Comment Letter
for
Areas of Critical Environmental Concern
in the
Desert Renewable Energy Conservation Plan
Proposed Land Use Plan Amendment
and
Final Environmental Impact Statement, California

May 09, 2016

Prepared For:

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Town of Apple Valley

A Better Way of Life

May 9, 2016

Via Email to blm_ca_drecp@blm.gov and First Class Mail

Vicki Campbell
DRECP Program Manager
2800 Cottage Way, Suite W-1623
Sacramento, CA 95825

RE: Areas of Critical Environmental Concern in the Desert Renewable Energy Conservation Plan Proposed Land Use Plan Amendment, California

Dear Ms. Campbell:

This comment letter regarding the Areas of Critical Environmental Concern (ACECs) listed in the Desert Renewable Energy Conservation Plan Proposed Land Use Plan Amendment and Final Environmental Impact Statement (BLM/CA/PL-2016/03+1793+8321) is submitted on behalf of the Town of Apple Valley (Apple Valley or Town). The Town is submitting this comment letter per the Bureau of Land Management's (BLM) Federal Register Notice published March 11, 2016, which announced a 60-day public comment period on the designation of 134 ACECs.

As stated in our previous comment and protest letters, the Town and the County of San Bernardino (County) are developing the Apple Valley Multispecies Habitat Conservation Plan/Natural Community Conservation Plan (MSHCP/NCCP). The Town is the Lead Agency for this planning effort. Previous letters submitted to the BLM/DRECP with regards to the Apple Valley MSHCP/NCCP include a scoping period comment letter in 2011, a comment letter on the Draft DRECP Document in February 2015, and a protest letter on the DRECP Proposed LUPA/FEIS in December 2015. The latter two letters are incorporated by reference.

ACECs Relevant to Plan

Of the 134 ACECs currently being considered in the DRECP Proposed LUPA, four are within the Apple Valley MSHCP/NCCP Plan Area. These four ACECs total approximately 73,380 acres (or 85.3 percent) of the approximately 86,000 total acres of BLM lands within the Plan Area. They also represent approximately 33 percent of the total MSHCP/NCCP Plan Area (222,361 acres).

In addition, the Apple Valley MSHCP/NCCP identifies landscape-scale linkages that extend beyond the limits of its Plan Area and connect it to existing federally managed conservation areas. Five of the 134 ACECs considered are within or directly adjacent to these identified linkages.

ACECs Within Apple Valley MSHCP/NCCP Plan Area	ACECs Within and Adjacent to Apple Valley MSHCP/NCCP Plan Area and Linkages
• Bendire's Thrasher ACEC • Granite Mountain Wildlife Linkage • Juniper Flats Cultural Area • Northern Lucerne Wildlife Linkage	• Brisbane Valley Mojave Monkeyflower ACEC • Fremont-Kramer ACEC[1] • Mojave Fishhook Cactus ACEC • Ord-Rodman ACEC • Superior-Cronese ACEC

The MSHCP/NCCP Plan Area and the above-listed ACECs are shown in Exhibit A, *Map of Apple Valley Plan Area and Proposed DRECP ACECs,* attached.

Basis for Comments

The Town has devoted significant time and resources to understanding its Plan Area and the surrounding region. This has included ground-truthing the area to ensure that the Plan reflects and incorporates true on-the-ground conditions; analyzing and applying current scientific models and reports; and participating in relevant regional planning efforts (including the DRECP, West Mojave Route Network Project, and many others). The Town has also coordinated with BLM and other DRECP Agencies throughout the MSHCP/NCCP planning process, and where complementary has incorporated input received into the Plan.

The Federal Land Policy and Management Act of 1976 (FLPMA) requires BLM to coordinate with local jurisdictions. Section 202 of FLPMA explicitly calls for coordination with local governments and for assistance in resolving inconsistencies between Federal and non-Federal Government plans. This concept is echoed in the BLM Land Use

[1] The Fremont-Kramer, Superior-Cronese, and Ord-Rodman ACECs are also referred to as Desert Wildlife Management Areas, or DWMAs. DWMAs are ACECs that were established to protect high quality habitat for the desert tortoise.

Planning Handbook, on page 11: "*The BLM must, to the extent practical, assure that consideration is given to those Tribal, state, and local plans that are germane in the development of land use plans for public lands. Land use plans must be consistent with state and local plans to the maximum extent consistent with Federal law.*"

The BLM's proposed revisions to the existing regulations that establish the procedures used to prepare, revise, or amend land use plans pursuant to FLPMA strengthen this mandate. The new BLM Proposed Rule emphasizes the importance of public outreach and local coordination. It also newly stresses the need for "high quality information" to make the best land use decisions. BLM defines "high quality information" as "*any representation of knowledge such as facts or data, including the best available scientific information, which is accurate, reliable, and unbiased…*"

Need for Consistency Between Plans

Coordination with DRECP Agencies and other efforts carried out by the Town during its nine-year planning process has resulted in the identification of "high quality information" for the region. The Town believes that this information should be incorporated into the DRECP and the DRECP BLM LUPA. Incorporation of the Town's information is especially important to ensure the consistency needed between the two plans to support successful conservation and recovery of species.

Issues Important for Ensuring Consistency between Plans

The Town has identified three areas where adjustments are required to ensure consistency between federal and local planning efforts:

I. Proposed DRECP ACEC designations in ACECs within and adjacent to the Apple Valley Plan Area
II. Disturbance caps and ACEC administration
III. Streamlined process to sync local plans with BLM DRECP LUPA

Many of these issues were previously raised by the Town in its February 2015 comment letter, its December 2015 protest letter, and/or directly with BLM.

The Town has maintained a positive working relationship with the BLM, including the BLM Barstow Field Office, throughout the DRECP LUPA process to identify and address conflicts between the two plans. The Town hopes to continue working with BLM towards resolution of issues identified and to incorporate local planning and on-the-ground knowledge into the DRECP LUPA. In that spirit of cooperation, the following are the Town's comments regarding each of these important issues:

I. Proposed DRECP ACEC Designations

A. ACECs Within the Plan Area

Within the MSHCP/NCCP Plan area, the Town has identified two areas of concern with regards to the Northern Lucerne Wildlife Linkage ACEC (LUPA/FEIS Appendix L, pp. 893-900). First, this ACEC contains an area that is heavily used for recreation and is unsuitable for inclusion within the ACEC. This area should be removed from the ACEC. Second, this ACEC excludes Upper Lucerne Valley, which contains high-quality desert tortoise habitat essential to the success of the Ord-Rodman DWMA and this ACEC. This area should be added to the ACEC. Exhibit B, *Recommended Changes to DRECP LUPA ACEC Designations*, outlines these areas.

1. Area of Heavy Recreational Use

The Northern Lucerne Wildlife Linkage ACEC includes approximately 6,000 acres located along Stoddard Wells Road, east of Dale Evans Parkway that are heavily used for off-road recreation. This area is easily accessed from I-15 and is a popular location for camping, riding, and racing (both individually and in large groups).

Despite BLM designation of the lands within this area as "limited use," heavy use of the area for off-road recreation has been ongoing for decades. Based on input from members of the public, this area has been used heavily for recreation for more than 30 years. Residents also report that on certain high-use weekends, users in the area can number several thousand. The DRECP Desert Tortoise Linkage Evaluation report in Appendix D of the Draft DRECP (Attachment 1) notes that this area is problematic as a linkage and contains "*extensive unauthorized OHV damage…which will likely require extensive law enforcement and restoration to be effective*" (Croft, 2013). Exhibit C, *Photos of OHV Impacts*, contains examples of typical use in this location. This heavily-used area should be removed from the ACEC for the following reasons.

Incompatibility with DRECP Goals

The DRECP Proposed LUPA and FEIS states that "*the ACEC designation indicates to the public that the BLM recognizes that an area has significant values and has established special management measures to protect those values*" (p. II.3-66). Appendix L of the DRECP Proposed LUPA/FEIS (p. 893) details those values for the Northern Lucerne Wildlife Linkage, stating that its specific goal is to "*protect biological values, including habitat quality, populations of sensitive species, and landscape connectivity while providing for compatible public uses.*"

The 6,000-acre area that is heavily impacted by intense recreational use does not exhibit high biological values or provide high quality habitat. Large areas are denuded of habitat and used for high-intensity riding and camping. In addition, the level of route proliferation in the area is high and vegetation

found in the area is crisscrossed with routes. As a result, there is a very low likelihood that this area supports populations of sensitive species. The heavy recreational use is also likely to prevent this area from providing landscape connectivity described in Appendix L.

Inclusion of this heavy-use area therefore does not meet the goals ascribed to the Northern Lucerne Wildlife Linkage, or to ACECs in general. The DRECP should describe the actual on-the-ground condition of this land in its planning effort and remove it from the Northern Lucerne Wildlife Linkage.

Financial and Environmental Costs

If this heavy-use area is designated as an ACEC, it will require a substantial financial commitment to restore the area to meet its prescribed goals. The substantial funding need is documented in a study on recovery and restoration of desert ecosystems, which found that restoration of degraded areas in the Mojave can cost up to $25,000 per hectare and can take centuries to complete.[2] Based on the study, the estimated cost to restore this area could be upwards of $60 million. The study also notes that spending this amount does not guarantee success. And this estimate includes only the costs for restoration—costs for enforcement, which would be necessary to reduce the level of use in the area so it could provide the values described in Appendix L, are not included and would require additional funds.

Furthermore, the Town is concerned that enforcing the management objectives in this area, as described in Appendix L, will effectively close the area and force current users into neighboring areas that exhibit higher biological values. Diverting users to new areas that are comparatively unused will ultimately cause greater impacts to the habitat and the sensitive species that the ACEC is intended to protect. This is contrary to the Management Objective for this ACEC of protecting sensitive habitat from impacts associated with vehicle traffic. Nearby areas with high habitat values include other areas of the Northern Lucerne Wildlife Linkage, such as Turtle Valley and the Wild Wash; Upper Lucerne Valley; and the southwest corner of the Stoddard Valley OHV Area—where users prefer to use existing routes rather than ride overland.

Lastly, in respect to this area of high use, the Town is concerned that it could ultimately be responsible for the enforcement and restoration efforts necessary to bring this area into conformance with Management Objectives described for the ACEC. This is because the Town is actively working to develop a MSHCP/NCCP that is consistent and complementary with BLM land management objectives within its Plan Area. The high intensity restoration and

[2] Lovich and Bainbridge. "Anthropogenic Degradation of the Southern California Desert Ecosystem and Prospects for Natural Recovery and Restoration." Environmental Management 24 (1999): 309-326.

management measures needed to rehabilitate the impact area to meet the goals and objectives of the ACEC appear to be both cost-prohibitive and infeasible.

Proposed Solution that Meets the Criteria for this ACEC

The Town has identified that the valley north of this heavy-use area and south of Stoddard Mountain (approximately 5,000 acres) meets the criteria for designation as an ACEC and provides the linkage values described in the BLM's goals and objectives. Because the DRECP excluded OHV Areas, like Stoddard Valley, in its analysis of potential linkage areas, suitable habitat was left out of the DRECP LUPA linkage design. However, the habitat in the southwestern corner of the Stoddard Valley OHV Area provides significantly more biological value than does the heavily-used area currently included in the DRECP linkage.

Based on existing use patterns, it appears that Stoddard Valley riders prefer to use existing routes in the southern portion of the open area. As a result, high quality, intact vegetation is present in the open area. This area is also documented as containing suitable desert tortoise habitat—according to the 1993 Final Stoddard Valley OHV Area Management Plan, the entire area is "designated by the BLM as Interim Category III tortoise habitat."

In light of this, the Town is reaching out to OHV groups with the goal of initiating a Friends Group similar to those that exist in Jawbone Canyon or El Mirage. The Friends of Jawbone (FOJ) and Friends of El Mirage (FOEM) groups have instituted successful programs that encourage OHV users to stay on the trails within sensitive habitat areas. FOJ has utilized grant funds for trail maintenance, sign installation, trash reduction, and successful restoration of desert habitat that was impacted by unauthorized use.[3] Similarly, FOEM works to maintain the trails and facilities within the El Mirage Open OHV Area while also promoting preservation and multiple use.[4]

The Town believes the success of these groups can be recreated within Stoddard Valley OHV Area, allowing for existing uses to continue while also preserving desert tortoise habitat. The Town is committed to working with BLM to achieve these goals, minimizing impacts to the linkage and aligning the ACEC design to reflect on-the-ground values. The Town will also seek to partner with BLM on education and outreach programs within these areas.

Modifying the boundaries of the ACEC would ensure the maintenance of both multiple-use values and high-quality habitat.

[3] Friends of Jawbone (2015). *Friends of Jawbone Annual Report 2015: Protecting outdoor Recreation in the Jawbone Canyon Region*. http://www.jawbone.org/foj/downloads/FOJ_Ann_Rpt_2015.pdf
[4] http://www.elmirage.org

2. Upper Lucerne Valley

The high-quality habitat of Upper Lucerne Valley (approximately 16,000 acres) should be included in the Northern Lucerne Wildlife Linkage ACEC. The proposed boundary of the eastern portion of the Northern Lucerne Wildlife Linkage ACEC currently contains only the mountainous portions of Stoddard Ridge and excludes the valley bottom of Upper Lucerne Valley.

The DRECP Desert Tortoise Linkage Evaluations Report (Report; Attachment 1) in Appendix D of the Draft DRECP supports the inclusion of intact desert tortoise habitat on the floor of Upper Lucerne Valley in DRECP's linkage design:

> *This arm [north of Upper Lucerne Valley] of the proposed Northern Lucerne Wildlife Linkage ACEC is comprised primarily of Stoddard Ridge, which is of lower habitat potential for desert tortoise due to mountainous terrain. As a linkage for other wildlife, such as bighorn sheep, or as a reserve for raptor breeding, it may still have beneficial value. However, as a linkage for desert tortoise it is low of value.* ***Preservation of the intact habitat in the valley bottom areas of Upper Lucerne Valley would provide a more suitable linkage for desert tortoise through this area****. (Croft, 2013). [[emphasis added]]*

The Report also notes that the Ord-Rodman DWMA is the only Tortoise Conservation Area (TCA) in the West Mojave that does not meet the required minimum reserve size to support long-term tortoise population growth and distribution. It notes in its "Results and Recommendations" section that:

> *In general, Brisbane Valley, Upper Lucerne Valley…contain large continuous tracts of intact habitat. All of these areas also contain high desert tortoise habitat potential (Nussear et al., 2009). Impacts to these areas would affect their function for the Ord-Rodman DWMA to varying degrees depending on the level of development and habitat degradation or fragmentation separating the intact linkage area from the DWMA.*

This makes protection of desert tortoise linkage areas adjacent to Ord-Rodman, like Upper Lucerne Valley, especially critical and is why the Town has included Upper Lucerne Valley in its Linkage Design. The Desert Tortoise suitability[5] map (Exhibit D) shows that Upper Lucerne Valley contains a block of high-quality desert tortoise habitat. Additionally, this valley was recently identified as part of an evolutionary hotspot in the Mojave Desert.[6]

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[5] Nussear, K.E., et al. 2009. *Modeling habitat of the desert tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona: U.S. Geological Survey Open-File Report 2009-1102*, 18 p.

[6] Vandergast, A.G. et al. 2013. Evolutionary Hotspots in the Mojave Desert. Diversity 5:293-319

Like much of the LUPA planning area, Upper Lucerne Valley contains a mix of private and public lands. This mix of land ownership is reflected in the BLM's ACEC design in that the proposed ACECs cover many non-federal lands. Thus, there is no reason for the exclusion of Upper Lucerne Valley due to limited federal lands within the area. The failure to include the valley floor of Upper Lucerne Valley in the ACEC ignores the value of this area as a desert tortoise linkage and is in conflict with the recommendations made in DRECP's Linkage Evaluations Report. The failure to recognize this area for its linkage value has potential negative consequences for local and regional populations of the desert tortoise.

Recommendation: *The BLM should work closely with the Town to ensure that existing uses are maintained and that a functional linkage in this area is made possible through appropriate designations. The Northern Lucerne Wildlife Linkage ACEC should be adjusted to exclude the heavily used area along Stoddard Wells Road east of Dale Evans Parkway. Upper Lucerne Valley should be added to the Northern Lucerne Wildlife Linkage ACEC.*

B. ACECs Adjacent to the Plan Area

The BLM's linkage design should include a connection between the Ord-Rodman DWMA in the east and the Fremont-Kramer/Superior-Cronese DWMAs in the northwest. As currently proposed, the Northern Lucerne Wildlife Linkage ACEC only connects the Ord-Rodman DWMA to the Brisbane Valley Mojave Monkeyflower ACEC. It does not continue northwest across the Mojave River and connect to the Fremont-Kramer/Superior-Cronese DWMAs. The LUPA should ensure that linkage connections between the DWMAs are complete.

In comparison, the Apple Valley MSHCP/NCCP linkage design extends from the Wild Wash I-15 undercrossing and traverses northwest along the wash, through Brisbane Valley, the Brisbane Valley Mojave Monkeyflower ACEC, and across the river, ultimately connecting to the DWMAs in the northwest. Exhibit B, *Recommended Changes to DRECP LUPA ACEC Designations*, shows the difference between these two linkages.

Although much of Brisbane Valley is not included in the Northern Lucerne Wildlife Linkage ACEC, it is a valuable and integral part of the linkage design. The DRECP Desert Tortoise Linkage Evaluations Report states:

> *Brisbane Valley contains large areas of intact desert tortoise habitat, but its connection with the Ord-Rodman DWMA is tenuous due to Interstate 15 and intervening land uses that are not conducive to desert tortoise conservation (e.g., Stoddard Valley OHV Area and illegal OHV use south of Stoddard Valley OHV Area). However, desert tortoises continue to occupy the OHV areas and there are seven underpasses (Wild Wash Bridge and 6 passable culverts) under Interstate 15 that likely provide for some level of continued population connectivity (Croft, 2013).*

Furthermore, Brisbane Valley was designated in the 2006 West Mojave Plan as a "Special Review Area," indicating that it has high numbers of desert tortoises and therefore warranted a heightened level of environmental review for new projects. The Desert Tortoise Suitability[7] map (Exhibit D) supports this designation, showing that Brisbane Valley contains very high-quality desert tortoise habitat.

Recommendation: *The Northern Lucerne Wildlife Linkage ACEC/Brisbane Valley Mojave Monkeyflower ACEC should be adjusted to match the Town's Linkage Design and fully connect to the Fremont-Kramer/Ord-Rodman DWMAs, as shown in Exhibit B.*

II. Disturbance Caps and ACEC Administration

The use of disturbance caps in managing ACECs is partially described in Section II.3.2.2 of the DRECP Proposed LUPA/FEIS (pp. II.3-66—II.3-73), but the methods for the setting of these caps, the methodology for calculating these caps, and their implementation remain unclear.

The following table provides a summary of allocated disturbance caps for the ACECs in and adjacent to the Plan Area:

ACEC	Proposed Disturbance Cap
ACECs Within Apple Valley MSHCP/NCCP Plan Area	
Northern Lucerne Wildlife Linkage	0.5%
Granite Mountain Wildlife Linkage	0.25%
Bendire's Thrasher	0.5% and 1% (varies)
Juniper Flats Cultural Area	1%
ACECs Adjacent to Apple Valley MSHCP/NCCP Plan Area and Linkages	
Brisbane Valley Mojave Monkeyflower	1%
Fremont-Kramer	0.25% to 1% (varies)
Mojave Fishhook Cactus	0.5%
Ord-Rodman	0.5% and 1% (varies)
Superior-Cronese	0.5%

Allocation of Disturbance Caps

The DRECP Proposed LUPA and FEIS provides little explanation for how each cap was assigned to each ACEC, or why a given ACEC can contain a range of caps within it. In many cases, the disturbance cap assigned to one ACEC differs significantly from the disturbance cap assigned to an immediately adjacent ACEC, which seems inconsistent. From the minimal information provided in the document, the caps appear to be arbitrarily set across the LUPA Plan Area.

[7] Nussear, K.E., et al. 2009. *Modeling habitat of the desert tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona: U.S. Geological Survey Open-File Report 2009-1102*, 18 p.

Calculation of Disturbance Caps

Calculation of disturbance caps appears subjective as well. The methodology proposed in the LUPA does not provide enough detail to ensure objective and consistent calculation. Measurement of disturbance caps by different parties could achieve different results depending on information used and who is doing the calculations. The methodology also does not sufficiently describe how to identify and account for a disturbance in a given calculation—What exactly is considered a disturbance? How do you map disturbance on an aerial, including routes and trails?

Implementation of Disturbance Caps

At this time, the amount of disturbance in each of the ACECs adjacent to the Town and within its Plan Area is unknown. Based on informal discussions with BLM, this number may not be known until the WMRNP is completed. It appears from the disturbance cap description provided in the LUPA that if an ACEC exceeds the proposed cap, additional disturbance mitigation measures would be required to reduce the disturbance level in the ACEC back to or below the level of the cap. Without knowing the current status of the cap in each ACEC it is difficult to know if disturbance mitigation will be required for activities occurring within ACECs in the Town's Plan Area. Such information is critical to the public and local jurisdictions, because if an ACEC is at or exceeds the cap, additional uses of public lands could be prohibited—unless there is an opportunity to provide "disturbance mitigation" in the area.

Those with private in-holdings are concerned that the disturbance cap program could prevent access to many private in-holdings and cause a financial burden. For example, if a property owner needs to build a road to their property, a disturbance cap analysis is required, which is paid for by the property owner. What will be the cost to the landowner to conduct a cap analysis over an entire ACEC?

It also appears that the disturbance cap program could prevent the development of proposed public projects if an ACEC is currently at or exceeds the cap. In this case, it seems inequitable that the first proposal to the BLM following the setting of the caps should be required to provide mitigation for the cumulative impacts, even those that occurred within the last 40 years (i.e., since the California Desert Conservation Plan was approved), let alone for things that occurred before then. This potential problem could be even greater if there are no disturbance mitigation options present or feasible. In that case, would access be denied? The process, procedure, and decision points of the disturbance cap program need to be explained in greater detail so the public fully understands the proposed program.

Lastly, according to the document, different disturbance mitigation ratios are to be assigned to activities on previously disturbed areas depending on whether those past disturbances received authorization from BLM. (i.e., projects in unauthorized-disturbance areas are subject to a higher disturbance mitigation ratio than projects in

authorized-disturbance areas). The Town believes that, regardless of whether a disturbed area has received previous authorization from the BLM, it should require lower mitigation ratios than those projects proposed on undisturbed land. This will ensure that developers are encouraged to site their projects on disturbed areas versus undisturbed land.

Recommendation: *The BLM should provide additional documentation regarding the setting of the disturbance caps to ensure that assigned caps are appropriate. The BLM should also refine the methodology for disturbance calculations to ensure that they are accurate and consistent. The additional documentation also should include information on the use of the program when applying for any permit or license on federal lands within an ACEC. Finally, the BLM should modify mitigation ratios to encourage development on disturbed land versus development on any category of undisturbed land.*

III. Streamlined Process to Sync Local Plans with BLM DRECP LUPA

Initially, the DRECP was to address renewable energy development and conservation on both private and federal lands simultaneously. In March 2015, the DRECP was separated into two phases, with the BLM DRECP LUPA proceeding first as Phase I. The FEIS for the DRECP LUPA did not provide information on how Phase II activities on private and other non-federal lands would be implemented and work alongside the BLM LUPA. Section I.0.1 of the DRECP LUPA document (DRECP Background and Overview) provided the only description of Phase II:

> *Phase II of the DRECP will focus on the renewable energy development and resource conservation opportunities on nonfederal lands within the DRECP area. The timing and completion of Phase II has yet to be determined.* (p. I.0-1)

At present, the Town's MSHCP/NCCP is the only plan addressing development and resource conservation opportunities comprehensively on private and other nonfederal lands within the DRECP LUPA Plan Area. Given the mix of private and public land within the Town's Plan Area, approximately 85% of which has been designated as ACECs, it is critical that the two conservation plans work together.

It is the Town's understanding that local jurisdictions are important to the successful completion of Phase II of the DRECP. In its comment and protest letters, the Town asked for a clear description of how DRECP coordination with local governments would function and for flexibility in the plan for local planning. However, a clear and flexible path to accommodate changes made by the State, USFWS, and/or local jurisdictions based on on-the-ground conditions and their land use designations still needs to be incorporated into the planning effort.

The FEIS for the LUPA attempted to address this need for flexibility in Section II.3.7.1.2, Partnership with Local Governments (pp. II.3-286-II.3-287). This section stated that "*As part of its ongoing evaluation of its plans under Section V of the BLM Land*

Use Planning Handbook, the BLM will consider whether adjustments to the LUPA are necessary based [on] future planning in the DRECP area." The section specifically mentioned Apple Valley in the paragraph that follows:

> *…the Town of Apple Valley is in the process of preparing a habitat and natural community conservation plan at a local level. As all these county and local plans get closer to a final decision, BLM would confer with appropriate parties and agencies, and evaluate the effectiveness of the DRECP Proposed LUPA core habitats, wildlife linkages, renewable energy development, and recreation allocations using the integrated information and maps.*

While we believe that this language is important to ensuring consistency between the two plans, our concern is that the Town and BLM may need to go through a land use plan amendment to sync up the two conservation plans.

FEIS Section II.3.7.1, Overview of LUPA Implementation (p. II.3-286), states the following:

> *The BLM may change the DRECP LUPA in several ways. Land use plan decisions and supporting components can be maintained to reflect minor changes in data or refining, documenting, or clarifying a previously approved decision incorporated into the plan. (43 CFR 1610.5-4) Maintenance must not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of the approved plan. Plan maintenance is not considered a plan amendment.*
>
> *In addition, the DRECP LUPA includes some policy decisions, such as some of the incentives for developers in DFAs. Policy decisions are not land use plan decisions, therefore a plan amendment is not required to change them.*
>
> *Finally, if any of the core components of the DRECP LUPA are to be changed, they must be changed through the land use plan amendment process. The BLM must follow the land use plan amendment process, as detailed in 43 CFR 1610.5-5. This process includes several opportunities for public notification and public involvement, based on the potential impacts of the amendment.*

From this text, it appears that local jurisdictions will be required to go through the cumbersome process of a full Land Use Plan Amendment in order to make adjustments to ACEC designations to address local needs. The BLM should provide a simple alternative mechanism for incorporating local plans into the LUPA without the imposition of such a process. Because a large percentage of federal lands surrounding the Town's Plan Area have been designated as ACECs, the Town's work effort could serve as the model for how the BLM LUPA will address future local conservation planning by local jurisdictions within the DRECP plan area.

At minimum, both plans should provide a mechanism to recognize the other's efforts and adopt the solution that best addresses an issue. For example, the Town's Plan will

recognize the DRECP conservation design and support its environmental goals and objectives. The DRECP should recognize that the Linkage Design proposed in the Town's Plan provides additional value to the DRECP. Both plans should work together during their implementation to identify the best available opportunities that will aid in the recovery of the desert tortoise and other sensitive species based on on-the-ground knowledge and experience. This holistic approach will ensure that the flexibility needed to provide effective conservation and management locally, both on private and federal lands, is maintained.

Recommendation: *The Town requests that the BLM create a simple and effective amendment process that ensures that the LUPA will be amended to incorporate approved local plans that are consistent with the goals and objectives of the LUPA. The BLM also should maintain discussions and continue coordination with local jurisdictions throughout the BLM LUPA planning area.*

In closing, the Town recognizes that a substantial amount of effort and coordination went into the development of the DRECP and its ACEC design and appreciates the opportunity to provide comment. We look forward to continuing to work with the BLM to solve these important issues.

If you would like additional information concerning the Town's MSHCP/NCCP please contact me at (760) 240-7000 x7204, or email me at llamson@applevalley.org.

Sincerely,

Lori Lamson
Assistant Town Manager
Community and Development Services
Town of Apple Valley

cc: Frank Robinson
Town Manager
Town of Apple Valley

Gerry Newcombe
Director
County of San Bernardino Department of Public Works

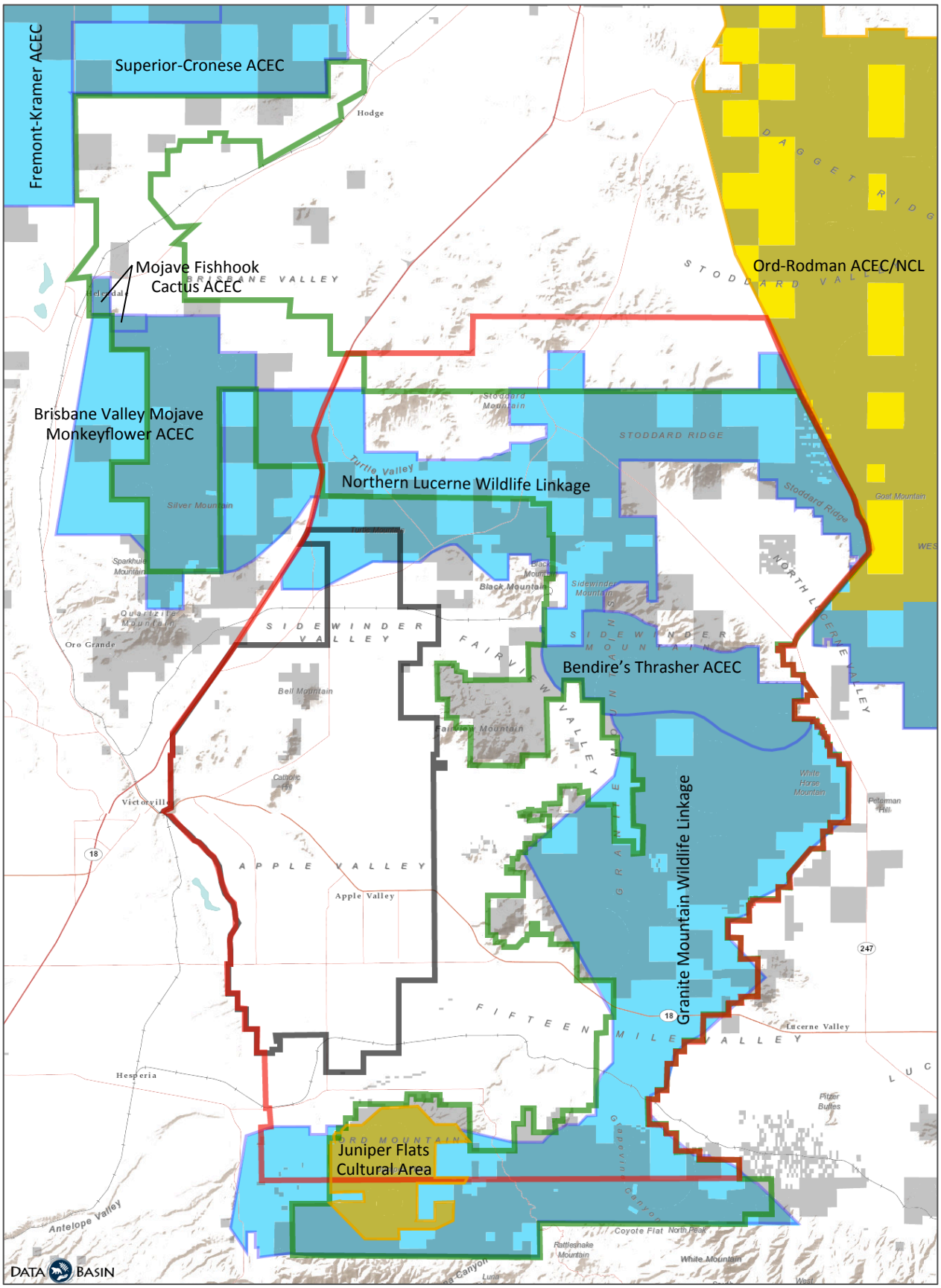
Tom Hudson
Director
County of San Bernardino Land Use Services Department

Terri Rahhal
Planning Director
County of San Bernardino Land Use Services Department

ADMINISTRATIVE DRAFT

Exhibit A

Map of Apple Valley Plan Area and Proposed DRECP ACECs



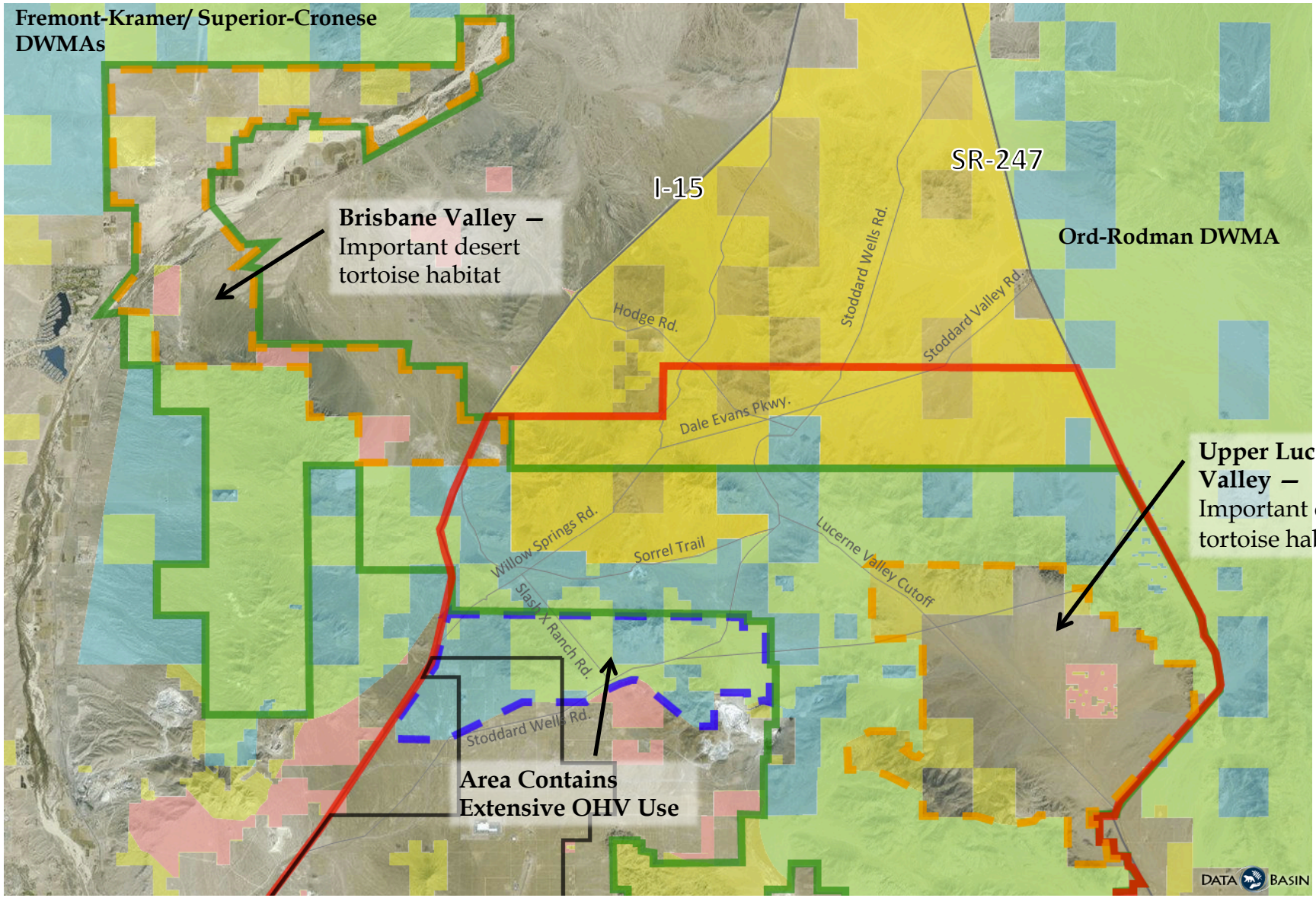
Town of Apple Valley | MSHCP/NCCP Plan Area | MSHCP/NCCP Identified Linkages

Development Focus Areas | National Conservation System Lands | Areas of Critical Environmental Concern | BLM Lands

ADMINISTRATIVE DRAFT

Exhibit B

Apple Valley MSHCP/NCCP
Recommended Changes to DRECP LUPA ACEC Designations*



*The Town has spent extensive time and resources evaluating and ground-truthing this area, and is making these recommendations based on existing land uses and ground conditions.

EXHIBIT C

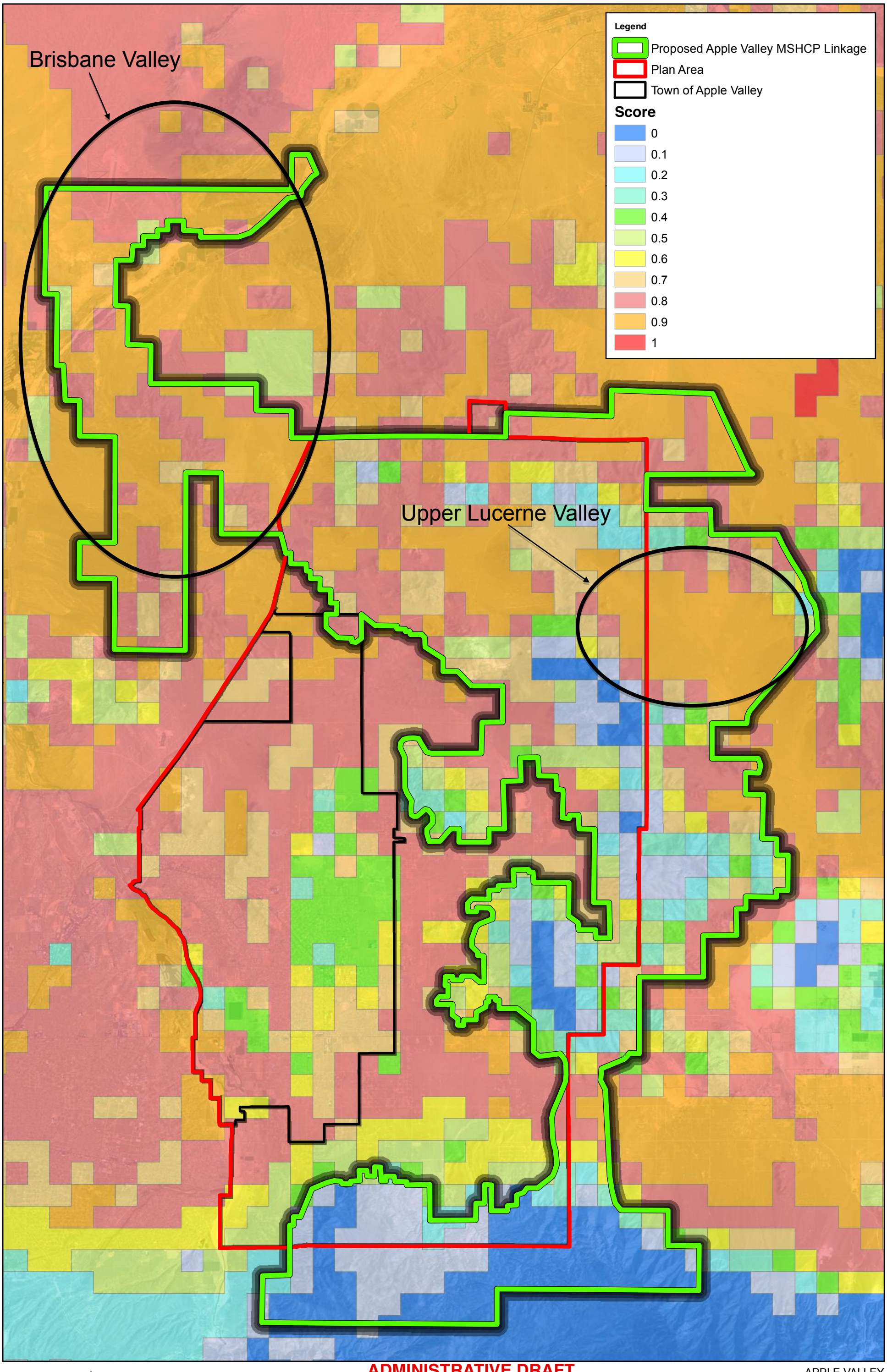
Photos of OHV Impacts.

Photos of OHV Impacts.

Photos of OHV Impacts.

Note: This map was created prior to boundary adjustments and does not reflect the most current Apple Valley MSHCP/NCCP Plan boundaries.

Exhibit D



1/15/2015 JN M:\Mdata\142990\MXD\02 Tortoise Suitability Map.mxd

ADMINISTRATIVE DRAFT

APPLE VALLEY

Desert Tortoise Suitability

Michael Baker INTERNATIONAL

0 1.25 2.5 5 Miles

Source: San Bernardino County, CNDDB, DRECP, ESRI World Imagery

Exhibit 2

Nussear, K.E., et al. 2009. Modeling habitat of the desert tortoise (Gopherus agassizii) in the Mojave and parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona: U.S. Geological Survey Open-File Report 2009-1102, 18 p.

Attachment 1

October 25, 2013

DESERT RENEWABLE ENERGY CONSERVATION PLAN – DESERT TORTOISE LINKAGE EVALUATIONS – ORD-RODMAN LINKAGES

Brian Croft - U.S. Fish and Wildlife Service, 602 South Tippecanoe Avenue, San Bernardino, California

Contents

Desert Renewable Energy Conservation Plan – Desert Tortoise Linkage Evaluation – Ord-Rodman Linkages

Brian Croft - U.S. Fish and Wildlife Service, 602 South Tippecanoe Avenue, San Bernardino, California

Introduction

Conservation strategies for the Mojave desert tortoise rely on intensive management of designated Tortoise Conservation Areas (TCAs) that are of sufficient size and suitability to support long-term growth in population size and distribution (Service 2011). TCAs consist of desert tortoise critical habitat, Bureau of Land Management (BLM) Areas of Critical Environmental Concern (ACEC), and National Park Service units (Service 2011). For each TCA to support long-term population viability a minimum reserve size of 2,590 km^2 is needed (Service 1994). However, to conserve desert tortoises within these areas, management must focus not only on TCAs, but also on the matrix of habitat within linkages that connect TCAs (Averill-Murray et al. 2013). Management of populations within this matrix is critical for maintenance of gene flow, to protect against demographic consequences of small population size, and to allow for climate change adaptation. Linkage management is especially critical for TCAs that do not meet the minimum reserve size threshold.

Within the Western Mojave Recovery Unit, the Fremont-Kramer, Superior-Cronese, and Ord-Rodman Desert Wildlife Management Areas (DWMAs - i.e. BLM ACECs), as well as Joshua Tree National Park comprise the key Tortoise Conservation Areas. Of these, all meet the required minimum reserve size threshold with the exception of the Ord-Rodman DWMA, which is 1015 km^2 (BLM 2005) and not completely within Federal ownership and management control. In addition, central portions of the Ord-Rodman DWMA are mountainous and have low habitat potential (Nussear et. al 2009), which further constrains the effective area available to meet minimum reserve size (see Figure 1). Areas to the east, west, and south of the Ord-Rodman DWMA currently contain desert tortoise populations in continuity with the populations within the DWMA, so the DWMAs small size is not likely to result in loss of population viability within this TCA in the near term. However, these areas also contain off-highway vehicle use to the west and south and military training to the east that are not conducive to long-term desert tortoise occupancy and conservation (see Figure 2).

To address these issues, the Desert Renewable Energy Conservation Plan (DRECP) incorporated desert tortoise linkage modeling (Averill-Murray et al. 2013) in development of biological goals and objectives, reserve design planning, development focus area (DFA) siting, and development of conservation management actions. In applying this linkage modeling to the DRECP planning process, we performed more detailed analysis of the linkages connecting the Ord-Rodman DWMA to Joshua Tree National Park and the Fremont-Kramer DWMA to map the condition of habitat within the linkages and to assess proposed DFAs and ACEC locations.

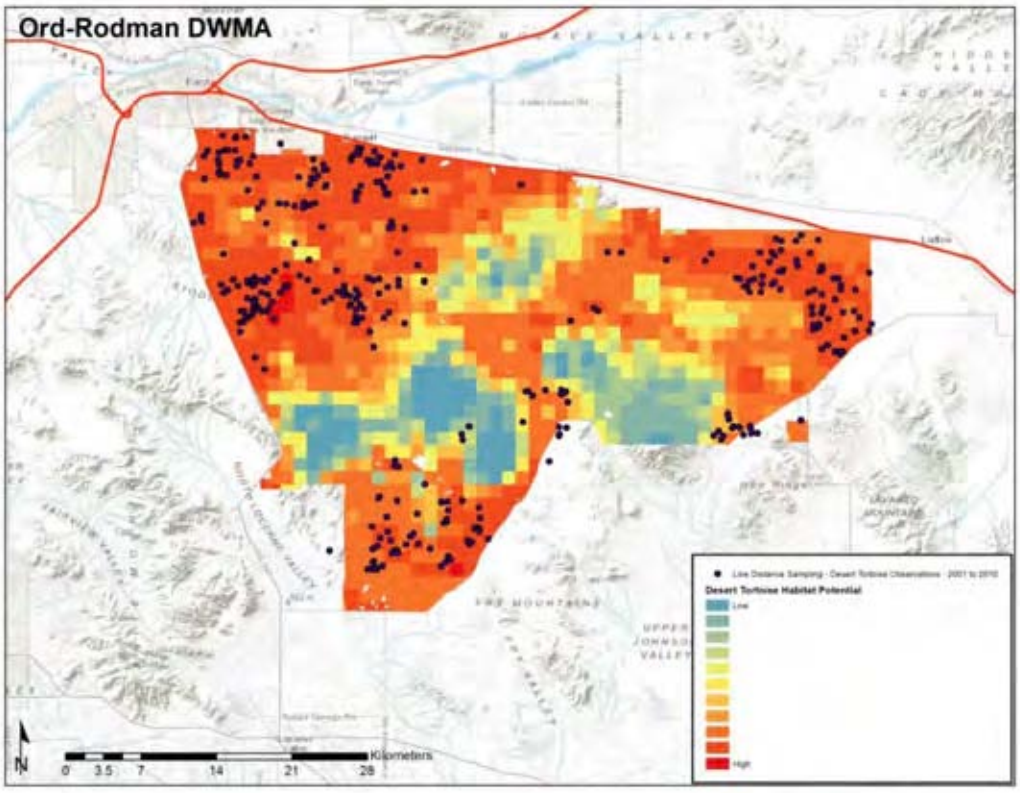


Figure 1. Desert tortoise habitat potential (Nussear et al. 2009) within the Ord-Rodman DWMA.

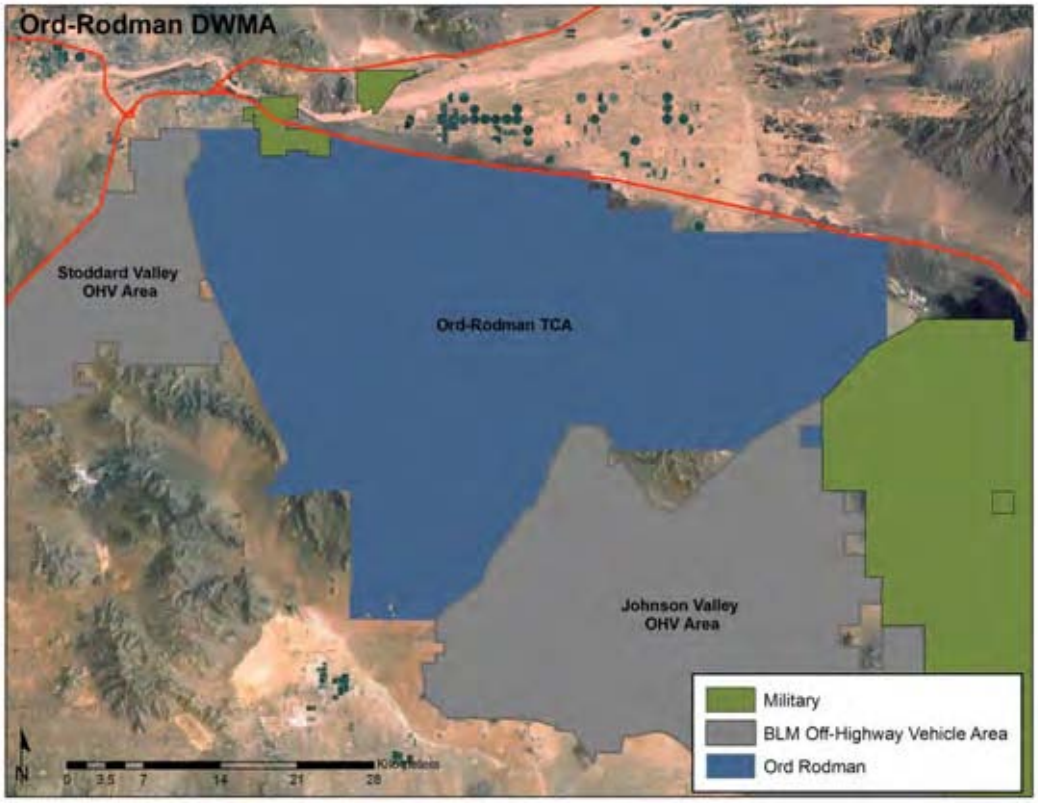


Figure 2. Ord-Rodman TCA, BLM OHV areas, and military lands

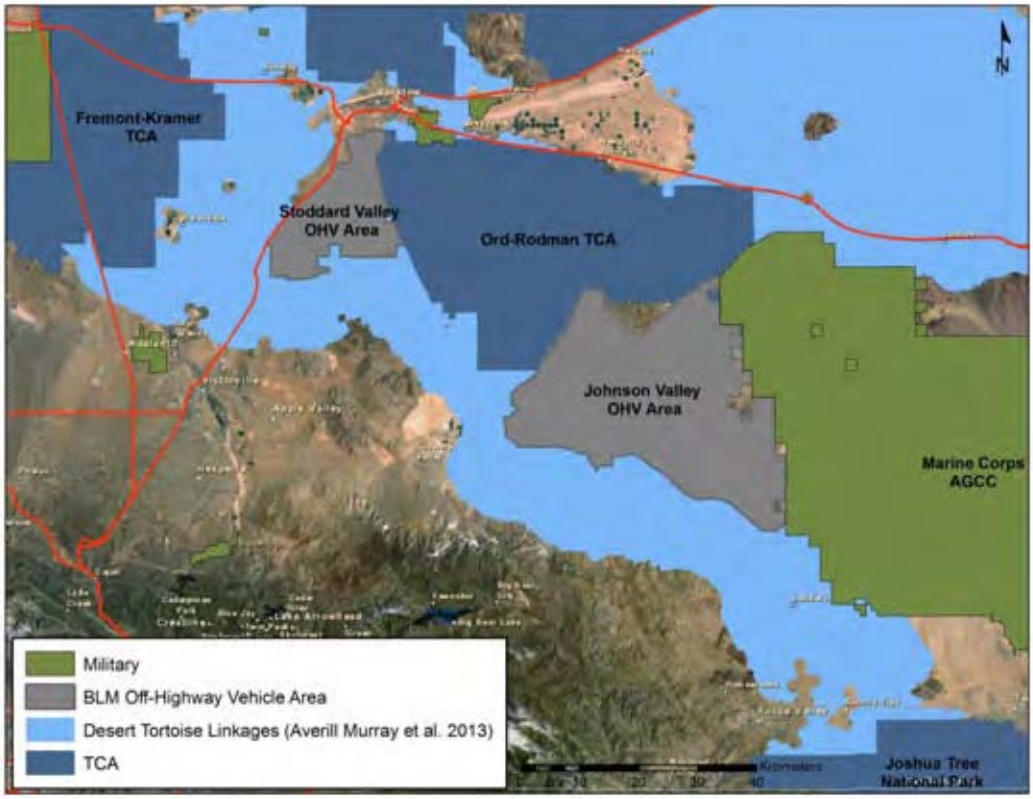


Figure 3. Ord-Rodman TCA and desert tortoise linkages. Linkages connecting the Ord-Rodman DWMA to the Fremont-Kramer DWMA and to Joshua Tree National Park are from Averill-Murray et al. 2013.

Methods

We analyzed the linkages connecting the Ord-Rodman DWMA to Joshua Tree National Park and the Fremont-Kramer DWMA using a combination of aerial photography analysis and field reconnaissance surveys. We focused this analysis on: 1) identifying large areas of intact habitat within the linkage, 2) identifying highly fragmented or developed areas that would be unsuitable for reserve design, 3) identifying areas of unsuitable habitat (e.g. playas, dunes), and 4) identifying areas of degraded habitat. We used this analysis in making recommendation on DFA boundary adjustments, conservation management actions, and ACEC modifications.

Aerial Photography Analysis

We performed analysis of aerial photography using the imagery base layer available from ArcMap. Analysis consisted of viewing this layer at a 1:10,000 scale and performing virtual transects across all portions of the two linkages. During these transects, we created a point feature layer depicting structures, bare areas, and agricultural areas within the linkage. Each structure generally received a single point, while larger bare areas and agricultural fields received multiple points meant to cover a representative portion of their extent. We also created a "non-habitat" layer by combining available GIS

layers of playas with our own digitized polygons of the Mojave River corridor and other playas not included in the available data layers (see Figure 4).

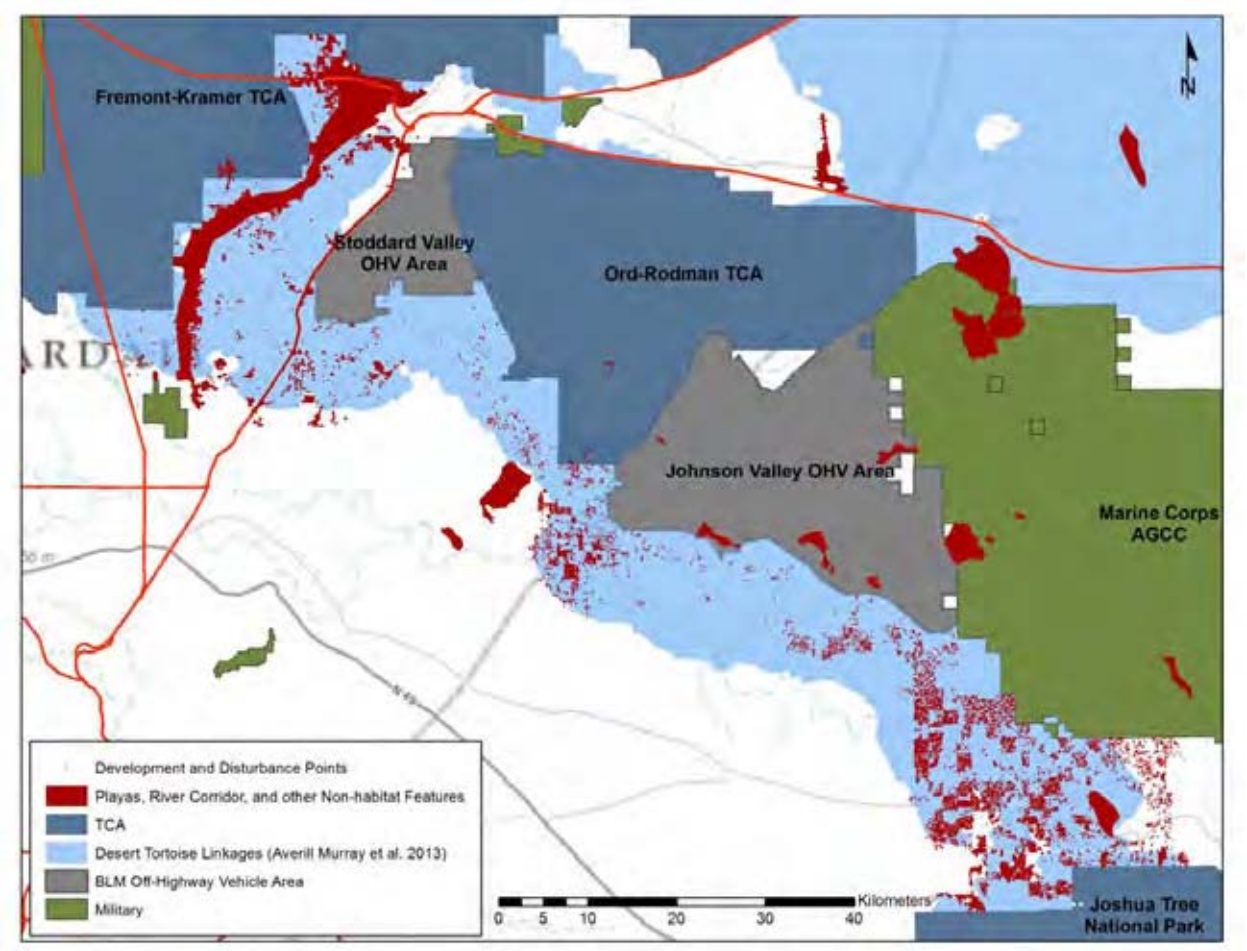


Figure 4. Development and disturbance points and non-habitat features identified through aerial photography analysis and use of available GIS layers prior to field reconnaissance surveys.

Following the development of this map, we created a kernel density layer using the point features described above to better depict where high density of disturbance and fragmentation was likely to occur in the linkage. We selected a threshold in this kernel layer by adjusting the symbology within the layer while looking at the underlying aerial photography to obtain an estimate of where more intact portions of the linkage occurred. In the Brisbane Valley area, we did not use this threshold method because of the desire to use the nearest section lines or other easily identifiable features to mark the edges of intact habitat. Both methods resulted in a rough estimate of what portions of the linkages contained relatively continuous intact habitat versus more fragmented or developed areas. We then used these rough maps in the field to help guide the routes taken during reconnaissance surveys.

Field Reconnaissance Surveys

We performed one field reconnaissance survey of the Ord-Rodman to Joshua Tree Linkage on March 12, 2013 and two surveys of the Ord-Rodman to Fremont-Kramer Linkage on March 19 and October 29, 2013. We used field maps to record notes (see Figure 5 and Appendix 2) during surveys and focused on: 1) areas of linkage constriction, 2) areas of potential off-highway vehicle impacts, 3) areas of DFA overlap with the linkage, and 4) areas containing the rough boundaries that we mapped between our intact and fragmented areas. Because of our limited field time and the size of the areas within the linkage, we extensively used high points (e.g., mountain peaks) to obtain a better vantage for assessing the level of development, road density, and other disturbances. Sufficient time was not available to visit all portions of the linkages, so we placed special emphasis on areas of DFA and ACEC overlap with the linkage. Areas that we definitively identified through aerial photography as too fragmented for reserve inclusion (e.g. Yucca Valley area) or clearly intact (e.g. areas south of Highway 247 in southern Johnson Valley) were not visited. We extensively documented all vantage points using photo points that provide a representative depiction of the area surveyed (see Figure 6 and Appendix 1).

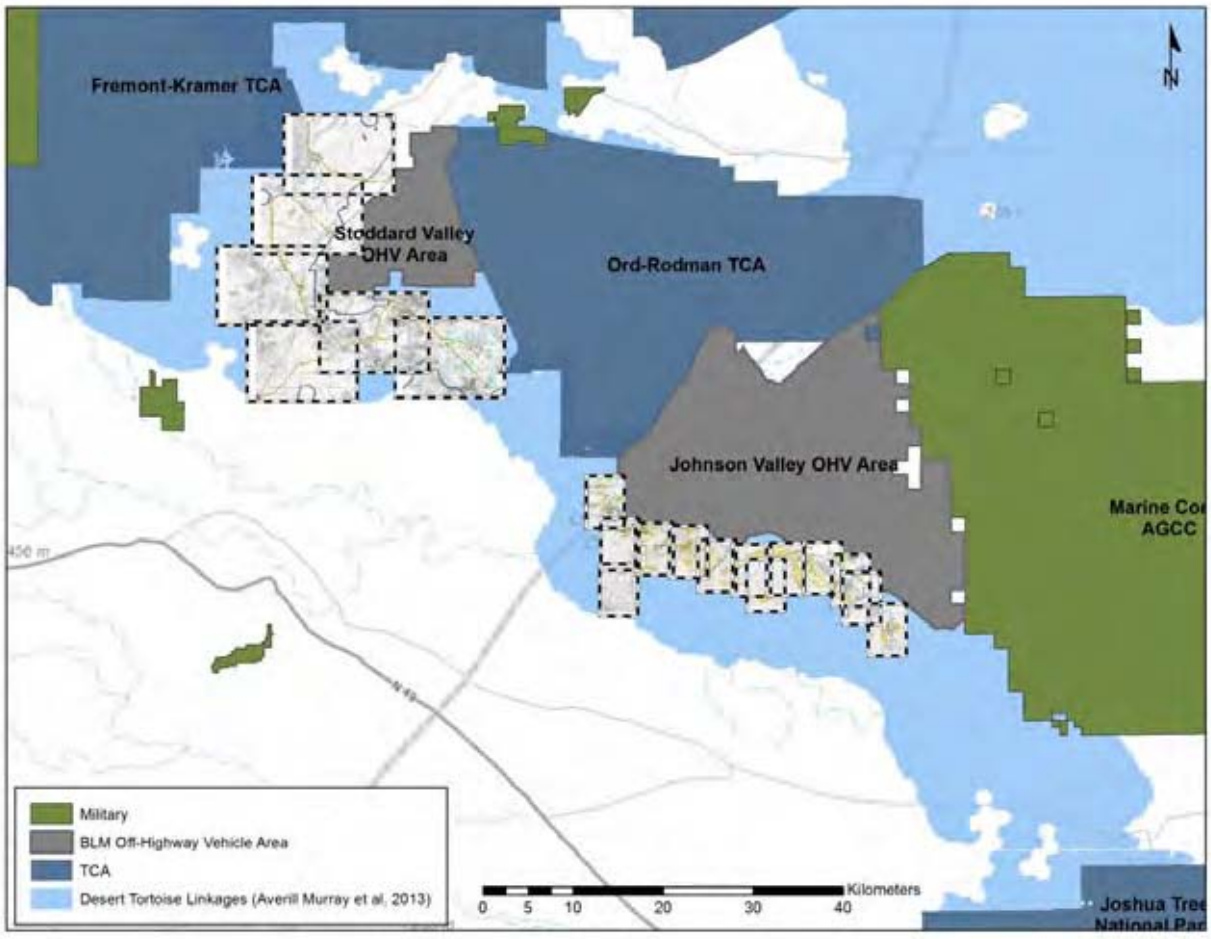


Figure 5. Coverage of field reconnaissance survey maps within analyzed linkages. Refer to Appendix 2 for field reconnaissance maps.

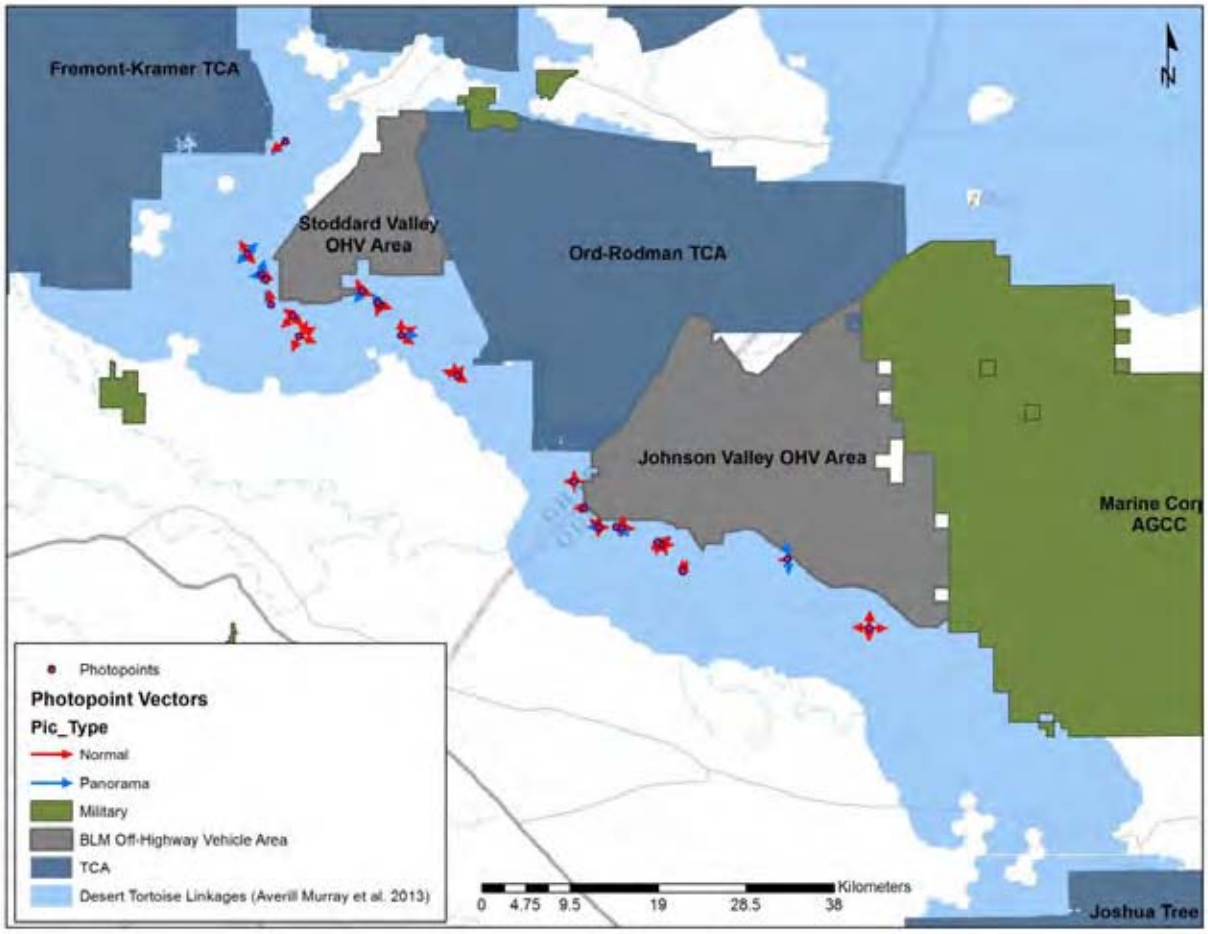


Figure 6. Location of photo points and photograph directions within linkages. Refer to Appendix 1 for images and descriptions.

Following completion of field reconnaissance surveys, we used our initial aerial photography analysis along with field notes and photographs to categorize the linkage into intact areas, fragmented areas, non-habitat, lost, developed, or severely disturbed habitat, and ohv-impacted habitat (see Figure 7). We then used these categories and their boundaries to inform U.S. Fish and Wildlife Service (Service) recommendations on adjustment of DFA and ACEC boundaries for analysis in various alternatives and to inform development of conservation management actions and biological goals and objectives for these two linkages.

Results and Recommendations

Figure 7 provides the categorization of the linkages as described above. In general, Brisbane Valley, Upper Lucerne Valley, and southern Johnson Valley contain large continuous tracts of intact habitat. All of these areas also contain high desert tortoise habitat potential (Nussear et al. 2009). Impacts to these areas would affect their function for the Ord-Rodman DWMA to varying degrees depending on the level of development and habitat degradation or fragmentation separating the intact linkage area from the

DWMA. For example, Upper Lucerne Valley may be relatively more important to the Ord-Rodman DWMA than Brisbane Valley because it is immediately adjacent to the DWMA and only separated by a two-lane highway, while Interstate 15 and large areas of ohv-impacted habitat separate Brisbane Valley from the DWMA. Our analysis supports the BLMs establishment of an ACEC south of Highway 247 in southern Johnson Valley. Based on this work we also added Conservation Planning Areas in the reserve system that would be immediately adjacent to this ACEC on the western end. We removed portions of the Johnson Valley DFA that were west of Bessemer Mine Road from the preferred alternative to improve the potential for maintaining a population connection between this ACEC and Ord-Rodman. All other areas of DFA overlap with the mapped intact portions of this linkage received stringent project analysis requirements and higher mitigation ratios during the development of conservation management actions.

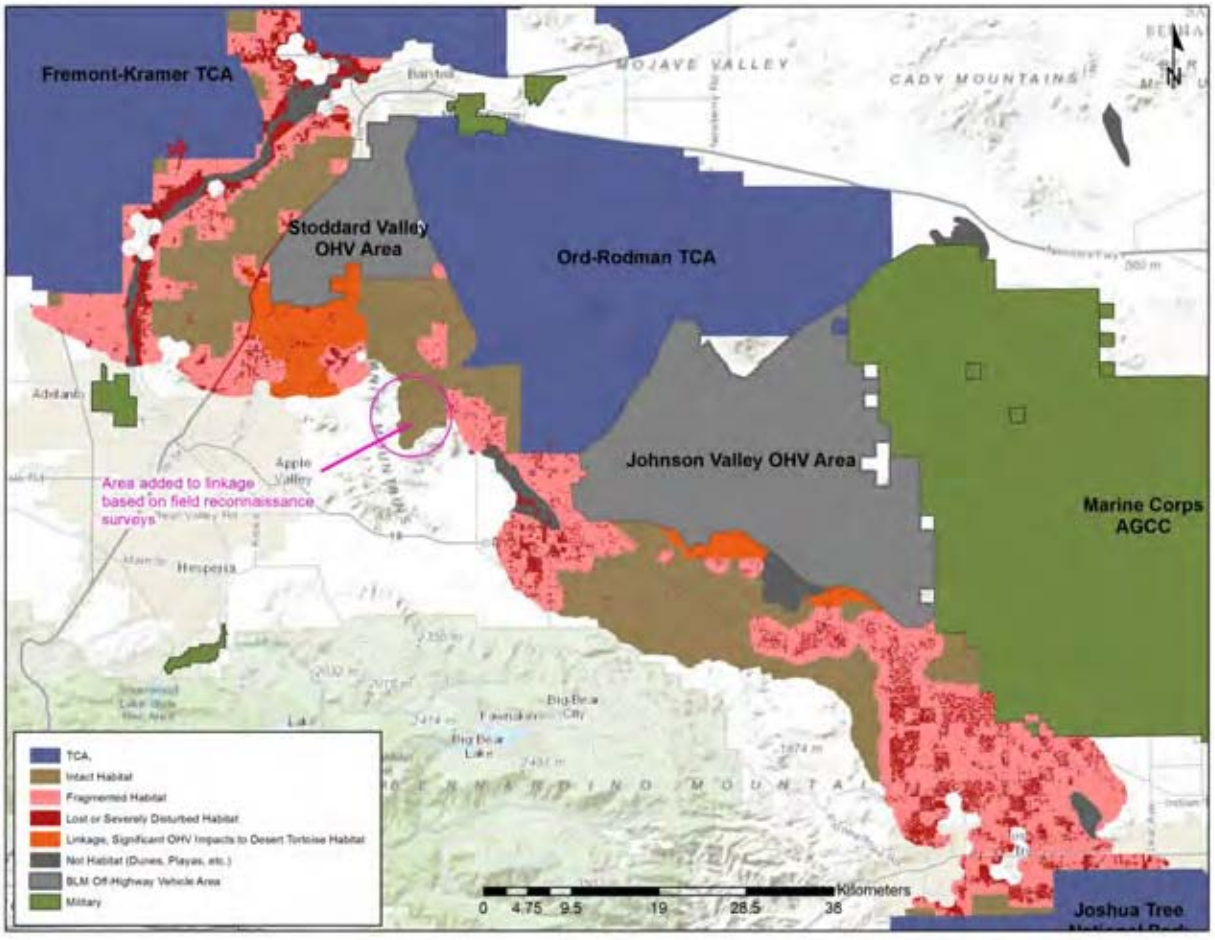


Figure 7. Categorization of habitat intactness and disturbance within linkages connecting the Ord-Rodman DWMA to the Fremont-Kramer DWMA and Joshua Tree National Park.

Areas immediately south of the Johnson Valley OHV area and south of the Stoddard Valley OHV area contain extensive unauthorized OHV damage, but would contain intact desert tortoise habitat otherwise. The ohv-impacted area south of the Stoddard Valley OHV Area is contained within a BLM

proposed ACEC, which will likely require extensive law enforcement and restoration to be effective. The ohv-impacted areas south of the Johnson Valley OHV area are within a DFA, so we recommended lower conservation management action requirements in these areas due to the likelihood of low desert tortoise density.

We categorized large portions of Landers, Yucca Valley, and Joshua Tree as highly fragmented in the southern portion of the Ord-Rodman to Joshua Tree National Park Linkage. While these areas continue to contain desert tortoises and likely contribute to gene flow, we believe they are too fragmented to serve as a functional part of the reserve system relative to desert tortoise conservation goals.

DFA Recommendations

The following map and list of recommendations provide more detailed information on specific areas of DFA overlap with the linkage. Each of these areas has undergone special consideration in the DRECP relative to conservation management action and compensation requirements.

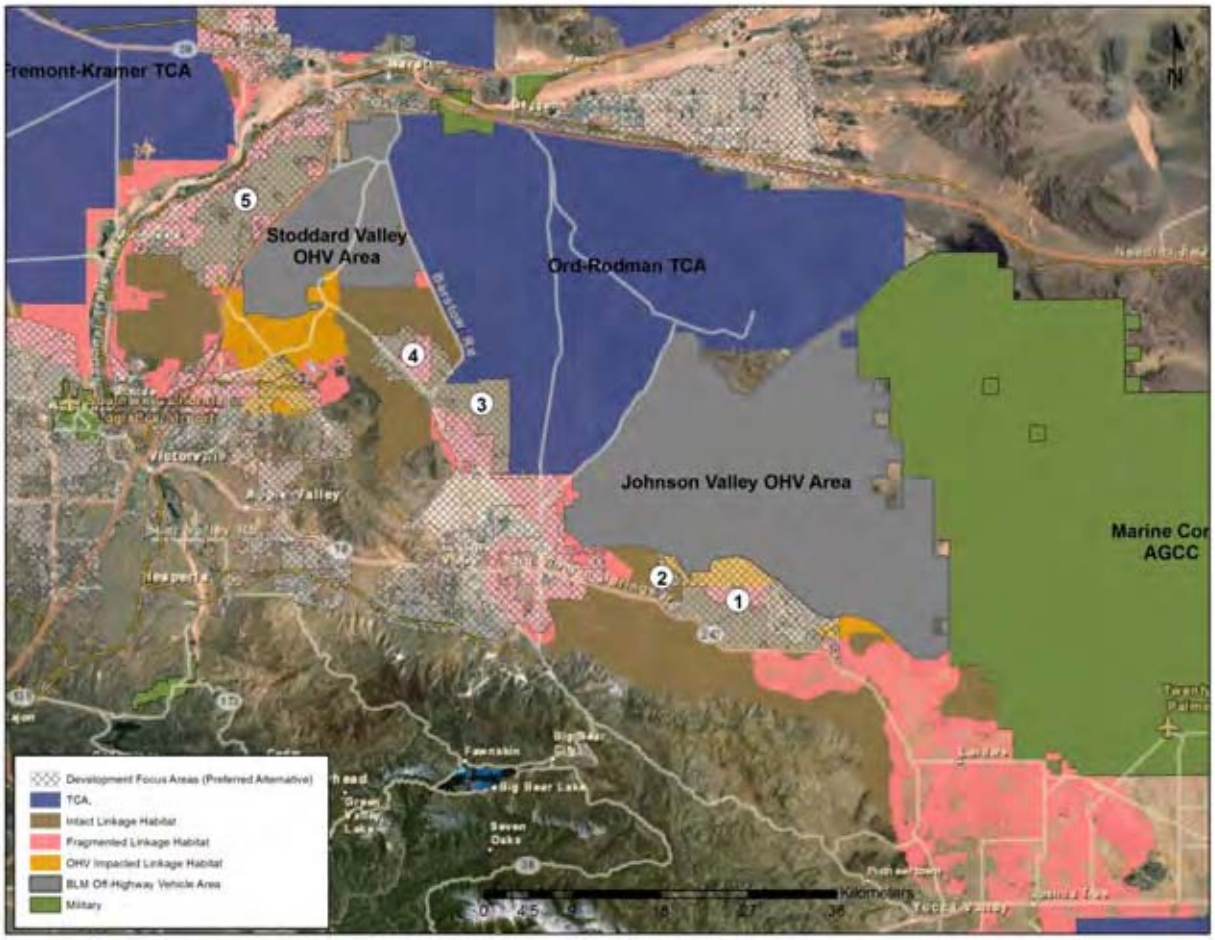


Figure 8. Overlap of DRECP DFAs with categorized linkage habitat. Numbers correspond to recommendation, detailed below, regarding DFAs.

The following numbered recommendations correspond to geographic areas labeled in Figure 8.

1. The DFA south of the Johnson Valley OHV Area contains a mixture of intact habitat, fragmented habitat, dune and sand transport areas (i.e., non-habitat areas), and areas heavily impacted by unauthorized off-highway vehicle use. Because desert tortoise are likely to be absent or occur in very low numbers in the OHV impacted areas and non-habitat areas, we recommended that the DRECP require fewer, more streamlined, conservation management actions and lower compensation requirements in these portions of the DFA. We recommended that the DRECP require high mitigation ratios (e.g., 5 to 1) and more stringent conservation management actions in portions of this DFA containing intact desert tortoise habitat.
2. We recommended that all portions of this proposed DFA, west of Bessemer Mine Road, be removed from the DFA and either added to the reserve system as part of BLMs ACEC or as part of a Conservation Planning Area in the proposed preferred alternative. These areas will help provide sufficient width to the north-south corridor that connects to the portions of the proposed Old Woman Springs ACEC, south of Highway 247.
3. The intact linkage habitat, south of Highway 247 (Barstow Road), and immediately adjacent to the Ord-Rodman DWMA are currently part of a Future Assessment Area. Because this area contains intact habitat, it is important for helping to maintain long-term viability of desert tortoise populations in the southern end of the DWMA. We recommended that this area not be opened to development.
4. The portion of Upper Lucerne Valley, north of Highway 247, within the DFA, comprises large areas of intact desert tortoise habitat that are contiguous with the Ord-Rodman DWMA and the Future Assessment Area identified in Item 3. In addition, the DFA portions of this intact linkage habitat comprise the areas of highest habitat potential. Other portions of the intact habitat north of Highway 247 are more marginal and include more mountainous areas like Stoddard Ridge that are likely to contain fewer desert tortoises than that found in the DFA itself. Based on this, we recommended stringent conservation management actions and high mitigation ratios in this portion of the DFA. All projects considered in this location must perform an analysis of effects on connectivity and effects on population viability within the Ord-Rodman DWMA. Projects that cannot show sufficient mitigation of their impacts on these factors are prohibited.
5. Brisbane Valley contains large areas of intact desert tortoise habitat, but its connection with the Ord-Rodman DWMA is tenuous due to Interstate 15 and intervening land uses that are not conducive to desert tortoise conservation (e.g., Stoddard Valley OHV Area and illegal OHV use south of Stoddard Valley OHV Area). However, desert tortoises continue to occupy the OHV areas and there are seven underpasses (Wild Wash Bridge and 6 passable culverts) under Interstate 15 that likely provide for some level of continued population connectivity. Based on this information, we recommended more stringent conservation management actions and high compensation ratios for projects in this DFA.

Reserve Recommendations

The following map and list of recommendations provide more detailed information on specific areas of ACEC overlap with the linkages.

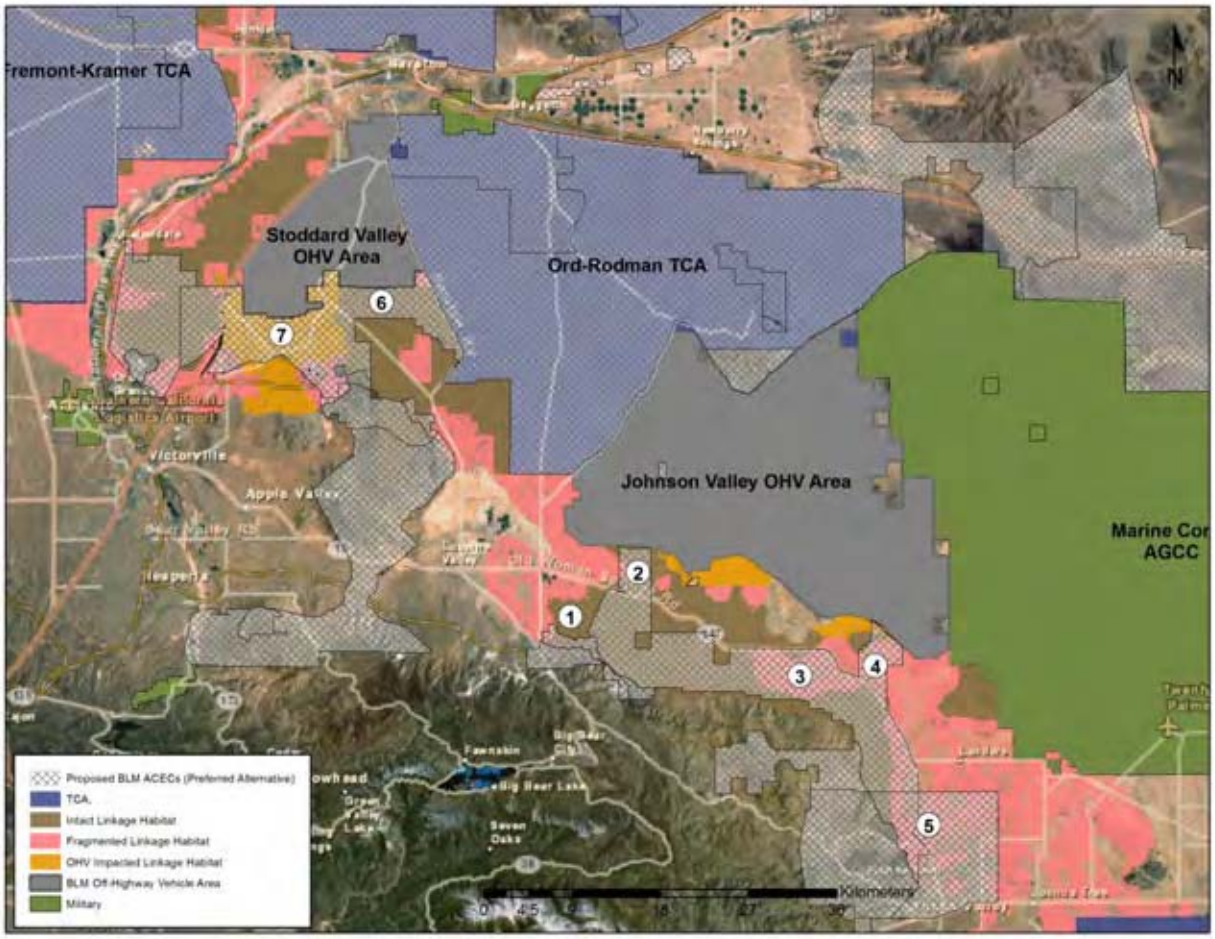


Figure 9. Overlap of BLMs proposed ACECs (preferred alternative) with categorized linkage habitat. Numbers correspond to recommendation made below.

1. Based on field reconnaissance surveys, we recommended that the intact linkage habitat in this location be added to the reserve as a Conservation Planning Area.
2. Field reconnaissance surveys support the inclusion of this north-south corridor in the reserve. However, we have recommended that the DRECP widen it to extend to Bessemer Mine Road by.
3. This portion of the proposed Old Woman Springs ACEC is relatively fragmented and contains numerous houses that may make consolidation and management difficult within the reserve.
4. This north-south linkage may be suitable for wildlife such as bighorn sheep, but it is likely to provide lower value for desert tortoise due to the fragmentation and development identified through our analysis.

5. This ACEC area contains large developed and fragmented portions of Yucca Valley. Consolidation and management of this area is likely to be infeasible.
6. This arm of the proposed Northern Lucerne Wildlife Linkage ACEC is comprised primarily of Stoddard Ridge, which is of lower habitat potential for desert tortoise due to mountainous terrain. As a linkage for other wildlife, such as bighorn sheep, or as a reserve for raptor breeding, it may still have beneficial value. However, as a linkage for desert tortoise it is of low value. Preservation of the intact habitat in the valley bottom areas of Upper Lucerne Valley would provide a more suitable linkage for desert tortoise through this area. This would require modification of the DFA in Upper Lucerne Valley.
7. This area contains high levels of unauthorized OHV use and extensive damage. BLM will need a large investment in law enforcement, land ownership consolidation, and habitat restoration for effective management. However, accomplishment of these things along with preservation of a suitable linkage through Upper Lucerne Valley (see Item 6 above) would allow connection of Ord-Rodman, under the Wild Wash Bridge to the ACEC in Brisbane Valley.

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