

WEMO Supplemental EIS
Compilation of Issues Report
October 2012

1.0 Introduction

AECOM has been assigned several tasks to assist the Bureau of Land Management (BLM) in completing a Supplemental Environmental Impact Statement (EIS) for their West Mojave (WEMO) Amendment to the California Desert Conservation Area (CDCA) Plan of 1980. The WEMO Plan Amendment, and the associated designation of routes, has an extensive history, which is not presented here. The information that is relevant to this report, and to AECOM's task, is that the original WEMO Final EIS, completed in 2005, was rejected, in part, by the United States District Court for the Northern District of California (the Court). As a result of that rejection, BLM is currently developing a Supplemental EIS to address issues that the Court determined were deficient in the previous EIS.

This Compilation of Issues Report has been developed as part of Task 2 (Compilation of Issues) of AECOM's Statement of Work. The purpose of this report is to conduct reviews of the 2005 Final WEMO EIS, the Court documents, and other documentation to compile and summarize the issues that need to be addressed in the Supplemental EIS. This includes a detailed evaluation of the issues that were found to be deficient by the Court, as discussed in the Court's Summary Judgment dated September 28, 2009. This summary, presented in Section 2 of this report, only summarizes issues that need to be addressed in the development of the Supplemental EIS for the WEMO Plan. The Summary Judgment discussed a much greater range of issues, as it addressed all issues raised by the Plaintiffs in the case (Center for Biological Diversity). However, for many of those issues, the Court found that the EIS was sufficient. The issues that were found to be sufficient are not addressed in this report, although it will be important to understand them during development of the Supplemental EIS.

The issues on which the Court rejected the 2005 EIS are numbered (Court Issue #1, Court Issue #2, etc.) to facilitate tracking in the project documentation. This includes not just issues that the Court specifically rejected, but other issues on which they chose not to rule, but on which they could rule later. For instance, for Court Issues #8 and #11, the Court chose not to rule because of the narrow focus of their review. However, the focus of their review could be expanded on the Supplemental EIS, so it will be critical for the project team to consider and address those issues.

The Court has also issued a Remedy Order dated January 28, 2011. Other than the schedule for completion of the EIS and ROD, and some specific requirements for implementing monitoring of resources, most of the issues specified in the Remedy Order are related to actions to be taken by BLM to protect resources in the interim. This compilation of issues does not address these actions, except to the extent that they may provide data to be subsequently used in the Supplemental EIS (i.e., additional air monitoring).

Also note that the Remedy Order addresses Court decisions with respect to some specific geographic locations (Rand Mountain Area Routes R5 and R50, Juniper Flats, Wonder Valley, and Edwards Bowl). However, the Court's Summary Judgment was entirely based on general deficiencies, as opposed to location-specific decisions. Therefore, although the location-specific issues that the Court was asked to address will need to be considered by BLM in the development of route alternatives, this compilation of issues report does address EIS deficiencies in specific geographic areas.

As part of the discussion of the deficiencies found by the Court, this report provides a preliminary discussion of the actions that can be taken to address each issue in the Supplemental EIS. This is a very preliminary discussion, and, as AECOM was only recently assigned this project, it does not take into account ideas generated by BLM's WEMO Project Team over the past several months. The purpose of presenting these ideas is to initiate discussion with BLM regarding actions that need to be taken to move forward with the Supplemental EIS.

The evaluation also included a review of the 2005 WEMO FEIS to identify issues that will drive the development of the Supplemental EIS. Because a substantial portion of the 2005 FEIS was either not challenged or was upheld by the Court, much of the text should either be directly adapted, or adopted by reference, in the Supplemental EIS. The reason that this Compilation of Issues focuses on the Court documents is in order to focus on the issues that were found to be deficient, and that require correction in the Supplemental EIS. However, this review included evaluation of the format, sources of data, and evaluation methods used in the FEIS. A summary of that evaluation is provided in Section 3.

BLM has also completed the scoping process for this Supplemental EIS. The Scoping Report, dated June 2012, summarizes hundreds of comments received by the Agency during the scoping process. This report presents a summary of the general categories of comments that were made during the scoping process in Section 4. However, the scoping report itself acts as a compilation of issues raised during scoping, and is not repeated here.

Finally, the Supplemental EIS will require an update of baseline data that was used in the 2005 EIS. In addition, BLM has issued updated guidance for Travel Management Planning and other issues, and these revised procedures will need to be implemented in the Supplemental EIS. These general update requirements are discussed in Section 5 of this report.

2.0 Court-Identified Issues

2.1 Alternatives

Background Description of Pre- and Post-1980 Route Issue

The CDCA Plan expressly prohibits designation of routes that did not exist in 1980. This stems from the language from Pg. 77 of the CDCA Plan, which limits motorized vehicle access only to "existing routes of travel", and further defines "existing routes of travel" as a route established before approval of the CDCA Plan in 1980.

The Court's Summary Judgment contains a great deal of discussion regarding the fact that BLM did not have an inventory of these routes in 1980, the efforts BLM has taken since 1980 to develop that inventory, the fact that routes have continued to proliferate despite the prohibition, and how these difficulties affect BLM's development of the EIS and WEMO Plan Amendment.

Inclusion of the post-1980 routes in both the No Action Alternative and the other alternatives was a key point raised by the Plaintiffs in the lawsuit, and the latter was a key factor in the Court's decision. These issues, and how they affect the Supplemental EIS, are described in more detail below.

No Action Alternative

Court Issue 1 - Sufficiency of Description of No Action Alternative

With respect to the No Action Alternative, the Plaintiffs had argued that the route network included in the No Action Alternative must be based entirely on the existing route network in 1980, and cannot include any routes that were designated or came into existence after 1980.

The court did not conclude that the No Action Alternative was not allowable. In fact, they agreed that BLM's inclusion of the post-1980 routes, which the Plaintiffs had argued against, was proper. The Court agreed that the No Action Alternative, as the baseline for EIS analysis, should be the situation on the ground at the time of the EIS, not a 1980 version that does not exist anymore (see Summary Judgment, Pg. 43, Lines 6-10).

What the Court did not agree with was how the No Action Alternative was described in the document. The Court found two issues:

- The EIS did not sufficiently explain that the routes contained in the No Action Alternative included post-1980 routes, was larger than both the 1980 and 1985-1987/ACEC networks, and was smaller than the 2001-2002 inventoried network.
- The discussions of the No Action network throughout the EIS were not consistent. Some specific examples were raised, including Table 3-58 and Table 4-45. Instead of alternatives being compared only to the No Action Alternative, they were also compared to the 1985-1987 network, the 2001-2002 inventory, and the 2003 EA network. The Court stated that a single No Action network needs to be defined, described, and then used as the basis for comparison for all impacts.

Potential Solutions in Supplemental EIS

In developing the route network for the No Action Alternative, BLM is not constrained by the language in the CDCA Plan prohibiting post-1980 routes. Therefore, the only consideration for BLM in developing the route network for the No Action Alternative is to capture the existing route network as of the baseline date. For most BLM EISs, the baseline date is usually the date of the NOI for the EIS, or in this case, September 13, 2011.

Addressing the description of the No Action Alternative will be a substantial objective in the Supplemental EIS. First, the description of the No Action Alternative will need to address each of the issues raised by the Court. With respect to the second issue, AECOM understands that numerous variations of route networks were approved at various times, and that the 2005 EIS compared and contrasted these routes with each other. As we read the Court's Judgment, this apparently created confusion regarding what was considered to be the No Action route network. This cannot be done in the Supplemental EIS. The only comparisons that will be relevant are comparisons of the alternative route networks to the No Action Alternative network. While the text can discuss features of the other networks, it must clear when these discussions are relevant to a comparison between the alternative networks and the No Action network.

Route Networks Included in Alternatives

Court Issue 2 - Inclusion of Post-1980 Routes in Alternatives

BLM had argued, in some e-mails quoted in the Summary Judgment, that the WEMO Plan was an amendment to the CDCA Plan, and therefore inclusion of post-1980 routes in the alternatives

in the WEMO EIS and Final ROD constituted amendment of the CDCA Plan's limitation to "existing routes of travel".

The Court very clearly states that BLM can designate additional routes that did not exist in 1980 (Summary Judgment, Pg. 36, lines 13-16). However, to do so, BLM must actually amend the language that restricts the network to pre-1980 routes. That amendment would need to be done in accordance with NEPA and FLPMA, and would have to explain why inclusion of post-1980 routes is justified.

Based on this judgment, it appears that BLM has two choices with respect to alternative route networks to be analyzed in the Supplemental EIS:

- Restrict all alternatives (except for the No Action Alternative) to pre-1980 routes; or
- Modify the language in CDCA that limits route designations to existing routes, or modify the language in CDCA that defines an existing route as one existing in 1980.

Noticeably, the No Action Alternative is the only alternative that can include post-1980 routes (unless the restriction language is changed). This is because the Court acknowledges that post-1980 routes are included in the existing, baseline condition.

Potential Solutions in Supplemental EIS

Based on the language in BLM's NOI for the Supplemental EIS, it appears that BLM has chosen the second option above (i.e., modify the CDCA language). The NOI states "A primary objective of the proposed action for this plan amendment is to replace the following CDCA Plan language: "at the minimum, use will be restricted to existing routes of travel" with language that reflects current BLM policy, such as restricting motorized vehicle use to designated routes."

Amendment of the language in the CDCA Plan will free up the BLM to consider alternatives that include designation of routes that did not exist in 1980. However, this will also require two actions in the Supplemental EIS:

- The Supplemental EIS will need to include the language change as part of one or more actions to be analyzed on a resource-by-resource basis in the document. The document cannot only analyze the proposed route networks – it must also analyze the impact of BLM's proposed language change.
- The routes to be designated pursuant to this language change would still need to be evaluated with respect to the minimization criteria in 43 CFR 8342.1. If the CDCA Plan language is to be modified to from "existing routes" to "designated routes", then BLM may want to consider whether to include, in the modified language, specification that such designation would be done in accordance with 43 CFR 8342.1. This may actually help with the analysis of the language change in the resource sections. For example, the analysis of the language change in the soil resources section would be able to directly link the language change to the regulation's requirement to minimize damage to soil.

Court Issue 3 - Criteria Used for Route Designations

43 CFR 8342.1 specifies criteria to be used by BLM in designating areas and trails as open, limited, or closed to off-road vehicles. Among other things, these criteria include considering that areas and trails shall be located to minimize damage to soil watershed, vegetation, air, or other resources of the public lands; that they be located to minimize harassment of wildlife or

significant disruption of wildlife habitat (including T&E species and their habitats); and that they be located to minimize conflicts between other uses of the same or neighboring public lands, and to ensure compatibility with existing conditions in populated areas.

The Court provides an extensive analysis of the Decision Tree used in the FEIS to demonstrate that it did not consider these factors (Summary Judgment, Pg. 18-30). According to this analysis, the only resource impacts considered in the Decision Tree include impacts to sensitive species. The Court's analysis of the Decision Tree concludes that it does not address impacts to other resources, and even with respect to sensitive species, the analytical methodology heavily favors maintaining existing routes unless it can be shown that those routes are redundant.

With respect to the Decision Tree, BLM argued that the other criteria were considered in a footnote to the Decision Tree which gives the analyst discretion to modify the conclusion based on "other special circumstances". However, the Court rejected this argument (Summary Judgment, Pg. 27-28) by stating the footnote did not directly reference the 8342.1 criteria. Also, the Court studies the route-specific designation forms to see if the other criteria were ever applied in making a route designation, and they were not.

BLM also argued that the fact that almost two-thirds of the routes were closed in the Decision Tree process indicated that the 8342.1 criteria were applied. The Court rejected this, noting that their review showed that most of these closures were based on redundancy, not resource considerations. In general, the Court rejected the notion that closure of two-thirds of the routes constituted "minimization" with respect to impacts, noting that nothing in the Administrative Record linked these closures to a reduction in impacts.

Potential Solutions in Supplemental EIS

This issue applies directly to the definition of the route network alternatives to be analyzed in the Supplemental EIS. This process has already been begun by BLM, and AECOM has so far had no role in the development of the alternatives. In addition, because the route network alternatives must be completed in early November in order to meet the aggressive Supplemental EIS schedule, it is likely that BLM will complete this task in a few weeks with no, or with limited, AECOM involvement. However, we understand that consolidation and presentation of the rationale for the route network alternatives is the basis for AECOM's Task 3, Data Support and Documentation.

To accomplish this, without having been substantially involved in the process, will require us to work with the route development personnel to understand how and where they are capturing their rationale as the routes are developed. In the 2005 EIS, this documentation was captured in route designation forms. The concept of route designation forms was not rejected by the Court, and it seems likely a logical and systematic way to capture the supporting rationale. However, to be approved by the Court, the forms would need to capture the data necessary to understand how the minimization criteria in 43 CFR 8342.1 were applied. It is also possible to capture some or all of this information automatically by populating a database as a result of overlying GIS layers – for instance, overlaying the existing route network over desert tortoise critical habitat could result in populating a critical habitat field for each route in the network.

We understand that BLM's Travel Management training, occurring in early November, will include some modules on this documentation process, presented by BLM staff who have previously been through the process. This would be ideal, if another BLM office currently has a comprehensive system that can be adapted. In general, the scope of AECOM's task here will depend on how the information is going to be captured. If the data are being captured in

organized designation forms or spreadsheets that have been designed to include the minimization criteria, then our task will be to consolidate this information into a form which is presentable in the Supplemental EIS. If the data are not being captured in this manner, AECOM may have to perform interviews, or find some other means of documenting the process that BLM is using.

In addition to Task 3, this issue will also need to be addressed in the resource-specific analyses (AECOM's Task 4). The primary objection of the Court on this issue was that the development of the route network alternative did not consider the minimization criteria, which needs to be addressed by BLM in the development of the current alternatives. However, the minimization criteria will also need to be evaluated in the resource analyses in the EIS.

Court Issue 4 - Reasonable Range of Alternatives

As discussed in the Court's Summary Judgment (Pg. 39), the alternatives considered in the WEMO EIS only varied in terms of type of designation (open or limited), and in terms of management prescriptions. The route network itself, on which OHV use was allowable, comprised the same 5,098 mile network in all seven alternatives analyzed.

Without weighing in on what types of route modifications should be considered in defining different route networks for various alternatives, the Court concluded that different route networks, including at least one network with a smaller size, must be developed and analyzed as alternatives in the EIS.

Potential Solutions in Supplemental EIS

This issue is specific to the route network alternatives currently being developed by BLM. Based on our recent conference calls with BLM, it appears certain that a range of network alternatives are being developed with biological resources, cultural resources, and recreation needs being considered. As described by BLM, it appears that this effort will be sufficient to satisfy this issue for the Court.

2.2 Resources, Impact Analyses, and Mitigation

Resource-Specific Issues

Court Issue 5 - Soils

The Court acknowledged that the EIS contained a detailed discussion of the general impacts of OHV use on soils. However, the Court held that the EIS did not provide any specific discussion of the proposed OHV route network on the soils that exist in the area (Summary Judgment Pg. 48). The Court specified that the EIS does not need to have a route-by-route discussion of soil impacts, but should contain some specificity with regard to the resources present and the proposed route network.

It should be noted that, although the Court's Summary Judgment is substantially focused OHV use, the suit filed by the Plaintiffs also alleged deficiencies in the analysis of grazing. The issue of grazing was raised in limited portions of the Summary Judgment, and was held to be deficient in a few areas, including soils. The Summary Judgment (Pg. 48, lines 17-18) stated that the ". . . FEIS should contain some discussion of the particular impacts on soils of the proposed Plan, both with regard to the designated OHV network, and livestock grazing".

Potential Solutions in Supplemental EIS

This issue will be addressed by AECOM in the analysis of soil impacts in the Supplemental EIS. Interestingly, the Court's Summary Judgment summarized how the 2005 EIS discussed some resource impacts (such as soil resources) in generic terms, while others (such as the three sensitive vegetation species) were discussed in the EIS with enough specificity to be satisfactory. Therefore, one objective of AECOM will be to review those analyses which were deemed to be sufficient, evaluate them to understand the differences between the generic analyses and the specific analyses, and then ensure that those issues rejected for having generic analyses are corrected by making them parallel to the specific analyses. This may be a general approach throughout the EIS. Only a few specific items were rejected by the Court, and it will be important to correct those issues, but to avoid extensive modification to discussions that were found to be acceptable.

In addition, another approach could be to select criteria to analyze for each resource. For example, for soils, the criteria could be miles of erodible, compactible, or sensitive soils crossed by OHV routes, if those data would be available.

Addressing the issue of impacts due to grazing is more difficult. Certainly, these impacts need to be considered in the cumulative analysis of each resource, including soils. However, it is not clear what grazing-related elements of the alternatives are in question, and to what extent these elements need to be addressed in the Supplemental EIS.

Court Issue 6 - Cultural and Historical Resources

With respect to cultural resources, the EIS acknowledged that OHV use may have significant effects on such resources, but also stated that there was inadequate baseline data to determine the actual effect. The EIS also stated that the significance of the effect would be evaluated when specific actions were proposed, and that those activities would not be approved until compliance with Section 106 of the NHPA and consultation with the SHPO and Tribes had been completed.

The Court agreed with the Plaintiffs argument that this analysis is insufficient. The Court reviewed the Decision Tree and the Administrative Record, and found no indication that cultural resource impacts were considered in the route designation process. The specific EIS language cited by the Court was "the effect of BLM routes of travel on public land cultural resources has not been fully determined because information needed to assess effect is incomplete at the present time".

Potential Solutions in Supplemental EIS

Based on the manner in which the Court discussed other specific resources, it appears that they did the following:

- Rejected generic discussions of how OHVs can impact a resource, if a resource is present;
- Acknowledged that full inventories of all resources on all routes is not possible;
- Accepted discussions in which generic impacts were discussed where necessary, but impacts to specific resources were also included for areas where resources were known.

Within this framework, it is understandable that the Court rejected blanket statements that a resource could not be analyzed due to lack of data, and that the impacts would be looked at

later. Although the Court does not say it directly, it seems like they understand that data exists in some areas, so BLM should discuss what is known for those areas. This seems like a potential approach that could be taken in the Supplemental EIS:

- Compile known information. If the volume of site-specific data is too large in some areas (such as Route X impacting Cultural Site Y), there is still likely to be some level of discussion possible on a broader scale (for instance, a network of routes within an ACEC designated for cultural resources).
- For compiling known information, a focus could be placed on resources identified through the scoping process, and through consultation with SHPO and tribes. The Court acknowledges that full resource inventories are not appropriate. However, addressing resources that are known to, and have been pointed out by, the public, regulators, and cooperating agencies should be a focus of this effort.
- Discuss generic impacts that could occur for areas where no specific data exist.
- Mitigate the generic impacts in much the same way impacts to undiscovered resources is handled for solar plants (basically, education and reporting discoveries, as well as limitation to a specific distance from routes).
- Avoid blanket statements about lack of data and plans for later analysis and coordination.

Based on early discussions with BLM cultural resources staff, we understand that there have been discussions with the SHPO regarding the additional data collection that would be required to support this analysis. BLM has contacted the SHPO regarding measures needed to address the Court's and SHPO's concerns pertaining to cultural resources issues in the 2005 EIS. Key elements of this plan are listed in the table below.

Summary of BLM Consultation with SHPO	
Issue	Action
Source and quality of cultural resources data	Update records search for each travel route
Consultation	Contact Tribes and interested parties
Outdated GIS Cultural Resource Geodatabase	Update the BLM GIS Cultural Resource Geodatabase
Lack of surveys	Sensitivity rating for the 33 sub-regions, including a predictive model Class III survey for specific undertakings where rehabilitation or improvement is proposed during the course of the WEMO revision
Lack of impacts assessment	Evaluation of impacts; includes visiting one unevaluated site in each of the 33 sub-regions, as well as areas identified by Tribes and interested parties as being sensitive Provide a methodology for collecting data for effects determinations Standard protection measures Monitoring Reporting

Based on a recent discussion with BLM archaeologist Jim Shearer, SHPO has verbally agreed that this Plan of Action will address their concerns. According to Jim, BLM's efforts to date to implement the Plan of Action have been to send consultation letters to the Tribes.

In general, we understand that the Supplemental EIS schedule certainly does not include additional time for baseline data collection for any resources, including the aggressive data collection envisioned in the table above. According to the schedule, AECOM is required to have an Administrative Draft Supplemental EIS developed by late December. This is barely enough

time to compile the existing data, let alone develop new data. Following the approach above would enable BLM to move forward with the existing data.

Court Issue 7 - Unusual Plants Assemblages (UPAs) and Riparian and Water Resources

The Court's conclusion regarding UPAs and riparian and water resources referenced back to their discussion of soil resources. Similar to soils, the EIS generally discussed the impact of OHV use and grazing on these resources. However, the EIS did not discuss any impacts of the specific route network on any specific resources. Similar to soils, the Court does not require a route-by-route discussion, but does require a discussion that is specific to the area and alternatives.

In addition to the findings of the Summary Judgment, the Remedy Order (Pg. 15) required BLM to implement additional information gathering and monitoring regarding riparian areas and UPAs, including new proper functioning condition (PFC) assessments for all of the springs and seeps in the WEMO area.

Potential Solutions in Supplemental EIS

See the discussion of cultural resources above. It seems that the same approach (discuss specifics about what is known, and discuss generic impacts and generic mitigation for other areas) could be applied to UPAs and riparian areas. The Court seems to have accepted this approach for the vegetation species.

A question arises here with respect to the Court's requirement that BLM perform PFC assessments for "all" springs and seeps in the WEMO area. If BLM has completed this effort, then the data need to be provided to AECOM for incorporation. If not, then we need to determine what the Court will accept with respect to this issue in the Supplemental EIS. As discussed above, field data collection is no longer possible in the timeframe necessary for AECOM's Administrative Draft EIS. Therefore, we need to understand what data exist upon which to build a baseline, and then move forward immediately. Although the Court ordered that the assessments be implemented, it is not as clear that they require the data from the assessments to be incorporated into the Supplemental EIS by the Court-ordered deadline.

Court Issue 8 - Sensitive Species - General

In its discussion of sensitive species (Summary Judgment, Pg. 52), the Court points out that the Plaintiffs only listed four species (Mojave fringe-toed lizard, Barstow wooly sunflower, desert cymopterus, and Mojave monkeyflower) in their complaint. The Court pointed out that the Plaintiffs did not raise a general deficiency regarding the analysis of biological resources, so the Court's evaluation only included the EIS discussions of those four species. Of those four species, the Court found that the discussions for the three vegetation species were adequate. The only species for which the discussion was found to be deficient was the Mojave fringe-toed lizard (discussed below).

Potential Solutions in Supplemental EIS

It should be noted that, although the Court only addressed the four species mentioned by the Plaintiffs, that does not mean that the Plaintiffs will not raise similar objections with respect to other species as part of the Supplemental EIS. The Court only chose to limit their review because the Plaintiffs did not raise an objection to the general process, and only specifically referenced the four species.

Therefore, even though the Mojave fringe-toed lizard analysis was the only biological analysis rejected by the Court, we cannot limit our review and revisions to this one species. Instead, it will be necessary to re-review all species discussions to identify those which followed the approach taken for the vegetation species, and which followed the approach taken for the Mojave fringe-toed lizard. Any discussions found to be similar to the lizard discussions will need to be corrected, as it is likely that the Plaintiffs would object to those discussions in the Supplemental Draft EIS.

Also, the Court cited the “CBD II” Court decision in which it was found that BLM had access to resource survey information Imperial Sand Dunes Recreation Area (ISDRA), but did not use that information in the EIS. It is not clear what the effect of this requirement is – it could potentially require a cataloguing of all resource inventories within the WEMO area, and then vetting these for relevance for inclusion in the Supplemental EIS. Another approach would be to conduct impact analyses for groupings of species in similar habitat, rather than a species-by-species analysis.

Court Issue 9 - Sensitive Species – Mojave Fringe-Toed Lizard

The Court’s rejection of the Mojave fringe-toed lizard analysis was very narrowly based on a comparison of two statements in the EIS. In the Species Account for the lizard, the text stated that there is no recent data on population status and density. However, the analysis stated that the primary routes would cover about one-fourth of the occupied habitat, and still concluded that the routes would not impact the species. The Court held that, after acknowledging that there was limited data and that the routes covered one-fourth of the habitat, the conclusion that there were no impacts is not supported by any factual basis.

In addition to the findings of the Summary Judgment, the Remedy Order (Pg. 14-15) required BLM to implement additional information gathering and monitoring regarding the status of the Mojave fringe-toed lizard and its habitat.

Potential Solutions in Supplemental EIS

In the Court’s Order, it does not appear that the discussion of the Mojave fringe-toed lizard was rejected because of a lack of baseline data. Instead, it appears that the text was rejected based on the EIS’s conclusion on no impacts even though the EIS acknowledged the existence of routes in a large portion of the habitat. Based on the Order itself, it appears that this issue could be addressed in the Supplement EIS with a couple of approaches:

- Consider the lizard habitat in the development of route alternatives, and document where routes were closed in an attempt to minimize impacts to the lizard and its habitat.
- Either provide additional support to the argument that there would be no impacts, or modify the conclusion to acknowledge that there would be impacts, and mitigate these impacts accordingly.

The Court’s requirement to gather additional information and monitor the status of the lizard and its habitat is problematic. As we read the Court’s Order, there are no objections raised to the sufficiency of the baseline data used. So it is not clear why the Court required monitoring of the Mojave fringe-toed lizard to supplement the baseline data. Also, similar to the requirement to perform PFC assessments for springs and seeps, it is not clear what the status of this monitoring is, or whether there is a requirement that the resulting data be used in the EIS.

Court Issue 10 - Air Quality

The Court evaluated several objections raised by the Plaintiffs with respect to the sufficiency of the air quality analysis. Of these, the Court held that BLM only analyzed the impact of air emissions on open routes, but did not analyze the impacts of OHV emissions that would occur within open areas.

Further discussion of the air quality was provided in the Court's Remedy Order dated January 28, 2011. On Pg. 9, lines 19-22 of the Remedy Order, the Court vacated the finding of consistency with the Clean Air Act. In addition, the Order (Pg. 14) required BLM to implement additional information gathering and monitoring regarding air quality in and around the open areas.

Potential Solutions in Supplemental EIS

The Court's rejection of the air quality analysis is based on a very specific analytical gap that can be filled by AECOM. The EIS already included quantification and analysis of air emissions on open routes, and the Court required that these be extended to the open areas. We intend to verify this approach with BLM's Air Quality specialist, and potentially propose to perform this analysis. While not raised by the Court, it seems that a similar analysis of air emissions resulting from OHV use in Limited areas would also be required.

With respect to the air conformity analysis, the Court did not specify the reasons for rejecting that analysis, although it is assumed it was because the air emissions associated with the alternatives were deemed to be incomplete due to the absence of an emissions estimate for the open areas. If this is the case, then the conformity analysis can be re-developed once the air emissions estimate is completed.

Court Issue 11 - Cumulative Analysis

The Court's Summary Judgment did not conduct a specific analysis of the cumulative impact analysis in the EIS. The Court concluded that, because the specific impact analysis (especially with respect to soils, cultural resources, and water and riparian resources) was deficient, the cumulative analysis was also deficient. Since these analyses are to be re-done, the Court chose not to address the Plaintiffs specific arguments.

Potential Solutions in Supplemental EIS

Although the Court chose to defer their evaluation of the cumulative analysis in the 2005 EIS, this was based only on the fact that the analysis would be expanded to include the above resources (soils, cultural resources, UPAs, Mojave fringe-toed lizard, and air quality). We propose to review the Plaintiff objections to the original cumulative analysis, and correct deficiencies if they are found.

3.0 Review of 2005 EIS

Use of the 2005 EIS as a basis for the Supplemental EIS raises several issues that must be considered. Most importantly, large portions of the document were either not challenged or were upheld by the Court, and it could therefore be argued to avoid modifying portions of the document that were acceptable to the Court. Aside from following the general principle of "if it isn't broken, don't fix it", a primary reason for this is that maintaining the same format and

general text, and limiting modifications, will facilitate the Court's review and allow them to focus on the correction of the previous deficiencies.

On the other hand, there are some reasons for evaluating the document and making modifications, if necessary. One substantial reason is that both the purpose and need and the alternatives to be evaluated must be changed and this, by itself, will require a substantial change in Chapter 4 of the document. A second reason is simply that, if the presentation of the information can be improved to make it an easier document to work with, then those changes should be made. The following subsections describe how the 2005 FEIS was structured, and how that structure needs to be modified for the Supplemental EIS.

3.1 Purpose and Need

The basis for the entire EIS is the Purpose and Need (P&N) statement. For the 2005 FEIS, the P&N was to establish a regional biological strategy to conserve plant and animal species and their habitats to prevent future listings, and to establish an efficient, equitable and cost-effective process for complying with threatened and endangered species laws.

Within the framework of that P&N, the 2005 FEIS evaluated seven alternatives with a focus on protecting biological resources. These seven alternatives primarily consisted of different configurations of newly-designated Desert Wildlife Management Areas (DWMAs) and Areas of Critical Environmental Concern (ACECs), and different management strategies associated with those areas and their land uses (grazing and recreation among them). Within each of the seven alternatives the route network remained the same, although certain management prescriptions (route designations and use limitations) were varied among them.

The Court decision did not eliminate the framework of DWMAs and ACECs that were established in the 2006 WEMO ROD. Instead, it very specifically rejected the route network specified within that framework. As a result, the NOI for the Supplemental EIS, while not specifying a P&N, does state that the document will address two components: 1) Alternatives for amending the language of the Motorized Vehicle Access Element of the CDCA Plan; and 2) Alternative processes for designating travel routes within the sub-regional areas of the WEMO Plan area.

These differences in the P&N result in a different structure in which the route network is defined and analyzed. In the 2005 FEIS, the process was as follows:

P&N = Conserve species → Route network designed to conserve species → Analysis of ability of route network to conserve species

Under this framework, the route network was designed one time specifically for protection of biological resources. Although the impact of that designed network on other resources was evaluated, the other resources were not directly used, in the EIS, to modify that network.

In the Supplemental EIS, the process should be:

P&N = Define network → Alternative networks and management strategies to address all resource concerns → Analysis of alternatives across all resources

Note that this change requires substantial de-linking of the route network from the original biologically-driven P&N. The purpose now is not to protect biological resources. The purpose

now is to define the network, and to determine how the network will be modified in the future in consideration of all resource concerns.

3.2 Structure of Alternatives

Because the P&N is to change, the structure of the alternatives to be evaluated must change. What should have happened in the 2005 FEIS was that each of the seven alternatives should have had a separate route network defined. This would have made sense – for example, Alternative A was intended to be a multi-species conservation strategy, and this strategy would have been composed of specific DWMA and ACEC designations, specific management prescriptions, and a specific route network designed to accomplish that strategy. Similarly, Alternative E, designed to enhance recreation opportunities, would have had a different set of DWMA and ACEC designations, management prescriptions, and route network to accomplish that goal. Each of the seven different alternatives would have then been evaluated against all resources.

Based on the original structure, and the fact that the major point of the Court's decision was that the route networks were not varied among alternatives, one approach towards the Supplemental EIS could be to simply re-evaluate the same alternatives, but vary the route component included in them. This has appeal, on the surface, in that it would be simple to implement, and would achieve the goal of modifying the original EIS (most of which was acceptable to the Plaintiffs and the Court) as little as possible. However, this approach is probably not an option, because it could potentially re-open other decisions that do not need to be re-opened. As an example, the ROD selected implementation of certain DWMA and ACECs. It is possible that, had the route networks been varied, a different set of DWMA and ACECs may have been selected. As a result, using the same framework of alternatives does not make sense.

Instead, it is recommended that the scope of the alternatives be developed within the framework of DWMA, ACECs, and other decisions made in the 2006 ROD. We now have established areas. Now, we can vary the route network within that framework, evaluate its impacts with respect to all resources, and then select a network that meets all of BLM's multiple use needs and minimization criteria.

3.3 Updates of Affected Environment

This issue is addressed in more detail in Section 5 below, where specific resource-by-resource considerations are discussed. However, it is useful here to point out a general challenge posed in the Supplemental EIS. We are aware that much of the specific data presented in Section 3 needs to be updated because, by the nature of the resource, data are constantly updated. For instance, air quality data, air quality attainment status, traffic volumes, and socioeconomic data are resources that are constantly updated on government websites, and which must be updated in the Supplemental EIS. Also, we anticipate that BLM will have more specific resource survey data to be incorporated in specific areas. We are also aware that BLM has new guidance and criteria for evaluation of visual impacts, paleontological impacts, and cultural resources impacts. Each of the resource description will have to be revised.

Of greater difficulty is the extent to which the general background discussions, based on literature search and published information, will need to be updated. Just as an example, the 2005 FEIS contains several pages of discussion of the life history of the desert tortoise. It also contains site-specific survey data, and the regulatory status of the tortoise. We understand that

the site-specific survey data and regulatory status sections need to be updated. What is less clear is the need to update the background literature search and life history discussions. This would be an immense task, and would apply to dozens of species, cultural resources, and other resources. We are aware that there is a great deal of additional literature just on the tortoise since 2005, and it is likely that substantial additional literature is now available on many other resources.

3.4 CEQA Status of Supplemental EIS

We note that the original 2005 EIS was a joint NEPA/CEQA document, and also acted as an Environmental Impact Report. However, the CEQA link was not explained very well in the document. Section 1.1.3 describes the role of CEQA in the document, and Section 4 mentions the CEQA significance criteria. However, almost no CEQA significance conclusions are reached in the document.

The role of CEQA in the Supplemental EIS, if any, is not clear. Neither the NOI nor AECOM's statement of work mention a CEQA role. Therefore, it is assumed that the Supplemental EIS is not a joint CEQA document. However, the reason for this is not clear. If the geographic scope of the original document included private lands, then does not the Supplemental EIS also cover private lands? The answer may be that the scope of the Supplemental EIS, being limited to designation of routes on public lands, is more limited in geographic scope.

Overall, we just need to understand the role of CEQA in the Supplemental EIS. If this is to be a joint document, then the manner in which CEQA conclusions are presented will need to be revised. If not, then any previous discussions of CEQA significance will need to be purged.

4.0 Scoping-Identified Issues

As discussed in Section 1, the Scoping Report (dated June 2012) acts as a compilation of issues raised in the public scoping process. Many of those comments mirror the requirements of the Court, as discussed above, and will be addressed as required by the Court. All other comments will be considered by BLM and AECOM in the development of the Supplemental EIS, as applicable. The comments cover the range of the entire NEPA process and route development process and, therefore, cover issues which are both within and not within the purview of AECOM. For example, comments on the NEPA process, development of the route alternatives, and recommendations for public involvement are entirely within BLM's purview, and need to be considered by BLM when conducting those activities. Alternatively, comments on the data and route inventory, analytical methods, mitigation, and specific resource impacts will be considered by AECOM in the same manner that scoping comments are considered on other EISs.

We specifically reviewed the scoping comments to determine how the revision of the P&N and the structure of the alternatives could be received. Of specific concern was the possibility that comments had been made requesting conformance with the original P&N of the 2005 EIS, and continuing evaluation of alternatives within the same framework. In fact, no such comments were made. The comments on the P&N and the alternatives focused on the route networks and the modification of the route designation process.

5.0 General Update Needs

In addition to addressing the Court's requirements and considering the public scoping comments, the updates to the 2005 EIS that will need to be incorporated into the Supplemental EIS will need to include:

- A general update of baseline resource data, to reflect the later date for the Supplemental EIS; and
- Incorporation of new BLM guidance and NEPA requirements.

The following subsections summarize some of the issues that will require general updating.

Air Quality

The 2005 EIS was likely based on baseline air quality data, attainment status, and existing State Implementation Plans (SIPs) that were available and in effect in the 2002 to 2004 timeframe. For each of these issues, AECOM will perform literature searches, as necessary, to update the baseline and regulatory status. The updated information will be included in the Supplemental EIS.

In addition, the manner in which EISs must address climate change is constantly being modified, and has undergone many changes since 2005. The Supplemental EIS will need to provide an analysis of climate change in accordance with current CEQ, EPA, and BLM requirements.

Geology, Soils, and Water

It is unlikely that the affected environment for geology, soils, or water quality in the project area has changed substantially since the 2005 EIS. There may be additional data available, but the actual baseline condition associated with each of these resources is unlikely to have changed. AECOM will update this information if specific data are provided by BLM, but will otherwise use the affected environment section from the 2005 EIS will remain the basis for these analyses.

We understand that BLM has issued general procedural guidelines with respect to paleontological resources since the 2005 EIS was issued, including Instruction Memorandum (IM)-2008-009 and IM-2009-011. IM-2008-009 implemented the Potential Fossil Yield Classification (PFYC) System, which is to be used to classify paleontological resource potential on public lands in order to support land use planning. We will need to work with BLM to understand the extent to which classifications have been done in the WEMO area, and how to incorporate this information into the Supplemental EIS.

Wildlife and Vegetation Resources

It is unlikely that the baseline information, such as areas inhabited by the various species, has changed substantially since the 2005 EIS. Similar to the discussion above, there may be additional data available, but the actual baseline condition associated with each of these resources is unlikely to have changed. What will have likely changed is the regulatory status of some of the species. In addition, it is likely that BLM will have more detailed data regarding species and habitat presence in specific areas of interest.

With respect to regulatory status, there are likely to have been changes in the federal or state designation of certain species as threatened or endangered since 2005. As a limited example,

the bald eagle was delisted from the Endangered Species List in 2007. We are also aware of substantial changes in the management of many species (golden eagle, desert tortoise) by CDFG and USFWS in recent years. These changes will need to be reflected in the Supplemental EIS, and may affect previous impact conclusions or mitigation measures presented in the 2005 EIS.

AECOM will also need to understand the status of the 2007 Biological Opinion (BO), and address this in the wildlife and vegetation sections of the Supplemental EIS. Our understanding is that the BO was not affected by the Court's decision. However, because it was developed two years after the 2005 EIS, it likely has updated information and mitigation measures that need to be captured.

Socioeconomics

Similar to Air Quality data, socioeconomic baseline data in EISs is very time specific, and must be updated in EIS revisions and Supplemental EISs. AECOM will adopt the format and level of detail used in the 2005 EIS, but will update the data contained in the document to reflect most current data (2010 US Census data).

Recreation

It is assumed that BLM is incorporating the most updated recreation uses into the route alternatives, as an element to be considered in developing those alternatives. That information would be maintained as part of the documentation for the development of the route alternatives in AECOM's Task 3.

Grazing

As discussed above with respect to Court Issue #5, the Court specifically raised the lack of analysis of grazing impacts in their Summary Judgment, and included this lack as part of the rationale for rejecting some parts of the 2005 EIS. The Court's Summary Judgment does not specifically refer to the grazing impacts as part of a cumulative analysis, so it is assumed that the Court is rejecting the analysis of direct and indirect impacts of the portion of the alternatives that address management prescriptions for grazing. If so, then it is assumed that these management prescriptions will remain in the purpose and need for the Supplemental EIS, and will need to be evaluated throughout the document.

Energy Production, Utility Corridors, and other Land Uses

In general, the scope of approved land uses would need to be updated from the baseline used in the 2005 EIS. However, given the proliferation of solar and wind developments (both approved and proposed), it is likely that a specific discussion of these developments would need to be provided. These discussions, as well as the alternative route networks, would need to incorporate route changes necessitated by occupation of large land areas by solar plants, as well as the challenges associated with access roads from these projects potentially causing proliferation of unauthorized routes.

Cultural and Historical Resources

In general, the status of cultural and historical resources that may be impacted would not have changed since 2005. Additional data are likely available, but it is unlikely that the status of existing resources has changed substantially. However, as discussed above with respect to Court Issue #6, the previous EIS did not include an adequate description of the baseline resources. Therefore, the entire approach to updating the cultural resources data needs to be discussed with BLM.

We are also aware that BLM issued IM-2007-030 in 2006, for clarification of cultural resource considerations in OHV designation and travel management. This IM specified how the area's Class I Inventory should be considered when designing a planning area travel system for proposed designation, how the Area of Potential Effect (APE) should be defined, and how potential effects should be determined. It is assumed that the requirements of this IM were not considered in the 2005 EIS, but that its requirements are being considered by BLM in designing the route network alternatives. Similar to recreation uses, that information would be maintained as part of the documentation for the development of the route alternatives in AECOM's Task 3.

Visual Resources

Through AECOM's work with the Calnev pipeline project, we have access to the Barstow Field Office Visual Resource Inventory files, and we are aware that these inventories were conducted in 2010. The Needles Field Office Inventory was also developed in 2010. We are not currently aware of the date of the Ridgecrest Field Office inventories, but it seems likely that these may also not have been available for the 2005 EIS. Therefore, these data were not available for the 2005 EIS.

In fact, the Affected Environment Section of the 2005 EIS did not address visual resources at all, and the impact analysis in Section 4 only made some cursory statements regarding visual resource impacts. Therefore, the visual resources baseline needs to be developed from scratch, and the impact analysis needs to be re-developed based on the newly available information.

Special Designations (Including Wilderness and Wilderness Characteristics)

Although it is not certain, it seems likely that the existing network of specially designated areas (Areas of Critical Environmental Concern [ACECs]), wilderness, Wilderness Study Areas, and Desert Wildlife Management Areas [DWMAs]) has not changed substantially since the 2005 EIS. Therefore, the baseline data and impact analysis for those areas may not require much revision.

BLM Manuals 6310 and 6320 issued on March 15, 2012 clarifies that the requirements of Sections 201 and 202 of FLPMA remain in effect, which requires BLM offices to conduct and maintain inventories for wilderness characteristics, and to consider these lands in their land use plans. It is possible that the BLM offices involved in the WEMO project have conducted these inventories, and that they are available for incorporation into the Supplemental EIS. If not, the issue will at least require discussion in the Supplemental EIS. The impacts analysis will focus on how the travel management actions affect the potential future ability of BLM to manage these areas for wilderness characteristics. Planning decisions to determine future management of these areas is outside the scope of this effort.

Noise

Similar to the discussion of geology, soils, and water, it is unlikely that that the affected environment with respect to noise issues has changed substantially since 2005. It is possible that some additional noise sources, such as wind turbines, may have been implemented. It is also possible that some additional sensitive receptors may have appeared, possibly as a result of expansion of residential areas into areas that were previously undeveloped. AECOM will propose to work with BLM to identify any substantial additional noise sources, and any substantial additional sensitive receptors, for inclusion in the analysis.

Cumulative Scenario

It is assumed that the cumulative scenario will need to be modified from the 2005 EIS. The major expected change would be with respect to energy projects, although there may be other new developments that need to be considered. We will be working with BLM to acquire an updated list of cumulative projects.

Transportation and Travel Management Network

Since the publication of the 2005 EIS, BLM has issued a variety of revised guidance related to Travel and Transportation Management (TTM). These include:

- IM-2004-005, Clarification of OHV Designations and Travel Management in the BLM Land Use Planning Process (this may have been incorporated into the 2005 EIS).
- March 2005 revision to BLM Land Use Planning Handbook (H-1601-1).
- 2006 Roads and Trails Terminology
- IM-2007-030, Clarification of Cultural Resource Considerations for OHV Designation and Travel Management (also discussed with respect to cultural resources above).
- IM-2008-014, Clarification of Guidance and Integration of Comprehensive TTM into Land Use Planning.
- 2012 Travel and Transportation Management Handbook

The New TTM guidance requires these products (from Handbook H-8342-1):

- Criteria to select or reject specific roads, primitive roads, and trails in the final network; to add new roads, primitive roads or trails; and to specify limitations;
- A map of roads, primitive roads, trails for all travel modes and uses, including motorized, non-motorized and mechanized travel;
- Definitions and additional limitations for specific roads, primitive roads and trails;
- Guidelines for managing and maintaining the system. This includes the development of route specific road, primitive road and trail management objectives, a sign plan, education/public information plan, enforcement plan, and a process requiring the application of engineering best management practices;
- Indicators to guide future plan maintenance, amendments, or revisions related to the travel management network;
- Needed easements or ROWs;
- Provisions for new route construction and use or adaptation/relocation of existing routes;
- A plan for decommissioning and rehabilitating closed or unauthorized routes;
- A monitoring plan; and

- Classification of all roads, primitive roads and trails, designated for travel in a TMP as assets in FAMS. All roads, primitive roads and trails will also be identified as such in the GTLF geospatial database.

It is expected that the requirements of these various documents are currently being used by BLM in their development of route network alternatives, and that the manner in which they are incorporated is included within any written documentation.

In addition to implementing the new guidance information, AECOM has also developed the following list of questions regarding the development of the alternatives by BLM.

- Will the OHV area designations from the 2005 WEMO ROD remain the same and only the routes would change (location and designation)? Or possibly changing area designations as well?
- Will TMAs be developed?
- Do we want to change/add any mitigation measures based on monitoring results? For instance regarding closing routes, signage, etc.
- Are we going to classify routes into roads, primitive roads and trails, also transportation linear disturbances?
- If retaining in the new process, do we need to update the issues and goals of each Motorized Access Zone?
- Are we using new guidance regarding RS2477 routes and language to include in document?
- Will the new alternatives relate to routes only? We know that they will also include generic management prescriptions. Will they also include designation of support facilities (staging areas, restrooms, etc.)?
- Will there be mitigation for loss of OHV opportunities (closing routes)?
- Is the CAPA area part of this project?
- Will routes be analyzed on a regional or subregional basis?

6.0 Conclusions

The process of developing this summary, as an initial task for AECOM, has been extremely helpful in bringing us up to speed on the specific deficiencies in the 2005 EIS that must be corrected in the Supplemental EIS. Significant challenges that were highlighted for us as a result of the review include:

- The extent to which the Court's issues must be addressed both in the development of route network alternatives (which we understand to be BLM's task) and in the Supplemental EIS analysis (AECOM's task). AECOM's Task 3 requires us to compile the documentation for the selection of route alternatives, and Task 4 then requires AECOM to consider the

minimization criteria in their analysis. However, our understanding is that BLM is already engaged in the route selection process, and that AECOM is not tasked with their selection.

- The issues that result from modifying the P&N and the structure of the alternatives from that used in the 2005 FEIS.
- The need to incorporate BLM's most recent management tools, which were not in existence at the time of the 2005 EIS. Many of these tools will require substantial modification of the Affected Environment sections of the Supplemental EIS, because they require a different method of inventorying or classifying the resources.
- The need to understand the source of baseline information to be used in the Supplemental EIS. Specifically, the Court's Summary Judgment specified concerns with the manner in which the baseline cultural resources data were used, and we understand that the approach is currently being developed with the SHPO. Also, we note that the Court's Remedy Order required the collection of additional field data, although the status of that collection, and the manner in which it needs to be used, is not clear.

Our current schedule requires delivery of an Administrative Draft Supplemental EIS in late December. To do so, we need to work with BLM to understand the status of the input materials (route network alternatives and baseline data), and to assist in expediting their completion.