Corridor 115-238

Palo Verde-San Diego Corridor

Corridor Rationale

This energy corridor provides a pathway for energy transport, particularly electrical transmission from the Palo Verde Nuclear Generating Station to southern California. Input regarding alignment from the Arizona Public Service Electrical Company; American Wind Energy Association; National Grid; New Mexico Energy, Minerals, and Natural Resources Department; TransWest Express, LLC; Tucson Electric Power Company; and Western Utility Group suggested following this route during the WWEC PEIS. There are no planned projects and no pending or recently authorized ROWs for transmission line or pipeline projects in the Region 2 portion of the corridor. An authorized transmission line project intersects the Region 2 portion of the corridor.

Corridor location (Region 2 portion; Region 1 evaluated in Region 1 Review):
Arizona (Maricopa Co.)
BLM: Lower Sonoran Field Office
Regional Review Region(s): Region 1 and Region 2

Corridor width, length (Region 2 portion):
Width 3,500 ft
22.9 miles of designated corridor
24.7 mile-posted route, including gaps

Sec 368 energy corridor restrictions: (N)
- corridor is multi-modal

Corridor of concern (N)

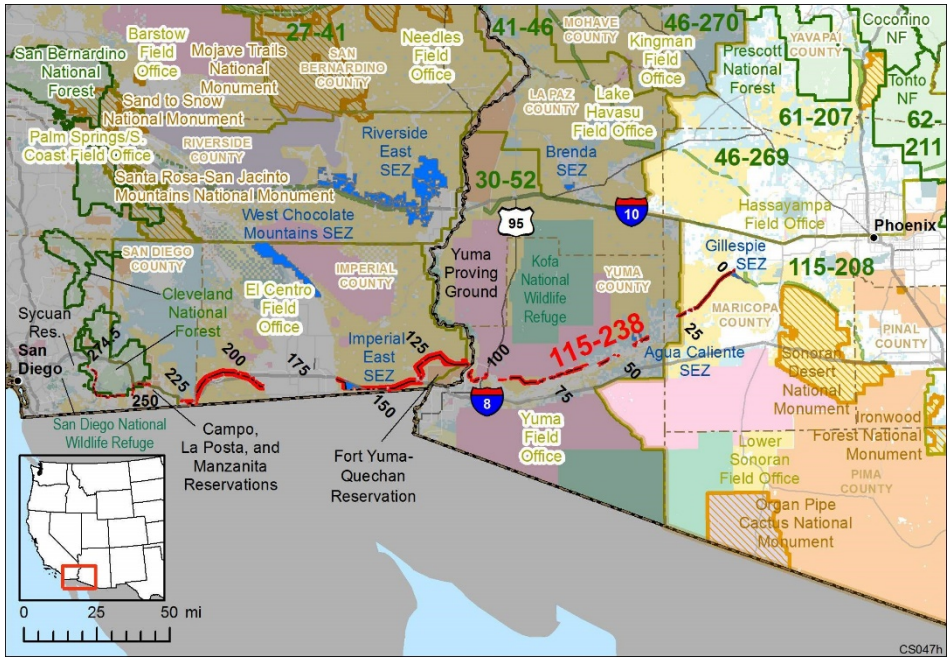
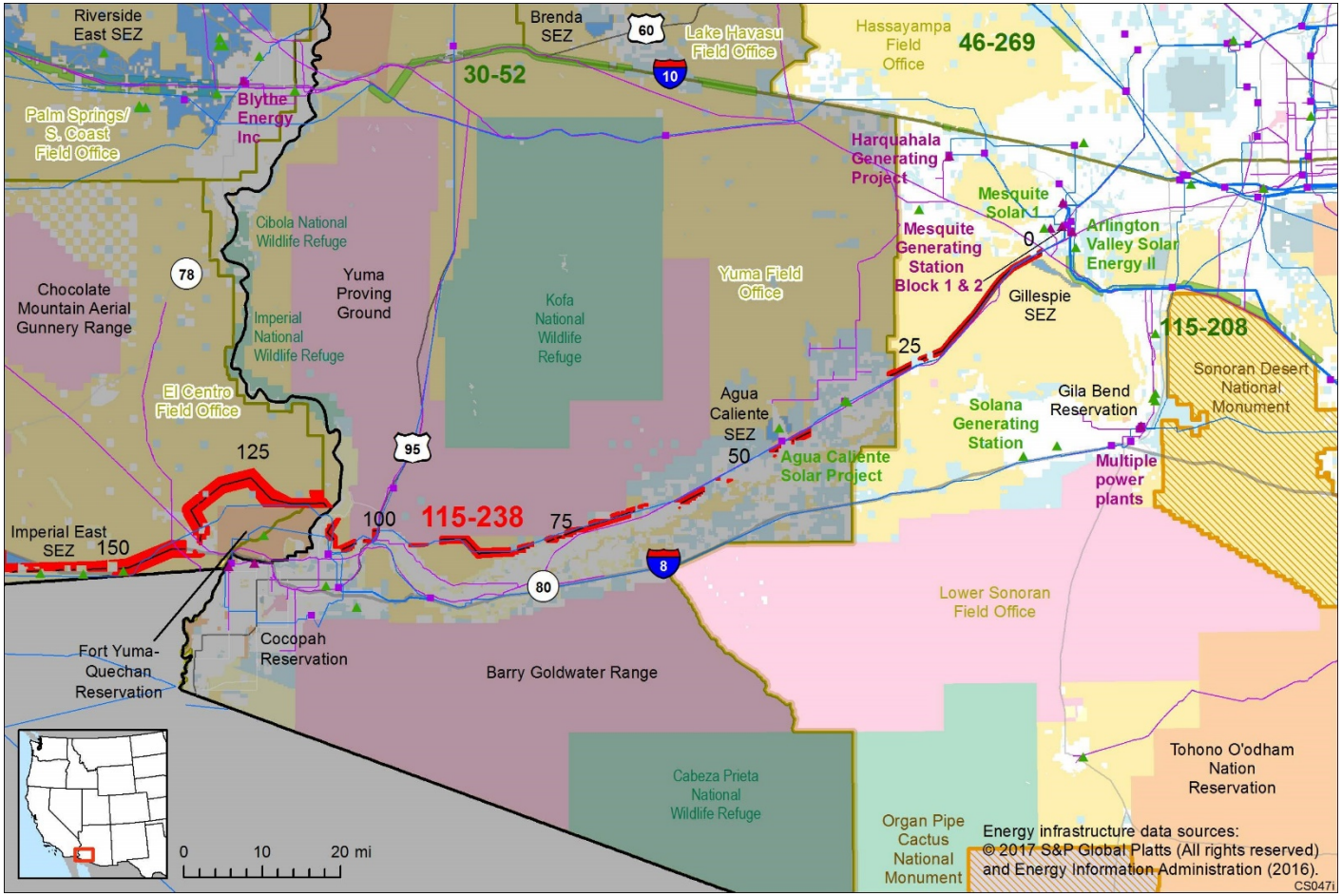
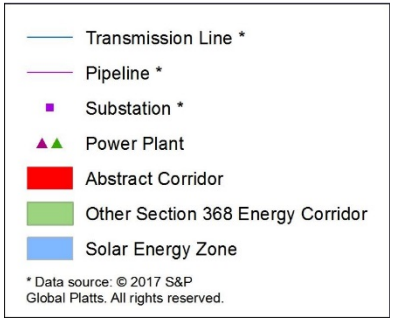


Figure 1. Corridor 115-238

Corridor history:
- Locally designated corridor prior to 2009 (N)
- Existing infrastructure (Y)
  - Electric transmission:
    - two 500-kV lines (within corridor from MP 0 to MP 14 and adjacent to corridor for rest of Region 2)
  - Pipelines:
    - refined product (within corridor from MP 0 to MP 7 and adjacent to corridor for rest of Region 2)
- Energy potential near the corridor (Y)
  - Gillespie SEZ within 0.2 mi (MP 0 to MP 2)
  - six power plants (natural gas and solar) within 4.6 miles of MP 0
  - REDA adjacent to and within 5 mi (MP 1 to MP 8)
- Corridor changes since 2009 (N)





Keys for Figures 1 and 2

Figure 2. Corridor 115-238 and nearby electric transmission lines and pipelines (grayed out area outside of Region 2 and 3 Review)

Conflict Map Analysis

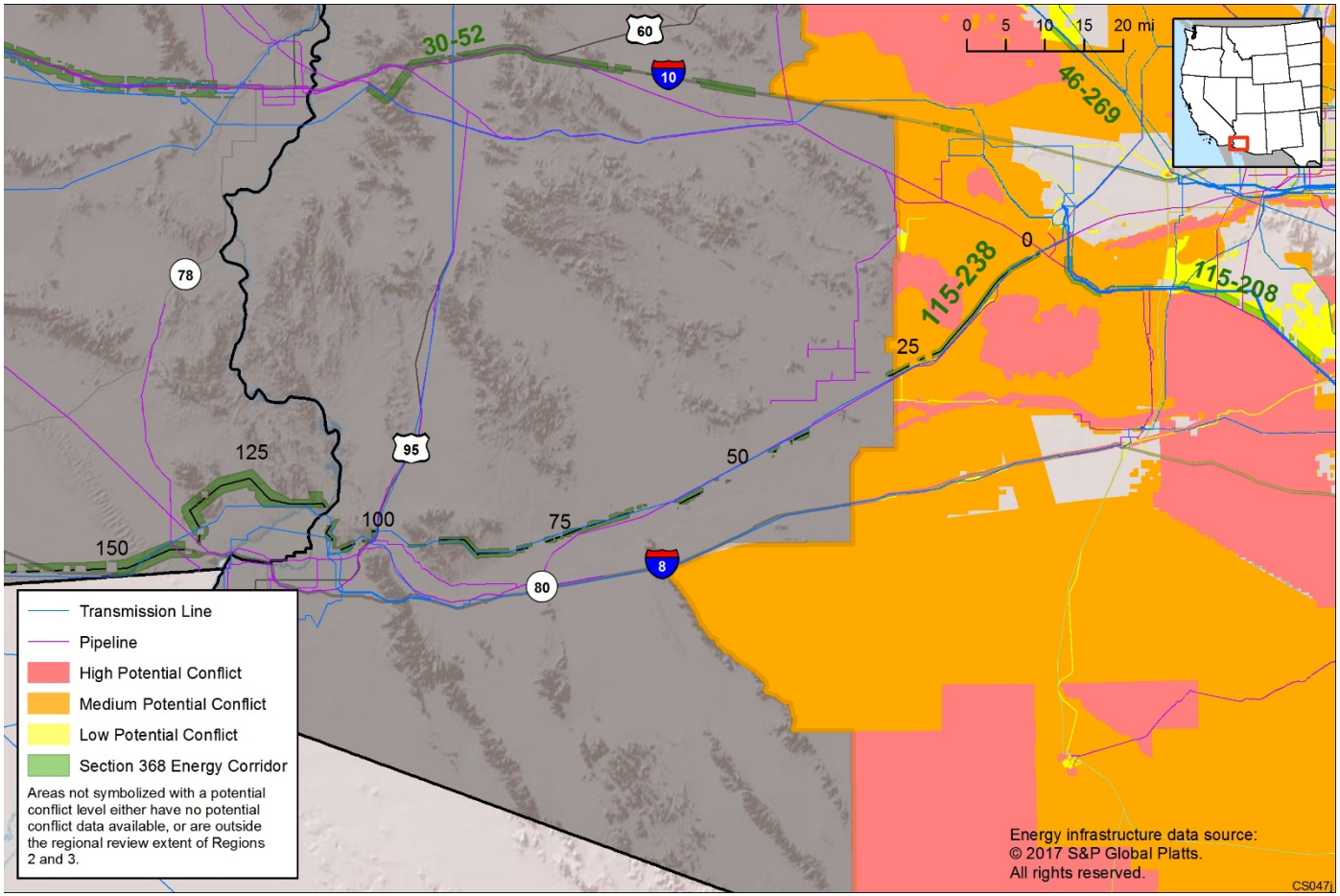


Figure 3. Map of Conflict Areas in Vicinity of Corridor 115-238

Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor's proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on criteria found on the WWEC Information Center at www.corridoreis.anl.gov. To meet the intent of the Energy Policy Act and the Settlement Agreement siting principles, corridors may be located in areas where there is potentially high resource conflict; however, where feasible, opportunity for corridor revisions should be identified in areas with potentially lower conflict.

Visit the 368 Mapper for a full view of the Potential conflict map (https://bogi.evs.anl.gov/section368/portal/)

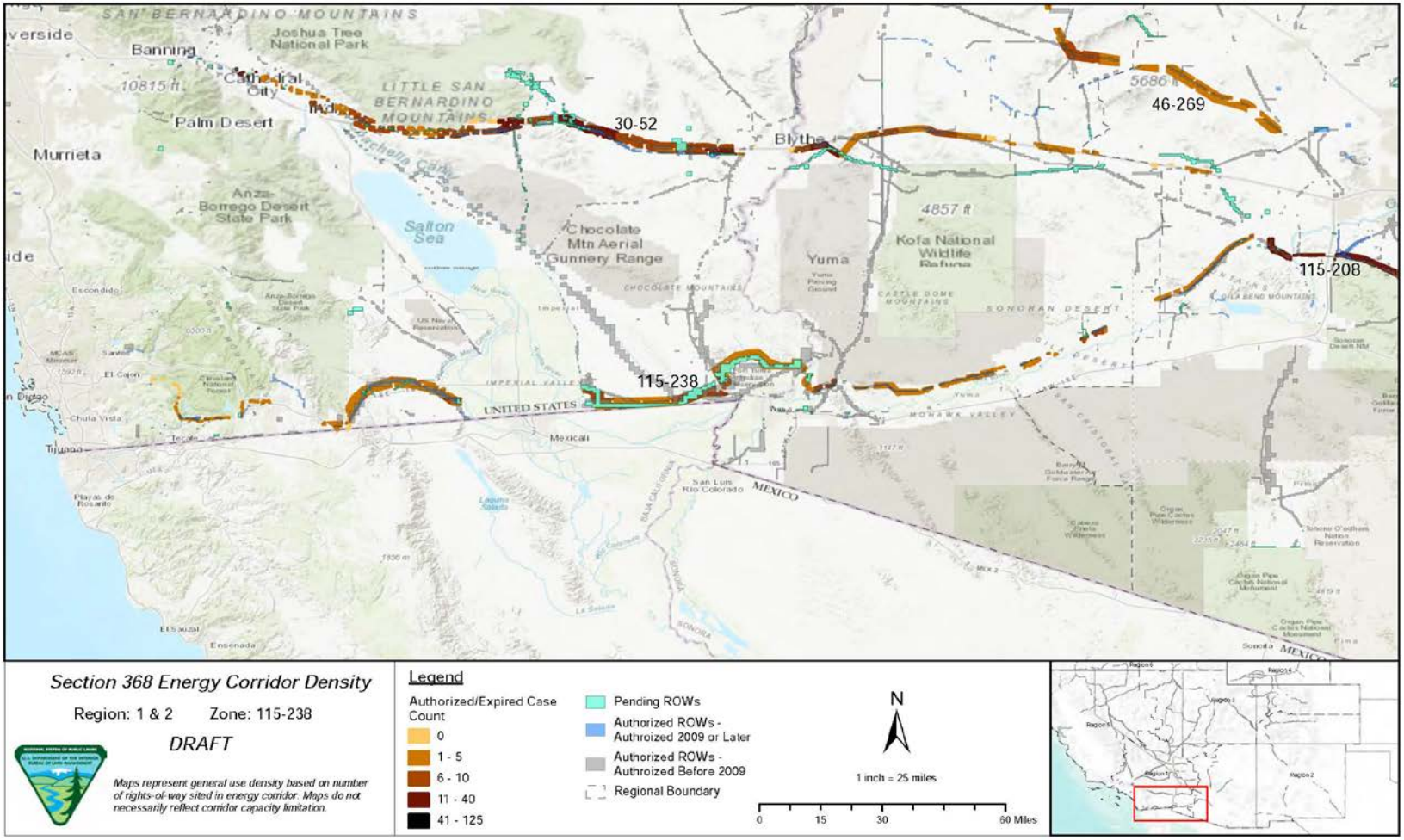


Figure 4. Corridor 115-238, Corridor Density Map

Figure 4 shows the density of energy use to assist in evaluating corridor utility. ROWs granted prior to the corridor designation (2009) are shown in grey; ROWs granted after corridor designation are shown in blue; and pending ROWs under current review for approval are shown in turquoise. Note the ROW density shown for the corridor is only a snapshot that does not fully illustrate remaining corridor capacity. Not all ROWs have GIS data at the time this abstract was developed. BLM and USFS are currently improving their ROW GIS databases and anticipate more complete data in the near future.

General Stakeholder Feedback on Corridor Utility

Stakeholders did not provide specific input on corridor utility.

Corridor Review Table

The table below captures details of the Agencies' review of the energy corridor. Consideration of the general corridor siting principles of the 2012 Settlement Agreement framed each corridor review, to identify potential improvements to maximize corridor utility and minimize impacts on the environment. Initial Agency analysis is provided to facilitate further discussion during stakeholder workshops.

CORRIDOR 115-238 REVIEW TABLE							
ID	**Agency**	**Agency Jurisdiction**	**County**	**Primary Issue**	**Corridor Location (by Milepost [MP])**	**Source**	**Agency Review and Analysis[1, 2]**
ENVIRONMENTAL RESOURCE ISSUES							
Specially Designated Areas							
115-238 .001	BLM	Lower Sonoran FO	Maricopa, AZ	Signal Mountain Wilderness	MP 8 to MP 12 (near)	GIS Analysis: Wilderness Area as close as 1 mi to corridor.	Wilderness areas are an important resource that are considered carefully during corridor planning. The corridor's current location does not intersect the Wilderness Area and best meets the siting principles. (1)
Ecology							
115-238 .002	BLM	Lower Sonoran FO	Maricopa and Pinal, AZ	Sonoran Desert Tortoise habitat (BLM-sensitive species, not listed under ESA)	MP 3 to MP 14 and MP 18 to MP 22	RFI: re-route to avoid siting new facilities in Sonoran Desert Tortoise Category I and II management habitat. Minimize impacts from new energy infrastructure development to the maximum extent practicable, and where impacts are unavoidable, utilize compensatory mitigation pursuant to BLM policy. Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of Category I & II habitat. GIS Analysis: habitat is within the corridor.	The Lower Sonoran RMP states that Category I and II Sonoran Desert Tortoise habitats are avoidance areas for major linear land use authorizations. Future ROWs in the corridor would be mitigated in accordance with the Desert Tortoise Range-wide Plan and other applicable policy guidance, including CEQ mitigation hierarchy of avoid, minimize, mitigate. The preferred methodology to mitigate undue degradation of resources is to collocate future energy infrastructure across public land with existing infrastructure to the extent feasible. The corridor does contain existing infrastructure. (3)

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					MP 3 to MP 14, MP 18 to MP 22	Comment on abstract: impacts to sensitive desert tortoise habitat has the potential to adversely impact use of MCAGCC Twentynine Palms and Barry M. Goldwater Range for ground-to-ground, air-to-ground, and maneuver training, as well as use of transit routes near, around, or between DoD ranges.	There is an opportunity to consider the addition of an Agency Coordination IOP with DoD to mitigate potential impacts pre-emptively by coordinating at early stages of energy infrastructure proposals to avoid adverse impacts to training activities. (2)
Lands with Wilderness Characteristics							
115-238 .003	BLM	Lower Sonoran FO	Maricopa, AZ	Lands with wilderness characteristics	MP 14 to MP 15	GIS Analysis: lands, managed to protect wilderness characteristics adjacent to the corridor.	The lands managed to protect wilderness characteristics and corridor do not intersect and best meets the siting principles (1).
115-238 .004	BLM	Lower Sonoran FO	Maricopa, AZ	Citizens' proposed wilderness	Not specified. MP 8 to 14 MP 15 MP 16 to MP 21	RFI: citizens' proposed wilderness: Dixie Peak, Face Mountain Comment on abstract: corridor intersects with BLM wilderness-quality lands. 2,398 acres overlap (Dixie Peak-citizens wilderness proposal) 334 acres overlap (Yellow Medicine Butte- citizens wilderness proposal). 1,897 acres overlap (Face Mountain- citizens wilderness proposal). BLM should exclude energy corridors from all wilderness-quality lands	The BLM's current inventory findings will be used in land use planning analyses related to the revision, deletion, or addition to the energy corridors. Consideration of citizen wilderness proposals is beyond the Agencies scope and authority. As such, the corridor's current location best meets the siting principles. (1) At such time that citizen's inventory information is formally submitted, the BLM will compare its official Agency inventory information with the submitted materials, determine if the conclusion reached in previous BLM inventories remains valid, and update findings regarding the lands ability to qualify as wilderness in character.

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Visual Resources							
115-238 .005	BLM	Lower Sonoran FO	Maricopa, AZ	VRM Class I	MP 7 to MP 12	GIS Analysis: VRM Class I as close as 1 mi south of corridor.	There are no VRM Class I areas in the corridor. (1)
115-238 .006	BLM	Lower Sonoran FO	Maricopa, AZ	VRM Class II	MP 14 to MP 15	GIS Analysis: VRM Class II areas and the corridor intersect.	The corridor slightly overlaps VRM Class II. The corridor could be narrowed to avoid VRM Class II area. (2)
115-238 .007	BLM	Lower Sonoran FO	Maricopa, AZ	VRM Class III	MP 2 to 25	GIS Analysis: VRM Class III areas and the corridor intersect.	VRM Class III allows for moderate change to the characteristic landscape, although minimizing visual contrast remains a requirement. Management activities may attract the attention of the casual observer, but shall not dominate the view. (1)
115-238 .008	BLM	Lower Sonoran FO	Maricopa, AZ	VRM Class IV	MP 0 to 25	GIS Analysis: VRM Class IV areas and corridor intersect.	The existing corridor location best meets the siting principles. (1)
Land Use Concerns							
Military and Civilian Aviation							
115-238 .009	BLM	Lower Sonoran FO	Maricopa, AZ	MTR – VR	MP 0 to MP 8 and MP 20 to MP 25	GIS Analysis: VR and the corridor intersect.	The concern related to MTRs is noted and the adherence to existing IOP regarding coordination with DoD would be required to ensure this potential conflict is considered at the appropriate time. In addition, there is an opportunity to consider a revision to the existing IOP to include height restrictions for corridors in the vicinity of DoD training routes. (2)
115-238 .010	BLM	Lower Sonoran FO	Maricopa, AZ	MTR – IR	MP 8 to MP 25	GIS Analysis: IR and the corridor intersect.	

[1] Projects proposed in the corridor would be reviewed during their ROW application review process and would adhere to Federal laws, regulations, and policy.

[2] (1) = confirm existing corridor best meets siting principles; (2) = identify opportunities to improve corridor placement or IOPs; (3) = acknowledge concern not easily resolved or avoided by corridor-level planning.

Abstract Acronyms and Abbreviations

BLM = Bureau of Land Management; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GIS = geographic information system; IOP = Internal Operating Procedure; IR = Instrument Route; MCAGCC = Marine Corps Air Ground Combat Center; MP = milepost; MTR = Military Training Route; PEIS = Programmatic Environmental Impact Statement; REDA = Renewable Energy Development Area; RFI = request for information; RMP = Resource Management Plan; ROW = right-of-way; SEZ = Solar Energy Zone; USFS = U.S. Forest Service; VR = Visual Route; VRM = Visual Resource Management; WSA = Wilderness Study Area; WWEC = West-wide Energy Corridor.