

Lower Yolo Bypass Planning Forum

Solano Multispecies Habitat Conservation Plan/ Yolo County Habitat/Natural Community Conservation Plan

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Natural Community Conservation Plans

- California Endangered Species Act (CESA 1974)
- Natural Community Conservation Planning Act (Section 2835, 1991)
 - Legislation Established a Process for DFG to Work with Local Governments to Plan for Conservation of Biological Resources

Species and Habitats of California

The **California Endangered Species Act** (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved.

Why NCCP?

- Voluntary and locally driven
- Public Process involves wide range of stakeholders = strong buy-in
- Ecosystem/landscape scale approach
- Certainty through assurances
- Increased funding opportunities

- Consider Biological Resources, Agriculture, Development, Infrastructure, Economics
- Provides for Long Term Conservation of Plants and Animals and their habitats
- With DFG and USFWS Authorization for “Incidental Take” of Plants and Animals Covered in the Plan

YOLO NATURAL HERITAGE PROGRAM

Habitat Conservation Plan/Natural Community Conservation Plan



653,629 Acres

69 Covered Species, 2 guilds

5 Natural Communities

Between 12-15,000 acres of Proposed Development

ACRES TO BE PRESERVED: Not yet determined

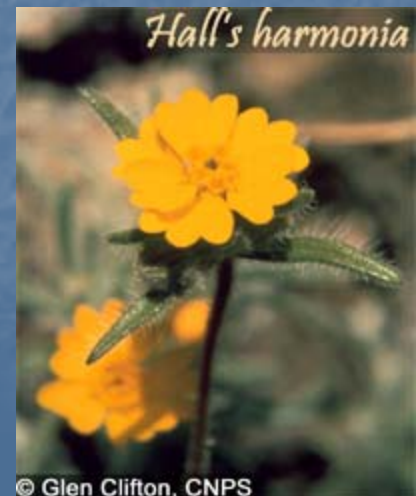


What is the Yolo Natural Heritage Program?

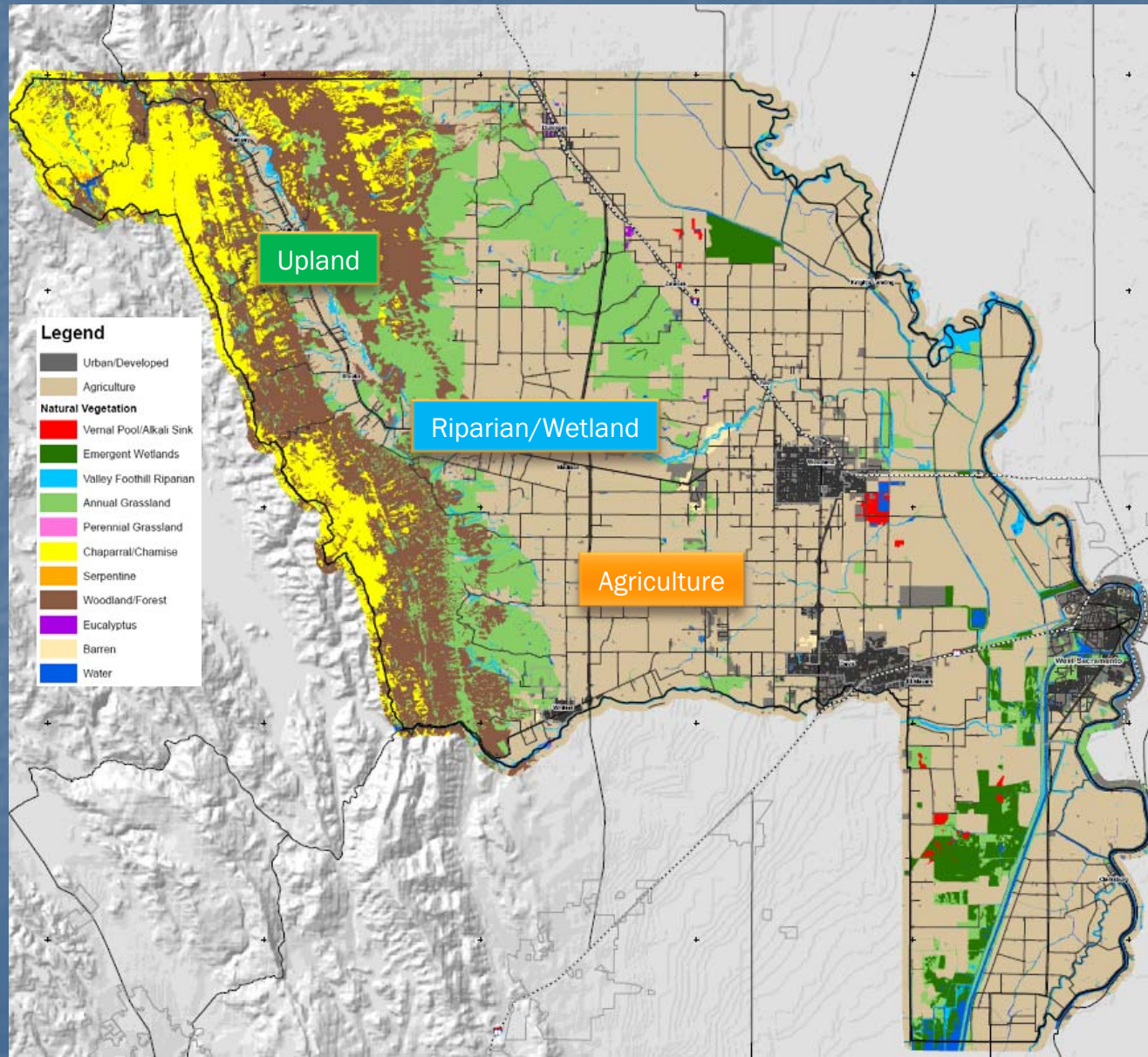
- Previous Name: Yolo County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP)
- County-wide – covers 659,629 acres
- Conserve five major habitat types and the species that depend on them: *wetlands, oak woodlands, agriculture, grasslands, riparian*
- Managed by the Yolo Habitat Joint Powers Agency
 - Yolo County, cities of Davis, West Sacramento, Winters and Woodland and UC Davis

YOLO NATURAL HERITAGE PROGRAM

- Conserve Yolo County's natural heritage with its broad array of native species and habitats
- Support the long-term viability of the County's agricultural economy
- Promote smart, sensible economic growth and development
- Protect natural areas and features that help define the character of Yolo County
- Preserve key open space areas and enhance opportunities for recreation



YOLO COUNTY LANDSCAPES



Reserve Design Principles

- Conserve target species throughout plan area
- Large blocks of contiguous habitat
- Link reserves with corridors
- Diversity of physical and environmental conditions
- Conservation of unique habitat features

UPLAND CONSERVATION STRATEGY

- Identify and protect biologically important areas
 - Oak woodlands
 - Unique habitats (e.g., serpentine, salt springs)
 - Biologically rich areas
- Protect large intact ecosystems (core preserves)
- Maintain species movement areas (habitat linkages)



RIPARIAN/WETLAND CONSERVATION STRATEGY

- Identify and protect biologically important areas
 - Riparian and marsh habitats
 - Unique habitats (vernal pools and alkali sinks)
 - Biologically rich areas
- Protect wetland functions and values
 - Hydrologic process and diversity
- Maintain habitat integrity
 - Establish buffer areas
 - Manage invasive species

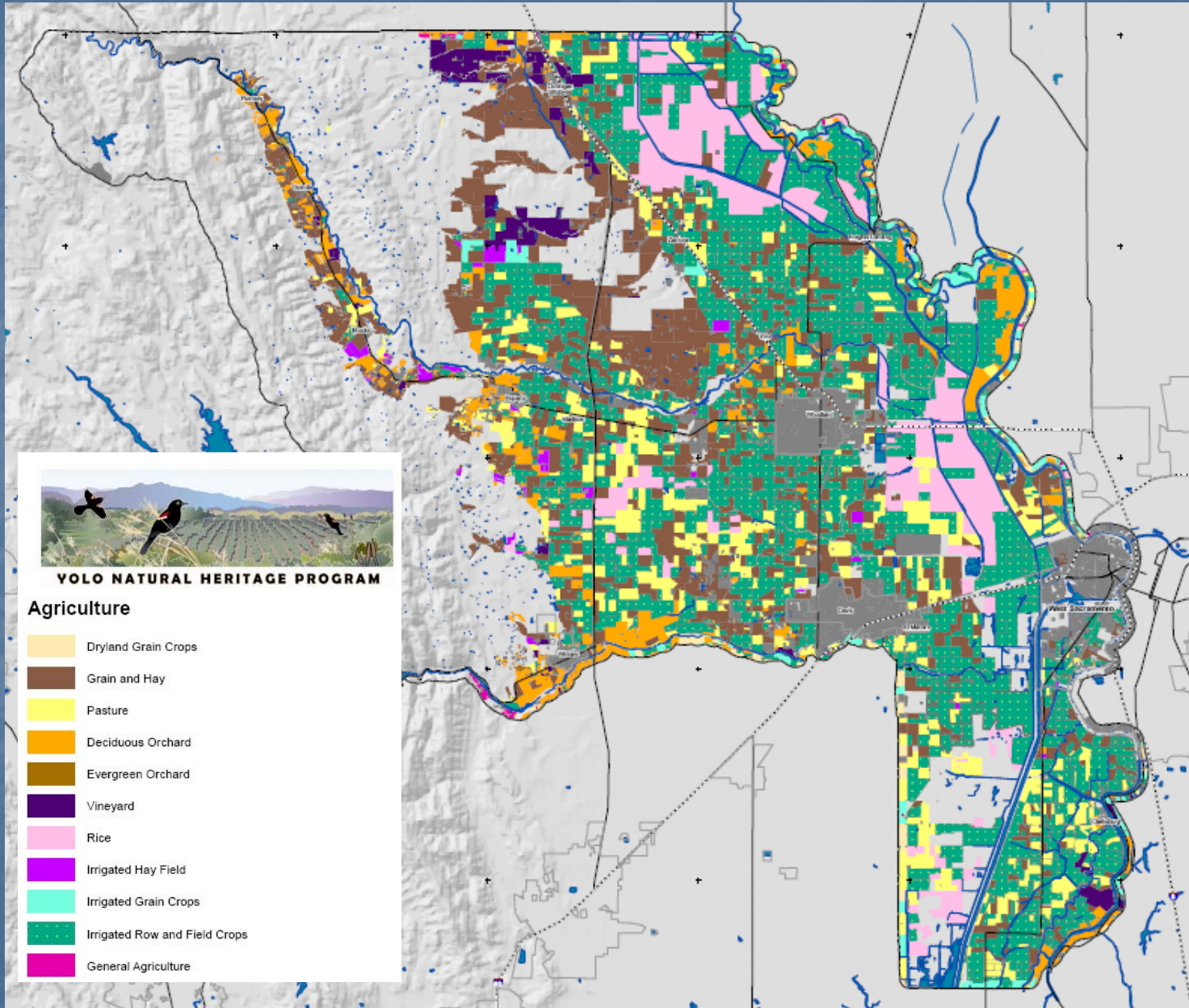


AGRICULTURAL CONSERVATION STRATEGY

- More complex than the upland or riparian/wetland strategy
 - Dynamic landscape with shifting habitat values
 - Habitat Value dependent on crop type and location
- Questions:
 - Which species use which crops?
 - How does location affect crop habitat value?
 - How can habitat value be monitored and maintained?



AGRICULTURE IN YOLO COUNTY



Crop Type	Acres	Percent
FIELD CROPS	99,284	27%
GRAIN AND HAY CROP	74,139	20%
TRUCK & BERRY CROPS	64,370	18%
PASTURE	41,863	11%
RICE	30,411	8%
DECIDUOUS FRUITS AND NUTS	25,756	7%
IDLE	15,862	4%
VINEYARD	9,438	3%
SEMIAGRICULTURAL & INCIDENTAL TO AGRICULTURE	3,339	1%
CITRUS AND SUBTROPICAL	303	0%
<i>Total Acres of Agriculture (56% of County)</i>	364,765	100%
<i>Total Acres in County</i>	653,629	

Conceptual Approach: Identify Habitat Elements

- Which crop types are used by which species
 - 26 of the 67 potential covered species use some crops as habitat
 - Based on DWR crop classification
- Other important elements
 - Distance to water, nesting sites
 - Timing of planting/harvest, residuals management

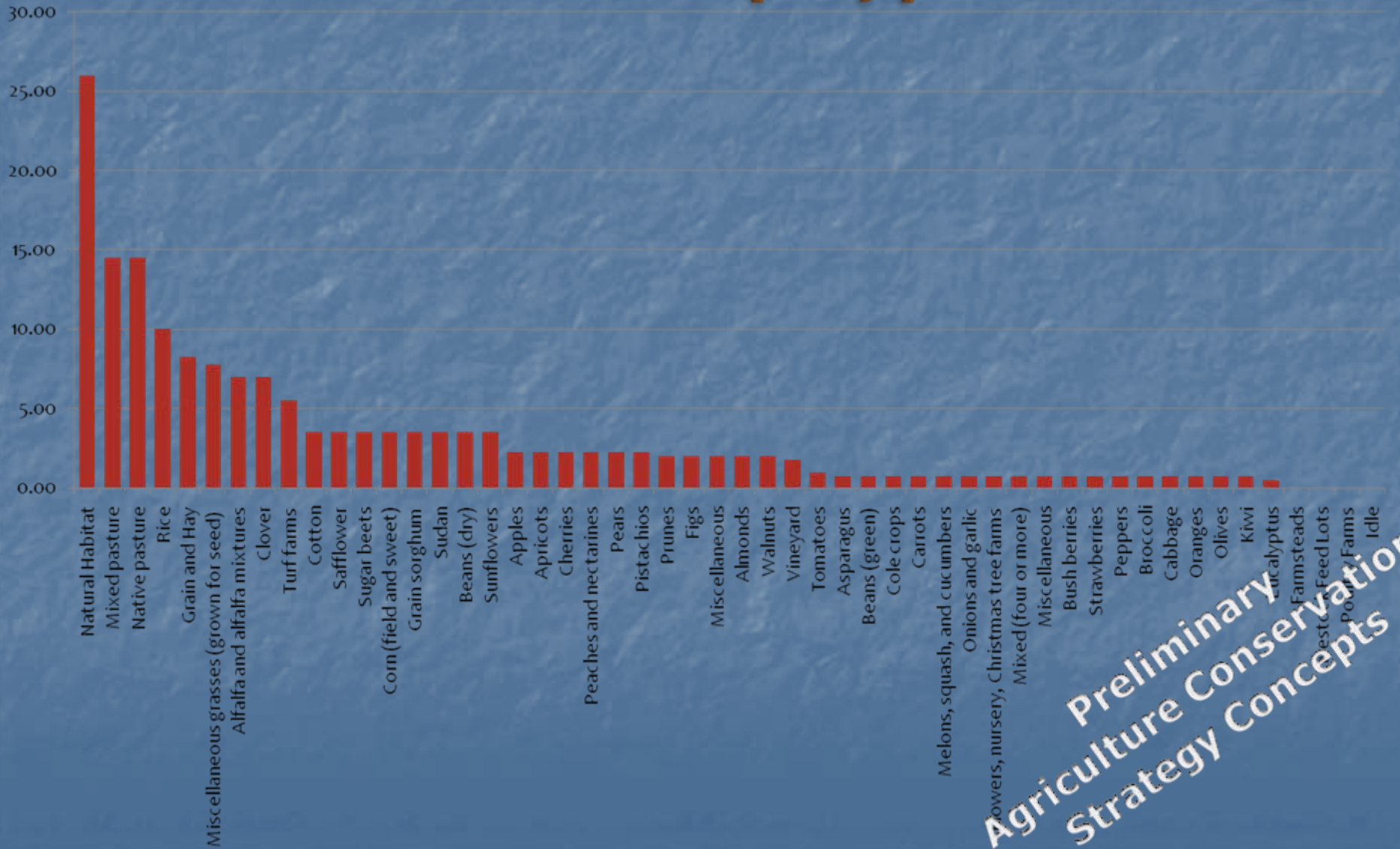
Preliminary
Agriculture Conservation
Strategy Concepts

Conceptual Approach: Determine Crop Habitat Values

- How do crops compare to natural habitat?
 - Develop a simple relative weighting scheme for crop types
 - Very High Value
 - High Value
 - Moderate Value
 - Low Value
 - Rank relative to natural habitat
 - As good as natural habitat would be very high value

Preliminary
Agriculture Conservation
Strategy Concepts

Summed Habitat Values within Each Crop Type

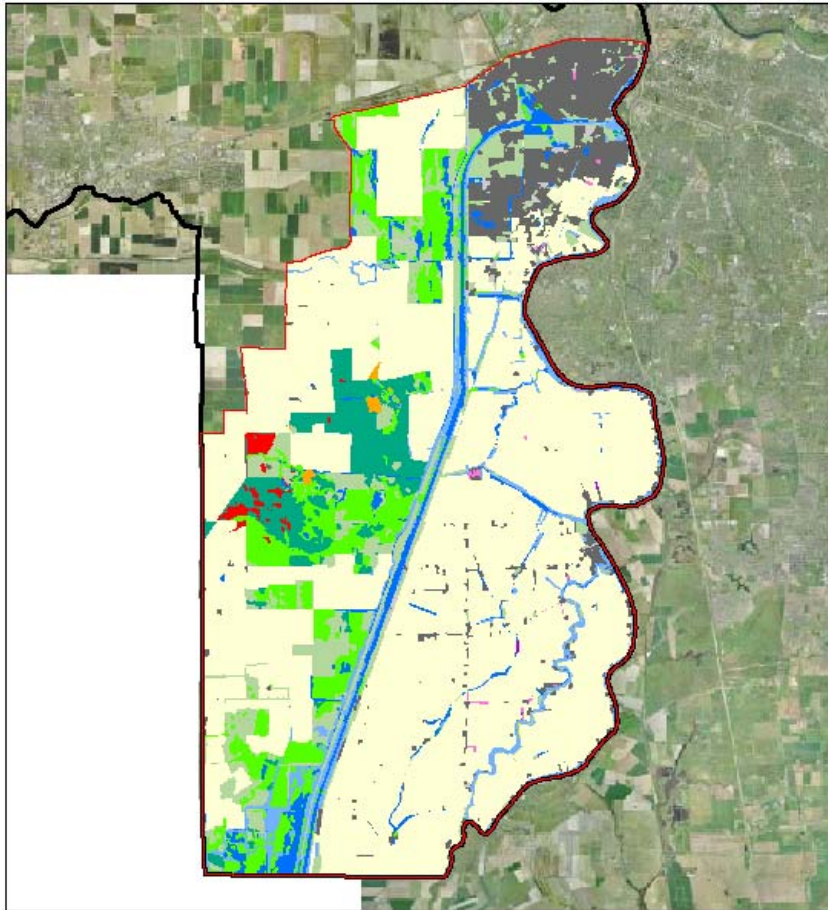


Preliminary
Agriculture Conservation
Strategy Concepts

Rice Fields



YNHP-BDCP Planning Area Overlap



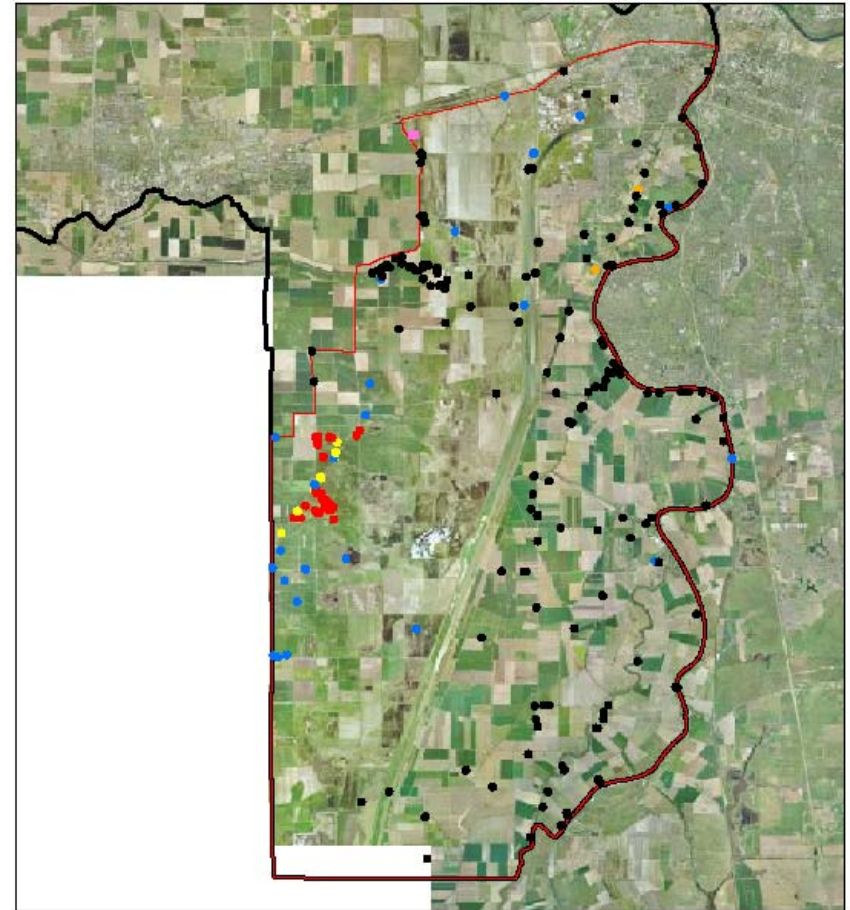
Yolo Delta
Vegetation Communities



Technology Associates
INCORPORATED

Date: Jan 26, 2006

Document: YoloDeltaProperty_bx11_veg.mxd



Yolo Delta
Species Occurrences



Technology Associates
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Date: Jan 26, 2006

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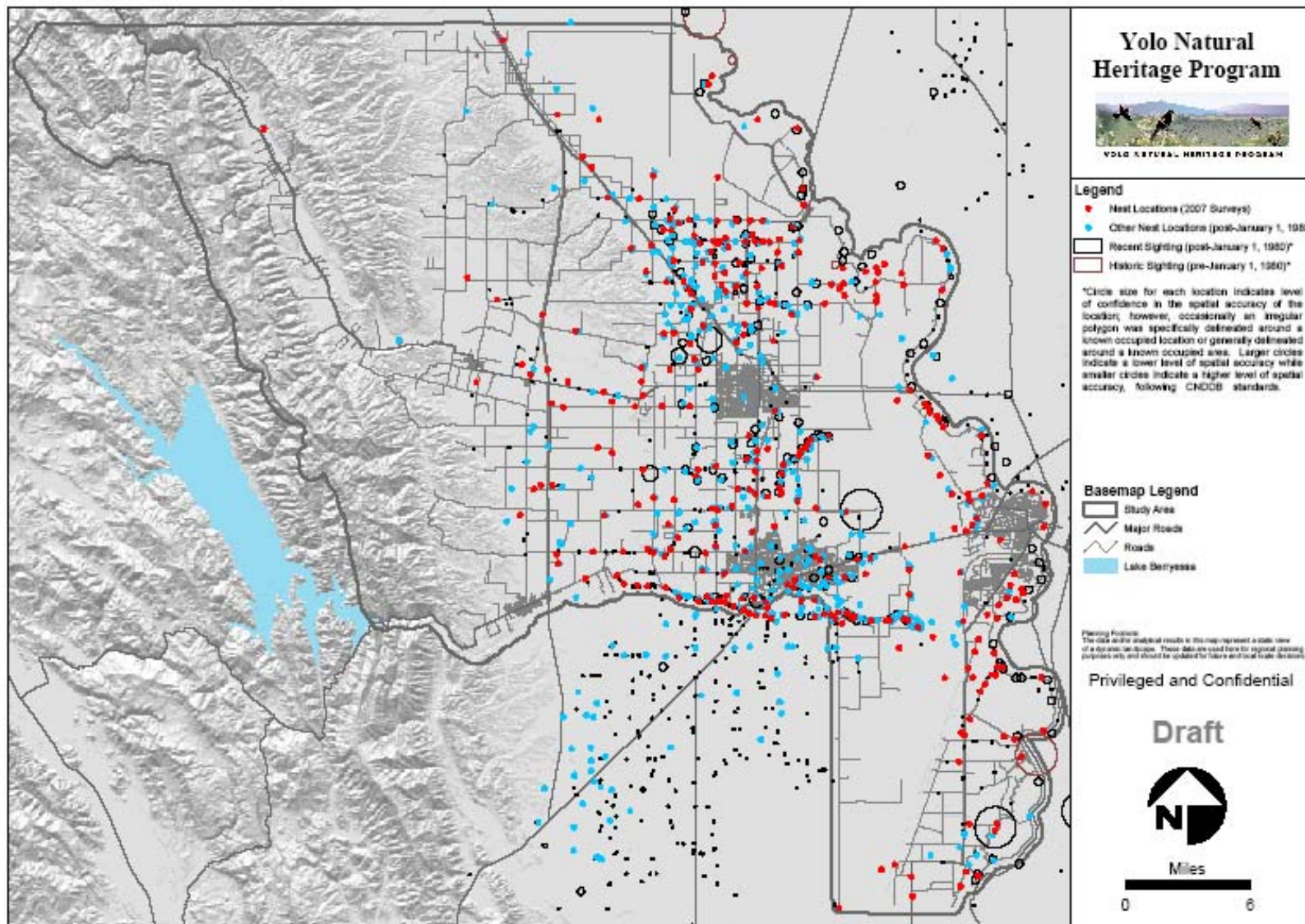
What do we know today?

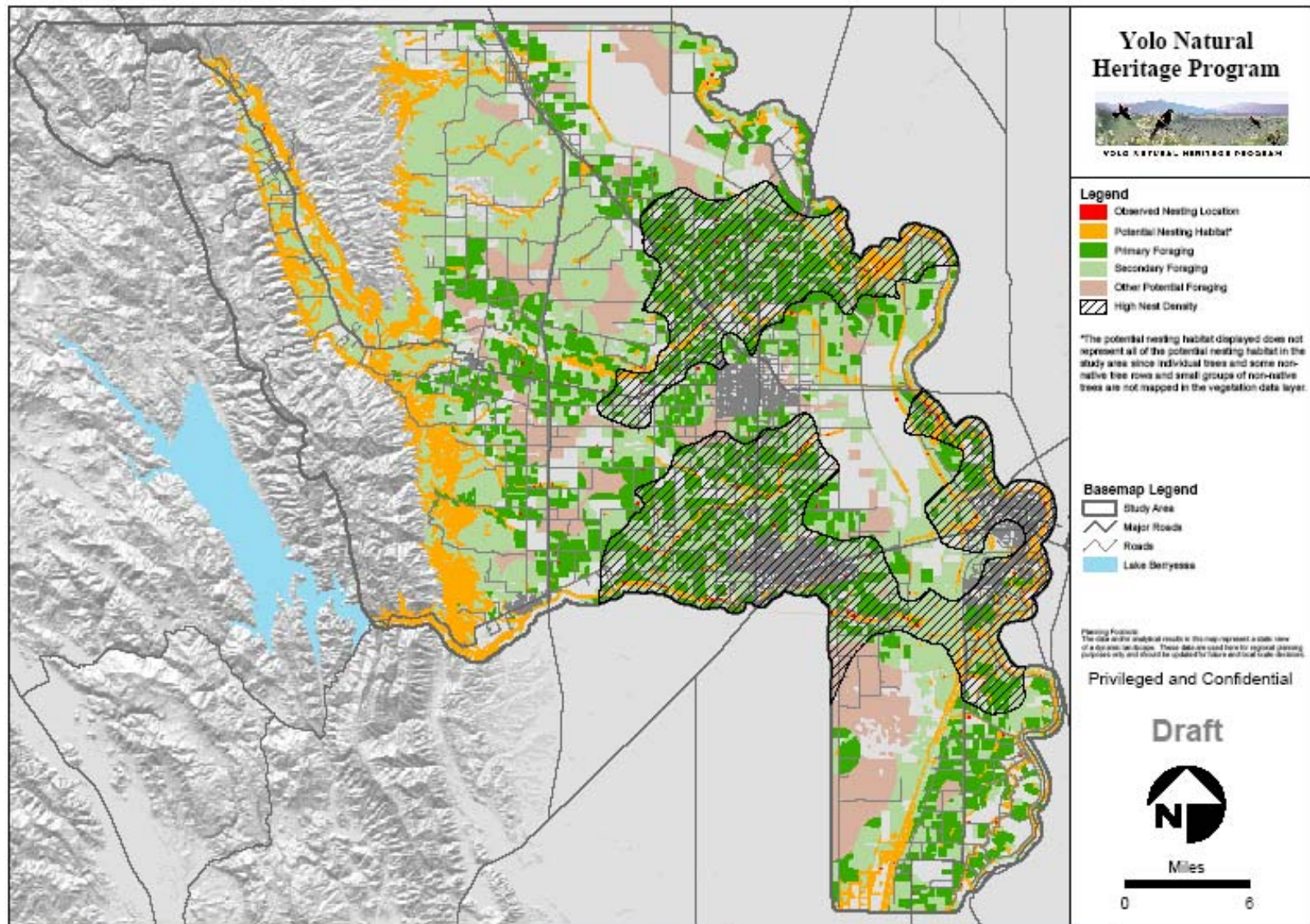
- Sensitive species documented in the YNHP-BDCP Overlap Area include:
 - Swainson's hawk (*Buteo swainsoni*)
 - Giant garter snake (*Thamnophis gigas*)
 - Sensitive vernal pool plants and vernal pool invertebrates
 - Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)
 - Other sensitive bird species.

What can we predict?

A large proportion of the potential habitat for many species is included in this Yolo-Delta overlap area including

- California tiger salamander (*Ambystoma californiense*)
- California black rail (*Laterallus jamaicensis coturniculus*)
- Black tern (*Chlidonias niger*)
- Grasshopper sparrow (*Ammodramus savannarum*)
- Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*)
- Mason's lilaeopsis (*Lilaeopsis masonii*)
- Rose mallow (*Hibiscus lasiocarpus*)
- Solano grass (*Tuctoria mucronata*)
- Colusa grass (*Neostapfia colusana*)
- Heckard's peppergrass (*Lepidium latipes* var. *heckardii*)
- Ferris' milkvetch (*Astragalus tener* var. *ferrisiae*)
- Britblescale (*Atriplex depressa*)
- Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)
- Alkali milk vetch (*Astragalus tener* var. *tener*)
- San Joaquin spearscale (*Atriplex joaquiniana*)





Questions?



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