




**DRAFT** Grazing Management Plan  
Santa Teresa County Park,  
San Jose, CA



April 21, 2011

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# Collaborators:

- LD Ford Rangeland Management and Conservation Science: Larry Ford and Devii Rao
- EcoSystems West Consulting Group: Bill Davilla, Justin Davilla, Kim Glinka, and Erin McGinty
- Entomological Consulting Services, Ltd.: Dick Arnold
- HydroScience: Toby Hanes
- S Singer Environmental and Ecological Services: Steve Singer
- County of Santa Clara, Parks and Recreation Department: Don Rocha and Dan Clark

# Primary Challenges to Develop the Grazing Management Plan for STCP:

- Improve and maintain habitat quality for numerous special-status animals, plants, and natural communities using cattle grazing as primary management tool;
- Especially habitat for the threatened Bay Checkerspot Butterfly and other serpentine grassland species;
- Determine requirements and locations for new infrastructure to support viable cattle grazing operation;
- Minimize conflicts with existing transportation and recreational uses, and neighbors.



IBM-ARC

- ~1700 acres, 790 grazable
- Serpentine outcrops and soils
- Riparian areas and wetlands
- Ravines and excluded areas
- No grazing infrastructure

# Planning Approach:

- Based on best-available science--scholarship and reliance on experts, including rancher;
- Maximize benefits to special resources, minimize impacts, and maintain sustainable livestock operation;
- Defines objectives and performance standards, not tactics or specific practices;
- Must be feasible and flexible for livestock operation, with incentives for cooperation;
- Plan will be a comprehensive reference document for managers;
- Plan will be adaptable based on efficient monitoring.



- Bisected by roads and recreational trails
- Neighboring high-density residential areas, private inholdings, and golf course
- Opportunity for cooperation with neighboring grazed rangelands

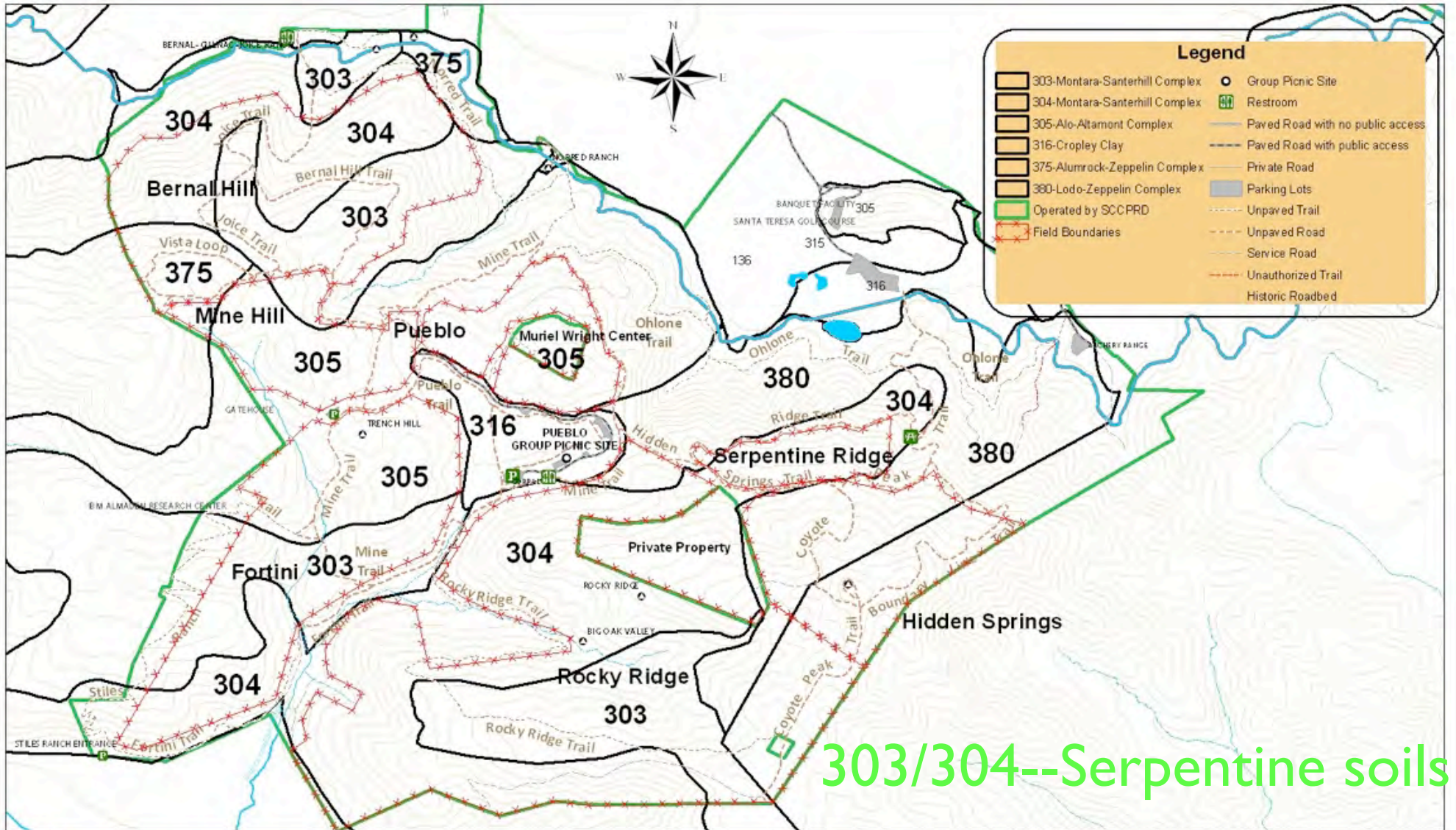
# *DRAFT* STCP Grazing Management Plan Outline:

1. Introduction
2. Summary of Current Conditions Affected by Livestock Grazing
3. Management Goals, Objectives, and Performance Standards
4. Predicted Effects and Desired Conditions
5. Grazing Management Specifications
6. Operations Guidelines, Incentives, and Contingencies
7. Monitoring of Conditions and Planned Effects on Resources Related to Grazing
8. Assumptions and Recommended Supplementary Planning
9. References Cited

# *DRAFT* STCP Primary Grazing Management Goals:

1. Maintain rangeland conditions for persistence of special habitat;
2. Maintain health of the rangeland ecosystem;
3. Reduce fire hazards;
4. Minimize the impacts of “pest” plants;
5. Maintain recreational opportunities;
6. Maintain conditions to sustain a cattle operation;
7. Provide for a cooperative and productive relationship between County and Cattle Operator.



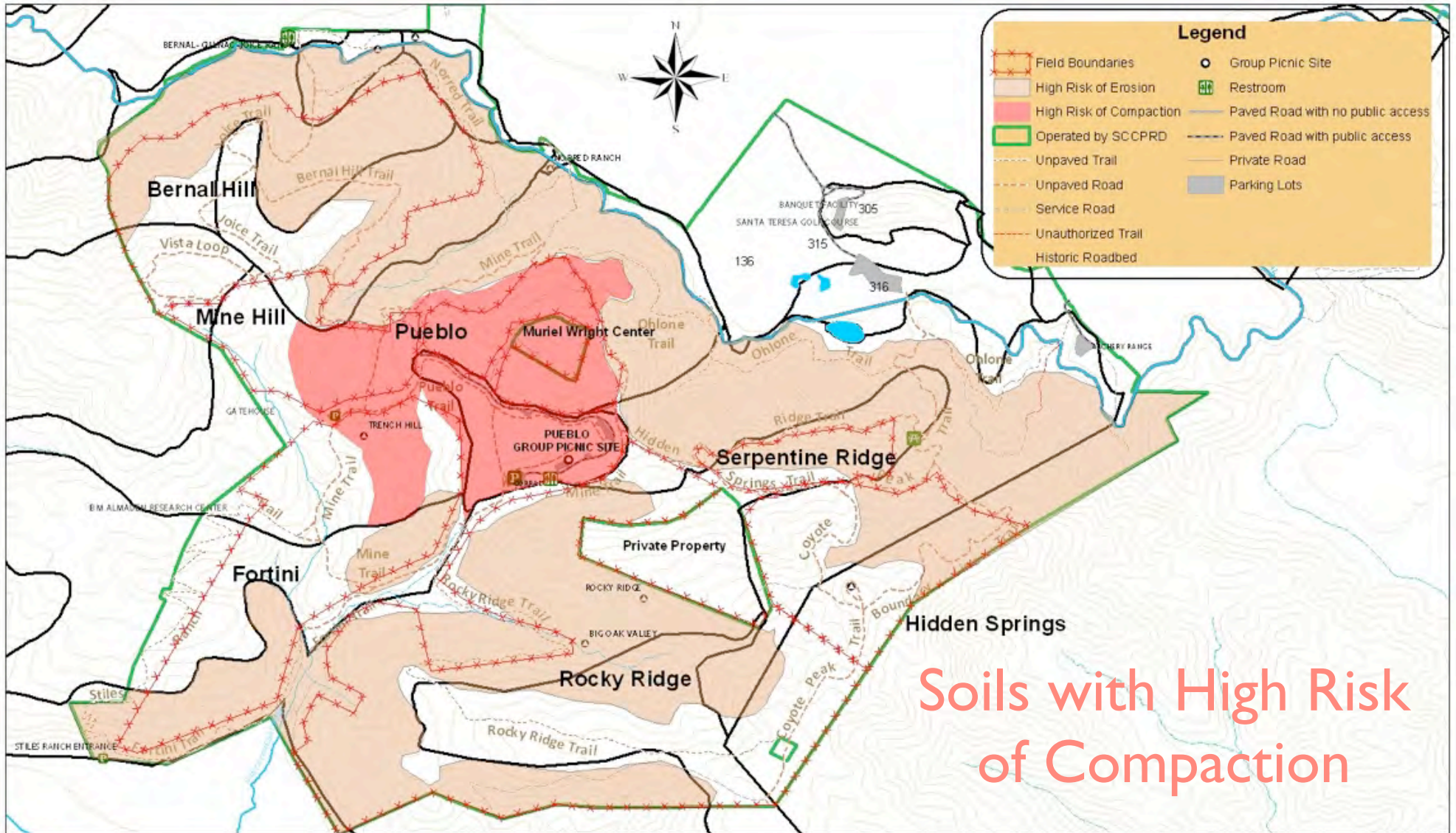


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Title: Soils/Contour Map-Santa Teresa County Park  
 Date: March 7, 2011

Comments:  
 Created By: DRocha





# Soils with High Risk of Compaction



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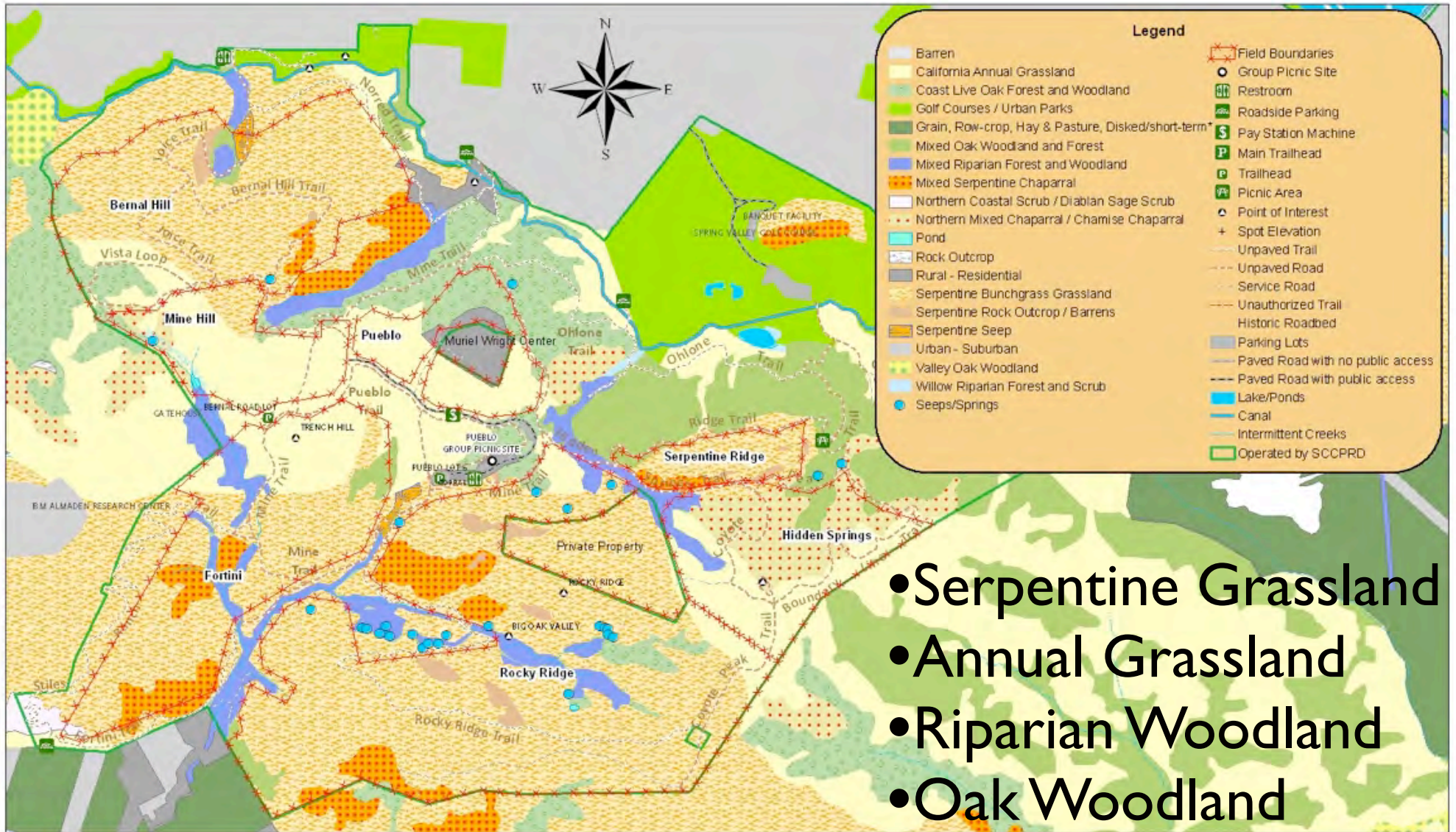
Title: Soil Susceptibility to Surface Erosion or Compaction  
Map-Santa Teresa County Park

Date: March 7, 2011

Comments:

Created By: DRocha





- Serpentine Grassland
- Annual Grassland
- Riparian Woodland
- Oak Woodland



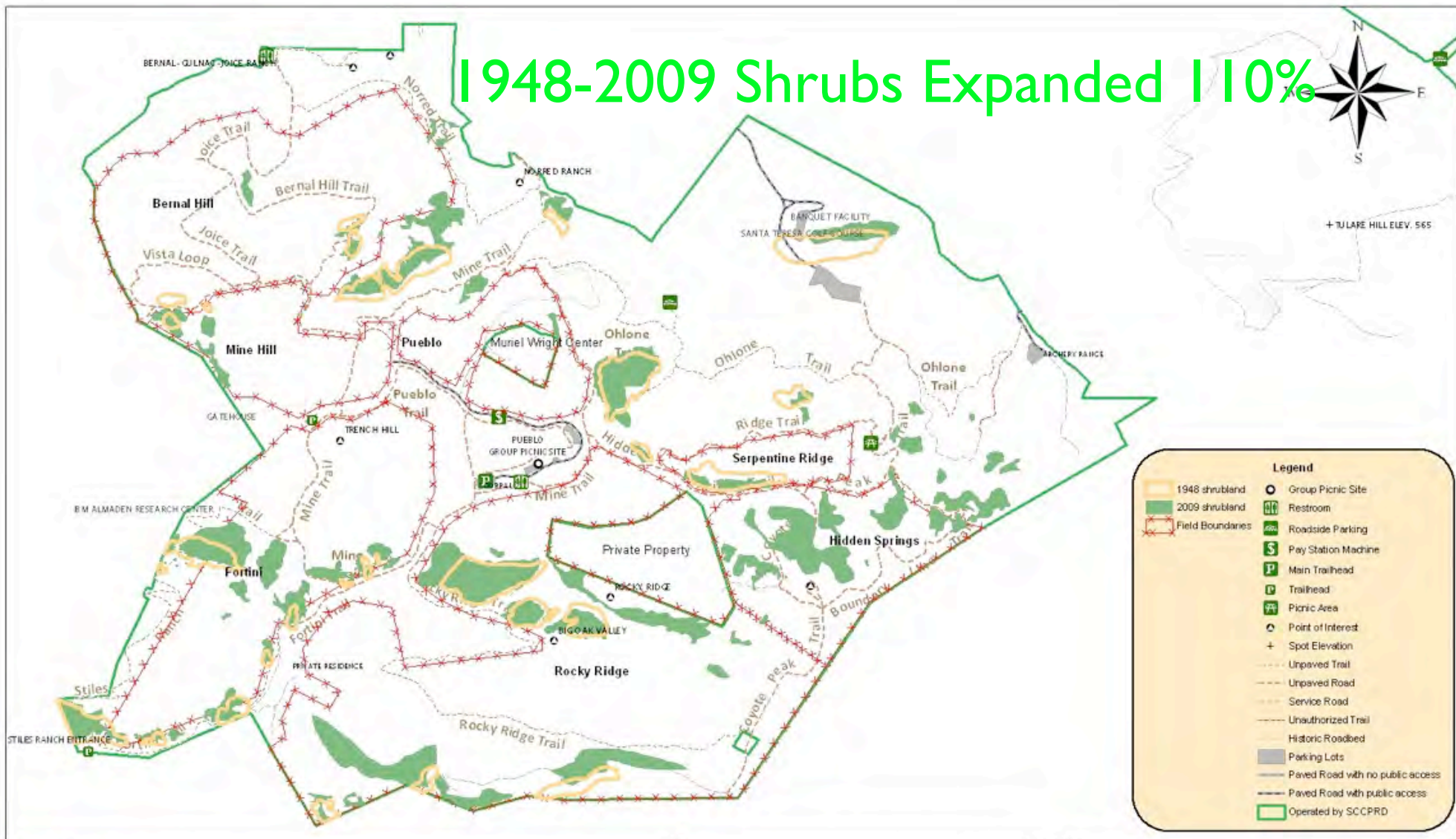
This map generated by the County of Santa Clara Department of Parks and Recreation. The GIS files were compiled from various sources. While deemed reliable, the Department assumes no liability.

Title: Vegetation Type Map-Santa Teresa County Park  
 Date: March 25, 2011

Comments:  
 Created By: DRocha

Scale: 0 250 500 1140 1710 2280 Feet

# 1948-2009 Shrubs Expanded 110%



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Title:	Shrub Encroachment Map-Santa Teresa County Park
Date:	March 16, 2011

Comments:	
Created By:	DRocha
Scale:	0 250 500 1,000 1,500 2,000 Feet

Santa Teresa County Park  
Grazing Opportunities on Areas with Serpentine Soils and Vegetation



0 600 1,200 2,400 3,600 4,800 Feet

Drafted April 13, 2010  
Entomological Consulting Services, Ltd.

# Causes of Endangerment:

- Small population size and narrow niche in marginal habitat;
- Habitat loss due to land use conversion to agriculture, then development;
- Habitat degradation due to ecological conversion to aggressive non-native annual grasses, exclusion of fire and grazing, shrub encroachment, pest plant infestations, pollution

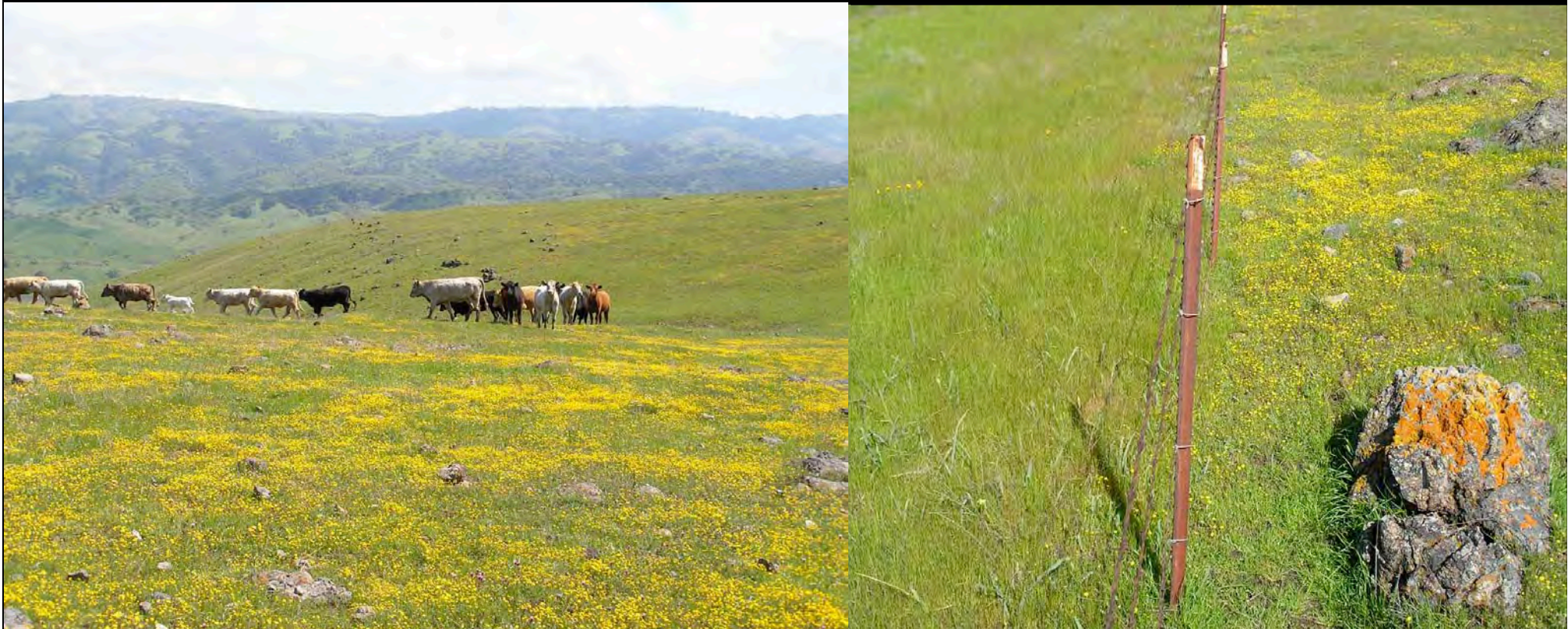
# Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)

- Serpentine soil and rock outcrops, plus associated native-dominated grassland;
- Presence of host plants at appropriate densities;
- Cool to moderate micro-climates (warmer hilltops and slopes; sufficient winter-spring precipitation).

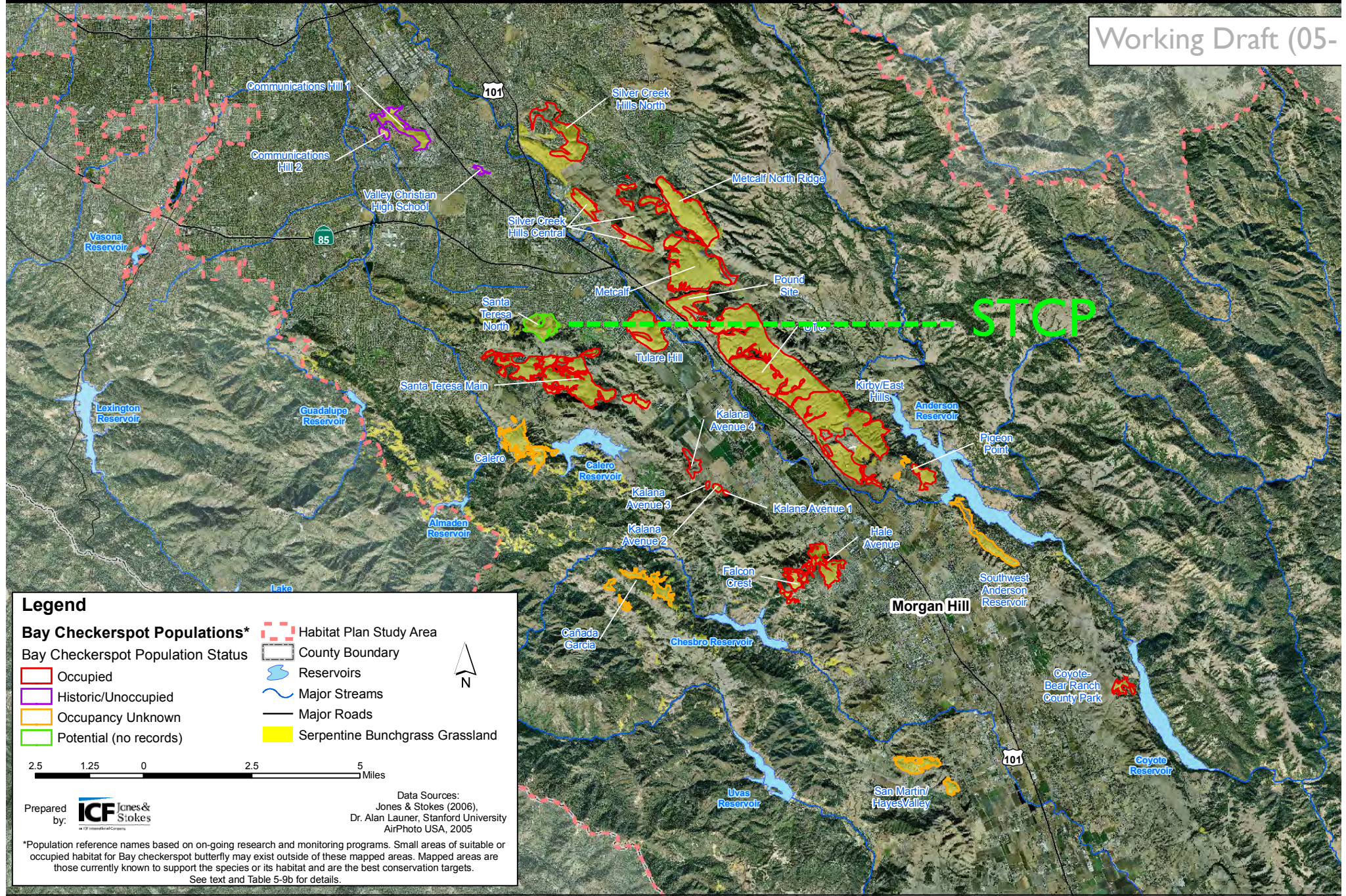


# Bay Checkerspot Butterfly

- Host plants are typically out-competed (for sunlight, nutrients, moisture) by aggressive non-native grassland plants, particularly at weaker serpentine sites;
- Rec'd--flexible grazing management (timing and numbers), based on growing-season grazing of serpentine habitat







**Legend**

**Bay Checkerspot Populations\***

- Occupied
- Historic/Unoccupied
- Occupancy Unknown
- Potential (no records)

**Bay Checkerspot Population Status**

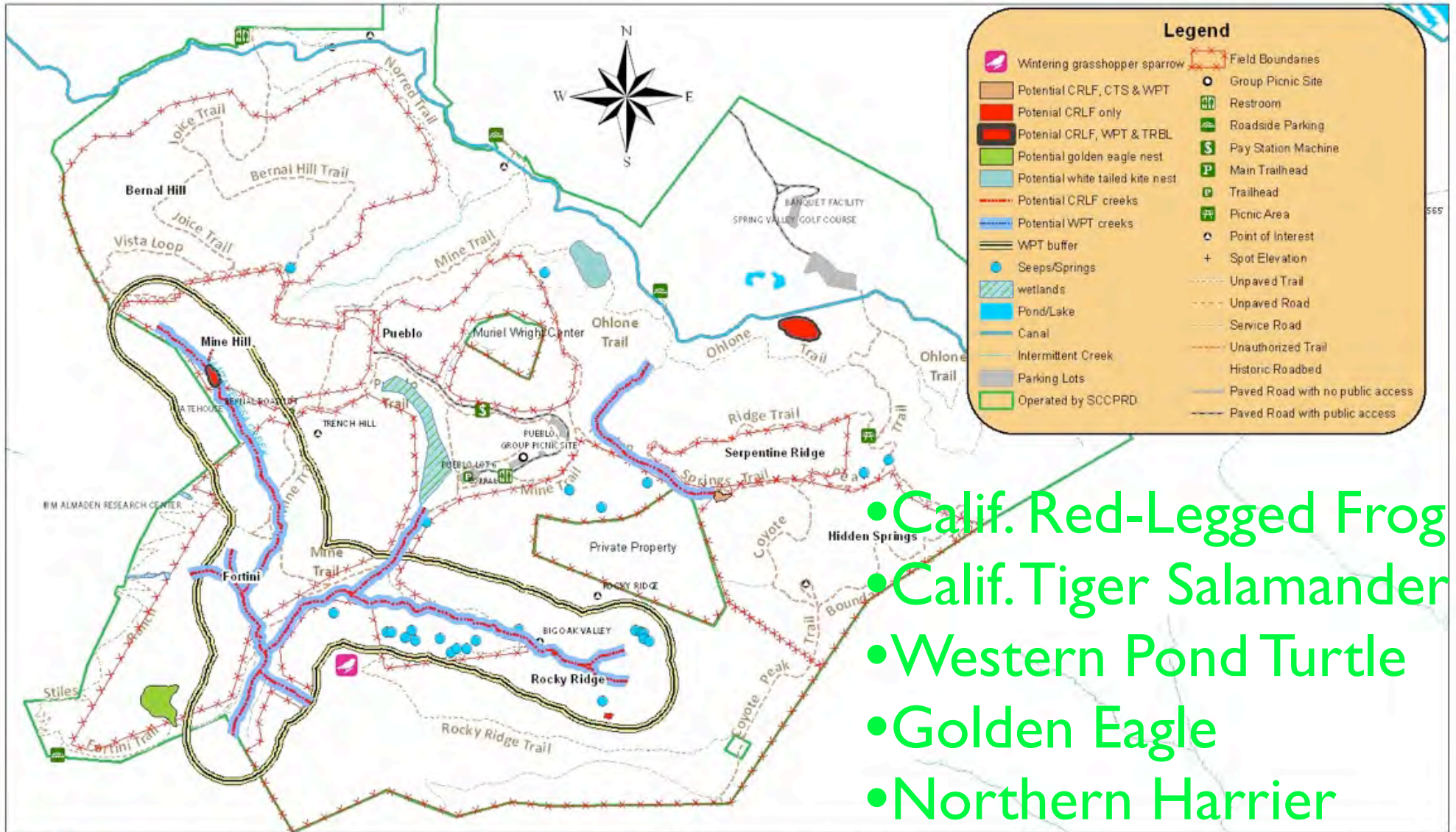
- Habitat Plan Study Area
- County Boundary
- Reservoirs
- Major Streams
- Major Roads
- Serpentine Bunchgrass Grassland

2.5 1.25 0 2.5 5 Miles

Prepared by: **ICF Jones & Stokes**

Data Sources:  
 Jones & Stokes (2006),  
 Dr. Alan Launer, Stanford University  
 AirPhoto USA, 2005

\*Population reference names based on on-going research and monitoring programs. Small areas of suitable or occupied habitat for Bay checkerspot butterfly may exist outside of these mapped areas. Mapped areas are those currently known to support the species or its habitat and are the best conservation targets. See text and Table 5-9b for details.



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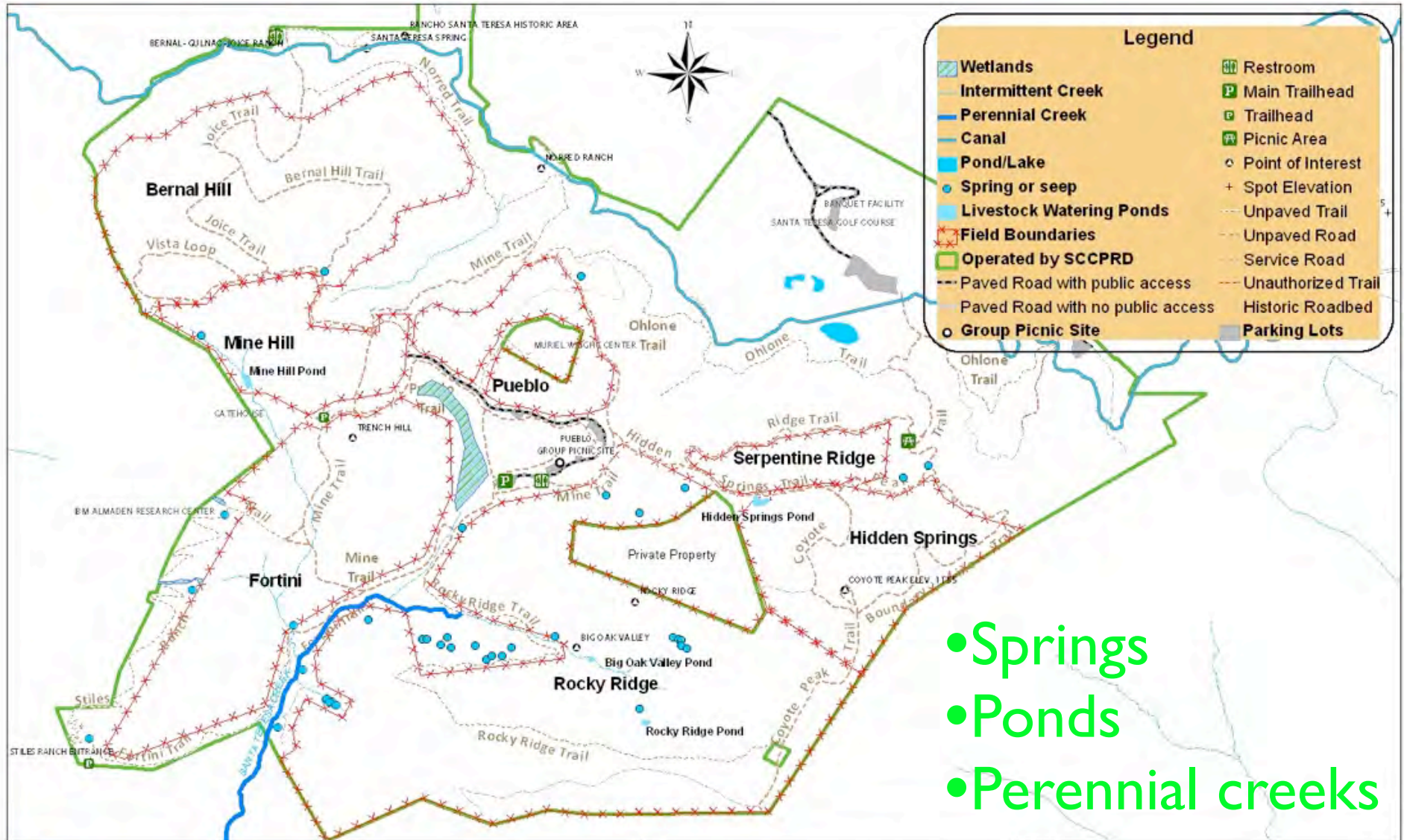
Title: Special Status Vertebrates Map-Santa Teresa County Park

Date: March 25, 2011


Comments:

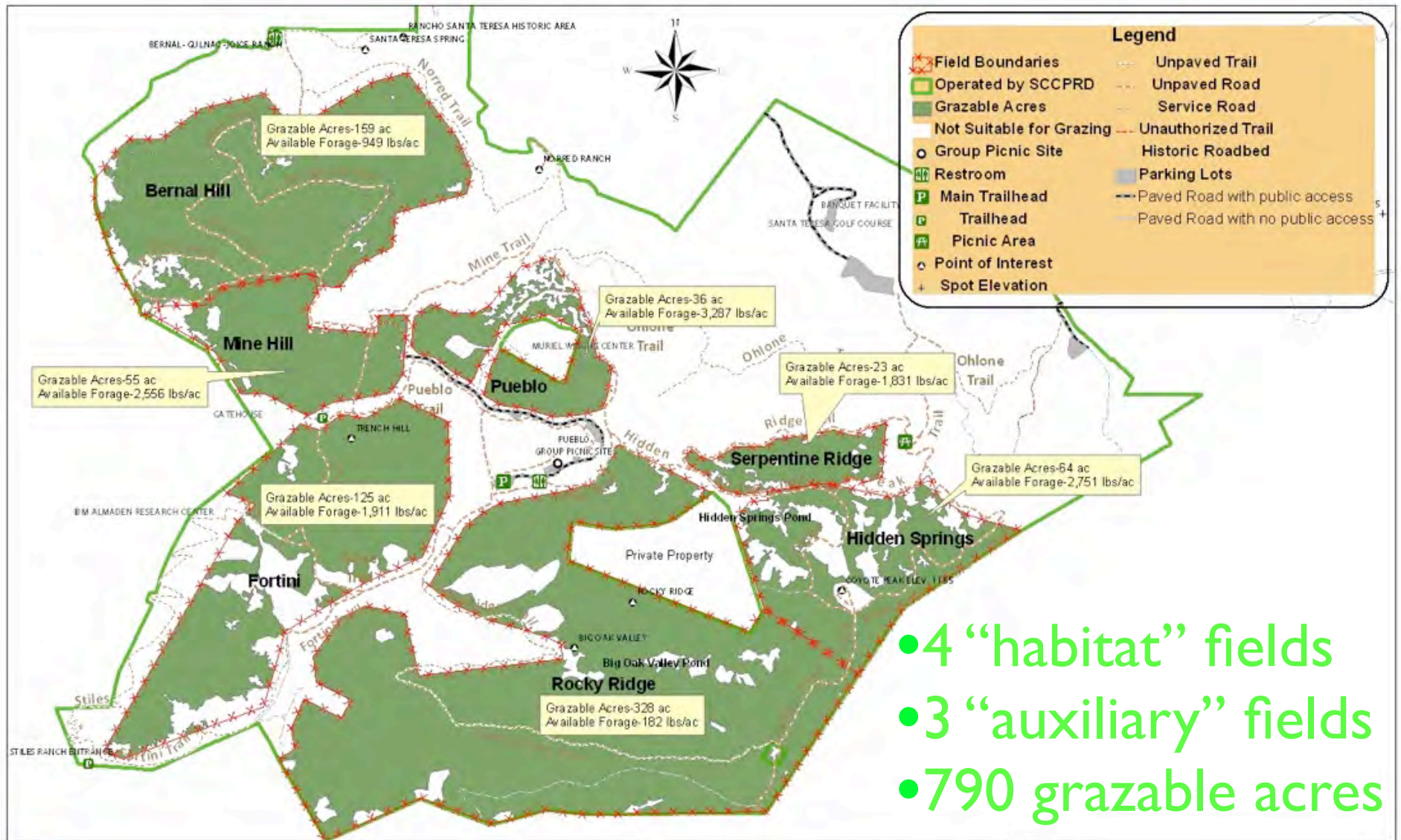
Created By: DRocha

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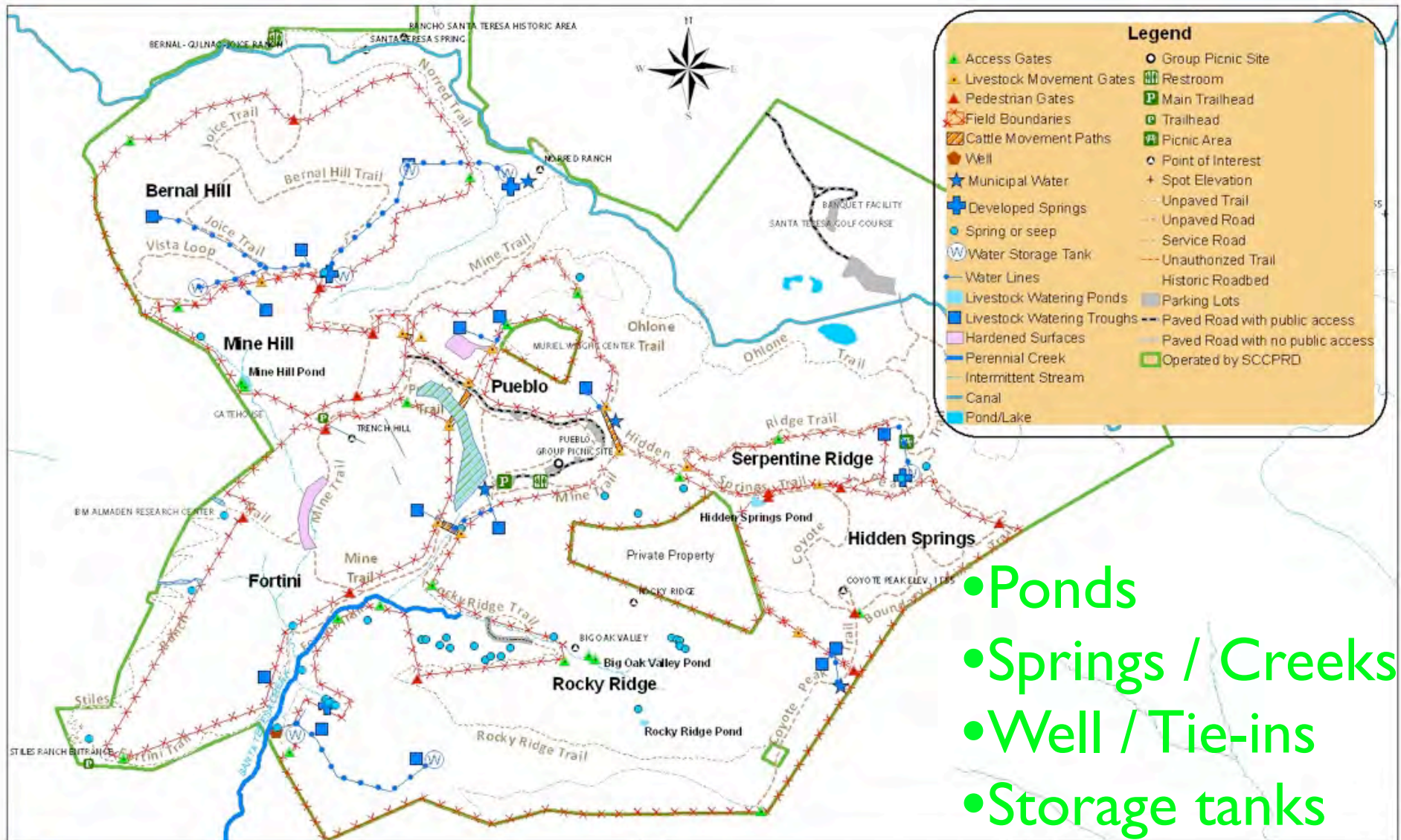
- Springs
- Ponds
- Perennial creeks

 <b>SANTA CLARA COUNTY PARKS</b>	This map generated by the County of Santa Clara Department of Parks and Recreation. The GIS files were compiled from various sources. While deemed reliable, the Department assumes no liability.	Title: Hydrology Map-Santa Teresa County Park	Comments:
		Date: March 7, 2011	Created By: DRocha Scale: 0 265 530 1,060 1,590 2,120 Feet




- 4 “habitat” fields
- 3 “auxiliary” fields
- 790 grazable acres

<p><b>SANTA CLARA COUNTY PARKS</b></p>	<p>This map generated by the County of Santa Clara Department of Parks and Recreation. The GIS files were compiled from various sources. While deemed reliable, the Department assumes no liability.</p>	<p>Title: Grazing Capacity Map-Santa Teresa County Park</p>	<p>Comments:</p>
		<p>Date: March 7, 2011</p>	<p>Created By: DRocha</p> <p>Scale: 0 265 530 1,060 1,590 2,120 Feet</p>



- Ponds
- Springs / Creeks
- Well / Tie-ins
- Storage tanks

 <b>SANTA CLARA COUNTY PARKS</b>	This map generated by the County of Santa Clara Department of Parks and Recreation. The GIS files were compiled from various sources. While deemed reliable, the Department assumes no liability.	Title: Livestock Infrastructure Map-Santa Teresa County Park	Comments:
		Date: March 16, 2011	Created By: DRocha Scale: 0 265 530 1,060 1,590 2,120 Feet