Sacramento, CA 95814
Contact: Doug Leslie
916.737.3000

March 8, 2017



Contents

	Page
List of Tables and Figures	iii
List of Acronyms and Abbreviations	iv
Chapter 1 Introduction	1-1
1.1 Purpose of the Preserve Management Plan	1-1
1.2 Preserve Location	1-2
1.3 Land Ownership and Management	1-2
Chapter 2 Baseline Preserve Characteristics, Goals and Objectives	2-1
2.1 Wildlife Habitat Associations Identified in the SJMSCP	2-1
2.2 Goal and Objectives of the Management Plan	2-2
Chapter 3 Land Management Activities.....	3-1
3.1 Agricultural Practices.....	3-1
3.2 Prohibited Uses and Activities.....	3-1
3.2.1 Access and Trespass/Illegal Uses/Signage	3-1
3.2.2 Agricultural Conversion	3-1
3.2.3 Alteration of Watercourses	3-2
3.2.4 Chemicals	3-2
3.2.5 Dumping.....	3-2
3.2.6 Hunting and Fishing	3-2
3.2.7 Vegetation Removal or Destruction	3-2
3.2.8 Natural Resource Development.....	3-2
3.2.9 Pest Management.....	3-3
3.2.10 Recreational Activities.....	3-3
3.2.11 Roads.....	3-3
3.2.12 Structures	3-3
3.2.13 Vehicle Use	3-4
3.3 Permitted Uses and Activities	3-4
3.3.1 Hunting and Fishing	3-4
3.3.2 Roads.....	3-4
3.4 Affirmative Obligations	3-4
3.4.1 Emergency Vehicle Access.....	3-4
3.4.2 Maintenance and Repair.....	3-5
3.4.3 Monitoring and Reporting	3-5
3.4.4 Preserve Enhancements	3-5
3.5 Implementation and Management Schedule	3-5

Chapter 4	Monitoring and Adaptive Management	4-1
4.1	Compliance Monitoring	4-1
4.2	Effectiveness Monitoring	4-1
4.3	Monitoring Preserve Enhancements	4-2
4.4	Success Criteria	4-2
4.5	Adaptive Management	4-2

Tables and Figures

	Page
Table 1 Mizuno Hayes Road Preserve Parcel Information.....	1-2

Figures appear at end of document

Figure 1 Mizuno Hays Road Preserve San Joaquin County	
Figure 2 Mizuno Hays Road Preserve and Other Conservation Easements in the Vicinity	
Figure 3 Mizuno Hays Road Preserve	
Figure 4 Habitats Present on the Mizuno Hays Road Preserve	
Figure 5 Documented Occurrences of SJMSCP-Covered Species within 2 Miles of Mizuno Hays Road Preserve	

Acronyms and Abbreviations

amsl	above mean sea level
CNDDDB	California Natural Diversity Database
GIS	geographic information systems
HTAC	Habitat Technical Advisory Committee
MHRP	Mizuno Hays Road Preserve
SJCOG	SJCOG, Inc.
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
USGS	U.S. Geological Survey

Chapter 1

Introduction

SJCOG, Inc., is currently implementing the *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP)¹ (San Joaquin Council of Governments 2001). The principal biological goal of the SJMSCP (the Plan) is to maintain habitat of sufficient quality and quantity to conserve populations of all fish, wildlife, and plant species covered by the Plan. As part of this Plan, lands within the SJMSCP area are acquired as preserves from willing landowners through either conservation easements or fee title purchase.

This document is the Preserve Management Plan (PMP) for the Mizuno Hays Road Preserve (MHRP), owned by Mizuno Partners, LLC, on which a conservation easement is being placed. The property addressed in this PMP is approximately 79 acres in size and is comprised of two parcels adjacent to the existing Mizuno Preserve to the southwest. A conservation easement is being placed on approximately 10.5 acres of the property by SJCOG Inc., and will be incorporated into the preserve system as a row and field crop preserve. It is anticipated that most of the remaining acreage of the property will be put under easement in the near future. This PMP assumes that most of the remainder of the properties will be placed under conservation easement, although until such time as that occurs, the Permitted Uses, Prohibited Uses, and Affirmative Obligations (defined below) outlined in this PMP apply only to the 10.5 acres currently being placed under easement. Upon close of the remaining acreage, the Permitted Uses, Prohibited Uses and Affirmative Obligations will apply.

The MHRP is intended to offset impacts resulting from the conversion of agricultural lands primarily within the Central Zone, as allowed in Section 5.1.2.6 of the Plan.

1.1 Purpose of the Preserve Management Plan

The PMP sets forth specific guidelines regarding land management and monitoring activities to ensure the landowner(s) and SJCOG, Inc., are in agreement with the conditions of the conservation easement and the manner in which preserve lands will be managed and monitored.

The PMP describes the baseline biological conditions of the property; states the goals and objectives of management; and describes the ongoing land management activities, including permitted and prohibited uses of the property and any affirmative obligations of the landowner(s).

The PMP also sets forth guidelines for adaptive management as required under the SJMSCP. Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs. In the context of preserve management, monitoring activities are undertaken to assess the progress of management activities toward achieving the stated management goals. The information collected can then be used to improve management activities, if warranted. Landowners are required to provide information regarding management activities upon request for the purpose of informing the adaptive management process. However, there will be no alteration of management activities not in conflict

¹ San Joaquin County Council of Governments. 2001. *San Joaquin County Multi-Species Habitat Conservation & Open Space Plan*. Stockton, CA. Available: <<http://www.sjcog.org/sections/habitat/sjmscp>>. Accessed August 28, 2009.

with this PMP that adversely affect permitted agricultural uses of the land without the agreement of the landowner(s).

1.2 Preserve Location

The MHRP is located just east of the San Joaquin River approximately 5.8 linear air miles north of its' confluence with the Stanislaus River in San Joaquin County (Figure 1). Information pertaining to the property is provided in Table 1.

Table 1. Mizuno Hays Road Preserve Information

Assessor's Parcel Numbers	241-220-04, 241-220-05
Acreage	76 acres
SJMSCP Index Zone	Central
USGS 7.5-minute quadrangle	Vernalis
Township	Unsurveyed (El Pescadero Land Grant)
Range	Unsurveyed
Section	Unsurveyed
SJMSCP = <i>San Joaquin County Multi-Species Habitat Conservation and Open Space Plan</i> ; USGS = U.S. Geological Survey	

The MHRP is in close proximity to the Seegers and Allegre preserves, in addition to be adjacent to the Mizuno Preserve (Figure 2).

1.3 Land Ownership and Management

The parties responsible for managing lands in accordance with the PMP for the MHRP are listed below.

Landowner

Mizuno Partners, LLC
Contact: Clark Mizuno
29050 S. Ahern Road
Tracy, CA 95304
Phone: 209.835.5154

Conservation easement holder

SJCOG, Inc.
555 East Weber Street
Stockton, CA 95202
Contact: Steven Mayo
Phone: 209.235.0600

Land manager

ICF International
630 K Street, Suite 400
Sacramento, CA 95814
Contact: Doug Leslie
Phone: 916.737.3000

Baseline Preserve Characteristics, Goals and Objectives

As noted above, the MHRP is an approximately 79-acre portion of the properties owned by Mizuno partners, LLC. The property is located just east of the San Joaquin River. The property contains 5 distinct fields which are separated from each other by Walthall Slough. The southern field was in alfalfa in January 2017 at the time of the site visit and is bordered on the north side by Walthall Slough. The fields northeast and northwest of Walthall Slough were plowed bare dirt in January 2017 at the time of the site visit. Historically, these fields have been used to grow wheat, dry beans, tomatoes, sweet corn, and silage. The 5th “field” is a small section of the property separated from the rest of the property by a levee on the west side and a slough on the east side and appears to be currently unfarmed (Figures 3 and 4).

Walthall slough is comprised of relatively mature riparian forest dominated by Valley oak (*Quercus lobate*) with pockets of cattail marsh (*Typha spp.*) and water hyacinth (*Eichhornia crassipes*) in the slough bottom (Figure 4).

There are no home sites on or immediately adjacent to the property.

The SJMSCP geographic information systems (GIS) database and the California Natural Diversity Database (CNDDB 01/13/2017) were searched to identify records of SJMSCP-covered species within approximately 2 miles of the MHRP. There are eight records of nesting Swainson’s hawk (*Buteo swainsonii*) within a 2-mile radius of the MHRP, one of which is on the MHRP. There are several records of Pacific pond turtle (*Emys marmorata*, formerly *Clemmys marmorata*) further north along Walthall Slough and several records of Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) further north along the San Joaquin River. Several records for riparian brush rabbit (*Sylvilagus bachmani riparius*) are also present along the San Joaquin River north of the MHRP (Figure 5).

2.1 Wildlife Habitat Associations Identified in the SJMSCP

The habitats and preserve elements described in the SJMSCP and present on the MHRP are listed below.

- Row and field crop.
- Presence of rodents.
- Presence of pigeons or mice.
- Presence of short grasses, sometimes almost barren ground.
- Presence of small reptiles and/or amphibians in shallow waters.
- Presence of tall perching sites (i.e., vegetative perches higher than surrounding vegetation which permit the species to survey the surrounding area) normally with adjacent agricultural fields or grasslands.

- Location of the preserve from the San Joaquin River from its confluence with the Stanislaus River to Mossdale.
- Presence of snags or trees with a moderate canopy cover, preferably near riparian areas.
- Presence of stands of dense, tall, trees along riparian corridors for roosts or rookeries.
- Presence of slow moving waters within natural and agricultural waterways.
- Presence of small birds.

These habitats and preserve elements, according to the SJMSCP, provide foraging habitat for the SJMSCP-covered species listed below.

- Swainson's hawk
- Northern harrier (*Circus cyaneus*)
- White-tailed kite (*Elanus leucurus*)
- Merlin (*Falco columbarius*)
- Long-billed curlew (*Numenius americanus*)
- Horned lark (*Eremophila alpestris*)
- Great egret (*Ardea alba*)
- Great blue heron (*Ardea herodias*)
- Loggerhead shrike (*Lanus ludovicianus*)
- Riparian brush rabbit (*Sylvilagus bachmani riparius*)
- Riparian woodrat (*Neotoma fuscipes ripari*)
- Red bat (*Lasiurus borealis*)
- Black-crowned night heron (*Nycticorax nycticorax*)
- Slough thistle (*Cirsium crassicaule*)
- Cooper's hawk (*Accipiter cooperii*)
- Sharp-shinned hawk (*Accipiter striatus*)

The riparian and agricultural lands on the preserve also benefit several other common bird species, including Oak titmouse (*Baeolophus inornatus*), Dark eyed Junco (*Junco hyemalis*), Nuttall's woodpecker (*Picoides nuttallii*), and Western bluebird (*Sialia Mexicana*), as well as habitat for jackrabbits (*Lepus californicus*), coyotes (*Canis latrans*), raccoons (*Procyon lotor*), opossums (*Didelphis virginiana*), and gopher snakes (*Pituophis catenifer*).

2.2 Goal and Objectives of the Management Plan

The MHRP will be managed as a Row and Field Crop Preserve as described in Section 5.4.4.4 of the SJMSCP. The goal of this preserve type is to maintain and enhance the *habitat values* extant on the site for the benefit of Swainson's hawk and other species covered by the SJMSCP that depend to varying degrees upon habitat values provided by agricultural habitats and associated riparian

habitats. **Habitat Values** are defined herein as the resources provided on the landscape that provide benefits for covered species, such as abundant and accessible prey or forage, cover, perch sites, nest sites, water, or other resources necessary for survival and reproduction. Habitat values decrease with increasing disturbance, pesticide and herbicide use, and increasing habitat uniformity. Because the MHRP is devoted to agricultural production, the primary goal of the preserve is to provide foraging habitat for SJMSCP-covered species, in addition to preserving perching, nesting, and foraging habitat and cover provided by associated riparian and wetland habitats along Walthall Slough and the nearby San Joaquin River.

Chapter 3

Land Management Activities

This chapter discusses the land management activities that will be implemented under the conservation easement. The desired agricultural practices as well as permitted and prohibited land uses are discussed.

The MHRP will be managed according to the guidelines for Central and Central/Southwest Transition Zone Row and Field Crop Preserves outlined in the SJMSCP. These guidelines state that the key management practice for the agricultural use of row and field crops is to grow only those crops having a canopy structure and other attributes that do not mechanically prevent foraging by raptors.

3.1 Agricultural Practices

Land management practices on the MHRP have historically provided benefits for Swainson's hawk and other SJMSCP-covered species. These practices will be continued as part of this PMP. The property is currently being used to grow alfalfa. The crop types may vary depending on market values and may include various hay crops, beans, safflower, carrots, beets, tomatoes, pumpkins, cucumbers, squash, and other vegetable crops. Vineyards, orchards, blueberries, and other permanent or semi-permanent crops are prohibited without permission from the SJCOG, Inc., Habitat Technical Advisory Committee (HTAC).

3.2 Prohibited Uses and Activities

This section identifies prohibited uses of the preserve under the MHRP Conservation Easement. *Landowner* refers to Mizuno partners, LLC *SJCOG, Inc.*, refers to all agencies, organizations, or individuals affiliated with or that represent the SJCOG, Inc., during implementation of actions under the preserve management plan.

3.2.1 Access and Trespass/Illegal Uses/Signage

No access to the general public will be permitted. The SJMSCP requires that signage be installed at all preserves under conservation easement. At the landowner's discretion, the signage can identify the property as being part of the San Joaquin County Open Space system, or *No Trespassing* signs can be installed. Signage should be installed on the MHRP within 120 days following approval of the conservation easement. The signs should be installed along public roadways and rights-of-way and should clearly state that public access is prohibited. The signs will be provided by the SJCOG, Inc., and installed by the landowner.

3.2.2 Agricultural Conversion

The conversion of the preserve from production of row and field crops (e.g., tomatoes, corn, beans, cucumbers, or other vegetables; wheat, oats, or other grains; alfalfa or other hay crops) to

agricultural uses that are not compatible with providing foraging habitat for Swainson's hawk and other covered species (e.g., conversion to orchards, vineyards, blueberries, or other permanent or semi-permanent crop types) is prohibited without prior approval by the HTAC.

3.2.3 Alteration of Watercourses

The alteration or manipulation of any natural watercourse, wetland, or body of water and activities or uses that are detrimental to water quality, including, but not limited to, degradation, pollution, or fill, are prohibited. This prohibition does not include irrigation of crops, drainage of agricultural fields, routine maintenance of ditches, or installation of preserve enhancements approved by the HTAC.

3.2.4 Chemicals

Except for those pesticides, herbicides, fungicides, or fertilizers used in ongoing row and field crop production in strict compliance with application and labeling instructions, no chemicals will be used on the preserve unless they are used for the specific purpose of controlling exotic weed or pest species that may threaten habitat functions and values. All chemicals will be used, stored, and disposed of in strict compliance with labeling instructions and applicable laws.

3.2.5 Dumping

The dumping, storage, or other disposal of refuse, trash, sewer sludge, and toxic or hazardous materials or chemicals is not permitted on the preserve. This prohibition includes the storage or disassembly of inoperable automobiles, trucks, farm equipment, or other machinery for the purpose of sale or storage.

3.2.6 Hunting and Fishing

Commercial fishing, hunting and trapping are prohibited. No recreational hunting or fishing that could result in take under the federal or stated endangered species acts is permitted.

3.2.7 Vegetation Removal or Destruction

The removal of any natural vegetation (such as riparian habitats along Walthall Slough) or vegetation installed as part of a preserve enhancement project is prohibited. Removal of large trees with potential to be used as nesting habitat by covered species is prohibited without the prior approval of the HTAC.

3.2.8 Natural Resource Development

The filling, dumping, excavating, draining, dredging, mining, drilling, removing, exploring, or extracting of or for minerals, soils, sands, gravels, rocks, or other material on or below the surface of the preserve is prohibited, unless otherwise approved by the HTAC.

3.2.9 Pest Management

Pest management is an ongoing activity associated with agricultural production. However, chemical rodent control should be minimized to the extent possible to maximize habitat values for covered species. The implementation of pest management is restricted in accordance with the parameters listed below to ensure that agricultural activities are consistent with the goals and objectives of the SJMSCP.

- All vertebrate pest control measures will be conducted in accordance with rodenticide labeling instructions, in accordance with Endangered Species Act Bulletins (available from local Agricultural Commissioner), and in accordance with Agricultural Commissioners (regulation and procedures).
- Application of rodenticides is restricted to bait feeders and should not be used unless absolutely necessary.
- Anti-coagulant pesticides are prohibited.
- Rodenticide baiting in burrows and rodenticide broadcast baiting are prohibited, with the following exceptions:

The use of strychnine or other non-anticoagulant rodenticides (such as ZP Rodent Oat Bait or AG Oat Grain Bait) dispersed underground (using a gopher-baiting machine for example) for pocket gopher abatement is allowed. The intention is to ensure that dead pocket gophers remain underground to reduce the possibility of secondary poisoning of covered species. While the aforementioned rodenticide labels list other uses for the product, such as vole control in alfalfa fields, their use for control of species other than pocket gophers in a manner other than specified above is prohibited because their above ground use would pose a danger to covered species, including Sandhill cranes.

If vertebrate pest control procedures are not effective and additional control is necessary, adaptive management procedures will be followed. The landowner will consult with the HTAC in a timely fashion and in accordance with the SJMSCP.

3.2.10 Recreational Activities

No revenue-generating recreational activities are permitted. Private recreational activities that degrade the habitat values of the property are prohibited.

3.2.11 Roads

The construction of new roads is prohibited.

3.2.12 Structures

The construction or placement of the structures listed below is prohibited on the preserve.

- New residential or other buildings.
- Camping accommodations.
- Mobile homes, house trailers, permanent tent facilities, Quonset huts or similar structures.

- Underground tanks.
- Billboards, signs, or other advertising.
- Streetlights.
- New utility structures or power lines except those required to power new pumps on the property for agricultural purposes.
- New sewer systems.

3.2.13 Vehicle Use

The use of motorized vehicles off designated roadways, except for agricultural purposes, is prohibited.

3.3 Permitted Uses and Activities

This section identifies permitted uses of the preserve under the MHRP Conservation Easement. Although some activities may be permitted under this PMP, all activities are still subordinate and subject to all applicable Federal, State, and local laws and regulations. The primary permitted use of the property is the continuation of row and field crop agriculture.

3.3.1 Hunting and Fishing

Noncommercial fishing, hunting and trapping of wildlife is permitted so long as it is conducted in compliance with applicable laws and regulations and in a manner that does not compromise the habitat values or damage the ecology of the biological resources on the preserve.

3.3.2 Roads

Resurfacing of existing roads with onsite materials and clean gravel is permitted as long as material is kept within the immediate roadway.

3.4 Affirmative Obligations

This section identifies the affirmative obligations of the landowner under the MHRP Conservation Easement. Affirmative obligations include both activities and permissions. All activities and permissions are subordinate and subject to all applicable Federal, State, and local laws and regulations.

3.4.1 Emergency Vehicle Access

The landowner must allow emergency vehicles to have direct access to the preserve from Hays Road, when necessary (Figure 3). The MHRP is currently not protected by gates or cables and is not actively patrolled.

3.4.2 Maintenance and Repair

SJCOG, Inc., is not responsible for general maintenance, repair, and replacement of existing facilities such as roads, fences, agricultural ditches, and irrigation supply lines and pumps. The landowner retains responsibility for these items and other general maintenance.

3.4.3 Monitoring and Reporting

SJCOG, Inc., is required to track crops grown on the preserve, ensure that the terms of the conservation easement are adhered to, and to conduct monitoring to ensure that acquisition and management of the easement are facilitating the achievement of the SJMSCP goals and objectives. Therefore, the landowner is required to allow reasonable access to the preserve by SJCOG, Inc. for purposes of ensuring compliance with the terms of the conservation easement and for purposes of monitoring use of the preserve by covered species.

3.4.4 Preserve Enhancements

There are currently no preserve enhancements proposed for the MHRP primarily because the area already provides ample riparian and wetland habitats that provide nesting, perching, and foraging opportunities for covered species. However, the small, currently unfarmed field at the northern end of the property between the levee and Walthall Slough may provide an opportunity to create additional riparian brush rabbit habitat or other habitats for covered species.

If preserve enhancements are agreed to by the landowner and SJCOG, Inc. at some point in the future, the landowner is required to allow access to the enhancements and is required to refrain from any action that would negatively impact the preserve enhancements. Details concerning the installation of any preserve enhancements would be specified in a separate Preserve Enhancement Plan.

3.5 Implementation and Management Schedule

The landowner will begin implementing and managing the preserve in accordance with this PMP immediately upon formal approval and acceptance of the conservation easement by the landowners, SJCOG, Inc., and the HTAC. The landowners and SJCOG, Inc., intend that the property be preserved and maintained in perpetuity by permitting only those agricultural practices that provide foraging habitat for Swainson's hawk and other SJMSCP-covered species that forage in agricultural habitats. The proposed agricultural practices are beneficial to these species.

Chapter 4

Monitoring and Adaptive Management

This chapter describes the biological monitoring plan and reporting requirements for land management activities on the MHRP. This chapter also summarizes remedial measures that may be implemented should the property not provide the desired benefits for Swainson's hawk and other SJMSCP-covered species. The primary objective of monitoring is to ensure that the goals and objectives of the SJMSCP and this PMP are being met.

A preserve monitoring strategy for the entire SJMSCP preserve system is currently being completed. The monitoring plan described in this chapter is considered provisional until the system-wide monitoring plan is completed and approved.

Two general types of monitoring are conducted on a regular basis to ensure that the goals and objective of the SJMSCP are being met; *compliance monitoring* and *effectiveness monitoring* (referred to as *biological monitoring* in the SJMSCP).

4.1 Compliance Monitoring

Compliance monitoring is monitoring that demonstrates compliance with the terms and conditions of the conservation easement, the SJMSCP and its permits. Compliance monitoring will be achieved through an annual site visit(s) to the preserve and annual discussion with the landowner(s) to document changes in agricultural practices or other factors such as water deliveries, drought conditions, market conditions, etc. that could affect the conservation and habitat values of the preserve. A set of photo stations will be established and photographs from each station will be taken annually during the site visit. Because breeding populations of Swainson's hawk and other covered species that depend upon agricultural habitats during a significant portion of their life cycle are the primary targets of this PMP, the site visit will be conducted during spring or summer, when these species can be found in the region.

Three variables will be reviewed during each site visit: the crop types that are in production; the areal extent of each crop type, if applicable; and any changes in land use or status of the preserve that could substantively influence the habitat values of the preserve.

Noncompliance with the conservation easement will be addressed in accordance with the provisions of the conservation easement.

4.2 Effectiveness Monitoring

Effectiveness monitoring (referred to as *biological monitoring* in the SJMSCP) is comprised of several types of monitoring. The general purpose of effectiveness monitoring as described in the SJMSCP is to track habitat conditions and the status of covered species on and around preserve lands and to determine if management actions maintain and improve habitat conditions for covered species.

Baseline habitat conditions are established at the time of preserve acquisition and are described in this PMP. Because neighboring land uses may change over time, potentially reducing the suitability of habitats on the preserve, habitat/crop cover types within a 2-mile radius of the preserve will also be documented.

Baseline surveys to determine presence of SJMSCP covered species will be conducted within 2 years of acquisition. The survey will consist primarily of a complete search of all potential Swainson's hawk nesting substrates within a 2-mile radius of the preserve to the extent possible given potential access constraints from surrounding landowners. Baseline surveys may also include focused surveys for burrowing owls, loggerhead shrikes, or tricolored blackbirds. All wildlife species detected, including SJMSCP-covered species, will be recorded.

The baseline habitat and focused species surveys will be updated once every 3 years by mapping changes in habitats/crop types found within a 2-mile radius of the preserve and repeating the focused nesting Swainson's hawk survey within a 2-mile radius of the preserve. Mapped data will be recorded in the GIS database. The results of the focused survey and assessment of adjacent land uses will be provided in the SJMSCP program-level annual report.

The information will be used for comparison with results from the original baseline survey to track changes over time and to ensure that the goals and objectives of the preserve management plan are being met.

4.3 Monitoring Preserve Enhancements

No preserve enhancements are currently proposed for this property. Therefore, no monitoring of preserve enhancements is required. If preserve enhancements are installed at a later date, monitoring to determine if the success criteria for the preserve enhancements are met will be outlined in a separate Preserve Enhancement Plan.

4.4 Success Criteria

A single criterion was identified to determine the success of land use centered on cropping patterns. Preserve management will be considered successful if the entire 79 acres of designated agricultural lands are maintained in suitable row and field crops (allowing for fallowing as a part of normal crop rotations and excepting any preserve enhancements that may be installed) each year and all terms and conditions of the conservation easement are adhered to.

4.5 Adaptive Management

This chapter summarizes the adaptive management provisions of the SJMSCP as they pertain to the MHRP. Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs. The principle of adaptive management recognizes that the resources being managed are dynamic systems and that the state of knowledge regarding natural resource management is constantly improving. Adaptive

management, by definition, does not include predetermined actions, but rather identifies new responses based on the outcome of management activities.

In the context of preserve management, monitoring activities are undertaken to assess the progress of management activities toward achieving the stated management goals. The information collected can then be used to improve management activities, if change is warranted. However, there will be no alteration of management activities that adversely affect permitted agricultural uses of the land without the agreement of the landowner.

Results of monitoring will be used to determine the effectiveness of the measures outlined in the SJMSCP and this PMP in providing habitat for Swainson's hawk and other SJMSCP-covered species. If substantial changes in populations of covered species occur, or evidence suggests the operating conservation program outlined in the SJMSCP is not meeting the goals and objectives outlined in the SJMSCP, then adaptive management procedures may be warranted. Such measures would include a review of the terms of the conservation easements and a review of the cropping patterns, crop types, monitoring requirements, and other management or monitoring activities on SJMSCP preserves.

K:\Projects_2\SJHCP\05076_05\aromap\Mizuno_Hays\Figure1_MizunoHaysA.mxd ds 2/16/2017

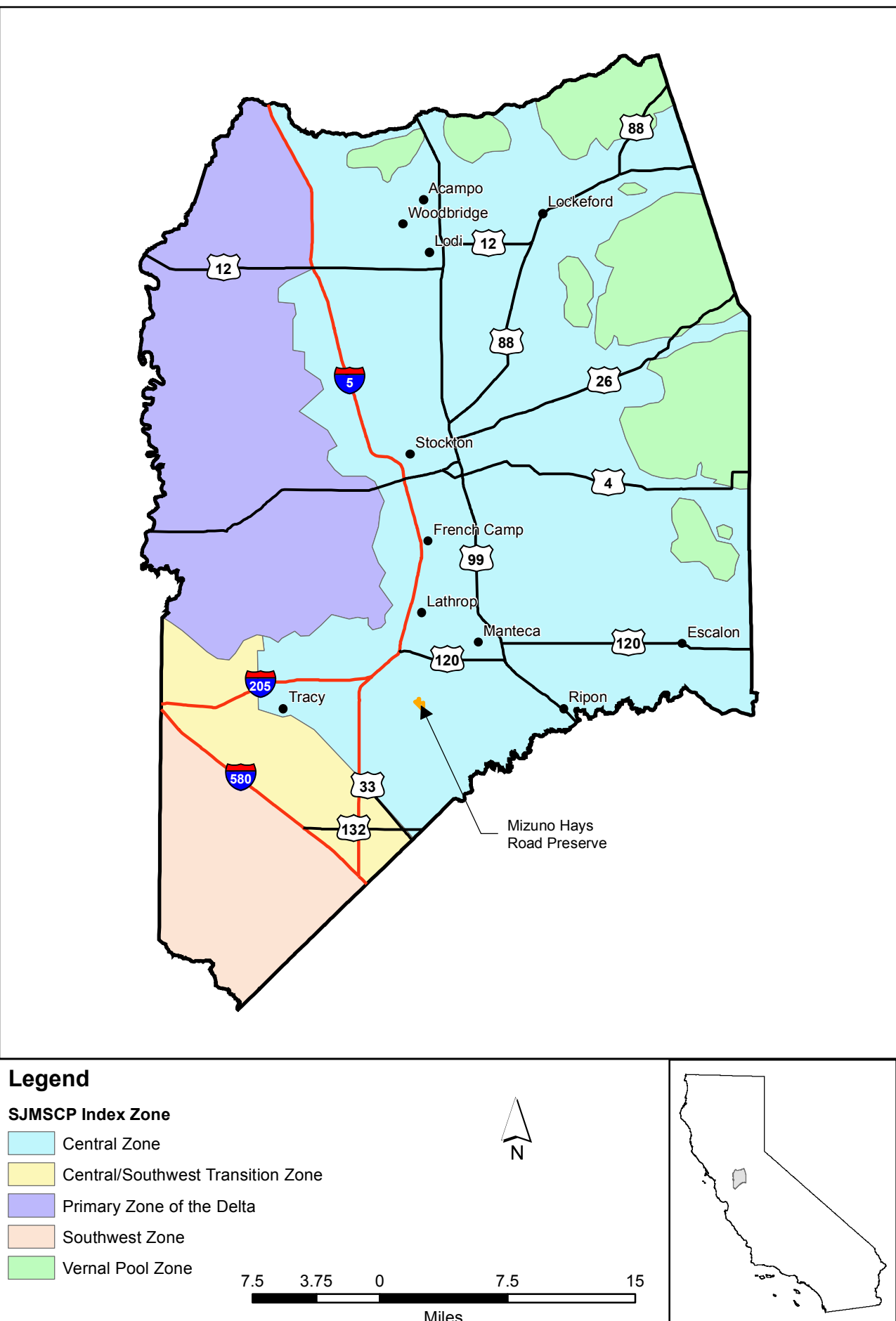


Figure 1
Mizuno Hays Road Preserve
San Joaquin County



K:\Projects_2\SJHCP\05076_05\arcmap\Mizuno_Hays\Figure2_MizunoHays.mxd ds 1/24/2017

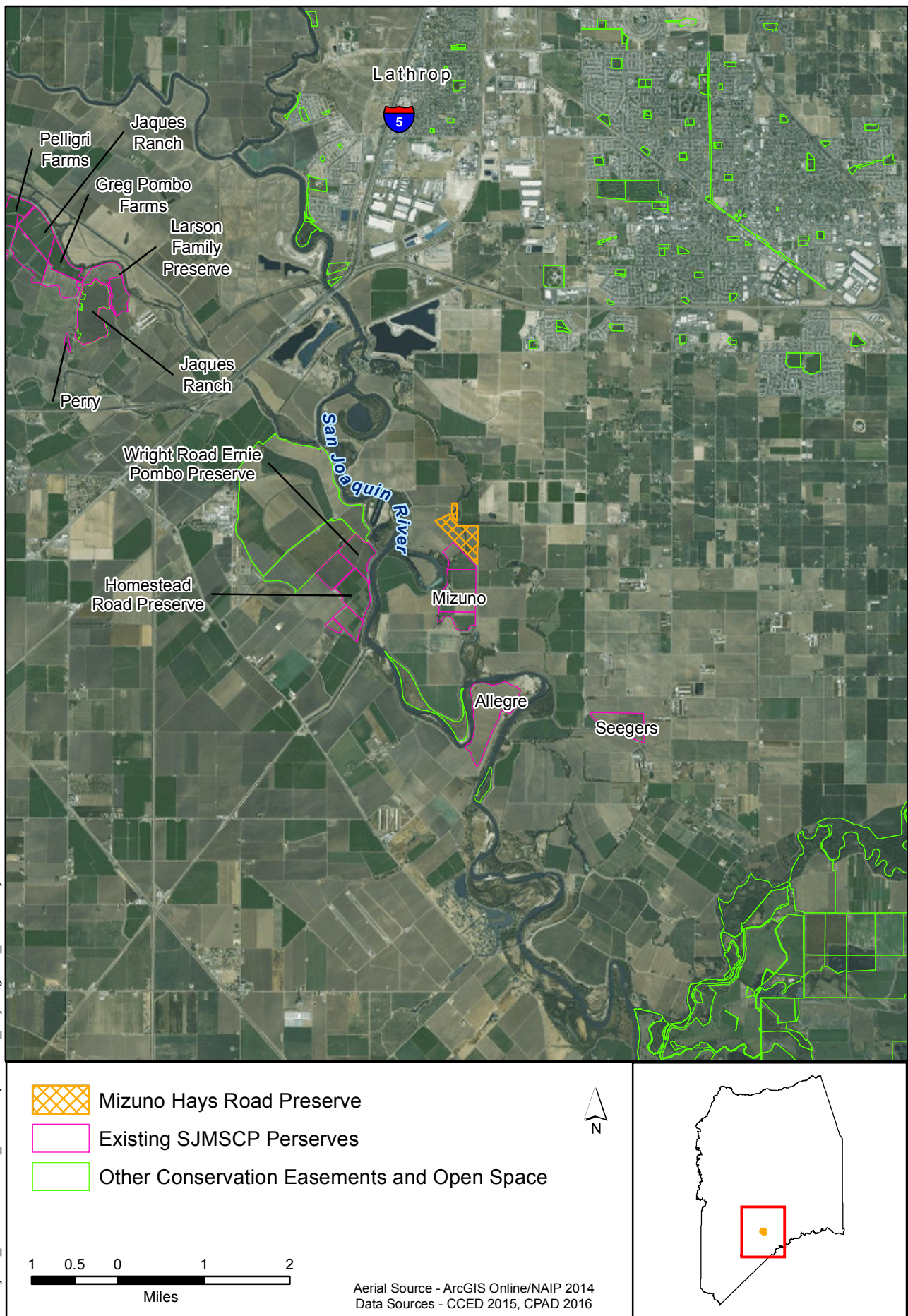


Figure 2
Mizuno Hays Road Preserve and
Other Conservation Easements in the Vicinity

K:\Projects_2\SJHCP\05076_05\arcmap\Mizuno_Hays\Figure3_MizunoHaysA.mxd ds 3/13/2017



Legend



Mizuno Hays Road Preserve

Mizuno Hayes Road 10.5-Acre Conservation Easement

500 0 500 1,000
Feet

Aerial Source - ArcGIS Online/NAIP 2014

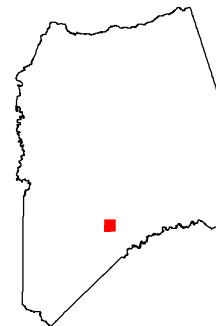




Photo 1. Agricultural Habitats With Walthall Slough on the Mizuno Hays Road Property



Photo 2. Riparian and Wetland Habitats on the Mizuno Hays Road Property

K:\Projects_2\SJHCP\05076_05\arcmap\Mizuno_Hays\Figure5_MizunoHaysA.mxd ds 1/19/2017

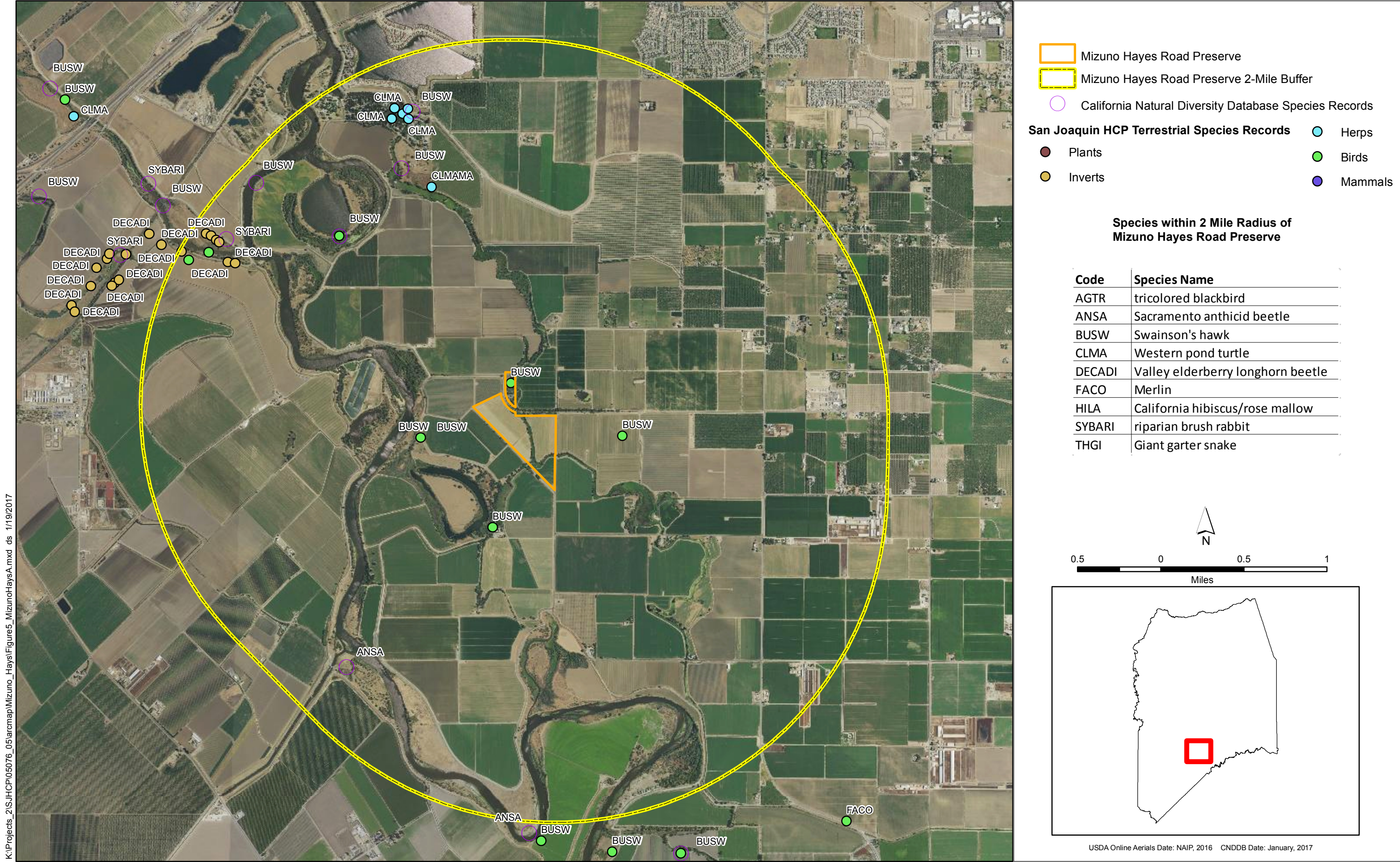


Figure 5
Documented Occurrences of SJMSCP-Covered Species within 2 Miles of Mizuno Hayes Road Preserve

ICF
INTERNATIONAL