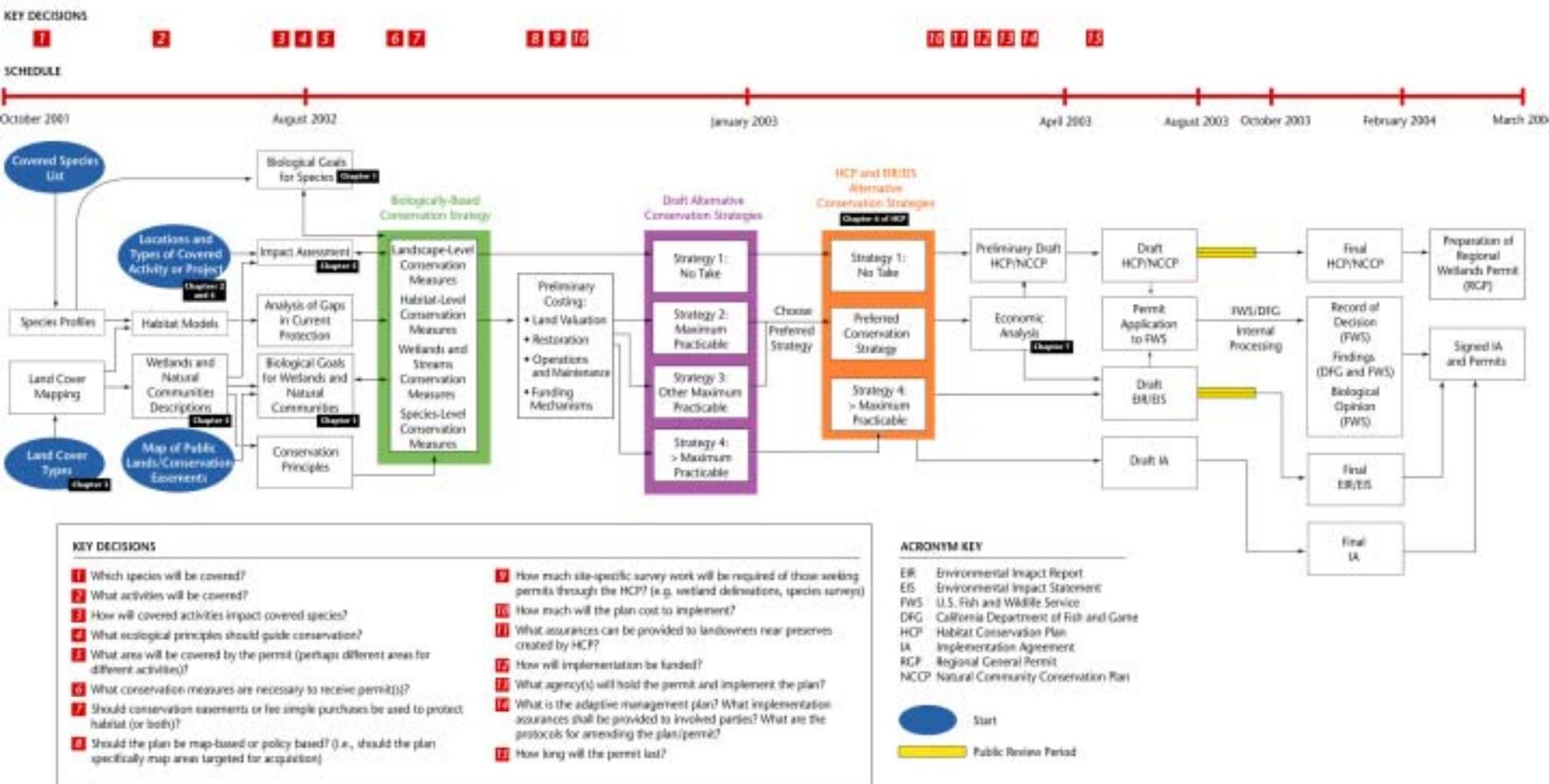




# Where Are We in the Process?

## Process, Schedule, and Key Decision Points for the East Contra Costa County HCP/NCCP



# January 23 Documents

- Cover memo
- Revised draft biological goals
- Proposed approach to wetlands permitting memo
- Land valuation analysis memo
- Potential funding sources memo
- Preliminary impact analysis memo
- Preliminary draft conservation strategy and alternatives

# Preliminary Impact Analysis

- 3 general scenarios evaluated:
  - 1: Inside ULL on developable land uses (13,292 acres)
  - 2: Inside ULL on all non-protected land uses (18,686 acres)
  - 3: Inside and outside ULL according to City General Plans (21,769 acres)

# Impact Analysis: Limitations

- Type and location of covered activities not yet clearly defined—scenarios are general
- Scenarios may overestimate extent of impacts
- Impacts to some land cover types inaccurate (Table 4)
  - Underestimate: Wetlands, alkali grassland
  - Overestimate: Riparian woodland/scrub, streams
- Excludes indirect and cumulative effects
- Does not factor in conservation strategy (overlap)

# Preliminary Impact Analysis

- Relationship to Conservation Strategy
  - Impact analysis used as a guide
  - Prelim. Draft proposed strategy and Alternative A: Scenario 2
  - Prelim. Draft Alternative B: Scenario 1
  - Impact area will be “adjusted” to form permit area

# Impact Analysis: Issues Remain

- Select an impact scenario or combination
- Should rural residential development be covered outside the core impact area?
- Should unique activities such as wind farms or quarries be covered?
- Should recreational uses within existing parks be covered?
- Antioch

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# Conservation Strategy

- Preliminary Partial Draft !!!
- Presents outline, concepts, and some details
- Need feedback before we go further
- Strategy will evolve over time as we receive guidance, feedback, more data

# Conservation Strategy

- Baseline data will change
  - EGC approved small-scale features mapping, if funding can be found
  - Upgrade to new NCCPA: Ecosystem function, biological diversity
  - Add Clayton to inventory area
  - Additional ground truthing land cover map
  - Additional covered species, if funding found

# Conservation Strategy

- Impact analysis will change
  - Baseline data will change
  - Select covered activities
  - Determine permit area (which impact scenario)
  - May not assume full buildout of each scenario
  - Incorporate indirect and cumulative impacts
- Cost not fully analyzed
  - Refine land value analysis
  - Incorporate management, restoration, monitoring costs

# Cons. Strategy: Overview

- 3 levels of conservation measures
  - Landscape-level
  - Community-level
  - Species-level
- Programmatic approach to conservation measures
  - Focus on landscape-level and ecosystem
  - Preserve locations not yet known
  - Address limitations in data and ecological uncertainty

# Cons. Strategy: Overview

- General categories of conservation measures
  - Conditions on development (1.1.X)
  - Survey requirements (1.2.X)
  - **Land acquisition process and requirements (1.3.X)**
  - Preserve management plans (1.4.X)
  - Habitat enhancement (2.X.X)
  - Habitat restoration or creation (2.X.X)
  - Species avoidance/minimization requirements (3.X.X)
  - Species population enhancement (3.X.X)
  - Species compensation (3.X.X)

# Cons. Strategy: Preserve Design

- Acquisition Analysis Zones
  - 6 major Zones (Table 6-1)
  - Zones divided into subzones
  - Acquisition requirements by Zone or subzone
- Land acquisition requirements by
  - land cover type (Table 6-8)
  - Suitable habitat
  - Configuration
  - Plant population (satellite preserves)

# Cons. Strategy: Overview

- General categories of conservation measures
  - Conditions on development (1.1.X)
  - Survey requirements (1.2.X)
  - Land acquisition process and requirements (1.3.X)
  - **Preserve management plans (1.4.X)**
  - **Habitat enhancement (2.X.X)**
  - **Habitat restoration or creation (2.X.X)**
  - **Species avoidance/minimization requirements (3.X.X)**
  - **Species population enhancement (3.X.X)**
  - **Species compensation (3.X.X)**

# Preserve Management

- Preserve locations unknown
- Management guidance and principles
- Preserve System plans
  - Exotic plant control program
  - Recreation plan
- Preserve plans
  - Preserve management plans
  - Agricultural management plans (cropland only)

# Preserve Management Plans

- Preserve objectives
- Vegetation management
- Fire management
- Infrastructure maintenance
- Recreation
- Monitoring
- Adaptive management

# Preserve Management: Grazing

- Grazing is an important management tool
- Grazing will likely be used in all Preserves
- Existing grazing leases will be re-evaluated when Preserve Management Plan approved
- Grazing may be adjusted to better achieve HCP/NCCP goals and objectives
- Grazing leases <5 years
- See Appendix A

# Agricultural Management Plans

- Prepared by and paid for Implementing Entity with cooperation of landowner
- Describe agricultural practices to meet conservation goals of HCP/NCCCP
- Must be compatible with on-going economic viability of operation
- Many elements would become conditions of lease or conservation easement
- Implementing Entity pays for any additional costs of measures and economic loss due to measures

# Agricultural Management Plans

- Potential measures to enhance cropland for covered species (Table 6-17)
  - Eliminate or reduce application of rodenticide or pesticide
  - Establish and maintain cover strips along field margins
  - Plant isolated trees, small groups of trees, blackberry bushes along margins or ditches
  - Delay crop harvest or on portion of land

# Cons. Strategy: Overview

- General categories of conservation measures
  - Conditions on development (1.1.X)
  - Survey requirements (1.2.X)
  - Land acquisition process and requirements (1.3.X)
  - Preserve management plans (1.4.X)
  - **Habitat enhancement (2.X.X)**
  - **Habitat restoration or creation (2.X.X)**
  - Species avoidance/minimization requirements (3.X.X)
  - Species population enhancement (3.X.X)
  - Species compensation (3.X.X)

# Habitat Enhancement

- Wetland and pond enhancement
  - Alter grazing patterns
  - Drain ponds to eliminate exotic wildlife
  - Recreate historic microtopography
  - Repair leaky stock ponds
- Based on extensive program at Los Vaqueros

# Habitat Enhancement

- Grassland enhancement
  - Prescribed burning
  - Alter grazing patterns
  - Enhance rodent population and burrow density
  - Experimentation
- Oak savanna/woodland
  - Decision tree
  - Grazing, planting acorns or seedlings, fencing, wild pig control

# Habitat Enhancement

- Chaparral/Scrub
  - Maintain or improve habitat quality
  - Assess historic fire frequency
  - Use prescribed burns sparingly
- Riparian Woodland/Scrub
  - Remove exotics, bank stabilization
  - Plant native vegetation to fill in gaps

# Habitat Restoration/Creation

Land Cover Type	Restoration	Creation
Oak Savanna	✓	
Riparian woodland	✓	
Seasonal wetland	✓	
Perennial wetland	✓	
Ponds		✓
Streams/sloughs	✓	✓

# Habitat Restoration/Creation

- Required compensation ratio applied to level of impact (1:1 or 2:1)
- Additional requirement to contribute to species recovery (absolute acreage)
- Compensation estimates limited by impact analysis
- Restoration/creation in Preserve System where practicable
- Designed to minimize impacts (but take allowed)

# Habitat Restoration/Creation

- Restoration/creation for compensation: must be initiated prior to impacts
- Restoration/creation that contributes to recovery: stay ahead of impacts (20% of requirement for every 100 acres of impact)
- Details: see Tables 6-15, 6-16 and 11 conservation measures

# Cons. Strategy: Overview

- General categories of conservation measures
  - Conditions on development (1.1.X)
  - Survey requirements (1.2.X)
  - Land acquisition process and requirements (1.3.X)
  - Preserve management plans (1.4.X)
  - Habitat enhancement (2.X.X)
  - Habitat restoration or creation (2.X.X)
  - **Species avoidance/minimization requirements (3.X.X)**
  - **Species population enhancement (3.X.X)**
  - **Species compensation (3.X.X)**

# Species Avoidance/Minimization

- Preconstruction surveys for some species
- Minimize impacts of construction
  - Destroy empty kit fox dens, bat roosts, owl burrows
  - Avoid Golden Eagle nests
  - Relocate whipsnakes, frogs, salamanders, plants from construction sites
- Based on existing agency protocols

# Population Enhancement

- Burrowing Owl: create artificial burrows, perches
- Experimental management of covered plant populations
  - Benefits of livestock exclosure?

# Species Compensation

- Giant garter snake
  - Based on 1999 FWS guidelines
  - Compensate at 1:1 to 3:1
  - Add land to Preserve System or contribute to existing mitigation bank
- Vernal pool invertebrates
  - Based on 1996 FWS guidelines
  - Preserve at 3:1 or create at 2:1, or contribute to existing mitigation bank