



# Bakersfield HCP

*Stakeholder Group*

June 10, 2015

# Agenda

- Update on BHCP/NCCP Planning Process and Upcoming Events
- Looking Back: Metro Bakersfield HCP Effectiveness Analysis
- Biological Goals and Objectives
- Example Biological Goals and Objectives

# Update on Planning Process

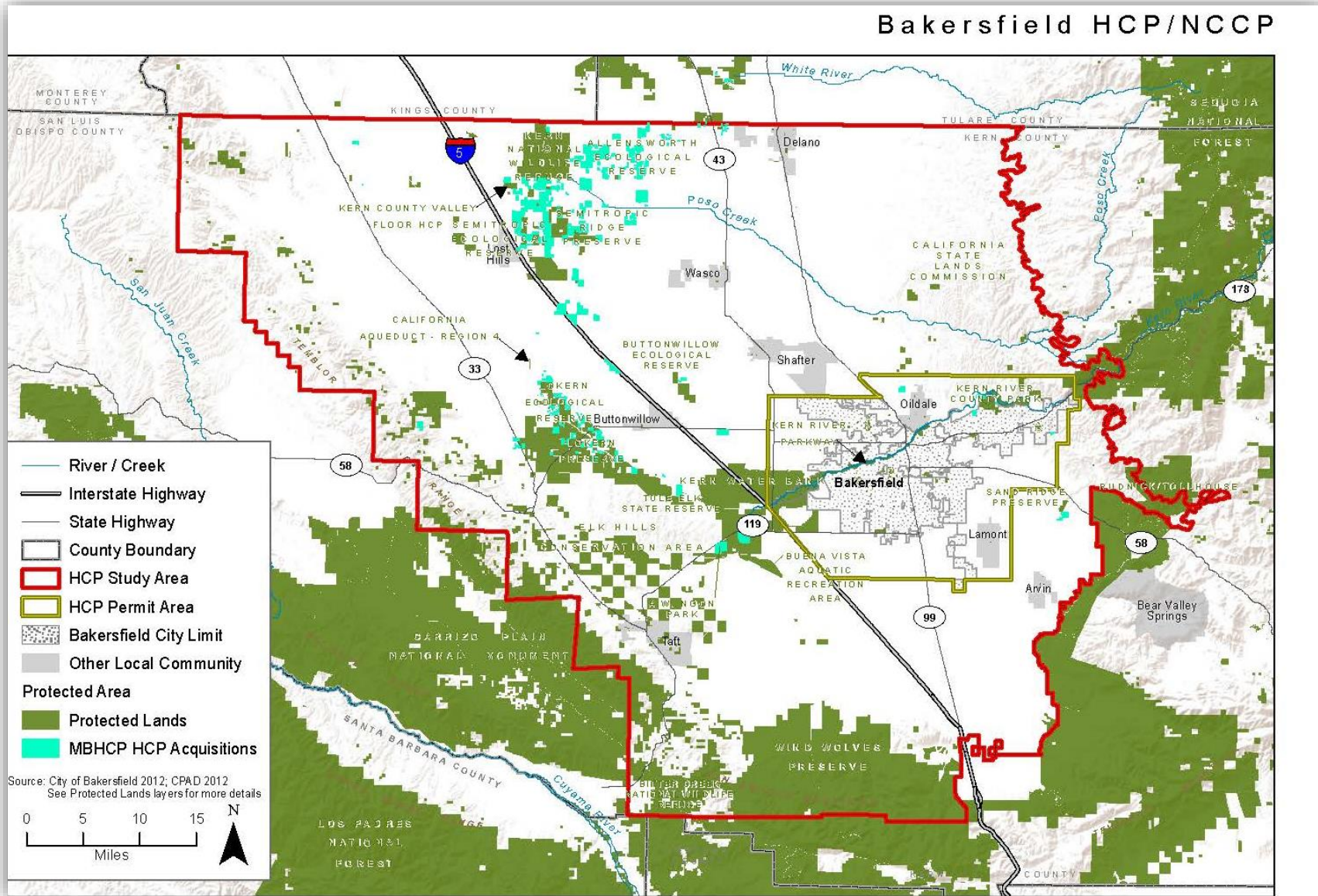
- City and County are reviewing draft chapters.
- Refining the approach to the impact analysis and finalizing a draft of Chapter 4 – Impact Analysis
- Drafting Chapter 5 – Conservation Strategy and Chapter 6 – Conditions on Covered Activities
- Science Advisor Committee will be convened later in the summer
- EIR/EIS Process is underway, public scoping meeting will occur later in the summer

# Metro Bakersfield HCP Effectiveness

# Metro Bakersfield HCP Impact Summary

- MBHCP authorized the development of up to 14,200 acres of Natural Lands and 33,400 acres of Open Lands within the 261,120 acre permit area.
- As of June 30, 2014 – 22,280 acres had been impacted, comprised of 3,208 acres of Natural Lands and 19,072 acres of Open Lands
- 57% of authorized Open Lands had been lost and 23% of Natural Lands.
- During that same period 22,563 acres of land was acquired as mitigation for impacts.

# Metro Bakersfield HCP Land Acquisitions



# Habitat Conservation

Land Cover Types Conserved by the Metro Bakersfield HCP		
Land Cover Type	Acres	Proportion of Total
Annual Grassland	753	3.3%
Canal	41	0.2%
Coastal Scrub	30	0.1%
Developed	18	0.1%
Idle Agriculture	1,041	4.6%
Industrial	0	0.0%
Oil Field - High Density	13	0.1%
Oil Field - Low Density	172	0.8%
Oil Field - Medium Density	35	0.2%
Open Water	5	<0.1%
Row Crops	65	0.3%
Saltbush Scrub	6,002	26.6%
Urban Greenspace	0	0.0%
Valley Sink Scrub	13,092	58.0%
Valley-foothill Riparian	611	2.7%
Vineyards/Orchards	361	1.6%
Wetlands	325	1.4%
<b>Total</b>	<b>22,563</b>	

**Natural Lands were preserved at a ratio of 7:1!**

# Covered Species Conservation

Covered Species	Habitat Loss (Acres)	Habitat Preserved (Acres) <sup>b</sup>	Ratio of Protection to Habitat Lost
Bakersfield Cactus	355	1,047	3:1
Bakersfield Saltbush	0	N/A <sup>c</sup>	--
Blunt-Nosed Leopard Lizard	1,966	20,054	10:1
California Jewelflower	0	N/A	--
Giant Kangaroo Rat	0	3,439	Cannot calculate
Hoover's Woolly Star	13	N/A	--
Kern Mallow	0	N/A	--
San Joaquin Antelope Squirrel	0	19,392	Cannot calculate
San Joaquin Kit Fox	22,280 <sup>a</sup>	22,563 <sup>d</sup>	1:1
San Joaquin Woolly Threads	13	9,106	700:1
Striped Adobe Lily	0	N/A	--
Tipton Kangaroo Rat	125	17,384 <sup>e</sup>	139:1
Tulare Pseudobahia	0	N/A	--

<sup>a</sup> It is assumed that all Open Land in Plan Area is suitable kit fox habitat

<sup>b</sup> These acreages come from modeled species habitat for the Bakersfield HCP-NCCP.

<sup>c</sup> These species are not covered by the Bakersfield HCP-NCCP and therefore habitat models were not created.

<sup>d</sup> Of the 22,563 acres of San Joaquin kit fox acquired, 14,816 acres were classified as Moderate to High Suitability and another 4,701 acres as Low to Moderate suitability.

<sup>e</sup> Of the 17,384 acres of Tipton's kangaroo rat habitat acquired, 3,211 acres is High Value Habitat, and another 6,223 acres is Medium Value Habitat.



# Conclusion

- Far more natural land was preserved than was lost to covered projects.
- All of the covered species benefited from the land acquisitions.
- For some species there were zero impacts, yet conservation still occurred.
- Due to lack of monitoring it is uncertain how the habitat is functioning for the species.

# Biological Goals and Objectives

# Purpose

- Biological Goals and Objectives are one of the required elements outlined in the USFWS' Five Point Policy (e.g., Biological Goals and Objectives, Adaptive Management, Monitoring, Permit Duration, Public Participation)
- Create a framework for the conservation strategy
- Ultimately become the criteria that the success of the HCP/NCCP is measured against during implementation



# Definitions

- **Goals:** Broad qualitative statements – “*the world we want to live in*”
- **Objectives:** Measurable targets that support the goals
- **Conservation Actions:** Activities on the ground that will be implemented to achieve the objectives.
- **Conservation Strategy:** Collection of all Actions and Avoidance and Minimization Measures
- *Backbone of the Conservation Strategy*

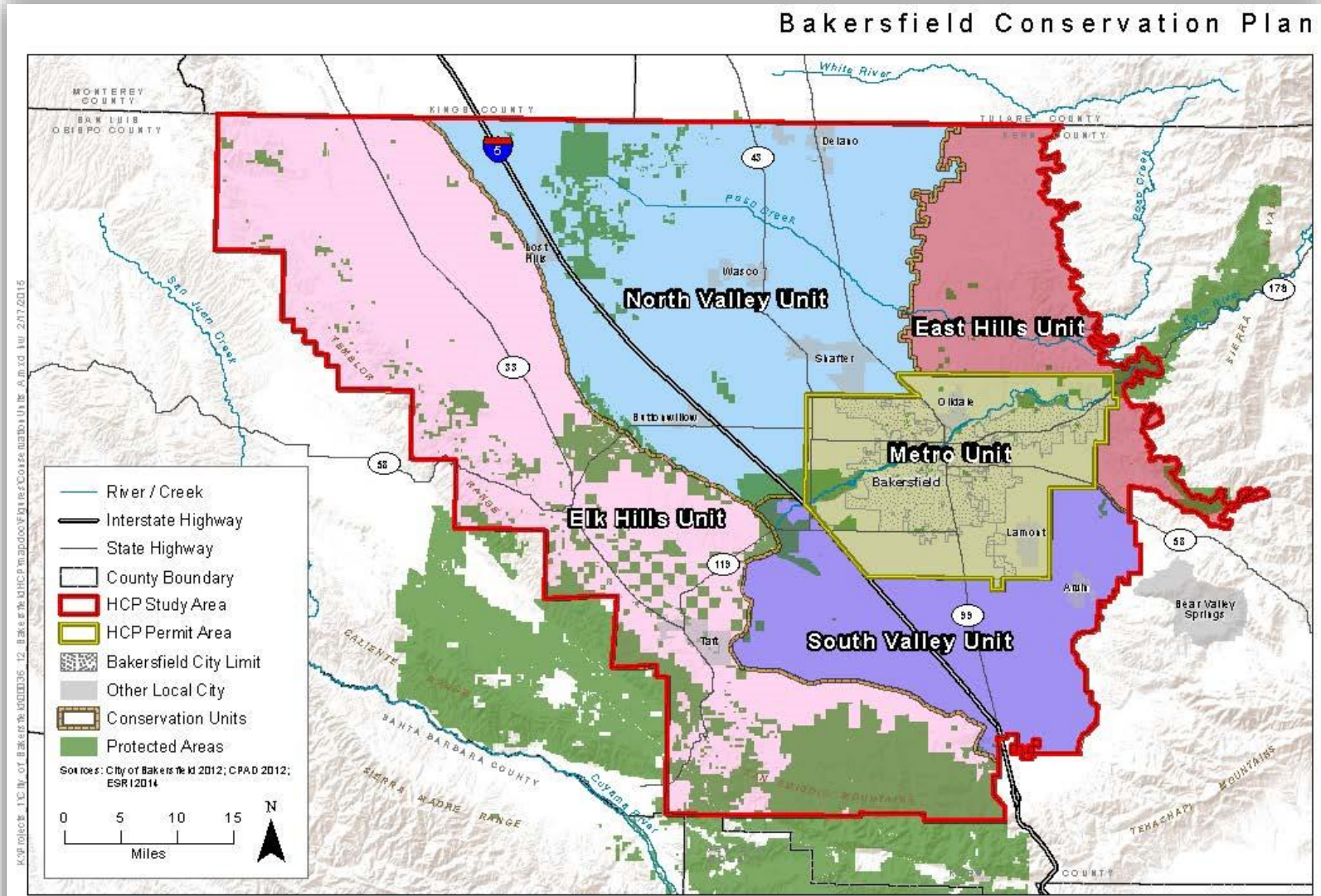
# Definitions

- **Protect** = fee title or conservation easement
- **Increase** = means the status quo +1
- **Retain/Maintain** = assumes that the level of protection, type of habitat, or population size is adequate at present
- **Enhance** = increase the habitat function and value for covered species through changes in management
- **Restore** = the return of natural features that were once present on the landscape in the past. Typically more intensive than just changes in management.

# Developing Goals and Objectives

- Data Driven
  - Conservation Gap Analysis
  - Recovery Plans
  - Species Occurrence Data
- Involve Species Experts
- Think about the regional relevance of goals and the needs relative to the impacts from covered activities
- Balance multiple species needs and natural community needs, to create the most efficient conservation program

# Conservation Units



**Figure 5-4  
Conservation Units in the Study Area**

# Structure

- Landscape Level –
  - High level goals and objectives aimed at meeting NCCP issuance criteria
  - Ecosystem function (e.g., species movement, natural processes)
  
- Natural Community Level –
  - Focus on community level conservation (e.g., grassland, scrub)
  - Encompass species needs
  
- Species Level –
  - Specific goals and objectives for each species
  - Can be combined with other species
  - Nested within Landscape/Natural Community goals and objectives



# Anatomy of Biological Objectives

- Amount (acres, miles)
- Population size
- Location, location, location
  - Conservation Units
  - Notable Landmarks
  - Anything descriptive (but retain flexibility)
- Natural Community types and functionality for species
  - Require that land is comprised of certain communities
  - Use species habitat models as a proxy (e.g., kit fox moderate-high habitat)

# Example: Landscape Level (Draft)

- **Goal Landscape-1:** A reserve system with representative natural and semi-natural landscapes that contributes to sustained populations of covered species and an increase in native biodiversity.
  - **Objective Landscape 1.1:** Protect or restore XX acres of natural communities and covered species habitats.
  - **Objective Landscape 1.2:** Include a variety of environmental gradients (e.g., elevation, soils, slope, and aspect) within and across a diversity of protected and restored natural communities.
  - **Objective Landscape 1.3:** Increase the size of the reserve system by acquiring lands adjacent to and between existing conservation lands.
  - **Objective Landscape 1.4:** Increase native species diversity and relative cover of native plant species, and reduce the introduction and proliferation of nonnative species.

# Example: Natural Community Level (Draft)

- **Goal Scrub-1:** Sizable and connected patches of scrub that support covered species and provide opportunities for other native species to complete their full life-cycle.
  - **Objective Scrub-1.1:** Protect XX acres of Valley Sink Scrub, of which at least XX acres is in the North Valley Conservation Unit, at least XX acres is in the South Valley Conservation Unit, and at least XX acres is in the Metro Conservation Unit.
    - **Cons Action Scrub-1.1:** Protect, and where needed, restore XX acres of Valley Sink Scrub, between the Kern National Wildlife Refuge and the Kern Water Bank.
    - **Cons Action Scrub-1.2:** Protect, and where needed, restore XX acres of Valley Sink Scrub, west of I-5, just west and south of Kern Water Bank.
    - **Cons Action Scrub-1.3:** Protect, and where needed, restore XX acres of Valley Sink Scrub, inside of the Metro Bakersfield General Plan boundary to preserve a movement corridor under I-5.

# Example: Species Level (Draft)

- **Goal SJKF-1:** A reserve system that contributes to the regional conservation of San Joaquin kit fox in natural lands in western Kern County.
  - **Objective SJKF-1.1:** Of the XX acres of grassland, valley sink scrub, and saltbush scrub habitat which will be protected and managed under Objectives Grass-1.1, Scrub-1.1, and Scrub-1.3, at least XX acres will be habitat for San Joaquin kit fox.
    - **Cons Action SJKF-1.1:** Protect, and where needed, restore XX acres of San Joaquin kit fox habitat modeled as Moderate-High Suitability.
    - **Cons Action SJKF-1.2:** Protect, and where needed, restore XX acres of San Joaquin kit fox habitat modeled as Low-Moderate Suitability.
    - **Cons Action SJKF-1.3:** Protect, and where needed, restore XX acres of San Joaquin kit fox habitat modeled as Low Suitability.

# Coming Up...

- EIR/EIS Scoping Meeting
- Next stakeholder group meeting – September 9<sup>th</sup>



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