



Final Tier 1 Environmental Impact Statement and Preliminary Section 4(f) Evaluation

Appendix H8, Cooperating Agency Comments on Administrative Final Tier 1 EIS

July 2021



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Cooperating Agencies were provided the opportunity to review and comment on the Administrative Final Tier 1 EIS in early 2021. Each of those comments is inventoried and responded to in the following table. Because the Final Tier 1 EIS document was subsequently revised, the text/figure/table/page that is the subject of the comment may no longer align with what is in the published document.

Standard responses were prepared to provide broad responses to the most frequently raised issues and to supplement unique comment responses. Standard response codes referenced in comment response correspond to the codes underlined in bold within Appendix H1 (Standard Responses).



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Cooperating Agency Review Comments on Administrative Final EIS

#	Section	Page	Paragraph/ Bullet/ Figure	Line(s)	Reviewer	Comments	Disposition
1 FRA					Amanda Ciampolillo	I've reviewed this AFEIS for FRA and do not have any comments for you.	No response needed.
1 CNF		3	Recommended vs Preferred Build Corridor Alternatives	7-8		Throughout the report, it states that a Tier 2 analysis will select the east or west option through Pima County. As noted on page 5, the Tier 1 final analysis is supposed to select a single corridor and an alignment identified in Tier 2. Since this Tier 1 study did not provide a corridor in this section to analyze, will FHWA/ADOT allow for review and comment on the east/west analysis or are they only going to present the chosen alternative in the Tier 2 analysis. The CNF would like an outline of this process as well as the ability to review the analyses conducted on the east/west alternative prior to it's publication in the Tier 2 analysis.	GlobalTopic_1 In the Tier 2 NEPA study for the south section both the east and west options will be evaluated and designed to make a decision between the two options. The single preferred alternative corridor includes both the east and west options in the portion of the corridor in Pima County. No change made.
2 CNF		3.3-8	Table 3.3-7 Summary of Land Mgmt	--		How do the east and west options have the same acreage impacts for Areas of Critical Environmental Concern and State Wildlife Area?	The numbers presented in the Table are for the acreages within the end to end corridors and there are no ACEC or SWA in Pima County. No change made.
3 CNF	3.3.6	3.3-9	3.3.6.2 Mitigation Commitments	--		Why are Section 4(f) properties not considered as mitigation commitments? Per the 2019 ADOT Manual, "The Section 4(f) process requires the inclusion of all measures to minimize harm to Section 4(f) properties. Consider the mitigation measures and environmental commitments developed in accordance with the Section 106 process when determining which alternative results in the least overall harm."	The section of the Final Tier 1 EIS this comment is pointing to is about Land Use and Section 6(f). The mitigation commitments related to the Section 4(f) properties in the study area are discussed in Chapter 4 of the Final Tier 1 EIS. No change made.
4 CNF	3.17.5 Preferred Alternative	3.17-7	3.17.5.1	--		The CNF believes another important indirect effect from the west option would be that that it would isolate and impede people from the Tohono O'odham Nation from traveling to SNP for traditional activities such as harvesting saguaro fruit. As stated on page 3.17-10 that the Orange Alternative would, "chip away at adjacent historic districts." Construction of the west option would also "chip away at traditional cultural practices."	FHWA and ADOT have consulted with the tribes, including TON, throughout the study process. The TON did not voice concerns regarding access to the SNP for traditional activities. Any potential Tribal access issues will be coordinated with the TON during the Tier 2 studies. Existing access to SNP would be continued as needed per those conversations and commitments agreed upon by ADOT and the TON. See GlobalTopic_13. No change made.
5 CNF	3.17.5	3.17-10	3.17.5.2 Cumulative Effects	12-14		To remain neutral, this line should read similar as that in line 11, construction of the west option of the Preferred Alternative would "chip away at the remaining habitat and wildlife corridors." Or lines 10-11 removed.	GlobalTopic_3 No change made.
6 CNF	Applicability of Section 4(f) to Properties	3	--	--		Per the 2019 ADOT Manual, "The OWJ over the Section 4(f) property must agree, in writing, (1) with the assessment of the impacts on the Section 4(f) property; and (2) on the mitigation for the Section 4(f) property". In reviewing the Preliminary Section 4(f)	The OWJ correspondence is in the Final Tier 1 EIS Appendix F and consultation with the OWJs will continue in Tier 2 studies as part of the Final Section 4(f) Evaluations.

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						Evaluation document, we did not see the correspondence with the OWJ for the affected 4(f) properties. Has this step occurred? If so, can this correspondence be provided to all Coordinators for review?	No change made.
7	CNF Applicability of Section 4(f) to Properties	3	--	17-18		<p>CNF does not agree with the 4(f) status of park and recreation for SNP. As a partner that works closely with SNP and has an understanding of the Foundation Document for SNP, we believe it should also be considered a wildlife/waterfowl refuge. Line 17 states that ADOT/FHWA reviewed the Park's webpage for a general mission statement but does not cite the purpose of the Park as described in the SNP foundation document. What NPS and SNP resources were used to determine the 4(f) status of SNP? Was the OWJ consulted and agree to this determination?</p>	<p>Publicly owned land is considered to be a park, recreation area or wildlife and waterfowl refuge when the land has been officially designated as such by a Federal, State or local agency, and the officials with jurisdiction over the land determine that its primary purpose is as a park, recreation area, or refuge. Primary purpose is related to a property's primary function and how it is intended to be managed. Incidental, secondary, occasional or dispersed activities similar to park, recreational or refuge activities do not constitute a primary purpose within the context of Section 4(f).</p> <p>The National Park Service (NPS) owns and manages Saguaro National Park, a property that is significant for historic and natural resource preservation and public recreation. Specifically, NPS's mission is to "preserve unimpaired the natural and cultural resources and values of the NPS for the enjoyment, education and inspiration of current and future generations of people." On the webpage for Saguaro National Park, the general mission statement is repeated. As such, Saguaro National Park is protected by Section 4(f) for its primary purpose, as a park and a recreation resource.</p> <p>Resources used to determine the Section 4(f) status of SNP:</p> <p>Presidential Proclamation 2032 (https://quod.lib.umich.edu/p/ppotpus/4731703.PROC.001?rgn=main;view=fulltext)</p> <p>Presidential Proclamation 3439 (https://www.presidency.ucsb.edu/documents/proclamation-3439-enlarging-the-saguaro-national-monument-arizona)</p> <p>Public Law 108-364 (https://www.govinfo.gov/content/pkg/STATUTE-108/pdf/STATUTE-108-Pg3467.pdf)</p> <p>NPS's April 2014 "Foundation Document for Saguaro National Park" (https://www.nps.gov/sagu/learn/management/upload/SAGU_FD_2014-2.pdf)</p> <p>Act to Establish a National Park Service (Organic Act), 1916 (https://www.nps.gov/foun/learn/management/upload/1916%20ACT%20TO%20ESTABLISH%20A%20NATIONAL%20PARK%20SERVCE-5.pdf)</p> <p>NPS, the OWJ, did not provide documentation to show the primary purpose of SNP to be a wildlife/waterfowl refuge.</p> <p>No change made.</p>

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1 AGFD	Global				AZGFD	The Department supports FHWA and ADOT's decision to shift the location of the corridor segment between Buckeye to Casa Grande, to co-locate a portion of the corridor along existing facilities, i.e. Interstate 10 (I-10) and State Route 85 (SR 85). This co-location results in a significant reduction of potential impacts to sensitive resources found along the Gila River corridor, minimized impacts to 4(f) resources found within the corridor, and provides an opportunity to improve roadway safety. While the SR 85 will require upgrades to achieve Interstate design standards, it presents an opportunity to improve wildlife movement structures and design along the route, decreasing wildlife-vehicle collisions and improving driver safety, while maintaining connectivity for habitat and wildlife populations.	No response needed.
2 AGFD	Global				AZGFD	In previous coordination and comment opportunities, the Department expressed concern about the level of studies and data needed for an equitable 4(f) comparison between the Avra Valley and downtown Tucson alternatives. While downtown Tucson is host to a number of historic properties, the Avra Valley is host to mitigation, water recharge, and conservation lands, some of which have not been analyzed as 4(f) properties, and much of the land has not yet been surveyed for cultural resources. Given the complexity of evaluating and comparing these 4(f) resources, the Department supports the decision to move both routes forward into the Tier 2 process to provide the time for more thorough studies and analysis to be conducted, and the significance and character of resources along each route to be better understood.	No response needed.
3 AGFD	Global				AZGFD	The Department understands that the preparation of a NEPA document for a Tier 1 process, which provides landscape-level planning, can pose challenges when making mitigation commitments; specifically, without dedicated funding in place there are limitations on the scope and scale of commitments that can be included into the Tier 1 process. The Department appreciates the level of clarity and detail provided in the mitigation commitments for impacts to biological resources, including the commitment for pre-Tier 2 surveys, ongoing coordination throughout the Tier 2 effects analysis and design phases, and recognizing Arizona Game and Fish policies that seek compensation for actual or potential habitat losses resulting from land and water projects. The Department looks forward to seeing these commitments included in the Tier 1 Record of Decision (ROD) and implemented in future Tier 2 documents.	No response needed.
4 AGFD	ES 6.2	ES-7	Table ES-2		AZGFD	Information within the Public Draft EIS identifies the Orange/Existing I-10 as the alignment that best serves continued population and employment growth for Pima County and the southern segment. Under the heading "Access to Planned Growth Area" of Table ES-2, revise the East Option in Pima County to read as follows: " Best serves Responds to continued population and employment growth centered along existing I-10 and I-19 (Sahuarita, Tucson, Marana)". This change should also be made throughout the AFEIS to reflect consistency with the DEIS.	GlobalTopic_1 and GlobalTopic_3 Text was revised.
5 AGFD	Section 3.13				AZGFD	Please include FHWA's determination whether the Preferred Alternative's Santa Cruz river crossing is a "significant encroachment" under Executive Order 11988 and 23 C.F.R. 650, and if so, include FHWA's "Floodplain Only Practical Alternative" determination for the selection of the Preferred Alternative involving the "no practical alternative" finding and minimization and mitigation measures. These findings and determinations must be made in this	EO 11988 and DOT Order 5650.2 are codified at 23 CFR 650 subpart A of the FHWA implementing regulations. Section 13.3.2 of the Final Tier 1 EIS lists EO 11988 and DOT order 5250.2 in the list of regulations pertaining to activities that may impact water resources. More detail was added in Final Tier 1 EIS Section 3.13.1 for clarity.

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						<p>Tier 1 EIS, not deferred to a Tier 2 analysis. This comment is brought forward from the Department's previous comments on the Draft EIS.</p> <p>23 C.F.R. § 650.113 states: a) A proposed action which includes a significant encroachment shall not be approved unless the FHWA finds that the proposed significant encroachment is the only practicable alternative. This finding shall be included in the final environmental document (final environmental impact statement or finding of no significant impact) and shall be supported by the following information: (1) The reasons why the proposed action must be located in the flood plain, (2) The alternatives considered and why they were not practicable, and (3) A statement indicating whether the action conforms to applicable State or local flood-plain protection standards.</p> <p>The mandate of EO 11988 is described in <i>Department of Transportation Order 5650.2</i> (1979). DOT 5650.2 states that it is DOT's policy to avoid highway encroachments into floodplains. The DOT Order at Section 9 requires that a preferred alternative involving a significant encroachment into a floodplain shall not be approved unless the responsible official makes a finding in writing, incorporated into a final EIS, that the proposed encroachment is the only practical alternative, together with a description why the proposed action must be located in a floodplain, why other alternatives were not practicable, and a statement that the action conforms to state or local floodplain protection standards.</p>	<p>Avoidance and minimization will be studied further in Tier 2 studies. An avoidance alternative outside the 2,000-foot corridor may be considered. T2-Water Resources-7 was revised to state that an avoidance alternative outside of the 2,000-foot corridor may be considered.</p> <p>Floodplain impacts were considered in the decision-making process to identify the Preferred Alternative. Final Tier 1 EIS Section 3.13.5 includes mitigation measures committing ADOT to avoiding and minimizing impacts to waters of the US to the maximum extent practicable, and details continuing coordination with USACE and local floodplain administrators that will occur during Tier 2 studies.</p>
6 AGFD	3.17.5.2	3.17-10		12-14	AZGFD	<p>The AFEIS states the following regarding Cumulative Effects for the Preferred Alternative with west option: "With the west option in Pima County, impacts to wildlife connectivity would be same as the Recommended Alternative, as urbanization and the CAP canal have already impacted wildlife movement in the past." Please revise this statement to accurately reflect that cumulative impacts to wildlife connectivity would be significantly increased by the west option of the Preferred Alternative.</p> <p>While the CAP created a barrier to wildlife movement, it established several wildlife crossing "siphons" in Avra Valley, including 7 siphons within the Tucson Mitigation Corridor that was preserved in perpetuity to maintain permeability for wildlife across the CAP. Recent unpublished wildlife movement data (from the Department's efforts to GPS collar several mule deer in the vicinity) shows mule deer using the siphons to access areas on either side of the CAP within Avra Valley, and to move back and forth between the Tucson Mountains and the Sierrita Mountains to the south. Development in Avra Valley is currently rural and generally dispersed. Additionally, the current roadway infrastructure (Sandario Road, etc.) is reflective of the limited residential traffic. The interstate would not only present a new significant barrier to wildlife movement as well as contribute to cumulative noise and lighting impacts, but development of an interstate is expected to result in additional and more severe indirect effects such as residential and commercial development, and increased access to the area, as stated on page 3.17-2 line 17-19 and page 3.17-7 line 27-28.</p>	<p>GlobalTopic_3</p> <p>This statement was comparing the Preferred Alternative with west option in Pima County to the Recommended Alternative, which are the same. Text was revised to remove the second part of the sentence.</p>

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7 AGFD	7	7-1 and Table			AZGFD	If the Tier 2 NEPA process selects the west corridor option as its Preferred Alternative, which involves a second new crossing of the Santa Cruz River, ADOT must determine that a significant encroachment into a floodplain is the only practical alternative under EO 11988 and 23 CFR Parts 650.113 and 650.115, and the text should describe this as a Tier 2 Analysis Commitment. The text should also describe ADOT's duty to conduct a "River Only Practical Alternative" analysis pursuant to EO 11990 as a Tier 2 Analysis Commitment, in the event the west corridor option is selected involving a second crossing of the Santa Cruz River at the Pima-Pinal County line through riverine wetlands.	EO 11988 and DOT Order 5650.2 are codified at 23 CFR 650 subpart A of the FHWA implementing regulations. Section 13.3.2 of the Final Tier 1 EIS lists EO 11988 and DOT order 5250.2 in the list of regulations pertaining to activities that may impact water resources. More detail was added in Final Tier 1 EIS Section 3.13.1 for clarity. Avoidance and minimization will be studied further in Tier 2 studies. An avoidance alternative outside the 2,000-foot corridor may be considered. T2-Water Resources-7 was revised to state that an avoidance alternative outside of the 2,000-foot corridor may be considered. Floodplain impacts were considered in the decision-making process to identify the Preferred Alternative. Final Tier 1 EIS Section 3.13.5 includes mitigation measures committing ADOT to avoiding and minimizing impacts to waters of the US to the maximum extent practicable, and details continuing coordination with USACE and local floodplain administrators that will occur during Tier 2 studies.
1 DOI					General	<i>Correction of the Record</i> We would like to correct the record during the Special Study Session held by ADOT and the Tucson Mayor and City Council on June 18, 2019. During the meeting, the ADOT Representative was asked which agencies support the Recommended Alternative through the Avra Valley. The ADOT representative responded that there is consensus from, "...basically every agency within the Department of the Interior". (see minute 3:01; https://www.tucsonaz.gov/tv12/tucson-mayor-council-meeting-study-session-june-18-2019). DOI Bureaus discussed this comment at an in-person meeting with ADOT and FHWA on August 14, 2019, and were assured that ADOT staff would follow up with the City of Tucson to correct the record. The Bureaus have not received confirmation of the correction and seek confirmation that ADOT and/or FHWA provided the correct information to the Mayor and the City Council and that ADOT and/or FHWA representatives did not make similar mischaracterizations to other municipalities, groups, or individuals. As Cooperating Agencies, the Bureaus prefer to speak on our own behalf for this project.	Positions of the agencies are reflected in Draft Tier 1 EIS, Final Tier 1 EIS, and the administrative record (via comment letters and this comment response document). GlobalTopic_3 and GlobalTopic_1
2 DOI					General	<i>Level of Analysis West Option vs East Option</i> The Department notices that the AFEIS frequently offers greater analysis of the Preferred Alternative – West Option as the Recommended Alternative but does not present similar information for the Preferred Alternative - East Option, and at times, little to no information for comparison is provided. For example, capital cost information is provided for the East Option on page 4-94, but no information for comparison is provided for the West Option even though its estimated cost is higher. Economic benefits in the Sahuarita to Marana segment are only provided for the West Option, but none are given for the East Option (e.g. p. 3.6-4). While detailed mitigation is provided for the Tucson Mitigation Corridor (TMC), a Section 4(f) property along the West Option but not for any of the Section 4(f) properties on the East Option.	GlobalTopic_1 No change made.

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						Additionally, an attempt was made to pursue a Programmatic Net Benefit for the TMC but not for the David G. Herrera and Ramon Quiroz Park which is located on the East Option. As FHWA moves forward to study both alternatives in the Tier 2 study, both NPS and Reclamation look forward to collaborating to ensure uniform and balanced analyses is presented so that the public and decision makers understand the economic benefits and environmental cost of all alternatives.	
3 DOI					BLM	The BLM Hassayampa Field Office prefers the Orange Alternative analyzed in the DEIS in the Northern Section of the analysis area because it avoids the Vulture Mine Recreation Management Zone (VMRMZ), an approximately 70,000-acre BLM-administered area. While the Preferred Alternative uses a BLM-identified multi-use corridor, it also bisects the VMRMZ and an identified racecourse for off-highway vehicles within it. Maintaining access and wildlife connectivity to both sides of the VMRMZ would require significant mitigation, and while the AFEIS makes mitigation commitments for the racecourse, the BLM prefers total avoidance of the VMRMZ. The Orange Alternative, specifically Segment S, provides similar utility as the Recommended Alternative while avoiding these impacts to recreation. BLM has noted this preference in past comments throughout the project, most recently on the Draft EIS.	FHWA and ADOT acknowledge the BLM preference. No change made.
4 DOI					Reclamation	Reclamation continues to be concerned about the potential impact of noise on the TMC from the West Option alternative. The TMC is a highly sensitive and critical area that functions as the primary wildlife movement corridor for the Tucson Mountains and Saguaro National Park and Tucson Mountain Park which are found within. Research such as studies by McClure et al. (2013) reported that noise from roads is a major driver of effects on populations of animals and can lead to areas that are considered dead zones. Such dead zones are areas that species and populations avoid as a result of disturbances such as traffic noise, causing them to abandon and avoid those areas while devaluing and rendering habitat and its original purpose unsuitable. Reclamation wildlife biologists and partner agencies that assist in oversight of the TMC foresee a proposed I-11 as decreasing the level of use of the TMC and its crossing structures by wildlife affecting the initial purpose of its acquisition.	GlobalTopic_1 and N-1 No change made.
5 DOI					Reclamation	Reclamation identified in prior comments the location of Central Arizona Project (CAP) canal wildlife bridges and concrete overchutes near Segment U within the Hassayampa Plain and Tonopah Desert study area. Reclamation staff have monitored a diverse series of structures across the CAP canal for 3 years and have documented results showing that mule deer use individual structures as high as 411 times a month. Monitoring has also shown that human activity and nearby roads devalue the suitability of the bridges and overchutes resulting in reduced and recurring use as low as ≤10 crossings a month. We anticipate that we will publish these results in a report in 2021 or	GlobalTopic_8 and the following mitigation measure in the Final Tier 1 EIS addresses the concern raised: MM-BiologicalResources-4: Coordinate with AGFD and relevant agencies and stakeholders to determine wildlife connectivity data needs and study design. ADOT will then fund and facilitate implementation of identified studies prior to the initiation of the Tier 2 process, due to the timeline required (likely 2 to 4 years) to collect and analyze sufficient data before draft design plans begin to limit the mitigation measures possible. ADOT and the stakeholders will identify the crossing structures, design features, and supporting mitigation measure or

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						2022. Based on this information, we anticipate that a new highway will result in reduced use of the existing overchutes and bridges. Therefore, Reclamation would require mitigation for the affected bridges and overchutes if the proposed action is constructed.	conservation necessary to facilitate the movement of wildlife through the roadway barrier and will incorporate the solutions into subsequent I-11 projects. No change made.
6 DOI					USFWS	<i>Tumamoc Globeberry</i> The Tumamoc globeberry (<i>Tumamoca macdougali</i>) was listed as endangered in 1986 and then delisted in 1993 after the acquisition and protection of the Tumamoc Preserves by Reclamation and the discovery of additional populations in the United States and Mexico. However, monitoring in recent years indicates serious declines are occurring in populations in Pima County. FWS is concerned about potential effects of the Sahuarita to Marana west option on lands set aside in Avra Valley to preserve populations of this species. FHWA and ADOT planners are aware this species occurs in Pima County but have only briefly mentioned it. There is no clear commitment in the AFEIS that surveys will occur, and no specific mitigation/conservation measures are proposed. FWS would appreciate additional details regarding ADOT/FHWA's intentions with regard to the globeberry in the final EIS (FEIS).	GlobalTopic_1 ADOT will use the most up to date threatened and endangered species lists during the Tier 2 studies. No change made.
7 DOI					USFWS	<i>Sonoran Desert Tortoise</i> The Sonoran desert tortoise was removed from the candidate species list in 2015 and was returned to the candidate list in 2020 due to an August 3, 2020, court-approved settlement agreement (85 FR 73164). The existence and implementation of the 2015 Sonoran desert tortoise Candidate Conservation Agreement was a factor in not listing it as threatened or endangered. As a signatory to the 2015 Sonoran desert tortoise CCA, we trust that ADOT will comply with its conservation commitments.	ADOT will comply with all agreements, such as the Sonoran desert tortoise CCA, in place at the time of the Tier 2 studies. No change made.
8 DOI					USFWS	<i>Pima Pineapple Cactus</i> The proposed action will almost certainly adversely affect the Pima Pineapple Cactus (PPC) at levels well above any other listed or candidate species in the study area. Second, mitigation and compensation for PPC losses will be possible only if losses do not involve a substantial proportion of the remaining PPC population, which is probably under 8,000 individuals, and to the extent that PPC conservation bank credits or mitigation lands are available for purchase. Third, ADOT and FHWA ultimately may need to choose among other corridor alternatives where PPC numbers are lower if they cannot effectively minimize, reduce, or eliminate adverse effects within the Preferred Alternative. Finally, we remind ADOT and FHWA, as we have in the past, that the goal of the Tier 1/Tier 2 process, in the case of the PPC, is to avoid jeopardizing the species when we evaluate ADOT/FHWA's project under Section 7 of the Endangered Species Act. We strongly recommend PPC surveys in all corridor options and development of a preliminary mitigation/conservation plan at the earliest possible date. We also remind	GlobalTopic_1 Section 3.14.1.2 of the Final Tier 1 EIS acknowledges the potential impact to the Pima pineapple cactus and Section 3.14.6.2 contains mitigation commitments to address those impacts. No change made.

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						FHWA and ADOT that the west option of the Sahuarita to Marana segment may have more PPC and PPC habitat than any build corridor option considered in the draft and administrative final EISs.	
9 DOI					NPS	<p>General Comments</p> <p>As the federal agency with management responsibility for Saguaro National Park (Saguaro NP) and the federally-designated Saguaro National Wilderness, the NPS is mandated to protect these resources adjacent to the proposed project. The NPS provided comments during review of the Administrative Draft EIS in 2018, and the Draft EIS (DEIS) dated March, 2019, and continues to review relevant project materials as a cooperating agency under NEPA. The following comments, including attached matrix, are not only intended to supplement and identify outstanding concerns from NPS' previously submitted review of the study, they also identify technical edits and consider further analyses that should be incorporated into the FEIS or initiation of the Tier 2 study.</p> <p>NPS appreciates ADOT/FHWA's decision to carry the Preferred Alternative – East Option forward for further analysis in Tier 2. As reflected in NPS' comments on the DEIS, the former Recommended Alternative (now Preferred Alternative – West Option) has the potential to significantly impact multiple resources, requiring further mitigations than the measures proposed in the AFEIS. The proposed Preferred Alternative - West Option will occur .3 miles from Saguaro NP and .6 miles from the federally-designated Saguaro Wilderness, and has the potential to threaten the natural, cultural, and recreational experiences these areas provide the public. Additionally, the TMC is essential for maintaining biodiversity within the Park and continuing local biological mitigation efforts in Pima County.</p>	No response needed.
10 DOI					NPS	<p><i>Air Quality</i></p> <p>Because the I-11 NEPA review was conducted under the 1978 CEQ NEPA regulations, NPS believes the cumulative air quality effects from the FHWA Tier 1 Sonoran Corridor route should be addressed in the I-11 Final EIS or the Tier 2 study. While the AFEIS explains why the 3.9 mile connector near Marana is included as part of the I-11 Preferred Alternative – West Option, the proposed Sonoran Corridor, which is being analyzed in a separate EIS, is a reasonably foreseeable multimodal transportation facility currently being planned that would affect air quality, including visibility, also affected by the I-11 proposal. As we noted in our comments on the Sonoran Corridor Tier 1 DEIS, we would appreciate the chance to meet with FHWA and ADOT to get a better understanding of the connectivity between these two projects, and the potential for increased traffic, utilities, and multimodal uses if both projects are built.</p> <p>Consistent with the 2020 CEQ NEPA regulations, we also believe the Sonoran Corridor proposal should be identified as a reasonably foreseeable future project in the affected environment of the Tier 2 I-11 NEPA review, and the resource trends it will create should be described and considered when</p>	<p>The potential Sonoran Corridor transportation facility is acknowledged and evaluated in Section 3.17 of the Draft Tier 1 EIS as a reasonably foreseeable future action. The Sonoran Corridor Tier 1 EIS does not have a ROD yet, nor is the project funded and therefore not in a Regional Transportation Plan (RTP)/Transportation Improvement Program (TIP). When an I-11 Tier 2 study begins in Pima county, any Sonoran Corridor Tier 2 project that is in the RTP/TIP would be analyzed at that time. GlobalTopic_1, V-1, AQ-1, AQ-3, LU-3</p> <p>No change made.</p>

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						assessing the effects of the I-11 project. The Tier 2 analysis commitments should also include a quantitative analysis of the air quality impacts that could result from induced growth from the Preferred Alternative – West Option on Saguaro NP. While the AFEIS notes that site-specific mitigation measures will be identified for sensitive viewpoints in the Tier 2 analysis, NPS notes that measures for the Preferred Alternative – West Option will be particularly important since there is currently minimal development on this side of the park. Potential mitigation measures should also take into account the fact that viewpoints are generally located at a higher elevation than the proposed build corridor.	
11 DOI					NPS	<p><i>Historic Properties and Structures</i></p> <p>As of 2020, the 28,708-acre Tucson Mountain Historic District was determined eligible for listing on the National Register of Historic Places by the Arizona State Historic Preservation Office (SHPO). This district is directly adjacent to the western alignment of I-11, and roughly encompasses the original footprint of Tucson Mountain Park, now managed by the National Park Service and Pima County. The Historic District spans the Tucson Mountains, including sections of Saguaro National Park. At the closest point, the western Preferred Alternative is 200 feet from the Historic District, and, as stated in the 2020 Determination of Eligibility form, “[t]he creation of the park was seen as a way to preserve a large tract of undeveloped wilderness just outside the city” and to designate a “county wildlife refuge.” NPS recognizes that the FHWA <i>Class I Overview for Tier 1 Planning for Interstate 11: Historic Districts and Buildings Supplement</i> (November, 2020) was provided to address deficiencies and identify historic properties in the 2019 Tier 1 DEIS and draft 4(f) Evaluation. NPS appreciates this supplementary information, and would like to work with FHWA to address the Tucson Mountain Historic District and better identify its geospatial proximity to the Preferred Alternative – West Option. The NPS has the opportunity to share the description of this Historic District as it relates to the proposed alternatives, and, given our special expertise related to this resource, would like to work with FHWA/ADOT to determine how impact analysis and mitigations for consideration may be further addressed in the Tier 2 study.</p>	<p>FHWA and ADOT appreciate NPS’ willingness to share their concerns for and expertise on the Tucson Mountain Historic District. The Class I research conducted during the Tier 1 EIS study is limited entirely to extant data. FHWA and ADOT acknowledge that these data are incomplete and thus cannot provide a precise picture of the cultural landscape. While the Tier 1 exercise identified both data gaps and opportunities to fill them, conducting new surveys is beyond the scope of a Tier 1 study. Rather, such efforts would be completed during subsequent Tier 2 projects. This approach does not avoid the property consideration of potential impacts to the District, as both the East and West options have been retained. Potential impacts to the District will be analyzed during Tier 2 in order to further compare corridors and ultimately select an alignment.</p> <p>No change made.</p>
12 DOI					NPS	<p><i>Wildlife</i></p> <p>The NPS has outstanding concerns about loss of species in Saguaro National Park, as expressed in NPS comments to the DEIS. NPS is responsible for wildlife within its jurisdiction and the NPS Organic Act specifically protects wildlife in national parks, as NPS addressed in the DEIS in 2019. Although the NPS is listed as a Cooperating Agency, the AFEIS does not acknowledge the value of Saguaro National Park as a nationally-significant biological reserve or the many other NPS requests that FHWA/ADOT involve NPS biologists in design and review of Tier 2 studies that evaluate the relative impacts on biological resources of the two options in the Preferred Alternative in Pima County. We have been verbally assured that we would be invited to</p>	<p>GlobalTopic_1</p> <p>ADOT will coordinate with NPS and all other relevant agencies and stakeholders in the development of wildlife studies and the ultimate wildlife connectivity mitigation measures as evidenced in Section 3.14.6.2 of the Final Tier 1 EIS that includes the following mitigation commitment -</p> <p>MM-BiologicalResources-4: Coordinate with AGFD and relevant agencies and stakeholders to determine wildlife connectivity data needs and study design. ADOT will then fund and facilitate implementation of identified studies prior to the initiation of the Tier 2</p>

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						participate in these studies by ADOT but we would appreciate it if FHWA/ADO explicitly acknowledge this in the FEIS and Record of Decision.	process, due to the timeline required (likely 2 to 4 years) to collect and analyze sufficient data before draft design plans begin to limit the mitigation measures possible. ADOT and the stakeholders will identify the crossing structures, design features, and supporting mitigation measure or conservation necessary to facilitate the movement of wildlife through the roadway barrier and will incorporate the solutions into subsequent I-11 projects. No change made.
13 DOI					NPS	<i>Natural Sounds</i> As noted in past discussions and NPS comments on the Tier 1 DEIS, NPS believes current noise level increase predictions and other FHWA criteria (23 CFR 772) are not adequate for assessment of impacts on ambient sound levels in the Saguaro NP Tucson Mountain District. Although the AFEIS indicates the Preferred Alternative – West Option would not produce noise level increases in excess of applicable ADOT/FHWA noise abatement threshold, because there are no low noise, long-term baseline measurements in the vicinity, it is unknown if increases in noise levels from the I-11 project would exceed the applicable abatement threshold. We appreciate ADOT/FHWA's willingness to consider other criteria and to incorporate long-term acoustic ambient measurements from NPS into the Tier 2 analysis. The NPS is currently gathering new low noise Type 1 Sound Level Meter (SLM) data in the Saguaro NP Tucson Mountain District, and we respectfully request that ADOT/FHWA incorporate these additional acoustic criteria and new SLM data into the forthcoming Tier 2 analysis, including noise abatement determinations.	GlobalTopic_1 and N-1 ADOT is fully committed to close cooperation with all the partners on the project, will conduct a hard-look of all pertinent information, and conduct the Tier 2 analysis to the fullest extent allowable under, and in full adherence to, the applicable federal regulations and ADOT's noise policy at the time of the analysis, including, but not restricted to, the field noise measurements and determination of reasonable and feasible mitigation and abatement measures. No change made.
14 DOI					NPS	<i>Wilderness</i> The effects described above to air quality, wildlife, and natural sounds, as well as effects described in the attached matrix, would degrade the wilderness character of the Saguaro Wilderness Area located within 0.6 miles of the Preferred Alternative – West Option. Specifically, the effects of this proposal, including sights and sounds, would degrade the natural and undeveloped character of wilderness, opportunities for primitive and unconfined recreation, and opportunities for solitude. Considering the combination of the Tucson Mountain Park Historic District, the Saguaro Wilderness Area (1976), and Congress' stated intent to protect opportunities for solitude within the wilderness areas of Saguaro NP (Public Law 103-364), the NPS believes that the FEIS and Tier 2 study should acknowledge that Saguaro NP and its designated wilderness meet the sensitive land use criteria of 23 CFR 774.15. The NPS would be happy to share information about Saguaro NP wilderness character as it relates to the proposed alternatives, and given our special expertise regarding this resource, looks forward to working with FHWA/ADOT to ensure the effects are appropriately analyzed in the Tier 2 analysis.	23 CFR 774.15 defines Section 4(f) constructive use analysis and does not contain the terminology sensitive land use criteria. A constructive use analysis of the Saguaro National Park was completed and can be found in Appendix F. ADOT will work with NPS during the Tier 2 analysis involving Saguaro National Park. No change made.

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1 BLM	Appendix H				Cowger	BLM Hassayampa Field Office appreciates the attention given to comments BLM provided on the Draft EIS and addressed in Appendix H. Incorporation of these comments is noted throughout the FEIS document and improves discussion of BLM lands, resources, authority, and designations.	No response needed.
2 BLM	3.4.6.2	3.4-5		6-7	Cowger	The mitigation commitment to MM-Recreation-1 to maintain connectivity for the Vulture Mine Race Course, which would be crossed by the preferred alternative is noted and appreciated.	No response needed.
3 BLM	3.14.6				Cowger	Tier 2 and Mitigation commitments for wildlife resources including Sonoran desert tortoise and BLM special status species is noted.	No response needed.
4 BLM		4-49		4 & 11	Cowger	No need to reference the Agua Fria National Monument RMP in plans. "Bradshaw-Harquahala Resource Management Plan/Record of Decision (RMP)" is sufficient here and anywhere else in the document. The Agua Fria NM is not crossed or directly impacted by any of the alternatives and its RMP, while a companion document to the Bradshaw-Harquahala RMP, is not applicable to this project.	The Agua Fria National Monument was removed from the name of plan as requested.
5 BLM	General				Cowger	The BLM Hassayampa FO prefers the Orange Alternative analyzed in the DEIS in the Northern Section of the analysis area because it avoids the Vulture Mine Recreation Management Zone (VMRMZ), an approximately 70,000-acre BLM-administered area. While the Preferred Alternative uses a BLM-identified multi-use corridor, it also bisects the VMRMZ and an identified racecourse for off-highway vehicles within it. Maintaining access, and wildlife connectivity, to both sides of the VMRMZ would require significant mitigation, and while the FEIS makes mitigation commitments for the racecourse, the BLM prefers total avoidance of the VMRMZ. The Orange Alternative, specifically Segment S, provides similar utility as the Recommended Alternative while avoiding these impacts to recreation. This preference has been noted in past comments throughout the project, most recently on the Draft EIS.	FHWA and ADOT acknowledge the BLM preference. No change made.
1 Rec	ES 6.2	ES-7	Table ES-2		Reclamation	The section of the table addressing Access to Planned Growth Area seems to be inconsistent. For the West Option, Ryan airfield is already located along existing AZ State Route 86, which is an existing and significant travel corridor. Whereas information within the Public Draft EIS clearly identifies the Orange/Existing I-10 alignment best serves continued population and employment growth for Pima County and the southern segment. Therefore, Reclamation requests the text below for the East Option in table ES-2 and elsewhere be edited to be consistent with descriptions in the table and from results provided in the previous Public Draft EIS. Best serves Responds to continued population and employment growth centered along existing I-10 and I-19 (Sahuarita, Tucson, Marana)	GlobalTopic_3 Text was revised.

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2 Rec	Chapter 3	3-1		7-10	Reclamation	Reclamation recommends incorporating a reference table to identify resource impacts with changes within the Final EIS bolded. Providing such information will prevent the need for the public to have to reference both documents.	The Final Tier 1 EIS is in a condensed format that includes a subsection for each technical area entitled <i>Summary of Changes Since the Draft</i> which informs the reader without the need for a table or bold font. No change made.
3 Rec	3.14.6.2	3.14-22		38-40	Reclamation	While research has shown a broad range of species can and do use wildlife overpasses, research has done little to verify their effectiveness, because use does not equate to its effectiveness (Seth et al. 2006; Corlatti et al. 2009; Lesbarreres and Fahrig 2012; A. van der Giff et al. 2013, Gregory and Beier 2014). A study by Seth et al. (2006) found that observed migration rates of coyotes (<i>Canis latrans</i>) and bobcats (<i>Lynx rufus</i>) across the Ventura Freeway in southern California was a poor surrogate for evaluating gene flow. While the study did document mild levels of migration, populations on either side of the freeway were genetically differentiated and implied that individuals who crossed rarely reproduced (Seth et al. 2006). This uncertainty limits the ability of how best to mitigate impacts from roads and which impacts can be successfully mitigated (Soanes et al. 2017). We ask that the EIS acknowledges this uncertainty.	Section 3.14.6.2 of the Final Tier 1 EIS includes the following mitigation commitment - MM-BiologicalResources-4: Coordinate with AGFD and relevant agencies and stakeholders to determine wildlife connectivity data needs and study design. ADOT will then fund and facilitate implementation of identified studies prior to the initiation of the Tier 2 process, due to the timeline required (likely 2 to 4 years) to collect and analyze sufficient data before draft design plans begin to limit the mitigation measures possible. ADOT and the stakeholders will identify the crossing structures, design features, and supporting mitigation measure or conservation necessary to facilitate the movement of wildlife through the roadway barrier and will incorporate the solutions into subsequent I-11 projects. No change made.
4 Rec	3.3	3.3-4		3-19	Reclamation	Line 10 states that agencies such as Reclamation requested the Tier 1 EIS include a comprehensive list of state, local, and federal plans. Reclamation's original request submitted in July 2019 was to "Please describe all existing management plans (e.g., RMP, FMP, trail mgmt. plan, etc.) and evaluate consistency with those plans (40 CFR §1502.16(c))." A list is provided in the EIS but the evaluation for consistency would be completed during Tier II analysis. Both the 1978 and 2020 CEQ regulations state that the environmental consequences section of an EIS "shall" include a discussion of potential conflicts with existing land use plans, policies, and controls. An Avra Valley alternative is not consistent with Reclamation's Tucson Mitigation Corridor (TMC) Cooperative Agreement and Master Management Plan. The proposed action also appears to be inconsistent with the City of Tucson's Habitat Conservation Plan and the 21,596 acres established and planned throughout Avra Valley and with Pima County's Sonoran Desert Conservation Plan for the multiple natural resource mitigation properties they also have established in the valley. Consistency with existing plans is important information that should be available to the public and the decisionmaker prior to selecting a preferred route.	GlobalTopic_8 and GlobalTopic_1 Comprehensive and general plans provide broad guidelines as to a community's goals and aspirations in terms of growth and land development. The plans express and regulate public policies on transportation, utilities, land use, recreation, and housing. The comprehensive and general plans that were evaluated are listed in Table 3.3-3. Each of these plans were subject to public review before a city or county could adopt. Tier 2 will include a comprehensive review of applicable federal, state, and local laws, policies, and plans. ADOT will coordinate with appropriate land-managing agencies during the Tier 2 analysis to identify applicable laws, policies, and plans. This coordination may include a review of local resource management plans and modifications to those plans. Final Tier 1 EIS Section 3.3 was updated to show consistency with plans in Table 3.3-3.

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5 Rec	3.3.2.2	3.3-5		15-20	Reclamation	<p>Within the EIS it states the following: "Pima County, DOI, and the Coalition for Sonoran Desert Protection requested that Pima County's Conservation Lands System be considered an affected resource." Their location and information was provided to FHWA and ADOT during the draft phase. Have these lands been evaluated to determine whether they qualify as Section 4(f)? Their original purpose and presence likely fall under the Section 4(f) designation of a refuge which should be reviewed and considered in the analysis. Please include this analysis.</p>	<p>As stated in Final Tier 1 EIS Section 4.5.1.2, properties were identified by Pima County during the Draft Tier 1 EIS and Preliminary Section 4(f) Evaluation public comment period as potentially being protected by Section 4(f). ADOT will consult further with Pima County during Tier 2 studies to determine which properties are protected by Section 4(f) and to complete a Section 4(f) evaluation for protected properties. No change made.</p>
6 Rec	3.3	3.3-8	Table 3.3-7		Reclamation	<p>The table identifies that 12-acres of Reclamation land is found within a 2,000-foot wide corridor and is incorrect. A 2,000-foot wide corridor would encompass approximately 488-acres of Reclamation land and not 12. In the prior Public Draft, it was identified that the 2,000-foot corridor would encompass or use 453-acres. Whereas a 400-foot wide corridor would encompass or use approximately 96-acres. Please correct.</p>	<p>The 12 acres for "Reclamation" (top part of Final Tier 1 EIS Table 3.3-7) is based on the Land Ownership shapefile. The 566 acres for "Deeded Lands – Reclamation" (bottom part of Table 3.3-7) is based on the BOR_TucsonAreaProperties shapefile. Tier 2 will determine the project footprint and right-of-way width. A footnote was added to Table 3.3-7 with data sources and explanation of "deeded lands."</p>
7 Rec	3.6.4	3.6-2		33-35	Reclamation	<p>The EIS states the following. "The Project Team anticipates the economic impacts for the Recommended Alternative would be similar to the economic impacts for the Purple Alternative and Green Alternative presented in Section 3.6.4 (Environmental Consequences) of the Draft Tier 1 EIS." Further clarification from FHWA and ADOT is recommended to explain how the economic analysis was conducted and how impacts would be similar when the Public and Supplemental Draft identify that most key economic centers and planned growth areas are located along the Orange (Segment B) alternative.</p>	<p>Final Tier 1 EIS Section 3.6.4 evaluates the Recommended Alternative which primarily follows the same alignment as the Purple and Green Alternatives. Section 3.6.5 evaluates the east and west options in Pima County. The east option in Pima County follows the Orange (Segment B) alignment. No change made.</p>
8 Rec	Appendix E2	10	Table 3-4		Reclamation	<p>The table depicting 2040 travel times in minutes identifies that travel time from Nogales to Casa Grande would be 123 minutes for the now identified West Option verse 133 minutes for the existing East Option (Tucson). A difference of only 10 minutes does not appear to be an adequate improvement in travel time to justify the construction of an entirely new interstate versus improving the existing I-10 (East Option). The West Option would entirely bisect the Tucson Mitigation Corridor which is a property protected under 663(d) of the Fish and Wildlife Coordination Act and also classified as a Section 4(f) property within this EIS.</p> <p>The identified metric in Table 1-1 on page 1-1 states:</p> <p style="text-align: center;"><u><i>Reduces travel time for long distance traffic (2040 traveltime from Nogales to Wickenburg in minutes).</i></u></p> <p>Reclamation has not found how that metric is applied to different shorter segments and in conjunction with capital costs as an evaluation factor. The west option improves travel time by only 10 minutes, but no information or analysis was done to determine if it is a cost effective selection when evaluated side by side. Is a 10 minute improvement in travel time cost effective when the capital cost for segment C (Purple) is \$2,371,714,000.00, \$2,082,061,000.00 for D (Green), and \$585,899,000.00 for B (Orange)? That is a difference of</p>	<p>Travel time is only one of the factors considered in the decision-making process. GlobalTopic_1 No change made.</p>

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9 Rec	3.7.5.1	3.7-2		7-9	Reclamation	<p>\$1,785,815,000 more for constructing Segment C and \$1,496,162,000.00 more for Segment D over Segment B.</p> <p>As a result of criticism received from multiple subject matter experts on the adequacy of data used to assess impacts to cultural resources (Page 3.7-2, Line 7-9), it is recommended a disclaimer be incorporated to inform readers that results of the analysis are based off a disproportionate level of surveys and effort between the East (Orange) and West (Purple and Green) Option. Additional surveys and analysis are needed on the West side before a conclusion can be made about the abundance and impacts to cultural resources.</p>	<p>GlobalTopic_1</p> <p>The Class I research conducted during the Tier 1 EIS study is limited entirely to extant data. FHWA and ADOT acknowledge that these data are incomplete and thus cannot provide a precise picture of the cultural landscape. While the Tier 1 exercise identified both data gaps and opportunities to fill them, conducting new surveys is beyond the scope of a Tier 1 study. Rather, such efforts would be completed during subsequent Tier 2 projects.</p> <p>No change made.</p>
10 Rec	3.7.5.4	3.7-10		8-10	Reclamation	<p>Due to the disproportionate level of surveys between the East and West Option it is recommended the following language be modified.</p> <p><i>Based on existing but incomplete information,</i> the Final Tier 1 EIS impact assessment concluded that compared to the Recommended Alternative and the Preferred Alternative with west option in Pima County, the Preferred Alternative with east option in Pima County is likely to:</p>	<p>GlobalTopic_1 and GlobalTopic_3</p> <p>The Class I research conducted during the Tier 1 EIS study is limited entirely to extant data. FHWA and ADOT acknowledge that these data are incomplete and thus cannot provide a precise picture of the cultural landscape. While the Tier 1 exercise identified both data gaps and opportunities to fill them, conducting new surveys and analyses lies beyond the scope of a Tier 1 study. Rather, such efforts would be taken during subsequent Tier 2 projects.</p> <p>No change made.</p>
11 Rec	3.8.2	3.8-3		7-11	Reclamation	<p>Please add the TMC to this statement. There is also a high level of concern about the impact of noise on the Tucson Mitigation Corridor (TMC). The TMC is a highly sensitive and critical area that functions as the primary wildlife movement corridor for the Tucson Mountains and Saguaro National Park and Tucson Mountain Park which are found within. Research such as studies by McClure et al. (2013) reported that noise from roads is a major driver of effects on populations of animals and can lead to areas that are considered dead zones. Such dead zones are areas that species and populations avoid as a result of disturbances such as traffic noise causing them to abandon and avoid those areas while devaluing and rendering habitat and its original purpose unsuitable. Reclamation wildlife biologists and partner agencies that assist in oversight of the TMC foresee a proposed I-11 decreasing the level of utilization of the TMC, its crossing structures, and affecting the initial purpose of its acquisition. As stated in prior Draft EIS comments and in our January 2, 2020 email letter titled "Additional Reclamation Comments for an Individual 4(f) evaluation for the TMC", FHWA and ADOT face a significant challenge to not defeat the initial purpose of the TMCs acquisition as identified in 16 USC 663(d) (See Below). An anticipated violation could prohibit FHWA and ADOT from selecting an Avra Valley alternative.</p>	<p>GlobalTopic_1</p> <p>Text was revised.</p>

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						16 USC 663(d) states- (d)USE OF ACQUIRED PROPERTIES Properties acquired for the purposes of this section shall continue to be used for such purposes, and shall not become the subject of exchange or other transactions if such exchange or other transaction <u>would defeat the initial purpose of their acquisition.</u>	
12 Rec	3.8	3.8-4		10-14	Reclamation	Would noise levels exceed the FHWA NAC for the Tucson Mitigation Corridor and its functional purpose which Reclamation has previously stated is a property of unique and special significance under Section 4(f)? FHWA and ADOT have proposed highway overpasses for wildlife which would fall within a zone that produces the highest level of traffic noise.	GlobalTopic_1 No change made.
13 Rec	3.8	3.8-5	Table 3.8-3		Reclamation	Reclamation recommends incorporating the TMC within Table 3.8-3 because of the critical role it plays in supporting other Section 4(f) properties and the potential to affect the purpose of the TMC.	Final Tier 1 EIS Table 3.8-3 is limited to parks and recreation areas. No change made.
14 Rec	3.8.3	3.8-6		11-29	Reclamation	What are the no build noise levels in areas where there are little or no transportation facilities? What are the "existing transportation facilities" used for the noise analysis? Only I-10, or were secondary roads included also?	Existing noise measurements were reported in the Draft Tier 1 EIS to provide a baseline for comparison against the predicted 2040 Build Corridor Alternative noise levels in rural areas where there are little to no transportation facilities. More detailed noise analysis will be completed in future Tier 2 environmental reviews. Text was added to Final Tier 1 EIS Section 3.8.3 referencing ambient noise measurements in these areas.
15 Rec	3.10.2	3.10-2		12-16	Reclamation	The Administrative Draft States the following: <u>Agency and public feedback on air quality focused on concerns with impacts, such as visibility to Saguaro National Park, impacts to climate change and greenhouse gases, concerns with the project being in compliance with NAAQS, and a general concern for the project increasing air pollution in the Analysis Area. These air quality concerns did not result in changes to this Tier 1 analysis but would be addressed during the Tier 2 analysis.</u> The analysis and evaluation of these comments should be included in the Tier 1 EIS or the Tier 1 EIS should discuss why that is not possible at this time.	The analysis of these technical areas was included in the Tier 1 EIS. See Section 3.9 Visual and Aesthetics and Section 3.10 Air Quality. V-1, AQ-1, AQ-2 and AQ-3 No change made.
16 Rec	3.14.1.1	3.14-2		1-3		Reclamation recommends the following edits. The Purple and Green Alternatives <u>would</u> may generate an increased threat of noxious and invasive species spreading and impacting native species along new alignments in rural, undeveloped areas. If purple and green alternative are planned to be new developed corridors then they <u>would</u> generate an increased threat of noxious and invasive species.	GlobalTopic_3 Text was revised.
17 Rec	3.14.4.2	3.14-9		12-14	Reclamation	Reclamation recommends an edit to the statement below to replace <u>could</u> with <u>would</u> . There is an abundance of scientific studies that document how roadways in proximity to valuable wildlife habitat and conservation lands will lead to some level of impact. A proposed I-11 will lead to some level of isolation, an	GlobalTopic_3 Text was revised.

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						<p>increase in noise, light, and air pollution that will degrade nearby habitat quality. Those are roadway associated impacts documented elsewhere within this EIS such as page 3.14-8 Line 22-24 where FHWA and ADOT state how they could impact species covered under the ESA. The document also states how it will increase accessibility which will also lead to indirect impacts including development on page 3.17-2 Line 17-19.</p> <p>The City of Tucson Habitat Conservation Plan (City of Tucson 2018), as well as Pima County's Sonoran Desert Conservation Plan (Pima County 2016b), and Pima County's Conservation Lands System, could would be affected by the Recommended Alternative.</p>	
18 Rec	3.14.4.3	3.14-13		7-11	Reclamation	<p>The Administrative Draft states on Line 7-11 the recommended alternative "would create new infrastructure and therefore <u>add impediments to wildlife movement</u> in the following wildlife connectivity features" which include the Tucson Mitigation Corridor (TMC). Impediments to wildlife movement may risk defeating the initial purpose of the property. As stated above, our January 2, 2020 email letter provides further clarification on this.</p> <p>"lands described herein for fish and wildlife purposes shall not become subject to exchange or other transaction if those actions would defeat the initial purpose of their acquisition [16 U.S.C., section 663(d)]."</p>	<p>GlobalTopic_3</p> <p>Text was revised.</p>
19 Rec	3.14.5.2	3.14-18		33-36	Reclamation	<p>Reclamation requests the following edit below.</p> <p>Dispersal of invasive and noxious weeds into Semidesert Grassland following construction of the Preferred Alternative may would negatively impact protected species such as Pima pineapple cactus and Sonoran desert tortoise due to competition and altered fire regimes (USFWS 2015a).</p>	<p>GlobalTopic_3</p> <p>Text was revised.</p>
20 Rec	3.14.6.2	3.14-24		20-23	Reclamation	<p>Reclamation requests the following edit below.</p> <p><u>Avoid or</u> minimize construction footprint through quality Pima pineapple cactus habitat; survey suitable habitat 1 year prior to the Tier 2 process to inform design; implement long-term control of invasive and noxious weeds; and negotiate compensatory mitigation with USFWS, as needed.</p>	<p>Requested edit was made to MM-BiologicalResources-15 and MM-BiologicalResources-20.</p>
21 Rec	3.14.6.2	3.14-24		33-36		<p>Reclamation requests the following edits below.</p> <p>If the Preferred Alternative with west option is chosen during Tier 2 studies <u>will be developed to</u> avoid, minimize, or mitigate impacts to the Tucson Mitigation Corridor <u>and to determine compliance with 16 U.S.C., section 663(d).</u></p>	<p>The language was changed to the following:</p> <p>MM-BiologicalResources-23: If the Preferred Alternative with west option is chosen during Tier 2, studies will be developed to avoid, minimize, or mitigate impacts to the Tucson Mitigation Corridor, including coordination with Bureau of Reclamation, AGFD, and other relevant agencies to improve and design wildlife crossings in and near the Tucson Mitigation Corridor. Specific mitigation related to the Tucson Mitigation Corridor includes (1) relocating and reclaiming Sandario Road; (2) conducting wildlife studies prior to the Tier 2</p>

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							process; (3) aligning I-11 wildlife crossing structures to match the existing CAP canal siphons (seven crossings total); (4) creating additional wildlife crossing(s) near the Tucson Mitigation Corridor depending on the results of wildlife studies; (5) acquiring property (at a minimum 1:1 ratio) to support additional wildlife connectivity corridors between the Tucson Mountains and the Roskrige and Silver Bell Mountains for the number of acres of the Tucson Mitigation Corridor that will be impacted by the project; and (6) implementing design restrictions, such as no interchanges in the Tucson Mitigation Corridor or between Snyder Hill Road and Manville Road, and minimizing the width of I-11, to limit the I-11 footprint in the Tucson Mitigation Corridor area.
22 Rec	3.14.6.1	3.14-26		20-25	Reclamation	<p>Reclamation requests the following edits below.</p> <p>Avoid, or minimize, <i>and mitigate</i> impacts to the White Tank-Belmont Hieroglyphics Linkage and Wickenburg-Hassayampa Linkage <i>and primary and secondary wildlife crossing structures on Reclamation's CAP canal.</i></p> <p>Reclamation identified in prior comments the location of CAP canal wildlife bridges and concrete overchutes near Segment U within the Hassayampa Plain and Tonopah Desert study area. Reclamation staff have monitored a diverse series of structures across the CAP canal for 3 years and have documented results showing mule deer use individual structures as high as 411 times a month. Monitoring has also shown that human activity and nearby roads devalue their suitability resulting in reduced and recurring use as low as only ≤10 crossings a month. It is anticipated that these results will be published in a 2021 or 2022 Reclamation report. Mitigation for the affected bridges and overchutes would be required if the proposed action was constructed.</p>	<p>GlobalTopic_3</p> <p>MM-BiologicalResources-35 was revised.</p>
23 Rec	3.17.1.1	3.17-1		35-37	Reclamation	<p>The lines contradict each other by stating access "could" induce growth but then state in the next line that interchanges are "assumed" to have project induced growth.</p>	<p>GlobalTopic_3</p> <p>No change made.</p>
24 Rec	3.17.4.2	3.17-7		26-28	Reclamation	<p>The following statement is within the Administrative Draft.</p> <p><i>There is mitigation in place along the CAP canal to improve wildlife movement, but the construction of the Recommended Alternative would cumulatively add to the impacts to wildlife movement in this area.</i></p> <p>Has FHWA and ADOT determined that mitigation and minimization can be adequately developed and implemented for an already impacted and mitigated resource? If so, include how this determination was made.</p> <p>As identified within the TMC Cooperative Agreement and the Fish and Wildlife Coordination Act, the authority under which it was established, "lands</p>	<p>GlobalTopic_1</p> <p>No change made.</p>

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						described herein for fish and wildlife purposes shall not become subject to exchange or other transaction if those actions would defeat the initial purpose of their acquisition [16 U.S.C., section 663(d)]."	
25 Rec	3.17.5.2	3.17-10		12-14	Reclamation	<p>The following statement is within the Administrative Draft.</p> <p><i>With the west option in Pima County, impacts to wildlife connectivity would be same as the Recommended Alternative, as urbanization and the CAP canal have already impacted wildlife movement in the past.</i></p> <p>On page 3.17-7, the AFEIS states the construction of the recommended alternative in Avra Valley would cumulatively add to the impacts to wildlife movement in the area.</p> <p>Reclamation disagrees with the identified statement. Please include an explanation of how the impacts would be the same or remain the same since new transportation corridors result in additional and more severe indirect effects such as residential and commercial development, and increased access to the area. Very little development followed the construction of the CAP canal in Avra Valley, where the Administrative Draft has stated the Recommended alternative would cumulatively add to impacts to wildlife movement on page 3.17-7 line 27-28. It is also stated on page 3.17-2 line 17-19 that interchanges and areas with increased accessibility would experience changes in use as well as an increased rate of development.</p> <p>The resulting impact of an I-11 alternative within Avra Valley will be more severe than the construction of the CAP canal and would result in additional barriers. Additionally, it will be difficult to develop and implement effective minimization and mitigation measures without impairing prior Reclamation mitigation measures such as the Tucson Mitigation Corridor.</p>	<p>The Recommended Alternative in the Draft Tier 1 EIS and the Preferred alternative with the west option in Pima County in the Final Tier 1 EIS are the same in the South Section, therefore impacts to wildlife connectivity would be the same.</p> <p>GlobalTopic_1</p> <p>No change made.</p>
26 Rec	6.4.2.1	6-20		38-40	Reclamation	<p>Reclamation requests the following edit.</p> <p>The Tucson Mitigation Corridor plays a critical role in maintaining wildlife connectivity <i>maintaining and promoting normal gene flow</i> between the isolated habitat block along the Tucson Mountains (SNP and TMP), Ironwood Forest National Monument, and Roskrige Mountains.</p>	<p>GlobalTopic_3</p> <p>No change made.</p>
1 FWS						<p>Previous Reviews The ADEIS</p> <p>On August 17, 2018, we submitted comments on the July 2018 Administrative Draft Tier 1 EIS (ADEIS) and Preliminary Section 4(f) Evaluation directly to FHWA and ADOT in the form of a 13-page, itemized and numbered comments matrix. We addressed the adequacy of six key factors ADOT identified for comment by reviewers in the EIS Reviewer's Guide (including the adequacy of the effects analysis and mitigation measures), provided updates of habitat descriptions that appeared in the ADEIS, and updated references and citations for some species. We also identified issues and species that needed more attention and analysis, including:</p> <ul style="list-style-type: none"> A proposal to align I-11 through the undeveloped Avra Valley and Tucson Mitigation Corridor (TMC) west of Tucson (Option D of the Recommended Alternative). The TMC is a wildlife mitigation property established in 1990 to provide for wildlife movements across the 	No response needed.

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						<p>Central Arizona Project (CAP) aqueduct. In the ADEIS, we expressed concerns about the conflict between the proposed I-11 alignment, the TMC's stated purpose, and the provisions of the Fish and Wildlife Coordination Act and Master Management Plan under which the TMC was established. However, the TMC is a Section 4(f) issue, and as we pointed out above, we will comment on the Section 4(f) preliminary evaluation in a separate letter.</p> <ul style="list-style-type: none"> • Alignment of all three build corridor alternatives considered in the ADEIS, including the Recommended Alternative, through areas of Pima County supporting high densities of the endangered Pima pineapple cactus (<i>Coryphantha scheeri</i> var. <i>robustispina</i>) (PPC). • In Maricopa County, a proposed alignment requiring a new bridge over the Gila River west of Phoenix, rather than an alignment that takes advantage of an existing bridge, on State Route (SR) 85, seven miles downstream of the proposed crossing. The proposed crossing would involve work in sensitive wetland habitats that support the endangered Yuma Ridgway's rail (<i>Rallus obsoletus yumanensis</i>), and possibly the endangered southwestern willow flycatcher (<i>Empidonax traillii extimus</i>), threatened yellow-billed cuckoo (<i>Coccyzus americanus</i>), and protected bald eagle (<i>Haliaeetus leucocephalus</i>). • A potential problem with the tiered approach in the case of I-11—the risk of advancing a build corridor alternative into Tier 2 via a Record Of Decision without adequate data—in particular field data—to assess adverse effects among alternatives. <p>We also expressed concerns about the Tumamoc globeberry, (<i>Tumamoca macedougalii</i>) (globeberry) and Sonoran desert tortoise (<i>Gopherus morafkai</i>) (tortoise). We listed the globeberry as endangered in 1986 and then delisted the species in 1993 after surveyors found it to be more abundant and widespread than we thought in 1986. However, monitoring in recent years indicates serious declines are occurring in populations in Pima County.</p> <p>We removed the Sonoran desert tortoise from the candidate species list in 2015, and returned it to the candidate list in 2020 due to an August 3, 2020, court-approved settlement agreement (85 FR 73164). The existence and implementation the 2015 Sonoran desert tortoise Candidate Conservation Agreement (CCA) was a factor in not listing it as a threatened or endangered species. As a signatory to the 2015 Sonoran desert tortoise CCA, we trust that ADOT will honor its conservation commitments.</p> <p><u>The PRDEIS</u> On August 30, 2019, we submitted comments to ADOT and FHWA on the I-11 Public Review Draft Tier 1 EIS (PRDEIS) and Section 4(f) Evaluation through DOI's Office of Environmental Policy and Compliance (OEPC), in the form of a letter addressed to FHWA's Division Administrator in Phoenix, and an attachment containing our general and specific comments. In that review, we re-iterated and expanded our concerns about the TMC, PPC, and proposed Gila River crossing. We identified a new concern involving the alignment of I-11 through Public Land Order (PLO) 1015 waterfowl refuge lands managed by the Arizona Game Fish Department along the Gila River in Maricopa County. Like the TMC, these lands are protected under Section 4(f) and require a 4(f) evaluation if the lands are impacted by a highway</p>	

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2 FWS						<p>construction project. We are pleased that I-11 planners quickly determined that they could avoid these lands by minor adjustments to the Recommended Alternative.</p> <p>The AFEIS We did not thoroughly review the January 2021 Administrative Final Tier 1 EIS (AFEIS), but briefly examined Chapter 3.14 (Biological Resources), Chapter 6 (the Preferred Alternative), and Chapter 7 (Summary of Mitigation and Tier 2 Analysis). First, we describe briefly the Preferred Alternative, which seems likely to advance to Tier 2 for additional study and analysis, and contrast it with the Recommended Alternative—the build corridor that was identified in the ADEIS and PRDEIS. The Preferred Alternative includes several important adjustments to the Recommended Alternative that reflect concerns raised by cooperating agencies and the public during earlier reviews. We also provide brief general comments about the AFEIS and specific comments about the Pima pineapple cactus, Tumamoc globeberry, and Sonoran desert tortoise.</p> <p><u>The Preferred Alternative</u> We consider the Preferred Alternative in sections (identified by bold type), from the alternative’s southern starting point, the SR 189/I-19 interchange in Nogales, to its northern endpoint, a tie in to US 93 just north of Wickenburg.</p> <p>Nogales to the Santa Cruz/Pima County Line (near Sahuarita)—In this segment, the Preferred Alternative would be co-located with I-19 (the same as the Recommended Alternative).</p> <p>Sahuarita to Marana—In Pima County, the Preferred Alternative will advance two options to Tier 2—the west option (through Avra Valley and the TMC) and east option (through Tucson). This will provide additional time to consider impacts to the TMC, as compared to impacts to historic and recreational 4(f) properties in Tucson, and will allow a more informed decision when ADOT and FHWA select one of the options to be part of the Preferred Alternative. Carrying both options forward is a direct response to concerns about the environmental and natural resource impacts to Avra Valley (a relatively undeveloped area) and the TMC, expressed by DOI, the City of Tucson, other agencies, and the public.</p> <p>Marana to Casa Grande—Like the Recommended Alternative, in this segment, the Preferred Alternative would be a new corridor, with minor adjustments to minimize adverse effects to the Santa Cruz River floodplain in response to U.S Army Corps of Engineers (USACE) comments, and to re-locate the connector to I-10 in response to comments from the Town of Marana.</p> <p>Casa Grande to Buckeye—In this segment, the Preferred Alternative connects to SR 85 south of Buckeye and is co-located with SR 85 and I-10 in western Maricopa County. The new alignment reduces the amount of new construction and avoids new Gila and Hassayampa river crossings.</p> <p>Buckeye to Wickenburg—The Preferred Alternative is a new corridor on a new Alignment in this segment. It incorporates a shift to tie into US 93 slightly</p>	No response needed.

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						<p>west of the Recommended Alternative to minimize adverse effects to residences, floodplains, wildlife linkages, and Sonoran desert tortoise habitat.</p> <p><u>Mitigation Commitments in the AFEIS</u> The AFEIS includes 35 mitigation commitments addressing the range of concerns expressed by DOI bureaus directly to ADOT and the FHWA in 2018, and through OEPC in 2019 (see pages 3.14-22 to 3.14-26). Mitigation measures capture the need for protocol surveys of listed and special status species to assess adverse effects, and the need to avoid, minimize, or compensate for those effects, including effects to designated and proposed critical habitats. Commitments include broad-based studies of wildlife movements, connectivity issues, and the design and construction of wildlife crossings. ADOT and FHWA provide mitigation measures in general terms and as species-specific actions. Some mitigation measures will occur before Tier 2, others during Tier 2. Overall, the project proponents have proposed an ambitious program of wildlife studies, mitigation programs, habitat enhancements, and compensation to offset project impacts and resource losses.</p>	
3 FWS						<p><u>General Comments on the Tier 1 AFEIS</u> The objective and analytical approach of Tier 1 was clearly described in the Reviewer Guide of the 2018 draft EIS, and in the Introduction and Executive Summaries of the 2019 draft EIS and administrative final EIS (the current document). The primary purpose of Tier 1 is to compare differences among the build corridor alternatives and identify a 2,000-foot-wide recommended alternative to advance to Tier 2 for further analysis. During Tier 2, ADOT will refine the 2,000-foot-wide corridor down to a 400-foot-wide right-of-way. In theory, the recommended alternative is the one that will best meet the purpose and need of I-11 and result in the fewest impacts or at least impacts that the action agency can reduce to an acceptable level.</p> <p>We find that ADOT and FHWA have properly identified affected wildlife and other biological resources within the I-11 study area and have attempted to address potential impacts of the proposed action from a Tier 1 perspective. Mitigation measures are also adequate for most but not all Tier 1-level-purposes, as we explain below. We are pleased ADOT and FHWA resolved some concerns about the Recommended Alternative by co-locating more segments of the Preferred Alternative with existing roadways, using an existing bridge to cross the Gila River, and advancing the east and west options in Pima County to assess more fully the comparative effects of the two alignments.</p>	No response needed.
4 FWS						<p>Pima Pineapple Cactus—We re-emphasize key points from earlier reviews: First, the proposed action will almost certainly adversely affect the PPC at levels well above any other listed or candidate species in the study area. Second, mitigation and compensation for PPC losses will be possible only if losses do not involve a substantial proportion of the remaining PPC population, which is probably under 8,000 individuals, and to the extent that PPC conservation bank credits or mitigation lands are available for purchase. Third, ADOT and FHWA ultimately may need to choose among other corridor alternatives where PPC numbers are lower if they cannot effectively minimize, reduce, or eliminate adverse effects within the Preferred Alternative. Finally, we remind ADOT and FHWA, as we have in the past, that the goal of the Tier 1/Tier 2 process, in the case of the PPC, is to avoid jeopardizing the species</p>	Final Tier 1 EIS Section 3.14 acknowledges the potential impact to Pima pineapple cactus and that substantial compensatory mitigation would be required to avoid a Jeopardy decision by USFWS depending upon the alternative ultimately chosen. Mitigation commitments include minimizing the construction footprint through quality Pima pineapple cactus habitat and surveying suitable habitat 1 year prior to the Tier 2 process, among others. All applicable federal regulations will be applied, including adherence to Section 7 of the ESA in Tier 2 analyses.

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						when we evaluate ADOT/FHWA's project under Section 7 of the Endangered Species Act. We strongly recommend that PPC surveys in all corridor options and development of a preliminary mitigation/conservation plan at the earliest possible date. We also remind ADOT that the west option of the Sahuarita to Marana segment may have more PPC and PPC habitat than any build corridor option considered in the draft and administrative final EISs.	No change made.
5 FWS						Tumamoc Globeberry —ADOT planners are aware that this species occurs in Pima County and has declined in the county in recent years. Yet, the AFEIS mentions it only in passing. There is no clear commitment in the AFEIS that surveys for the plant will occur and no specific mitigation/conservation measures are proposed. We hope ADOT will include additional details about its intentions with regard to the globeberry in the final EIS (FEIS). We are particularly concerned about potential effects of the Sahuarita to Marana west option on lands set aside in Avra Valley to preserve populations of this species.	GlobalTopic_1 ADOT will use the most up to date threatened and endangered species lists during the Tier 2 studies. No change made.
6 FWS						Sonoran Desert Tortoise —As we mentioned above, we returned the tortoise to the candidate list in 2020 as the result of an August 3, 2020, court-approved settlement agreement (85 FR 73164). The AFEIS does not mention this development. ADOT should update the final EIS with this information and clearly state its intentions with regard to the commitments it made under the Sonoran desert tortoise CCA. We acknowledge ADOT's intent to conduct tortoise surveys in the Preferred Alternative during Tier 2, as described on page 3.14-23.	ADOT will comply with all agreements, such as the Sonoran desert tortoise CCA, in place at the time of the Tier 2 studies. No change made.
7 FWS						Conclusions <ul style="list-style-type: none"> One risk of a tiered NEPA process is that a recommended or preferred corridor alternative will advance to Tier 2 based on inadequate data. We conclude that this is not the case for most species and biological resources considered in the AFEIS. Overall, we are satisfied that no surprises where those species and resources are concerned are likely to occur—and acknowledge that specific mitigation strategies can await preconstruction and species-specific protocol surveys during Tier 2. The endangered PPC is restricted in its range and total population, and may occur in large numbers in all build corridor alternatives considered in the draft EISs. In the absence of occurrence data (numbers and distribution), based on field surveys in all corridor alternatives, there is no reason at this time to conclude that an effective strategy to offset potentially large PPC losses is possible. In the case of the PPC, ADOT's Tier 1-level analysis likely has not provided the level of detail needed to fully inform selection of a Preferred Alternative. The Tumamoc globeberry is unlikely to occur in large numbers in the west option of the Preferred Alternative, or in the Preferred Alternative overall, and the number of affected plants is unlikely to represent a substantial proportion of the species' remaining range-wide population. However, given evidence that the species is declining in Pima County, some populations by as much as 85%, measures to avoid or minimize project effects will be important. We encourage ADOT to include a status assessment for the globeberry and appropriate conservation measures in the FEIS. 	Final Tier 1 EIS Section 3.14 acknowledges the potential impact to Pima pineapple cactus and that substantial compensatory mitigation would be required to avoid a Jeopardy decision by USFWS depending upon the alternative ultimately chosen. Mitigation commitments include minimizing the construction footprint through quality Pima pineapple cactus habitat and surveying suitable habitat 1 year prior to the Tier 2 process, among others. All applicable federal regulations will be applied, including adherence to Section 7 of the ESA in Tier 2 analyses. No change made. GlobalTopic_1 ADOT will use the most up to date threatened and endangered species lists during the Tier 2 studies. No change made.

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1 NPS	Executive Summary	ES-7	Tables ES-2		NPS	NPS appreciates the side-by-side comparisons across the alternatives. For Table ES-2, please label these as Peak Period afternoon travel times as is identified later in Table 1-3 and in Appendix E2.	Requested edit was made in a footnote.
2 NPS	Executive Summary	ES-9	Table ES-3		NPS	Please include the 28,708-acre Tucson Mountain Park Historic District in the table for NRHP-eligible historic districts along the Preferred Alternative – West Option. The National Park Service would be happy to provide the information to FHWA necessary to analyze effects to this resource, including coordinating provision of documents through the AZ SHPO.	Table ES-3 provides information on resources within the build corridors and it is our understanding based upon your comments that the District is outside the corridors and would therefore not be included. No change made.
3 NPS	Community Resources, Title VI, & Environmental Justice	3.5-2		14-20	NPS	Per NPS <i>Management Policies 2006</i> , 5.3.5.3 and EO 13007, the NPS will “strive to allow American Indians and other traditionally associated peoples access to and use of ethnographic resources.” Although the Preferred Alternative – West Option does not cross the park boundary, it will impact access to the park’s unique ethnographic and ethnobotanical resources utilized by members of the Tohono O’odham Nation. Through authorization under an existing FONSI and MOU, tribal members come to Saguaro NP every year for cactus fruit harvest. The atmosphere provided for these sacred traditions in the park (both day and night) would be compromised by the project’s impacts to natural sounds and night skies, and the ambience of the ethnographic traditional use on the western side of the park. The harvest camp and harvesting grounds are the closest locations to the project area within the park, making tribal members of the Tohono O’odham Nation the group of people who could be most negatively impacted at Saguaro NP. NPS appreciates your consideration of the unique ethnographic use of this area and suggests further analysis in the Tier 2 study to identify if specific communities whose access to and traditional use of the park may be impacted by the Proposed Alternative – West Option.	The I-11 project team has had numerous meetings with the TON and will continue to consult with the Nation during the Tier 2 studies. GlobalTopic_1 and GlobalTopic_13 No change made.
4 NPS	3.6 Economic Impacts	3.6-2		17-21	NPS	NPS shares the City of Tucson’s concerns about regional economic impacts, particularly in the tourism sector: the Preferred Alternative – Western Option has potential to impact many resources at Saguaro NP, ultimately diminishing visitors’ experience. In 2019, Saguaro National Park attracted over one million visitors with an economic output of \$98 million, with more than 98% of this economic output coming from non-local visitors. (Cullinane Thomas, C., and L. Koontz. 2020. <i>2019 National Park Visitor Spending Effects: Economic Contributions to Local Communities, States, and The Nation</i> . Natural Resource Report NPS/NRSS/EQD/NRR—2020/2110. National Park Service, Fort Collins, Colorado.) Please disclose these effects in the FEIS, or include these NPS-specific statistics and analysis in the Tier 2 study.	E-2 No change made.
5 NPS	3.14	Fig. 3.14-4	Map of Large Intact Block Clusters	NA	NPS	Please include a detailed map of the “2” group clusters that includes the Tucson Mitigation Corridor, and for the same map in Appendix E-14.	There are maps that cover these areas in the Final Tier 1 EIS, and more detailed maps will be created and analyzed in Tier 2. No change made.
6 NPS	3.14	Table 3.14-3	Summary of Large Intact Block Clusters	NA	NPS	Please explain what the corresponding numbers mean for each identified alternative (e.g., under 2D-Green Alternative there is listed 117,003, 22,808, 787, 5, 1): because Figure E14-10 is at such a large scale, it is difficult to understand where the block boundaries are, it is difficult for the reader to interpret. See similar comment in Appendix E-14.	Numbers listed in the table are the area in hectares within the corridors of each Large Intact Block. No change made.

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7 NPS	3.14	3.14-14	Preferred Alternative	20	NPS	The statement that " <i>the Preferred Option, with either option, would impact a smaller surface area of the vegetation communities</i> " implies that the Preferred Alternative - East Option damages as much natural desert based on Figure 3.14-1. Please clarify this statement.	The statement referred to states the following - <i>The Preferred Alternative, with either option, would impact a smaller surface area of Semidesert Grassland and Arizona Upland Sonoran Desertscrub than the Recommended Alternative.</i> – The statement refers to the Preferred Alternative in its entirety, not just the East Option portion versus the West Option portion. No change made.
8 NPS	3.14	3.14-20	Wildlife Connectivity	1	NPS	The Coyote-Ironwood linkage would be solely impacted by the Preferred Alternative - West Option, please add similar comment as in lines 3.14-4 unless there is a linkage that is not clear from Figure 3.14-1	The referenced wildlife linkage would only impacted by the Preferred Alternative - West Option. Language was added to Final Tier 1 EIS Section 3.14.5.3 to clarify.
9 NPS	3.14	3.14-20-21	Wildlife Connectivity	35-37	NPS	Please state in the AFEIS that the purpose of the Tier 2 evaluation will be to analyze the relative impacts of the Preferred Alternative – West Option against the Preferred Alternative – East Option, balancing proposed mitigations for both options.	The Tier 2 process will evaluate both east and west options to a degree where a decision can be made. No change made.
10 NPS	3.9.6.1, 7	3.9-7, 7-6	Tier 2 Analysis Commitments	9-21	DM	NPS notes that the AFEIS recognized that simulations of the corridor may be conducted in the Tier 2 analysis. NPS re-emphasizes that simulations of the corridor, produced at a suitable scale, could more clearly show potential changes in the landscape. The most recent Federal Land Managers Air Quality Related Values Workgroup (FLAG) guidance is the appropriate method for AQRV impact assessments. NPS requests the simulations be prepared in accordance with guidance in Chapter 5 of the Guide to evaluating visual impact assessments for renewable energy projects, available at: https://irma.nps.gov/DataStore/Reference/Profile/22142 .	AQ-1 and AQ-3 No change made.
11 NPS	3.10.6.1,7	3.10-5, 7-7	Tier 2 Analysis Commitments	9-23	DM	Please ensure that the Tier 2 analysis commits to an analysis of the air quality impacts that could result from induced growth from the Preferred Alternative – West Option on Saguaro NP.	AQ-1 and AQ-3 No change made.
12 NPS	3.10.1	3.10-1	Air quality	29-31	DM	" <i>Transportation sources do not significantly contribute to visibility impairment in these Class I areas</i> (ADEQ 2011)": transportation sources emit visibility-impairing pollutants including nitrogen oxides and soot (particulate matter). These pollutants can have negative contributions to visibility at Class I areas such as Saguaro National Park if they are emitted in sufficient quantities and meteorological conditions are favorable for aerosol formation and transport to the area. This project's effect on visibility at any Class I areas will only be concluded when a full quantitative air analysis is completed, therefore, we request FHWA please acknowledge this potential in the FEIS or recognize the need for further evaluation in the Tier 2 study.	AQ-1 and AQ-3 No change made.
13 NPS	Appendix E2				NPS	The proposed FHWA Sonoran Corridor by itself has the potential to provide direct multimodal connectivity between I-11 and I-10 and could contribute to increase project traffic loads that should be acknowledged as a cumulative action. Construction of the Preferred Alternative for the Sonoran Corridor (identified in the Nov 2020 DEIS) and Preferred Alternative-Western Option for I-11 could substantially increase traffic loads and impacts to sensitive resources, particularly during periods of congestion in downtown Tucson when through-traffic may favor the Preferred Alternative – West Option of I-11. Please include analysis of traffic loads from the Sonoran Corridor project to better assess cumulative impacts to air quality, including effects to Saguaro, a Class I Airshed under the Clean Air Act.	The potential Sonoran Corridor transportation facility is acknowledged and evaluated in Section 3.17 of the Draft Tier 1 EIS as a reasonably foreseeable future action. The Sonoran Corridor Tier 1 EIS does not have a ROD yet, nor is the project funded and therefore not in a Regional Transportation Plan (RTP)/Transportation Improvement Program (TIP). When an I-11 Tier 2 study begins in Pima county, any Sonoran Corridor Tier 2 project that is in the RTP/TIP would be analyzed at that time. GlobalTopic_1, V-1, AQ-1, AQ-3, LU-3 No change made.

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14 NPS	E14	Fig. E14-10	Wildlife Linkages	NA	NPS	Please provide a detailed map of the Tucson Mountain area that includes Important Bird areas, Large Impact Block Clusters, and the Tucson Mitigation Corridor.	There are maps that cover these areas in the Final Tier 1 EIS, and more detailed maps will be created and analyzed in Tier 2. No change made.
15 NPS	Appendix E14	p. E14-3	The Wilderness Act	lines 33-35	NPS	The description of the Wilderness Act in this section has omitted critical components of this law that govern NPS management of the Saguaro Wilderness. Wilderness areas are to be managed to a much higher standard than the prohibited uses listed in this summary. Excerpts from the Wilderness Act indicate that "...each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area", and "...wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use..." Wilderness character consists of five qualities which guides the NPS management and protection of the Saguaro Wilderness: 1) Natural - Ecological systems are substantially free from the effects of modern civilization. 2)Untrammelled - Wilderness is essentially unhindered and free from the intentional actions of modern human control or manipulation.3) Undeveloped - Wilderness is essentially without permanent improvements or the sights and sounds of modern human occupation. 4) Opportunities for solitude or primitive and unconfined recreation - Wilderness provides opportunities for solitude or a primitive and unconfined type of recreation.5) Other features of value - Wilderness may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value. Thank you for expanding the description of the Wilderness Act to encompass the full protections afforded by a designated wilderness, such as the Saguaro Wilderness.	Requested language added to the Appendix.
16 NPS	Appendix E-2	Pg. 13-14	Travel Forecasting Methods		KSS-LD	Through the Tier 1 analyses, the AZ (state) model has been used thus far. The AFEIS notes on page 14 of Appendix E2 that " <i>More detailed Tier 2 environmental studies would likely use the regional models,</i> " however, regional models are usually appropriate for smaller areas. Please elaborate in the Tier 2 analysis the rationale for using regional or state models to assess which model forecasts the highest travel demand and/or movements. Subsequently, the highest demand should be used in Tier 2 analyses, including environmental study assumptions, such as mobile source emissions (EPA MOVES model).	ADOT will use the most appropriate and up to date models during the Tier 2 analysis. No change made.
17 NPS	Appendix E14.1.3 Local Ordinances	p. E14-6	Pima County Buffer Overlay Zone		NPS	As shared in the DOI comments for the DEIS (July 2019), the Pima County Buffer Overlay Zone is an important land management ordinance established in part to: "3. Establish mechanisms that will protect the public preserves and result in an ecologically sound transition between the preserves and more urbanized development; 4. Assure the continued existence of adequate wildlife habitat and foster the unimpeded movement of wildlife in the vicinity of Pima County's public preserves..." (Pima County Code of Ordinances § 18.67). NPS thanks FHWA for including discussion of the Pima County Buffer Overlay Zone to this appendix, please update the "relevant laws and regulations" pertinent to this Zone.	As noted by the comment, discussion of the Pima County Buffer Overlay Zone is included in Final Tier 1 EIS Section E14.3.3, Section E14.4.2, and Section E14.4.3. For consistency, the list of Local Ordinances throughout the Tier 1 EIS does not include zoning information. No change made.
18 NPS	Appendix E 14	Tables, pages 40-44 and page 9	Federally Listed Species	17-24	NPS	Please update the analysis and tables to consider effects to federally listed species on National Park lands: the USFWS IPAC database reflects existence of federally-listed species on NPS land. Please coordinate with the NPS and/or FWS for the updated list of Threatened and Endangered species that should be considered on NPS lands for this analysis. We believe there will be effects on these species due to population fragmentation and habitat loss.	GlobalTopic_1 ADOT will use the most up to date threatened and endangered species lists during the Tier 2 studies. No change made.

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19 NPS	Appendix E14	E14-103	Migratory birds	1-15	NPS	"Impacts to migratory birds can be mitigated with standard construction techniques and species-specific mitigation measures developed in Tier 2 analysis," however, migratory birds vary greatly in their ecology and natural history and birds (elf owls, for example) may be harmed by loss of landscape connectivity. Please ensure the Tier 2 analysis and mitigation pays attention to flycatchers, swallows, and orioles that migrate at lower altitudes by day.	The language quoted ensures the appropriate analysis and mitigation will be completed in Tier 2. No change made.
20 NPS	Appendix E14	E14-108-9	Large Intact Blocks	NA	NPS	Line 2 on page 109 states "Options C, F, and part of D...could potentially restrict wildlife movement..." suggesting that the impacts to Large Impact Blocks by these alternative routes is equivalent to Option B. However, each option will have its own specific level of impact on wildlife movement. Please identify how the Large Impact Blocks will be impacted by each specific route.	GlobalTopic_1 The language quoted does not suggest the impact to be equivalent to Option B. No change made.
21 NPS	Appendix E 14	E 14-1	Regulatory Setting	Lines 23-27	NPS	While the NPS coordinates with AZ Game and Fish in some cases over the management of wildlife, well-established case law makes it clear the NPS has jurisdiction over wildlife in Saguaro National Park. The NPS requests this jurisdiction be stated in lines 23-27. The NPS has jurisdiction stemming from the Organic Act, and under 35 CFR 2.2 which regulates the protection of wildlife with NPS areas and prohibits the taking of wildlife. The Property Clause also give Congress the power to protect wildlife on public lands, the state law notwithstanding.	GlobalTopic_3 No change made.
22 NPS	ES.1	ES-1		Lines 10-30	NPS	We appreciate the list of previous transportation planning efforts summarizing the related documents that have led to the development of this AFEIS. It appears that two other recently published, high-level planning efforts that would contribute to cumulative effects should be included in the AFEIS: 1) ADOT's I-10 Phoenix-Tucson Bypass Study (2008); and 2) ADOT's Final Tier I EIS and ROD for the Arizona Passenger Rail Corridor Study (2016).	Neither project has a reasonable source of funding nor are they in the STIP. No change made.
23 NPS	Appendix H2	8	NPS Comments #68 and #69 and ADOT/FHWA Responses		NPS IMR-NR	Please address wilderness character: response to previous NPS comments fail to note whether or how 23 USC § 109(i) and 23 CFR 772 addresses wilderness solitude. Please revise the statement that "ANSI/ASA S12.100 is not approved by ANSI": ANSI/ASA S3/SC1.100-2014/ANSI/ASA S12.100-2014 (R2020) is current and was reaffirmed in 2020. For more information, please visit: https://acousticalsociety.org/acoustical-society-standards/	ADOT committed to coordinate with the agency partners on the project and conduct the Tier 2 analysis in full adherence to applicable federal regulations and ADOT's noise policy at the time of the analysis. The ADOT statement in the previous response pertaining to the ANSI standard was correct at the time. The change of its status as of May 28, 2020 is noted. No change made.
24 NPS	Appendix F	12	Historic Sites	16	NPS	In addition to numerous prehistoric sites within the park, the Tucson Mountain Park Historic District is a designed park landscape of 28,708 contiguous acres on the western slopes of the Tucson Mountains in Pima County, Arizona: Tucson Mountain Park Historic District has been deemed historically significant under National Register of Historic Places Criteria A, and C at the state level of significance, by the Keeper of the National Register. NPS believes that the FEIS (and the Tier 2 study) should identify the significance of the park under Criterion A and C in the categories of Politics/Government and Entertainment/Recreation and Architecture and Landscape Architecture associated with the Civilian Conservation Corps (CCC) and New Deal. To better understand how ambient qualities may enhance or diminish the historic integrity of the Tucson Mountain Park Historic District, NPS recommends the Nomination Form be integrated into the FEIS, upon provision from the NPS or Arizona State Historic Preservation Office (SHPO).	ADOT is committed to considering the Tucson Mountain Park Historic District, pursuant to all relevant NRHP criteria, during Tier 2 studies. ADOT looks forward to consultation with NPS at that time, in order to better understand the District's significance and susceptibility. The Tucson Mountain Park Historic District was added to the Final Tier 1 EIS.
25 NPS	Appendix F	12	Ecological Intrusion	1-3	NPS	Please see previous comment on the categorization of Saguaro National Park (NPS comment #28): the NPS continues to assert that the proposed Avra	GlobalTopic_1 No change made.

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						Valley alignment will have significant impacts on the ecological health and biological integrity which the Park is mandated to manage for future generations.	
26 NPS	Appendix F		General Comment		NPS	We note FHWA's argument to classify Saguaro National Park as a "park and recreation resource" (p. 3, lines 12-18); however, direct impacts to recreation should be analyzed as a standalone impact topic as are other impact topics. Within this Constructive Use analysis there is no mention of potential impacts to the park's diverse user groups; the more than one million people who visited the park in 2019; the more than \$97 million in recreation-related economic output; and the estimated 928 jobs supported by the park's recreational users. (Cullinane Thomas, C., and L. Koontz. 2020. <i>2019 National Park Visitor Spending Effects: Economic Contributions to Local Communities, States, and The Nation</i> . Natural Resource Report NPS/NRSS/EQD/NRR—2020/2110. National Park Service, Fort Collins, Colorado). As a cooperating agency, NPS would welcome the opportunity to work with FHWA to ensure effects to NPS-managed lands are adequately and accurately analyzed.	GlobalTopic_1 and E-2 No change made.
27 NPS	Appendix F		General Comment		NPS-KSS	The Tucson Mountain Park Historic District (28,708 acres) should be identified and analyzed for Section 4(f) Constructive Use within this Appendix. This Historic District is 200' from the western Preferred Alternative and overlaps with Saguaro National Park.	The Tucson Mountain Park Historic District was added to Final Tier 1 EIS Table 4-2 of Section 4(f) Historic Sites in the Corridor Study Area. A constructive use analysis was completed for the Saguaro National Park and the Tucson Mountain Park (see Appendix F), two park properties that qualify for Section 4(f) protection. As the constructive use analysis for a park is more stringent than a historic resource like the Tucson Mountain Park Historic District, the result of the analysis would be the same.
28 NPS	Appendix F		General Comment		NPS-KSS	This Constructive Use analysis should mention Cumulative Effects or Indirect Effects from induced development. As a multimodal project, we anticipate that the impact from planned future uses of railroad and utility, along with induced development will further cause Constructive Use impacts.	Currently there are no plans for railroad or utility to use the I-11 Corridor. The Section 4(f) regulation and FHWA's 2012 Section 4(f) Policy Paper directs that a constructive use analysis focus on the proximity effects of a transportation project that could occur as a direct result of the construction or operation of that project. Such proximity effects could include noise or visual changes, for example, that occur as a direct result of the project being proximate to a property protected under Section 4(f). Indirect effects analysis is part of the NEPA analysis. Chapter 3 of the Tier 1 EIS provides the indirect and cumulative analysis for the I-11 Corridor Project. No change made.
29 NPS	Appendix F	8			NPS-KSS	The Saguaro Wilderness has been designated by the US Congress with the full protections of the Wilderness Act to preserve the qualities of serenity and quiet identified here under Category A in the Noise Abatement Criteria Table. As such, this area is more appropriate for consideration and analysis under Activity Category A.	Appendix F, page 9 states - <i>The category for which wilderness would qualify was not evaluated. However, even if the wilderness within Saguaro National Park fell under Category A, the predicted noise levels would not exceed the threshold (57 dBA).</i> No change made.
1 USACE	3.13		All Figures		Rice	Unlike other sections in the document, there are no maps depicting the Recommended or Preferred Alternative in the Water Resources section and it is difficult for the reader to visually compare impacts across all alternatives.	Recommended and Preferred Alternative maps were added to Section 3.13 of the Final Tier 1 EIS.
2 USACE	3.13.4.6	3.13-37 to 3.13-39				The revisions to 3.13.1 (Regulatory Setting) provide a better understanding of the Corps' permit process and the requirements that must be met under the Section 404(b)(1) Guidelines. As stated in this section, alternatives that do not involve discharges into wetlands are generally considered to have less	The language requested was added to Final Tier 1 EIS Section 3.13.4.6.

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						adverse impact on the aquatic ecosystems unless proven otherwise. In Section 3.13.4.6 (Summary), it would be helpful to revisit this requirement in relation to the Preferred Alternative.	
3 USACE	3.13.5	3.13-40		9		Replace Section 408 with Section 14. Section 408 refers to regulation where the Rivers and Harbors Act is codified (33 CFR 408).	The requested edit was made.
1 EPA					Clifton Meek	EPA has no new comments to provide at this time.	No responses needed.
1 FAA					Jared Raymond	I have no comments regarding the AFEIS.	No response needed.

DOI Agency Review Comments on Administrative Final EIS Section 4(f) Evaluation

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1 DOI					General	<p>Historic Transportation Proposals Through the Tucson Mitigation Corridor. Regional Transportation Plan In the early 1980's, Pima County conducted a planning process for a regional transportation plan. The plan included a proposal for the San Joaquin Road extension through the Tucson Mitigation Corridor (TMC). Reclamation sent various letters to the County describing the conflict with Reclamation's habitat protection commitment for the TMC. In a letter to Pima County dated December 27, 1988 Reclamation opposed the rezoning of the TMC for the construction of the San Joaquin Road extension. Reclamation stated: <i>The San Joaquin Road extension is absolutely incompatible with the goals for this land and its wildlife values.</i></p> <p>During the same planning process, FWS also sent a letter to Pima County. The letter is dated December 19, 1988 and provides comments on the proposed road extension relative to the TMC: <i>...the sole purpose of this land is for wildlife mitigation. Placement of a public road across it would seriously violate the integrity of this land and critically diminish its value for wildlife.</i></p> <p>I-10 Phoenix-Tucson Bypass Study Department of the Interior Bureaus cooperated during the development of the Arizona Department of Transportation's (ADOT) 2007-2008, <i>I-10 Phoenix-Tucson Bypass Study</i>. Corridor H for that project is similar to the Western Option under consideration in the I-11 AFEIS and was also designed to traverse the TMC. The final report (January 2008) stated on page 4-19: <i>Corridor H would encroach upon either the Tucson Mitigation Corridor or the Indian reservation. As a result, Corridor H may not pass the fatal flaw test.</i></p> <p>Reclamation opposed another effort at an Avra Valley bypass in a December 19, 2008 letter to the State Transportation Board. Reclamation reiterated that the 1990 Tucson Mitigation Corridor Cooperative Agreement and Master Management Plan (MMP) for the TMC prohibits any future development within the area other than future wildlife habitat improvements or developments agreed to by Reclamation, Arizona Game and Fish Department (AGFD), FWS, and Pima County. Consistent with the requirements in the MMP, Reclamation continued to oppose developments within the TMC. Additionally, in the December 19, 2008 letter, Reclamation submitted the following statement: <i>...the Bureau of Reclamation has no intention of allowing our Central Arizona Project right-of-way or Tucson Mitigation Corridor to be used for the bypass project. We believe the status of these lands as a wildlife preserve should rule out this bypass corridor from further consideration. By identifying this Corridor H as the only bypass corridor to be studied further, the Transportation Board will be setting up a future conflict with Reclamation and the Department of the Interior.</i></p>	No response needed.

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						These statements continue to speak to the Department's position on development within the TMC. This property was established as a firm conservation commitment made through a complex, multi-decadal planning process to construct the Tucson Aqueduct-Phase B as part of the Central Arizona Project (CAP). In the Tucson Aqueduct Phase B Environmental Impact Statement and the TMC's MMP, Reclamation memorialized its long-term commitment to preserve the property. Reclamation and the signatories of the TMC's MMP have opposed infrastructure proposals within the TMC in each of the past four decades since the property was established, and the Department will continue to uphold this position as the I-11 EIS advances to Tier II.	
2 DOI					General	<p>Tucson Mitigation Corridor Reclamation acquired title to the 2,514-acre TMC in 1987, and the total present-day cost of the TMC is approximately \$15 million. The land was purchased to partially mitigate biological impacts from the CAP Tucson Aqueduct-Phase B. Reclamation's letter dated January 2, 2020 to the Federal Highway Administration (FHWA) provided further explanation that the primary purpose of the TMC is, "to mitigate for the movement disruption impacts, not totally compensated for by the wildlife crossing structures over the aqueduct, by providing an undeveloped and long-term movement corridor for wildlife to maintain and promote normal gene flow while avoiding genetic isolation of the Tucson Mountains and wildlife habitat to the west." Additionally, the CAP was modified to accommodate the TMC. In Reclamation's Final EIS for the CAP Tucson Aqueduct-Phase B, Reclamation identified specific environmental commitments and mitigation measures to reduce project impacts. In accordance with the Fish and Wildlife Coordination Act of 1958 (PL 85-624, 16 U.S.C. 661 et seq.), Reclamation, AGFD, FWS, and several public conservation groups agreed on a specific parcel (i.e., TMC) for mitigation. In 1990, Reclamation, FWS, AGFD, and Pima County signed a Cooperative Agreement. The Cooperative Agreement states: <i>WHEREAS, lands described herein for fish and wildlife purposes shall not become subject to exchange or other transaction if those actions would defeat the initial purpose of their acquisition [16 U.S.C., section 663(d)].</i></p> <p>The MMP prohibits any future development within the area other than existing wildlife habitat improvements or developments jointly agreed to by Reclamation, AGFD, FWS, and Pima County.</p> <p>The true value of the TMC is the functional and critical role the property plays in maintaining the primary wildlife movement corridor between the Tucson Mountains and west across Avra Valley to the Roskrige Mountains and Ironwood Forest National Monument (IFNM). The corridor supports multiple biological processes that are critical to the ecological health of Saguaro National Park (SNP) and Tucson Mountain Park (TMP), both Section 4(f) properties found within the Tucson Mountains that total approximately 44,818-acres. A "use" or impact to the TMC would result in correlated and compounding impacts to not only SNP and TMP, but other properties west across Avra Valley. As a result of this role, Reclamation has viewed and managed the TMC as a Section 4(f) property of unique significance and critical importance.</p>	GlobalTopic_1 No change made.

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						<p>West Option impact on the Purpose of the TMC</p> <p>The West Option through Avra Valley would defeat the purpose of the TMC because Reclamation established the TMC and designed the siphons to provide multiple crossings for wildlife under relatively natural, undisturbed conditions. Aligning an interstate highway next to the CAP aqueduct represents a substantial alteration of those conditions, diminishing the purpose of the TMC. The Department can reasonably expect adverse effects to wildlife connectivity, gene flow, and populations from the West Option.</p>	
3 DOI					General	<p>General Section 4(f) Comments</p> <p>The Tucson Mountain District of SNP was established to protect its natural resources, scenic beauty, and habitat from various threats associated with the growth of metropolitan Tucson. Because many wildlife species rely on the ability to move in and out of SNP and TMP to meet their water needs throughout the year, SNP works closely with adjacent land managers and neighbors to assist in providing habitat (and water sources) that maintain healthy wildlife populations. These needs have been recognized and formalized through federal and local efforts. As mentioned above, Reclamation established the TMC to protect its function as the primary wildlife corridor for the entire Tucson Mountains. Additionally, Pima County established the Pima County Buffer Overlay Zone, in part to: "3. Establish mechanisms that will protect the public preserves and result in an ecologically sound transition between the preserves and more urbanized development; 4. Assure the continued existence of adequate wildlife habitat and foster the unimpeded movement of wildlife in the vicinity of Pima County's public preserves..." (Pima County Code of Ordinances § 18.67). Finally, the Sonoran Desert Conservation Plan has identified critical wildlife corridors within the project study area which connect the park to other adjacent conservation lands.</p>	No response needed.
4 DOI					General	<p>The Department does not agree with the Section 4(f) Finding of No Constructive Use determination for Saguaro NP and the Saguaro Wilderness. While we recognize Federal Highway Administration regulations (23 CFR § 774.15(c)) give FHWA authority in determining whether to prepare documentation of a Section 4(f) Finding of No Constructive Use, we believe that the proximity of the western Preferred Alternative to Saguaro NP (0.3 mi) and the federally-designated Saguaro Wilderness (0.6 mi) would meet the definition of a Constructive Use by causing <i>substantial impairment</i> to the core purposes for which these areas were protected through Congressional action. The Department believes that there would be un-mitigatable impacts from this project (described below and in further detail in the attached matrix) that would impact natural and cultural resources and substantially diminish the recreational experiences sought by the public in these areas.</p>	<p>FHWA and ADOT acknowledge DOI's opinion on the Constructive Use finding. The Preliminary Section 4(f) Evaluation will be finalized in Tier 2.</p> <p>No change made.</p>
5 DOI					General	<p>The Department is concerned that the summary statistics for Potential Use of Section 4(f) properties (e.g., Table ES-3, p. ES-10), are currently cited as "eight" for the Preferred Alternative - East Option and "two" for the Preferred Alternative - West Option. We recommend that FHWA include further analysis in Tier 2 to</p>	<p>GlobalTopic_1</p> <p>Section 4.6.3.2 of the Section 4(f) chapter discusses the possible uses of the resources in the Preferred Alternative - East Option,</p>

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						more accurately capture potential impacts to both alternatives based on what is currently known. The Department notes that mitigations are presented for the Section 4(f) properties along the Preferred Alternative - West Option, but not for the Preferred Alternative - East Option. Starting in Section 4.6.3.3, an extensive multi-page discussion of mitigations to the Tucson Mitigation Corridor are provided, but there is no in-depth, detailed discussion of mitigation strategies pursued for each of the Section 4(f) properties along the Preferred Alternative – East Option.	alternatives to be evaluated that may decrease the number of 4(f) properties impacted, and mitigation and measures to minimize harm. No change made.
6 DOI					General	In addition to the comments below and the attached matrix, please recognize that, currently, the AFEIS summary for Potential Use of Section 4(f) properties minimizes the role of the Tucson Mitigation Corridor (TMC) as a wildlife corridor and gene flow conduit. As mentioned above, the TMC was created to adjoin the 4(f) properties which rely upon its continued role in facilitating wildlife movement and gene flow, and any disruption to this function would have continued effects on additional Section 4(f) properties and designations including Saguaro National Park, Tucson Mountain Park, Ironwood Forest National Monument, the Saguaro Wilderness, the Tucson Mountain Wildlife Area, the Tucson Mountain Park Historic District, and lands of the Tohono O’odham Nation. We look forward to further in-depth, detailed discussion of the use of and potential impacts to the TMC and related Section 4(f) properties.	FHWA and ADOT respectfully disagree that the information on the TMC presented in the Tier 1 EIS minimizes the role of the property. The Tucson Mountain Wildlife Area and Tohono O’odham Nation lands are not Section 4(f) properties. No change made.
7 DOI					General	Alternatives In order for the West Option to be chosen FHWA and ADOT cannot defeat the initial purpose of the TMC as identified in 16 U.S.C., section 663(d). Evaluating potential impacts to the purpose of the property requires knowledge of the connectivity and ecosystem and biological processes associated with the property. Ensuring the preservation of connectivity through the TMC would require more than the construction of wildlife bridges and compensation for the direct loss of over 96-acres; it would require that the key ecosystem and biological processes that the TMC was specifically acquired for, would continue. Those processes were identified by Reclamation prior to acquisition in comment letters from Subject Matter Experts, and in the March 1984 Fish and Wildlife Coordination Act Report (FWCA Report), written by the USFWS, the agency Congress entrusted with certain duties to consult on federal proposals to impound, divert, or otherwise control or modify any stream or other body of water (16 U.S.C., section 663(d)). The Department agrees with the scientific community that overpasses can improve permeability, but their success can only be judged on a project specific basis. While research has shown a broad range of species can and do use wildlife overpasses, research has done little to verify their effectiveness, because use does not equate to effectiveness (Seth et al. 2006; Corlatti et al. 2009; Lesbarreres and Fahrig 2012; A. van der Gift et al. 2013, Gregory and Beier 2014). A study by Seth et al. (2006) found that observed migration rates of coyotes (<i>Canis latrans</i>) and bobcats (<i>Lynx rufus</i>) across the Ventura Freeway in southern California was a poor surrogate for evaluating gene flow. While the study did document mild levels of migration, populations on either side of the freeway were genetically differentiated and implied that individuals who crossed rarely reproduced (Seth et al. 2006). This uncertainty limits the	GlobalTopic_1 Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors. No change made.

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						<p>ability of how best to mitigate impacts from roads and which impacts can be successfully mitigated (Soanes et al. 2017).</p> <p>When FHWA is preparing the Tier 2 analysis and Individual Section 4(f) Evaluation, the TMC should be identified as a property of unique or otherwise of special significance due to its critical role as the primary movement corridor for SNP and TMP, both significant Section 4(f) properties. An important component of that evaluation is 16 U.S.C., section 663(d) of the FWCA, which describes the use of acquired properties and the prohibition against exchange or other transactions that would defeat the initial purpose of the acquisition. As previously mentioned, the Department believes the West Option would defeat the purpose of the TMC because it is reasonable to expect adverse effects to wildlife connectivity, gene flow, and populations. The selection of the West Option in Tier 2 would require the development of significant mitigation and minimization measures. Success would be measured beyond the commitment to construct crossing structures and the acquisition of land for supplemental corridors. If minimization and mitigation developed for the TMC were deemed inadequate and/or genetic divergence of taxa was identified or predicted, then the initial purpose would be defeated and criteria in the FWCA would not be met. Adaptive management is a mitigation option; however, the Department does not consider that reasonable because there would be no guarantee that the additional measures would help or be feasible for reversing its conclusion. The Department understands the challenge this presents to FHWA and ADOT, and Reclamation and the relevant Departmental Bureaus, including FWS and NPS, are willing and interested in continuing to review FHWA's future development of minimization and mitigation measures.</p>	
1 Rec	4.5.1.2	4-38		3-7	Reclamation	<p>Section 4.5.1.2 lists eight potential 4(f) properties in Pima County and states the 4(f) evaluation for those properties would take place during the Tier 2 analysis. Table 4-4 identifies and compares the potential use of 4(f) properties for the build alternatives but does not include these eight properties.</p> <p>Reclamation requests additional information be incorporated on why the 8 Pima County properties were not evaluated for Section 4(f) protection within the Administrative Draft. Additionally, an updated Least Overall Harm Analysis should be made to incorporate the newly identified county properties that fall under Section 4(f) protection. The Section 4(f) properties along Segment B should also be reevaluated to determine which ones would still fall under "use" as a result of the City of Tucson recommending the elimination of frontage roads to avoid impacts to Section 4(f) properties in their October 29, 2019 letter.</p>	<p>GlobalTopic_1</p> <p>As stated in Final Tier 1 EIS Section 4.5.1.2, the referenced properties were identified by Pima County during the Draft Tier 1 EIS public comment period. As FHWA and ADOT are not choosing between the East and West Options in Pima County, the determination whether these properties qualify for Section 4(f) protection, and additional evaluation of these properties with more information on potential impacts in Pima County and greater detail in design of potential alternatives will provide a more-informed decision-making process in Tier 2.</p> <p>No change made.</p>
2 Rec	4.6.3.2	4-93		6	Reclamation	<p>Follow up to a question submitted during the Public Draft process that did not appear to be addressed.</p> <p>"The EIS does not address whether FHWA evaluated other Net Benefit opportunities along Segment B. At a May 22, 2019 Cooperating Agency</p>	<p>FHWA and ADOT completed a high-level review of the application of the Net Benefit Programmatic to the David G Herrera and Ramon Quiroz Park and the Estevan Park after the suggestion was made by Reclamation. The determination was that relocation of the parks would not result in a net benefit.</p>

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						Meeting FHWA was asked and they stated they had not pursued a Net Benefit option with any other Section 4(f) properties including David G. Herrera and Ramon Quiroz Park. During that meeting they were informed an opportunity exists at Estevan Park located approximately 0.2-miles north. A Net Benefit can be achieved by relocating at the larger park and installing and upgrading newer and additional facilities for the local community. Only a Net Benefit was pursued by FHWA and ADOT on Segment D. "Section 4(f) properties should be identified as early as practicable in the planning and project development process in order that complete avoidance of the protected resources can be given full and fair consideration (23 CFR 774.9(a))". By not considering and pursuing a Net Benefit for the Herrera and Ramon Quiroz Park, FHWA and ADOT did not give full and fair consideration to other 4(f) properties.	GlobalTopic_1 No change made.
3 Rec	4.6.3.2	4-94		43-45	Reclamation	Reclamation recommends the following edit to eliminate language on impacts to properties not covered under Section 4(f) but mentioned within Chapter 4. Reclamation also recommends the addition of the following language within the middle and at the end to make sure the information is impartial and not misleading by only providing cost information for one alternative and scenario. <u>The elevated alternative also would impact businesses and residences that are not protected by Section 4(f) and would add almost \$1 billion to the overall estimated \$585,899,000.00 in capital cost of the Preferred Alternative east option or the Orange Alternative (compare to widening at grade). The estimated capital cost identified in the Tier 1 Public Draft for segment C (Purple) is \$2,371,714,000.00 and \$2,082,061,000.00 for segment D (Green). This results in a difference of \$1,785,815,000 more for constructing Segment C and \$1,496,162,000.00 more for constructing Segment D over and above the cost of constructing Segment B (east option).</u>	GlobalTopic_3 No change made.
4 Rec	4.6.3.2	4-95		16-19	Reclamation	Reclamation recommends the following addition below. <u>The Preferred Alternative west option would avoid the downtown Tucson properties but, as described in this Section 4(f) Evaluation, would impact Section 4(f) properties on its route, including the Tucson Mitigation Corridor and the 8 separate potential Section 4(f) properties owned by Pima County for wildlife mitigation purposes.</u>	As the evaluation of the Pima County properties has not been completed, the requested edit was not made.
5 Rec	4.6.3.3	4-97		17-20	Reclamation	Reclamation requests the following addition to Line 20. <u>The 2002 Cooperative Agreement states in part, "Whereas, lands described herein for fish and wildlife purposes shall not become subject to exchange or other transaction if those actions would defeat the initial purpose of their acquisition (16 United States Code, Section 663(d))." In order for the West Option (Segment D or C) to be chosen the initial purpose of the property cannot be defeated. Identified in a January 2, 2020 letter from</u>	GlobalTopic_3 Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors. No change made.

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						<u>Reclamation, the purpose of the TMC was identified as: "The primary purpose of the TMC is to mitigate for the movement disruption impacts, not totally compensated for by the wildlife crossing structures over the aqueduct, by providing an undeveloped and long-term movement corridor for wildlife to maintain and promote normal gene flow while avoiding genetic isolation of the Tucson Mountains and wildlife habitat to the west."</u>	
6 Rec	4.6.3.3	4-99		25-27	Reclamation	<p>Below is summarized information that provides additional background on past attempts by the State Transportation Board, Pima DOT, and ADOT to construct an I-10 bypass through the Tucson Mitigation Corridor (TMC) and Avra Valley.</p> <p>In the early 1980's Pima County was aware of Reclamation's commitment to the acquisition and protection of the TMC during the planning stages of their regional transportation plan. They were informed that it would conflict with Reclamation's habitat protection commitment for the TMC in letters dated March 19, 1984, February 3, 1987, and March 3, 1989. In another letter dated December 27, 1988 Reclamation opposed the rezoning of the TMC for the construction of the San Joaquin Road extension. Within the letter it stated, "the San Joaquin Road extension is absolutely incompatible with the goals for this land and its wildlife values."</p> <p>The U.S. Fish and Wildlife Service sent a December 19, 1988 letter stating the "sole purpose of this land is for wildlife mitigation. Placement of a public road across it would seriously violate the integrity of this land and critically diminish its value for wildlife."</p> <p>In a December 19, 2008 letter to the State Transportation Board Reclamation again opposed another effort at an Avra Valley bypass. They were reminded how the Master Management Plan prohibits any future development within the area other than future wildlife habitat improvements or developments agreed to by Reclamation, Arizona Game and Fish Department, Fish and Wildlife Service, and Pima County. Consistent with the requirements in this management plan, Reclamation continues to oppose developments within the TMC.</p> <p>Additionally, in the December 19, 2008 letter Reclamation, submitted the following statement: "...the Bureau of Reclamation has no intention of allowing our Central Arizona Project right-of-way or Tucson Mitigation Corridor to be used for the bypass project. We believe the status of these lands as a wildlife preserve should rule out this bypass corridor from further consideration. By identifying this Corridor H as the only bypass corridor to be studied further, the Transportation Board will be setting up a future conflict with Reclamation and the Department of the Interior."</p>	No response needed.

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7 Rec	4.6.3.3.	4-99		42-43	Reclamation	<p>The Administrative Draft states the following.</p> <p><u>Also, the multi-level structure would not be desirable with respect to maintenance and future expansion (Factors 1 and 2).</u></p> <p>What future expansion? Was this explained in the Draft EIS? This EIS needs to adequately address how a proposed Avra Valley corridor would not violate 16 USC 663(d) when it would be constructed and for the specified foreseeable <u>future expansion</u>. FHWA and ADOT face a significant challenge of not defeating the initial purpose of its acquisition which is the maintenance and promotion of normal gene flow identified in Reclamation's January 2, 2020 letter to FHWA. Future expansion would impact current proposed mitigation and minimization measures while decreasing the effectiveness of future efforts. Repeated attempts at mitigation for additional or expansion of existing barriers become less and less effective and successful. Prior comments by Reclamation, Fish and Wildlife Service, National Park Service, Arizona Game and Fish Department and other subject matter experts have determined how an Avra Valley bypass and proposed I-11 is not compatible with the goals for this land and its wildlife values and that it would impact the integrity of this land and appreciably diminish its value for wildlife. The expansion of a transportation corridor would continue to magnify the impacts to the TMC and the Tucson Mountains.</p>	<p>The language in Section 4.6.3.3 was edited to state - "Also, the multi-level structure would not be desirable with respect to maintenance and operations (Factors 2 and 4)."</p> <p>The need for future expansion has not been established based on the travel demand model used for the Tier 1 EIS study.</p> <p>GlobalTopic_1</p> <p>Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors.</p>
8 Rec	4.6.3.3.	4-100		10-18	Reclamation	<p>The Administrative Draft states that the Tohono O'odham Nation is opposed to a proposed I-11 on and near their lands. The Tucson City Council requested on June 18, 2019 that Segment B be selected, and I-11 be placed through the city. The request was further documented in Resolution No. 23051. Reclamation requests that these requests be described in the comparable section in the EIS.</p>	<p>The Tohono O'odham Nation has not formally taken a position on the proposed I-11. Two TON Districts have passed Resolutions, and these are discussed in the Section referred to by Reclamation. City of Tucson Resolution No. 23051 is located in Appendix H of the Final Tier 1 EIS and does not apply to the discussion referenced.</p> <p>No change made.</p>
9 Rec	4.6.3.3.	4-101 to 102		43 and 1-4	Reclamation	<p>Reclamation requests the following edit since it conforms to the documented purpose of the Tucson Mitigation Corridor and legal protection identified in our January 2, 2020 letter to FHWA and the 1990 Cooperative Agreement and Master Management Plan.</p> <p><u>Because the primary purpose of the Tucson Mitigation Corridor is to mitigate for the movement disruption impacts, not totally compensated for by the wildlife crossing structures over the aqueduct, by providing an undeveloped and long-term movement corridor for wildlife to maintain and promote normal gene flow while avoiding genetic isolation of the Tucson Mountains and wildlife habitat to the west. is to enable wildlife movements across the property, FHWA and ADOT coordinated with the Bureau of Reclamation on developing a conceptual roadway right-of-way width and alignment designs that would help minimize impacts to wildlife</u></p>	<p>GlobalTopic_3</p> <p>Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors.</p> <p>No change made.</p>

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10 Rec	4.6.3.3	4-101		12-15, 15-16, 18-21, 33-35	Reclamation	<p>movements, <u>compared to the interstate being located along Sandario Road.</u></p> <p>Reclamation requests the following edits.</p> <p>However, the Bureau of Reclamation is concerned not only with the property impacts at that location but also with the potential negative effects of I-11, Sandario Road, and the CAP canal on wildlife movements <u>and maintenance and promotion of normal gene flow.</u></p> <p>Specifically, each existing linear facility (Sandario Road and the CAP canal) has some barrier effect on wildlife movements <u>and normal gene flow</u> across the property.</p> <p>The Bureau of Reclamation indicated that I-11/Sandario Road and the CAP canal would form two parallel linear systems that would negatively affect wildlife movements <u>and the maintenance and promotion of normal gene flow</u> to a greater extent than exists today.</p> <p>However, the Bureau of Reclamation was concerned about the negative effects on wildlife movements <u>and the maintenance and promotion of normal gene flow</u> that would be caused by retaining existing Sandario Road in its current location and the I-11/CAP corridors.</p>	<p>GlobalTopic_3</p> <p>Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors.</p> <p>No change made.</p>
11 Rec	4.6.3.3	4-102		15-18	Reclamation	<p>Reclamation requests the following edit.</p> <p>The Bureau of Reclamation acknowledges this mitigation measure for this reason and because it would consolidate the I-11/CAP canal <u>infrastructure in one location and may reduce the potential barrier effect as compared to independent alignments I-11 could cause on the Tucson Mitigation Corridor property.</u></p>	<p>ADOT and FHWA disagree with the language suggested. No change made.</p>
12 Rec	4.6.3.3	4-102		18-21	Reclamation	<p>Please modify the following statement. Current wording is confusing.</p> <p>“As stated in their letter of June 8, 2018 (Appendix F3 [Correspondence Related to Preliminary Section 4(f) Evaluation]), this would encourage and enhance conditions for wildlife movements across the Tucson Mitigation Corridor, <u>compared to the alternative of I-11 bisecting the TMC not adjacent to the CAP canal.</u>”</p>	<p>The following edit was made to the Final Tier 1 EIS Section 4.6.3.3. – “...across the Tucson Mitigation Corridor, <u>compared to the alternative of I-11 not adjacent to the CAP canal.</u>”</p>
13 Rec	4.6.3.3	4-102		27-29	Reclamation	<p>Reclamation requests the following edits to conform to our January 2, 2020 letter to FHWA.</p> <p>Prior to making a Section 4(f) approval, project-level analysis in Tier 2 will include measures to <u>confirm maintenance and promotion of normal gene flow to the TMC and to</u> minimize harm and commitments that apply to <u>other</u> Section 4(f) properties in general (listed in Section 4.9).</p>	<p>GlobalTopic_3</p> <p>Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors.</p> <p>No change made.</p>

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14 Rec	4.6.3.3	4-104		1-5	Reclamation	Reclamation requests the following edits. ADOT will coordinate with AGFD and USFWS, as recognized wildlife authorities, on determining the studies required to understand east-west wildlife movement needs <u>and maintaining and promoting normal gene flow</u> (both on and off the Tucson Mitigation Corridor) between the Tucson Mountains and the Roskrue Mountains.	GlobalTopic_3 Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors. No change made.
15 Rec	4.6.3.3.	4-104		41-43	Reclamation	Reclamation requests the following edits. This detailed coordination work was critical to identifying and resolving concerns regarding the ability of the Tucson Mitigation Corridor property to continue achieving its mission of enabling wildlife movements <u>and maintaining and promoting normal gene flow</u>.	GlobalTopic_3 Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors. No change made.
16 Rec	4.10.1	4-118	January 2, 2020		Reclamation	Reclamation requests the following information be incorporated into the Reclamation January 2, 2020 comments. 1) The primary purpose of the TMC is to mitigate for the movement disruption impacts, not totally compensated for by the wildlife crossing structures over the aqueduct, by providing an undeveloped and long-term movement corridor for wildlife to maintain and promote normal gene flow while avoiding genetic isolation of the Tucson Mountains and wildlife habitat to the west. 2) An important component of its evaluation is 16 U.S.C., section 663(d) of the FWCA, which describes the use of acquired properties and the prohibition against exchange or other transactions that would defeat the initial purpose of the acquisition. 3) Reclamation states the TMC is a property of unique, or otherwise of special significance, due to its critical role as the primary movement corridor for SNP and TMP, both significant Section 4(f) properties. The continued maintenance and promotion of normal gene flow must be demonstrated as part of the Tier 2 evaluation.	No response needed. Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors. No change made.
17 Rec	4.10.2, 6.4.2.1	4-124, 6-20		27, 32- 36	Reclamation	Based on subsequent project information Reclamation has conducted additional research on wildlife connectivity and gene flow, the Programmatic Net Benefit, and consulted with subject matter experts. This additional information resulted in a determination that a Net Benefit is not feasible or legally applicable to the Tucson Mitigation Corridor under the proposed project configurations.	No response needed.
18 Rec	4.12	4-125		41	Reclamation	Reclamation requests the following additional information be included after line 41.	GlobalTopic_3 No change made.

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						Reclamation will consult with the U.S. Fish and Wildlife Service on the Fish and Wildlife Coordination Act to determine compliance with 16 USC 663(d)).	
19 Rec	6.4.2.1	6-20		38-40	Reclamation	Reclamation requests the following edit. The Tucson Mitigation Corridor plays a critical role in maintaining wildlife connectivity <i>maintaining and promoting normal gene flow</i> between the isolated habitat block along the Tucson Mountains (SNP and TMP), Ironwood Forest National Monument, and Roskrige Mountains.	GlobalTopic_3 Gene flow is just one aspect used to evaluate the impact of barriers to wildlife movement. The Department has committed to wildlife movement studies prior to the Tier 2 process. These studies will allow for biologists to establish a baseline and better assess wildlife movement through the proposed corridors. Text was revised.
1 FWS					USFWS	As a cooperating agency on the I-11 project, we have reviewed two drafts of the I-11 Tier 1 EIS and Preliminary Section 4(f) Evaluation: the Administrative Draft (ADEIS) on August 17, 2018; and the Public Review Draft (PRDEIS) on August 30, 2019. We also have reviewed the January 11, 2021, Administrative Final Tier 1 EIS (AFEIS) and provided comments on January 26, 2021. We acknowledged changes in the AFEIS that will reduce adverse impacts to biological resources and re-emphasized our concerns about the project's effects on particular listed and sensitive species. FHWA and ADOT intend to advance two options in Pima County to Tier 2: the West Option through the Avra Valley west of Tucson, with a new highway, and the East Option through Tucson, co-located with existing interstate highways. The previous draft EISs included only the West Option. In past reviews, when the West Option (then Segment D of the Recommended Alternative) was the only alternative moving forward, FHWA and ADOT had not realistically addressed the alignment's potential effects to the Tucson Mitigation Corridor's (TMC) purpose and function and had not adequately considered the East Option. As a result, we focused less on the TMC's ecological significance and the high bar that would be set attempting to mitigate for its loss. Here, we briefly address those topics, but note that Reclamation's white paper (Bommarito 2020) addressed the same topics in detail.	No responses needed.
2 FWS					USFWS	<u>Establishment and Importance of the Tucson Mitigation Corridor</u> The TMC is a wildlife movement corridor, created to offset the effects of the Central Arizona Project (CAP) aqueduct, completed in 1993. The TMC is not a wildlife overpass structure, or underpass, bridge, tunnel, or culvert. It is a property through which >two miles of the CAP aqueduct passes and periodically disappears into underground siphons. Siphons are located where natural drainages intersect the canal, allowing wildlife to cross the CAP in natural or nearly natural surroundings. The TMC is the primary wildlife movement corridor maintaining the connectivity and genetic integrity (gene flow) among wildlife populations in Avra Valley and the surrounding Roskrige and Tucson Mountains. As such, it is critical to wildlife populations in other 4(f) properties east and west of the TMC, including Tucson Mountain Park, Saguaro National Park, and Ironwood Forest National Monument. We agree with Bommarito (2020) and emphasize that preventing the mountains and mountain parks and monuments of western Pima County from becoming genetic islands is one of the TMC's most important functions.	No response needed.

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						<p>We have long recognized the TMC's importance, in part because we have had statutory and regulatory authorities for the TMC since it first came under consideration by the U.S. Bureau of Reclamation (Reclamation) as a CAP mitigation property. In a February 14, 1985, letter to Reclamation about the mitigation plan for the proposed aqueduct, we stated:</p> <p style="padding-left: 40px;"><i>"Without acquisition of this corridor, we believe the mitigation plan [for the CAP] is grossly inadequate and would not come close to adequately addressing wildlife impacts [from the CAP]."</i></p> <p>Our December 19, 1988, letter to Pima County addressing an early proposal to construct an interstate highway bypass through Avra Valley (I-10 in this case) stated:</p> <p style="padding-left: 40px;"><i>"...the sole purpose of this land [the TMC] is for wildlife mitigation. Placement of a public road across it would seriously violate the integrity of this land and critically diminish its value for wildlife."</i></p> <p>Reclamation established the TMC under the Fish and Wildlife Coordination Act (16 U.S.C. §§661-666c) (FWCA). The U.S. Department of Interior, FWS, and Department of Commerce, National Oceanic and Atmospheric Administration shares authority for FWCA implementation. Under this statute, Reclamation was required to consult with FWS when it created the mitigation corridor.</p> <p>When Congress enacted the FWCA, the effects of all water developments on fish and wildlife, including the CAP aqueduct, came under its intent and oversight:</p> <p style="padding-left: 40px;">Its [FWCA's] enactment pre-dates much of the current body of environmental law, including the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA)... The FWCA represents one of the earliest and most significant indications of the intent of Congress that fish and wildlife considerations were to be a major component of the analysis of projects affecting bodies of water and were to receive equal consideration with other traditional project purposes such as navigation and flood damage reduction (Bean 1984, Smalley and Mueller 2004).</p> <p>With section 663(d) of the FWCA, the TMC property itself came under the intent and oversight of the U.S. Congress. From 16 U.S.C. §§661-666c, section 663(d):</p> <p style="padding-left: 40px;"><i>"Properties acquired for the purposes of this section shall continue to be used for such purposes and shall not become the subject of exchange or other transactions if . . . [it] would defeat the initial purpose of their acquisition."</i></p> <p>Reclamation operates the TMC under a 1989 Master Management Plan (MMP) and a 1990 Agreement with Pima County, Arizona Game and Fish Department (AGFD), and FWS. As the FWCA requires, the agreement and MMP both expressly prohibit development other than wildlife habitat improvements, or development agreed to by the signatories.</p>	

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						<p>We have excerpted relevant provisions from Reclamation's 1989 MMP, Chapter II, Section 2 and Pima County, AGFD, and FWS's 1990 cooperative agreement:</p> <p>Reclamation's 1989 Master Management Plan</p> <p><i>"a. Prohibit any future developments within the area other than existing wildlife habitat improvements...or future wildlife improvements, management, or developments agreed to by Reclamation, Arizona Game and Fish Department (AGFD), Fish and Wildlife Service (FWS), and Pima County. This will preserve this fragile desert habitat from urbanization and maintain an open wildlife movement corridor.</i></p> <p><i>b. Prohibit grazing, mining, dumping, discharge of firearms, trapping, recreation developments, and off-road vehicles to maintain the integrity of the area for both wildlife and special status plant species. Prohibited activities will be regulated according to Chapter 12 of the Parks and Recreation Commission, Pima County, under authority A.R.S. 11-931 et seq."</i></p> <p><i>"g. Maintain locked gates on perimeter of TMC to exclude unauthorized motor vehicles.</i></p> <p><i>h. Enforce all laws and regulations set forth in this document, and by the State of Arizona, for the entire 2,730 acres, including the 216 acre CAP right-of-way."</i></p> <p>Pima County, AGFD, and FWS 1990 cooperative Agreement, Item 9</p> <p><i>"Title to these lands shall remain in the name of the United States. Failure to administer the lands for the conservation and management of plant and wildlife resources as identified in the Master Management Plan will result in the termination of agreements with Pima County and the transfer of management responsibilities back to Reclamation unless the departure is agreed upon by both parties and reflected in a modification of the Master Management Plan."</i></p>	
3 FWS					USFWS	<p><u>Will the West Option Defeat the Purpose of the TMC?</u></p> <p>The West Option through Avra Valley would defeat the purpose of the TMC, because Reclamation established the TMC and designed the siphons to provide multiple crossings for wildlife under relatively natural, undisturbed conditions. Aligning an interstate highway next to the CAP aqueduct represents a substantial alteration of those conditions, diminishing the purpose of the TMC. We can reasonably expect adverse effects to wildlife connectivity, gene flow, and populations from the West Option.</p>	GlobalTopic_1 No change made.
4 FWS					USFWS	<p><u>Can ADOT and FHWA Mitigate Effects to the TMC?</u></p> <p>FHWA and ADOT must address whether they can mitigate effects to the TMC during its Tier 2 evaluation. ADOT and FHWA must demonstrate, under Section 4(f): 1) that there are no feasible or prudent alternatives to using the</p>	During Tier 2 and prior to making a final Section 4(f) approval, ADOT will make final determinations of use, assess avoidance and least overall harm as warranted, and identify additional specific measures to minimize harm.

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						<p>TMC; and 2) that all possible planning has been included in the proposed action to minimize impacts.</p> <p>Regarding the first part, our discussions with other DOI cooperating agencies suggest that a properly executed least harm analysis (also required by section 4(f)), may find that the East Option's local effects on 4(f) properties in Tucson are lower than the regional effects of aligning I-11 through the TMC. Given that outcome, the East Option would clearly be the preferred I-11 alignment under the 4(f) statute.</p> <p>With respect to the second part, FHWA and ADOT have outlined in the AFEIS an ambitious program of field study and mitigation to offset effects of I-11 on wildlife connectivity from the towns of Nogales to Wickenburg. Inside the TMC, ADOT would include wildlife overpasses or underpasses along I-11 in the same locations as the siphons built into the CAP aqueduct when it was constructed. As outlined, and if implemented, the proposed actions may help to alleviate long-standing wildlife movement problems that have increased over decades of growth and urbanization in southern Arizona, particularly near the Tucson Mountains. On the other hand, if the least harm analysis provides no clear choice between the East and West Options, and project proponents choose the West Option, the two-mile wide natural movement corridor that is the essential feature of the TMC will be lost. Whether FHWA and ADOT can effectively offset that loss with a series of wildlife overpasses and underpasses in Avra Valley is an open question and dependent on what is determined to be a final mitigation package.</p>	<p>GlobalTopic_1 No change made.</p>
1 NPS	4.5.1	4-21	Table 4-1	Property #64	NPS	<p>The features and Attributes column reads: "25,000 acres for Saguaro NP West, historic and nature resource preservation, recreation (not a historic property)." Please edit to reflect The Tucson Mountain Park Historic District (including most of Saguaro National Park and Wilderness, as well as the Tucson Mountain Park) as eligible for listing on the on the National Register of Historic Places, with a signed copy by the SHPO of the NR Nomination Form accessible to agencies involved.</p>	<p>"Not a historic property" was deleted from the features of Saguaro NP. The Tucson Mountain Park Historic District was added to Table 4-2.</p> <p>"Historic property" is applicable to all NRHP-eligible and listed resources. This designation, however, cannot be extrapolated to constituent, overlapping, or overarching administrative units. Although the "Tucson Mountain Park Historic District" is a historic property, this does not mean that the "Saguaro National Park West", "Saguaro Wilderness," or "Tucson Mountain Park" are historic properties.</p>
c	4.5.2	p. 4-38	Table 4-2. Historic Sites in the Corridor Study Area		NPS	<p>Please add the Property 64 from Table 4-1 to Table 4-2 and reference the National Register Nomination Form for specific features and attributes of The Tucson Mountain Park Historic District. The district is a "designed park landscape of 28,708 contiguous acres on the western slopes of the Tucson Mountains in Pima County, Arizona," including both county and federal park lands linked to the early conservation efforts in Pima County and in cooperation with the National Park Service.</p> <p>The period of significance is 1921-1941, and the National Register Form, Pg. 41, Section 8. Narrative Statement of Significance states that: "Because the Tucson Mountain Park Historic District encompasses an area that has had a protected status since its designation as a county park in 1932, the district as a whole and most of its individual buildings, structures, and landscape elements retain a high degree of integrity." The NPS requests that the FEIS acknowledge the effects to the Historic District, including to the impacts to cultural and</p>	<p>The Tucson Mountain Park Historic District was added to Final Tier 1 EIS Table 4-2 and to Section 3.7 Cultural Resources.</p>

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						historic sounds that are “ <i>fundamental components of the purposes and values for which the parks were established...</i> ” (NPS Management Policies 2006).	
3 NPS	4.6.3.3	p. 4-103		19-21	NPS	In Tier 2 analysis, please analyze if the reduction in the facility's width would result in a change to the modeled Peak Travel times: with the currently modeled time differences between the two alternatives, stakeholders and decision-makers would benefit from knowing if this travel time difference is decreased further.	During Tier 2 the most up to date traffic model will be used to determine the travel times to compare the various alternative alignments being studied. The information will be shared with the project stakeholders as part of the NPEA process.
4 NPS	4.6.4.2	p.4-106 to p-108	Constructive Use, Regulatory Context, and SNP Noise Impact Assessment		NPS IMR-NR	<p>23 CFR 774.15(e) notes that constructive use can occur when a project substantially interferes with enjoyment of a historic site where a quiet setting is generally recognized feature or attribute. We recommend FHWA recognize that Saguaro National Park and the Saguaro Wilderness Area (designated in 1976) meet the land use criteria of 23 CFR 774.15 given the presence of the Tucson Mountain Park Historic District, the Saguaro Wilderness Area, and Congress' stated intent to protect opportunities for solitude within the wilderness areas of Saguaro National Park (Public Law 103-364). Furthermore, it is clear that a quiet setting is required to achieve the recognized wilderness quality of solitude. Because there are no low noise, long term baseline measurements in the vicinity, it is unknown if increases in noise levels from the I-11 project would exceed applicable ADOT/FHWA noise abatement thresholds.</p> <p>There has not been any recent long term acoustic ambient measurements using low noise Type 1 Sound Level Meter (SLM) in the SNP Tucson Mountain District. We respectfully request that ADOT/FHWA incorporate new Type 1 SLM data that NPS is collecting into the Tier 2 EIS analysis, including constructive use and noise abatement determinations.</p>	<p>GlobalTopic_1 and N-1</p> <p>A constructive use analysis of the Saguaro National Park was completed and can be found in Appendix F. ADOT will work with NPS during the Tier 2 analysis involving Saguaro National Park. The Tucson Mountain Park Historic District was added to Final Tier 1 EIS Table 4-2 of Section 4(f) Historic Sites in the Corridor Study Area. A constructive use analysis was completed for the Saguaro National Park and the Tucson Mountain Park (see Appendix F), two park properties that qualify for Section 4(f) protection. As the constructive use analysis for a park is more stringent than a historic resource like the Tucson Mountain Park Historic District, the result of the analysis would be the same.</p> <p>23 CFR § 774.15(e) would apply to the Tucson Mountain Park Historic District, being the historic property, but cannot be extrapolated to overarching administrative units. Likewise, it would apply operationally to constituent administrative units and features, but not statutorily.</p> <p>ADOT is fully committed to close cooperation with all the partners on the project, will conduct a hard-look of all pertinent information, and conduct the Tier 2 analysis to the fullest extent allowable under, and in full adherence to, the applicable federal regulations and ADOT's noise policy at the time of the analysis, including, but not restricted to, the field noise measurements and determination of reasonable and feasible mitigation and abatement measures.</p>
5 NPS	Appendix F	3	Saguaro National Park	13-18	NPS	<p>The National Park Service disagrees with the classification Saguaro National Park as a “<i>park and recreational resource</i>”: based on the Congressional legislation summarized below, FHWA should consider recognizing National Parks as 4(f) properties independent of additional categorization or use (Department of Interior 2014 <i>Handbook on Departmental Review of Section 4(f) Evaluations</i>).</p> <p>The most important statutory directive for the National Park Service is provided by interrelated provisions of the NPS Organic Act of 1916 and the NPS General Authorities Act of 1970, including amendments to the latter law enacted in 1978.</p> <p>The key management-related provision of the Organic Act is as follows: [The National Park Service] shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified ... by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will</p>	The Tucson Mountain Park Historic District was added to Final Tier 1 EIS Table 4-2 and to Section 3.7 <i>Cultural Resources</i> .

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						<p>leave them unimpaired for the enjoyment of future generations. (16 USC 1)</p> <p>Congress supplemented and clarified these provisions through enactment of the General Authorities Act in 1970, and again through enactment of a 1978 amendment to that act (the "Redwood amendment," contained in a bill expanding Redwood National Park), which added the last two sentences in the following provision. The key part of that act, as amended, is as follows: Congress declares that the national park system, which began with establishment of Yellowstone National Park in 1872, has since grown to include superlative natural, historic, and recreation areas in every major region of the United States, its territories and island possessions; that these areas, though distinct in character, are united through their inter-related purposes and resources into one national park system as cumulative expressions of a single national heritage; that, individually and collectively, these areas derive increased national dignity and recognition of their superlative environmental quality through their inclusion jointly with each other in one national park system preserved and managed for the benefit and inspiration of all the people of the United States; and that it is the purpose of this Act to include all such areas in the System and to clarify the authorities applicable to the system. Congress further reaffirms, declares, and directs that the promotion and regulation of the various areas of the National Park System, as defined in section 1c of this title, shall be consistent with and founded in the purpose established by section 1 of this title [the Organic Act provision quoted above], to the common benefit of all the people of the United States. The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress. (16 USC 1a-1).</p>	
6 NPS	Additional Comment				NPS	<p>Since the last comment period, a new 28,708 Historic District has been nominated to the National Register of Historic Places. This district is directly adjacent to the western alignment of I-11, and roughly encompasses the original footprint of Tucson Mountain Park, now managed by the National Park Service and Pima County. The Historic District spans the Tucson Mountains, including sections of Saguaro National Park and Tucson Mountain Park. At the closest point, the western Preferred Alternative is 200 feet from the Historic District. As stated in the nomination, "[t]he creation of the park was seen as a way to preserve a large tract of undeveloped wilderness just outside the city" and to designate a "county wildlife refuge."</p> <p>Thank you for including this Historic District in the Final EIS and for further analysis in Tier II for potential impacts to cultural resources and Section 4(f) properties. This new designation was provided in the table included in Reclamation's letter submitted on January 2, 2020, but DOI has not previously provided a description of this new Historic District.</p>	The Tucson Mountain Park Historic District was added to Final Tier 1 EIS Table 4-2 and to Section 3.7 <i>Cultural Resources</i> .