

Implementation of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Biological Consultant Training

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Overview

- MSHCP Basics
- Roles and Responsibilities
- Building the Reserve (Cell Criteria)
- Consistency Analysis prepared by Consultants
- Information needed by RCA for Consistency Determination
- Applying Cell Criteria (Reserve Assembly Analysis)
- Other Plan Requirements
- Documentation and Submittal Requirements
- Common Comments and Issues
- Example Scenarios

MSHCP Basics

- Federal HCP and State NCCP
- Federal and State Permits issued in June 2004
- 25 years for Reserve Assembly; 75-year Permits; Reserve management in perpetuity
- Covers “take” for 146 species (under both ESA and CESA and CEQA)
- Permittees committed to MSHCP implementation through Implementing Agreement
- Compliance triggered when project is subject to a discretionary action
- No MSHCP take coverage on federal lands

Governing Documents

- MSHCP documents - Volume I, Parts 1 and 2
 - Contains all the primary implementing information and processes
- The Implementing Agreement (IA)
 - The Contract between the Permittees, Wildlife Agencies, and RCA
- Permits - 10(a)(1)(a) USFWS, CDFW NCCP Permit, MBTA Special Purpose Permit (Note that Permit conditions includes requirements not in Plan)
 - i.e. Permit Condition No. 5 – clearing and MBTA Take

All documents available at <http://wrc-rca.org/document-library/>

Documents and Tools

MSHCP documents available online at:

<http://www.wrc-rca.org/document-library/>

Volume 1, Parts 1 and 2

Online information and mapping:

RCA MSHCP Information Tool

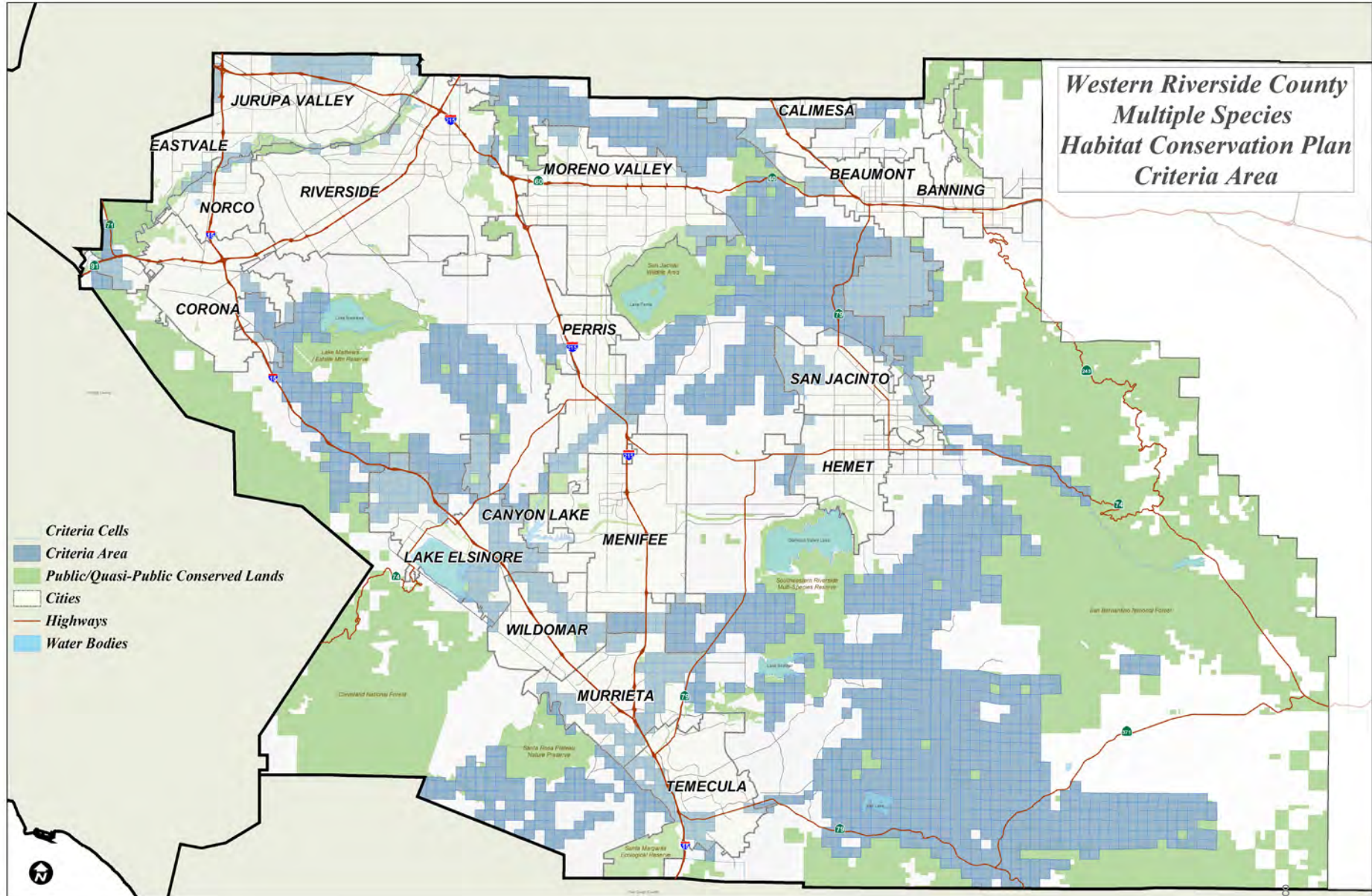
<https://www.wrc-rca.org/rcamaps/>

Note - Riverside County Conservation Summary Report Generator is no longer available.

Definitions

- **PERMITTEES** – County, Cities (18), Flood, Waste, Parks, RCTC, Caltrans, State Parks and the RCA
- **PUBLIC/QUASI-PUBLIC (PQP) lands** – lands in public or quasi-public ownership with some conservation value constituting 347,000 acres Reserve baseline
- **ADDITIONAL RESERVE LAND (ARL)** - 153,000 acres needed for Reserve Assembly above the 347,000 of PQP
- **CRITERIA AREA** – area from which Reserve will be built
- **CRITERIA CELL** – On average 160-acre units within Criteria Area with specific description of Reserve goals
- **MSHCP CONSISTENCY** – Is required throughout Plan area when project triggers a discretionary action by a Permittee.
- **HABITAT EVALUATION ACQUISITION NEGOTIATION STRATEGY (HANS)** - Process used by County and Cities to determine reserve assembly needs & make MSHCP consistency determination. Required only within Criteria Area
- **JOINT PROJECT REVIEW (JPR)** - RCA and Wildlife Agency MSHCP consistency determination process following HANS. Findings are provided.
- **LONG TERM CONSERVATION VALUE (LTCV)**
- **DETERMINATION OF BIOLOGICALLY EQUIVALENT OR SUPERIOR PRESERVATION (DBESP)** - Mitigation plan for impacts under the MSHCP for specified resources/species

The Plan Area & Criteria Area



Role of the RCA

- Build the 153,000-acre Additional Reserve Lands (ARL)
- Purchase and accept Conservation Land
- Reserve management in perpetuity
- Review all discretionary projects within Criteria Area (except for CalTrans only projects)
- Ensure MHSCP consistency determinations are adequate
- Assist the Permittees with implementation
- Protect the Permits
- Annual Reporting; Tracks losses and gains

The Wildlife Agencies

- CDFW and USFWS have permit authority
- Partners in MSHCP implementation
- Provide acquisition funding
- Monthly meetings at RCA – any Permittee/Applicant/Consultant may request time on agenda; Permittee must attend
- Include RCA in all conversations with WAs

Role of Permittees

Implement the MSHCP and protect the Permits:

- Ensure all projects are consistent with MSHCP (before submitting for JPR), including those outside the Criteria Area
- Make MSHCP Findings with each approval of discretionary action
- Require dedication of lands needed for Reserve Assembly. Reserve Assembly analysis not applicable to some *public* projects.
- Submit application materials to RCA for JPR
- Require measures to protect adjacent conservation land
- Add applicable conditions of approval to ensure consistency after JPR process complete
- Collect and remit MSHCP mitigation fees to RCA

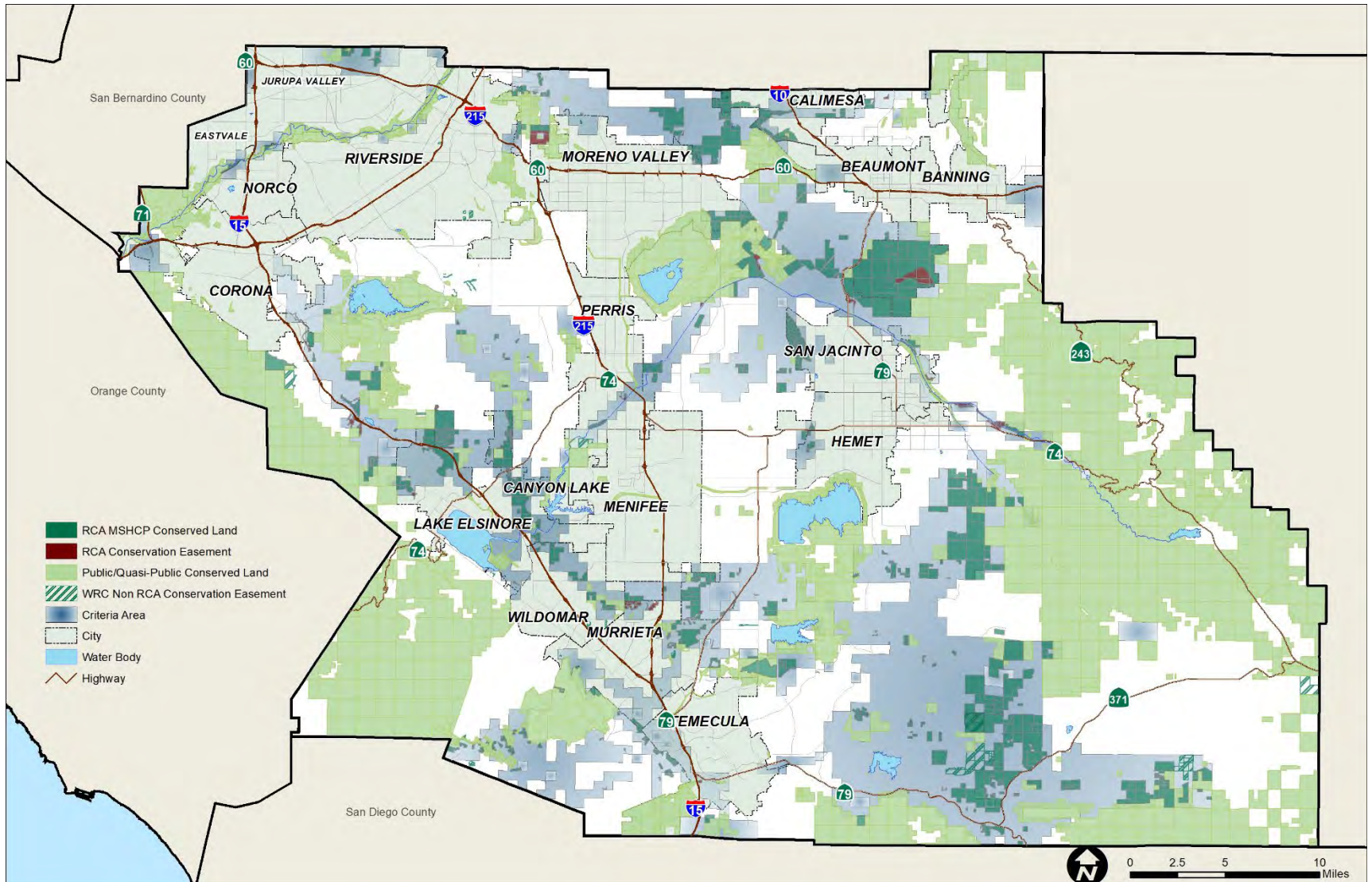
Reserve Assembly

- Reserve Assembly = acquiring 153,000 acres (ARL)
- Acquisition occurs only in Criteria Area
- MSHCP Consistency Analysis reports must address Reserve Assembly requirements
- Permittees make determination through HANS process; submit to RCA for Joint Project Review
- All private discretionary projects in the Criteria Area subject to Reserve Assembly review via HANS/JPR process
- Some public projects also subject to JPR review

Purchase or Dedication of Reserve Land

- Willing Sellers – property owners who approach the RCA to sell their property. 98% of properties have been acquired from willing sellers.
- Dedication – when partial conservation is needed, jurisdictions condition projects for conservation
 - Permittees condition project to convey land
 - Endowment for mgmt needed only if mgmt efforts are over and above RCA's general practices
- HANS/JPR 100% conservation determinations; RCA makes purchase offer

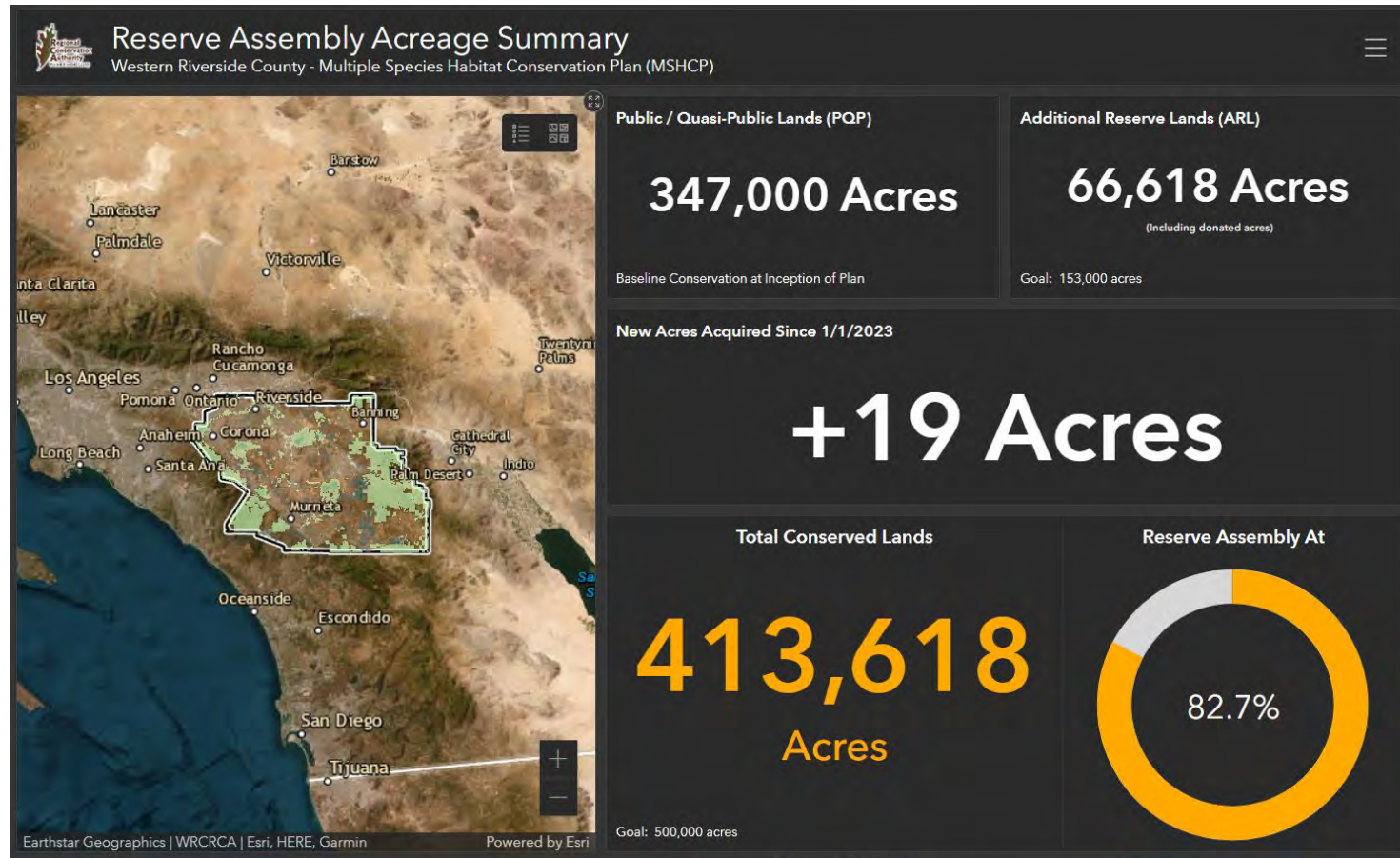
How the Reserve is Taking Shape



The Numbers

- Plan Area = 1.26 Million Acres
- The Reserve = 500,000 Acres
 - Public/Quasi-Public (PQP) = 347,000 acres
 - Additional Reserve Lands (ARL) = 153,000 acres
 - ❑ 56,000 acres State and Federal
 - ❑ 97,000 acres Local (Cities and County)
 - ✓ 41,000 acres dedicated through Development
 - ✓ 56,000 acres purchased by RCA
- Current ARL = 66,618 acres

RCA Reserve Assembly Summary



Consistency Determinations

In order for RCA to make consistency determination and prepare Findings for projects in the Criteria Area, project must demonstrate:

- Consistency with Reserve Assembly goals
- Consistency with ALL other Plan requirements



Reserve Assembly Review

1. Identify Area Plan
2. Note - Occasionally project will be located w/in 2 Area Plans
3. Identify Area Plan Subunit, and identify:
 - Target Acreage Ranges
 - Cells and Cell Groups
 - Planning Species
 - Biological Issues and Considerations
4. Cell or Cell Group Criteria - describes what Reserve feature the area contributes to, goals for habitat types, connections to other Cells or Cell Groups, and the % and location of acres needed for conservation

START Reserve Assembly analysis by looking at Cell/Cell Group criteria

Applying Cell Criteria

From the Plan, consider the following:

- Acreage and habitat described in Cell or Cell Group criteria
- Area Plan Subunit Planning Species
- Landscape, topography
- Surrounding land uses
- Geographic proximity to other existing and described conservation lands (connectivity), and developed areas

Beware – Cell in Two Subunits



Beware - Cell in Two Subunits

Cells in one or more Area Plan Subunits:

Ex. Cell 3891

- **Subunit 2: Hemet Vernal Pools West**
 - Conservation within this Cell will focus on assembly of Proposed Noncontiguous Habitat Block 7. Conservation within this Cell will focus on playas vernal pool habitat. Areas conserved within this Cell will be connected to wetlands proposed for conservation in Cells #3791, #4007, and #3887 to the north, south, and west, and to wetlands proposed for conservation in Cell Group D to the east in the San Jacinto Area Plan. Conservation within this Cell will range from 45%-55% focusing on the western portion of the Cell.
- **Subunit 4: Hemet Vernal Pools Areas – East**
 - Conservation within this Cell will contribute to assembly of Proposed Noncontiguous Habitat Block 7. Conservation within this Cell will focus on playas/vernal pool habitat. Areas conserved within this Cell will be connected to playas/vernal pool habitat proposed for conservation in Cell Group D' to the north, in Cell #3892 to the east, in Cell #4007 to the south and in **Cell #3891 in the Harvest Valley/Winchester Area Plan to the west.** Conservation within this Cell will range from 45%-55% of the Cell focusing in the eastern portion of the Cell.

What Lands Count as ARL (Reserve Assembly)?

- NOT PQP Lands – PQP is the 347,000-acre portion of the 500-acre reserve at the time the Plan began.
- NOT an Easement as a result of Section 7 or Section 10 ESA consultation prior to MSHCP permits issuance, unless expressly allowable in Volume 1 of the Plan.
- Conserved Lands that can be transferred in fee title or Conservation Easement(CE) to the RCA
- Non-Permittee conservation lands in Criteria Cells consistent with conservation criteria above will be counted as ARL if RCA has Management MOU in place with said entity (e.g., RCRCD, RLC)
- Conservation easement held by RCA

PQP/ARL Mapping

RCA Website:

<http://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/>

- PQP = light green
- ARL = dark green + dark reddish brown
- Non RCA Conservation Easements

▼ ☒ MSHCP Conserved Public Quasi-Public Lands



▼ ☒ MSHCP Conserved Additional Reserve Lands



▼ ☒ MSHCP Additional Reserve Conservation Easements



▼ ☒ Non RCA Conservation Easements



Required Information for Reserve Assembly Analysis

- **GIS Layers**
 - Completed and pending JPRs
 - ARL – conserved lands/conservation easements
 - PQP Lands
 - Non RCA Conservation Easements
 - Covered Roads
 - GIS layers for parcel ownership are available from County of Riverside
 - ROW
 - HOA open space
- **Google Earth (or some other similar tool) to view undeveloped land potentially available for conservation, near Reserve feature (e.g., Core or Linkage) described for conservation**

Potential Lands Available for Reserve Assembly

- WRC Regional Conservation Authority
- 18 Cities
- County of Riverside
- Riverside County Flood Control and Water Conservation District
- Riverside County Regional Parks and Open Space District
- Riverside County Waste Management District
- Riverside County Transportation Commission
- CA Department of Transportation
- CA Department of Parks and Recreation
- CA Department of Fish and Game
- US Fish and Wildlife Service

Lands Not Available for Reserve Assembly

- Water Districts
 - Metropolitan
 - Eastern
 - Elsinore Valley
 - Hemet Lake
 - Rancho California
- School Districts
- Special Districts
- HOAs
- Utility Easements and Railroad ROW
- etc.... If the entity is not listed in the prior slide, they are not Permittees of the Plan

Example - Independent Cell



Example – Start w/ Reserve Assembly

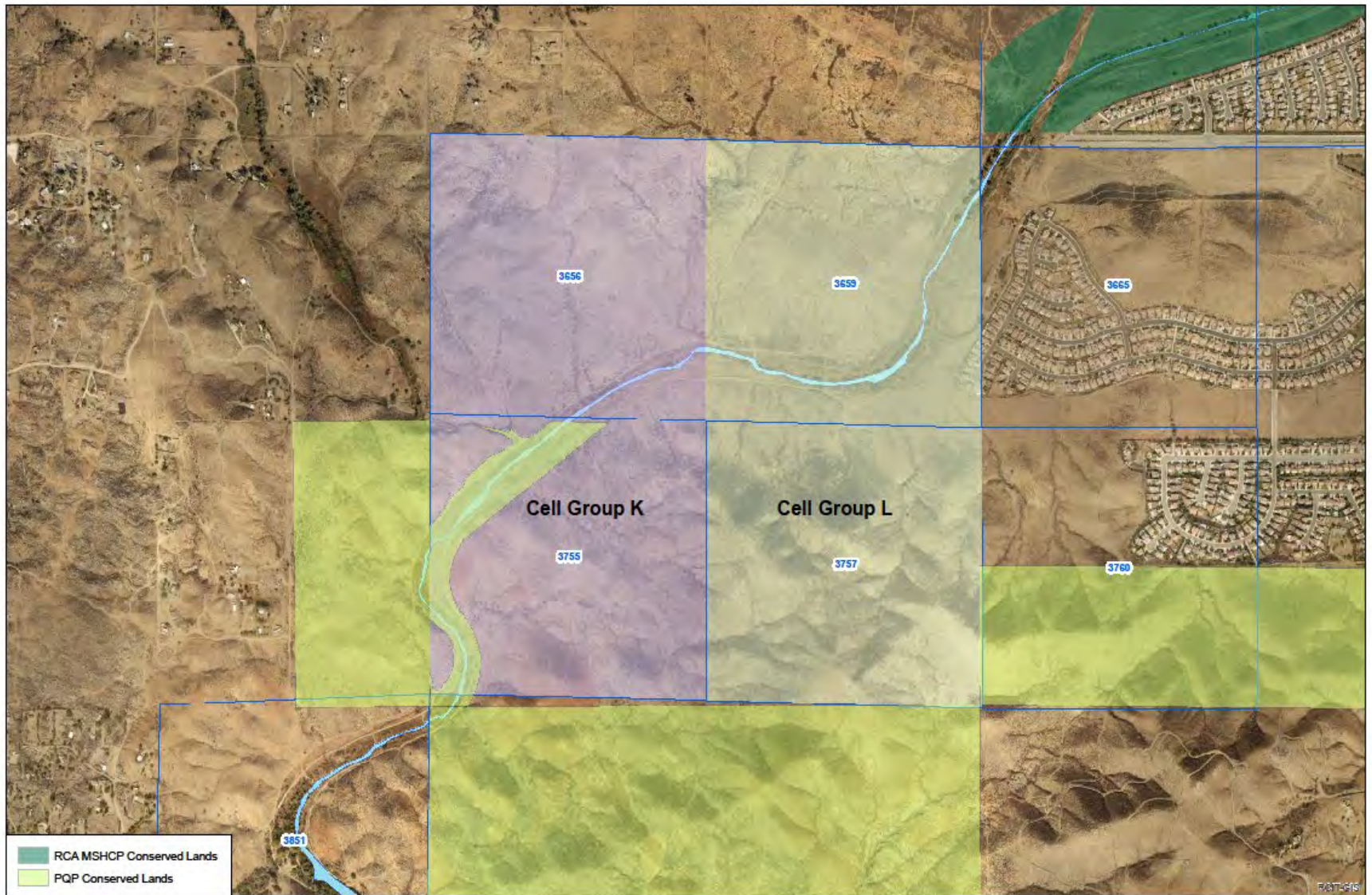
What does Cell Criteria say?

Cell 7079

“Conservation within this Cell will contribute to assembly of Proposed Constrained Linkage 13. **Conservation within this Cell will focus on riparian scrub, woodland and forest habitat along Murrieta Creek.** Areas conserved within this Cell will be connected to riparian scrub, woodland and forest habitat proposed for conservation in Cell 7078 to the west and to grassland, riparian scrub, woodland and forest habitat proposed for conservation in Cell 7166 to the south.

Conservation within this Cell will range from 5% to 15% of the Cell, focusing in the southwestern portion of the Cell.”

Example – Criteria (Cell Group) Analysis



Example – Reserve Assembly

What does Criteria say?

Cell Group K

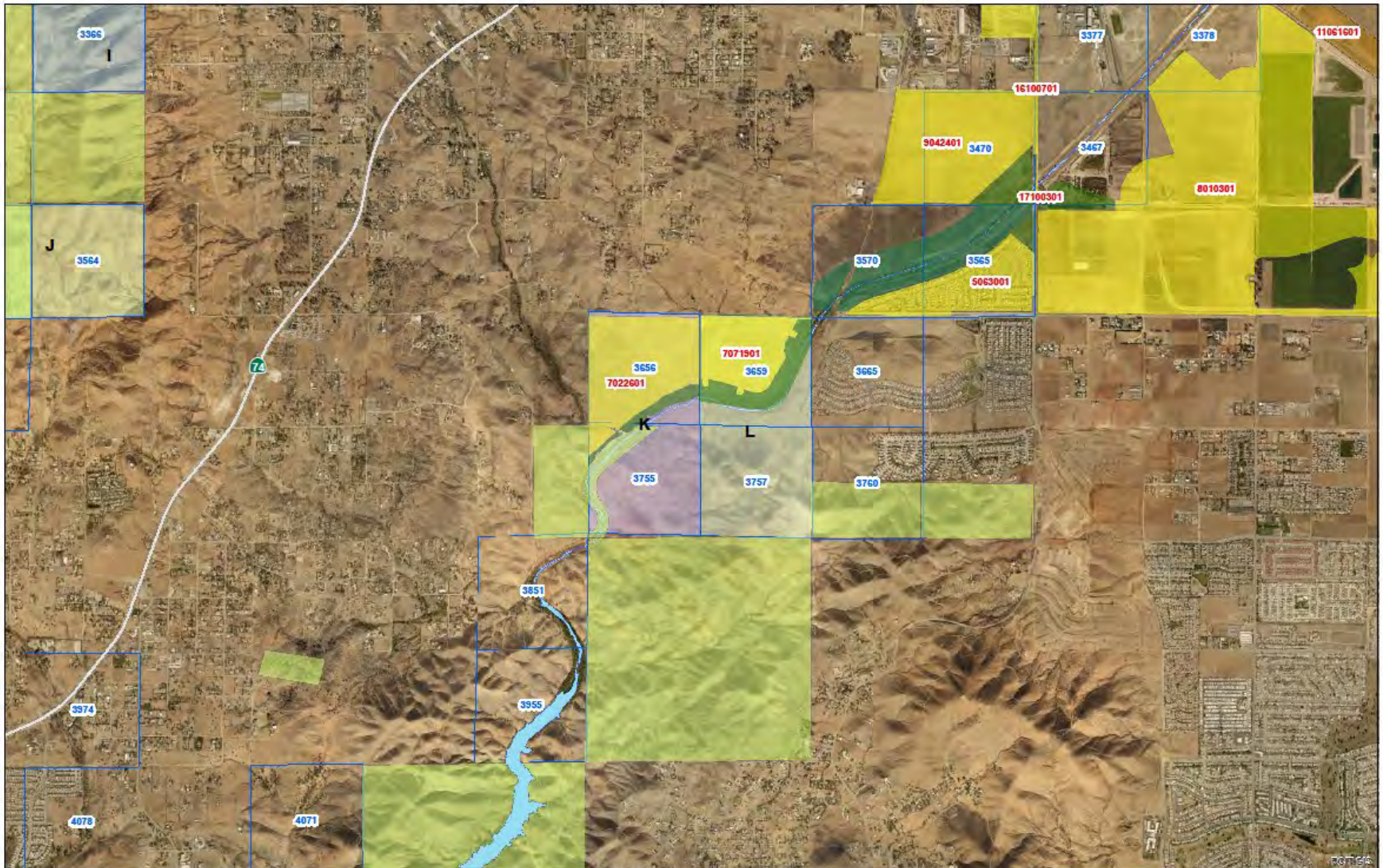
Conservation within this Cell Group will contribute to assembly of Proposed Linkage 7.

Conservation within this Cell Group will focus on assembly of coastal sage scrub, riparian scrub, woodland, forest, grassland and chaparral habitat associated with the San Jacinto River. Areas conserved within this Cell Group will be connected to coastal sage scrub, riparian scrub, woodland, forest, and chaparral habitat proposed for conservation along the San Jacinto River in Cell Group L to the east and to coastal sage scrub, riparian scrub, woodland, and forest habitat proposed for conservation in Cell #3851 in the Elsinore Area Plan to the southwest. **Conservation within this Cell Group will range from 45%-55% of the Cell Group focusing in the southern portion of the Cell Group.**

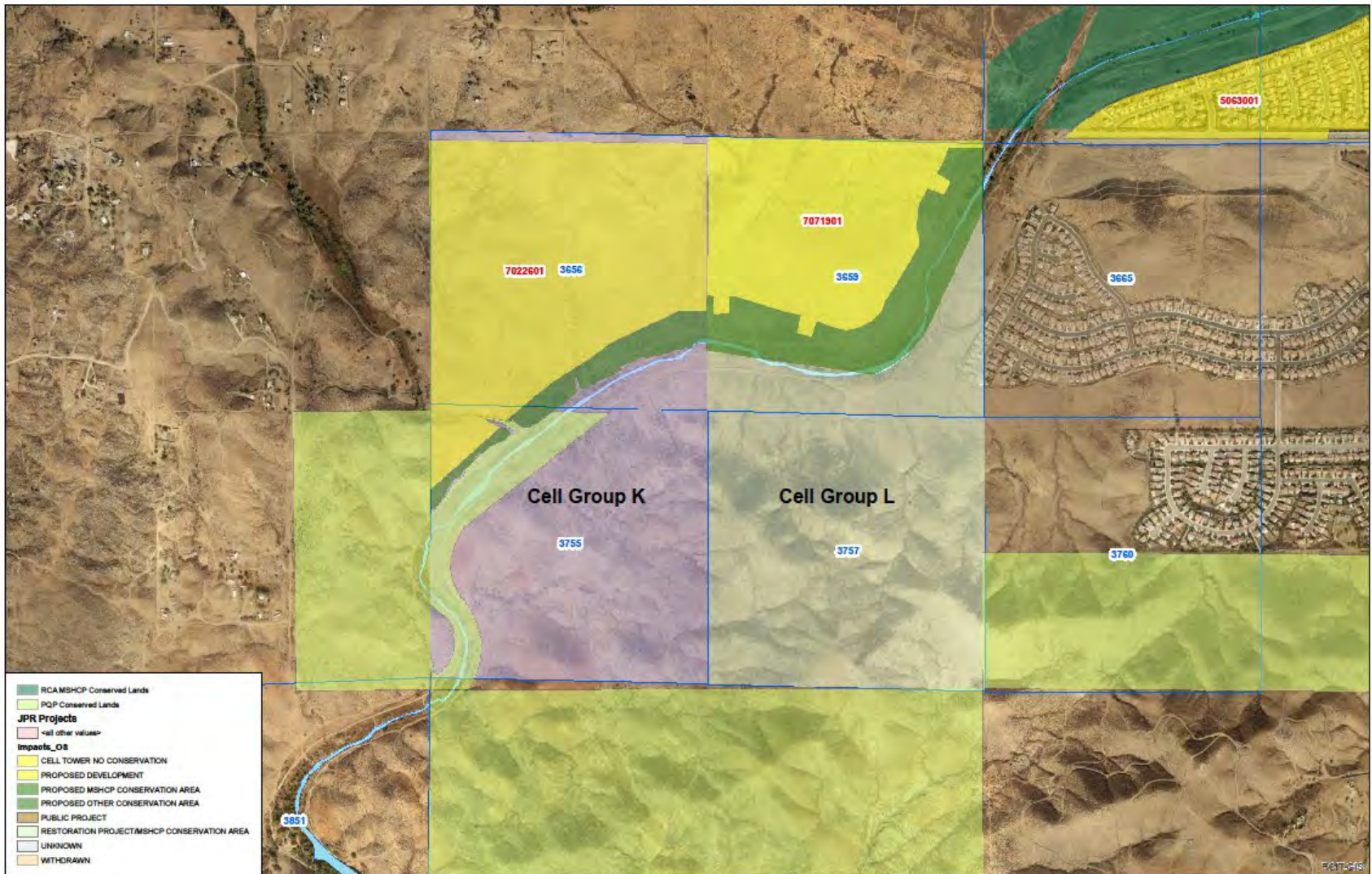
Cell Group L

Conservation within this Cell Group will contribute to assembly of Proposed Linkage 7 and of Proposed Constrained Linkage 19. **Conservation within this Cell Group will focus on assembly of riparian scrub, woodland, forest, coastal sage scrub, chaparral and grassland habitat associated with the San Jacinto River.** Areas conserved within this Cell Group will be connected to riparian scrub, woodland, forest and coastal sage scrub habitat proposed for conservation along the San Jacinto River in Cell Group K to the west, to riparian scrub, woodland, and forest habitat proposed for conservation along the San Jacinto River in Cell #3570 and #3665 to the northeast, and to chaparral habitat proposed for conservation in Cell #3760 to the east. **Conservation within this Cell Group will range from 60%-70% of the Cell Group focusing in the southern and central portions of the Cell Group.**

Evaluate Conservation/Development Patterns



Example - Cell Group Analysis



Example Reserve – Analysis Table

EXAMPLE – JPR 07-02-26-01		
Note although this project only covers one cell group it is important to understand adjacent cell group requirements to ensure connectivity as described by the Plan		
CELL GROUP K		
Feature	Acres	Comments
Total Area of Cell Group K	315	Described 45 to 55% (142-173 ac.) in southern portion
Proposed Project, Existing Development, Existing/Planned Roadways, Exempt Lands		
Proposed JPR (07-02-26-01) (Cells 3656+3755)	137.64	
Covered Roads	6.16	
Subtotal - Cell Group K	143.80	
ARL Conserved Lands (Existing and Pending; DO NOT count PQP)		
Proposed; Dedicated as part of Project	14.21	Along San Jacinto River
Subtotal - ARL Conserved Lands in Cell Group K	14.21	
Undeveloped Lands Potentially Available for Conservation (DO NOT count PQP-24.19 ac.)		
In Cell Group K (only count if can contribute to described Reserve feature)	132.80	Along San Jacinto River and most of cell 3755; SCE easements present along river portion (Do not count water districts that are exempt from MSHCP)
Subtotal - Undeveloped Lands in Cell Group K	132.80	
Cell Group K = Total Conserved + Undeveloped and Available for Conservation (does not include PQP)	147.01	Need 142-173 acres in southern portion of Cell Group; With development of proposed project, Cell Group K can still meet its goal

What if there is an Issue?

***Contact Permittee and RCA early in process
to discuss possible options!***

- First priority is to conserve additional on-site acres
- Subunit Analysis (Same as Cell and Cell Group analysis, only bigger!)
 - Can another Cell/Cell Group absorb the loss (acreage and function of the Reserve feature, e.g., PCL 19) caused by the project? Disclaimer - Standards have NOT yet been determined; currently in process with the Wildlife Agencies; still may not preclude a Criteria Refinement
- Criteria Refinement (must be completed prior to JPR)
 - Section 6.5 allows changes to cell criteria "In cases where refinements to the Criteria are desirable to facilitate Reserve Assembly". Criteria Refinement process is separate from HANS/JPR and require biologically equivalent replacement lands at minimum 1:1 ratio
 - Replacement lands must be outside of Criteria Area (not described for conservation)
 - Should be vetted by RCA before starting this process



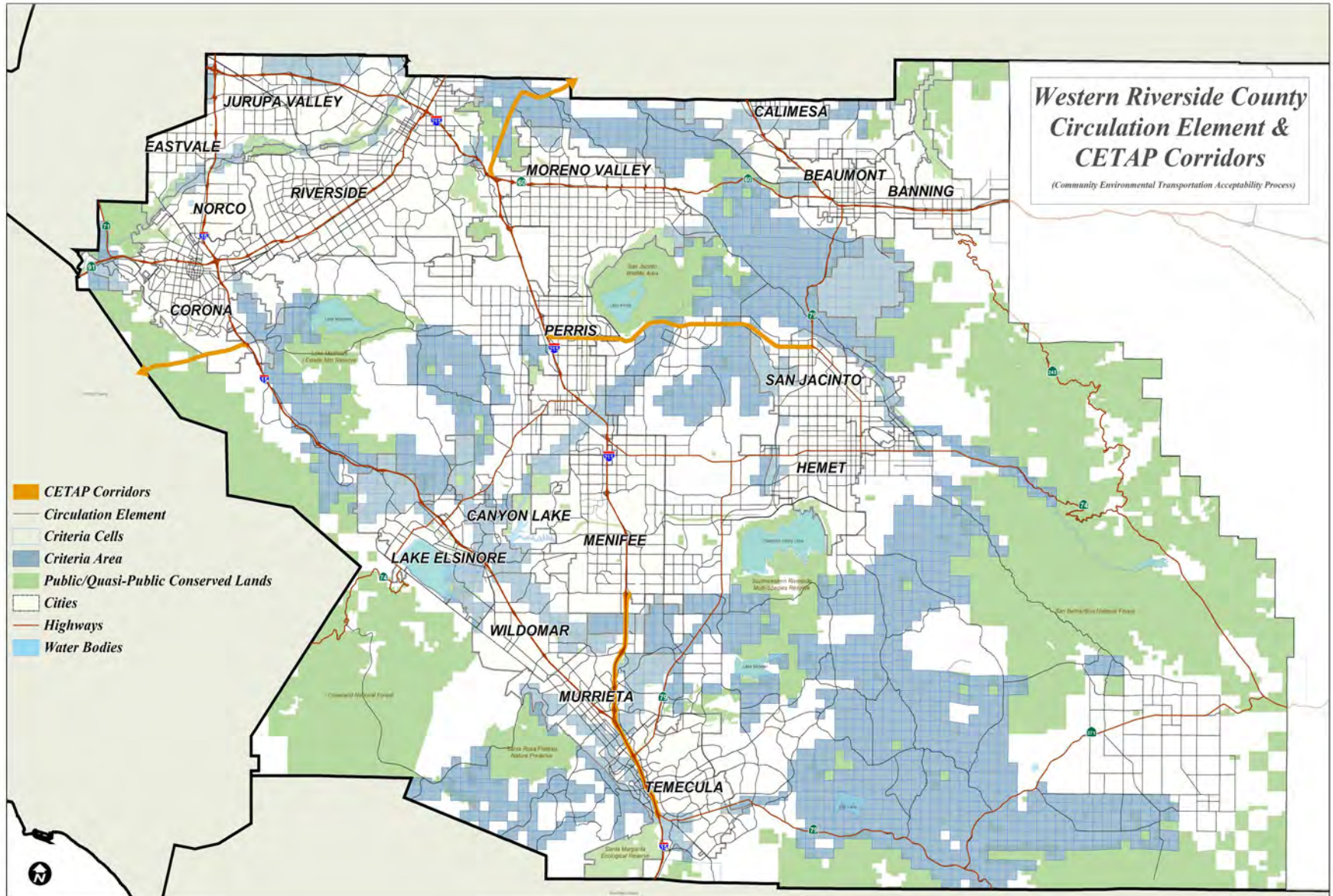
JPR Reserve Assembly Analysis – Other Considerations

- Create connections to existing and described Conservation
- Consider wildlife connectivity/crossings into project
- Consider Planning Species – subset of Covered Species considered for each Core and Linkage; also identified per each Subunit
- Consider Urban/Wildlands Interface & edge effects
- Rough Step consistency (generally coordinated directly between RCA and Permittee)

What if PQP Lands are being affected?

- PQP's 347,000 acres - backbone of the Reserve
- Primarily public landowners (USFS, BLM, CDFW, RCHCA)
- Section 3.2.1 – requires that if affect PQP lands in a way that affects Reserve function, replace those lands at a minimum 1:1 ratio
 - If impacted, PQP Equivalency Analysis required
 - PQP landowner may have additional requirements in addition to replacement

Covered Roads



Covered Roads

- Must remain within the allowable widths assigned to them as provided in the MSHCP Covered Roads data layer (RCA can provide if needed)
- Allowable width includes all project components (e.g., landscaping, safety requirements, curb and gutter, manufactured slopes, fuel modification zones, etc.).
- Components outside of the allowable width could require land replacement at equivalent or superior biological value.
- Covered Roads within the Criteria Area not subject to Reserve Assembly analysis unless they extend outside of their allowable width

Covered Roads

Three Major Project Types:

- Covered Road Operation and Maintenance
- Covered Road Safety Projects (non-capacity enhancing)
- Road improvement projects (widening/capacity enhancing)

Covered Road Operation & Maintenance

- ☐ Signage
- ☐ Traffic Control Devices
- ☐ Guardrails and Fences
- ☐ Pavement Repairs
- ☐ Accident Response
- ☐ Tree Trimming
- ☐ Natural Disaster Damage/Restoration of Emergency Access
- ☐ Storm Damage
- ☐ Weed Control
- ☐ Grading Shoulders
- ☐ Grading Existing Dirt Roadways
- ☐ Dust Stabilization
- ☐ Culverts/Drop Structures
- ☐ Curbs/Gutters/Sidewalks
- ☐ Berms
- ☐ Roadway Resurfacing
- ☐ Ditch Clearing
- ☐ Landscape Maintenance
- ☐ Bridge Maintenance
- ☐ Roadway Reconstruction

- **Must not be capacity enhancing**
- These activities are subject to Appendix C BMPs.
- Activities in Criteria Area also subject to Section 7.5.3, Construction Guidelines.
- These activities are not required to comply with Sections 6.1.2, 6.1.3, 6.1.4 and 6.3.2 or 7.5

Covered Road Safety Projects

- Must be non-capacity enhancing
- These activities are subject to Appendix C BMPs.
- Activities in Criteria Area also subject to Section 7.5.3, Construction Guidelines.
- These activities are not required to comply with Sections 6.1.2, 6.1.3, 6.1.4 and 6.3.2 or 7.5

Covered Roads Road Improvements

Road improvement (widening) projects subject to:

- Sec. 6.1.2 - Riparian/Riverine and Vernal Pool Policies
- Sec. 6.1.3 and 6.3.2 - Species surveys in mapped survey areas if suitable habitat will be impacted
- Sec. 7.5 - Siting, design, construction and wildlife movement guidelines if in a Criteria Cell or PQP lands
- Urban/Wildlands Interface
- JPR for projects in Criteria Cells only*
- Not subject to Reserve Assembly requirements

*Projects improving Caltrans facilities are not subject to JPR unless local agency sponsor chooses but, are subject to State Permittee review process with Wildlife Agencies.

What if not a Figure 7-1 Covered Road?

Inside Criteria or ARL – Requires a Minor Amendment for a Road Exchange

- Must replace w/ 7-1 road that will not be built; No net increase in impact acreage can occur
- Cannot negatively affect Rough Step
- Cannot impact existing or future Reserve
- Cannot impact Reserve connectivity
- Consistency with Sections 6.1.2, 6.1.3, 6.1.4 and 6.3.2 and with the siting, design and construction requirements identified in Sections 7.5.1, 7.5.2, and 7.5.3

What if not a Figure 7-1 Covered Road?

Outside Criteria and PQP – Covered Activity with no Minor Amendment/Road Exchange required, but still subject to all other applicable MSHCP policies

Inside PQP Lands – If affects Reserve Assembly, requires minimum 1:1 replacement and analysis document (Section 6.5) to demonstrate replacement is biologically equivalent or superior to existing road; Also follow same process as new roads inside Criteria Cells

Section 7.5.1

Guidelines for Siting/Design of Planned Roads

- Located in the least environmentally sensitive location, if feasible
- Avoid, impacts to Covered Species and wetlands to the greatest extent Feasible
- Consider wildlife movement requirements
- Narrow Endemic Plant Species should be avoided if feasible
- Avoid clearing of natural vegetation during the active breeding season (MSHCP states March 1 through June 30, but should be extended pursuant to the MBTA)

Section 7.5.2

Guidelines for Construction of Wildlife Crossings

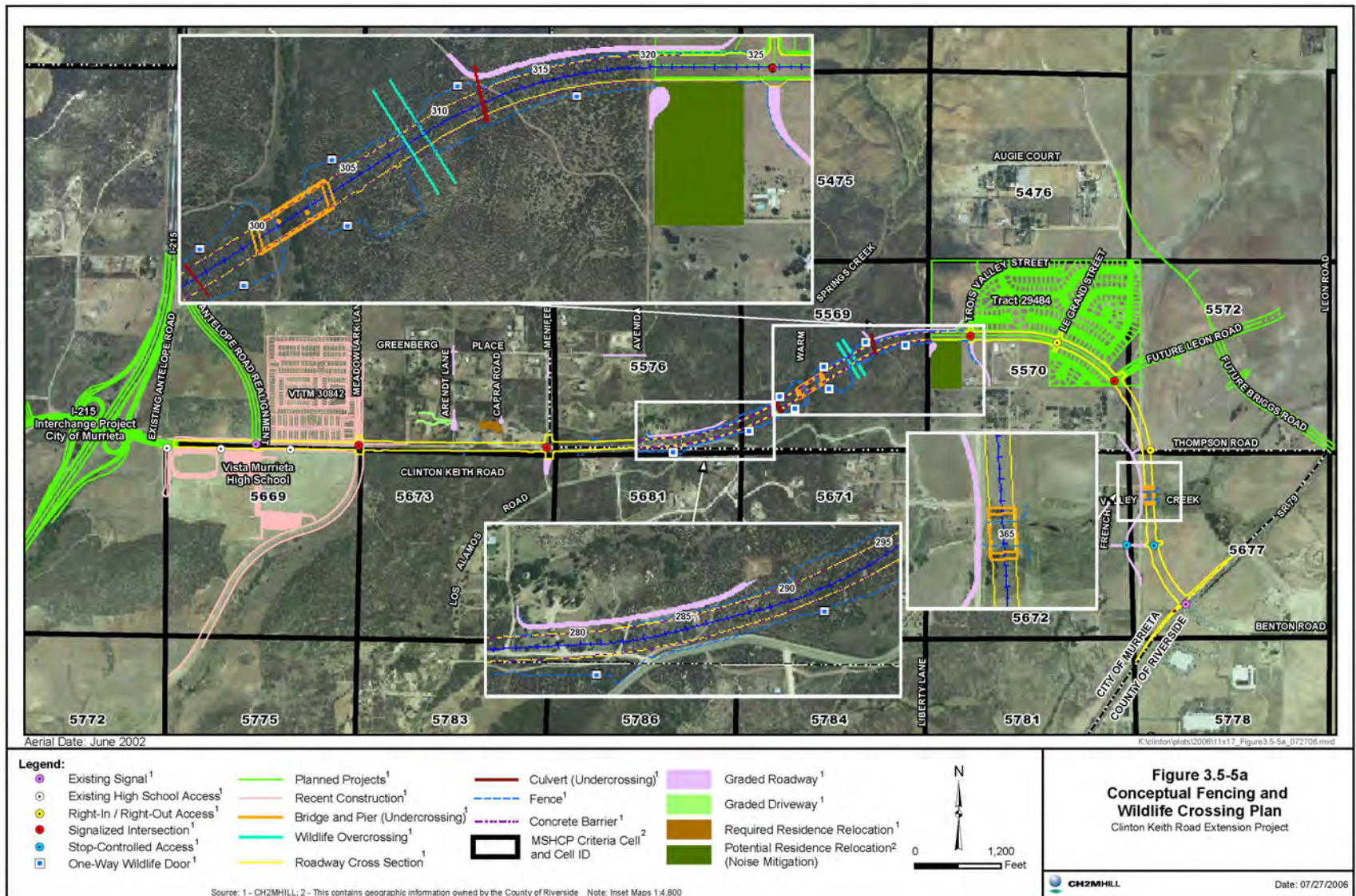
- Applies to facilities where conservation land exists or is expected to exist on both sides of a Covered Facility
- Consider wildlife movement needs for Planning Species in the project area. Section lists requirements for number and size of undercrossings depending on species (use openness ratio)
- Use variety of crossings for different types of species depending on length of road interface with conservation land
- Use openness ratio
- Most projects can accommodate wildlife movement using drainage culverts already part of the facility with some upsizing and directive fencing. Dry crossings or culverts with dry ledge may be needed for smaller species.

Meadowlark Road and the Clinton Keith Road extension both designed to accommodate wildlife movement

Additional Wildlife Crossing Considerations

- Natural bottom
- Vegetated overcrossing or undercrossing
- Directional fencing
 - Fencing plans to be reviewed/approved by RCA
- Dry crossing
- Maintain line of sight
- Consider planning species
- Follow crossing spacing increments from Section 7.5.2

Wildlife Crossings – Clinton Keith Extension



Wildlife Crossings – Clinton Keith Extension



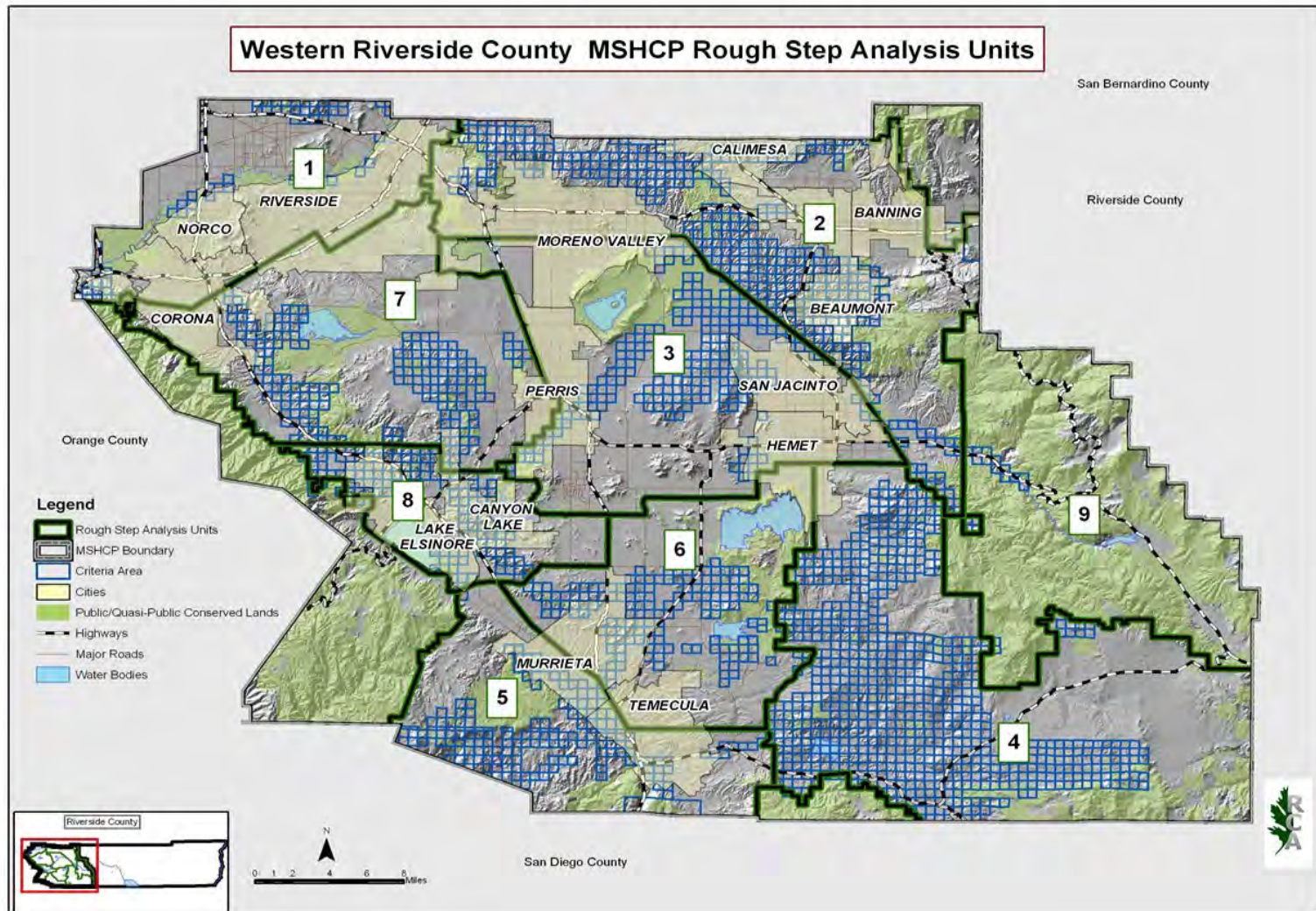
Clinton Keith Extension – Visual Simulation



Rough Step

- Designed to track how Conservation is keeping pace with Development
- Primary measurement tool of Plan success
- Based on vegetation communities and tracked within Criteria Cells
- Status reported in Annual Report
- If out of Rough Step, Plan calls for Permittee to conserve needed vegetation communities prior to authorizing additional loss
- Three units currently out of balance (**RSUs 3 and 7** – Riversidean Alluvial Fan Sage Scrub; **RSU 8** - Grassland)

Rough Step Units



Rough Step

- RCA must consider Rough Step in addition to Reserve Assembly requirements in project consistency review
- RCA will include Rough Step status in JPR consistency findings
- RCA closely monitors loss of high value vegetation categories (riparian, alluvial fan sage scrub) that have limited acres available for development
- Section 6.7 – “If the Rough Step rule is not met during any analysis period the Permittees must conserve appropriate lands supporting a specified Vegetation Community within the Analysis Unit to bring the Plan back into the parameters of the rule prior to authorizing additional loss of the Vegetation Community for which the rule was not achieved.”



Covered Species “Take” Limitations

Table 9-3 – Species Not Adequately Conserved

Take not available without Forest Service MOU:

- California bedstraw
- California spotted owl
- Cleveland's bush monkey flower
- lemon lily
- ocellated Humbolt lily
- San Bernardino mountain kingsnake
- San Diego mountain kingsnake
- shaggy-haired alumroot
- southern rubber boa
- southern sage brush lizard
- sticky-leaved dudleya
- Williamson's sapsucker

Covered Species “Take” Limitations

Table 9-3 Species Not Yet Adequately Conserved

Take not available until named objective is met:

- cliff cinquefoil
- California muhly
- Chickweed oxytheca [*partial objective met*]
- grasshopper sparrow [*partial objective met*]
- Lincoln's sparrow
- Mojave tarplant

Take available because named objective has been met:

- | | |
|----------------------------|------------------------------|
| ✓ beautiful hulsea | ✓ peninsular spine flower |
| ✓ Coulter's matilija poppy | ✓ Plummer's mariposa lily |
| ✓ fish's milkwort | ✓ rainbow manzanita |
| ✓ graceful tarplant | ✓ small- flowered microseris |
| ✓ Parry's spine flower | |

Species “Take” Limitations

Take very limited or not available
(not even outside of breeding season):

- Santa Rosa fairy shrimp
- Bald eagle*
- Golden eagle*
- Peregrine falcon*
- White-tailed kite*

*State Fully Protected Species





JPRs - Getting Started

- APNs and acreages - accurate and consistent throughout all documentation
- Include project description details, including both on-site and off-site project components
- Full GIS shapefiles (on-site, off-site, permanent, temporary, avoidance)
- If no site plan, still need definitive areas of disturbance, temporary and permanent
- If fuel modification zones are required, they ARE also part of the project description (permanent impact)
- Include photos

Keep in Mind...

- Age of surveys
- Quality documentation, with all conclusions adequately justified, means less comments/less delays
- Documents needs to walk the reviewers into agreeing with the conclusions
- Biologists should be informing their clients and the Permittees of any requirements and risks early *before* JPR documents are submitted to RCA
- CEQA support

Other Plan Requirements

After Reserve Assembly...

All projects are required to address, when applicable:

- Section 6.3.1 – Vegetation Mapping
- Section 6.1.2 – Riparian/Riverine/Vernal Pool
- Section 6.1.3 – Narrow Endemic Plant Species
- Section 6.3.2 – Additional Survey Needs and Procedures
 - Plants – Criteria Area Species (generally in Criteria Cells)
 - Animals – Amphibians, Burrowing Owl, Mammals
 - Delhi Sands Flower-loving Fly
- Section 6.1.4 – Urban Wildlands Interface

Determining Survey Requirements

RCA MSHCP Information Tool

<https://www.wrc-rca.org/rcamaps/>

Riparian/Riverine habitat and associated species (e.g., fairy shrimp, riparian birds) is not included in this Tool.
ALL projects needs to address Section 6.1.2

Section 6.1.2 Riparian/Riverine Resources Assessment Needs and Considerations

https://www.wrc-rca.org/wp-content/uploads/2022/06/Section6_1_2_Riparian_Riverine_Functions_and_Values_Factors_List_FINAL_20220620.pdf

Vegetation Mapping

Project-level **VEGETATION MAPPING** generally required:

- to demonstrate consistency with Criteria
- to demonstrate support of Reserve Assembly
- for Section 6.1.2 Protection of Species Associated with Riparian/Riverine and Vernal Pools
- for Section 6.1.3 Narrow Endemics Plant Species
- for Section 6.3.2 Additional Survey Needs and Procedures

Although the MSHCP (Section 6.3.1) states that not all situations may require project-level vegetation mapping, it is applicable to most projects:

- Important tool to describe existing site conditions, habitat suitability, species that may or may not be supported on site, and temporary and permanent impacts.

Section 6.1.2 Riparian/Riverine & Vernal Pools

- Applies to all projects within the entire Plan area (both within and outside of Cells)
- Address all four potential areas of impact, every time, all the time:
 - Riparian/Riverine Resources
 - Vernal Pools
 - Fairy Shrimp
 - Riparian Birds
- Also, consider other associated species



Section 6.1.2 – Riparian/Riverine Resources

“...lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent moss and lichens, which occur close to or depend upon soil moisture from a nearby fresh water source; OR areas with fresh water flow during all or a portion of the year.”

- Natural in origin; includes past natural features that have been heavily modified and/or redirected through man-made manipulation
- Even manmade concrete channel connected to existing or described conserved lands installed to redirect historic flows could warrant mitigation
- Evaluate riparian/riverine features in context of downstream **connectivity**

Section 6.1.2 – Riparian/Riverine Resources

- Include a detailed description regarding when, where, and how the riparian/riverine resources were defined and evaluated in the field.
- Riparian/Riverine resources should be mapped and clearly depicted on graphics and included in the GIS shapefiles (i.e., need more than line on map to determine impacts)
 - Jurisdictional Delineation only is not a substitute
 - CDFW jurisdiction may be used as starting point (CDFW streambed jurisdiction *generally* equivalent to MSHCP riparian/riverine)
- Compare function(s) and value(s) of resources pre- and post- project.
- On-and off-site hydrology, and historic flows

Artificially Created Wetlands

- Most artificial wetlands are NOT subject to MSHCP riparian/riverine reqs (if isolated and unvegetated) but are still subject to other Section 6.1.2 requirements (e.g., fairy shrimp)
- Exceptions (these ARE subject to MSHCP):
 - Wetlands created for mitigation
 - Created open waters (i.e., Lake Perris)
 - Wetlands created from the alteration of natural streams (e.g., managed marsh)



Section 6.1.2 – Riparian/Riverine Resources

- **Avoidance**

- Commitment to a deed restriction, conservation easement, OR similar legal protective mechanism AND measures to protect LTCV (directly and indirectly)

- **Impacts**

- Impacts (permanent and temporary, direct and indirect) to riparian or riverine resources should be both qualitatively and quantitatively discussed
- Discussion of impacts to functions and values
- Riparian/Riverine or vernal pool resources that are not 100% avoided (directly and indirectly), prepare DBESP

Vernal Pools

- Determine if suitable conditions on site, and discuss:
 - On- and off-site Hydrology
 - Soils
 - Plants
 - Topography
 - Historic conditions



- Map extent of feature(s) including supporting hydrology
- Substantiate presence OR absence
- Do not sidestep the issue by calling them SEASONAL Pools or Depressions
- If can't 100% avoid (directly and indirectly), prepare DBESP



Fairy Shrimp

- Identify and map suitable habitat for Riverside, vernal pool, and Santa Rosa fairy shrimp
 - Vernal pools
 - Ephemeral pools
 - Other depressions may be suitable, including manmade stock ponds, detention basins, road ruts, etc.
- Characterize soils, inundation, topography/hydrology, historic conditions, etc. as factors in suitability of habitat



Fairy Shrimp

- Survey initiation and/or pond checks would occur after initial storm events to determine when potential habitat has become inundated
- Per the USFWS 2017, if appropriate habitat is present (i.e., considered to be inundated when it holds greater than 3 cm of standing water 24 hours after a rain event) then initiate protocol-level surveys



Fairy Shrimp

- If suitable fairy shrimp habitat is present and the project can't avoid, focused surveys per current USFWS protocol are required
 - 2 seasons of protocol surveys per 10(a)(1)(a) permit (= 1 wet/1 dry)
- If can't avoid 90% of occupied areas that provide LTCV, including the supporting hydrology, prepare DBESP

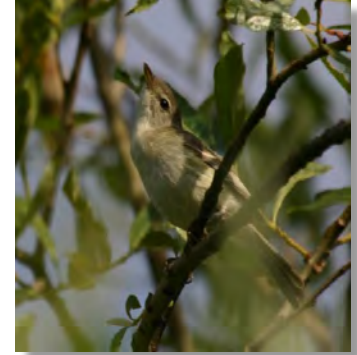
Riparian Birds

- If project will impact suitable riparian habitat, conduct protocol-level surveys:
 - Least Bell's vireo (LBVI)
 - Southwestern willow flycatcher (SWFL)
 - Yellow billed cuckoo (YBCU)
- If focused surveys detect LBVI and project cannot avoid 90% of occupied areas that provide LTCV, prepare DBESP
- If focused surveys detect SWFL and/or YBCU and project cannot avoid 100% of occupied areas that provide LTCV, prepare DBESP.



Riparian Birds

- Address direct and indirect impacts
- Consider potentially occupied habitat adjacent to the site
- LBVI and SWFL Objectives 2 and 3:
Include at least 100 meters of undeveloped landscape adjacent to suitable habitat where it occurs within the Criteria Area
- Impacts to occupied habitat during breeding season is prohibited (Note: pre-con surveys are not a replacement for protocol-level surveys)
- Mitigation for riparian birds is required in addition to mitigation for riparian/riverine impacts



Section 6.1.2 Resources Considerations

- Detailed methodology, mapping, and quantification (existing, impacted, avoided)
- CDFW streambed jurisdiction *generally* equivalent to MSHCP riparian/riverine)
- Identify all on-site and off-site resources, in relation to proposed project
- Differentiate between direct, indirect, permanent, temporary impacts (on maps and in GIS data)
- Address functions & values, and LTCV (more than just occupied)
- Support conclusions of “no suitable habitat” and “absence of species”
- Be definitive; Don’t use terms like “may”, “low potential”, etc.

Don't simply say...

- “No on-site riparian habitat or riverine drainages; therefore, no impacts to Section 6.1.2 resources.”
- “There is no habitat for XX species, and therefore surveys are not required.”
- “Site is disturbed and there are no vernal pools, therefore there is no habitat to support fairy shrimp and no surveys are required.”
- “Although there is riparian habitat suitable for LBV adjacent to the project site, none is present on the project site, and therefore, no further action is required.”

Avoidance - Riparian/Riverine/VPs and Associated Species

- Map avoidance areas in all JPR documents
- Include solid and justified avoidance statement (“commitment”) for areas not being impacted directly or indirectly
- Provide assurances for avoidance in perpetuity (e.g., conservation easement or deed restriction)
- Again, if cannot avoid Rip/Riv/VPs, SWFL, and/or YBCU at 100% and/or cannot avoid at least 90% of occupied areas that provide LTCV for FS and LBVI, prepare a DBESP

Section 6.1.2 - DBESP Content

- Justify why avoidance is not possible
- Identify and map extent of all existing on-site resources
- Quantify project impact acreage(s),
 - Include linear feet if Riparian/Riverine
 - Include in GIS shapefiles
- Describe F&V of existing on-site resources pre- and post-project
 - For Riparian/Riverine, the F&V discussion must include potential effects (direct and indirect) on connectivity to downstream resources, and to existing and described Conserved Areas (e.g., Linkages)
- DBESP mitigation is required to be biologically equivalent or superior as compared to existing F&V if “no project”

Section 6.1.2 - DBESP Mitigation

- CDFW mitigation *generally* meets MSHCP DBESP standard
- Mitigation bank or in-lieu fee credits must be within Plan area; Must be “in kind”
- Mitigation terminology should be consistent with current terms (e.g., Establishment, Re-establishment, Rehabilitation, Enhancement, and/or Preservation)
 - Provide acreage amount of mitigation for each mitigation type and location
- If restoration and/or habitat replacement is proposed (applicant-sponsored), provide methodology, success criteria, mgmt, monitoring, etc.
- Riparian/Riverine impacts and mitigation; finding off-site mitigation is difficult and expensive and usually better to mitigate on site or conserve
- Identify entity responsible for carrying out mitigation and managing it in the long-term (note: cannot be HOA)
- Riparian birds – may need additional mitigation over an above riparian habitat mitigation
- RCA can accept regulatory permit mitigation land if it also contributes to Reserve Assembly

Section 6.1.2 DBESP - Common Issues

- Mapping and Presence/Absence
 - Riparian/Riverine areas too narrowly defined
 - Mapping a line vs. the extent of the feature
 - Discounting value of unvegetated riverine resources
 - Discounting hydrology, downstream connectivity, and historic flows
 - Relying too much on USACE jurisdiction
- Mitigation
 - Not addressing habitat suitability or occupancy of riparian species
 - Mitigation relying solely on in-lieu fee programs and/or not in-kind
 - Mitigation not specifically identified or relies on low ratios without including specific type of credit(s) and/or without “before and after” F&V discussion (all considered as part of equivalency analysis)
 - Proposing 1:1 ratio (rarely acceptable due to temporal loss)
- Not implementing indirect avoidance of nesting riparian birds

Note: Projects are still subject to CEQA and CFGC/MBTA

Monthly Pre-Application Meetings

- Attendees include RCA, CDFW, USFWS, USACE, RWQCB
- Purpose:
 - To assist applicants with State waters/streambed and federal wetlands/waters of the U.S. permitting
 - To promote consistency between MSHCP Section 6.1.2 and Agency permitting requirements, including mitigation
- Second Wednesday of each month
- Meetings currently are virtual and alternate between the Santa Ana/San Jacinto watershed and the Santa Margarita watershed
- Agencies may grant 30-day DBESP review instead of 60-day if they concur early on with mitigation strategy
- Permittees must attend and you need to plan to provide project description and any applicable maps

Contact Leslie Levy llevy@rctc.org to schedule



Sections 6.1.3 Narrow Endemic and 6.3.2 Criteria Area Plants

- NEPSSA and CASSA Plants – use RCA Information tool
- NEPSSA addressed throughout Plan; CASSA Plants only within Criteria Area
- Document soils, topography, and precipitation data
- Identify and map any suitable habitat; overlay with project boundaries
- If suitable habitat, must conduct focused surveys during appropriate blooming period (Table 6-1) within 1-2 years prior to JPR process
- Identify LTCV for each plant species to be impacted
- Quantify impacts from project, including impacts to LTCV

Sections 6.1.3 Narrow Endemic and 6.3.2 Criteria Area Plants

- Methodology when site is subject to drought conditions
- Check reference populations to confirm blooming; Reference populations should not be on land subject to active mgmt or supported by artificial water source
- If assert no suitable habitat, must support conclusion(s) with solid evidence; disturbance is NOT a sole basis for ruling out habitat suitability
- Consider associated veg, soils, topography, presence of seedbank
- Include all the above in Consistency Analysis
- Don't use terms such as "low potential" or "unlikely to occur"
- If can't avoid 90% of LTCV (must explain how determined; all of the 90% does not have to be occupied), prepare a DBESP

NEPSSA/CASSA Plants - DBESP Content

- Define areas of LTCV on maps
- Mitigation:
 - Restoration, creation, relocation/translocation
 - Identify methodology, weeding, success criteria, etc.
 - Identify entity responsible for carrying out mitigation, including long-term management (no HOAs)
 - Mitigation site must be protected in perpetuity
 - Demonstrate equivalent or superior long-term viability of mitigation



Section 6.3.2 Additional Wildlife Surveys

- Mapped surveys areas for:
 - Amphibians
 - Burrowing Owl
(largest mapped survey area)
 - Small Mammals
- Use RCA Information Tool to determine species surveys required for a site
- Survey requirements can be discontinued when all species objectives have been met. None discontinued to date...



6.3.2 Amphibians

Survey according to accepted protocols:

- arroyo toad (USFWS 1999)
- California red-legged frog (USFWS 2005)
- mountain yellow-legged frog (USFWS protocol pending; MSHCP Mountain Yellow-Legged Frog Survey Report 2005 describes a general protocol)



6.3.2 Burrowing Owl

- Follow MSHCP's 2006 Survey Instructions Protocol (Step-by-Step)
- Step I –Site Assessment
 - Map all on-site suitable habitat, and w/in including within 500' buffer
 - Ground squirrel burrows
 - Burrow - entrance diameter and depth
 - Debris piles
 - Other sign
- Must support assertion of “no suitable habitat” with solid evidence
- Disturbance alone does not rule out habitat suitability
- Step II-A - If suitable habitat, conduct focused burrow survey



6.3.2 Burrowing Owl continued

- Step II-B - If suitable burrows, conduct focused owl surveys
- Spread out the four focused owl survey dates
- Document specific details of methodology and existing conditions (dates, times, weather conditions, and percent vegetation cover)
- Define criteria to support species detection, or lack thereof
- Avoidance is always best!
- If can't avoid 90% LCTV (doesn't all have to be occupied), prepare DBESP
- Note that pre-construction surveys do NOT replace focused/protocol-level surveys

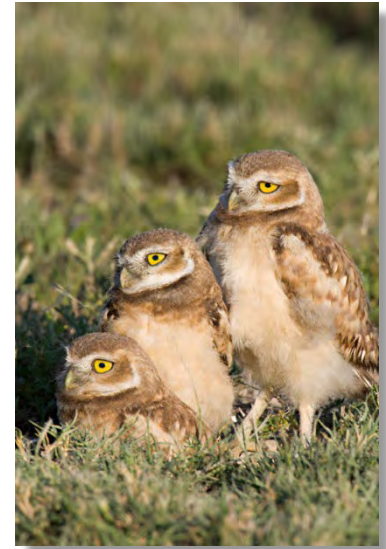
Burrowing Owl – Other Measures

- Pre-construction survey (30 days prior) required on all projects with suitable habitat; If site left undisturbed again for 30 days, conduct pre-con surveys again (include this full commitment in JPR documentation)
- Note: pre-construction means pre-veg clearing, pre-staging equipment (i.e., pre-any disturbance)
- If found, commit (in document) to immediately notify RCA and WAs
- May also need to prepare a *BUOW Protection and Relocation Plan*

We can provide this “commitment language”

Burrowing Owl Conservation/Mitigation

- Avoidance always preferred!
- Separate standard for on-site conservation
 - If three or more pairs on 35+ acres of suitable habitat
- Eviction/passive relocation generally only acceptable if:
 - Suitable habitat and natural or artificial burrows w/in 75-100 meters
 - Adjacent habitat is conserved (preferred)
 - Coordinate with RCA/Wildlife Agencies
- Active Relocation – requires Relocation Plan and coordination with RCA/Wildlife Agencies



6.3.2 Small Mammals

- Los Angeles Pocket Mouse
 - No official protocol (assessment and trapping) but the MSHCP Bio Monitoring Program has developed good guidance
 - Sandy soils, washes, windblown habitats
 - Clearly map all suitable habitat
 - Report should describe LTCV and connectivity to off-site habitats
 - The 90% standard applies (and not all area has to be occupied)
- San Bernardino Kangaroo Rat - Similar approach to LAPM above
 - Absence and/or avoidance must be supported by solid evidence.*



Stephens' Kangaroo Rat

- MSHCP overlaps with SKR HCP
- Where overlap occurs, SKR HCP provides SKR take
- In areas outside SKR HCP, the MSHCP provides take
- No SKR assessment or trapping is required under either HCP
- Other than payment of fees, no additional mitigation for SKR is required under either HCP
- No impacts allowed within SKR HCP Core Areas

Survey Results

- Clearly map all suitable habitat and results
- Survey all required buffers (unless access is not allowed)
- Conclusions of “no suitable habitat” and “absence” must be justified
- Disturbance is not a sole factor useful in ruling out presence
- If asserting no suitable habitat, don’t use terminology such as species has “low potential” or “is unlikely” to occur; otherwise focused surveys required

Section 6.3.2 Wildlife - DBESP Content

- Methods, mapping/shapefiles, population data, long-term mgmt, success criteria etc.
- Need to justify why project cannot avoid resources
- Address how the impacts will be offset by proposing benefits (equivalent or superior to avoidance of current conditions)
- BUOW DBESPs most common, often prepared as contingency on linear projects with suitable habitat
- Challenges with mitigating for small mammals
- USFWS can provide guidance
- RCA may be able to help find mitigation sites

General Note for all DBESP Submittals

In Criteria Area: Permittee submits DBESP with JPR Materials; 60-day review* starts when JPR received by Wildlife Agencies

Outside Criteria Area: Permittee submits DBESP (including other consistency information) to Wildlife Agencies for 60 day review* on all projects

*Unless 30 day review has been granted through a pre-application meeting

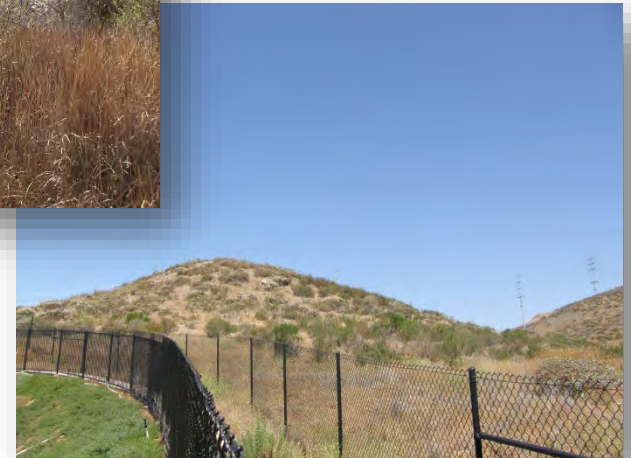
Delhi Sands Flower-loving Fly

- Mostly Jurupa Valley
- Refer to Fig 9-9 and Species Object 1B
- If attempting to conclude no suitable habitat in a mapped Delhi sands area, need to provide evidence that no unconsolidated Delhi sands are present, regardless of disturbance, unless site is completely developed.
- USFWS must provide concurrence with conclusion of “no suitable habitat”
- If suitable habitat, 2 consecutive years of surveys
- Requires 2x/week from July 1 to Sept 20

Section 6.1.4 - Urban Wildland Interface

Applies where development is near Conservation Areas (future and existing) that may create edge effects. MSHCP Consistency document and CEQA document should address:

- Drainage
- Toxics
- Lighting
- Noise
- Invasives
- Barriers/Fencing
- Grading/Land Development



Section 6.1.4 - Urban Wildland Interface

- **Drainage/Toxics** – all runoff is treated before discharging into streams to protect downstream riparian\riverine resources. Addressed through NPDES construction and stormwater quality requirements. BMPs (e.g., basins) must be located outside Conservation Area
- **Lighting** – direct all project lighting away from adjacent conservation areas and wildlife crossings
- **Invasives** – avoid use of invasive plant species adjacent to existing or future Conservation Areas (Table 6-2)
- **Barriers** - Projects should include fencing plans when adjacent to existing or proposed conservation
- **Grading/Land Development** - Manufactured slopes, FMZs, basins, or other improvements may not encroach into conservation areas

Other UWIG Considerations

- Affects properties in close proximity to existing and described Conservation Areas (projects can affect existing and future conservation areas even when not directly adjacent)
- Edge Effects and Indirect Impacts
- Consider “connectivity” when discussing edge effects and indirect impacts
- May also apply to projects outside of the Criteria Area, if adjacent to Criteria
- To reiterate, FMZs are permanently impacted areas; Cannot encroach into any Reserve/conserved lands
- Addressing UWIG is one of the many reasons we need detailed project description information, including FMZs

Volume I, Appendix C – Standard Best Management Practices

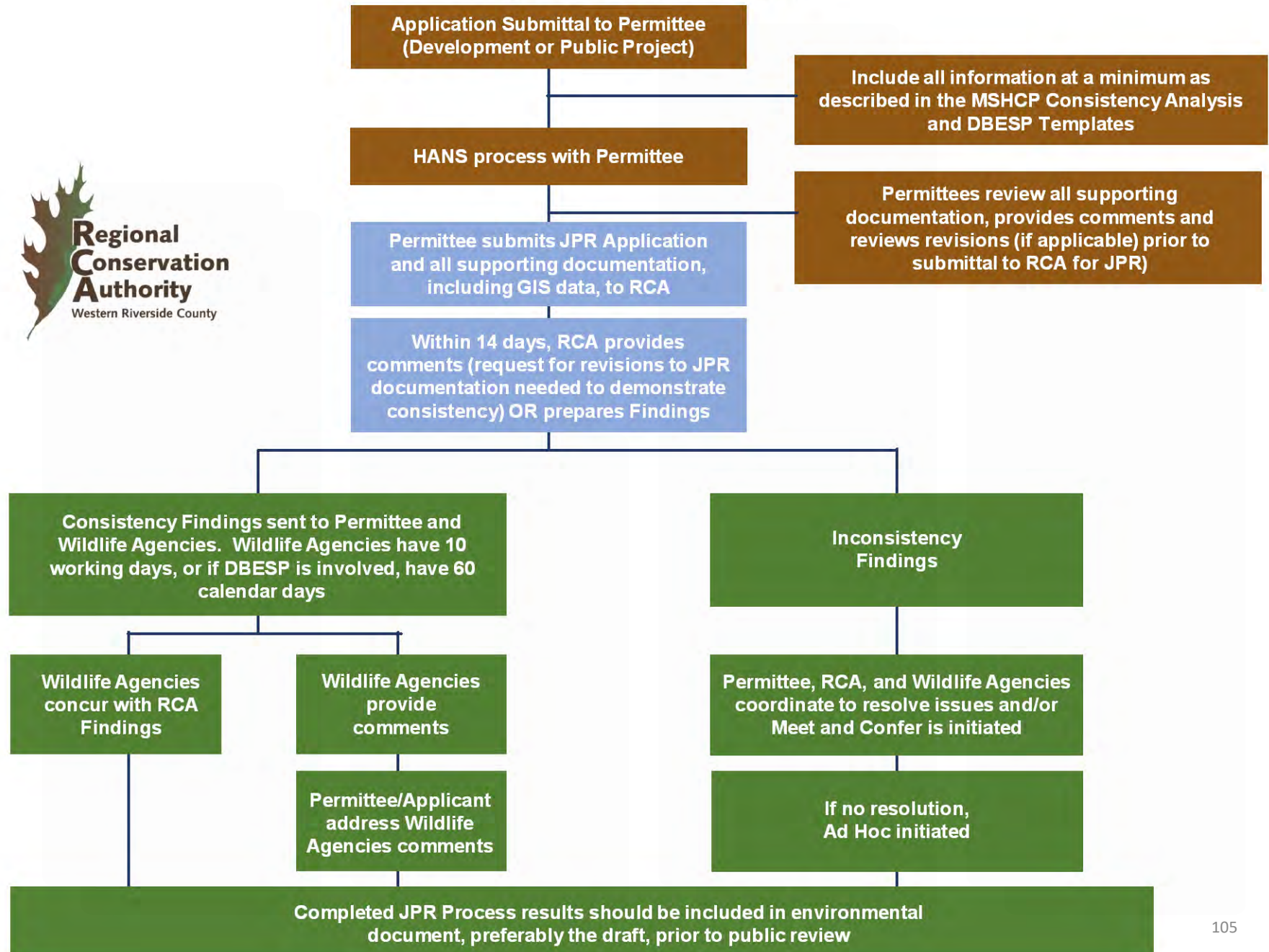
- Training session for personnel prior to grading
- Qualified biologist shall monitor construction activities for the duration of the project
- Avoid breeding season in/near riparian habitats
- Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species
- ...and more...



Joint Project Review

- Triggered by any discretionary action/project in Criteria Cells
- Follows after HANS process
- Process by which RCA reviews Permittees' Consistency Analysis
- Include Reserve Assembly Analysis, Fragmentation and/or Wildlife Movement, and All Other Plan Requirements
- Permittees are responsible for reviewing submittals before they send to RCA

Joint Project Review Overview



JPR Application Submittal

- JPR application
 - ✓ Private Project Form + \$1,500.00 deposit
 - ✓ Public Project Form (no deposit)
- MSHCP Consistency Analysis Report
 - ✓ Reserve Assembly
 - ✓ Habitat Assessments and Focused Surveys
 - ✓ On-site and off-site permanent and temporary impacts
 - ✓ Avoidance areas
 - ✓ Summarize mitigation that will be detailed in DBESP
- DBESP(s) – when required
- Electronic PDFs (searchable, not scans)
- GIS shapefiles

JPR Process – Timing

- RCA has 14 days to provide “on hold” comments, or provide Consistency Findings
- Additional information requested should be provided within revised Consistency Analysis documents, not as separate responses letters
- Depending on complexity of on hold comments, the quality of revised documentation, and ongoing coordination, at least an additional 14 days for review may be necessary
- RCA issues Consistency Findings (sends to Permittee and Wildlife Agencies [WAs])
- WAs have 10 working days for consistency review; 60 days for DBESP review

CEQA Documents

- All CEQA documents should address consistency with MSHCP [see Bio (f) from Appendix G Initial Study Checklist]
- Completing JPR process before MND or DEIR is best
- JPR can be done after MND or DEIR public review, but may be considered deferral is challenged
- If outside the Criteria Area, then no JPR; however, MND or DEIR should include Consistency Analysis (reviewed by WAs)
- DBESPs (whether inside or outside of Criteria) should be complete, reviewed by the WAs, and included as Appendix to the draft CEQA document (all prior to public review)

Participating Special Entity Process

- Incidental take authorization not conveyed through a Permittee
- PSE process used in lieu of the lengthier Section 7 or 10
- All PSE projects subject to review regardless of their location inside or outside of the Criteria
- Generally large projects, often linear, such as utility lines and pipelines
- SKR addressed differently (no PSE provision available in the SKR HCP)
- Fees are based on a % of capital costs

PSE Application Package

- PSE Application Form
- Same information and documentation as JPR submittals (APNs, GIS, Reserve Assembly if in the Criteria Area, and Sections 6.1.2, 6.1.3, 6.1.4 and 6.3.2)
- MSHCP Consistency Analysis Report, DBESP(s), supporting bio survey reports, etc.
- Rough Step analysis (if in the Criteria Area)
- PQP/ARL Equivalency Analysis, if applicable
- The RCA has a 30-day review period, then the WAs have 30 days to concur with RCA PSE Findings and 60 days for DBESP review

RCA/Wildlife Agency Monthly Meetings

- Purpose is to coordinate on and work through issues relative to the MSHCP, JPR process, resource avoidance, and mitigation
- Third Thursday of each month
- Virtual Teams Meeting
- Attendees generally include RCA, CDFW, USFWS
- Permittees, Applicants, or Consultants may request to be scheduled. Permittees must be invited/attend if applicant or consultant schedules.
- Contact Leslie Levy (llevy@rctc.org) to request getting on the agenda



Any Questions?

Anything that we didn't cover?

Thank you for your time!!

