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Amending the Clark County Multiple Species Habitat Conservation Plan

August 10, 2010

John Tennert

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Presentation Overview

- Clark County MSHCP
- Permit Amendment Overview
- Advisory Committee
- Conservation Strategy
- Project Milestones

Clark County MSHCP

- MSHCP Overview
  - 30-year permit effective February 2001
  - Take cannot exceed 145,000 acres
  - Permittees collect a $550 per acre disturbance fee
  - MSHCP achieves conservation by augmenting existing funding/conservation on federal lands
  - Fund habitat restoration and enhancement, public information, research and monitoring and other similar conservation actions

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Permit Amendment Overview

- Permit Amendment Purpose
  - Address acreage cap
  - Re-evaluate the list of covered species to refocus attention on those species most at risk and most directly impacted by take
  - Re-evaluate covered activities and overall conservation/ mitigation strategy
  - Re-evaluate structure and implementation of the permit and plan

Stakeholder Groups

- Environmental (2)
- Developer/Homebuilder (2)
- Education (2)
- Gaming (1)
- Off-Highway Vehicle (1)
- Banking/Finance (1)
- Nevada Taxpayers Association (1)
- Business/Small Business (2
- Rural community (1)
- Senior (1)
- Tribal representative (1)
- Union (1)
- Southern Nevada residents (5)

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Advisory Committee

- CAC has recommended amending the plan to include:
  - 215,000 acres
  - 21 species
- CAC expressed support for a revised conservation strategy

Common Name	Scientific Name	Current Federal Status	Current State Status
Birds			
Arizona bell's vireo	*Vireo bellii*		Protected
Bendire's thrasher	*Toxostoma bendirei*		Protected
LeConte's thrasher	*Toxostoma lecontei*		Protected
Phainopepla	*Phainopepla nitens*		Protected
Southwestern willow flycatcher	*Empidonax traillii extimus*	Endangered	Endangered
Western burrowing owl	*Athene cunicularia hypugea*		Protected
Yellow-billed cuckoo	*Coccyzus americanus*	Candidate	Sensitive
Yuma clapper rail	*Rallus longirostrus yumanensis*	Endangered	Endangered
Amphibians			
Relict leopard frog	*Rana onca*	Candidate	Protected
Mammals			
Desert kangaroo rat	*Dipodomys deserti*		
Desert pocket mouse	*Chaetodipus penicillatus sobrinus*		
Spotted bat	*Euderma maculatum*		Threatened
Townsend's big-eared bat	*Corynorhinus townsendii pallescens*		Sensitive
Reptiles			
Desert tortoise	*Gopherus agassizii*	Threatened	Threatened
Banded Gila monster	*Heloderma suspectum cinctum*		Protected
Vascular Plants			
Forked (Pahrump Valley) buckwheat	*Eriogonum bifurcatum*		
Las Vegas bearpoppy	*Arctomecon californica*		Critically Endangered
Las Vegas Valley buckwheat	*Eriogonum corymbosum* var. *nilesii*	Candidate	
Sticky buckwheat	*Eriogonum viscidulum*		Critically Endangered
Threecorner milkvetch	*Astragalus geyeri* var. *triquetrus*		Critically Endangered
White-margined beardtongue	*Penstemon albomarginatus*		
Yellow two-tone beardtongue	*Penstemon bicolor* ssp. *bicolor*		

Conservation Strategy

- Current MSHCP Conservation Strategy
  - Funds species conservation on public land
  - After 10 years, not as effective or efficient as envisioned

Conservation Strategy

- Amendment Conservation Strategy
  - Implements species monitoring and management
  - Focus on reserve units that support covered species
  - Reserve design process needed to identify MSHCP reserve units

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Minimization Measures

- Current MSHCP is largely expenditure-based
  - Relies on funding federal agencies for conservation on federal lands
- Minimal on-site minimization to avoid direct take of covered species
- FWS has indicated that it cannot meet issuance criteria without more on-site minimization

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Proposed Impact Zones

- Zone A-Majority of vacant land near or adjacent to developed land
- Zone B-Characterized by natural land-cover types with varying levels of disturbance and development

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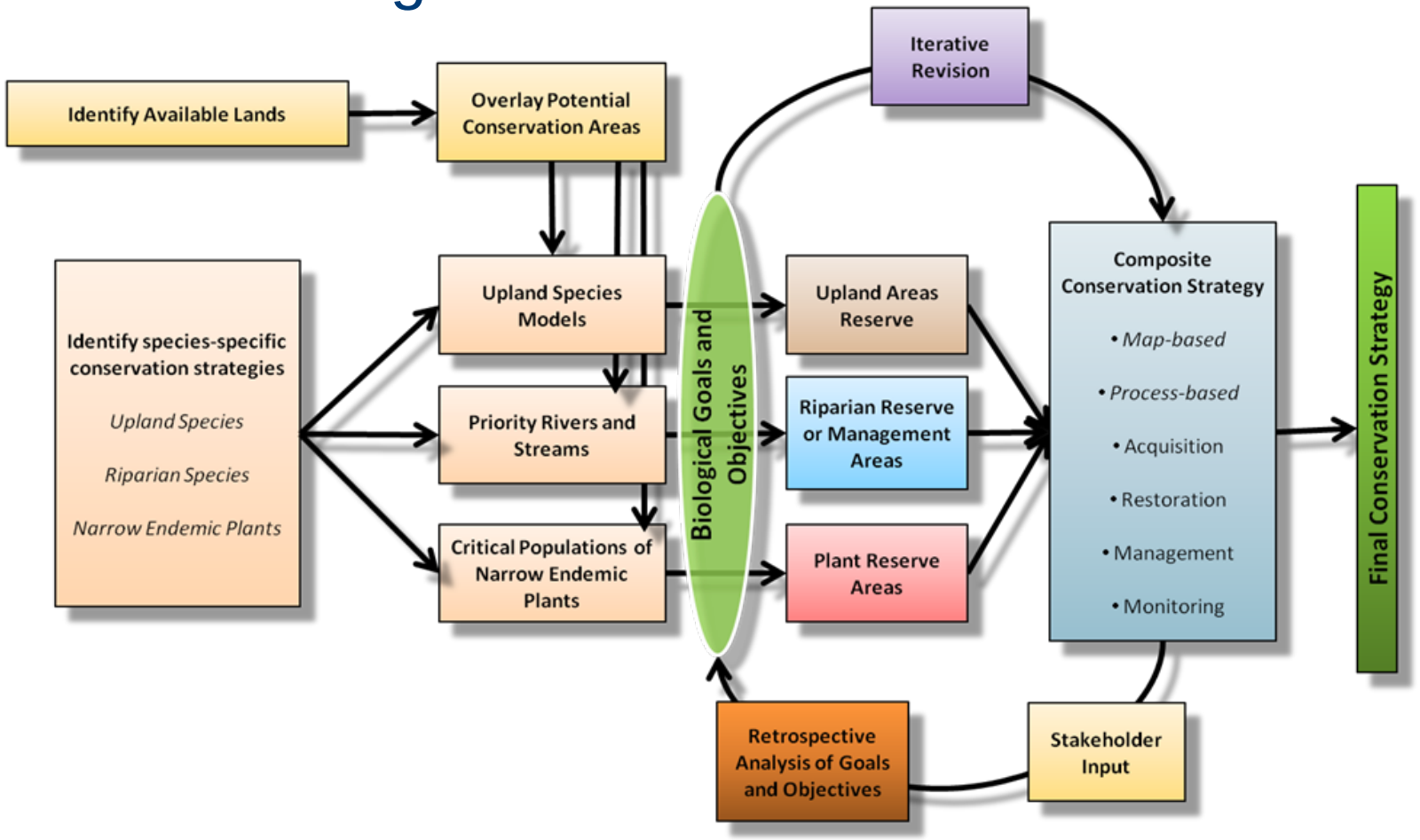
Proposed AMMs by Zone

Proposed Avoidance and Minimization Measures	Zone A Urban Areas	Zone B Future Urban Areas
Planning surveys	No	No
Pre-construction surveys		
Burrowing owl	No	Yes
Desert tortoise	No	Yes
Riparian birds	No	If within 250 ft. of full bank width
Other species	No	No
Plants	No	If potential habitat
Construction monitoring		
Fencing	No	No
On-site monitor	No	No
Employee training program	Yes	Yes
Translocation/relocation	No	Yes
On-site waste management	No	Yes
Urban-wildland interface measures	No	Boundary edge only

Reserve Design Process



Conservation Strategy
Reserve Design

- Reserve Design Principles
  - Provide high-quality habitat for covered species
  - Be large enough to support sustainable populations of covered species
  - Provide connectivity to other conserved lands for covered species or serve as buffers
  - Provide diversity of environmental gradients
  - Provide opportunities for habitat enhancement/restoration
  - Minimize the length of edge and adjacent land uses that are detrimental to the reserve system

Conservation Strategy
Reserve Design

- Reserve System Proposal
  - Two approaches:
    - Upland - consists of transfer of BLM land to permittees for conservation
    - Riparian - consists of acquiring riparian habitat from willing sellers along Muddy and Virgin rivers

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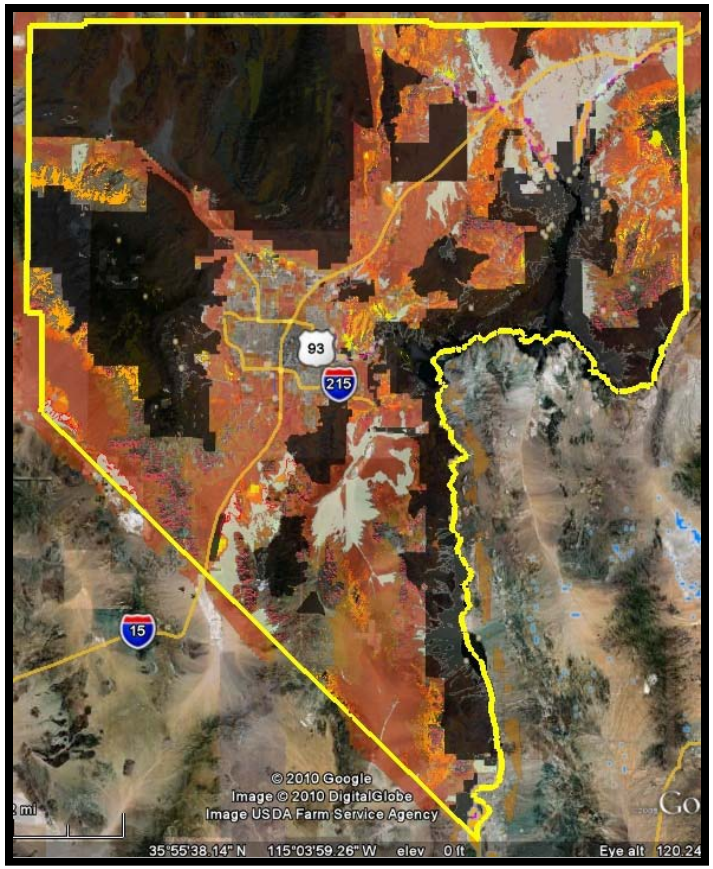
Conservation Strategy
Reserve Design

- Habitat of Covered Species
  - Modeled habitat distribution
    - Best available scientific data
    - Knowledge of the ecological and habitat associations
    - Best available GIS data
  - Known species occurrence data
    - Strongest evidence of habitat suitability

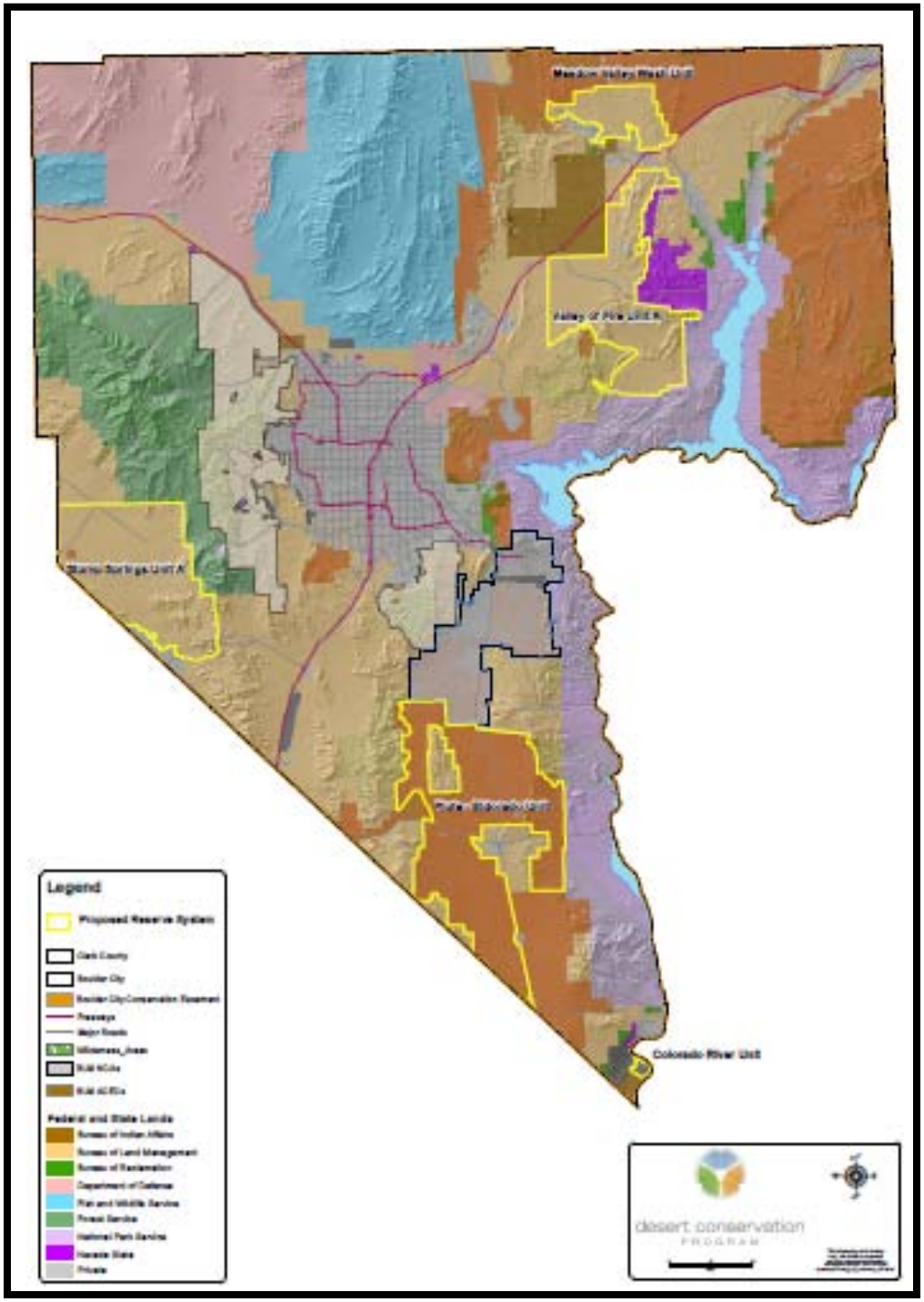


Conservation Strategy
Reserve Design

- Select Reserve Units
  - Based on the principles of reserve design
  - Select available lands first
  - Supplement with other lands if needed
  - Selected reserve unit areas between 100,000 and 300,000 acres

Reserve alternatives

Reserve Unit	Alternative 1 (acres)	Alternative 2 (acres)	Alternative 3 (acres)	Alternative 4 (acres)	Alternative 5 (acres)
Valley of Fire	150,696	-	97,261	-	150,696
Stump Springs	-	155,060	64,336	-	155,060
Meadow Valley Wash	42,229	42,229	42,229	-	-
Paiute-El Dorado	-	-	-	230,000	-
Colorado River	1,387	1,387	1,387	1,387	1,387
Total	*194,312*	*198,677*	*205,214*	*231,387*	*307,143*


Legend
Proposed Reserve System
Clark County
Boulder City
Boulder City Conservation Easement
Freeways
Major Roads
Wilderness_Areas
BLM NCAs
BLM ACECs
Federal and State Lands
Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
Department of Defense
Fish and Wildlife Service
Forest Service
National Park Service
Nevada State
Private
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Project Milestones

- February 2009 – First CAC meeting
- October 2009 – NEPA scoping
- September 2010 – Final CAC recommendations report
- Spring 2011 – Draft MSHCP/EIS
- Spring 2012 – Amended MSHCP and permit


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Questions?