

Chuckwalla

Description/Location: The proposed Chuckwalla area is located in southeastern Riverside County and northeastern Imperial County, and encompasses the Orocopia, Chuckwalla, Little Chuckwalla, and Palo Verde mountains and the intervening alluvial fans, washes and valleys. The area contains the Chuckwalla Bench, an elevated area of coalescing alluvial fans between the Chuckwalla and Chocolate mountains, and the extensive Milpitas Wash in Imperial County.

Nationally Significant Values:

Ecological: The Chuckwalla area is the most outstanding representative of the Sonoran Desert in California with a full complement of characteristic wildlife and plant species. The entire area is USFWS designated critical habitat for the Federally threatened Agassizi's desert tortoise and contains areas of exceptional desert tortoise densities, the highest known in the Sonoran Desert. The flora is one of the most botanically diverse in the California Desert with 158 plant species including several species found nowhere else, most notably the Mecca aster (BLM Sensitive Species), Orocopia sage (BLM Sensitive Species), and the tree-like Munz's cholla (BLM Sensitive Species) which grows 6-13 feet tall. The washes and foothills provide excellent habitat for burro deer, a subspecies of mule deer found only in the Sonoran Desert. This area is considered the most important habitat for this subspecies in California. The Chuckwalla Bench contains the best remaining habitat in California for the Federally endangered Sonoran pronghorn. It was the last area in California where this species occurred and, according to a recent report by the USFWS Sonoran Pronghorn Recovery Team, is considered the most suitable area for its reintroduction, which is considered crucial for the recovery of the species. A reintroduction program involving BLM, USFWS, and CDFW is currently underway. The Chuckwalla Valley Dune Thicket, in the northeastern corner of the proposed Chuckwalla unit, contains unusually dense pockets of microphyll woodland and has the highest known winter bird densities in the California Desert, as well as especially high densities of reptiles and mammals. Milpitas Wash, in the southeastern portion of the proposed NLCS unit, is the most extensive classic Sonoran Desert microphyll woodland in the California Desert. Corn Springs, located in a canyon deep in the Chuckwalla Mountains, supports a rich stand of riparian vegetation that includes native California fan palms (unique to the Colorado Desert), mesquite, catclaw, desert willow, and smoke trees. Corn springs supports abundant wildlife and is important for migratory birds. The lush vegetation at the oasis combined with the rugged colorful surrounding canyon walls rank it as one of the more scenic areas in the CDCA.

Cultural: Many factors contribute to the national significance of the cultural values associated with the proposed Chuckwalla unit. Key areas, described below, are Alligator Rock, Corn Springs, and the Bradshaw Trail. Alligator Rock is a microcosm of the archaeology of the Colorado Desert. It contains examples of most of the site types that are common to the Colorado Desert as well as some site types that are uncommon. It tells a story of resource procurement, trade, and travel carried out by mobile populations in a harsh environment. The area is currently designated as a National Register District and an ACEC. Corn Springs was an occupation site for prehistoric Native Americans. Impressive petroglyphs consisting of approximately 600 design elements, a series of trail segments with pottery and lithic debitage and bedrock mortars have all been recorded at the site. There is a long history of mining in the Corn Springs canyon and tributary canyons dating back to the last century. The Historic Bradshaw Trail bisects the proposed Chuckwalla unit and is an important remnant of a formative period in the history of the desert Southwest. It was established to link the Arizona gold mine camps at La Paz (Ehrenberg) with Los Angeles in the 1860s. The BLM designated the route as a National Back Country Byway in 1992. The Bradshaw trail was blazed with the aid of Chief Cabazon and several other Native Americans based on their knowledge of water sources along a pre-existing prehistoric trail system.

Scientific Values: Although the world renowned rock art site at the mouth of the canyon has been studied by many, the entire canyon area and its tributary canyons remain virtually unstudied. It is likely that toolstone procurement areas exist that are scattered throughout the Chuckwalla Mountains, and other petroglyphs continue to be discovered and reported today. The Trail system that transects the canyon from east to west reveal much about the past dealing with trade, transportation of goods, and prehistoric effects on people dealing with climactic changes across the land from the Coast to the inland Southwest.

Special Designations/Management Plan/Date: Chuckwalla DWMA/ ACEC (2002), Chuckwalla Bench ACEC (1980, which was deleted and subsumed by the larger Chuckwalla DWMA/ACEC), Chuckwalla Valley Dune Thicket ACEC (1980), Corn Springs ACEC (1980), Alligator Rock ACEC (1980), Milpitas Wash HMP (1980, which was deleted and subsumed by the larger Chuckwalla DWMA/ ACEC), Chuckwalla Mountains HMP (1980), Orocopia Mountains HMP (1980), USFWS designated desert tortoise critical habitat (1994)

Relevance and Importance Criteria: Relevant cultural, scenic, vegetative and wildlife values. One of the highest density populations of the Federally threatened Agassizi's desert tortoise in the Sonoran Desert. It is also excellent habitat for burro deer, desert bighorn sheep, and is a priority reintroduction area for the federally endangered Sonoran pronghorn. The extensive microphyll washes serve as excellent habitat for multiple migratory bird species. The ACEC serves as an outstanding representative of the Sonoran Desert with a full complement of the characteristic wildlife and plant species. The ACEC provides unique opportunity for multiple use management- aside from its rich wildlife and botanical resources, it has been utilized extensively for outdoor recreation. The proposed extension of the Chuckwalla ACEC is in an area of higher value desert tortoise habitat (2009 USGS Desert Tortoise Habitat model). It would provide critical desert tortoise habitat connectivity between the two major desert tortoise populations identified in the Colorado Desert (i.e., the Chuckwalla and Chemehuevi populations) through Joshua Tree National Park. The area is also the designated desert tortoise translocation site from surrounding solar projects

Goals: To protect and enhance habitat for sensitive animal and plant species and rare vegetation alliances within the ACEC while reducing hazards to public safety and providing for compatible public uses. Priority wildlife species include the Agassizi's desert tortoise, desert bighorn sheep, and burro deer. Priority plant species include three endemic plant species: Mecca aster, Orocopia sage, and the Munz's cholla. Priority rare vegetation alliances include Blue Paloverde-Desert Ironwood Woodland and Smoketree Woodland. Maintain habitat connectivity between the proposed Chuckwalla NLCS unit and Joshua Tree National Park. Bighorn Sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan. Protect the cultural values of the Alligator Rock, Corn Springs, and Bradshaw Trail. Areas near the upper bajadas and at the base of the Chuckwalla Mountains have stable geologic surfaces and desert pavements where prehistoric trails are well preserved. Areas skirting the trails commonly feature archaeological sites with ceramics, groundstone and flaked stone evidence. If a natural water source is nearby, larger sites with petroglyphs are likely present.

For NLCS Lands -- Where this ruleset differs from the plan-wide NLCS rulesets, the more restrictive rules will apply.

Designation and Acreage by Alternative:

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	493,600	0	1%
Preferred Alternative	318,400	514,600	0	0.1 and 0.5%
1	257,500	514,600	0	1%
2	512,400**	512,400	0	0.1 and 0.25%
3	338,300	514,600	0	0.1 and 0.5%
4	301,700	514,500	0	0.1 and 0.5%

* Acreage values are for BLM managed lands

**Includes overlap of existing designated Wilderness

*** This conservation area is zoned, with different disturbance caps associated with the zones. The 0.1% disturbance cap applies to critical tortoise linkages, the other identified disturbance caps are associated with desert tortoise conservation areas.

Alternatives:

Under All Action Alternatives--This is an existing ACEC that overlaps several smaller ACECs and designated wilderness areas. To resolve these dual designations, all action alternatives will removed these dually designated acres from Chuckwalla (the designation of the other ACEC or wilderness would remain and the acres would still be managed for conservation purposes) to assist BLM is accurate reporting of number of acres in conservation status. The ACEC is expanded to the north and has two small infill additions.

No Action – this existing ACEC would continue to be managed as it currently is, and the dual designations would remain.

Objectives (desired future conditions)/Allowable uses/ Management Actions	Resource
<p>Management Action: Restrict construction activities when soils are susceptible to heightened risk of erosion. Limit ground-disturbing activities when soils are wet in order to avoid compaction of soils.</p> <p>Comply with the State of California for all proposed actions that would contribute to particulate matter emissions.</p> <p>Objective: Prevent excessive ground water withdrawal that would potentially threaten dune/ playa dependent vegetation.</p> <p>Management Action: Allow no activities that would create a water basin deficit/ decline.</p>	Soil, water, air
<p>Objective: Protect the following special status plants and rare vegetation alliances by ensuring habitat is in a stable or improving condition.</p> <p>Special Status Species:</p> <ol style="list-style-type: none"> 1. Los Animas colubrina (<i>Colubrina californica</i>) (NECO covered, CRPR 2) 2. Crucifixion thorn (<i>Castela emoryi</i>) (NECO covered, CRPR 2) 	Vegetation (incl. special status species)

3. Foxtail cactus (*Coryphantha alversonii*) (NECO covered, CRPR 4)
4. Glandular ditaxis (*Ditaxis clariana*) (NECO covered, CRPR 2)
5. California ditaxis (*Ditaxis serrata* var. *californica*) (NECO covered, CRPR 3)
6. Crown-of-thorns (*Koeberlinia spinosa* ssp. *tenuispina*) (NECO covered, CRPR 2)
7. Spearleaf (*Matelea parvifolia*) (NECO covered, CRPR 2)
8. Munz's cholla (*Opuntia munzii*) (BLM SS, CRPR 1B)
9. Desert unicorn plant (*Proboscidea althaeifolia*) (NECO covered, CRPR 4)
10. Orocopia sage (*Salvia greatae*) (BLM SS, CRPR 1B)
11. Coves' cassia (*Senna covesii*) (NECO covered, CRPR 2)
12. Mesquite neststraw (*Stylocline sonorensis*) (NECO covered, CRPR 1A)
13. Mecca-aster (*Xylorhiza cognata*) (BLM SS, CRPR 1B)

Rare Vegetation Alliances:

1. Big Galleta Herbaceous (Pleuraphis rigida Herbaceous Alliance)
2. Desert-Willow Woodland (Chilopsis linearis Woodland Alliance)
3. Blue Paloverde-Desert Ironwood Woodland (Parkinsonia florida - Olneya tesota Woodland Alliance)
4. Smoketree Woodland (Psorothamnus spinosus Woodland Alliance)
5. Teddy-bear Cholla Shrubland (Cylindropuntia bigelovii Shrubland Alliance)
6. Jojoba Shrubland (Simmondsia chinensis Shrubland Alliance)
7. Spinescale Shrubland (Atriplex spinifera Shrubland Alliance)

Management Action: Develop a more accurate map of the distribution and abundance of special status plants (particularly those three endemics listed as BLM SS: Mecca aster, Orocopia sage, and Munz's cholla) and rare vegetation alliances to aid in monitoring, assessing impacts, developing appropriate mitigation and prioritizing any future land acquisitions.

Management Action: Place signs, kiosks and interpretive information at key sites to better inform the public of the protections and natural resource values within the proposed NLCS unit.

Management Action: Sign all primary open routes (Le. Bradshaw Trail, Red Cloud Road, gasline etc.), limited and closed routes with the appropriate standard carsonite sign. Closed routes would also be signed and barricaded or obliterated where appropriate.

Management Action: Increase the BLM Ranger and resource staff presence in the proposed NLCS unit.

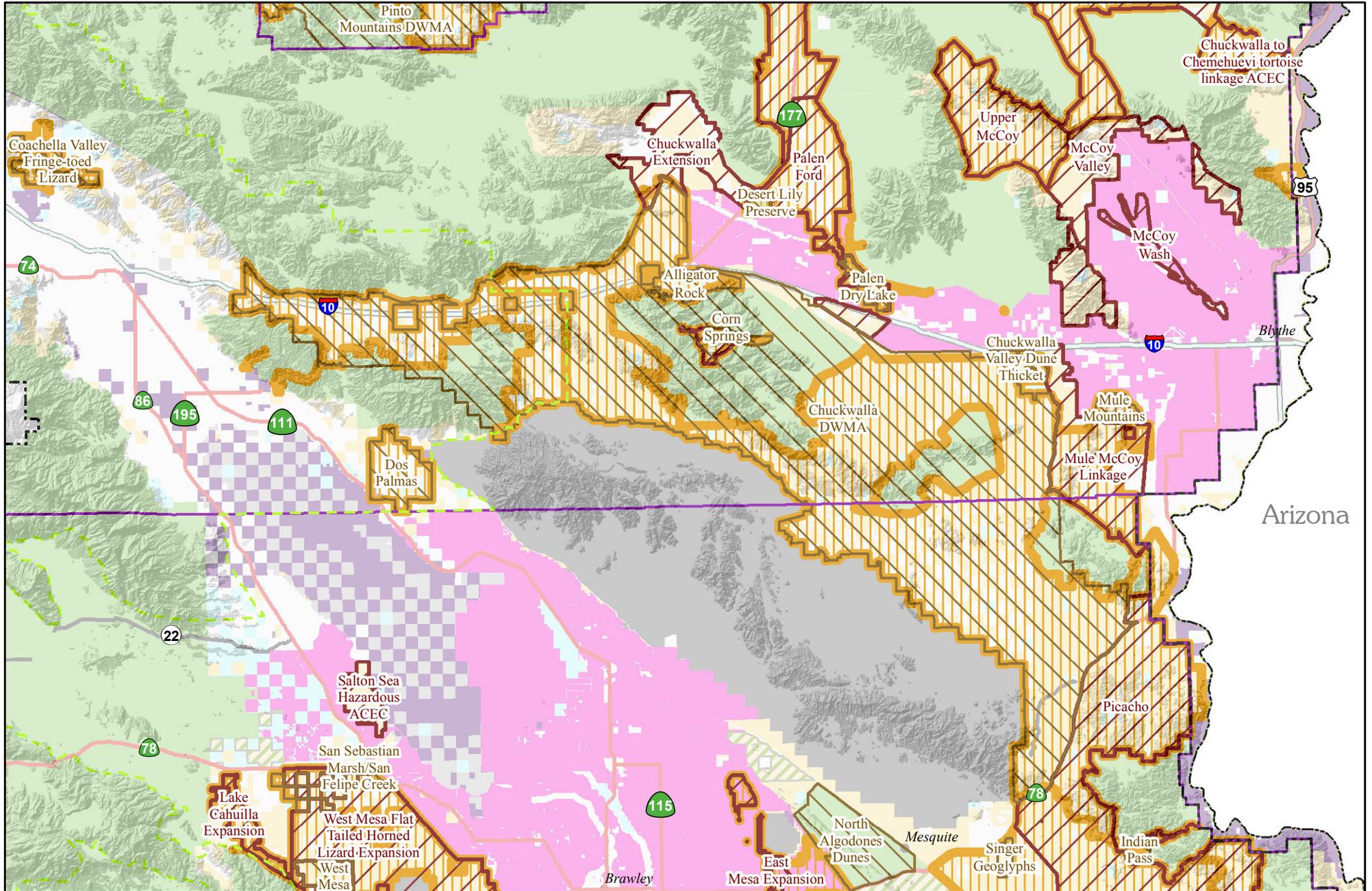
Management Action: Develop a cooperative agreement with the Navy and Marine Corps to allow for the joint management of the public land within that portion of the Chocolate Mountain Aerial Gunnery Range north of Bradshaw Trail.

<p>Management Action: Limit camping to within 100 feet of designated vehicles routes. Campers would be encouraged to limit use to the five areas on the Bench already receiving such use.</p> <p>Management Action: Place boundary signs on all major entry roads to identify the proposed NLCS unit, and resource values, illustrate the major routes of travel.</p> <p>Management Action: Develop a monitoring program to determine the trend of wildlife and vegetation resources within the proposed NLCS unit, determine the effectiveness of the planned actions, and help identify future management needs.</p> <p>Management Action: Coordinate with Riverside County on the maintenance of the Bradshaw Trail. Ensure that Munz's chollas are avoided during maintenance activities.</p>	
<p>Objective: Protect the following special status animals by ensuring habitat is in a stable or improving condition, and connectivity corridors are maintained.</p> <ol style="list-style-type: none"> 1. Desert bighorn sheep (<i>Ovis canadensis</i> subspecies <i>nelsoni</i>) (BLMSS) 2. Burro deer (<i>Odocoileus hemionus eremicus</i>) 3. Mountain Lion (<i>Felis concolor</i>) 4. California leaf-nosed bat (<i>Macrotus californicus</i>) (BLMSS) 5. Occult little brown bat (<i>Myotis lucifugus</i> subspecies <i>occultus</i>) 6. Cave myotis (<i>Myotis velifer</i>) (BLMSS) 7. Fringed myotis (<i>Myotis thysanodes</i>) (BLMSS) 8. Fringed myotis (<i>Myotis thysanodes</i>) (BLMSS) 9. Townsend's big-eared bat (<i>Plecotus townsendii</i>) (BLMSS) 10. Pocketed free-tailed bat (<i>Tadarida femorosaccus</i>) 11. Western mastiff bat (<i>Eumops perotis</i>) (BLMSS) 12. Colorado Valley Woodrat (<i>Neotoma albigula venustra</i>) 13. Golden eagle (<i>Aquila chrysaetos</i>) (BLMSS) 14. Ferruginous hawk (<i>Buteo regalis</i>) 15. Prairie Falcon (<i>Falco mexicanus</i>) 16. Elf owl (<i>Micrathene whitneyi</i>) (State endangered) 17. Burrowing owl (<i>Speotyto cunicularia</i>) (BLMSS) 18. Gila woodpecker (<i>Melanerpes uropygialis</i>) (State endangered) 19. Vermilion flycatcher (<i>Pyrocephalus rubinus</i>) 20. Southwestern willow flycatcher (<i>Empidonax traillii extimis</i>) (Federally endangered) 21. Bendire's Thrasher (<i>Toxostoma bendirei</i>) 22. Crissal Thrasher (<i>Toxostoma crissale</i>) 23. LeConte's Thrasher (<i>Toxostoma lecontei</i>) 24. Yellow warbler (<i>Dendroica petechia</i>) 25. Chuckwalla (<i>Sauromalus obesus</i>) 26. Mojave fringe-toed lizard (<i>Uma scoparia</i>) (BLMSS) 27. Desert rosy boa (<i>Lichanura trivirgata</i>) 28. Agassizii's desert tortoise (<i>Gopherus agassizii</i>) (Federally threatened) 	<p>Fish and Wildlife (incl. special status species)</p>

<p>29. Couch's spadefoot toad (<i>Scaphiopus couchi</i>) (BLMSS)</p> <p>Management Action: Implement the recommended management actions from the most current version of the Recovery Action Plan for the Mojave Desert Tortoise (California Mojave Recovery Implementation Team). The management actions would be those that apply to the Chuckwalla Critical Habitat Unit.</p> <p>Management Action: Develop a desert tortoise habitat linkage management and monitoring plan. The plan would include an inventory of potential obstructions to connectivity and sources of mortality within the ACEC, and a list of specific actions under the jurisdiction of BLM that may be needed to remove or mitigate impediments to desert tortoise occupancy and movement, and minimize the risk of fatalities (e.g., construction of fences and culverts along Kaiser Road, repair of culverts under Kaiser Mountain Railroad, etc.).</p> <p>Management Action: Limit cumulative surface disturbance to one percent. Within the boundaries of the former Chuckwalla Bench ACEC, cumulative surface disturbance would be limited to 0.25 percent.</p> <p>Management Action: Compensation for surface disturbance would be required at a 5:1 ratio. All compensation would be directed to the proposed Chuckwalla NLCS unit.</p> <p>Management Action: Areas are designated as “washes closed zones” wherein vehicle use would be restricted to specific routes, including navigable washes that are individually designated “open” or “limited”.</p> <p>Management Action: Place signs, kiosks and interpretive information at key recreational sites to better inform the public</p> <p>Management Action: Stopping, parking, and vehicle camping are allowed no more than 100 feet from the centerline of an approved route of travel. Where wilderness areas would be closer to an approved route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the boundary.</p> <p>Management Action: Establish cooperative regional weed management area.</p>	
<p>Objective: Because of the proximity to Joshua Tree National Park, the ACEC would be managed area as VRM Class II, with portions near Interstate 10 designated as VRM Class III</p>	<p>Visual Resources</p>
<p>Management Actions: Stopping, parking, and vehicle camping are allowed no more than 100 feet from the centerline of an approved route of travel. Where wilderness areas would be closer to an approved route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the boundary.</p>	<p>Trails and Travel Management</p>

<p>Management Action: Areas are designated as “washes closed zones” wherein vehicle use would be restricted to specific routes, including navigable washes that are individually designated “open” or “limited”. Increase “washes closed zone” to include the entire boundary of the former Chuckwalla Bench ACEC.</p>	
<p>Objective: Portions of the area would be managed within the Eastern Riverside Extensive Recreation Management Area (ERMA). Provide dispersed opportunities focused on enjoyment of the unit qualities.</p> <p>Portions of this NLCS/ACEC overlap with the Chuckwalla Special Recreation Management Area (SRMA) and associated Recreation Management Zones (RMZ) found within. Please refer to the SRMA summaries for the SRMA and RMZs for specific guidance on recreation management/goals.</p>	Recreation
<p>Objective: Retain BLM lands. The proposed Chuckwalla NLCS/ ACEC would be a priority acquisition area for desert tortoise compensatory mitigation. Management Actions: Acquire private lands from willing sellers.</p>	Land Tenure
<p>Management Action: ROW avoidance area. Management Action: Where the unit overlaps the designated BLM Utility Corridor, the area is open for transmission ROW only (i.e., the integrity of the BLM Utility Corridor will be maintained). Management Action: ROWs in avoidance areas would be authorized on a case by case basis to meet public demand consistent with the goals and objectives of the unit. Management Action: All relevant and importance values of the unit must be protected. Management Action: For all avoidance areas within the unit, ROW development and land use authorizations must ensure full protection, or be fully mitigated. Management Action: New proposals will need to be analyzed at on a case-by-case basis and cumulatively, to assess whether they can be accommodated within the unit and its management goals.</p>	Rights of Way (ROW)
<p>Not an allowable use. Renewable energy development is not compatible with unit values and criteria.</p> <p>Geothermal: Area is closed to geothermal leasing and development</p>	Renewable Energy
<p>Management Action: Recommend withdrawal from locatable mineral entry within the boundaries of the former Chuckwalla Bench ACEC. This is the area of highest density tortoise populations.</p> <p>Management Action: Closed to Salable Minerals within the boundaries of the former Chuckwalla Bench ACEC. In other areas, material sales would be allowed only in areas where impact to vegetation and wildlife would be negligible.</p> <p>Management Action: No-surface occupancy leasable minerals.</p>	Locatable Minerals Mineral Materials Non-energy Leaseable

Chuckwalla



Preferred Alternative ACECs

Date Printed: 5/29/2013

Prepared by BLM California State Office



ACEC Layers

- Existing ACEC
- Proposed ACEC
- Proposed NLCS
- Design Focus Areas
- Legislatively and Legally Protected
- Cities
- OHV Areas
- CDCA Boundary
- DRECP Boundary
- BLM Field Office

Land Status

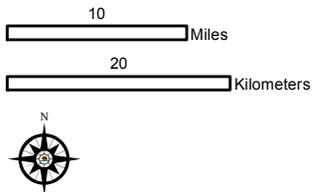
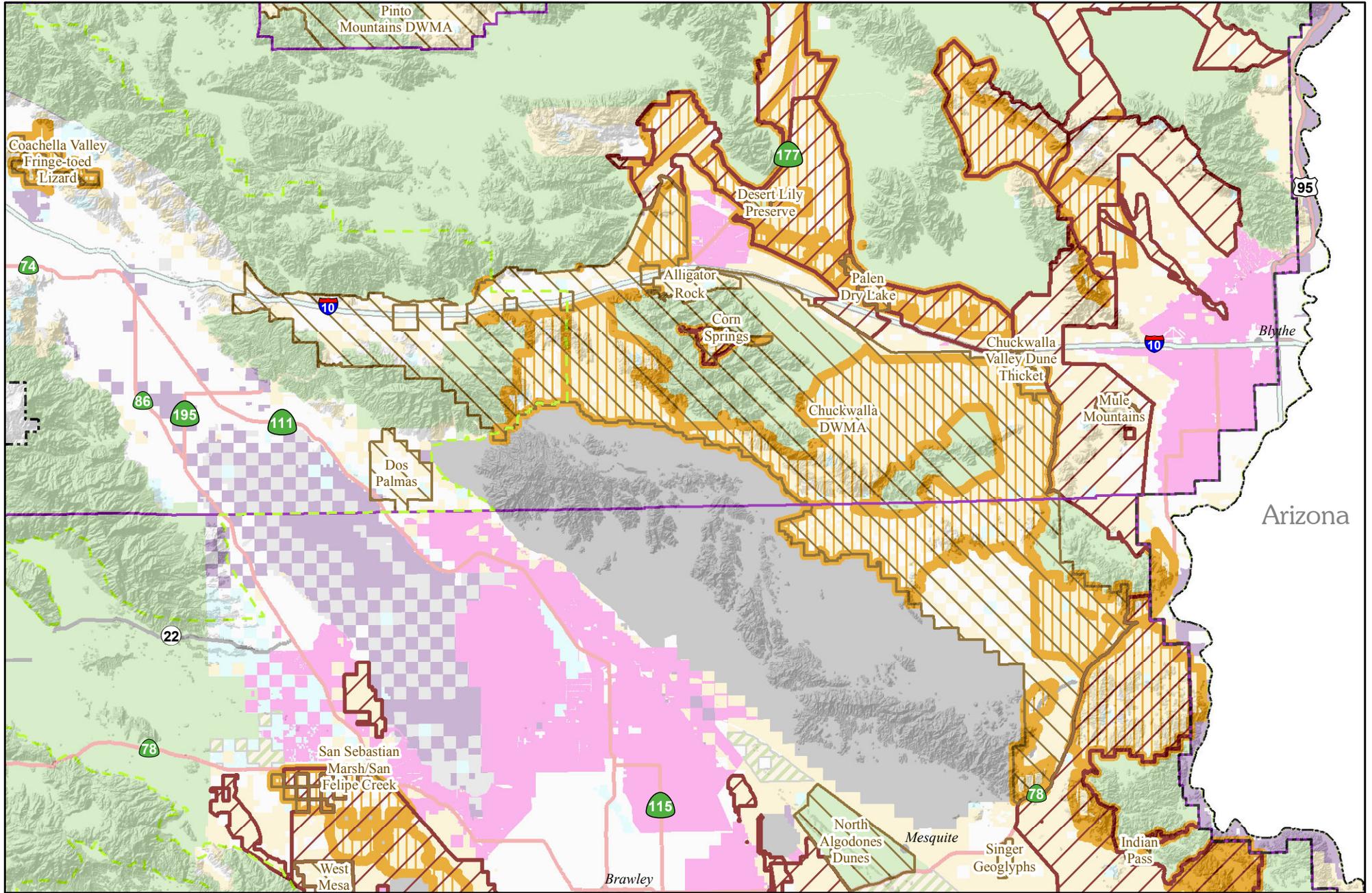
- Bureau of Land Management
- State
- Other Federal
- Military
- Private

GTFL

- Interstate
- US Hwy
- CA Hwy
- County Hwy



Chuckwalla



Alternative 1 ACECs
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ACEC Layers

- Existing ACEC
- Proposed ACEC
- Proposed NLCS
- Design Focus Areas
- Legislatively and Legally Protected

- Cities
- OHV Areas
- CDCA Boundary
- DRECP Boundary
- BLM Field Office

Land Status

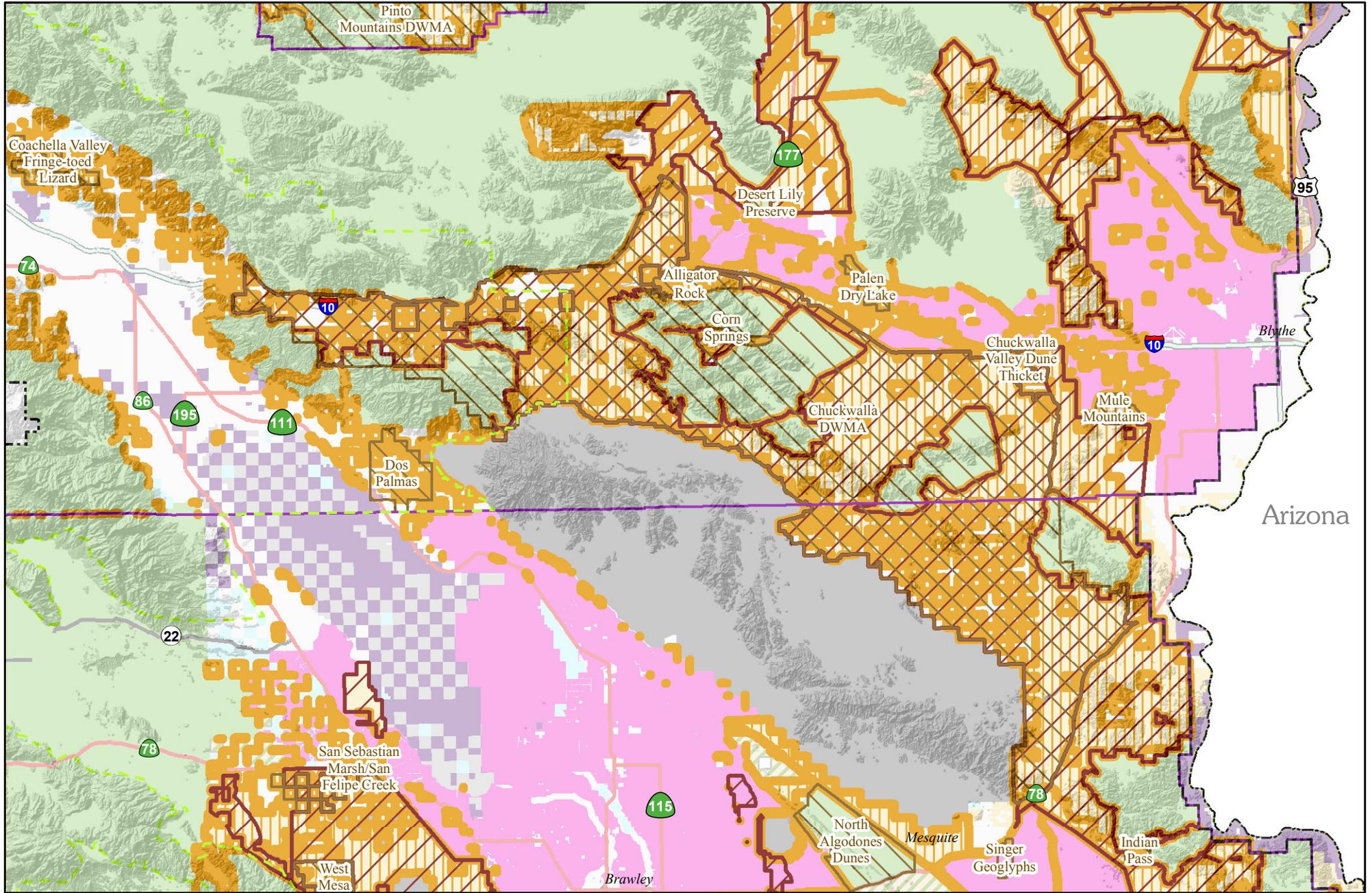
- Bureau of Land Management
- State
- Other Federal
- Military
- Private

GTIF

- Interstate
- US Hwy
- CA Hwy
- County Hwy



Chuckwalla



Alternative 2 ACECs

Date Printed: 5/29/2013
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ACEC Layers

- Existing ACEC
- Proposed ACEC
- Proposed NLCS
- Design Focus Areas
- Legislatively and Legally Protected

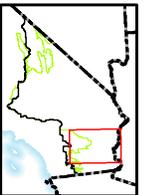
- Cities
- OHV Areas
- CDCA Boundary
- DRECP Boundary
- BLM Field Office

Land Status

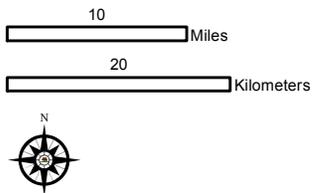
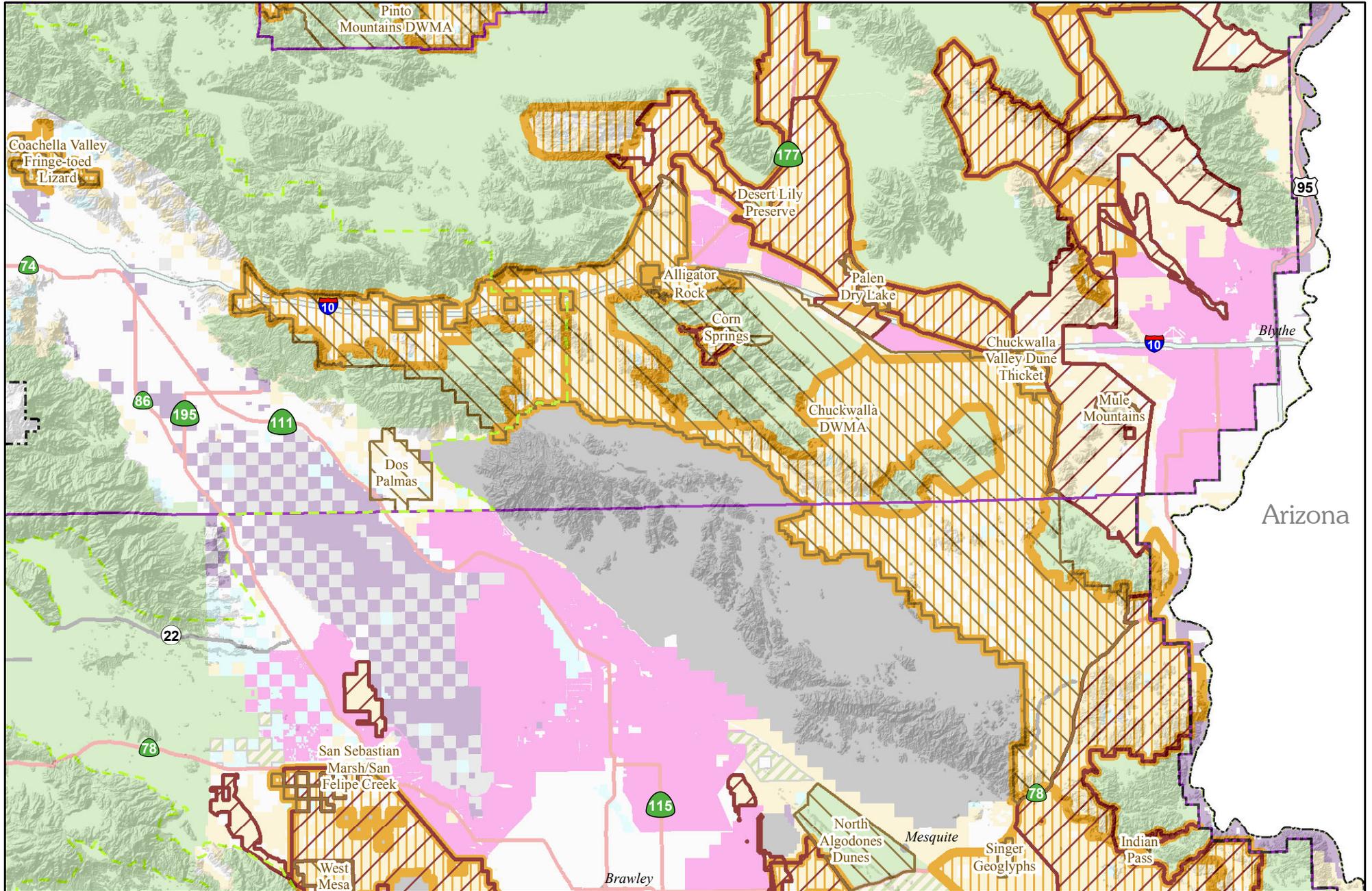
- Bureau of Land Management
- State
- Other Federal
- Military
- Private

GTIF

- Interstate
- US Hwy
- CA Hwy
- County Hwy



Chuckwalla



Alternative 3 ACECs
 Date Printed: 5/29/2013
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ACEC Layers

- Existing ACEC
- Proposed ACEC
- Proposed NLCS
- Design Focus Areas
- Legislatively and Legally Protected

- Cities
- OHV Areas
- CDCA Boundary
- DRECP Boundary
- BLM Field Office

Land Status

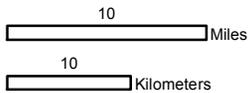
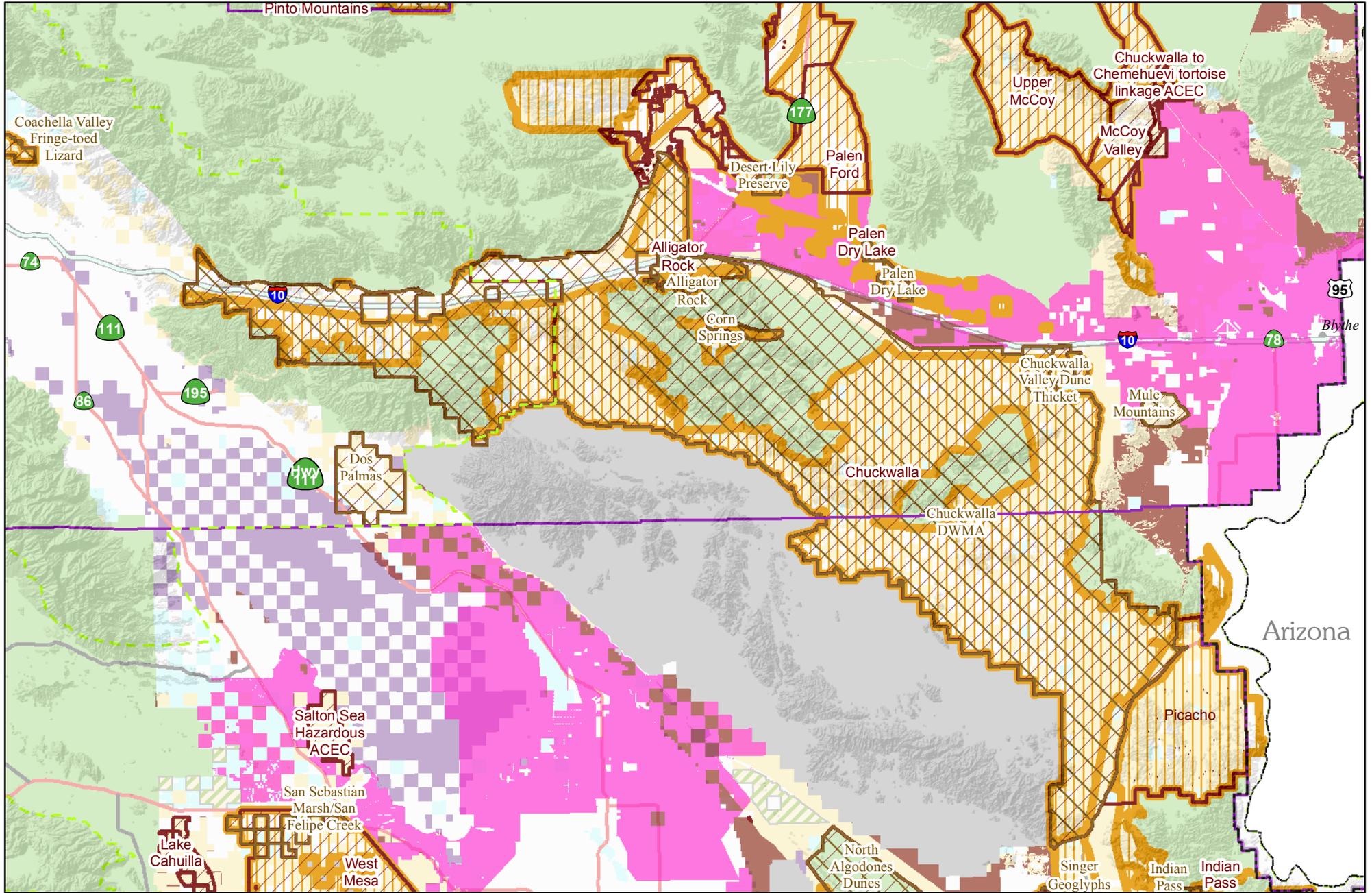
- Bureau of Land Management
- State
- Other Federal
- Military
- Private

GTLF

- Interstate
- US Hwy
- CA Hwy
- County Hwy



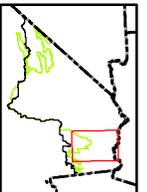
Chuckwalla



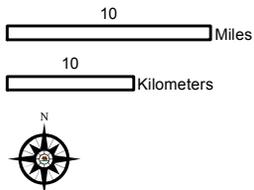
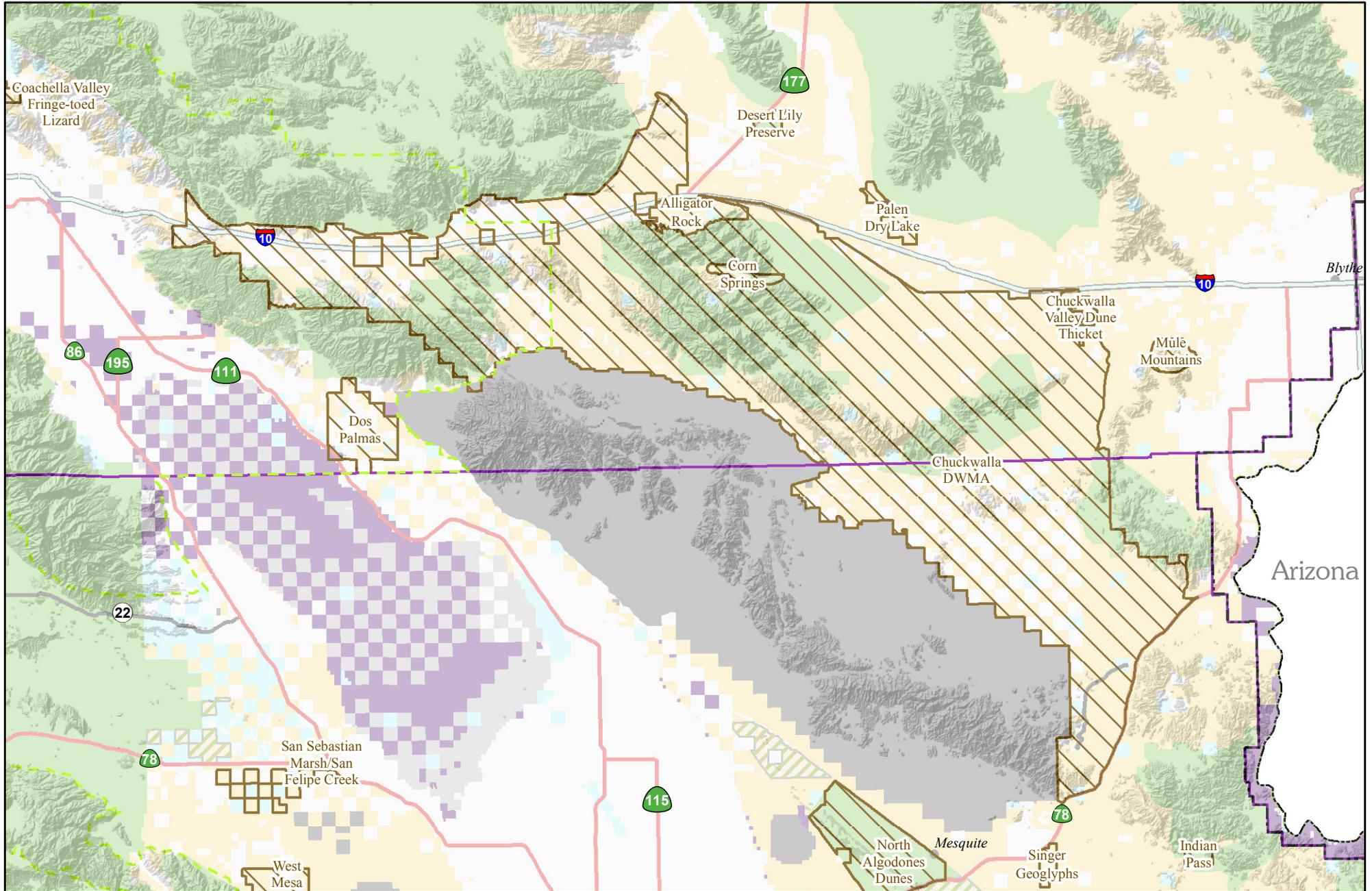
Alternative 4 ACECs
 Date Printed: 8/6/2014
 Prepared by BLM California State Office



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|-------------------------------------|--------------------|---------------------------|-------------|
| ACEC Layers | Design Focus Areas | Land Status | GTLF |
| Existing ACEC | Variance Lands | Bureau of Land Management | Interstate |
| Proposed NLCS | OHV Areas | State | US Hwy |
| Proposed ACEC | CDCA Boundary | Other Federal | CA Hwy |
| Proposed Wildlife Allocation | DRECP Boundary | Military | County Hwy |
| Legislatively and Legally Protected | BLM Field Office | Private | |



Chuckwalla



No Action ACECs

Date Printed: 5/29/2013

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ACEC Layers

Existing ACEC

OHV Areas

Legislatively and Legally Protected

Cities

CDCA Boundary

DRECP Boundary

BLM Field Office

Land Status

Bureau of Land Management

State

Other Federal

Military

Private

GTIF

Interstate

US Hwy

CA Hwy

County Hwy

