



COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES

860 NORTH BUSH STREET • UKIAH • CALIFORNIA • 95482
120 WEST FIR STREET • FT. BRAGG • CALIFORNIA • 95437

BRENT SCHULTZ, DIRECTOR
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pbs@mendocinocounty.org
www.mendocinocounty.org/pbs

March 12, 2019

Planning – Ukiah
Environmental Health - Fort Bragg
Caltrans
CalFire – Prevention

CalFire – Resource Management
Department of Fish and Wildlife
Coastal Commission
State Clearinghouse

US Fish & Wildlife Service
South Coast Fire District

CASE#: CDP_2017-0043

DATE FILED: 10/19/2017

OWNER/APPLICANT: FRANCES FORSMAN

AGENT: SPADE NATURAL RESOURCES CONSULTING

REQUEST: Coastal Development Standard Permit to construct a 494 sq. ft. residence, 270 sq. ft. carport, 211 sq. ft. covered deck, and ancillary development. The 70 ft. radius Fuel Reduction Zone and 2 leach fields would be located within a mapped Bishop Pine Forest. A proposed 4,100 sq. ft. driveway with access to State Hwy.

LOCATION: In the Coastal Zone, 4.65± miles north of Anchor Bay in the Iversen Subdivision, on the east side of State Route 1 (SR 1), 500± ft. south of the intersection of State Route 1 and Iversen Rd. (CR 503), located at 30101 S. Hwy. 1, Anchor Bay (APN: 142-032-05).

ENVIRONMENTAL DETERMINATION: Mitigated Negative Declaration

STAFF PLANNER: JULIANA CHERRY

RESPONSE DUE DATE: March 26, 2019

PROJECT INFORMATION CAN BE FOUND AT:

<https://www.mendocinocounty.org/government/planning-building-services/public-agency-referrals>

Mendocino County Planning & Building Services is soliciting your input, which will be used in staff analysis and forwarded to the appropriate public hearing. You are invited to comment on any aspect of the proposed project(s). Please convey any requirements or conditions your agency requires for project compliance to the project coordinator at the above address, or submit your comments by email to pbs@mendocinocounty.org. Please note the case number and name of the project coordinator with all correspondence to this department.

We have reviewed the above application and recommend the following (please check one):

- ☐ No comment at this time.
- ☐ Recommend conditional approval (attached).
- ☐ Applicant to submit additional information (attach items needed, or contact the applicant directly, copying Planning and Building Services in any correspondence you may have with the applicant)
- ☐ Recommend denial (Attach reasons for recommending denial).
- ☐ Recommend preparation of an Environmental Impact Report (attach reasons why an EIR should be required).
- ☐ Other comments (attach as necessary).

REVIEWED BY:

Signature _____ Department _____ Date _____

OWNER/APPLICANT: FORSMAN, FRANCES

AGENT: SPADE NATURAL RESOURCE CONSULTING

REQUEST: Coastal Development Standard Permit to construct a 494 sq. ft. residence, 270 sq. ft. carport, 211 sq. ft. covered deck, and ancillary development. The 70 ft. radius Fuel Reduction Zone and 2 leach fields would be located within a mapped Bishop Pine Forest. A proposed 4,100 sq. ft. driveway with access to State Hwy.

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ACREAGE: 2.74 ACRES

GENERAL PLAN: RURAL RESIDENTIAL (RR5(2):R)ZONING: RURAL RESIDENTIAL (RR:5)

COASTAL ZONE: YES

EXISTING USES: VACANT LANDSUPERVISORIAL DISTRICT: 5

TOWNSHIP: 11 NORTH RANGE: 16 WEST SECTION: 3USGS QUAD#: 69 SAUNDERS REEF

RELATED CASES ON SITE: Categorical Exclusion #52-05, Test Well. Proposal includes using existing well.

RELATED CASES IN VICINITY:

	ADJACENT GENERAL PLAN	ADJACENT ZONING	ADJACENT LOT SIZES	ADJACENT USES
NORTH:	RR5	RR5(2)	2.4 acres	vacant
EAST:	RR5	RR5(2)	2.6 acres	vacant
SOUTH:	RR5	RR5(2)	2.0 acres	SFR
WEST:	RR5	RR5(2)	2.4 acres	vacant

REFERRAL AGENCIES:

☒Planning (Ukiah)☐Department of Transportation☒Environmental Health (Ukiah - FB)☐Building Inspection (Ukiah - FB)☐Emergency Services☐Assessor☐Farm Advisor☐Forestry Advisor☐County Water Agency☒US Fish & Wildlife Service☐Manchester-Point Arena Rancheria

☐Trails Advisory Council☐Native Plant Society☒State Clearinghouse☒Caltrans☒CalFire☒Department of Fish & Game☒Coastal Commission☐Division of Mines & Geology☐Department of Conservation☐Cloverdale Rancheria☐Sherwood Valley Band of Pomo Indians

☐CHP☐MTA☐County Addresser☐LAFCO☐Gualala MAC☐Laytonville MAC☐Westport MAC☐Point Arena School District☒South Coast Fire Pro District☐Redwood Valley Rancheria

ADDITIONAL INFORMATION:

1-10-19 Revisions: Residence relocated. Revised development footprint includes residence, carport, and driveway turnout. Leach field and forceline located within ESHA or its 50-foot buffer. See attached exhibits, include Revised Site Plan, Revised Elevations North/East/South/West, and Revised Floor Plans. No revisions to Biological Scoping Survey Report or its figures. Revised location for building footprint and driveway includes 10 x 30 ft. turnout.

7-30-18 Revised/Updated information: 1. Spade Natural Resource Consulting authorized agent; 2. Addendum to 9-18-2017 Botanical, Biological Scoping Survey Report (regarding Hosackia); and 3. Report of Compliance dated July 20, 2018. Report of Compliance Appendix A is Carl Rittiman & Associates 7-6-2018 Augured Feasibility Evaluation at 30101 S Hwy 1. Also on-file are copied email correspondence from 4. James Shupe/CalTrans stating driveway encroachment is accepted; and 5. E-mail correspondence between applicant's agent and Susie Tharratt/FWS stating that the driveway would be approximately 50-feet north of the hosackia plants.

From previous referrals 12-17, 1-18, and 4-18: Biological Study accompanied application dated September 19, 2017. Special status plants are Bishop Pine Forest and Wax Myrtle Scrub alliance. Streams and riparian areas are potential ESHAs. Primary and replacement leach fields are proposed to be located within the area mapped as Bishop Pine Forest. Included in the biological report is a Reduced Buffer Analysis. The report includes the following recommendations: 1. Replace one Bishop Pine at a 5:1 ratio. 2. Heavy Equipment shall be washed before entering the site. 3. Orange construction fence shall be installed to maintain on-site 50 foot buffer line to streams riparian areas and special status plant communities. 4. A qualified biologist shall do a survey of the site one week prior to onset of construction for California red-legged frogs, bats and special status and nesting birds mitigation measures per the permit shall apply.

ASSESSOR'S PARCEL #: 142-032-05-05

PROJECT PLANNER: JULIANA CHERRYPREPARED BY: J CherryDATE: 2-5-2019

ENVIRONMENTAL DATA

COUNTY WIDE		
Yes	No	
NO		1. Alquist-Priolo Earthquake Fault Zone – Geotechnical Report #GS_____
NO		2. Floodplain/Floodway Map –Flood Hazard Development Permit #FP_____
NO / NO		3. Within/Adjacent to Agriculture Preserve / Timberland Production Mapped Grazing Land. See exhibit Important Farmland
NO		4. Within/Near Hazardous Waste Site
YES		5. Natural Diversity Data Base Refer to California Natural Diversity Database
NO		6. Airport CLUP Planning Area – ALUC#_____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Adjacent to State Forest/Park/Recreation Area.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Adjacent to Equestrian/Hiking Trail.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Hazard/Landslides Map See exhibit Topographic Map
<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Require Water Efficient Landscape Plan.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Biological Resources/Natural Area Map. See 7-20-2018 Addendum and 9-19-2017 Botanical, Biological Scoping Survey Report and Reduced Buffer Analysis; and see 7-20-2018 Report of Compliance
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Fire Hazard Severity Classification: <input checked="" type="checkbox"/> LRA <input checked="" type="checkbox"/> SRA-CDF# 427-17 Mapped High Fire Hazard. See exhibit Fire Hazard Zones & Responsibility Areas South Coast Fire Protection District
<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. Soil Type(s)/Pygmy Soils. Western Soils 139 and 117 are hydric types. See exhibit Local Soils
<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. Wild and Scenic River.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. Specific Plan Area.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. State Permitting Required/State Clearinghouse Review Coastal Commission, CalFire, DFW, CalTrans
<input type="checkbox"/>	<input checked="" type="checkbox"/>	17. Oak Woodland Area
COASTAL ZONE		
Yes	No	
NO		16. Exclusion Map.
Critical		17. Coastal Groundwater Study Zone. Critical Water Area. See exhibit Ground Water Resources
NO		18. Highly Scenic Area/Special Communities.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Land Capabilities/Natural Hazards Map.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. Habitats/ESHA/Resources Map. See exhibit LCP Habitats & Resources
<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Appealable Area/Original Jurisdiction Map. See exhibits Appealable Areas, Wetlands
<input checked="" type="checkbox"/>	<input type="checkbox"/>	22. Blayney-Dyett Map. See exhibit LCP Land Use Map 28: Schooner Gulch
<input type="checkbox"/>	<input checked="" type="checkbox"/>	23. Ocean Front Parcel (Blufftop Geology).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	24. Adjacent to beach/tidelands/submerged land/Public Trust Land. See exhibit Wetlands. Mapped freshwater forested shrub wetland. See Botanical Report and Report of Compliance
<input type="checkbox"/>	<input checked="" type="checkbox"/>	25. Noyo Harbor/Albion Harbor.

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DEPT OF PLANNING & BUILDING SERVICES
120 WEST FIR STREET
FORT BRAGG, CA 95437
Telephone: 707-964-5379

Case No(s) CDP-2017-0043
 CDF No(s) _____
 Date Filed Revised 7-27-2018
 Fee \$ _____
 Receipt No. _____
 Received by Juliana

Office Use Only

COASTAL DEVELOPMENT PERMIT APPLICATION FORM

Name of Applicant Frances A Forsman	Name of Owner(s) Forsman Family Trust Frances A Forsman, Trustee	Name of Agent Teresa Spade, Spade NRC
Mailing Address 1509 Becke Circle Las Vegas, NV 89104	Mailing Address same	Mailing Address PO Box 1503 Mendocino, CA 95460
Telephone Number 702-501-8728	Telephone Number same	Telephone Number 707-397-1802

I certify that the information submitted with this application is true and correct:


July 15, 2018
 Signature of Applicant/Agent Date

 Signature of Owner Date

Driving Directions

Located five miles south of Point Arena and 4.65 miles north of Anchor Bay, on the East side of Highway 1, in the Iversen Subdivision, approximately 500 feet south of the intersection of Highway One and Iversen Road, at 30101 South Highway One.

Assessor's Parcel Number(s)

142-032-05-05

Parcel Size

2.74+/-

☐ Square Feet
☒ Acres

Street Address of Project

30101 South Highway One, Anchor Bay, CA

Please note: Before submittal, please verify correct street address with the Planning Division in Ukiah.

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FORT BRAGG CA

COASTAL DEVELOPMENT PERMIT

APPLICATION QUESTIONNAIRE

The purpose of this questionnaire is to relate information concerning your application to the Planning & Building Services Department and other agencies who will be reviewing your project proposal. The more detail that is provided, the easier it will be to promptly process your application. Please answer all questions. Those questions which do not pertain to your project, please indicate "Not Applicable" or "N/A".

1. Describe your project and include secondary improvements such as wells, septic systems, grading, vegetation removal, roads, etc.

Construction of new 494 square foot residence with an attached 270 square foot carport, and 211 square foot deck. Associated development includes construction of a new 200 foot long driveway, install a primary and secondary septic disposal system, convert existing test well to a production well, and connect to utilities.

2. If the project is residential, please complete the following:

TYPE OF UNIT	NO. OF STRUCTURES/ UNITS	EXISTING SQ. FT.	PROPOSED SQ. FT.	TOTAL SQ. FT. PER STRUCTURE
<input checked="" type="checkbox"/> Single Family Residence		0	494	494
<input checked="" type="checkbox"/> Carport, Attached		0	270	270
<input checked="" type="checkbox"/> Deck		0	211	211
<input type="checkbox"/> Guest Cottage		0	0	0
<input type="checkbox"/> Shed		0	0	0
<input type="checkbox"/> Solar Panels		0	0	0
<input type="checkbox"/> Water Tank		0	0	0
<input type="checkbox"/> Propane Tank		0	0	0
<input type="checkbox"/> Oil Tank		0	0	0
<input type="checkbox"/> Generator (in shed)		0	0	0
<input checked="" type="checkbox"/> Driveway, gravel		0	3575	3575
<input checked="" type="checkbox"/> Driveway, paved apron		0	525	525
<input type="checkbox"/> Garden Fence		0	0	0
<input type="checkbox"/> Perimeter Fence		0	0	0

3. Are there existing structures on the property? ☒ Yes ☐ No
If yes, describe below and identify the use of each structure on the plot plan.

Test well.

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COASTAL DEVELOPMENT PERMIT

APPLICATION QUESTIONNAIRE

The purpose of this questionnaire is to relate information concerning your application to the Planning & Building Services Department and other agencies who will be reviewing your project proposal. The more detail that is provided, the easier it will be to promptly process your application. Please answer all questions. Those questions which do not pertain to your project, please indicate "Not Applicable" or "N/A".

1. Describe your project and include secondary improvements such as wells, septic systems, grading, vegetation removal, roads, etc.

Placement of new 400 sf modular residence with 287 sf of deck. Associated development includes construction of a new 200 foot long driveway, install a primary and secondary septic disposal system, convert existing test well to a production well, and connect to utilities.

2. If the project is residential, please complete the following:

TYPE OF UNIT	NO. OF STRUCTURES/ UNITS	EXISTING SQ. FT.	PROPOSED SQ. FT.	TOTAL SQ. FT. PER STRUCTURE
<input checked="" type="checkbox"/> Single Family Residence		0	400	400
<input type="checkbox"/> Garage, detached		0	0	0
<input checked="" type="checkbox"/> Deck		0	287	287
<input type="checkbox"/> Guest Cottage		0	0	0
<input type="checkbox"/> Shed		0	0	0
<input type="checkbox"/> Solar Panels		0	0	0
<input type="checkbox"/> Water Tank		0	0	0
<input type="checkbox"/> Propane Tank		0	0	0
<input type="checkbox"/> Oil Tank		0	0	0
<input type="checkbox"/> Generator (in shed)		0	0	0
<input checked="" type="checkbox"/> Driveway		0	3000	3000
<input type="checkbox"/> Retaining Wall		0	0	0
<input type="checkbox"/> Garden Fence		0	0	0
<input type="checkbox"/> Perimeter Fence		0	0	0

3. Are there existing structures on the property? ☒ Yes ☐ No
If yes, describe below and identify the use of each structure on the plot plan.

Test well.

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4.	<p>Utilities will be supplied to the site as follows:</p> <p>A. Electricity <input checked="" type="checkbox"/> Utility Company <input type="checkbox"/> Utility Company (requires extension of services to site): _____ feet _____ miles <input type="checkbox"/> On Site generation, Specify: <input type="checkbox"/> None</p> <p>B. Gas <input checked="" type="checkbox"/> Utility Company/Tank: propane tank. <input type="checkbox"/> None</p> <p>C. Telephone: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
5.	<p>Will there be any exterior lighting? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe below and identify the location of all exterior lighting on the plot plan and building plans.</p> <p>Shielded, downcast fixtures.</p>
6.	<p>What will be the method of sewage disposal?</p> <p><input type="checkbox"/> Community sewage system, specify supplier _____ <input checked="" type="checkbox"/> Septic Tank (indicate primary + replacement leachfields on plot plan) <input type="checkbox"/> Other, specify _____</p>
7.	<p>What will be the domestic water source? (existing)</p> <p><input type="checkbox"/> Community water system, specify supplier _____ <input checked="" type="checkbox"/> Well <input checked="" type="checkbox"/> On-Site <input type="checkbox"/> Off-site <input type="checkbox"/> Spring <input type="checkbox"/> On-Site <input type="checkbox"/> Off-site <input type="checkbox"/> Other, specify _____</p>
8.	<p>Is any grading or road/driveway construction planned? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Estimate the amount of grading in cubic yards __ If greater than 50 cubic yards or if greater than 2 feet of cut or 1 foot of fill will result, please provide a grading plan.</p> <p>Estimate the length of the proposed road/driveway: <u>2,000 linear feet</u> Describe the terrain to be traversed (e.g., steep, moderate slope, flat, etc.).</p>
9.	<p>Will vegetation be removed on areas other than the building sites and roads? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, explain:</p> <p>How many trees will be removed to implement the project: <u>~8</u>. Indicate on the site plan all trees to be removed that are greater than 12-inches in diameter (measured four feet from the ground). If applicable, please indicate on the site plan the size, location and species of all on-site trees that provide screening from public view areas.</p>
10.	<p>Is the proposed development visible from:</p> <p>A. State Highway 1? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No B. Park, beach or recreation area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If you answered yes to either question, explain: Visible from the highway, project is on the east side and will be small and natural colors.</p> <div style="text-align: right; margin-top: 20px;"> <p>RECEIVED</p> <p>JUL 27 2018</p> <p>PLANNING & BUILDING SERV FORT BRAGG CA</p> </div>
11.	<p>Project Height. Maximum height of structure(s). 15 feet</p>

12. Describe all exterior materials and colors of all structures.

	Material	Color
Siding:	cedar rough sawn 6' siding	Ranchwood Patina Gray stain
Trim:	metal flashings and trim	Galvalume or Bare Steel that rusts
Fascia:	Cedar	Natural Wood
Chimney:	n/a	n/a
Window Frames:	fiberglass	Black
Doors, person:	Wood & glass	Natural Wood and Glass
Doors, garage:	n/a	n/a
Roofing:	Metal Corrugated, Standing seam or Tuff Rib	Light Gray
Solar Panels:	n/a	n/a

13. Are there any water courses, anadromous fish streams, sand dunes, rookeries, marine mammal haul-out areas, wetlands, riparian areas, pygmy vegetation, rare or endangered plants, animals or habitat which support rare and endangered species located on the project site or within 100 feet of the project site?

A Botanical, Biological Scoping Survey Report and Reduced Buffer Analysis, prepared by Wynn Coastal Planning, dated September 19, 2017, is included. There are streams and bishop pine forest within 100' of the proposed development.

14. If the project is commercial, industrial, or institutional, complete the following:

N/A

Total square footage of all structures: _____

Estimated employees per shift: _____

Estimated shifts per day: _____

Type of loading facilities proposed: _____

Will the proposed project be phased? ☐ Yes ☐ No

If Yes, explain your plans for phasing.

Parking will be provided as follows: N/A

Number of Spaces Existing _____ Proposed _____ Total _____

Number of standard spaces _____ Size _____

Number of handicapped spaces _____ Size _____

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FORT BRAGG CA

Owner/Agent Information

CAL FIRE File Number 427-17 Date 10/04/17
 Owner's Last Name Forsman Owner's First Name Franny
 Owner's Phone Number 702-501-8728
 Owner's Mailing Address 1509 Becke Circle
Las Vegas, NV 89104 Agent/Phone # Teresa Spade 707-964-2537

Project Information

Project Street # 30101 Project Street Name South Hwy 1 Type of Project Residence
 Project City/Community Gualala Battalion 5 Boonville Finaled ☐

Conditions of Approval

With reference to the above case number, the California Department of Forestry and Fire Protection requires the following MINIMUM standards as set forth in Title 14, "Natural Resources; Div. 1.5, be adhered to in order to gain a "Final Clearance" and "Approval for occupancy" from this Department. Local agencies may have additional requirements that may be more restrictive.

☒ **Address Standard**

California Code of Regulations, Title 14, Section 1274.01

Address must be posted at the beginning of construction and maintained thereafter. It shall be posted on BOTH sides of a mailbox or post at driveway entrance so it is visible from BOTH directions of travel. Minimum 3 inch letter height, 3/8 inch stroke. Reflectorized, contrasting with background color. Sequential numbering issued by Mendocino County will be utilized. Multiple Addresses will be on a single post.

☒ **Driveway Standard**

California Code of Regulations, Title 14, Section 1273.10

Driveway will be minimum 10 feet wide, all weather surface. It shall be a maximum of 16 % grade, minimum 50 feet inside radius on turns, and have a minimum 15 feet vertical clearance. Driveways longer than 150 feet, but less than 800 feet require a turnout near the midpoint. Driveways longer than 800 feet require turnouts every 400 feet. Turnouts shall be a minimum 10 feet wide and 30 feet long with a 25 foot taper at each end. A 40 foot radius turnaround or 60 foot hammerhead "T" is required for driveways longer than 300 feet and must be within 50 feet of the building. Gates will be 2 feet wider than the traffic lane and located at least 30 feet in from the road.

☐ **Road Standard**

California Code of Regulations, Title 14, Section 1273

Roads will have two-10 foot traffic lanes (20 ft. wide road surface), Minimum 40,000 lb. load capacity, and have an all weather surface. Roads will have a maximum grade of 16%, a minimum curve radius of 50 foot, and a minimum of 15 foot vertical clearance. Dead end roads shall not exceed: 800 ft for parcels 1 acre or less - 1320 ft. for parcels 1 to 4.99 acres - 2640 ft. for parcels 5 to 19.99 acres - 5280 ft. for parcels 20 acres or larger. Dead end roads are also required to have turnarounds every 1320 ft. and at terminus. Turnarounds shall be a minimum 40 ft. radius or 60 ft. hammerhead "T". Roads shall be officially recognized by Mendocino County with approved signs at each intersection and visible for 100 feet from both directions. The sign shall be minimum 3 inch letter height, 3/8 inch stroke, reflectorized and contrasting with background color. One Way Road Standards (if approved) are available from this office.

☐ **Bridge Standard**

Bridges shall have a minimum 40,000 lb. load capacity, minimum 15 foot vertical clearance. Appropriate signing including: Weight limits, Vertical Clearance, One Way Road, Single Lane conditions shall be posted. One lane bridges shall provide an unobstructed view from one end to the other with turnouts at both ends.

California Code of Regulations, Title 14, Section 1275.01

☐ **Emergency Water Supply Standard**

Subdivisions shall meet or exceed either PUC Revised General Order #103, NFPA Standard 1231, or ISO Rural Class 8 Standard (local jurisdiction may require more as these are minimum standards). Fire Hydrant shall be 18 inches above grade, minimum 4 feet and maximum 12 feet from road or driveway. Hydrant shall be minimum 50 feet and maximum 1/2 mile from building it serves, and minimum 8 feet from flammable vegetation. Hydrant shall have 2 1/2 inch male National Hose fitting, suitable crash protection and located where Fire Apparatus using it will not block entry. Hydrant shall be identified with a 3 inch reflectorized blue dot on driveway sign, or placed within 3 feet of hydrant, or identified by blue highway marker as specified by State Fire Marshal.

California Code of Regulations, Title 14, Section 1276.01

☒ **Defensible Space Standard**

All parcels 1 acre or larger shall provide a minimum 30 foot setback for all buildings from all property lines and/or center of a road. All parcels less than 1 acre shall provide for same practical effect by standards set forth by local jurisdiction.

Public Resources Code, Section 4291

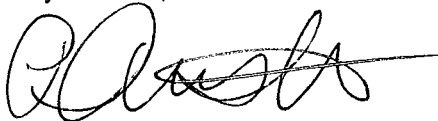
☒ **Maintaining Defensible Space**

Any person who owns, leases, or controls any property within the State Responsibility Area, shall at all times maintain a firebreak by clearing an area of all flammable vegetation or other combustible material 30 feet immediately around and adjacent to any building or structure. Additionally, a fuel reduction zone is required for an additional 70 feet or to the property line, whichever is nearer, this zone shall eliminate the fuel continuity. The total defensible space is 100 feet or to the property line. This subdivision does not apply to single specimens of trees, ornamental shrubbery, or similar plants which are used as ground cover, if they do not form a means of rapidly transmitting fire from the native growth to any building or structure.

CAL FIRE: ADDITIONAL COMMENTS:

Ryan Smith, Battalion Chief

By



Reviewing Official

Patricia Austin
Fire Prevention Bureau



DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Mendocino Unit
17501 North Highway 101
Willits, CA 95490
(707) 459-7414
Website: www.fire.ca.gov

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OCT 02 2017

MENDOCINO UNIT

CAL FIRE File #	427-17
To be completed by CAL FIRE	

-OFFICE USE ONLY-

STATE FIRE SAFE REGULATIONS APPLICATIONS FORM

Please complete the following and submit to the California Department of Forestry and Fire Protection (CAL FIRE)

1. Name, Mailing Address and Phone Number of Property Owner:

Franny Forsman1509 Becke CircleLas Vegas, NV 89104Phone: (702) 501-8728

2. Name, Mailing Address and Phone Number of Agent representing the Property Owner:

Teresa Spade, Wynn Coastal Planning703 North Main StreetFort Bragg, CA 95437Phone: (707) 964-2537**Mail correspondence to:**☐

Owner

☒

Agent

☐

Pick-up at Howard Forest

3. Address/Location of proposed building site:

30101 South Highway OneGualala, CA 95445APN: 142-032-05-05

Is it accessible, gate, locked? If so, gate combination or instructions to access:

No gate. The site is accessible.

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA.GOV

4. Type of Project – CHECK ONE

☐

Subdivision

Current acreage before split: _____

Number of new parcels to be created: _____

Acreage of newly created parcels: _____

☐

Use Permit

Describe your project, include dates, times, number of people, roads used or required, etc.

☒

Building Permit

☒

New building,

☐

Remodel,

☐

Class K,

☐

Replacement,

☐

Other

400

Size in square feet of Single Family dwelling, if applicable.

0

Size in square feet of attached garage, if applicable.

0

Size in square feet of proposed detached garage, if applicable.

287

Size in square feet of proposed accessory building(s), if applicable.

687

TOTAL SQUARE FOOTAGE

Briefly describe the type of structure you will be building:

400 sf single family residence with a 287 sf attached deck.

5. ☒ Yes ☐ No -- Is project location map attached showing access to the site?6. ☐ Yes ☒ No -- Was the subject parcel created PRIOR to January 1, 1992?

If NO please answer a & b below:

a. ☐ Yes ☒ No -- Is the structure within ½-mile driving distance of a working fire hydrant?b. ☒ Yes ☐ No -- Is the structure within a 5-mile driving distance of a year round fire station?7. ☒ Yes ☐ No -- Is the subject parcel 1 acre or larger?8. ☒ Yes ☐ No -- Will the proposed structure(s) be 30 ft. or more from ALL property lines?

If YES to # 7 and NO to # 8, an exemption will be required.

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PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA.GOV

9. ☐ Yes ☒ No -- Will your project require construction of a new road?
If so, how long in feet or miles? _____
If so, what is the maximum grade(%)? _____
10. ☐ Yes ☒ No -- Will your project require the extension of an existing road?
If so, how long in feet or miles? _____
If so, what is the maximum grade(%)? _____
11. ☒ Yes ☐ No -- Will your project require construction of a new driveway?
If so, how long in feet or miles? ~200 feet
If so, what is the maximum grade(%)? approx 5 to 10%
12. ☐ Yes ☒ No -- Will your project require the extension of an existing driveway?
If so, how long in feet or miles? _____
If so, what is the maximum grade(%)? _____

13. If NO to 9-12 above, Describe the existing road/driveway:

14. ☐ Yes ☒ No -- Will trees be cut and timber products sold, bartered, traded or exchanged?
If YES, may require a harvest permit from CAL FIRE Resource Management.
15. ☐ Yes ☒ No -- Will timberland be converted to non-timber growing use?
If YES, may require a harvest permit from CAL FIRE Resource Management.

FOR TIMBER RELATED QUESTIONS, PLEASE CALL 707-459-7440.

16. ☐ Yes ☒ No -- Are there existing bridges en route to the proposed project located on your property?
17. ☐ Yes ☒ No -- Will this project require any bridges to be constructed/installed?
18. ☐ Yes ☒ No -- Are you requesting any exemptions to the Fire Safe Regulations?

If YES, attach a separate page identifying the applicable section of State Law pertinent to your request, material facts supporting the request, the details of the exemption or mitigation measures proposed, and a map showing the proposed location of the exemption or mitigation measure.

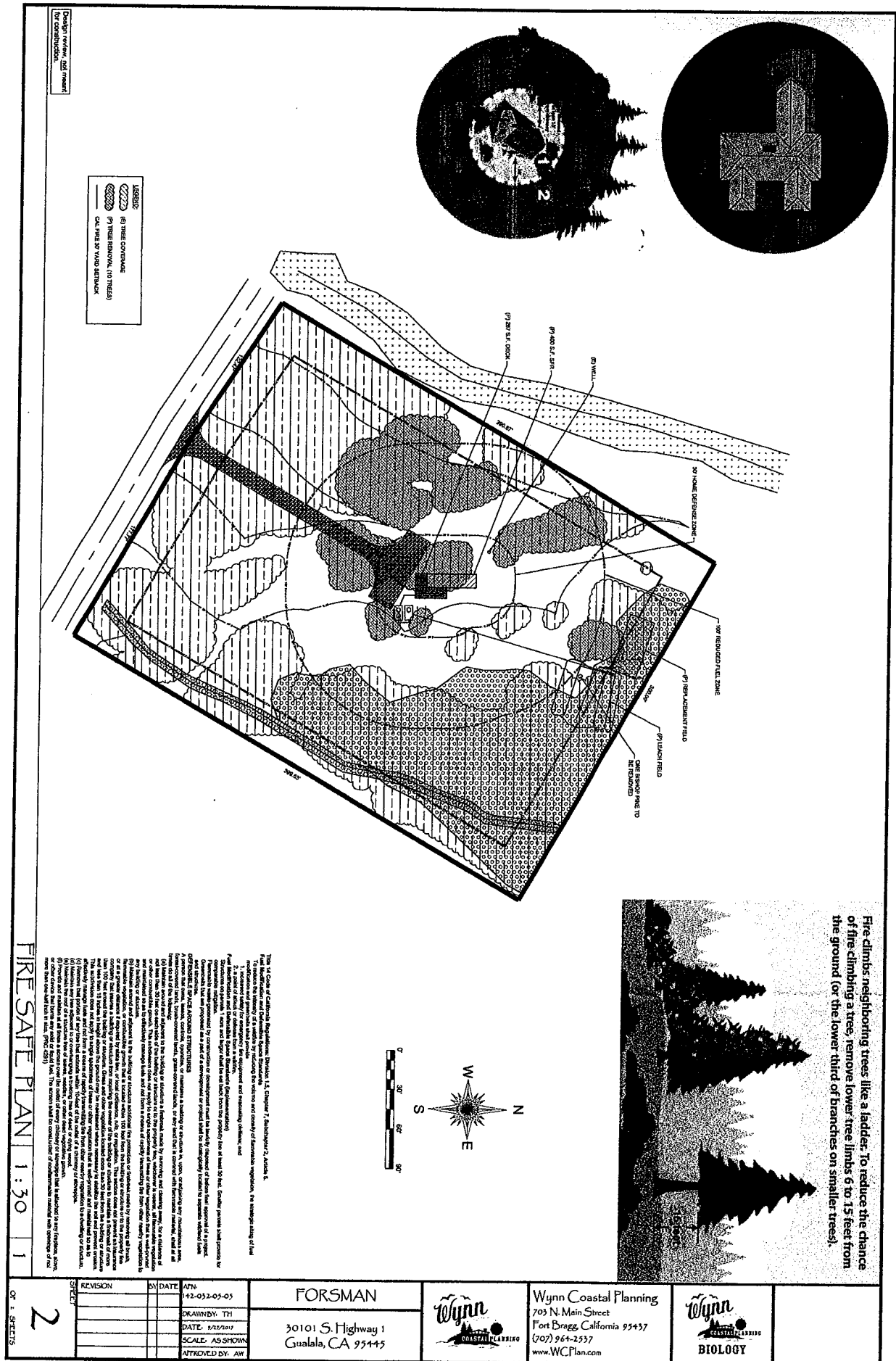
By signing below, I hereby agree to maintain the aforementioned property in compliance with the Fire Safe Requirements established in the Public Resources Code Section 4290.

SIGNATURE OF PROPERTY OWNER OR AGENT


Teresa Spade, Senior Planner, Wynn Coastal Planning
Print Name

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT WWW.CA.GOV



BOTANICAL, BIOLOGICAL SCOPING SURVEY REPORT

and REDUCED BUFFER ANALYSIS

for

30101 South Highway One
Gualala CA 95445
APN 142-032-05-05
Mendocino County

Property Owners:
Franny Forsman
1509 Becke Circle
Las Vegas, NV 89104



Report Prepared By:
Teresa Spade, Senior Biologist
Wynn Coastal Planning

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September 19, 2017

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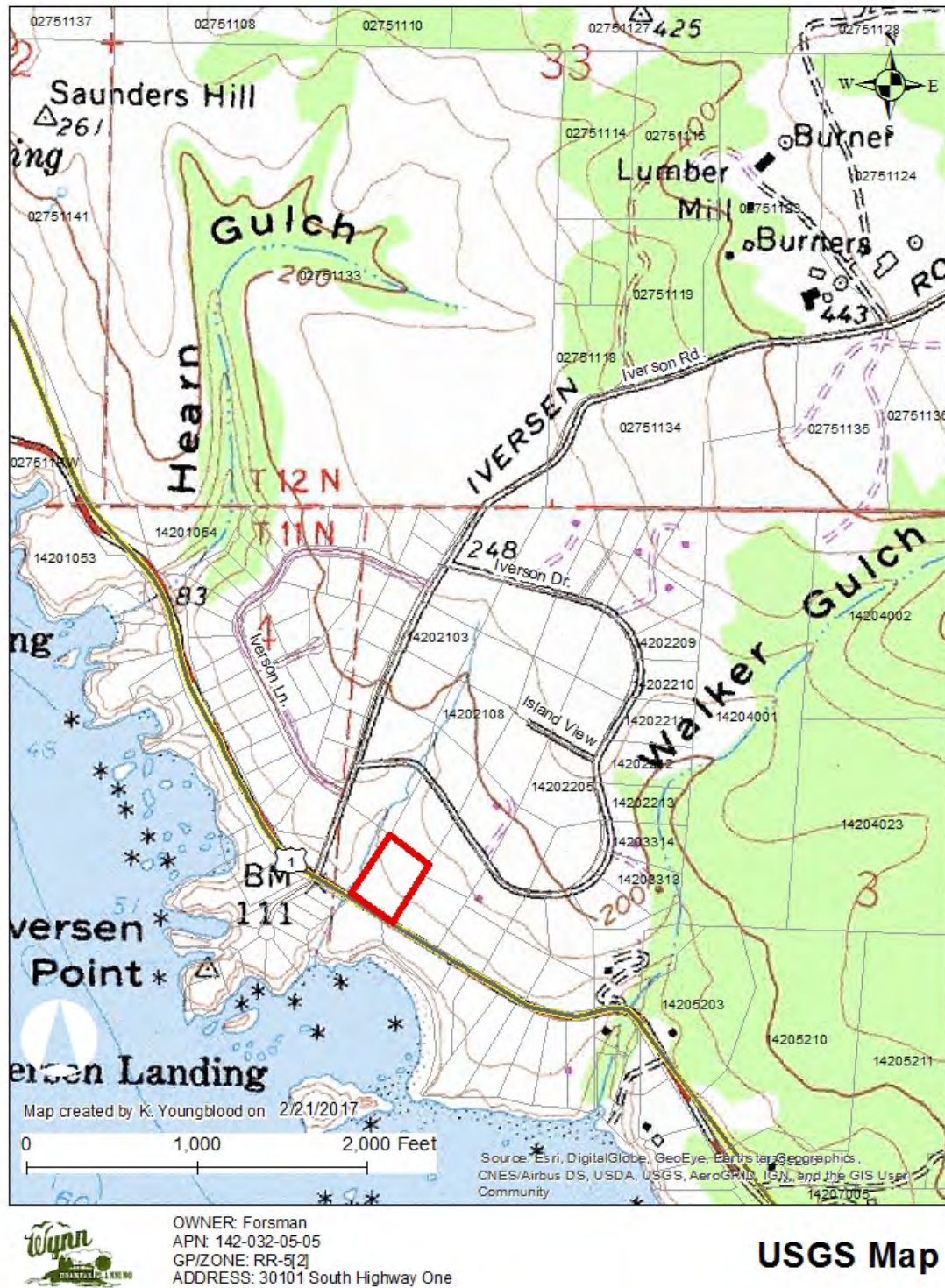


Figure 1. Location map.

1.0) PROJECT SUMMARY

A survey on a ~2.74 acre parcel (APN 142-032-05) was conducted by Wynn Coastal Planning to locate special status plants and communities, wetlands and riparian areas, and special status animal habitats, to determine if they would be directly or indirectly impacted by the proposed residence and associated development. The project is located on the property at 30101 South Highway One, Gualala, CA, and is located within the California Coastal Zone as defined in Section 30103 of the California Coastal Act. The parcel is located in the Iversen Subdivision about halfway between Point Arena and Anchor Bay, approximately 500 feet south of the intersection of Iversen Road and Highway One, on the east side of the highway (**Figure 1**). The property is an undeveloped parcel with an existing well. Drainages run along the east and west boundaries of the property. The proposed development consists of a new single-family residence and associated development.

This analysis has been performed by Wynn Coastal Planning, and is the culmination of our professional opinion, research and data collection. The County of Mendocino (County), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) should also be consulted regarding this project to obtain all necessary permits and obtain their concurrence with our findings and recommendations, and to make recommendations of their own, including concurrence of the boundaries of the sensitive areas and appropriate avoidance and protective measures.

2.0) PROJECT DESCRIPTION

The proposed development consists of construction of a ~400 sf single-family residence with ~287 sf deck, approximately 3,000 sf of new driveway, and a new on-site septic disposal system. The applicant will utilize the existing well and will connect to electrical utilities. Approximately eight trees will be removed to accommodate the development.

3.0) STUDY AREA DESCRIPTION

The project is located at 30101 South Highway, Anchor Bay, CA. The 2.74-acre undeveloped parcel (APN 142-032-05) is located within the California Coastal Zone, approximately 5 miles south of Point Arena and 4.65 miles north of Anchor Bay, on the east side of Highway One, in the Iversen Subdivision (**Figure 1**). The property is on a westerly facing slope, and is vegetated by a non-native grassland/coyote brush scrub/pine forest mosaic, with riparian vegetation in the vicinity of drainages at the east and west property boundaries.

4.0) SURVEY METHODOLOGY

4.1 Floristic Field Surveys

Wynn Coastal Planning Staff, including Asa Spade, Teresa Spade, and Karen Youngblood, conducted field survey site visits on November 18, 2016, and April 7, June 26 and July 11, 2017. Surveys were conducted on the property located at 30101 South Highway One, Anchor Bay, CA (APN 142-032-05-05) to locate special-status plants and plant communities, wetland and riparian areas, and special-status wildlife habitat to determine if they would be directly or indirectly impacted by the project. Floristic surveys were conducted by walking throughout the property during bloom windows of potentially present special status plant species. Surveys followed the California Department of Fish and Wildlife "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities." November 24 2009.

All identifiable plant species located during the surveys were identified to the lowest taxonomic level necessary to determine the presence of special status plant species. *The Jepson Manual: Vascular Plants of California* (Baldwin 2012) was used to determine the taxonomic nomenclature. *A Manual of California Vegetation Second Edition* (Sawyer 2009) and the *List of California Terrestrial Natural Communities* (CDFW 2010) recognized by the California Natural Diversity Database, based on the Sawyer & Keeler Wolf classification system was used to classify and describe representative plant communities present.

4.2 Scoping Tables

Prior to conducting field surveys, available reference materials were reviewed. The CNPS's rare plant inventory 9-quadrant search and the CDFW's California Native Diversity Database (CNDDDB) BIOS version 5 (CNDDDB 2017) were used to generate scoping tables of rare plants, plant alliances, and fauna (**Appendix B, Tables 1-3**) that have the potential to occur near the project site in Coastal Mendocino County. CDFW's BIOS tool was also used, to scope for state wildlife and plant species listed as Rare, Threatened or Species of Special Concern.

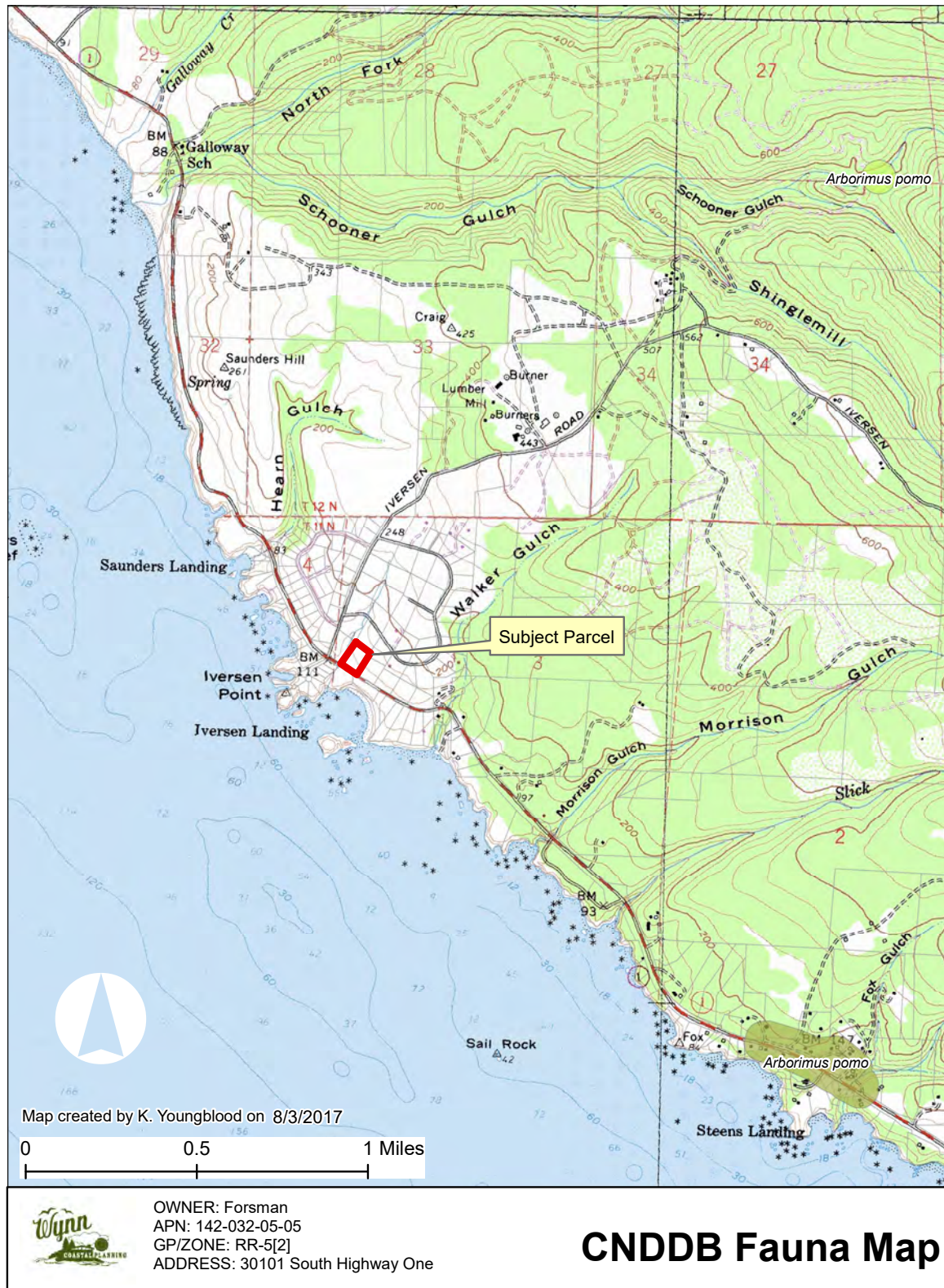


Figure 2. CNDDDB BIOS Fauna Map



Figure 3. CNDDDB BIOS Flora Map.

5.0) SURVEY RESULTS

5.1 Plants

No special status plants were observed on or near the property during floristic surveys.

5.2 Plant Communities

The following plant communities were observed on the property:

5.2.1 *Holcus lanatus* - *Anthoxanthum odoratum* semi-natural herbaceous stands

Common velvet grass – sweet vernal grass meadows (not a special status plant community)

The majority of the parcel is non-native grassland (**Figure 5**), primarily purple velvet grass (*Holcus lanatus*) and sweet vernal grass (*Anthoxanthum odoratum*) meadow. Other species observed in this plant community include rattlesnake grass (*Briza maxima*), hedgehog dogtail grass (*Cynosurus echinatus*), yarrow (*Achillea millefolium*), pale flax (*Linum bienne*), wild oats (*Avena barbata*), rigid hedge nettle (*Stachys rigida*), California blackberry (*Rubus ursinus*), and emergent sword fern (*Polystichum munitum*) and coyote brush (*Baccharis pilularis*).



Figure 4. Non-native grassland.

5.2.2 Pinus muricata Forest Alliance (G3 S3) Bishop Pine Forest - Potential ESHA

Bishop pine (*Pinus muricata*) dominates the overstory, with a sparse shrub layer of tanoak (*notholithocarpus densiflorus*) seedlings and coyote brush (**Figure 6**). California blackberry and bracken (*Pteridium aquilinum*) dominate in herb/vine layer. Also observed in this community were bedstraw (*Gallium aparine*), coastal burnweed (*Senecio glomerata*), blue wildrye (*Elymus glaucus*), fringed willow herb (*Epilobium ciliatum*), and salal (*Gaultheria shallon*).

As the G3 S3 ranking indicates, the Bishop Pine Forest is a special status plant community.



Figure 5. Bishop pines on the property.

5.2.3 *Pinus radiata* Forest Alliance (G1 S1.2) Monterey Pine Forest

The dominant species in the overstory is planted Monterey pine (*Pinus radiata*) (Figure 7). Bishop pine is also present within this community, but to a lesser extent. The sparse shrub layer consists of coffeeberry (*Frangula purshiana*), huckleberry (*Vaccinium ovatum*), silk tassel (*Garrya elliptica*) and some seedling tanoak. The herb layer contains velvet grass, rigid hedge nettle, cutleaf burnweed, Italian thistle (*Carduus pycnocephalus*), Douglas iris (*Iris douglasiana*), Pacific sanicle (*Sanicula crassicaulis*), bitter cress (*Cardamine oligosperma*), and California blackberry.

Although Monterey Pine Forest is listed by the Manual of California Vegetation as special status (G1 S1.2) this stand is found outside of the native range, and is presumed to have been planted. This plant community is not considered to be special status in this location.



Figure 6. Monterey pines found at the interior edges of the Bishop pine stand.

5.2.4 *Rubus parviflorus* Shrubland Alliance (G4 S3)/ *Carex obnupta* Herbaceous Alliance (G4 S3) Coastal Thimbleberry Brambles / Slough Sedge Swards – Potential ESHA

Along the northern property line, a stream is present, with the surrounding riparian area dominated by thimbleberry (*Rubus parviflorus*) (**Figure 8**). Patches are dominated by slough sedge (*Carex obnupta*). Coffeeberry, twinberry, wax myrtle (*Morella californica*), willow (*Salix* sp.), rigid hedge nettle, and giant horsetail (*Equisetum telmateia*) are also present.

Coastal brambles and slough sedge swards are considered special status plant communities due to the S3 designation. Streams and riparian areas are also protected under the Coastal Act.



Figure 7. Coastal Thimbleberry Brambles along north property line.

5.2.5 *Morella californica* Shrubland Alliance (G3 S3) Wax Myrtle Scrub – Potential ESHA

Along the south side of the property, a seasonal drainage is present, which is dominated by sword fern and lady fern (*Atherium felix-femina*) along the ditch, with sparse wax myrtle in the overstory (**Figure 9**). Silk tassel, twinberry, yarrow, California blackberry, black huckleberry, wood strawberry (*Fragaria vesca*), foxglove (*Digitalis purpurea*), white flowered onion (*Allium triquetrum*), blue wildrye, coastal burnweed (*Senecio minimus*), and pampas grass (*Cortaderia jubata*) were also observed in the drainage ditch.

Due to the S3 rank, the Wax Myrtle Scrub alliance is considered special status.



Figure 8. Wax myrtle scrub in drainage ditch along south property line.

5.2.6 Baccharis pilularis Shrubland Alliance (G5 S5) Coyote Brush Scrub

An area of emergent coyote brush scrub (**Figure 10**) is present in the northerly part of the non-native grassland. This area is dominated by coyote brush (*Baccharis pilularis*), pine seedlings (*Pinus radiata*, *Pinus muricata*), and tan oak seedlings (*Notholithocarpus densiflorus*).

The herb layer consists of sweet vernal grass (*Anthoxanthum odoratum*), velvet grass (*Holcus lanatus*), California blackberry (*Rubus ursinus*), yarrow (*Achillea millefolium*), rattlesnake grass (*Briza maxima*), purple-awned wallaby grass (*Rytidosperma pencillatum*), with patches of Bolander's goldenaster (*Heterotheca sessiliflora* ssp. *bolanderi*).

Coyote brush scrub is not a special status plant community.



Figure 9. Coyote brush scrub.

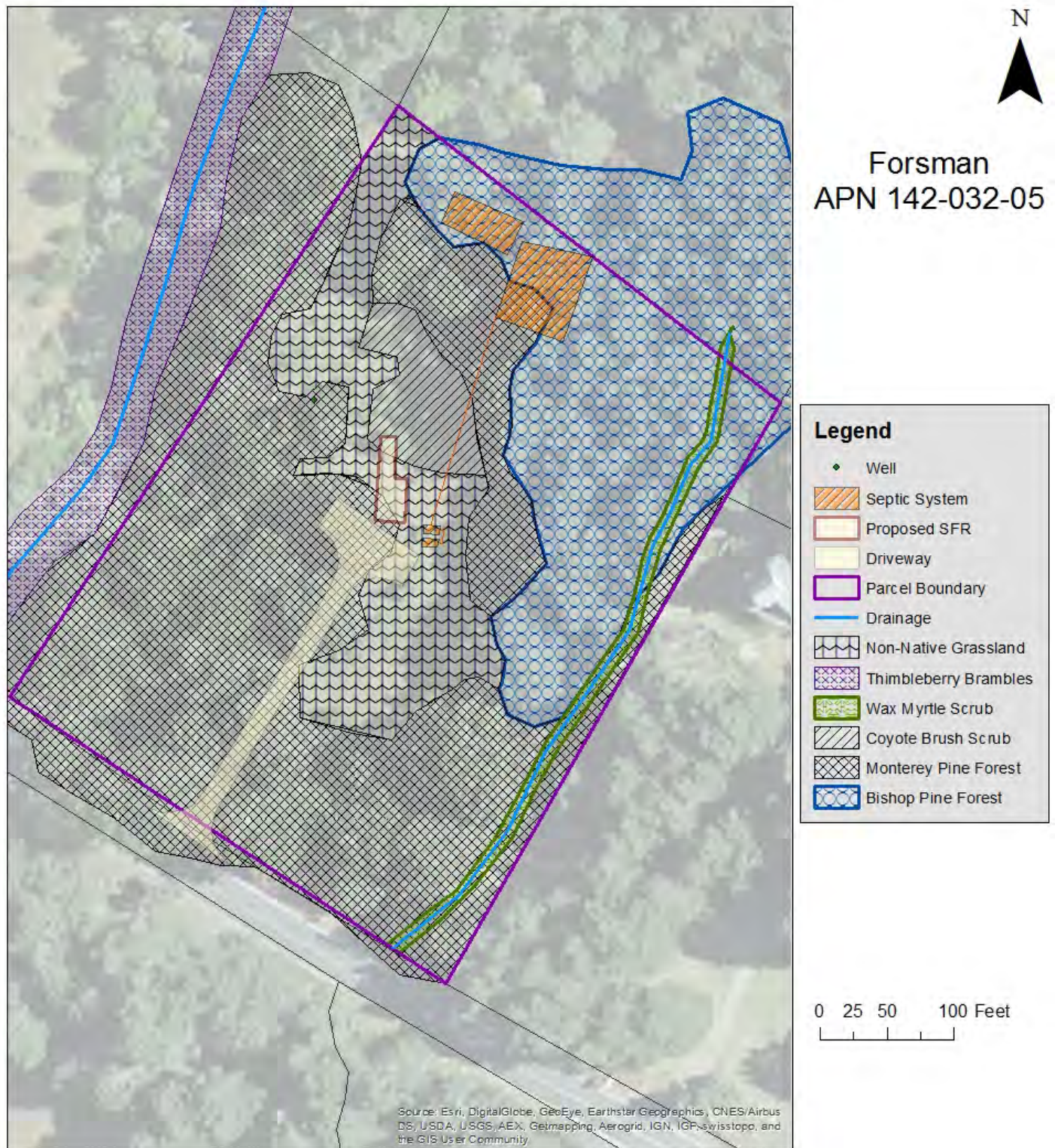


Figure 10. Plant community map.

5.3 Wildlife

The following discussion outlines wildlife with a potential for presence and whether habitat was or was not observed in the project area. While no wildlife species of concern have been identified within the Saunders Reef Quadrant, as shown in **Figure 3**, Sonoma tree vole was observed south of the Saunders Reef Quadrant, in the Fox Gulch area. Additionally, potential habitat for special status species was considered, including Lotis blue and Behren's silverspot butterflies, California red-legged frog, Foothill yellow-legged frog, Pacific tailed frog, Western pond turtle, southern torrent salamander, and special status birds and bats.

As discussed below, the property contains habitat for special status frogs, including California red-legged, Foothill yellow-legged, and Pacific tailed frog, for Western pond turtle, southern torrent salamander, and special status birds and bats. WCPlan recommends conditions to avoid impacts to potentially present special status wildlife species in **Section 6** of this study.

5.3.1 Lotis blue butterfly



Figure 11. Male and female Lotis blue butterflies (photo credit USFWS File Photograph).

The Lotis blue (*Lycaeides argyrognomon lotis* [aka *Lycaeides idas lotis*]) was first recognized as a Federally Endangered species in 1976. At that time, it was sighted at a single location in a sphagnum bog, approximately two miles north of the town of Mendocino. It was last observed there in 1983.

Little is known of the Lotis blue butterfly's (**Figure 12**) habitat requirements and ecology, however other northern California *Lycaeides idas* typically occur in wet meadows, bogs, seeps, springs, and along the shorelines of streams. Coastal lotus (*Hosackia gracilis*) is a presumed larval food plant.

The property was surveyed for coastal lotus (*Hosackia gracilis*) on April 7, June 26, and July 11, 2017, times when this plant species is presumed to be in bloom. No coastal lotus (*Hosackia gracilis*) was observed on or near the property, and the Lotis blue butterfly was not observed in any of its life stages on the property. The potential for presence of Lotis blue butterfly is very low. No additional surveys are recommended.

5.3.2 Behren's silverspot butterfly

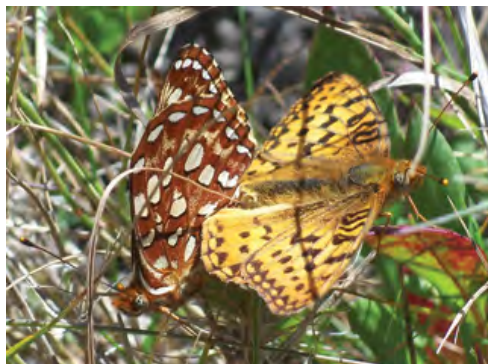


Figure 12. Male and female Behren's silverspot butterflies (photo credit SpadeNRC).

The Behren's silverspot (*Speyeria zerene behrensii*) (**Figure 13**) is Federally Endangered, listed December 5, 1997. The known historic range is along the coast from near the Town of Mendocino in Mendocino County to Salt Point State Park in Sonoma County.

The larval food plant is currently thought to be early blue violet (*Viola adunca*), based on studies of the closely related coastal subspecies, Oregon silverspot butterfly (*Speyeria zerene hoppolyta*). It inhabits coastal terrace prairie habitat in areas with a strong ocean influence.

The project area was surveyed for early blue violet on April 7, June 26 and July 11, 2017 – during the bloom window for this plant species. No early blue violet was observed on the property and the Behren's silverspot butterfly was not observed in any of its life stages on the property. Additionally, the property does not contain quality coastal terrace prairie habitat. No additional surveys are recommended at this time.

5.3.3 California red legged frog

California red-legged frog (*Rana aurora draytonii*) is federally listed as a Threatened Species under the Endangered Species Act as of May 23, 1996. Critical habitat has been designated and the project area is not located in a critical habitat area for California Red Legged Frog. According to the US Fish and Wildlife, within Mendocino County, California red-legged frog is known to occur in the following Hydrographic Units: Point Arena, Garcia, and Gualala. Upland dispersal habitat can include forest debris and small mammal burrows.

There is a potential for presence in the stream on the north side of the property, and also a potential for presence in upland areas of the property during migration.

5.3.4 Pacific tailed frog

Pacific tailed frog (*Ascaphus truei*) is not a Federal or State protected species but is a California State Species of Concern. Their known range is coastal from Anchor Bay, Mendocino County, north to the Oregon border. They inhabit cold, clear, rocky streams in wet forests. They do not inhabit ponds or lakes. A rocky streambed is necessary for cover for adults, eggs, and larvae. After heavy rains, adults may be found in the woods away from the stream.

There is a low potential for presence in the unnamed stream onsite.

5.3.5 Foothill yellow legged frog

On June 21, 2017, the California Fish and Game Commission voted to accept Foothill yellow-legged frog (*Rana boylei*) as a candidate threatened species. This frog species is present year round along most of the coast of California, in northwestern California, and in the western Sierra Foothills. This frog species is found in or near rocky streams in many habitat types, including but not limited to mixed coniferous forest, coastal scrub, and wet meadows. Foothill yellow-legged frog is rarely found away from permanent water.

Foothill yellow-legged frogs may be present in or near the stream on the north side of the property.

5.3.6 Southern torrent salamander

Southern torrent salamander (*Rhyacotriton variegatus*) is a California State Species of Special Concern. This salamander is found in permanent cold forest streams and seeps among rocks and pebbles. They are found in northwestern California south to Point Arena, and are found within water and in the splash zone of water. There is a low potential for presence in the stream on the north side of the property. The project area is just south of the range for southern torrent salamander.

5.3.7 Western pond turtle

The western pond turtle is present year round throughout Mendocino County. They are normally associated with permanent ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams. Basking sites include partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Nests are generally along sandy banks but have been reported as far away as 325 feet from water, in many soil types, from sandy to hard. Nests must have a relatively high internal humidity in order for eggs to develop and hatch properly.

The northern stream and its banks may serve as habitat for Western pond turtle. Areas outside the immediate streambed and bank lack the humidity needed for nesting habitat.

5.3.8 Special status and nesting birds

There is a potential for presence of several species of special status birds. A list of special status birds found in Coastal Mendocino County is included as Appendix B. Additionally, migrating nesting birds are protected under the Migratory Bird Treaty Act.

Bird nests are found on the ground, in burrows, in brush, in trees and on man made structures such as the underside of bridges and under roof eaves.

On the subject property, nesting birds may be seasonally present in any of the onsite plant communities.

5.3.9 Special status bats

Many species of bats roost in hollowed areas, crevices, or under bark of trees in forested areas near water. Several, but not all special status species, require a nearby fresh water source for feeding over and for drinking, because they do not have a good urine concentrating ability. Special status bats found in Coastal Mendocino County are listed in Appendix B.

There is a potential for presence of special status bats within wooded areas of the property.

5.3.10 Sonoma tree vole

According to the January 2016 Department of Fish and Wildlife Special Animals List, Sonoma tree vole (*Arborimus pomo*) is listed as a G3 S3 Species of Special Concern. The state listing indicates the species is considered vulnerable in its range due to a restricted range, relatively few populations, recent and widespread declines or other factors.

The Sonoma tree vole range is located along the coast from Sonoma County through Mendocino, Humboldt, and Trinity County. The total population is unknown but is estimated at over 10,000. Preferred habitat is considered mesic old growth Douglas Fir Forest, however Sonoma tree voles are known to live in other coniferous forests. They are known to eat primarily Douglas fir (*Pseudotsuga menziesii*) needles, but eat other conifer needles as well. They may also eat the inner bark of twigs. Sonoma tree voles live in the tree canopy and are thought to have limited dispersal capabilities, and so are threatened by canopy removal and fragmentation (Blois and Natureserve 2008).

The property is not considered adequate habitat for Sonoma tree vole. The property does not contain a sufficient number of Douglas fir trees to support a tree vole population.

6.0) IMPACTS AND AVOIDANCE MEASURES

The proposed project has been analyzed relative to its proximity to natural resources to determine its potential to disturb sensitive species, utilizing the methods and results gathered above and in through the **Reduced Buffer Analysis** of the Mendocino County's Local Coastal Program (**Appendix C**). It is the opinion of Wynn Coastal Planning that potential impacts to sensitive species can be minimized or avoided if the project utilizes the Avoidance Measures recommended below.

6.1 Impacts and Potential Impacts

The project will result in **removal of one bishop pine tree** in order to develop the septic leach field. Construction also has the potential to directly impact special status species, including frogs, salamanders, birds and bats. Potential impacts occurring from the project or use of the property are outlined below.

6.1.1 Bishop pine forest and other special status plant communities

Development of the septic leach field within the Bishop pine forest is expected to result in the removal of one Bishop pine tree.

Construction activities and residential use of the property may result in the introduction of invasive plant species that could degrade the quality of the on-site special status plant communities.

6.1.2 Special status frogs and salamanders

During construction, the use of heavy equipment and material stockpiling should not occur within 50 feet of the northwest stream. Equipment and materials in and in close proximity to the stream may result in habitat degradation for special status frogs and salamanders.

Additionally, California red-legged frogs may be present in upland areas of the property during migration. These frogs could be impacted by use of equipment and placing and moving stockpiles.

6.1.3 Special status birds and bats

Tree and vegetation removal, and ground clearing activities during construction may result in detrimental impacts to special status and other protected nesting birds and to special status bats. Special status birds and bats may also be disturbed by noise during construction.

6.2 Mitigation and Avoidance Measures

The following mitigation and avoidance measures are recommended:

6.2.1 Bishop pine forest restoration of disturbed areas

To mitigate for the loss of the Bishop pine tree to be removed, the property owner shall facilitate natural regeneration of Bishop pine and other community-appropriate plant species within the areas that have been disturbed by the installation of the septic disposal system within the Bishop pine forest and 50-foot buffer area to the Bishop pine forest.

Topsoil from areas within the Bishop pine forest and its buffer area that are planned for disturbance shall be set aside during septic system installation, and shall be replaced after the system is installed. Pine duff at a thickness of no more than ¼ inch, shall be placed over approximately 50% of the disturbance area, leaving the other 50% of the area to bare soil. Bare soil areas will better facilitate the growth of pine seedlings. If after one year, a minimum of five new pine seedlings have not naturally regenerated within the septic system installation area, the property owner shall obtain assistance from the UC Forest Advisor or another forestry professional to obtain natural regeneration of Bishop pines within the septic system disturbance area at a ratio of 5:1 for the Bishop pine tree removed.

6.2.2 Invasive plant species avoidance measures

Heavy equipment shall be washed before entering the site, in order to remove any potential invasive plant seed harbored in mud on wheels, undercarriage or other areas of equipment.

No invasive plant seed shall be used on the property for post ground disturbance soil stabilization.

No invasive plants (as listed by the California Invasive Plant Council) shall be used for landscaping purposes.

6.2.3 Special status plant community avoidance during construction

Prior to and during all ground disturbing construction activities, temporary orange construction fence shall be installed and maintained on-site at the 50-foot buffer line to the streams, riparian areas and special status plant communities. No heavy equipment, stockpiles, storage or other construction related activity shall occur within 50 feet of these special status plant community and stream areas, except for minimal disturbances as necessary for the installation of the septic disposal system within the Bishop pine forest and its buffer area.

6.2.4 Migrating California red-legged frog avoidance during construction

Within one week prior to the onset of construction, a qualified biologist shall conduct a survey of the construction area for migrating California red-legged frogs, and shall conduct a training for the construction crew on identification of California red-legged frogs, as well as the protocols they must follow per this condition:

Prior to the onset of construction, and every morning before moving heavy equipment and/or stockpiles, the construction crew shall perform a visual search around all stacked or stored material, and under parked equipment to detect the presence of frogs. If a California red-legged frog is detected, construction crews will stop all ground disturbing work in the vicinity and contact the United States Fish and Wildlife Service or a qualified biologist, to address the issue and provide clearance to re-initiate work.

If a rain event occurs during the construction period, all ground disturbing construction-related activities will cease until at least 48 hours after the rain stops. Prior to resuming ground disturbing construction activities, trained construction crew-member will examine the site for the presence of frogs. If no special status frogs are found, construction activities may resume.

6.2.5 Nesting bird and special status bat protection

The bird breeding season typically extends from February to August. Ideally, the clearing of vegetation and the initiation of construction can be done in the non-breeding season between September and January. If these activities cannot be performed in the non-breeding season, a qualified biologist shall perform preconstruction breeding bird within 14 days of the onset of construction or clearing of vegetation. If active

breeding bird nests are observed, no ground disturbance activities shall occur within a minimum 100-foot exclusion zone. These exclusion zones may vary depending on species, habitat and level of disturbance. The exclusion zone shall remain in place around the active nest until all young are no longer dependent upon the nest. A biologist should monitor the nest site weekly during the breeding season to ensure the buffer is sufficient to protect the nest site from potential disturbances.

As with birds, bat roost sites can change from year to year, so pre-construction surveys are usually necessary to determine the presence or absence of bat roost sites in a given area. Pre-construction bat surveys do not need to be performed if work or vegetation removal is conducted between September 1 and October 31, after young have matured and prior to the bat hibernation period. However, if it is necessary to disturb potential bat roost sites between November 1 and August 31, pre-construction surveys should be conducted. Pre-construction bat surveys involve surveying trees, rock outcrops, and buildings subject to removal or demolition for evidence of bat use (guano accumulation, or acoustic or visual detections). If evidence of bat use is found, then biologists shall conduct acoustic surveys under appropriate conditions using an acoustic detector, to determine whether a site is occupied. If bats are found, a minimum 50 foot buffer should be implemented around the roost tree. Removal of roost trees should occur in September and October, or after the bats have left the roost. In summary, no impacts would be expected and therefore no preconstruction surveys would be required for the species above if vegetation removal (including standing dead trees) is scheduled for the months of September or October.

The months of November through August would require a bird and/or bat survey dependent on the time of year.

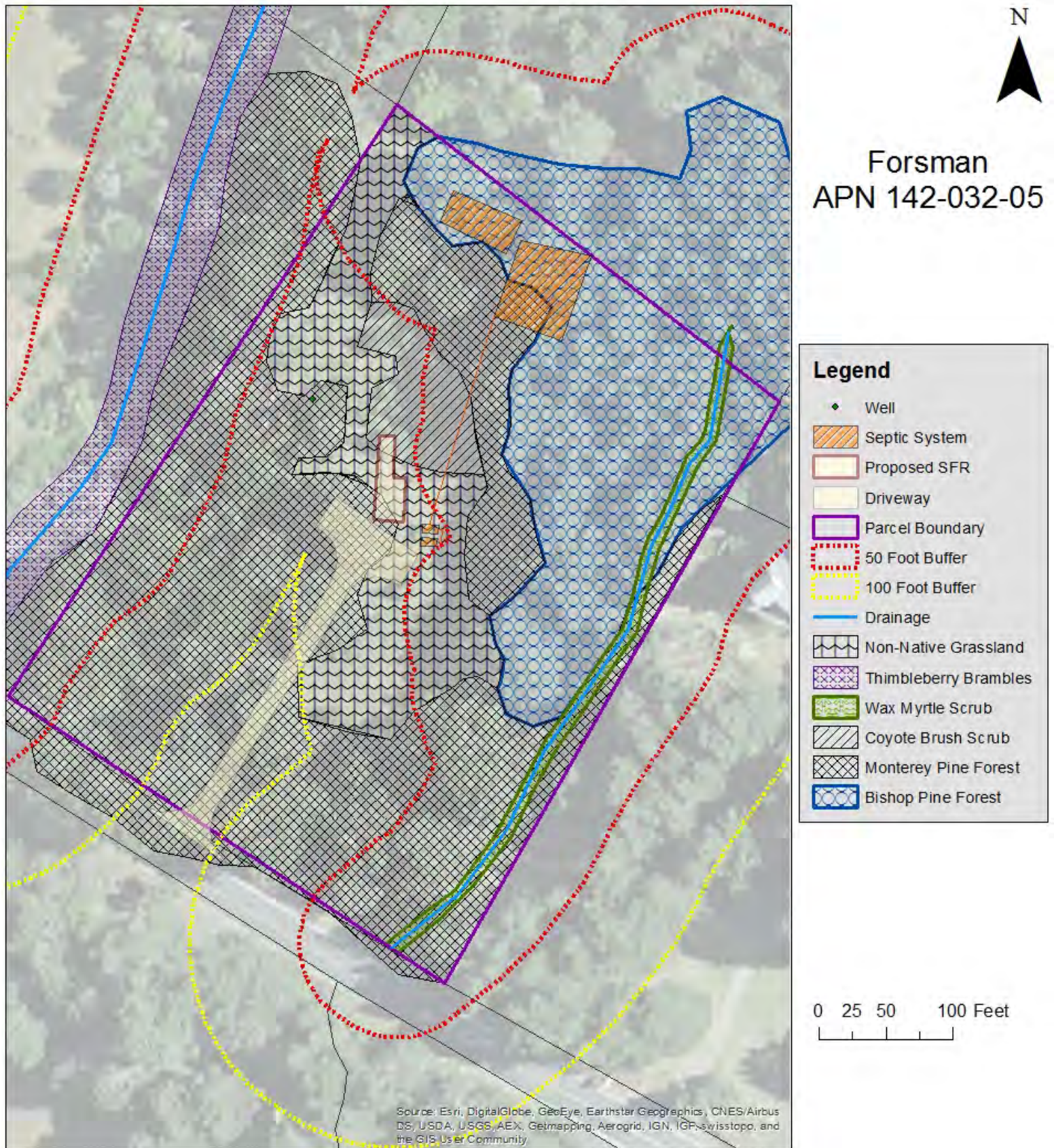


Figure 12. ESHA map with buffers (locations shown are approximate).

7.0) INVESTIGATOR BIOGRAPHIES

Asa B Spade graduated from Humboldt State University with a Bachelor's Degree in Environmental Science, with a concentration in Landscape Ecosystems as well as a minor in Botany. Since that time he has been working in the natural resources field, first with Mendocino County Environmental Health and later with California State Parks and the Department of Fish and Game. Prior to work with Wynn Coastal Planning, Mr. Spade worked for seven years as the principal and lead biologist for a company he co-ran with his wife. He has been trained in Army Corps wetland delineation by the Coastal Training Program at Elkhorn Slough. He is on the Fish and Wildlife Service approved list for Point Arena mountain beaver surveys and has done surveys for Behren's silverspot butterfly, Northern spotted owl, Sonoma tree vole, and the California red-legged frog. He has contributed to more than 100 coastal development projects in Mendocino County.

Teresa R Spade, AICP, graduated from Humboldt State University with a Bachelor's Degree in Natural Resources Planning and Interpretation. She has 11 years of experience working in land use planning and natural resources, and is a certified planner per the American Institute of Certified Planners. She has contributed to over 100 coastal development projects in Mendocino County, and has worked for the County of Mendocino, City of Fort Bragg, Caltrans and Spade NRC on coastal Mendocino projects, prior to joining Wynn Coastal Planning in 2016. She has been trained in Army Corps wetland delineation by Richard Chinn Environmental Training in Sacramento, CA. She is on the Fish and Wildlife Service approved list for Point Arena mountain beaver surveys and has surveyed for the Federally Endangered Behren's silverspot butterfly and Sonoma tree vole.

Karen Youngblood holds a Master's of Science in Natural Resources and a GIS Certificate from Humboldt State University and a Bachelor's of Arts in Environmental Studies, with an emphasis in Policy and Planning, from the University of California in Santa Cruz. Her diverse experience includes over 20 years of botanical, wildlife, fisheries and forestry field work throughout Northern California and Southeastern Oregon, with the last 10 years being focused in Coastal Mendocino County. She has received additional training in Army Corps wetland delineation by Richard Chinn Environmental Training in Sacramento, CA, Rare Plant Species of Special Concern with Teresa Sholars at the College of the Redwoods in Fort Bragg, CA (Spring, 2009), and *Carex* keying and identification training with Gordon Leppig in Arcata, CA (March, 2017).

APPENDIX A

APPENDIX A: List of All Plant Species Found

Scientific Name (Synonyms) Common Name	Family	Type	Origin
Herbs			
Achillea millefolium Yarrow	ASTERACEAE	perennial herb	native
Allium triquetrum Three cornered leek, White flowered onion	ALLIACEAE	perennial herb	native
Cardamine oligosperma Bittercress, Idaho bittercress, popweed	BRASSICACEAE	annual or perennial herb	native
Carduus pycnocephalus Italian thistle	ASTERACEAE	annual herb	non-native, invasive - moderate
Cirsium vulgare Bull thistle	ASTERACEAE	perennial herb	non-native, invasive - moderate
Digitalis purpurea Purple foxglove	PLANTAGINACEAE	perennial herb	non-native, invasive - limited
Epilobium ciliatum Fringed/Northern/Slender Willow herb	ONAGRACEAE	perennial herb	native
Fragaria vesca Woodland strawberry	ROSACEAE	perennial herb	native
Galium aparine (Galium aparine) Marin County bedstraw, Sticky willy	RUBIACEAE	annual herb	native
Goodyera oblongifolia Rattlesnake plantain	ORCHIDACEAE	perennial herb	native
Helminthotheca echioides Bristly ox-tongue	ASTERACEAE	perennial herb	not native
Heterotheca sessiliflora ssp. bolanderi Bolander's goldenaster, Sessileflower false goldenaster	ASTERACEAE	perennial herb	native
Iris douglasiana Douglas Iris	IRIDACEAE	perennial herb	native
Linum bienne Narrow leaved/Pale/Small flowered flax	LINACEAE	annual herb	non-native
Oenanthe sarmentosa Water parsley, Pacific oenanthe	APIACEAE	perennial herb	native
Piperia elegans Coast /Elegant/hillside piperia, Elegant rein orchid	ORCHIDACEAE	perennial herb	native

Scientific Name (Synonyms) Common Name	Family	Type	Origin
Ranunculus californicus California buttercup	RANUNCULACEAE	perennial herb	native
Rumex acetocella Common sheep sorrel	POLYGONACEAE	perennial herb	non-native, invasive - moderate
Sanicula bipinnatifida Purple sanicle, Snakeroot	APIACEAE	perennial herb	native
Sanicula crassicaulus Snakeroot, Pacific blacksnakeroot, gamble weed, Pacific sanicle	APIACEAE	perennial herb	native
Scrophularia californica California bee plant, California figwort	SCROPHULARIACEAE	perennial herb	native
Senecio glomeratus (Erechtites glomerata) cutleaf burnweed	ASTERACEAE	annual or perennial herb	non-native, invasive - moderate
Senecio minimus Coastal burnweed	ASTERACEAE	annual or perennial herb	non-native, invasive - moderate
Solidago canadensis Canada goldenrod	ASTERACEAE	perennial herb	native
Stachys rigida Rough hedgenettle	Lamiaceae	perennial herb	native
Stellaria media Chickweed	CARYOPHYLLACEAE	annual herb	non-native
Vicia sp.			
Vicia hirsuta Hairy/Tiny vetch	FABACEAE	annual herb, vine	non-native
Vicia sativa Spring vetch	FABACEAE	annual herb, vine	non-native
Veratrum californicum California false hellebore/ corn lily	MELANTHIACEAE	perennial herb	native
Grasses			
Anthoxanthum odoratum Sweet vernal grass	POACEAE	annual or perennial grass	non-native, invasive - moderate
Avena barbata Slender oat	POACEAE	annual or perennial grass	non-native
Briza maxima rattlesnake grass	POACEAE	annual grass	non-native, invasive - limited
Bromus laevipes Chinook /Narrow flowered /Woodland brome	POACEAE	perennial grass	native

Scientific Name (Synonyms) Common Name	Family	Type	Origin
Cortaderia jubata pampas grass	POACEAE	perennial grass	non-native, invasive - high
Elymus glaucus Blue wildrye	POACEAE	perennial grass	native
Holcus lanatus Velvet grass	POACEAE	perennial grass	non-native, invasive - moderate
Rytidosperma pencillatum (Daltonia pilosa) Purple awned wallaby/ Australian oatgrass	POACEAE	perennial grass	non-native, invasive - limited
Carex gynodynamis Olney's hairy sedge	CYPERACEAE	sedge, perennial grasslike herb	native
Carex obnupta Coast carex, Slough sedge	CYPERACEAE	sedge, perennial grasslike herb	native
Rushes			
Juncus sp.	JUNCACEAE	rush, perennial grasslike herb	native
Luzula comosa Wood rush	JUNCACEAE	rush, perennial grasslike herb	native
Ferns			
Athyrium filix-femina Common ladyfern	WOODSIACEAE	fern	native
Blechnum spicant Deer fern	BLECHNACEAE	fern	native
Equisetum telmateia Giant horsetail	EQUISETACEAE	fern	native
Polystichum munitum Western sword fern	DRYOPTERIDACEAE	fern	native
Pteridium aquilinum Western brackenfern	DENNSTAEDTIACEAE	fern	Native

Scientific Name**(Synonyms)**

Common Name

Shrubs**Baccharis pilularis**

Coyote brush, Dwarf chaparral broom

Family**Type****Origin**

ASTERACEAE

shrub

native

Cotoneaster lacteus

Milkflower cotoneaster

ROSACEAE

shrub

non-native,
invasive-moderate**Frangula californica**

California coffeeberry

RHAMNACEAE

shrub

native

Gaultheria shallon

Salal

ERICACEAE

shrub

native

Helichrysum petiolare

Licorice plant

ASTERACEAE

shrub, vine

non-native,
invasive - limited**Lonicera involucrata**

twinberry, twinberry honeysuckle

CAPRIFOLIACEAE

shrub

native

Mimulus aurantiacus

Bush/Island/Sticky monkey flower

PHRYMACEAE

shrub

native

Morella californica

California wax myrtle

MYRICACEAE

shrub

native

Rubus parviflorus

Western thimbleberry

ROSACEAE

shrub, vine

native

Rubus ursinus

California/Pacific blackberry

ROSACEAE

shrub, vine

native

Vaccinium ovatum

California /Evergreen huckleberry

ERICACEAE

shrub

native

Trees**Arbutus menziesii**

Madrono, Pacific madrone

ERICACEAE

tree

native

Garrya elliptica

silk tassel

GARRYACEAE

shrub, tree

native

Notholithocarpus densiflorus

Tanoak

FAGACEAE

shrub, tree

native

Pinus muricata

Bishop/ Bull/Prickle Cone Pine

PINACEAE

tree

native

Pinus radiata

Monterey pine

PINACEAE

tree

non-native,
Invasive-limited**Pseudotsuga menziesii**

Douglas fir

PINACEAE

tree

native

Salix sp.

SALICACEAE

shrub, tree

APPENDIX B



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Saunders Reef (3812376))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Baker's goldfields <i>Lasthenia californica ssp. bakeri</i>	PDAST5L0C4	None	None	G3T1	S1	1B.2
Blasdale's bent grass <i>Agrostis blasdalei</i>	PMPOA04060	None	None	G2	S2	1B.2
coast lily <i>Lilium maritimum</i>	PMLIL1A0C0	None	None	G2	S2	1B.1
coastal bluff morning-glory <i>Calystegia purpurata ssp. saxicola</i>	PDCON040D2	None	None	G4T2T3	S2S3	1B.2
Mendocino Coast paintbrush <i>Castilleja mendocinensis</i>	PDSCR0D3N0	None	None	G2	S2	1B.2
Pacific gilia <i>Gilia capitata ssp. pacifica</i>	PDPLM040B6	None	None	G5T3	S2	1B.2
perennial goldfields <i>Lasthenia californica ssp. macrantha</i>	PDAST5L0C5	None	None	G3T2	S2	1B.2
Point Reyes checkerbloom <i>Sidalcea calycosa ssp. rhizomata</i>	PDMAL11012	None	None	G5T2	S2	1B.2
purple-stemmed checkerbloom <i>Sidalcea malviflora ssp. purpurea</i>	PDMAL110FL	None	None	G5T1	S1	1B.2
pygmy cypress <i>Hesperocyparis pygmaea</i>	PGCUP04032	None	None	G1	S1	1B.2
Roderick's fritillary <i>Fritillaria roderickii</i>	PMLIL0V0M0	None	Endangered	G1Q	S1	1B.1
short-leaved evax <i>Hesperievax sparsiflora var. brevifolia</i>	PDASTE5011	None	None	G4T3	S2	1B.2
supple daisy <i>Erigeron supplex</i>	PDAST3M3Z0	None	None	G2	S2	1B.2
swamp harebell <i>Campanula californica</i>	PDCAM02060	None	None	G3	S3	1B.2
Wolf's evening-primrose <i>Oenothera wolfii</i>	PDONA0C1K0	None	None	G2	S1	1B.1

Record Count: 15

Appendix B2 Scoping List Wildlife Species

Scientific name Common name	Federal Status	State Status	G Rank	S Rank	Organization: Code	Habitat
INVERTEBRATES						
Snails, Slugs, and Abalone (<i>GASTROPODA</i>)						
<i>Helminthoglypta arrosa pomensis</i> Pomo bronze shoulderband	None	None	G2G3T1	S1	IUCN:DD	Found near the coast in heavily-timbered redwood canyons of Mendocino County, from Big River and Russian Gulch watersheds. Found under redwoods. Generally, in somewhat moist duff. Found in scrub in forest opening under a power line in Russian
<i>Noyo interressa</i> Ten Mile shoulderband	None	None	G2	S2	None	Known from a few locations in Mendocino County with limited habitat information. Known from Ten Mile Dunes.
Beetles (<i>INSECTA, Coleoptera</i>)						
<i>Coelus globosus</i> Globose dune beetle	None	None	G1	S1	IUCN:VU	Subterranean beetle that tunnels through sand under dune vegetation. Since coastal dune habitat in California is diminishing, the beetle is a special-status species.
Butterflies & Moths (<i>INSECTA, Hymenoptera</i>)						
<i>Lycaeides argyrognomon lotis</i> lotis blue butterfly	Endangered	None	G5TH	SH	XERCES:CI	Not seen since 1983, it is primarily from Mendocino County but historically from northern Sonoma and possibly Marin Counties. Inhabits wet meadows, damp coastal prairie, and potentially bogs or poorly-drained sphagnum-willow bogs where soils are waterlogged and acidic. Presumed host plant is Hosackia gracilis.
<i>Speyeria zerene behrensii</i> Behren's silverspot butterfly	Endangered	None	G5T1	S1	XERCES:CI	Historically from near the City of Mendocino, Mendocino County, south to the area of Salt Point State Park, Sonoma County. Now presumed to be from Manchester south to Salt Point area. Inhabits coastal terrace prairie with caterpillar host plants: violet (<i>Viola adunca</i>) and adult nectar sources: thistles, asters, etc.
Ants, Bees, & Wasps (<i>INSECTA, Hymenoptera</i>)						
<i>Bombus occidentalis</i> Western bumble bee	None	None	GU	S1	XERCES:IM	Populations in central California have declined since the 1990's. It visits flowers in a variety of habitats. Identified by a white patch on its abdomen hind tip. None recorded

Appendix B2 Scoping List Wildlife Species

FISH						
Lampreys (<i>PETROMYZONTIDAE</i>)						
<i>Entosphenus tridentatus</i> Pacific lamprey	None	None	G5	S4	AFS:VU	Anadromous lamprey found in freshwater rivers around the Pacific Rim, from Japan to Baja California. Adult Pacific Lamprey spawn in habitat similar to salmon: low gradient stream reaches, in gravel, often at the tailouts of pools and riffles.
<i>Lampetra ayresii</i> river lamprey	None	None	G4	S4	AFS:VU DFG:SSC	Anadromous lamprey that uses riffle and side channel habitats for spawning and for ammocoete rearing where good water quality is essential. Adult Pacific Lamprey spawn in habitat similar to salmon: low gradient stream reaches, in gravel, often at the tailouts of pools and riffles.
Trout & Salmon (<i>SALMONIDAE</i>)						
<i>Oncorhynchus gorbuscha</i> pink salmon	None	None	G5	S1	DFG:SSC	Most spawn in intertidal or lower reaches of streams and rivers in Sept and Oct. and move further upstream in Sacramento River. Optimal temp = 5.6 to 14.4° C. Embryos and alevins require fast-flowing well oxygenated water for development and survival.
<i>Oncorhynchus kisutch</i> Coho salmon - central California coast ESU	Endangered	Endangered	G4	S2?	AFS:EN	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.
<i>Oncorhynchus kisutch</i> Coho salmon - southern Oregon / northern California ESU	Threatened	Threatened	G4T2Q	S2?	AFS:TH DFG:SSC	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.
<i>Oncorhynchus mykiss irideus</i> summer-run steelhead trout	None	None	G5T4Q	S2	DFG:SSC	Cool, swift, shallow water and clean loose gravel for spawning, and suitably large pools in which to spend the summer.
<i>Oncorhynchus mykiss irideus</i> steelhead - central California coast DPS	Threatened	None	G5T2Q	S2	AFS:TH	Adult steelhead require high flows with water at least 18 cm deep for passage. They may leap up to ~3 m. For spawning, sufficient streamflow over clean gravel, cool water temperature, depth, and cover for escape (usually a deep pool with cover).
<i>Oncorhynchus mykiss irideus</i> steelhead-northern California DPS	Threatened	None	G5T2Q	S2	AFS:TH DFG:SSC	Cool, swift, shallow water and clean loose gravel for spawning.

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<i>Oncorhynchus tshawytscha</i> chinook salmon – California coastal ESU	Threatened	None	G5	S2	AFS:TH	Adults depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27° C lethal to adults.
Minnows & Carp (CYPRINIDAE)						
<i>Lavinia symmetricus navarroensis</i> Navarro roach	None	None	G5T1T2	S1S2	DFG:SSC	Habitat generalists. Found in warm intermittent streams as well as cold, well-aerated streams. Found in the lower, warmer reaches of streams in the Russian and Navarro River drainages.
<i>Lavinia symmetricus parvipinnis</i> Gualala roach	None	None	G5T1T2	S1S2	DFG:SSC	Habitat generalists. Found in warm intermittent streams as well as cold, well-aerated streams.
Gobies (GOBIIDAE)						
<i>Eucyclogobius newberryi</i> tidewater goby	Endangered	None	G3	S2S3	AFS:EN DFG:SSC IUCN:VU	Brackish water habitats along the California coast from Agua Hedionda lagoon, San Diego Co. to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.
AMPHIBIANS & REPTILES						
Olympic salamanders (RHYACOTRITONIDAE)						
<i>Rhyacotriton variegatus</i> southern torrent (=seep) salamander	None	None	G3G4	S2S3	DFG:SSC IUCN:LC USFS:S	Found in Coastal redwood, Douglas fir, mixed conifer, montane riparian, and montane hardwood-conifer forests from northern California south to Point Arena. Aquatic habitat includes permanent cold creeks, streams and seepages with low water flow; associated with moss-covered rocks within trickling water and the splash zone of waterfalls; old-growth coniferous forests with closed canopy; <50% cobble in creeks, remainder mixture of pebble, gravel and sand.
Tailed frogs (ASCAPHIDAE)						
<i>Ascaphus truei</i> Pacific tailed frog	None	None	G4	S2S3	DFG:SSC IUCN:LC	Occurs in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine habitats. Coastal from Anchor Bay, Mendocino Co. to Oregon border. Cold, clear, rocky streams in wet forests. They do not inhabit ponds or lakes. A rocky streambed is necessary for cover for adults, eggs, and larvae. After heavy rains, adults may be found in the woods away from the stream.

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Frogs (RANIDAE)						
<i>Rana aurora aurora</i> northern red-legged frog	None	None	G4T4	S2?	DFG:SSC USFS:S	Found in humid forests, woodlands, grasslands, and streamsides in northwestern California. Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season. Integration zone between northern and California species is between Manchester and Elk.
<i>Rana aurora draytonii</i> California red-legged frog	Threatened	None	G4T2T3	S2S3	DFG:SSC IUCN:VU	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
<i>Rana boylei</i> foothill yellow-legged frog	None	None	G3	S2S3	BLM:S DFG:SSC IUCN:NT USFS:S	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying.
Box & Water Turtles (EMYDIDAE)						
<i>Emys marmorata marmorata</i> western pond turtle	None	None	G3G4	S3	BLM:S DFG:SSC IUCN:VU USFS:S	Former scientific name: <i>Clemmys marmorata marmorata</i> . Associated with permanent or nearly permanent water in a wide variety of habitats. Requires basking sites. Nests sites may be found up to 0.5 km from water.
BIRDS						
Pelicans (PELECANIDAE)						
<i>Pelecanus occidentalis californicus</i> California brown pelican (nesting colony & communal roosts)	Delisted	Delisted	G4T3	S1S2	DFG:FP	Nest colonies are on offshore islands free of mammalian predators and human disturbance, are of sufficient elevation to prevent flooding of nests, and are associated with an adequate and consistent food supply. Brown pelicans roost communally, generally in areas that are near adequate food supplies, have some type of physical barrier to predation and disturbance, and provide some protection from environmental stresses such as wind and high surf.

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Cormorants (<i>PHALACROCORACIDAE</i>)						
<i>Phalacrocorax auritus</i> double-crested cormorant (nesting colony)	None	None	G5	S3	DFG:WL IUCN:LC	Rookery site: colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.
Hérons, Egrets, and Bitterns (<i>ARDEIDAE</i>)						
<i>Ardea alba</i> great egret (nesting colony)	None	None	G5	S4	CDF:S IUCN:LC	Rookery: colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes. Breeding territory is limited to the immediate vicinity of nest, and is used for courtship and copulation as well as nesting. A monogamous, colonial nester.
<i>Ardea herodias</i> great blue heron (nesting colony)	None	None	G5	S4	CDF:S IUCN:LC	Rookery: colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.
<i>Egretta thula</i> snowy egret (nesting colony)	None	None	G5	S4	CDF:S IUCN:LC	Rookery: colonial nester, with nest sites situated in protected beds of dense tules. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.
Hawks, Kites, Harriers, & Eagles (<i>ACCIPITRIDAE</i>)						
<i>Accipiter cooperii</i> Cooper's hawk (nesting)	None	None	G5	S3	DFG:WL IUCN:LC	Nesting: woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.
<i>Accipiter gentilis</i> northern goshawk (nesting)	None	None	G5	S3	BLM:S CDF:S DFG:SSC IUCN:LC USFS:S	Nesting: within and in vicinity of coniferous forest. Uses old nests, and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodge pole pine, Jeffrey pine, and aspens are typical nest trees. Northern goshawks typically nest in conifer forests containing large trees and an open understory on the west slope of the Sierra. There is historic nesting in Big River and Pudding Creek. Winter migrant on the coast (Coastal redwood zone).

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<i>Accipiter striatus</i> sharp-shinned hawk (nesting)	None	None	G5	S3	DFG:WL	Nesting: ponderosa pine, black oak, riparian deciduous, mixed conifer and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes, with plucking perches are critical requirements. Nests usually within 275 ft. of water. Nests in dense, even-aged, single-layered forest canopy, usually nests in dense, pole and small-tree stands of conifers, which are cool, moist, well shaded, with little ground-cover, near water. Foraging: Uses dense stands in close proximity to open areas.
<i>Aquila chrysaetos</i> golden eagle (nesting & wintering)	None	None	G5	S3	CDF:S DFG:FP DFG:WL IUCN:LC USFWS:BCC	Nesting and wintering: rolling foothills mountain areas, sage-juniper flats, desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas. Nests on cliffs of all heights and in large trees in open areas. Alternative nest sites are maintained, and old nests are reused. Builds large platform nest, often 10 ft. across and 3 ft. high, of sticks, twigs, and greenery. Rugged, open habitats with canyons and escarpments used most frequently for nesting.
<i>Buteo regalis</i> ferruginous hawk (wintering)	None	None	G4	S3S4	DFG:WL IUCN:LC USFWS:BCC	Usually east of the coastal belt, uncommon migrant in coastal Mendocino County seen in open areas such as Bald Hill and Manchester. Feeding habitat in open, treeless areas. Does not breed in California.
<i>Circus cyaneus</i> Northern harrier (nesting)	None	None	G5	S3	DFG:SSC IUCN:LC	Northern harriers prefer sloughs, wet meadows, marshlands, swamps, prairies, plains, grasslands, and shrublands and perch on structures such as fence posts. Nesting habitat: nest on the ground, usually near water, or in tall grass, open fields, clearings, or on the water on a stick foundation, willow clump, or sedge tussock. Most nests built within patches of dense, often tall, vegetation (e.g., cattails) in undisturbed areas. They usually nest near hunting grounds. Foraging: They need open, low woody or herbaceous vegetation for nesting and hunting.
<i>Elanus leucurus</i> white-tailed kite (nesting)	None	None	G5	S3	DFG:FP IUCN:LC	Nesting: rolling foothills/valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland, open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. Winter congregation of at least 20 birds seen at Manchester State Park in early 2000's. One nest known from a THP in Albion ~2006; nest was at the edge of conifer forest with no pasture immediately adjacent.

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<i>Haliaeetus leucocephalus</i> bald eagle (nesting & wintering)	Delisted	Endangered	G5	S2	CDF:S DFG:FP IUCN:LC USFS:S USFWS:BCC	Nesting and wintering: ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter. Known from winter in Lake Cleone, MacKerricher State Park and Little River.
<i>Pandion haliaetus</i> Osprey (nesting)	None	None	G5	S3	CDF:S DFG:WL IUCN:LC	Nesting: ocean shore, bays, fresh-water lakes, and larger streams. Large nests built in tree-tops within 6-7 to 15 miles of good fish-producing body of water. Flattened portions of partially broken off snags, trees, rocks, dirt pinnacles, cacti, and numerous man-made structures such as utility poles and duck blinds are used for nests. Furthest nest inland may be McGuire's Pond.
Falcons (FALCONIDAE)						
<i>Falco columbarius</i> Merlin (wintering)	None	None	G5	S3	DFG:WL IUCN:LC	General wintering habitat: Uncommon winter migrants on the coast. Habitat apparently similar to breeding habitat, (open forest and grasslands). Regularly hunts prey (e.g., shorebirds) concentrated on tidal flats. Often winters in cities throughout its range, where frequently perches on buildings, power poles, and tall trees. Also winters in open woodland, grasslands, open cultivated fields, marshes, estuaries, and seacoasts. Frequents open habitats at low elevation near water and tree stands.
<i>Falco peregrinus anatum</i> American peregrine falcon (nesting)	Delisted	Delisted	G4T3	S2	CDF:S DFG:FP USFWS:BCC	Nesting: near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape on a depression or ledge in an open site.

Appendix B2 Scoping List Wildlife Species

Plovers & Relatives (CHARADRIIDAE)						
<i>Charadrius alexandrinus nivosus</i> western snowy plover (nesting)	Threatened	None	G4T3	S2	ABC:WLBCC DFG:SSC USFWS:BCC	Nesting: federal listing applies only to the pacific coastal population. Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting. Sand spits, dune-backed beaches, unvegetated beach strands, open areas around estuaries, and beaches at river mouths are the preferred coastal habitats for nesting. Less common nesting habitat includes salt pans, coastal dredged spoil sites, dry ponds, and salt pond levees and islands.
Oystercatchers (HAEMATOPODIDAE)						
<i>Haematopus bachmani</i> Black oystercatcher (nesting)	None	None	G5	S2	IUCN:LC USFWS:BCC	From the Aleutian Islands to Baja California, the forage on intertidal macroinvertebrates along gravel or rocky shores and in the southern part of their range nest primarily on rocky headlands and offshore rocks.
Gulls & Terns (LARIDAE)						
<i>Larus californicus</i> California gull (nesting)	None	None	G5	S2	DFG:WL IUCN:LC	Colony nesters and usually occurring on an island or vegetated offshore rock.
Auklets, Puffins, & Relatives (ALCIDAE)						
<i>Brachyramphus marmoratus</i> marbled murrelet (nesting)	Threatened	Endangered	G3G4	S1	ABC:WLBCC CDF:S IUCN:EN	Nesting: feeds near-shore; nests inland along coast, from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir. Presence of platforms (flat surface at least four inches in diameter) appears to be the most important stand characteristic for predicting murrelet presence. Stands can be: 1) mature (with or without an old-growth component); 2) old-growth; 3) young coniferous forests with platforms; and 4) include large residual trees in low densities sometimes less than one tree per acre.
<i>Fratercula cirrhata</i> tufted puffin (nesting colony)	None	None	G5	S2	DFG:SSC IUCN:LC	Nesting colony: open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs free of human disturbance and mammalian predators. Nests in burrows or rock crevices when sod or earth is unavailable for burrowing. Occurs year-round offshore near breeding colonies in northern California, but more common in winter. Breeding records from Goat Rock, Mendocino Headlands State Park.

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Owls (STRIGIDAE)						
<i>Athene cunicularia</i> burrowing owl (burrow sites and some winter sites)	None	None	G4	S2	BLM:S DFG:SSC IUCN:LC USFWS:BCC	Burrow sites: open, dry annual or perennial grasslands, deserts and scrublands, and dunes characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
<i>Strix occidentalis caurina</i> northern spotted owl	Threatened	None	G3T3	S2S3	ABC:WLBCC CDF:S DFG:SSC IUCN:NT	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests w/patches of big trees. High, multistory canopy dominated by big trees, many trees w/cavities or broken tops, woody debris, and space under canopy.
Swifts (APODIDAE)						
<i>Chaetura vauxi</i> Vaux's swift (nesting)	None	None	G5	S3	DFG:SSC IUCN:LC	Nesting: redwood, Douglas fir, grand fir, and other coniferous forests. Nests in large hollow trees and snags. Often nests in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes. Also nests in artificial structures such as chimneys. The most important habitat requirement appears to be an appropriate nest site in a large, hollow tree. Forages over most terrains and habitats, often high in the air. Shows an apparent preference for foraging over rivers and lakes.

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Hummingbirds (<i>TROCHILIDAE</i>)						
<i>Selasphorus rufus</i> rufous hummingbird (nesting)	None	None	G5	S1S2	IUCN:LC USFWS:BCC	Breeds in open or shrubby areas, forest openings, yards and parks, and sometimes in forests, thickets, and meadows. Late winter and spring migrant on the California coast. Breeding range from southeast Alaska and as far south as northwestern California.
Selasphorus sasin Allen's hummingbird (nesting)	None	None			ABC:WLBCC IUCN:LC USFWS:BCC	Breeds only along a narrow strip of coastal California and southern Oregon. Nests in densely vegetated areas and forests. An early migrant compared with most North American birds, arriving in summer breeding grounds as early as January. Breeds in moist coastal areas, scrub, chaparral, and forests. Winters in forest edge and scrub clearings with flowers.
Woodpeckers (<i>PICIDAE</i>)						
<i>Picoides nuttallii</i> Nuttall's woodpecker (nesting)	None	None	G5	SNR	ABC:WLBCC IUCN:LC	Ranging from west of the Cascade mountains and in the Sierra Nevada from southern Oregon to Northern Baja California. Nests are excavated in dead branches or snags of various trees, usually in close association with oak woodlands and riparian zone, habitat vulnerable to development. At least one Mendocino Coast record from 2011 Audubon Christmas Bird Count.
<i>Sphyrapicus ruber</i> red-breasted sapsucker	None	None	G5	SNR	None	Breeds primarily in coniferous forests, but also uses deciduous and riparian habitat, as well as orchards and power line corridors. The nest is a hole usually dug in a live deciduous tree (e.g. alder, willow, madrone) with possible preference for larger trees showing decay-softened wood.
Tyrant Flycatchers (<i>TYRANNIDAE</i>)						
<i>Contopus cooperi</i> olive-sided flycatcher (nesting)	None	None	G4	S4	ABC:WLBCC DFG:SSC IUCN:NT USFWS:BCC	Breeds in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds. Tall standing dead trees are used as perch trees for catching flying insects. Accordingly, an open canopy is a key components of suitable habitat. Nest is an open cup of twigs, rootlets, and lichens, placed out near tip of horizontal branch of a tree. (Late successional conifer forest with open canopy, to sea level but usually mid elevations 3,000 to 7,000 feet.)

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Swallows (<i>HIRUNDINIDAE</i>)						
<i>Progne subis</i> purple martin	None	None	G5	S3	DFG:SSC IUCN:LC	Nesting: inhabits woodlands, low elevation coniferous forest of Douglas fir, Ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures such as weep holes in bridges. Nest often located in tall, isolated trees and snags. Nesting on the Mendocino Coast known, in part, from Juan Creek, Ten Mile, Noyo, and Big River, and snags from Ten Mile River to Pudding Creek. Need open foraging habitats. (Coast redwood forest and at Gualala River bridge)
Wood-warblers (<i>PARULIDAE</i>)						
<i>Dendroica occidentalis</i> hermit warbler (nesting)	None	None	G4G5	S3?	ABC:WLBCC IUCN:LC	Breeding range is relatively limited to the Pacific Coast and the Cascade and Sierra Nevada mountain ranges of Washington, Oregon, and California. Some winter along the coastal central and southern California, but most winter primarily in the mountains of western Mexico and Central America. Nesting habitats in Pacific northwest are coniferous forests with a high canopy volume, generally preferring mature stands of pine and Douglas fir. Avoids areas with a high deciduous volume; absent from riparian areas and clearcuts. Birds of coniferous forests; they prefer cool, wet fir forests at elevation, and moist forests of Douglas-fir, hemlock, and western red cedar closer to sea level. Major threat to this species appears to be the degradation of breeding habitat. Not known as frequently nesting on the coast, perhaps more common inland.
Sparrows, Buntings, Warblers, & Relatives (<i>EMBERIZIDAE</i>)						
<i>Ammodramus savannarum</i> grasshopper sparrow (nesting)	None	None	G5	S2	DFG:SSC IUCN:LC	Nesting: dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting. Summer (breeding) resident in Mendocino County known from north of Ten Mile River.

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<i>Passerculus sandwichensis alaudinus</i> Bryant's savannah sparrow (nesting)	None	None	G5T2T3	S2S3	DFG:SSC	California endemic from near Humboldt Bay, Humboldt Co. to Morro Bay, San Luis Obispo Co. Breeds in low tidally influenced habitats in higher parts of pickleweed/saltgrass marshes, adjacent ruderal areas, moist grasslands within and just above the fog belt, bottomlands and dairy pastures in the taller grasses and rushes along roads and fences, and infrequently, drier grasslands. In moist upland grasslands, it occurs where herbaceous vegetation is relatively short, with no or little woody plant cover. Open areas, whether provided by tidal mudflats or upland interstitial areas between clumps of vegetation, appears to be an important component of occupied habitat.
Blackbirds (<i>ICTERIDAE</i>)						
<i>Agelaius tricolor</i>	None	None	G2G3	S2	ABC:WLBC BLM:S	Nesting colony: highly colonial species, most numerous in central valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, such as cattails and foraging area with insect prey within a few km of the colony. Known inland from McGuire's Pond.
Mammals						
Evening Bats (<i>VESPERTILIONIDAE</i>)						
<i>Antrozous pallidus</i> pallid bat	None	None	G5	S3	BLM:S DFG:SSC IUCN:LC USFS:S WBWG:H	A wide variety of habitats deserts, grasslands, shrublands, woodlands and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. A yearlong resident in most of the range. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings where there is protection from high temperatures.
<i>Corynorhinus townsendi</i> Townsend's big-eared bat	None	None	G4	S2S3	BLM:S DFG:SSC IUCN:LC USFS:S WBWG:H	Generally found in the dry uplands throughout the West, but also occur in mesic coniferous and deciduous forest habitats along the Pacific coast. Unequivocally associated with areas containing caves and cave-analogs for roosting habitat. Requires spacious cavern-like structures for roosting during all stages of its life cycle. Typically, they use caves and mines, but have been noted roosting in large hollows of redwood trees, attics and abandoned buildings, lava tubes, and under bridges. Extremely sensitive to disturbance.

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<i>Lasionycteris noctivagans</i> silver-haired bat	None	None	G5	S3S4	IUCN:LC WBWG:M	Ranges throughout California in coastal and montane forests. May be found anywhere in California during spring and fall migrations. Primarily a forest (tree-roosting) bat associated with north temperate zone conifer and mixed conifer/hardwood forests. Prefers forested (frequently coniferous) areas adjacent to lakes, ponds, and streams. During migration, sometimes occurs in xeric areas. Roosts in dead or dying trees with exfoliating bark, extensive vertical cracks, or cavities, rock crevices, and occasionally under wood piles, in leaf litter, under foundations, and in buildings, mines and caves. The primary threat is likely loss of roosting habitat due to logging practices that fail to accommodate the roosting needs of this species (e.g., clusters of large snags).
<i>Lasiurus blossevillii</i> western red bat	None	None	G5	S3?	DFG:SSC IUCN:LC	Locally common in some areas of California from Shasta County south to the Mexican border. California Central Valley is the species' primary breeding region. Species appears to be strongly associated with riparian habitats for roosting and foraging, particularly mature stands/large diameter of cottonwood/sycamore. Roosts in woodland borders, rivers, agricultural areas, and urban areas with mature trees in the foliage of large shrubs and trees, usually sheltering on the underside of overhanging leaves. It often hangs from one foot on the leaf petiole and may resemble a fruit or a dead leaf. Rarely observed roosting in mines.
<i>Lasiurus cinereus</i> hoary bat	None	None	G5	S4?	IUCN:LC WBWG:M	Most widespread North American bat. Solitary species that winters along the coast and in southern California. Roosts in foliage of trees near ends of branches. Blends with the bark of trees. Highly associated with forested habitats but can be found in suburbs with old, large trees.
<i>Myotis evotis</i> long-eared myotis	None	None	G5	S4?	BLM:S IUCN:LC WBWG:M	Widespread in California, but generally is believed to be uncommon in most of its range. It avoids the arid Central Valley and hot deserts, occurring along the entire coast and interior mountains. Found in nearly all brush, woodland, and forest habitats, from sea level to at least 9,000 ft., but coniferous woodlands and forests seem to be preferred. Roosts in loose bark in tall, open-canopied snags; stumps in south-facing clear-cuts with minimal vegetation overgrowth in younger forests, and conifer snags in older forests, rocks, caves, bridges and abandoned mines.
<i>Myotis yumanensis</i> Yuma myotis	None	None	G5	S4?	BLM:S IUCN:LC WBWG:LM	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.

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Mountain Beavers (<i>PLODONTIDAE</i>)						
<i>Aplodontia rufa nigra</i> Point Arena mountain beaver	Endangered	None	G5T1	S1	DFG:SSC IUCN:LC	Generally known from 2 miles north of Bridgeport Landing to 5 miles south of the town of Point Arena. Coastal areas often near springs or seepages; mesic coastal scrub, northern dune scrub, edges of conifer forests, and riparian plant communities. North facing slopes of ridges and gullies with friable soils and thickets of undergrowth.
Mice, Rats, & Voles (<i>MURIDAE</i>)						
<i>Arborimus pomo</i> Sonoma tree vole	None	None	G3	S3	DFG:SSC IUCN:NT	Species split into red tree vole and Sonoma tree vole; approximate boundary between two species is Klamath River. Inhabits north coast fog belt from Oregon border to Sonoma Co. in old-growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats. Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock or spruce.
Weasels & Relatives (<i>MUSTELIDAE</i>)						
<i>Martes americana humboldtensis</i> Humboldt marten	None	None	G5T2T3	S2S3	DFG:SSC USFS:S	Endemic to the coastal forests of northwestern California with a historical range described as "the narrow northwest humid coast strip, chiefly within the redwood belt" from the Oregon border to northern Sonoma county. However, the one known remnant Humboldt marten population occurs in the north-central portion of the described range in an area dominated by Douglas-fir and tanoak. Typically associated with closed-canopy, late-successional, mesic coniferous forests with complex physical structure near the ground. Very rare on the Mendocino coast.
<i>Martes pennanti (pacifica)</i> DPS Pacific fisher	Candidate	None	G5	S2S3	BLM:S DFG:SSC USFS:S	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Use cavities, snags, logs and rocky areas for cover and denning. Need large areas of mature, dense forest. Very rare on the Mendocino coast.

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Sea Lions & Fur Seals (<i>OTARIIDAE</i>)						
<i>Arctocephalus townsendi</i> Guadalupe fur-seal	Threatened	Threatened	G1	S1	DFG:FP IUCN:NT	Solitary, non-social "eared" seals breed in the tropical waters off southern California/Mexico region but have been seen on rare occasion off Mendocino.
<i>Callorhinus ursinus</i> northern fur-seal	None	None	G3	S1	IUCN:VU	Mostly pelagic seal ranging throughout the Pacific Rim, from Japan to the Channel Islands. Pacific rookeries in the Channel and Farallon Islands. Infrequent visitor to the Mendocino Coast. One was stranded on Albion flat in 2013 and rescued by the Marine Mammal Center.
<i>Eumetopias jubatus</i> Steller (=northern) sea-lion	Threatened	None	G3	S2	IUCN:EN MMC:SSC	Range throughout the North Pacific Rim from Japan to central California. Unlike California sea lions, Stellers tend to remain off shore or haul out in unpopulated areas. Breeding rookery on Año Nuevo Island.

APPENDIX C

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
(A)	<p>Buffer Areas. <i>A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from future developments and shall be compatible with the continuance of such habitat areas.</i></p>
	<p>Special status plant communities and other areas observed on or near the property that may qualify as Environmentally Sensitive Habitat Areas include the stream along the northwestern property line and the associated riparian vegetation, Coastal Thimbleberry Brambles (G4 S3) and Slough Sedge Swards (G4 S3); Bishop Pine Forest (G3 S3) in the northeasterly portion of the property, and a seasonal drainage on the southeasterly side of the property, which does not contain riparian vegetation other than occasional wax myrtle. While the vegetation in the drainage does not fit neatly into any described vegetation community, it is described as Wax Myrtle Scrub (G3 S3) due to occasional wax myrtle species being the overstory dominant.</p>
(1)	<p>Width. <i>The width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred (100) feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area. Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area.</i></p>
	<p>Buffer areas were measured based from the outside edge (dripline of trees and other vegetation) resulting from ground surveys and aerial photo interpretation. It is the professional opinion of Wynn Coastal Planning that a buffer area of 100 feet is not necessary to protect the onsite resources from the proposed development and subsequent use of the property. Consultation with California Department of Fish and Wildlife should occur to obtain their opinion on the buffers recommended by Wynn Coastal Planning. The Department of Fish and Wildlife and County Planning Staff opinions will be needed to determine the final appropriate buffer widths between ESHA and proposed development.</p>
1(a)	<p>Biological Significance of Adjacent Lands. <i>Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they are functionally related to these habitat areas. Functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance depends upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding, or resting).</i></p> <p><i>Where a significant functional relationship exists, the land supporting this relationship shall also be considered to be part of the ESHA, and the buffer zone shall be measured from the edge of these lands and be sufficiently wide to protect these functional relationships. Where no significant functional relationships exist, the buffer shall be measured from the edge of the wetland, stream, or riparian habitat that is adjacent to the proposed development.</i></p>

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
	<p>Northwest Stream and Riparian Area (Coastal Thimbleberry Brambles and Slough Sedge Swards): Special Status Species that may be present in and proximal to the stream include California red-legged frog, Pacific tailed frog, Foothill yellow legged frog, southern torrent salamander, western pond turtle. Special status birds and bats may be present in the riparian vegetation. Special status and nesting birds may use upland areas within and around the property for feeding, however the adjacent upland areas do not provide any known specific significant habitat value for any potentially present protected bird species. California red-legged frogs may be found in upland areas during migration, however the adjacent upland areas do not provide any known specific habitat value for California red-legged frog. The buffer area to the northwest stream and associated riparian area is therefore measured from the dripline of riparian vegetation.</p> <p>Bishop Pine Forest: Special status birds and bats may be present in the Bishop Pine Forest. Adjacent wooded and grassland areas do not provide any known habitat value for any potentially present special status birds or bats. The buffer area to the Bishop Pine Forest is therefore measured from the dripline of the trees within the Bishop Pine Forest.</p> <p>Southeast Drainage and Associated Vegetation (Wax Myrtle Scrub): Special status birds may nest in the vegetation found in the southeast drainage. Adjacent wooded and grassland areas do not provide any known habitat value for any potentially present protected bird species. The buffer area to the southeast drainage is measured from the banks of the drainage ditch or dripline of vegetation found within the drainage ditch, whichever is greater.</p>
1(b)	<p><i>Sensitivity of Species to Disturbance.</i> <i>The width of the buffer zone shall be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development. Such a determination shall be based on the following after consultation with the Department of Fish and Game or others with similar expertise:</i></p> <ul style="list-style-type: none"> <i>(1b-i) Nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species;</i> <i>(1b-ii) An assessment of the short-term and long-term adaptability of various species to human disturbance;</i> <i>(1b-iii) An assessment of the impact and activity levels of the proposed development on the resource.</i>

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
	<p>No special status plant or animal species were observed in the project area during any of the field surveys. However, there is potential for presence of special status birds, bats, and amphibians in the project area.</p> <p>1b-i: Habitat requirements of resident and migratory fish and wildlife species: The drainages are not expected to support fish. The southeast drainage is seasonal, and the shallow, limited, northwest drainage flows down a steep bluff to the beach approximately 360 feet southwest of the property. Any potentially present special status amphibians are expected to stay in close proximity to the northwest stream for feeding and breeding, nesting and resting. Potentially present special status birds may utilize grassland areas of the property for some feeding requirements, however the limited grassland area on the property is not likely to support the feeding requirements of grassland feeding birds.</p> <p>1b-ii: Adaptability to human disturbance: The project area is located in a rural residential subdivision where the parcels are approximately 1-3 acres in size. The subdivision is about 30% built out. Properties adjacent to the northwest and southeast are developed with residences. Wildlife found in this area should be reasonably adapted to human disturbance.</p> <p>1b-iii: Impacts of proposed activity on the project area: The proposed development consists of a modest single family residence and associated development. The development is expected to result in minimal removal of vegetation, and the use of the property is expected to be similar to existing neighboring uses.</p> <p>A minimal buffer of 50 feet should be sufficient to address habitat requirements.</p>
1(c)	<p><i>Susceptibility of Parcel to Erosion.</i> <i>The width of the buffer zone shall be based, in part, on an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel and to what degree the development will change the potential for erosion. A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided.</i></p>
	<p>The property slopes gently to moderately in a southwesterly direction, towards the ocean, and also slopes gently towards the northeast and southwest property lines/drainages. Proposed impervious surface coverage is expected to be minimal. Downhill potential for erosion would be away from the Bishop Pine Forest (little to no potential) and due to the gentle slope and minimal development, erosion potential to the streams is very low. A minimal buffer of 50 feet should be more than sufficient.</p>
1(d)	<p><i>Use of Natural Topographic Features to Locate Development.</i> <i>Hills and bluffs adjacent to ESHA's shall be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from ESHA's. Similarly, bluff faces should not be developed, but shall be included in the buffer zone.</i></p>
	<p>There are no natural topographic features present to use for buffering purposes. Slopes are consistently gentle to moderate.</p>
1(e)	<p><i>Use of Existing Cultural Features to Locate Buffer Zones.</i> <i>Cultural features (e.g., roads and dikes) shall be used, where feasible, to buffer habitat areas. Where feasible, development shall be located on the side of roads, dikes, irrigation canals, flood control channels, etc., away from the ESHA.</i></p>

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
	There are no cultural features on the property to use as a buffer.
1(f)	<p><i>Lot Configuration and Location of Existing Development.</i> <i>Where an existing subdivision or other development is largely built-out and the buildings are a uniform distance from a habitat area, at least that same distance shall be required as a buffer zone for any new development permitted. However, if that distance is less than one hundred (100) feet, additional mitigation measures (e.g., planting of native vegetation) shall be provided to ensure additional protection. Where development is proposed in an area that is largely undeveloped, the widest and most protective buffer zone feasible shall be required.</i></p>
	Existing structures to the northeast of the property appears to observe a setback to the subject northeasterly stream of approximately 50 feet. The existing residence to the southeast of the property appears to observe a setback of approximately 20 feet to the subject Bishop Pine Forest. These measurements are based on GoogleEarth aerial photo interpretation. In both cases (these are the only adjacent developments), the distance is less than 100 feet. As a similar reduced setback is recommended for the subject property, additional mitigation measures are warranted to provide additional protection.
1(g)	<p><i>Type and Scale of Development Proposed.</i> <i>The type and scale of the proposed development will, to a large degree, determine the size of the buffer zone necessary to protect the ESHA. Such evaluations shall be made on a case-by-case basis depending upon the resources involved, the degree to which adjacent lands are already developed, and the type of development already existing in the area.</i></p>
	The proposed development is residential in nature, consistent with existing development in the area. The proposed residence is significantly smaller than existing development in the area. Based on the size and type of development proposed, a minimum buffer of 50 feet is recommended.
(2)	<p><i>Configuration.</i> <i>The buffer area shall be measured from the nearest outside edge of the ESHA (e.g., for a wetland from the landward edge of the wetland; for a stream from the landward edge of riparian vegetation or the top of the bluff).</i></p>
	The buffer area is measured from the landward edge of riparian vegetation associated with drainages and the dripline of trees within the Bishop Pine Forest. These measurements are taken from a compilation of ground surveys and aerial photo interpretation.
(3)	<p><i>Land Division.</i> <i>New subdivisions or boundary line adjustments shall not be allowed which will create or provide for new parcels entirely within a buffer area.</i></p>
	No new subdivisions or boundary line adjustments are proposed.
(4)	<p><i>Permitted Development.</i> <i>Development permitted within the buffer area shall comply at a minimum with the following standards:</i></p>

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
4(a)	<i>Development shall be compatible with the continuance of the adjacent habitat area by maintaining the functional capacity, their ability to be self-sustaining and maintain natural species diversity.</i>
	Development within the recommended 50 foot buffer area consist of septic leach fields and lines installed underground from leach field areas to the proposed residence. These underground installed lines are expected to result in the removal of a total of one bishop pine tree. The proposed underground utility lines are not expected to have a detrimental short or long term impact to the ESHA or buffers.
4(b)	<i>Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.</i>
	There are no structures proposed within the buffer area. The only development proposed within the buffer area or ESHA is the septic leach field and associated septic line, for which there are no other feasible alternatives on site. Areas for the septic system are constrained by distances to streams and must also be at least 100 feet from the existing well on the property and any wells on neighboring properties. Additionally, the leach fields must be placed in soil that is adequate to leach the materials into the ground in a legal and functional manner. The septic designers thoroughly investigated areas of the property outside of required setback distances and found the only location that met the necessary criteria was within the Bishop Pine Forest.
4(c)	<i>Development shall be sited and designed to prevent impacts, which would degrade adjacent habitat areas. The determination of the best site shall include consideration of drainage, access, soil type, vegetation, hydrological characteristics, elevation, topography, and distance from natural stream channels. The term "best site" shall be defined as the site having the least impact on the maintenance of the biological and physical integrity of the buffer strip or critical habitat protection area and on the maintenance of the hydrologic capacity of these areas to pass a one hundred (100) year flood without increased damage to the coastal zone natural environment or human systems.</i>
	The "best site" is as proposed. This is the only location that will be sufficient for adequate leach function. The fields were designed to minimize removal of healthy native trees. Only one tree is proposed for removal to accommodate the leach field.
4(d)	<i>Development shall be compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.</i>
	Development within the recommended 50 foot buffer area consist of septic leach fields and lines installed underground from leach field areas to the proposed residence. These underground installed lines are expected to result in the removal of a total of one bishop pine tree. The proposed underground utility lines are not expected to have a detrimental short or long-term impact to the ESHA or buffers.
4(e)	<i>Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1, which are lost as a result of development under this solution.</i>

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
	There is no other feasible location on the parcel for the proposed septic disposal system. Mitigation measures are proposed including facilitating the natural regeneration of Bishop pine within the proposed disturbance area caused by the installation of the septic system.
4(f)	<i>Development shall minimize the following: impervious surfaces, removal of vegetation, amount of bare soil, noise, dust, artificial light, nutrient runoff, air pollution, and human intrusion into the wetland and minimize alteration of natural landforms.</i>
	Proposed impervious surfaces are minimal, as is vegetation removal. The project is not expected to result in significant areas of bare soil, noise, dust, artificial light, nutrient runoff, air pollution or human intrusion into sensitive areas. The Coastal Zoning Code requires exterior lights to be downcast and shielded, and building and air quality requirements are expected to address dust, air pollution and nutrient runoff issues.
4(g)	<i>Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.</i>
	No riparian vegetation will be removed as part of the project.
4(h)	<i>Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.</i>
	The development is not proposed in a 100 year flood zone.
4(i)	<i>Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.</i>
	The proposed septic infrastructure will be placed underground and at least 100 feet to streams. It is therefore not expected to impact any terrestrial or aquatic hydrologic flow patterns or biological or hydrological processes.
4(j)	<i>Priority for drainage conveyance from a development site shall be through the natural stream environment zones, if any exist, in the development area. In the drainage system design report or development plan, the capacity of natural stream environment zones to convey runoff from the completed development shall be evaluated and integrated with the drainage system wherever possible. No structure shall interrupt the flow of groundwater within a buffer strip. Foundations shall be situated with the long axis of interrupted impermeable vertical surfaces oriented parallel to the groundwater flow direction. Piers may be allowed on a case-by-case basis.</i>
	The project will not change topography or drainage patterns. The project will respect and avoid the natural stream environment.

Mendocino County Coastal Zoning Code, Table 4. Section 20.496.020 ESHA – Development Criteria	
4(k)	<i>If findings are made that the effects of developing an ESHA buffer area may result in significant adverse impacts to the ESHA, mitigation measures will be required as a condition of project approval. Noise barriers, buffer areas in permanent open space, land dedication for erosion control, and wetland restoration, including off-site drainage improvements, may be required as mitigation measures for developments adjacent to environmentally sensitive habitats. (Ord. No. 3785 (part), adopted 1991)</i>
	This project is not expected to result in significant adverse impacts to ESHA.

APPENDIX D

Appendix D. References

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Addendum to September 19, 2017 Botanical, Biological Scoping Survey Report for Franny Forsman at 30101 South Highway One in Gualala by Teresa Spade, Spade Natural Resources Consulting

July 20, 2018

On May 30, 2018, I was at the property and observed two small populations of *Hosackia gracilis*, a common herbaceous species that was not noted as present during previous survey efforts. This species is important because it is the presumed larval food plant for the Federally endangered lotus blue butterfly. No blue butterflies (any life stages) were noted during this or any previous survey effort at the site. Figure one shows the approximate location of the observed *Hosackia gracilis*.

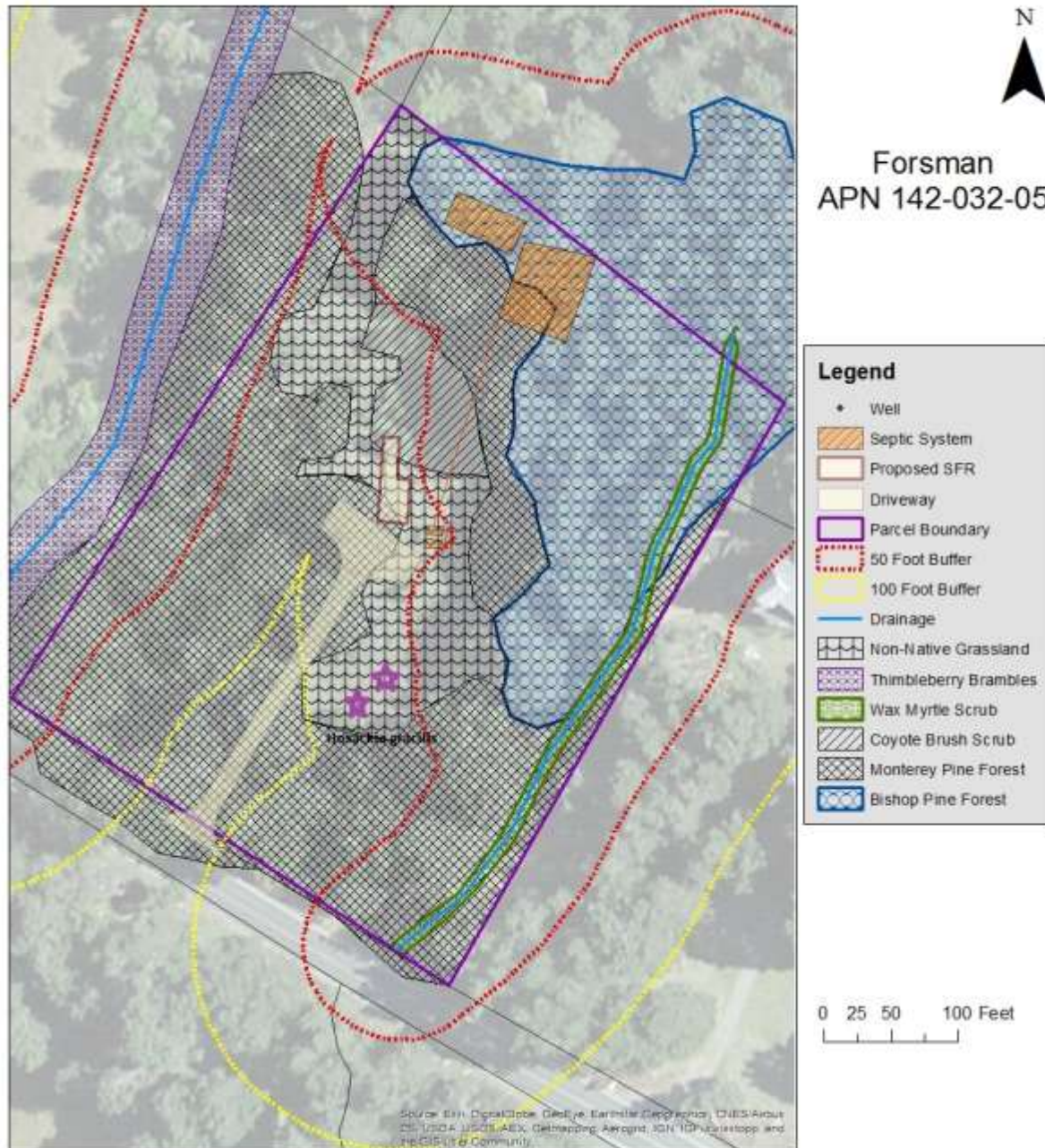


Figure 1. Approximate location of *Hosackia gracilis*.

REPORT OF COMPLIANCE

FOR

30101 SOUTH HIGHWAY ONE
(APN 142-032-05)
GUALALA, CA
MENDOCINO COUNTY



prepared for:
Franny Forsman

prepared by:
Spade Natural Resources Consulting
Teresa R Spade, AICP
611 Albion Street
PO Box 1503
Mendocino, CA 95460
(707) 397-1802
spadenrc@gmail.com

August 6, 2018

Report of Compliance

Background: A 400 square foot residence is proposed on a ~2.74 acre parcel in the Iversen Subdivision north of Gualala, CA. The site is constrained by the presence of drainages on the east and west sides, and bishop pine forest on the northwest side. Due to constraints of the soil, there is no other feasible location for the on-site septic disposal system outside of the bishop pine forest. The least impacting location within the bishop pine forest was selected. Within the proposed septic system footprint, there is only one, very dead bishop pine tree. After the system is installed, the bishop pine forest will be able to revegetate within the septic system footprint.

Purpose: The Report of Compliance is required by Section 20.536.060(E) Mendocino County Coastal Zoning Code, which requires supplemental application procedures for development in Environmentally Sensitive Habitat Areas as follows:

Report of Compliance. *A report based upon an on-site investigation which demonstrates that the development meets all of the criteria specified for development in, and proximate to, an environmentally sensitive habitat area including a description and analysis of the following performed by a qualified professional:*

- (1)
Present extent of the habitat, and if available, maps, photographs or drawings showing historical extent of the habitat area.
- (2)
Previous and existing ecological conditions.
 - (a)
The life history, ecology and habitat requirements of the relevant resources, such as plants, fish and wildlife, in sufficient detail to permit a biologist familiar with similar systems to infer functional relationships (the maps described in above may supply part of this information).
 - (b)
Restoration potentials.
- (3)
Present and potential adverse physical and biological impacts on the ecosystem.
- (4)
Alternatives to the proposed development, including different projects and alternative locations.
- (5)
Mitigation measures, including restoration measures and proposed buffer areas.
- (6)
If the project includes dredging, explain the following:
 - (a)
The purpose of the dredging.
 - (b)
The existing and proposed depths.
 - (c)
The volume (cubic yards) and area (acres or square feet) to be dredged.
 - (d)

Location of dredging (e.g., estuaries, open coastal waters or streams).

(e)

The location of proposed spoil disposal.

(f)

The grain size distribution of spoils.

(g)

The occurrence of any pollutants in the dredge spoils.

(7)

If the project includes filling, identify the type of fill material to be used, including pilings or other structures, and specify the proposed location for the placement of the fill, the quantity to be used and the surface area to be covered.

(8)

If the project includes diking, identify on a map the location, size, length, top and base width, depth and elevation of the proposed dike(s) as well as the location, size and invert elevation of any existing or proposed culverts or tide gates.

(9)

If the project is adjacent to a wetland and may cause mud waves, a report shall be prepared by a qualified geotechnical engineer which explains ways to prevent or mitigate the problem.

(10)

Benchmark and survey data used to locate the project, the lines of highest tidal action, mean high tide, or other reference points applicable to the particular project.

(11)

Other governmental approvals as required and obtained. Indicate the public notice number of Army Corps of Engineers permit if applicable.

Investigator: Teresa R Spade, AICP (B.S. Natural Resources Planning and Interpretation, Humboldt State)

Property Address: 30101 South Highway One, Gualala, CA

APN: 142-032-05

Project Area: The 2.74-acre undeveloped parcel (APN 142-032-05) is located within the California Coastal Zone, approximately 5 miles south of Point Arena and 4.65 miles north of Anchor Bay, on the east side of Highway One, in the Iversen Subdivision (**Figure 1**). The property is on a westerly facing slope, and is vegetated by a non-native grassland/coyote brush scrub/pine forest mosaic, with riparian vegetation in the vicinity of drainages at the east and west property boundaries.

Project Description: Proposed single family residence and associated residential development.

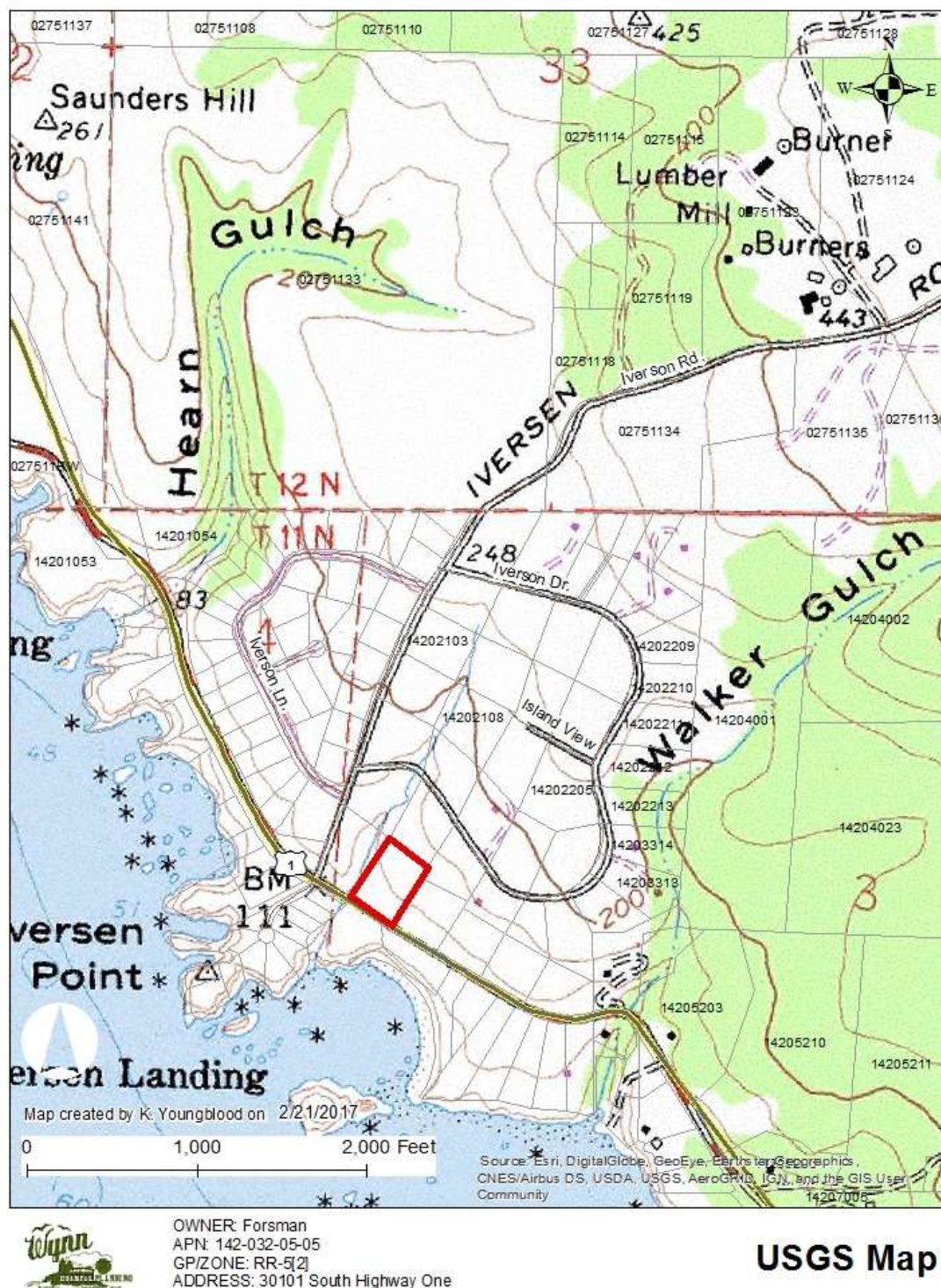


Figure 1. Project location map from WCPlan biological report..

Bishop Pine Forest

Present Extent of Habitat

According to the California Manual of Vegetation, Bishop pine (*Pinus muricata*) is limited in range to coastal California, with limited occurrences along the coast in Mexico. Figure 2 shows the range map.

Historical Extent

Available online historical aerial photographs of the project vicinity and surrounding areas were researched and no significant changes are apparent within the past 18 years relative to canopy cover on the property or within a mile. Figure 4 shows areas on and near the property that appear from aerial photo analysis to be dominated by Bishop pine, currently. These areas have not been ground-truthed, and are mapped only to illustrate the approximate extent of this forest type in the vicinity. Figure 5 shows the approximated extent of the Bishop pine forest within about a half mile of the project area.

Previous and Existing Ecological Conditions

Bishop pine (*Pinus muricata*) is a serotinous species, meaning that regeneration is tied to a historic fire regime. While many fires occurred following World War Two, with the increase in population and development on the coast, wildfires are no longer as common an occurrence, and many forests are even aged and nearing the end of their relatively short (80 to 100 year) life cycle. Due to lack of fire, duff and understory layers in forests can be thick, which presents a challenge to seed regeneration. Disease has become an issue in recent years, with large stands of Bishop pine dying from bark beetle and other diseases common with aging. The increasing presence of non-native tree species such as Monterey pine (*Pinus radiata*) may be contributing towards loss by displacement of habitat and spread of disease. Development is further reducing habitat and fragmenting forests.

In the absence of fire, Bishop pine forests will need to be actively managed, including brush and duff reduction, identification and appropriate removal of pathogens, and protection of new recruit pine seedlings over time to create stands with diversity in age groups.



Figure 2. Range of *Pinus muricata* forest alliance. Source: CNPS Online California Manual of Vegetation.



Figure 3. Recent approximate presumed extent of adjacent Northern Bishop Pine Forest in general vicinity, per remote sensing analysis (Photo from GoogleEarth, August 17, 2013).



Figure 4. Aerial photograph showing forest east of the property, presumed Bishop Pine Forest circled (Photo from GoogleEarth August 17, 2013).

Alternatives to the proposed development, including different projects and alternative locations

Alternative projects: The project is located on a residentially zoned property (RR-5 [RR-2]), and nearby development is residential. Principally permitted uses in the Rural Residential zoning district include single family residence, vacation home rental (either of which would be accommodated by the proposed development); agricultural uses including light agriculture, row and field crops, and tree crops; and passive recreation.

Agriculture and passive recreation are economically infeasible options in this location. The property is too small in size, does not contain prime agricultural soils, and is too close to the sea, with salt air and wind influence, to be considered an economically feasible location for agriculture. Further, water is limited to domestic well production, which is likely insufficient to support agriculture and may result in conflicts with neighboring residential uses.

The Island Cove Estates Covenants, Conditions and Restrictions, Article 5.6, requires as follows:

“Residential Use: Lots shall be occupied and used only for single-family residential purposes in conformity with the requirements of applicable zoning laws or other state or local rules and regulations.”

Economically feasible passive recreation in the area is accommodated to the north at the Botanical Gardens, however a small residential property would not be able to compete with the well-established 47

acre attraction. Conditionally permitted uses such as day care facilities and religious facilities would likely have a greater impact and more potential for incompatibility.

The property was purchased with the understanding that residential use is principally permitted, and nearby development is residential in nature. A septic system was designed for a residence on the property in 2005, and an existing residential well was drilled prior to that. The property was purchased by the current owner with the knowledge that the well and septic design would support a future residence.

Alternative locations: There are no less impacting alternative locations for the proposed septic system. The septic design that came with the property was located upslope from the building site, in the bishop pine forest. In association with the subject project and prior to submitting the Coastal Development Permit application, the septic designers were called out to the site to determine if any alternative locations existed on the site for a new septic design, outside of the bishop pine forest. This was done because the applicant was aware that the septic system would only be allowed in the Bishop Pine Forest if there was no other feasible alternative. The septic designers determined that due to soil constraints and also the required setback to the existing well, the only location that works on the site is within the bishop pine forest. They selected the least impacting location within the forest, where only one tree would be directly impacted by the installation. At the time of design, that tree was about half dead, and now it is completely dead. Nevertheless, three members of the Coastal Commission planning staff and the County project coordinator came out to the site, and suggested that the applicant consider moving the existing well and placing the septic system where the well is, after which point a new well would need to be drilled elsewhere on the property if feasible. In response to this request, the applicant again hired the septic designers, who dug numerous test pits within the setback area of the existing well, and determined that the soil there was inadequate for the suggested revision. The letter from the septic designer after that last exercise, is attached as Appendix A.

The impacts to the bishop pine forest are expected to be temporary in nature and are not expected to result in the removal of any live bishop pine trees. After the septic disposal system is installed, the area is expected to revegetate, and new bishop pines and associated understory species are expected to grow over the septic system area.

The following mitigation measures are recommended:

The following mitigation and avoidance measures are recommended:

1. Bishop pine forest restoration of disturbed areas

To mitigate for the loss of the Bishop pine tree to be removed, the property owner shall facilitate natural regeneration of Bishop pine and other community appropriate plant species within areas disturbed by installation of the septic disposal system within the Bishop pine forest and 50 foot buffer area to the Bishop pine forest.

Topsoil from areas within the Bishop pine forest and its buffer area shall be set aside during septic system installation ground disturbance, and shall be replaced after the system is installed. Pine duff at a thickness of no more than ¼ inch, shall be placed over approximately 50% of the disturbance area, leaving the other 50% of the area to bare soil. Bare soil areas will better facilitate the growth of pine seedlings. If after one year, a minimum of five new pine seedlings have not naturally regenerated within the septic system installation area, the property owner shall obtain assistance from the UC Forest Advisor or another forestry professional to obtain natural regeneration of Bishop pines within the septic system disturbance area at a ratio of 5:1 for the Bishop pine tree removed.

2. Invasive plant species avoidance measures

Heavy equipment shall be washed before entering the site, in order to remove any potential invasive plant seed harbored in mud on wheels, undercarriage or other areas of equipment.

No invasive plant seed shall be used on the property for post ground disturbance soil stabilization.

No invasive plants (as listed by the California Invasive Plant Council) shall be used for landscaping purposes.

3. Special status plant community avoidance during construction

Prior to and during all ground disturbing construction activities, temporary orange construction fence shall be installed and maintained on-site at the 50 foot buffer line to the streams, riparian

areas and special status plant communities. No heavy equipment, stockpiles, storage or other construction related activity shall occur within 50 feet of these special status plant community and stream areas, except for minimal disturbances as necessary for the installation of the septic disposal system within the Bishop pine forest.

.

References

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- Sawyer, J. O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento, CA.

Appendix A
Septic Designer Letter

CARL RITTIMAN & ASSOCIATES, INC.
Certified Professional Soil Scientist
PO Box 590 • Mendocino CA 95460

Teresa Spade
Spade Natural Resources Consulting
611 Albion Street
Mendocino, CA 95460

Date: 7/6/18

re: augered feasibility evaluation at 30101 S. Hwy. One; part two

Teresa,

Our office was contracted to further evaluate the soils at the above referenced site, in regards to the development of alternative leachfield areas on the parcel. Specifically, it was requested that we investigate the area within 100 feet of the existing well on-site, in order to determine whether potential exists to design a leachfield that adheres to all DEH guidelines. If an area were found, then the well would be abandoned and re-located.

A total of 10 augered soil profiles were examined. Their descriptions are as follow:


B1	mottled sandy clay loam noted at 20"
B2	mottled sandy clay loam noted at 20"
B3	4" to weathering rock
B4	mottled sandy clay loam noted at 28"
B5	mottled sandy clay loam at 16"
B6	6" to weathering rock
B7	14" to weathering rock
B8	10" to weathering rock
B9	6" to weathering rock
B10	mottled sandy clay loam noted at 16"

Once again, as a recap, in order to design even the most complex disposal system, it must be demonstrated that there is no winter watertable present (soil mottling) for a minimum of 24 inches and that a minimum of 24 inches of permeable soil is present. All but 1 of the 10 observations during this phase 2 evaluation failed to meet these requirements. The minimally acceptable observation (B4) had no spatial extent; 2 other profiles (B3 and B5) were conducted along contour (where a potential system might be placed) and exhibited unacceptable soil conditions.

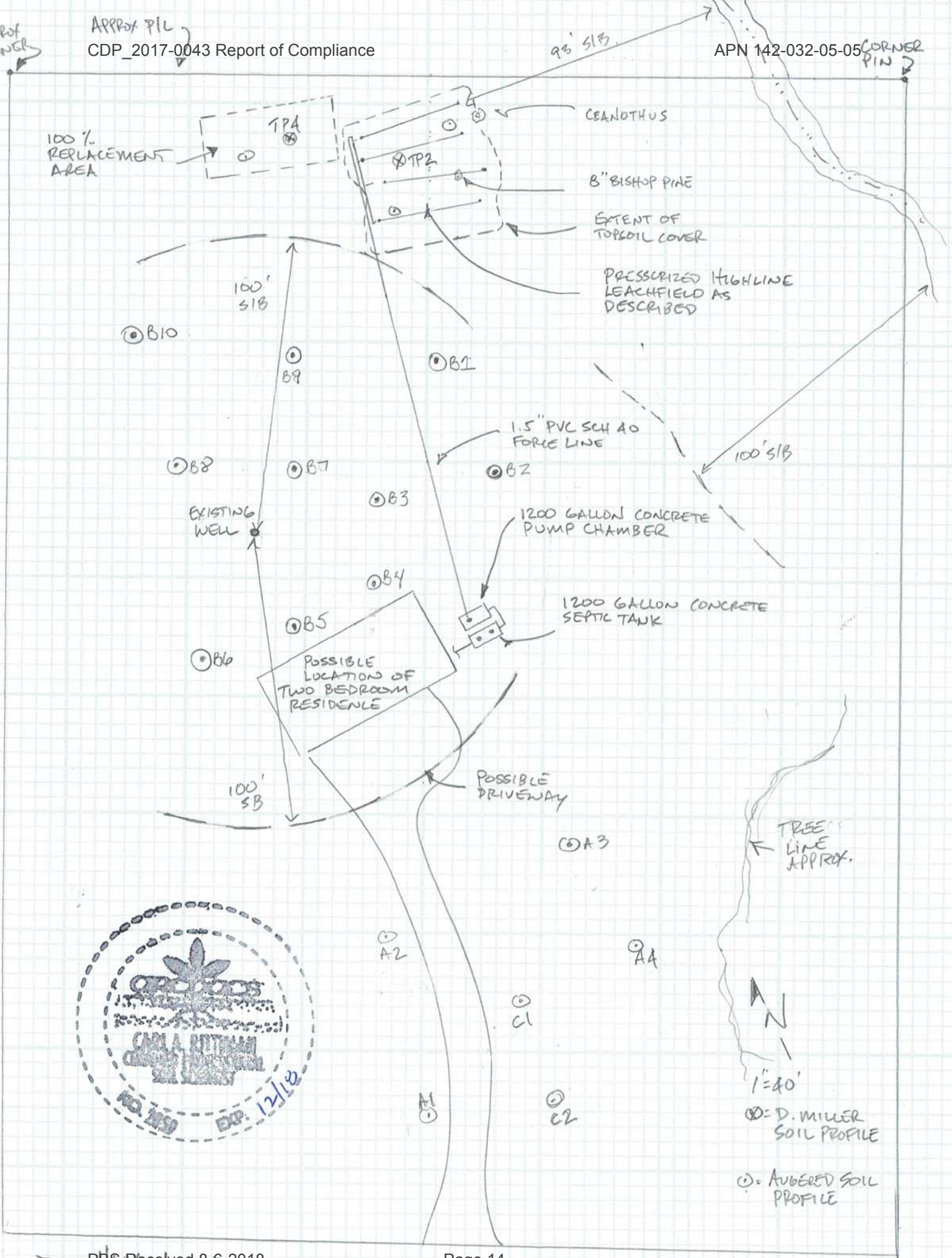
Based on our recent observations, we did not locate a new area, within the current 100 foot well setback, which could support an on-site sewage disposal system meeting current County and State guidelines for on-site sewage disposal.

If you have any questions, please feel free to contact our office.

Thank you.








Andrew Kawczak
Associate

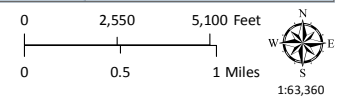
Phone 707-937-0804 • Fax 707-937-0575 • e-mail andy@carlrittiman.com





CASE: CDP 2017-0043
 OWNER: FORSMAN, Frances
 APN: 142-032-05-05
 APLCT: Frances A. Forsman
 AGENT: Teresa Spade
 ADDRESS: 30101 S. Highway 1, Gualala

-  Coastal Zone Boundary
-  Major Rivers
-  Major Towns & Places
-  Highways
-  Incorporated City Limits
-  Major Roads



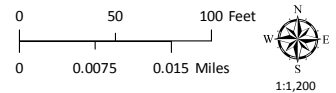
LOCATION MAP

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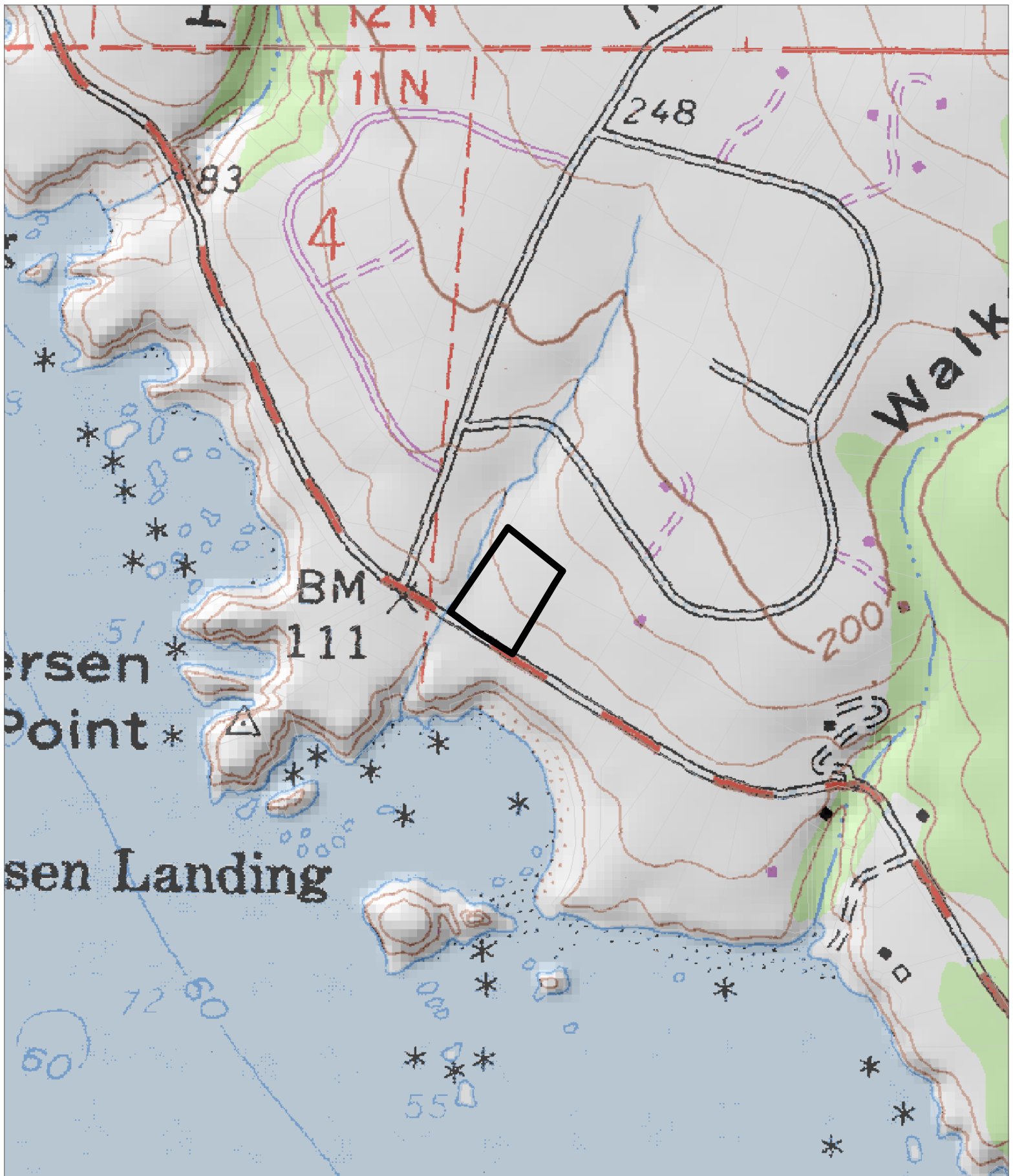
CASE: CDP 2017-0043
OWNER: FORSMAN, Frances
APN: 142-032-05-05
APLCT: Frances A. Forsman
AGENT: Teresa Spade
ADDRESS: 30101 S. Highway 1, Gualala

- Highways
- Public Roads
- Private Roads

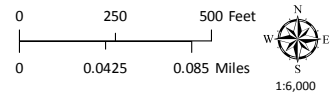


AERIAL IMAGERY

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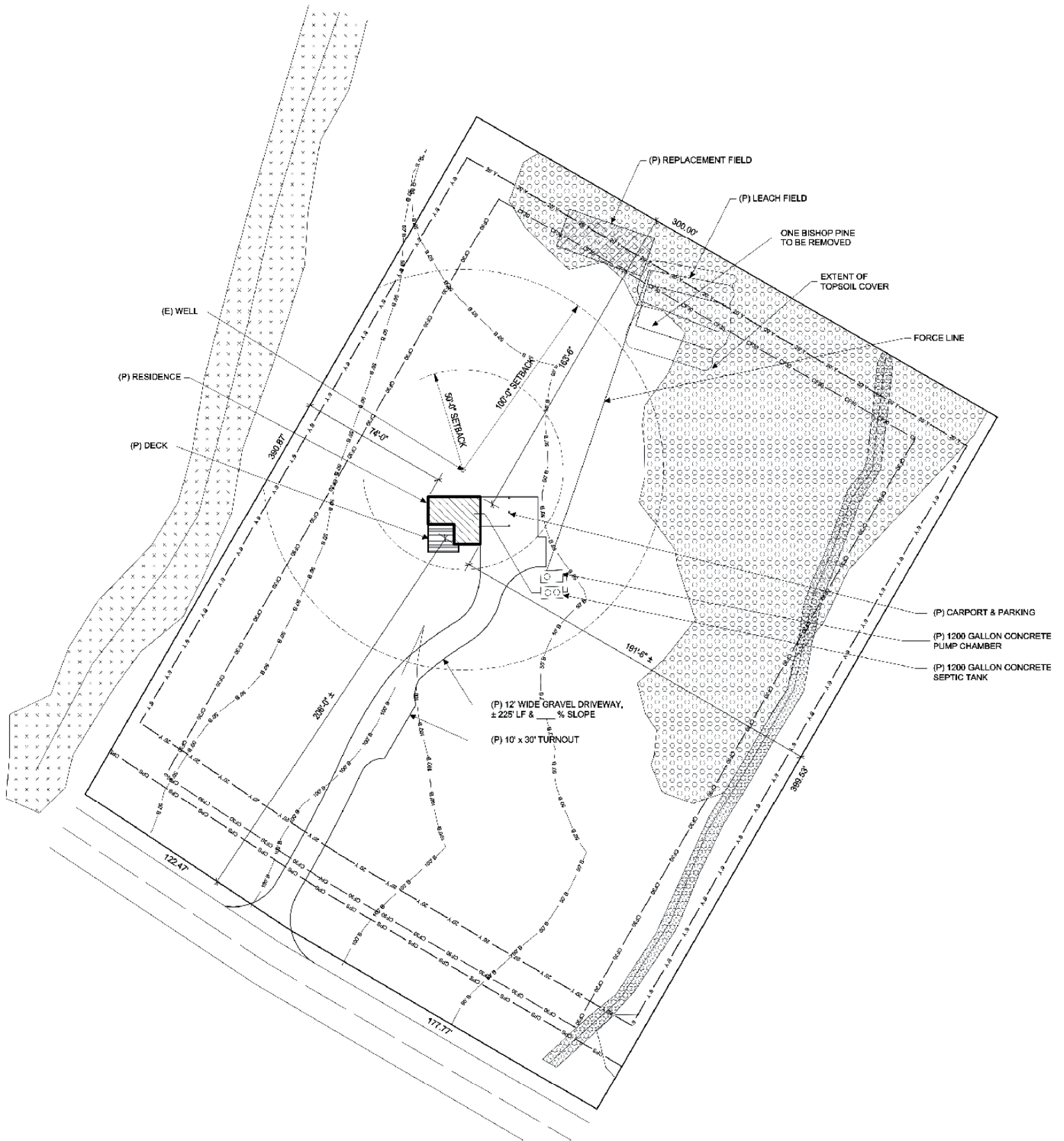


CASE: CDP 2017-0043
OWNER: FORSMAN, Frances
APN: 142-032-05-05
APLCT: Frances A. Forsman
AGENT: Teresa Spade
ADDRESS: 30101 S. Highway 1, Gualala



TOPOGRAPHIC MAP
CONTOUR INTERVAL IS 40 FEET

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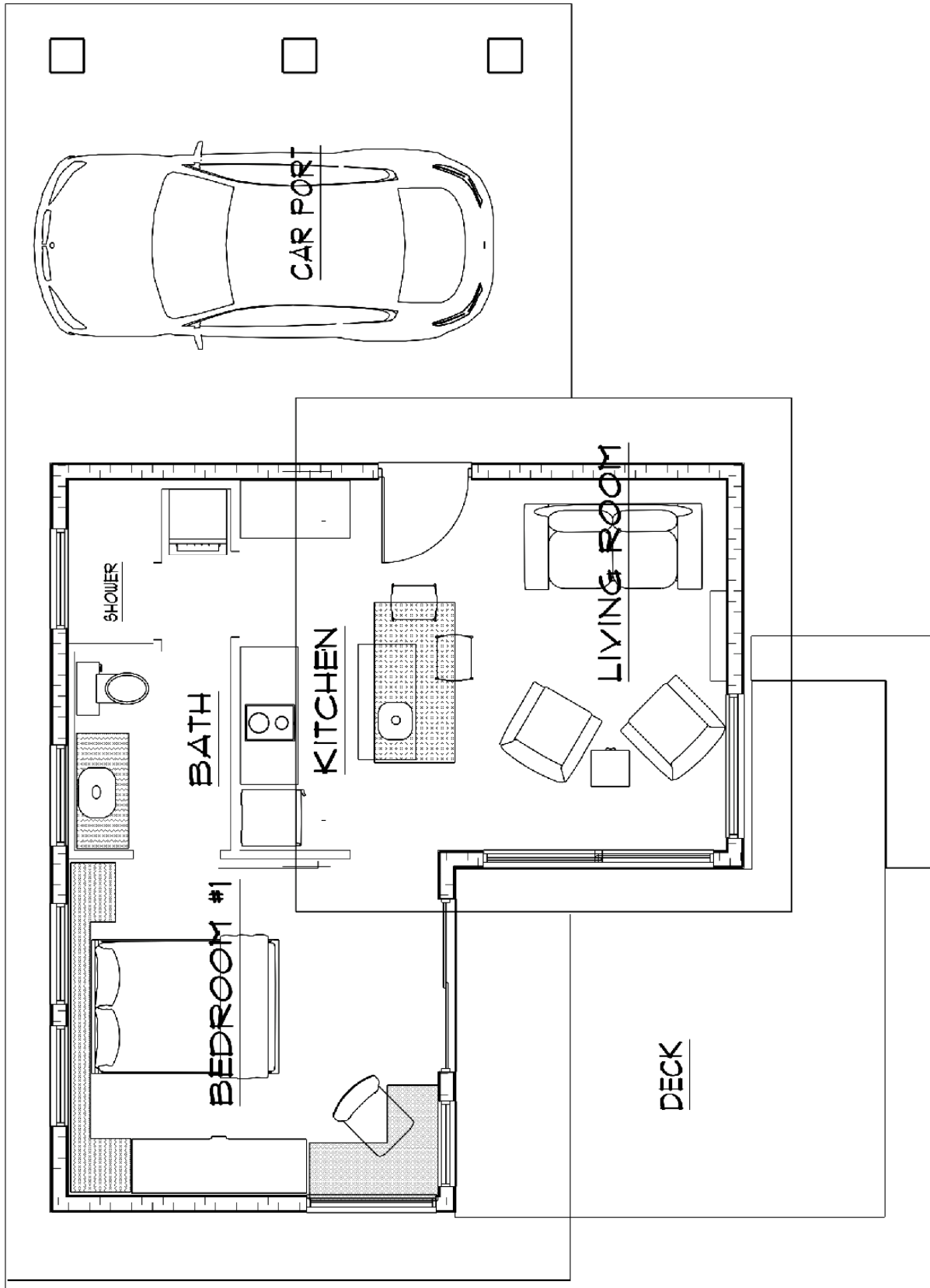


CASE: CDP 2017-0043
 OWNER: FORSMAN, Frances
 APN: 142-032-05-05
 APLCT: Frances A. Forsman
 AGENT: Teresa Spade
 ADDRESS: 30101 S. Highway 1, Gualala

NO SCALE

REVISED SITE PLAN

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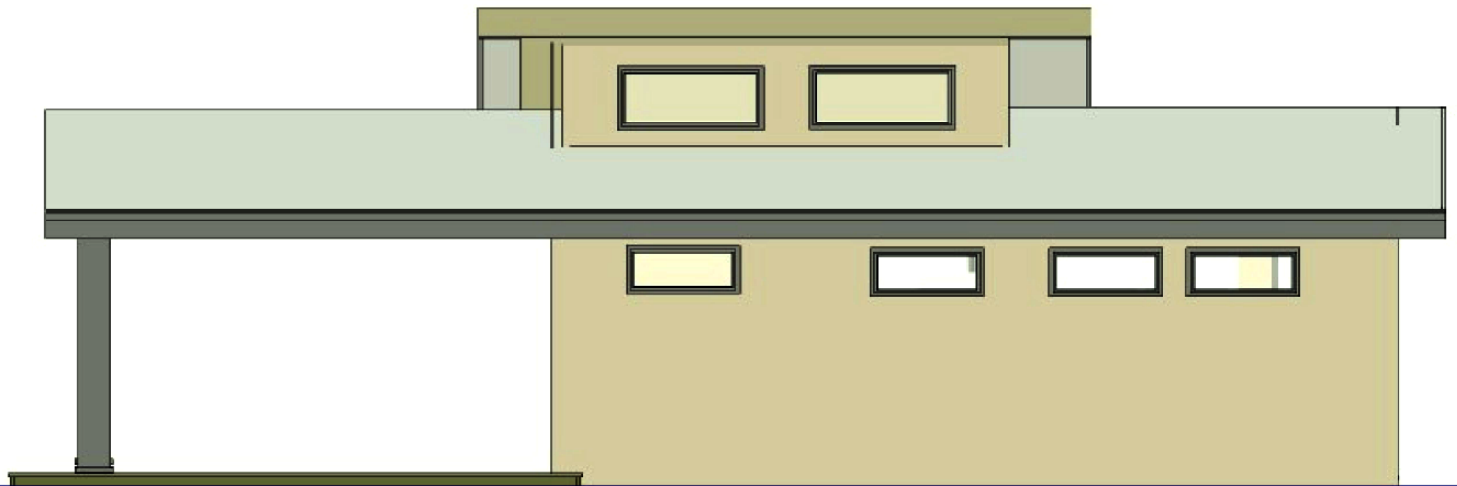
SCALE: 3/16" = 1'-0"

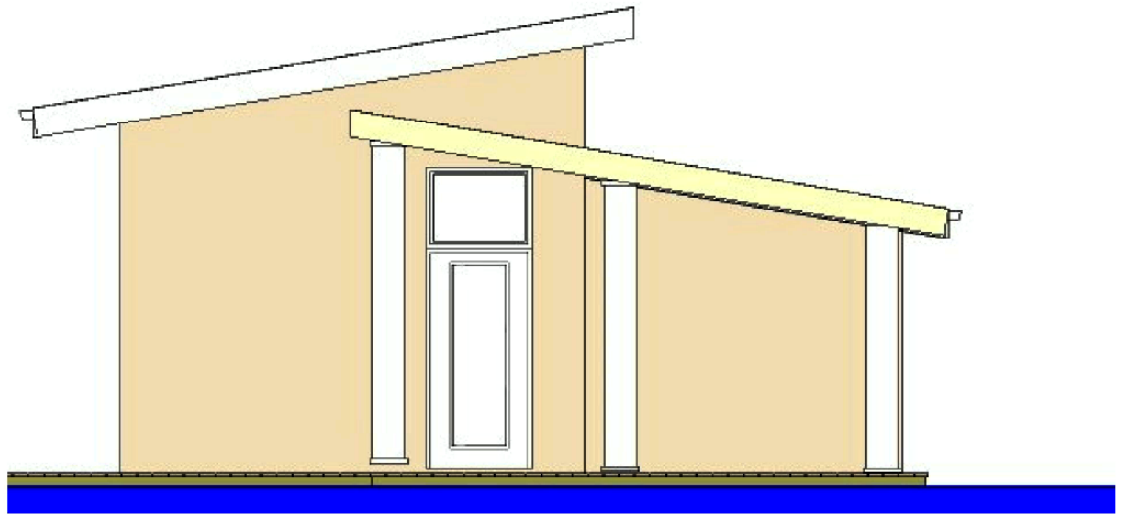
CASE: CDP 2017-0043
OWNER: FORSMAN, Frances
APN: 142-032-05-05
APLCT: Frances A. Forsman
AGENT: Teresa Spade
ADDRESS: 30101 S. Highway 1, Gualala

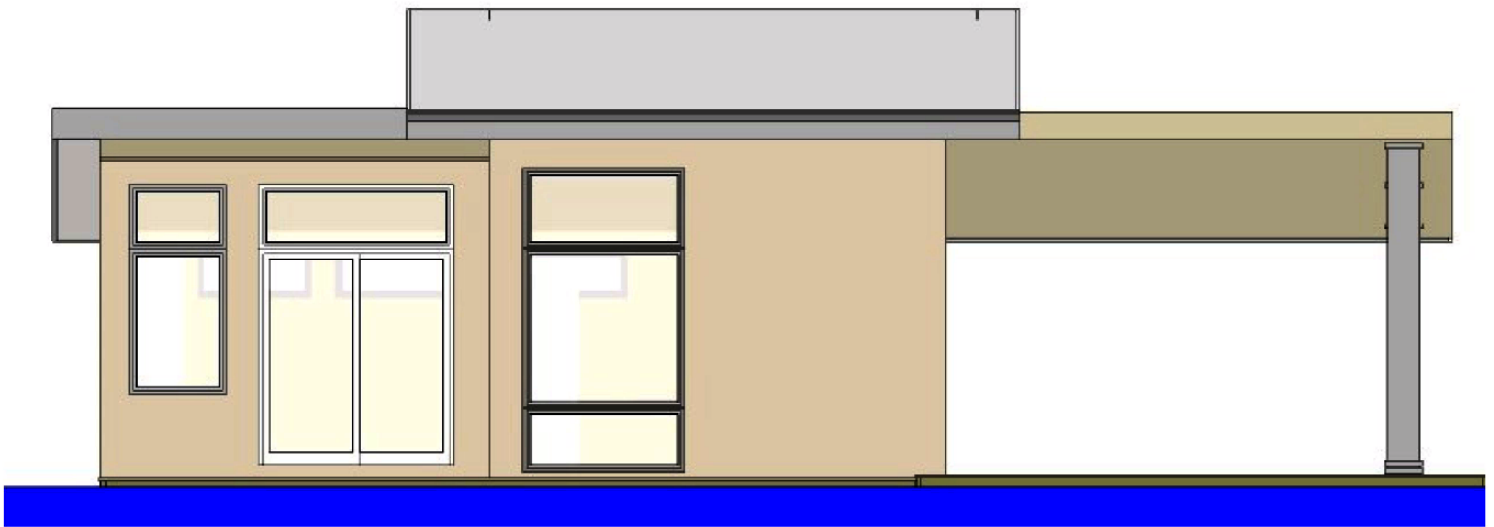
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REVISED FLOOR PLAN

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CASE: CDP 2017-0043
OWNER: FORSMAN, Frances
APN: 142-032-05-05
APLCT: Frances A. Forsman
AGENT: Teresa Spade
ADDRESS: 30101 S. Highway 1, Gualala

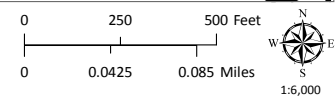
NO SCALE

REVISED ELEVATIONS (WEST)



CASE: CDP 2017-0043
OWNER: FORSMAN, Frances
APN: 142-032-05-05
APLCT: Frances A. Forsman
AGENT: Teresa Spade
ADDRESS: 30101 S. Highway 1, Gualala

 Zoning Districts




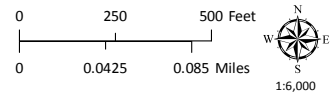
ZONING DISPLAY MAP

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CASE: CDP 2017-0043
OWNER: FORSMAN, Frances
APN: 142-032-05-05
APLCT: Frances A. Forsman
AGENT: Teresa Spade
ADDRESS: 30101 S. Highway 1, Gualala

 General Plan Classes



GENERAL PLAN CLASSIFICATION

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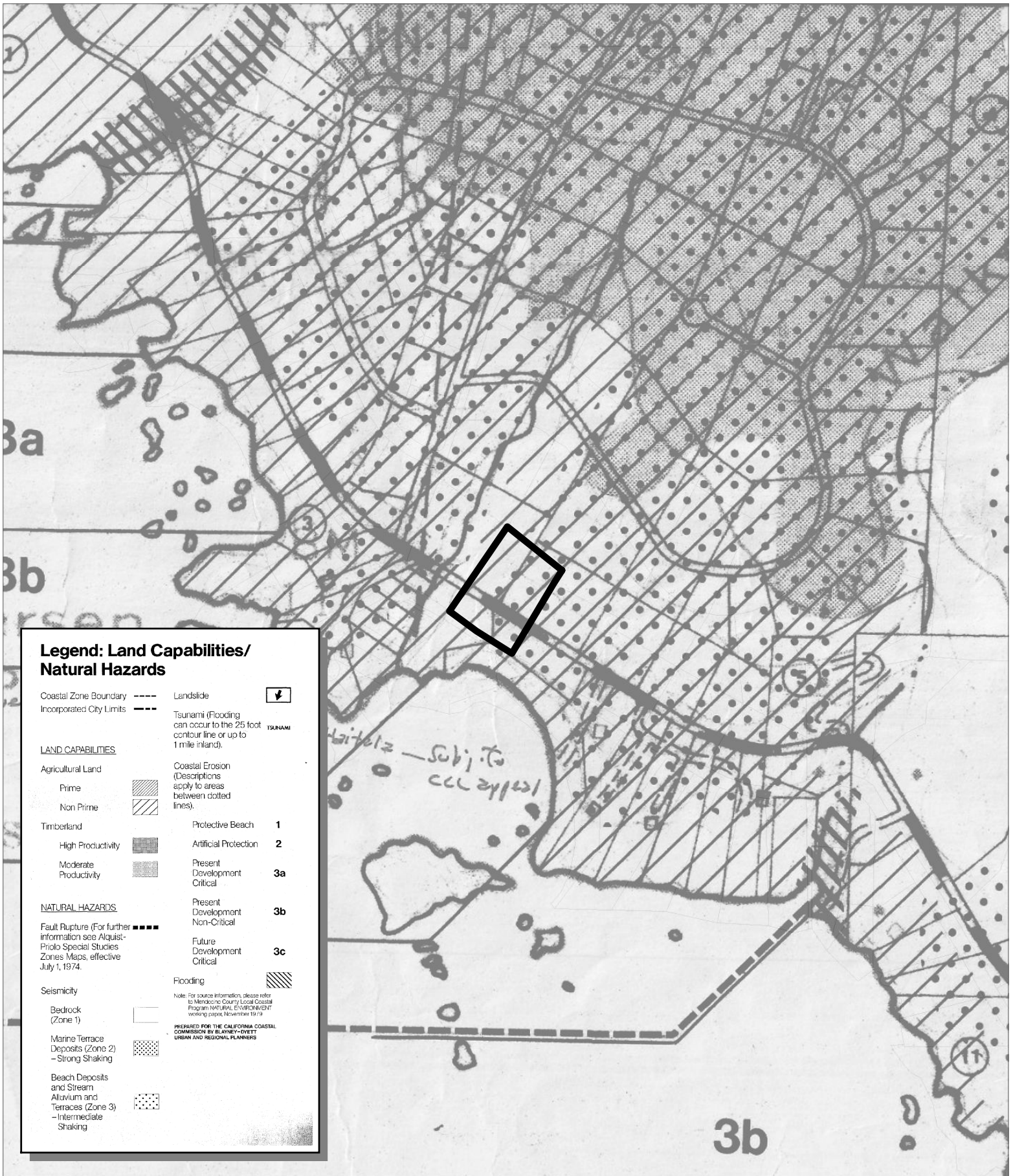


CASE: CDP 2017-0043
 OWNER: FORSMAN, Frances
 APN: 142-032-05-05
 APLCT: Frances A. Forsman
 AGENT: Teresa Spade
 ADDRESS: 30101 S. Highway 1, Gualala



LCP LAND USE MAP 28: SCHOONER GULCH

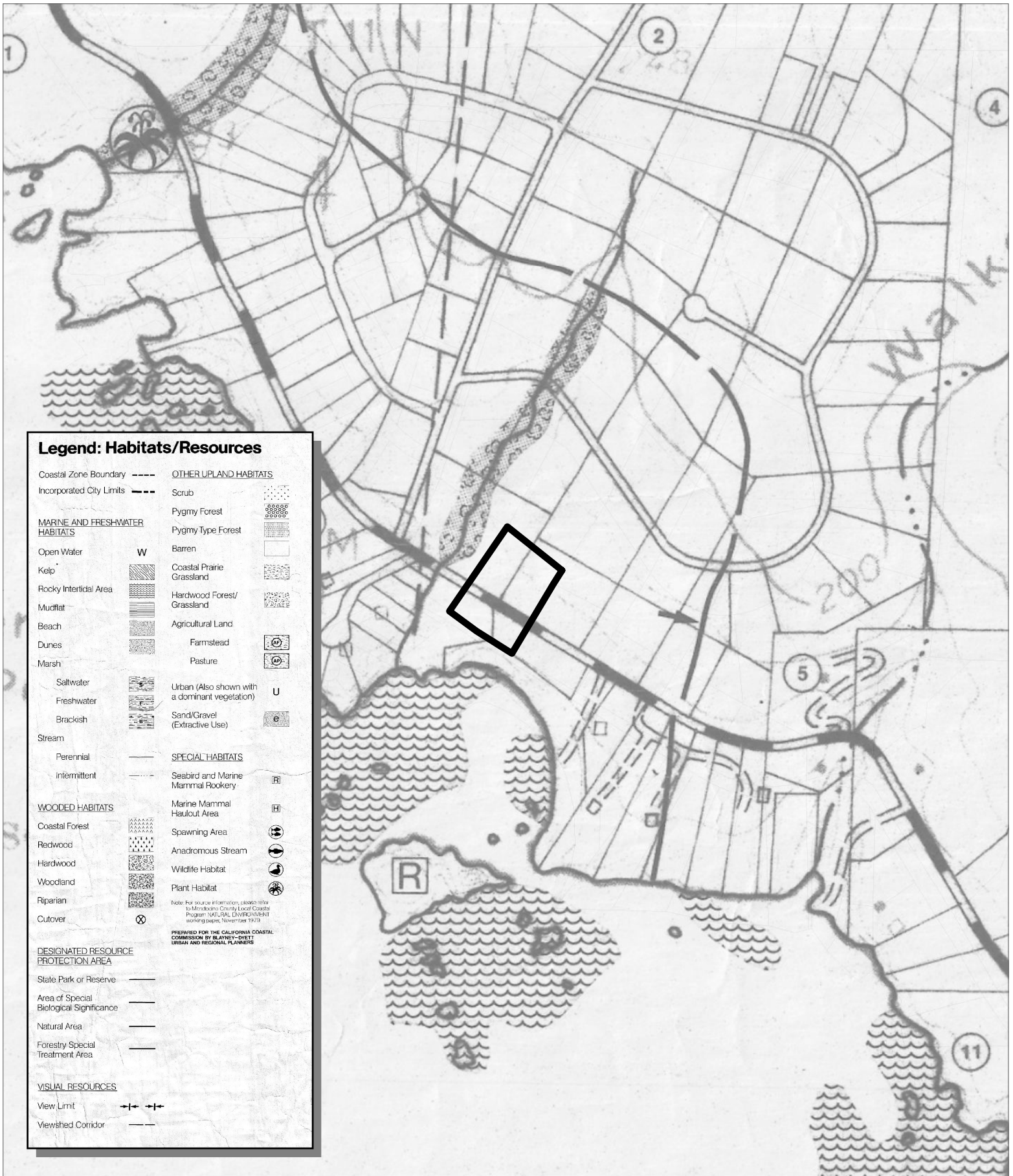
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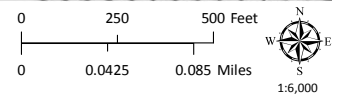
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OWNER: FORSMAN, Frances
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LCP LAND CAPABILITIES & NATURAL HAZARDS

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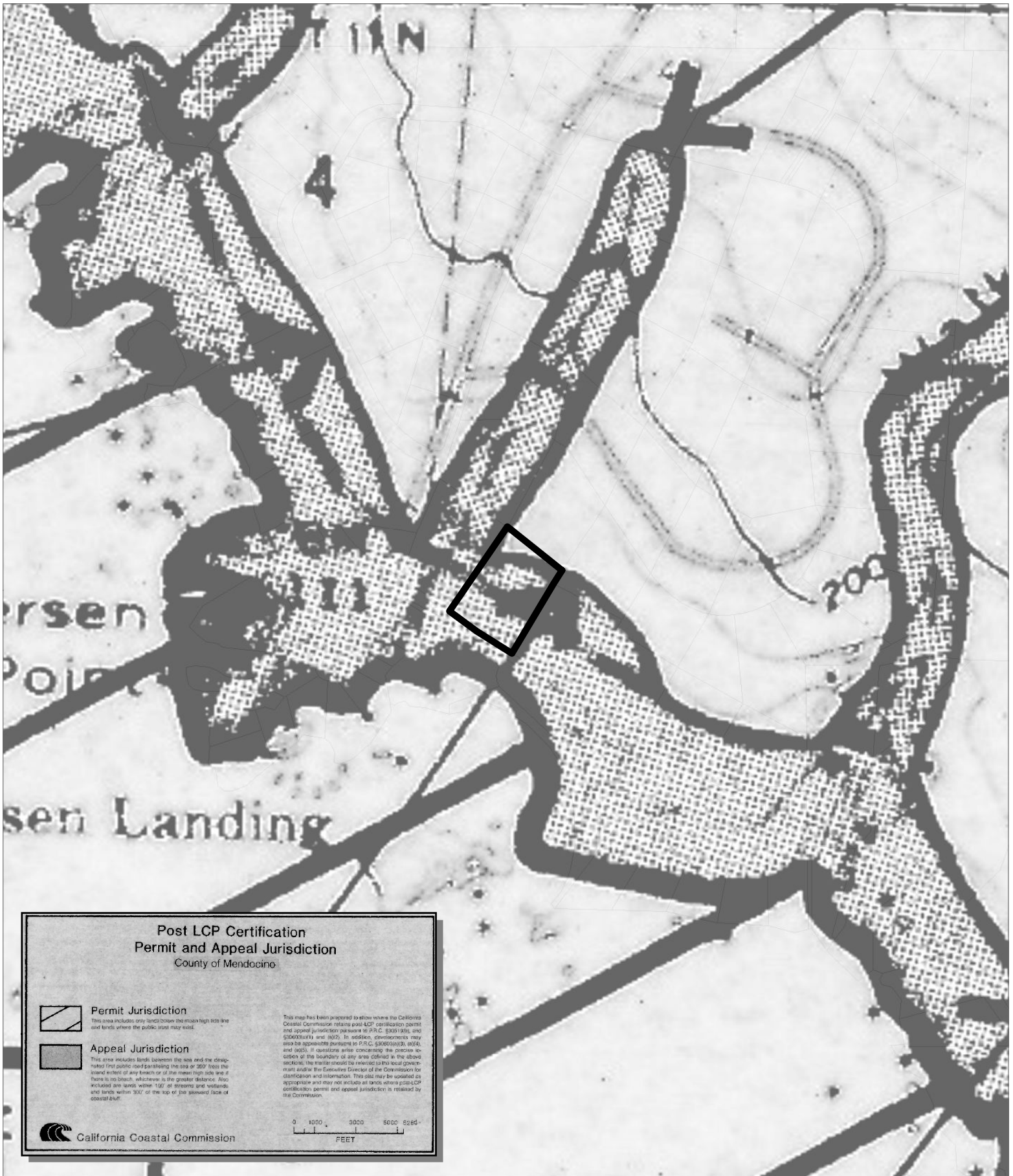


CASE: CDP 2017-0043
 OWNER: FORSMAN, Frances
 APN: 142-032-05-05
 APLCT: Frances A. Forsman
 AGENT: Teresa Spade
 ADDRESS: 30101 S. Highway 1, Gualala



LCP HABITATS & RESOURCES

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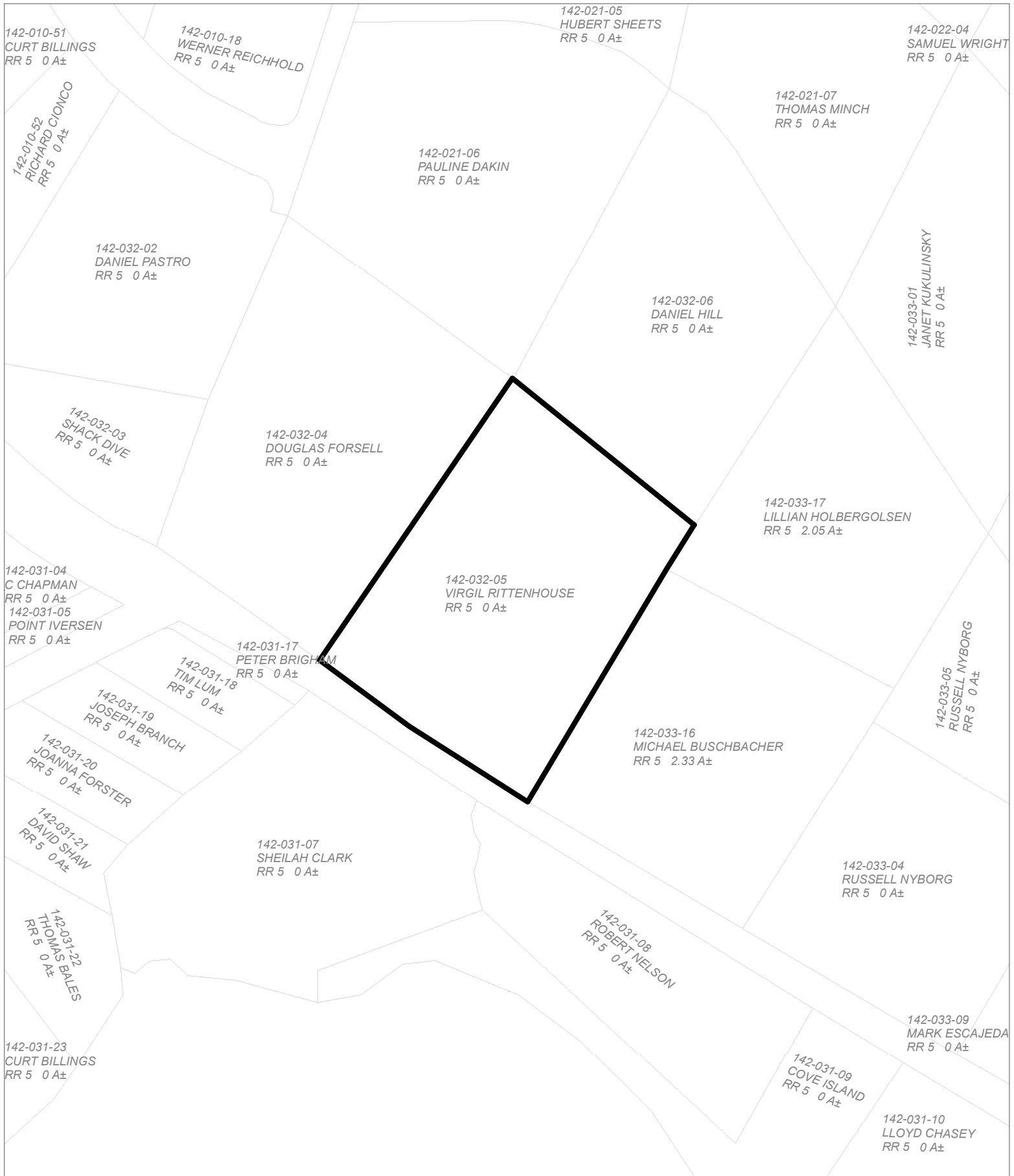


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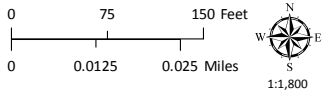


APPEALABLE AREAS

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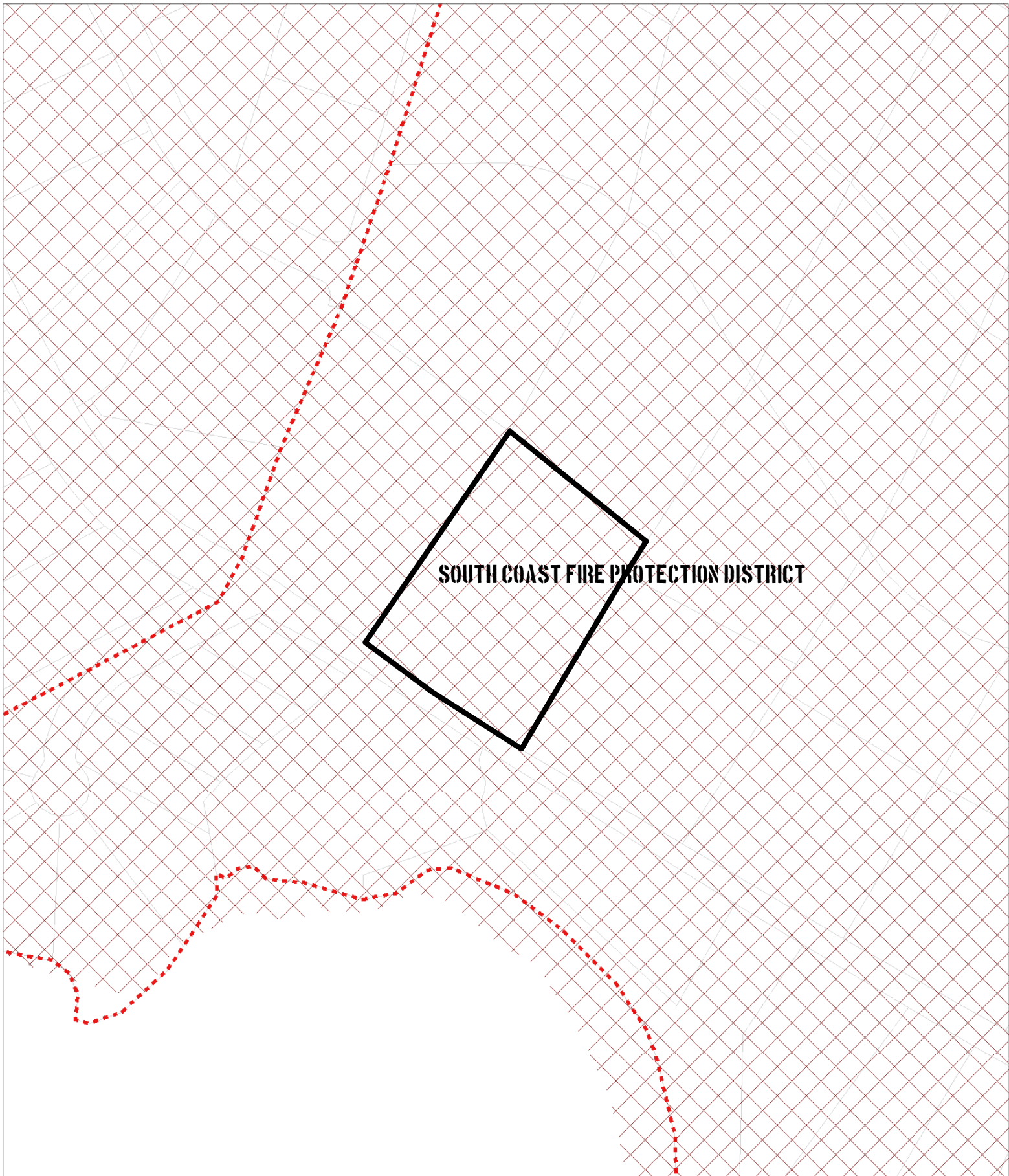


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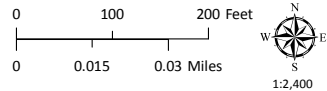
ADJACENT PARCELS

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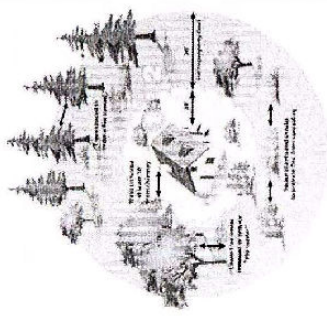
 County Fire Districts
 High Fire Hazard



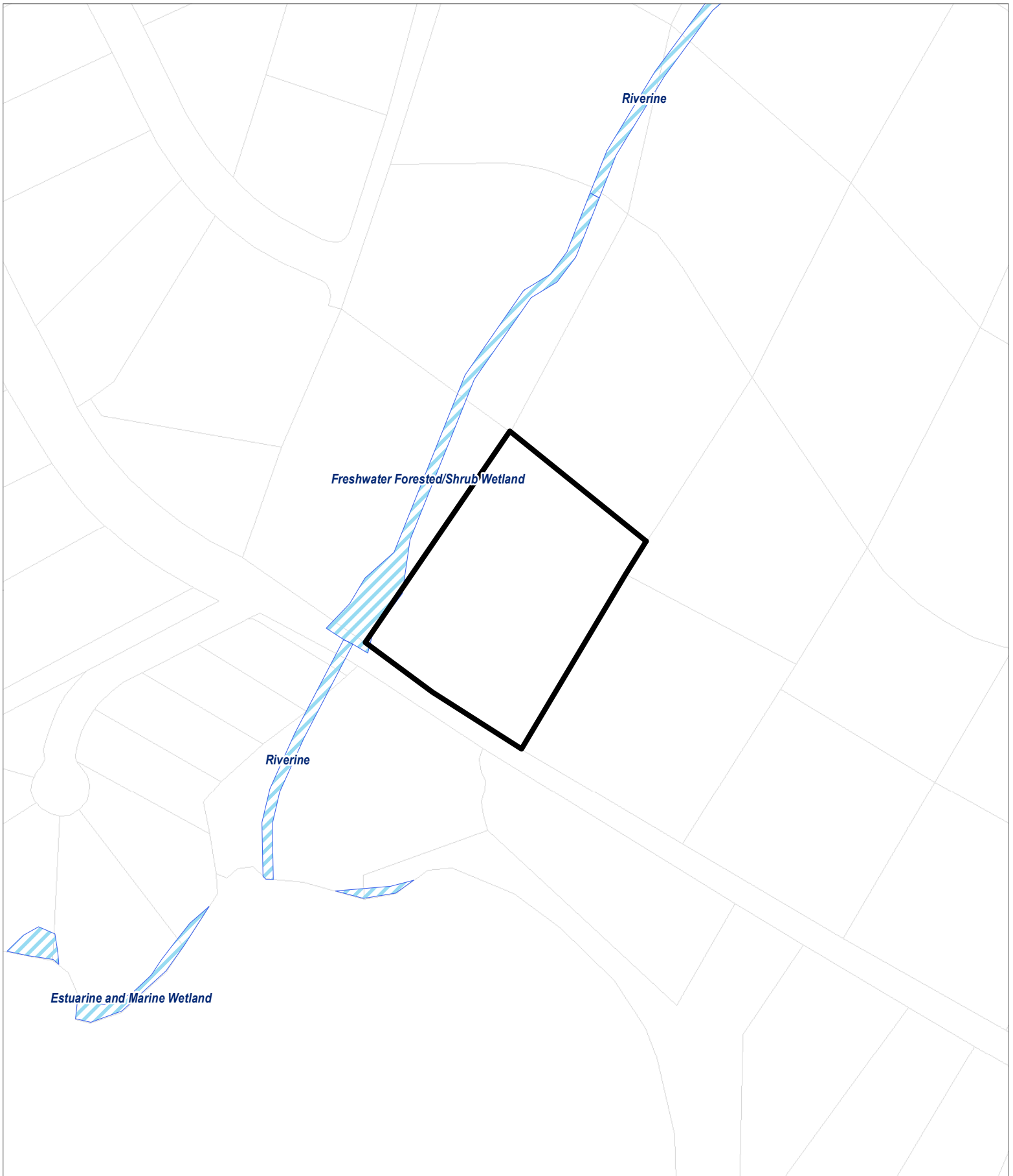
FIRE HAZARD ZONES & RESPONSIBILITY AREAS
STATE RESPONSIBILITY AREA

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A diagram showing a tree with a trunk of 15 feet and a shadow cast by the tree.

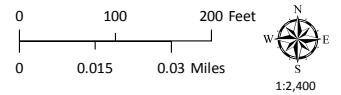


FIRE SAFE PLAN	1:30	1
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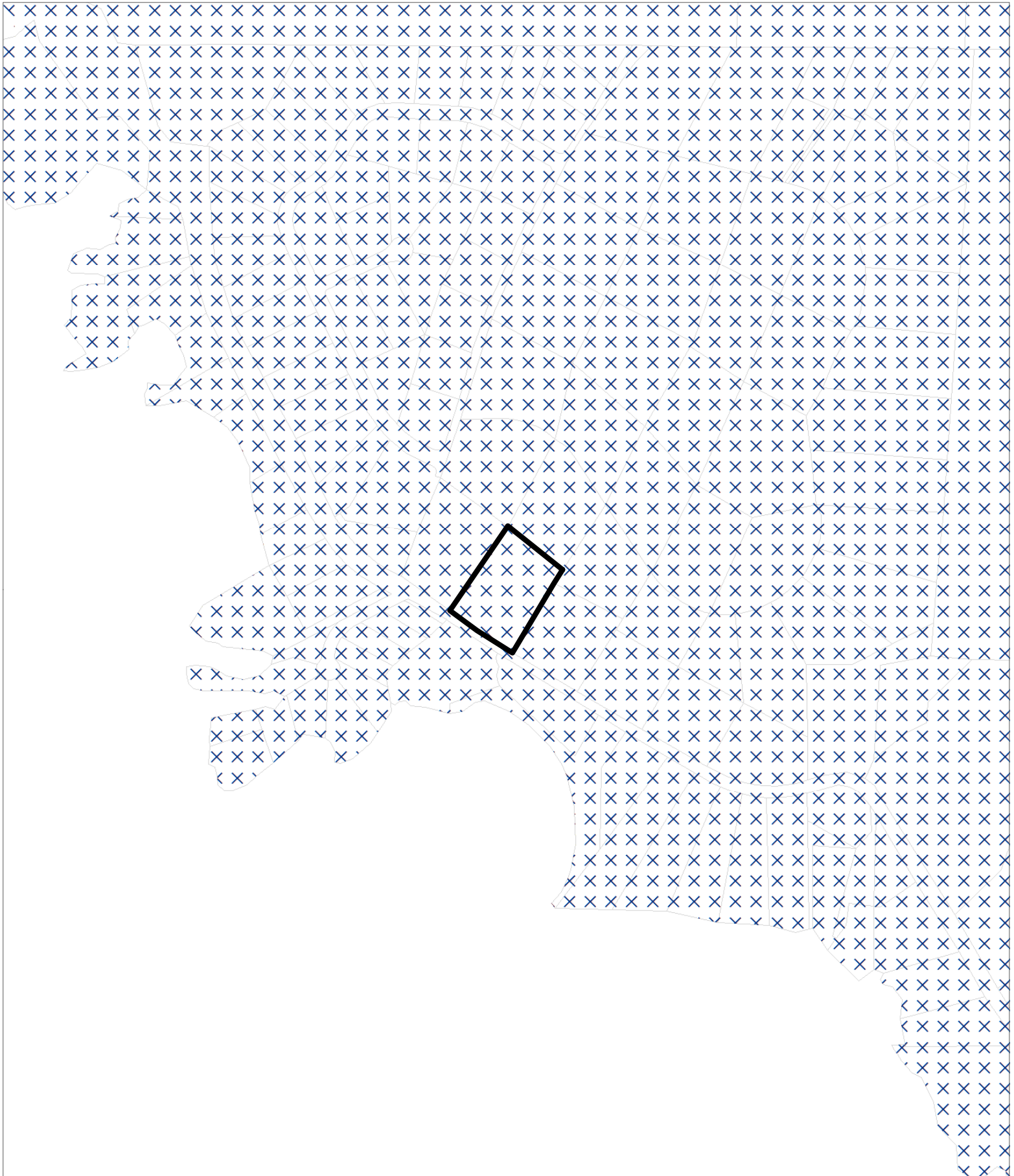
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 National Wetlands Inventory



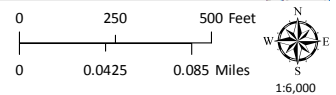
WETLANDS

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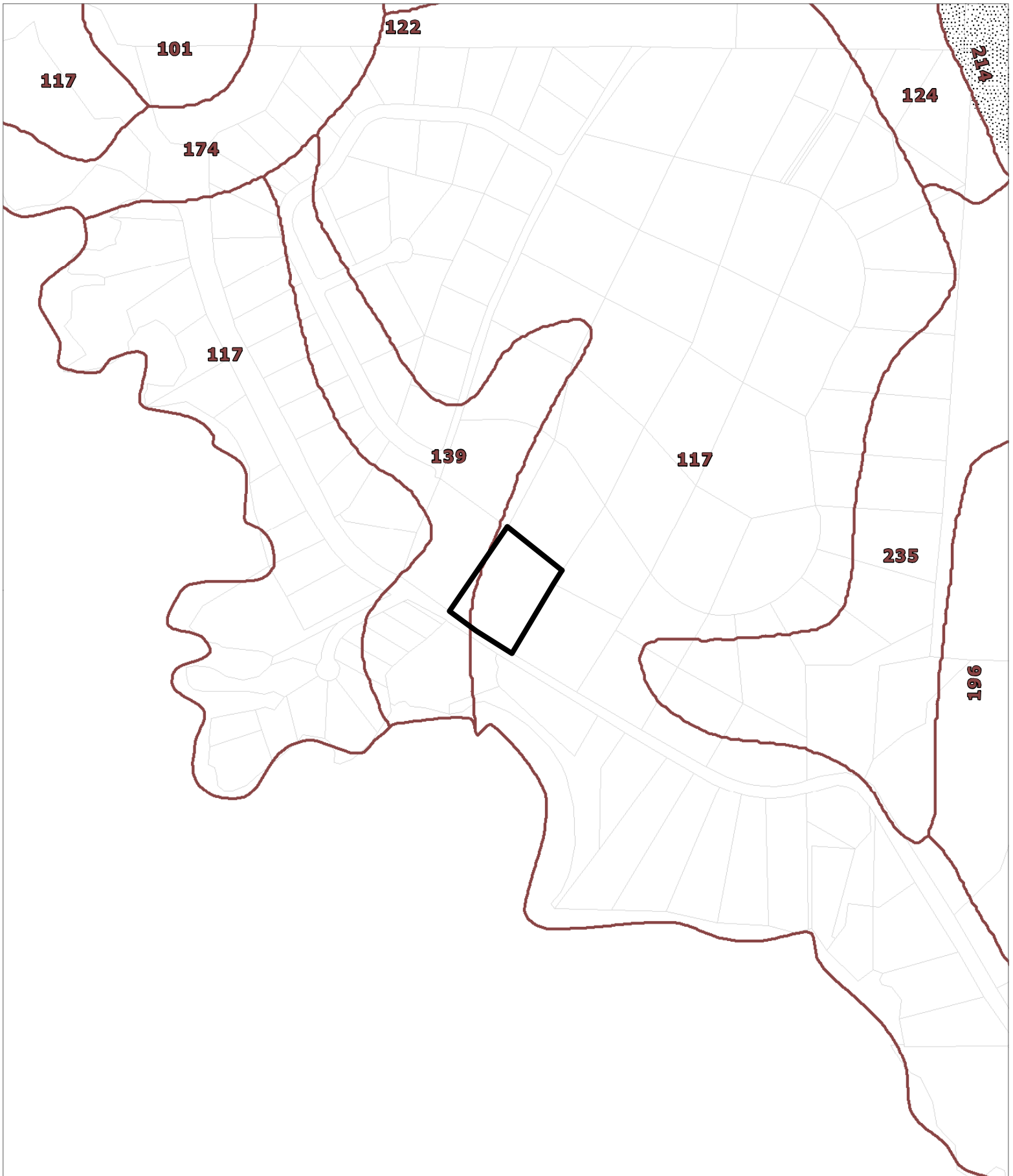
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X X Critical Water Areas





GROUND WATER RESOURCES

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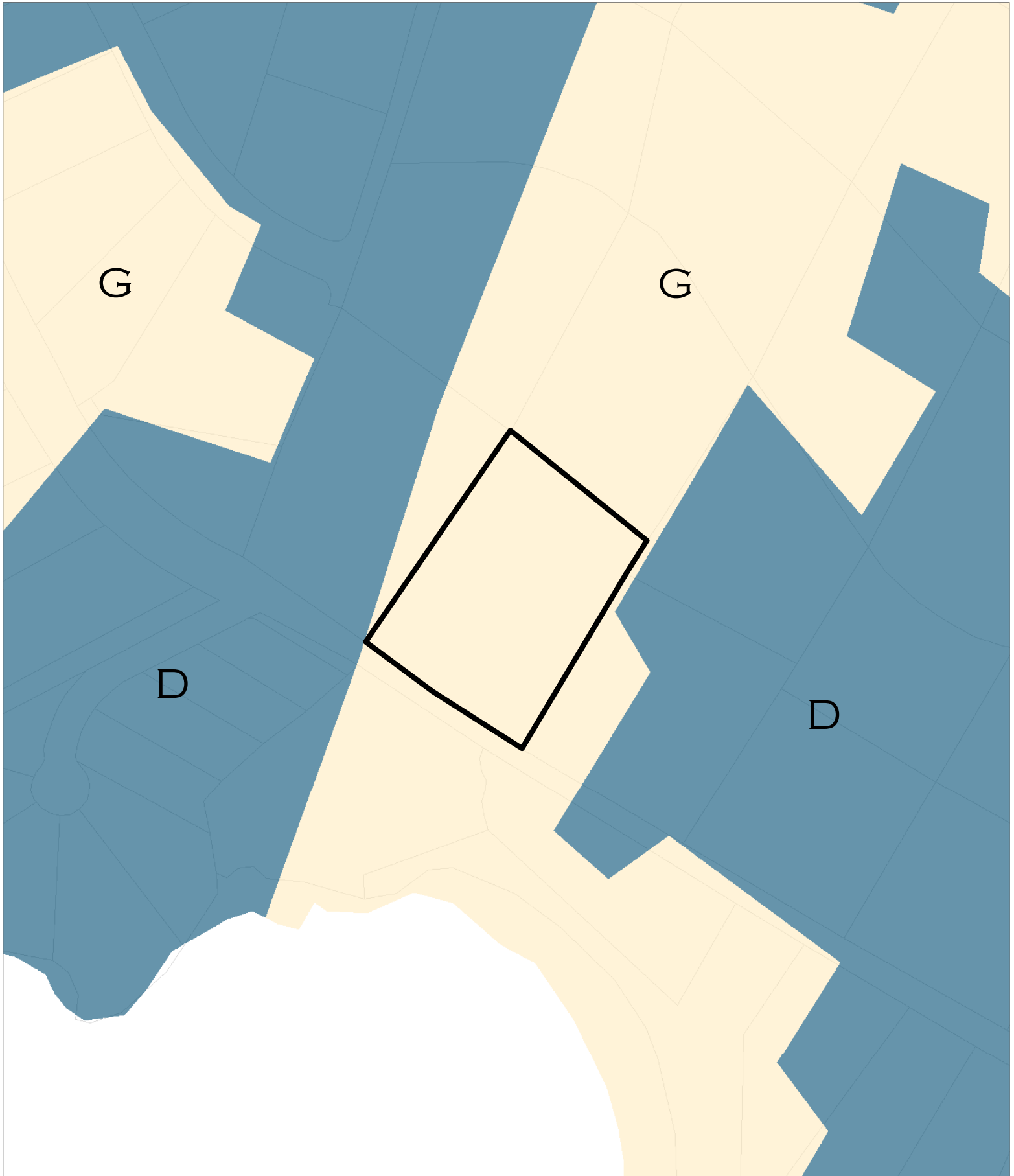
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 Western Soil Classes
 Shinglemill-Gibney Complex

0 250 500 Feet
0 0.0425 0.085 Miles
N
W
S
E
1:6,000

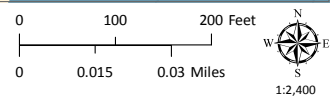
LOCAL SOILS

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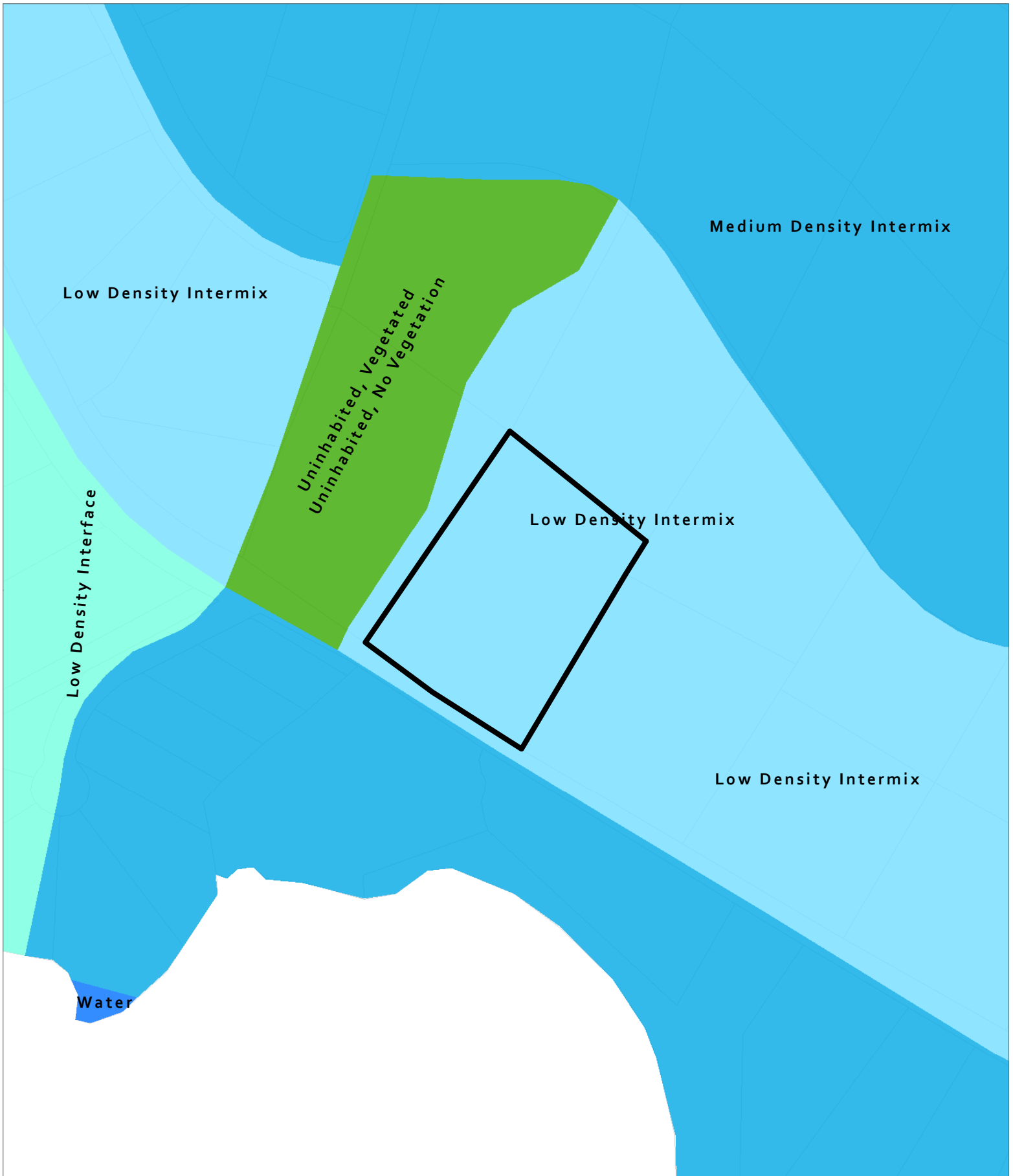
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- Urban & Built-Up Land (D)
- Grazing Land (G)



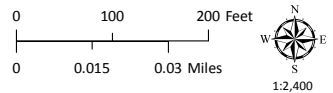
IMPORTANT FARMLAND

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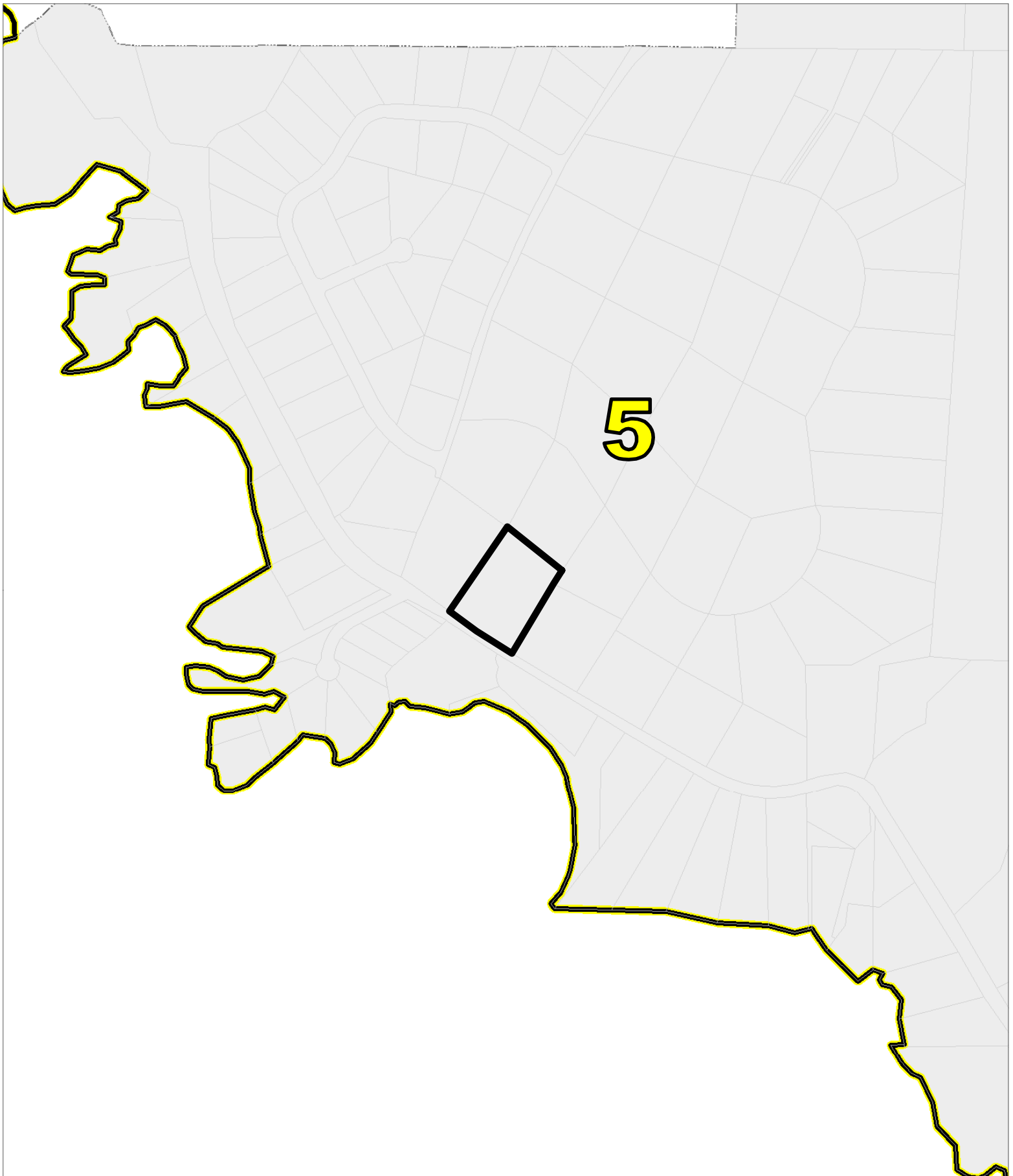
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Water





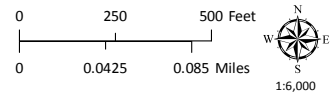
WILDLAND-URBAN INTERFACE ZONES

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 Supervisorial Districts 2010
 Gualala MAC



MISC DISTRICTS

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