



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers  
WASHINGTON, D.C. 20314-1000

REPLY TO  
ATTENTION OF:

CECW-PM (1105-2-10b)

17 OCT 2003

MEMORANDUM FOR Commander, South Pacific Division (CESPD-CM-P)

SUBJECT: Rillito River, Pima County, Arizona (El Rio Antiguo) – Alternative Formulation Briefing (AFB) Guidance Memorandum

1. Reference is made to the following:

a. E-mail, CESPD-CM-P, 28 August 2003, subject: Response to Comments Rillito River, Pima County, (El Rio Antiguo), transmitting responses to the policy compliance review comments; and

b. E-mail, CECW-PM, 14 August 2003, subject: Rillito, transmitting AFB policy compliance review comments; and

c. Memorandum, CESPD-CM-P, 9 May 2003, subject: Submittal of Alternative Formulation Briefing (AFB) Package for the Rillito River, Pima County, Arizona Feasibility Study (El Rio Antiguo), requesting Washington level review of the pre-conference material for the AFB.

2. The subject AFB was held on 4 September 2003. Participants in the conference included representatives from HQUSACE, CESPD, CESPL, and the sponsor. The AFB was held to obtain HQUSACE involvement in the preparation of the Draft Feasibility Report prior to release for public review. A complete summary of the comments, discussions and required actions reached during the AFB is enclosed.

3. As discussed during the AFB, the district will need to work with SPD to review proposed recreation features and determine, in accordance with policy, the appropriate cost-sharing for such features for inclusion in the draft feasibility report.

4. Upon satisfactorily responding to the action items contained in the enclosure, the district may release the draft feasibility report for public comment. To assist in expediting the policy review process, an AFB compliance memorandum should be prepared indicating how and where each of the remaining concerns were addressed in the draft feasibility report.

FOR THE COMMANDER:

WILLIAM R. DAWSON, P.E.  
Chief, Planning and Policy Division  
Directorate of Civil Works

Encl

**Alternative Formulation Briefing  
Planning Guidance Memorandum  
Rillito River, Pima County, AZ  
Ecosystem Restoration Study, Pre-AFB Package**

**GENERAL**

1. "Rio Antiquo" is not the correct project name. This is a study funded under the line item of "Rillito River, Pima County". Change the name accordingly throughout the report.

District Response: Concur. "El Rio Antiquo" is the local name for the study and future project. A local name was necessary to distinguish the study from the recently completed Corps project called "Rillito River, Arizona". There is also an 1135 called Rillito River Riparian in the same reach. If the name "El Rio Antiquo" is entirely dropped from the restoration study report, the ecosystem restoration study could be easily confused with the other studies/projects. Public involvement efforts have included both the name "El Rio Antiquo" and "Rillito River, Pima County". Dropping "El Rio Antiquo" may cause confusion and negate public involvement. The District proposes that both names be included in the report in a format acceptable to CECW-PC with all legal references being made to the name used for funding.

Discussion: There are a number of projects being pursued by the Corps and others on the Rillito River and as such there is a need to distinguish among them. In this vein, the district would like to refer to the project informally as El Rio Antiquo.

Required Action: The district will include in a brief discussion in the introduction of the draft feasibility report providing an explanation with regards to the locally preferred name for the project and use it henceforth throughout the document.

2. For the Draft Feasibility Report, the District should review and consider the quality of all text, exhibits, tables, maps, photos, plates, graphics etc it chooses to use. While there are a great number of such visual aids in the report, several (if not most) are unclear or unreadable. For examples, in the EIS, Figure 3-4 is an illegible reproduction of an aerial photograph and Table 3-2 has half the left hand column cut-off. Missing pages and the numerous incorrectly labeled tables and visual aids detract from the report's clarity, rather than add to it.

District Response: Concur. Additional quality assurance review of the report will be implemented to preclude a recurrence of these problems.

Discussion: Noted.

Required Action: The district will review the draft feasibility report to determine the need for each graphic with respect to purpose and quality.

3. The EIS cannot be an attachment or appendix to another report. Per ¶13 of 33 CFR 230, an EIS for a feasibility report may be a separate document, combined with another planning report, or integrated into the report in accordance with 40 CFR 1500.4(o) and 1506.4. Since this is a combined report, the EIS shall follow the format in 40 CFR 1502.10, follow the main report, use colored paper, and not be attachment or appendix. Comply with the CFRs and reword all instances in the Feasibility Report where the EIS is referred to as an attachment, etc.

District Response: Concur. The Draft EIS will be appropriately titled and reproduced. All references to the document in the main report will be changed accordingly.

Discussion: Noted.

Required Action: The district will retitle the Draft EIS as outlined in the District Response above.

#### **REAL ESTATE**

4. Neither the District nor the Division identified any RE issues for resolution at the AFB. Further, contrary to the statements contained in the District and Division transmittal memos, the REP forwarded by e-mail is not complete, does not contain a RE cost estimate, and contains little specific information on the LERRD requirements for the proposed project. Because of the above, the first opportunity for meaningful review by CERE-C will be when the District submits a draft report for that purpose.

District Response: The District will prepare and submit a revised and complete real estate plan to address the items noted in this review. The plan formulation for recreation features and whether or not these fit the modality of incidental recreation (Included as part of the single project) or separate recreation will be on the agenda for the AFB conference.

Discussion: Noted.

Required Action: The district will prepare and submit a draft Real Estate Plan with the draft feasibility report.

5. The District must prepare, and the draft and final feasibility reports must include, a comprehensive Real Estate Plan (REP) prepared in accordance with the requirements of Chapter 12 of ER 405-1-12. Among other matters, the REP should describe the acres and interests provided by the Sponsor for the prior flood control project that will also be required to implement the proposed project; and it should include a discussion on additional LERRD requirements applicable to the recreation features that are reported to be part of this project.

District Response: As stated above, the District will prepare and submit a revised and complete real estate plan to address the items noted in this review. The plan formulation for recreation features and whether or not these fit the modality of incidental recreation (Included as part of the single project) or separate recreation will be on the agenda for the AFB conference.

Discussion: Noted.

Required Action: The district will prepare and submit a draft Real Estate Plan with the draft feasibility report.

### **PLAN FORMULATION**

6. Sustainability – The projected future land use for Pima County (reference Pima County Master Plan), is that another estimated 15% of the area's existing natural areas are targeted for development. This increase in development is cause for concern that the proposed project is not sustainable. At what point will the county's development make water harvesting from tributary confluences infeasible? The district needs to consider the Non-Federal Sponsor's ability to provide adequate water resources for the life of the project in light of the pressures on these resources from other development.

District Response: Concur. The projected future land use for the entire county is expected to increase by 15%, however, this area is zoned low intensity urban, low intensity rural or for resource conservation along tributaries. If, however, these areas were to have increased development, runoff would increase, making water for harvesting more available, not less. The plan relies on commitment of reclaimed water to sustain the restored areas. Prior to construction of the project, a commitment of water resources would be made on the part of the sponsor. The report will be revised to present these facts more clearly in the context of the sustainability of the tentatively selected plan.

Discussion: Noted. The local governments are working to keep the area from overdeveloping. Degradation occurred in the 50s and 60s prior to flood plain management implementation at the local level. The intent is to incorporate it into the comprehensive landuse planning process.

With regard to water harvesting, it is expected that use of harvested water will reduce O&M costs by using less reclaimed water. It is also expected that the water harvesting will improve water quality by capturing storm water runoff.

Required Action: The district will ensure the draft feasibility report includes a full discussion of local land use planning processes to ensure the ecosystem restoration project benefits are realized. Further, a discussion of water harvesting operations and its relation to reclaimed water requirements will be outlined in the draft feasibility report.

7. Long-term approach -- The district needs to consider this proposed project in the context of the overall regional plan that addresses the reduction or elimination of the causes of environmental degradation, in addition to structural solutions to restore degraded areas. The district needs to look at the problems and opportunities of the region in a holistic and integrated manner to assure that the restoration project will truly meet the long-term goals of the community and the Corps.

District Response: Concur. The causes of degradation along the Rillito are human causes and primarily due to urbanization. These regional problems are being addressed by the sponsor as part of regional planning efforts. The sponsor has instituted a number of measures to deal with these problems as listed below:

- Comprehensive Land Use Plan - guides overall land use & densities
- Zoning Code - enforces Comp Plan guidelines
- ESLO (Environmentally Sensitive Lands Ordinance) - comprehensive policies and regulations for environmentally sensitive areas
- Floodplain Management Ordinance
- Floodplain management regulations
- Riparian Habitat Protection regulations
- Detention/retention of stormwater
- Grading Ordinance - limits amount of land disturbance
- NPPO (Native Plant Preservation Ordinance) - protects upland native vegetation
- Floodprone Land Acquisition Program - acquisition of floodplain for public safety & open space
- Open Space Acquisition Program - acquisition of property for protection natural and cultural resources
- SDCP (Sonoran Desert Conservation Plan) - comprehensive plan to preserve natural and cultural resources

This project and other Corps projects like it while clearly viable as stand alone projects, are formulated to view the region holistically. The discussion in the report will be revised to address this issue.

Discussion: Noted. See discussion for previous item.

Required Action: The district will ensure the draft feasibility report includes a full discussion of local land use planning processes to ensure the ecosystem restoration project benefits are realized.

8. Table 5.6. Plan Formulation matrix -- The logic of the table is difficult to follow, given that for some variables a higher number is beneficial and for other variables a lower number is better -- however all values appear to be summed to get a "bottom line" answer. The district should find a clearer method for displaying the results of this extensive analysis.

District Response: Concur. Throughout the table the alternative that ranks best on any given category is awarded a 1 and the one ranking worst receives a 4. Notations in the first column indicating more is better or less is better were intended to help clarify the basis for the rankings. These notations will be deleted in order to eliminate the confusion they have introduced.

Discussion: Noted.

Required Action: The district will review the referenced table to ensure ranking weightings are appropriately and consistently described in the draft feasibility report.

9. Discount Rate -- The report (page IV-53) and the Economic Appendix (page 1) are inconsistent regarding the discount rate used in the analysis of benefits and costs. Please rectify and review the analysis to be certain that the correct price level and discount rate are used throughout the analysis.

District Response: Concur.

Discussion: Noted.

Required Action: As noted in the District Response, the district will ensure the draft feasibility report is using the correct price level and discount rate throughout the document, including the economic appendix.

10. Cost Sharing, Recreation Features -- The district references the use of Policy Guidance Letters 36 and 59 regarding the cost sharing of recreational features. It is important to note the lists of features that may be cost-shared as part of an environmental restoration project. While signage and comfort stations are acceptable, the cost sharing of equestrian trails and ramps would not be permissible.

District Response: Concur. Ramps and trails planned for the site will be multi-purpose as required by Planning Guidance Letters 59 and 36. One of those uses is equestrian. Because equestrian use of the river is high this use is specifically mentioned because it is important to direct equestrian traffic away from use of restored areas. The report, EIS and appendices will be revised as necessary to discuss the multi-purpose nature of the trails and ramps. In addition, the report will be revised with recreation as a secondary purpose and a B/C ratio calculated.

Discussion: There is a need to distinguish between those features that are required to realize ecosystem benefits that can be used for recreation purpose. For example, ramps for O&M could be used for recreation but are required for project purposes. Further, realignment of the existing trails would be seen as a project feature versus a stand-alone recreation feature. The

provision of comfort stations, on the other hand, are not required to realize ecosystem benefits and would be treated as recreation features and cost shared accordingly. These features need to be delineated in order to define real estate needs and ultimately cost sharing requirements.

Required Action: The district will review the proposed recreation features and determine which are required to realize ecosystem restoration benefits and which are desired recreation features in the draft feasibility report.

11. Cost Sharing, Associated Costs -- Page VI-14 of the Main Report appears to include the total operation and maintenance costs of the project in the calculation for associated costs. The actual associated costs would be just the cost of providing the water to the project, or \$852,000. The additional \$408,000 would appear to be the other O&M costs. The district should verify these various costs and rectify the report, if warranted.

District Response: Concur. The reference to Associated Costs on page VI-14 will be revised to reflect the correct amount. Tables depicting alternative costs will be revised to present the annual cost of water as a separate line item.

Discussion: Noted.

Required Action: The district will revise the draft feasibility report to identify the provision of water as an associated project cost.

12. Letter of Support -- The AFB package references a letter of support from the sponsor (page XI-1); however, no such letter appears in the report. The letter would not be required in an AFB package, although the district should be sure to include it in the draft report.

District Response: Concur. A letter of support will be included in the draft report.

Discussion: Noted.

Required Action: The district will ensure a letter of support from the sponsor is included in the draft feasibility report.

13. The district has done a good job developing alternatives. However, there is no discussion supporting how the minimum of 219 units of average annual output was determined, so the number appears arbitrary. This number is a critical screening factor of cost effective alternatives so it must be defended as more than best-guess or the professional judgment of a team.

District Response: The basis for use of 219 units of annual output was the acreage of existing habitat plus existing river bottom acres. The report will be revised to reflect the basis for this number.

Discussion: There is a need to more fully describe the derivation of project outputs and any associated targets used to evaluate alternative plans in the draft feasibility report.

Required Action: The district will include a discussion of the derivation of project outputs and use of any targets in the plan formulation process in the draft feasibility report.

14. The final evaluation in the Feasibility Report and EIS must compare and contrast the effects of all alternatives that meet the project purpose and objectives (the final array includes Alt. 2E, 2F & 2H) on the significant resources that may be significantly affected, not just the tentatively selected alternative. The EIS is a tool to help determine the tentatively selected alternative. Further, economics is not the only factor to be considered when selecting an alternative. The use of CEA and ICA addresses the best bang for the buck, but it does not consider the social and cultural values, issues of sustainability, or the regional ecological significance of the project. Given the non-Federal sponsor's emphasis on maximizing the ecological outputs of the project, a small increase in the average annual cost per unit of output may be desirable to the locals although ICA may not support it. It does not appear that the differences in value of recreation benefits and incidental flood damage reduction among the alternatives have been considered in the selection. If the recreation and incidental flood damage reduction benefits are directly related to the ecosystem restoration are considered (and they must be considered under NEPA as indirect and/or cumulative effects of the project), the NER Alternative may not be the best alternative. According to ER 1105-2-100, §2-3.f.(3), if recreation benefits are considered in the Alternative Selection then both NER and NED must be considered.

District Response: Concur. The final evaluation in the EIS will be revised to better compare and contrast all alternative impacts of the final array on significant resources. The report will then reflect the discussion. These other factors (sustainability, regional ecological significance and social and cultural values) were considered in the selection of the alternative and a more detailed discussion of their use in the selection process (in addition to economic values) will be included. Recreation and flood damage reduction were considered in the trade-offs analysis and additional discussion will be included to reflect this fact. The trade-off between the NER and NED benefits will be addressed using a B/C ratio when the recreation analysis is revised and included as a project purpose rather than as an incidental benefit.

Discussion: Noted. The district acknowledges the need to include an evaluation of all the alternatives in the final array in the EIS.

Required Action: The district will include the environmental analysis of the final array of alternatives in the draft EIS.

15. Reasonable alternatives that are not in the Corps' jurisdiction are not discussed. Discussion of these alternatives is required in the EIS by Corps regulations and 40 CFR 1502.14(c) and should be included in the Main Report.

District Response: Concur. A discussion of reasonable alternatives that are not in the Corps jurisdiction will be added to the EIS and summarized in the main report.

Discussion: Noted.

Required Action: The district will include a discussion of reasonable alternatives in the draft EIS.

### **NEPA & ENVIRONMENTAL COMPLIANCE**

16. The transmittal says use of 404(r) is an issue. Use of the 404(r) exemption, must be reviewed and applied according to guidance and precedent. This guidance includes CEQ's *Guidance on Applying Section 404(r) of the Clean Water Act to Federal Projects Which Involve the Discharge of Dredged or Fill Materials into Waters of the U.S., Including Wetlands*, 17 November 1980 (<http://tis.eh.doe.gov/nepa/tools/guidance/Guidance-PDFs/14637.pdf>). For 404(r) to be allowable the intent to use it must be clearly stated in the DEIS and EIS. Carefully describe how each requirement of 404(r) has been addressed in the discussion of compliance with the Clean Water Act in §1.5, and in the EIS Summary. Since all information usually included in a 404(b)(1) evaluation must be in the report Congress uses to authorize the project prior to the authorization, the district should include a completed 404(b)(1) evaluation as an appendix to the EIS. This 404(b)(1) evaluation must address any fill placed in the water above or below the dam.

District Response: Concur. The respective documentation will be provided as suggested in the appropriate draft and final NEPA documents, to include clear discussion

Discussion: The district explained that sponsors are interested in pursuing Section 404(r) after appropriate coordination with responsible parties for a number of reasons, including substantive cost savings during construction on the part of the local sponsor (a substantive fee is typically charged by permitting agencies to the state in pursuance of a 401 water quality permit). While the district understands the concerns expressed by HQUSACE with the message being sent and received by the public, OMB, CEQ, and Congress, there are local needs that must be considered. The district also understands the potential to invoke 404(r) for contingently authorized projects is limited. The need for a letter documenting coordination of the districts intent to pursue Section 404(r) in the draft feasibility report was discussed.

Required Action: The district will consider the pros and cons of pursuing a Section 404(r) for this project. If the district chooses to pursue a Section 404(r), a letter from the State of

Arizona documenting their support related to Section 404(r) for this project will be included in the draft feasibility report.

17. The District should defend the need for an SEIS-ROD instead of an EA-FONSI. Based on the PDEIS, the only resources likely to be significantly affected by this project are the improvements to the Biological Resources (including water quality as a primary habitat factor) and Recreation Resources. The significance of these affects is arguable, since both the Main Report and PDEIS say the \$57M project improves the stream-riparian habitats from "poor" to "good". Expected recreation improvements are directly linked and presumably proportionate to the biological improvements, so these affects are likely to be minimal. The hefty price tag is not sufficient to require an EIS-ROD, an EA-FONSI may be sufficient.

The PDEIS is much too long due to encyclopedic information and inclusion of excessive information about resources that are not likely to be significantly affected. CEQ guidelines (40 CFR 1502.7) suggest 150 pages as the upper limit for EISs unless they are addressing extremely complex projects (e.g., a major power plant, a major navigation project, a basin-wide restoration), and these should be under 300 pages. This project deals with an important resource, but it is not so large or complex that more than 150 pages are needed to meet the purposes of NEPA. Detailed information should be incorporated by reference; it should not be included in the EIS.

District Response: Concur in part. Although this comment reasonably states that according to CEQ and other guidelines an EA-FONSI might be sufficient, the decision to prepare an EIS-ROD was based, first, on alternative, district-specific guidance. This district guidance, in brief, is that Feasibility projects going forward to Congress are inherently significant because they are going forward for high-level decision-making; entail significant commitment of public resources, e.g. dollars; and, therefore, meet some significance criteria under NEPA. Although this document could be reconfigured as an EA, moreover, past district experience suggests it is easier said than done (read risky) to reconfigure EAs as EISs due to time constraints of meeting feasibility milestones.

In addition, while this project may improve habitat simply from "poor" to "good" on some scales, this improvement in this context is much more significant than meets the eye or reader. The report will be revised, therefore, to show how significant these improvements are in the context of the arid southwest.

This comment also, reasonably, addresses the length of the subject PDEIS, excessive information, and so on. This document can and will be written more concisely thus shortening it. Selected portions of the report can, that is, be incorporated by reference or removed to attachments. Other changes will be reviewed one-on-one with selected reviewers, since they involve new approaches (e.g. Functional Assessment Modeling), and the district seeks to ensure that all pertinent back-up information is available to reviewers in one form or another. If this form comprises separate attachments/reports, in the view of reviewers, the district will willingly oblige.

Discussion: The district explained their basis for pursuing EIS's for all feasibility reports. For the most part, this is due to expectations of resource agencies and the view that feasibility reports, in and of themselves, constitute a major federal undertaking. Further, the protection afforded from potential lawsuits was discussed. HQUSACE acknowledged the districts position and need for a more conservative approach to NEPA compliance.

Required Action: The district will consider the advice offered by HQUSACE, and determine whether an EIS is required, prior to release of the draft feasibility and EIS.

18. An EIS is supposed to provide a clear, concise, to-the-point discussion of analyses of significant environmental impacts of reasonable project alternatives (at least the final array). All resources considered significant by law (including each one listed in §122 of the R&HA of 1970) must be considered in preparation of the EIS but a full discussion of each is not appropriate. The EIS should discuss impacts in proportion to their significance. However, full discussion of a resource is not required unless the resource will be significantly affected by one of the project alternatives and thus has a bearing on which alternative will be recommended. If a resource would be significantly affected the extent of discussion should correspond to the significance of the resource and the impact. If a significant resource will not be significantly affected it is sufficient to explain in the introduction of the Affected Environment section that these resources have been considered and that it has been determined that none of the alternatives would significantly affect the resources. To minimize the risk of being challenged that the district overlooked a resource, it is important to specifically list key resources that are typically addressed in an EIS and explain why each is not included in the detailed discussions. For example you can say "after consultation with the USFWS it has been determined that no species or habitat protected by the Endangered Species Act are in or near the project area, so they will not likely be affected by any project alternative therefore they will not be discussed in detail. Records of the considerations for all resources must be placed in the project file.

District Response: Concur. In view of these comments, individual resource discussions will be scrutinized to clarify potential significant affects relative to project alternatives. Where resources are not significantly affected by any or selected alternatives, this conclusion will be coordinated informally with concerned agencies as a basis for editing or removing detailed discussions from the report. As recommended, the results of these discussions will be documented for inclusion in project files and for reference in the NEPA document.

Discussion: Noted.

Required Action: The district will review the EIS and determine whether there are areas in which the EIS can be made more succinct by focusing on analysis of significantly impacted resources, prior to release of the draft feasibility report and EIS.

19. The EIS should follow the standard format prescribed in 40 CFR 1502.10, unless the agency determines a compelling reason to do otherwise. There is no compelling reason to deviate for this project. In addition to the sections provided in the PDEIS the DEIS must include a cover sheet (40 CFR 1502.11), a summary (40 CFR 1502.12), list of preparers (40 CFR 1502.17); a list of all agencies, organizations and individuals to whom copies of the statement will be/ have been provided; and an index that cross references the EIS, the main report, and included appendices.

District Response: Concur. All appropriate EIS sections, as listed, shall be included in the final document. They were excluded from this review draft, in some instances, at specific direction of district counterparts.

Discussion: Noted.

Required Action: The district will consider the advice offered by HQUSACE, and determine whether an EIS format used is appropriate.

20. Section 1-2 The "Purpose and Need" statement must state the most basic "need" to which the agency is responding with the proposed alternatives (40 CFR 1502.13). Explain in basic lay terms what this project is expected to produce and why it is important from the national or even regional perspective to produce these outputs. The discussion of the purpose of an EIS is not needed and should be eliminated.

District Response: Concur. The "Purpose and Need" statement will be revised to focus, as indicated, on the "most basic 'need' to which the agency is responding with the proposed alternatives..." Discussion of the purpose of an EIS, in turn, will be deleted.

Discussion: Noted.

Required Action: The district will revise the Purpose and Need statement to be more focused, as noted in the District Response above.

21. Chapter 1 -- A single section and table discussing compliance efforts accomplished and yet to be achieved would be much easier to use than the current presentation of all applicable laws statutes and regulations at the end of each resource discussion. This new section would also cover the 40 CFR 1502.25(b) requirements that the draft environmental impact statement include a list all Federal permits, licenses, and other entitlements that must be obtained in implementing the proposal. If it is uncertain whether a Federal permit, license, or other entitlement is necessary, the draft environmental impact statement must include this requirement and indicate the uncertainty.

District Response: Concur. To conform with established EIS format requirements, a single section and table on compliance achieved and yet to be accomplished shall be inserted in the

subject EIS as recommended. This section will also include, as advised, a list of "all Federal permits, licenses, and other entitlements that must be obtained..." plus discussion of any related uncertainties.

Discussion: Noted.

Required Action: The district will revise the draft EIS to include a single section and table to document compliance efforts as noted in the District Response above.

22. Chapter 2 – This chapter dwells on what the local governments want. An EIS should also present any opposition positions and issues raised. If there are/were issues, describe them and what has been done to resolve the issues. If there have been no issues or controversy say so or it appears you may be overlooking or hiding something. This is a full disclosure document not a rubber stamp of a predetermined decision.

District Response: Concur. We agree that the subject document must address any opposition positions and issues raised. This chapter will be recast, therefore, to emphasize not only what local governments want but also how this dovetails what larger publics, resource agencies want. In this manner we also seek to convey that this is a full disclosure document representing all publics.

Discussion: Noted.

Required Action: The district will revise the draft EIS to ensure it include a more full discussion of the interests and concerns of larger publics and resources agencies in the region.

23. Chapter 3 – Include a discussion of information related to the cumulative effects analysis. Base the CEA on the CEQ Guidance of January 1997, "Considering Cumulative Effects Under the National Environmental Policy Act."  
<http://ceq.eh.doe.gov/NEPA/ccNEPA/ccNEPA.htm>

District Response: Concur. A discussion of information on cumulative effects will be added to Chapter 3 following CEQ Guidance of January 1997, "Considering Cumulative Effects Under the National Environmental Policy Act," and considering any additional input from SPD and HQUSACE counterparts

Discussion: Noted.

Required Action: The district will revise the draft EIS to include a discussion of cumulative effects as noted in the District Response above.

24. Sections 3.2 – 3.3 – The Alternatives discussion starts with three very general approaches to restoring the stream-riparian ecosystem, i.e., use of basins, in-channel modifications, and terrace modifications. A fourth general approach consists of combinations of in-channel modifications, and terrace modifications. These four approaches are referred to as Alternatives. Then several pages are devoted to discussion of each of the possible measures that can be used within these approaches and each measure referred to as alternatives. Then the various combinations of measures are referred to as alternatives. This liberal use of the word “alternatives” is confusing. The most common use of “alternative” is to reference each combination of measures. Most of the detailed descriptions of the “measures” should be in the main report, and the actual alternatives described in the EIS. The descriptions of alternatives carried to the final array should be the most detailed. As presented it is difficult to sort out what measures are included in each alternative. Given the sensitivity of water issues in the region the sources and quantity of water needed for each alternative must be included in these detailed descriptions. Any mitigation efforts built into each alternative should be specifically described in the alternative description.

District Response: Concur. The respective sections of chapter 3 on alternatives in the EIS shall be revised to focus on alternatives, where the alternatives represent combinations of measures described in additional detail in the main report. Suspecting that some reviewers will look at the EIS before looking at the main report, or even to the exclusion of the main report, we will leave cross-references to these discussions. In this manner we agree that redundancy can be reduced while ensuring that the full range of alternatives is understood.

The recast alternatives shall also be adjusted to ensure that water sources and quantities are clear for each alternative. No mitigation is expected to be necessary.

Discussion: Noted.

Required Action: The district will revise the draft EIS to ensure alternatives are fully described in the document. Further, the district will ensure alternative descriptions are consistent with the main feasibility report document. Also, the district will specifically outline whether any biological mitigation is likely required in order to implement an alternative.

25. Chapter 3 – The interrelations of the resources must be considered. Describe how changes to each resource may directly, indirectly or cumulatively affect other significant resources. This is particularly essential with this project as nothing works unless there are changes to Hydrology/Water Resources. For example, the discussion in §4.2 covers WQ and several factors related to flooding, but nothing links WQ, quantity, timing, or duration to local biota or ecosystems. However, §5.2 makes the ecosystem connection, but does not relate to the material in §4.2. Then there is the missing link between the Hydrology to Biota to Recreation. Land Use changes outside the project area have and will continue to have profound influence on Hydrology & Water Resources and the Biotic Resources in the project

area, so good projections of future Land Use patterns are critical. The O&M figures in the Main Report show several million dollars for acquisition of water for the project.

District Response: Concur. The interrelations of resources, and notably the linkages between hydrology and ecology variables, shall be revisited in chapters 3 and 4 to more clearly delineate the respective relationships and associated direct, indirect and cumulative impacts to significant resources. These sections shall also be revised to highlight relevant, potential, linkages with future Land Use patterns, as recommended. Dollars for water acquisition in O&M are mentioned here, although it appears the comment was truncated (?). These O&M costs will be explained/discussed relative to land use, nonetheless, to ensure that the sponsor and other publics are aware of the long-term implications of this significant investment

Discussion: Noted.

Required Action: The district will more fully describe the interrelationships between the resource effects to one another within each alternative in the draft EIS.

26. Table 3-6 – If presentation of this information is necessary, it should include quantified information for each alternative in each column. ICA should include data for the 4<sup>th</sup> and 5<sup>th</sup> ranks, as do the other columns.

District Response: Concur. As suggested, addition of some quantities will be provided for each alternative in each column to include the 4<sup>th</sup> and 5<sup>th</sup> ranks. Our emphasis will be on representing qualitative differences in a quantifiable manner to enable comparison. Where the quantities are not comparable or compatible (apples vs. oranges), however, appropriate caveats will be inserted. The option of simply deleting this data representation will also be contemplated.

Discussion: Noted.

Required Action: The district will review Table 3-6 to ensure consistent information is presented for each alternative, as noted in the District Response above.

27. Section 3.7.1 – The definition of the No Action Plan in the first paragraph of the section is incorrect. “No Action” means no action by the Federal agency (the Corps) considering the proposed action/alternatives. Further, this definition disagrees with paragraph 3 of the same section that says the No Action Alternative assumes future development of the area in accordance with the city’s General 50-year Plan. The purpose of No Action is to establish a common basis to which each of the reasonable action alternatives can be compared. If the problem or opportunity is significant, it is likely some local entity will do something, so it essential to assume conditions will change with or without Corps participation. This projected condition is the basis of comparison and any mitigation.

District Response: Concur. The subject statement on the No Action Plan is incorrect as stated. Therefore, it will be rephrased.

Discussion: Noted.

Required Action: The district will revise the definition of the No Action Plan to ensure accuracy and consistency in the draft feasibility report and EIS.

28. Section 3.7.2 – Designation of a Recommended Plan is not required in the DEIS. Among the purposes of the DEIS is to gather additional information that may have bearing on selecting a recommended plan. Additional information gathered as a result of public review should be considered before designating of a Recommended Plan. Designation of a Recommended Plan is required in the EIS.

District Response: Concur. We understand your comment and agree that the draft EIS should be cast in a manner inviting external input on all reasonable alternatives, versus appearing to zero in on one recommended plan in the absence of such input. Ideally, we suppose, the data will speak for themselves and invite all entities, external and internal to this study, to focus in on some preferred plans, or plans providing the most positive environmental outputs for the least short- and long-term costs.

Discussion: Noted. The district explained that the public does generally prefer to have the preferred alternative identified in the circulation of the draft EIS.

Required Action: The district will identify the preferred alternative in the draft EIS.

29. Chapters 4.1 – Most of the information in this section is good regional setting information. It is not likely that the evaluated alternatives will change regional landforms, large areas of soil types or characteristics, land subsidence, earth fissures, faults or seismicity, so these discussions are too detailed for the EIS. Any detailed information should be in the Feasibility Report or a technical appendix to the Feasibility Report. A very brief summary of this information, local climate (particularly monthly information on normal temperature and precipitation ranges and averages), the nature of precipitation events and how the local biota responds to the events would give insight on how interrelated everything is too water in this region. This brief discussion should be in a new section 4.0 titled Settings. Since this is a settings description, not about specific resources expected to be significantly affected, no corresponding section in chapter 5 would be expected.

District Response: Concur. We agree that selected variables as named do not merit the detail provided in the body of the EIS, and in various cases can be relegated to appropriately referenced appendices. We also agree that some brief summaries will serve well to portray the settings in question, and can be inserted in a section so named. We understand that these background variables will not be addressed in chapter 5, but simply in chapter 4.

Discussion: Noted.

Required Action: The district will review the referenced information and determine its need in the draft EIS. As appropriate, brief summaries of this information will be included in Section 4.0 of the EIS, as suggested by HQUSACE. More detailed descriptions may be included in the appendix as required to support local interests at the determination of the district.

30. Chapters 4 and 5 – Again only resources that may be significantly affected (positively or adversely) should be discussed (see earlier comment). An example of where this document violates this principle is the Aesthetics Resources discussions. There is no argument that Aesthetics is an important resource, but there are nineteen pages on the base condition in 4.5, and four more pages in 5.5 to conclude the resource will not change in the Without Action Future and the resource will not change in the With Project Future. To lesser extent, the same lengthy baseline discussion and no significant impact result is found for 12 of the 14 resources discussed, there is no discussion of cultural resources but it will probably have the same outcome. Only the Recreation and Biological Resources are affected significantly and these effects are generally positive. Based on the PDEIS, this project does little to modify existing resources except extend the time the limited precipitation remains in the streambed to soak in and it distributes treated wastewater. Too little is said about how this increase in moisture is sufficient to significantly improve the local riparian ecosystem or to compare the extent of these changes among the final array of alternatives. Likewise little is said about how this moderate restoration of the riparian ecosystem will in turn lead to more use of the area for compatible recreation activities. It is difficult to understand how this project has average O&M exceeding \$1M/year to move water and there is no significant affect to H&H, local agriculture or some infrastructure utility in this water-starved area. The EIS must address how water to be retained is used now and how it would likely be used in the future without a project.

District Response: Concur. The lengthy baseline discussions identified can, we agree, be significantly pruned based on considerations of potential significant impacts, either positive or negative. On the other hand, increases in moisture and their potential to improve the ecosystem will be laid out in more detail to ensure that the relative, positive, impacts are clearly defined. How this relates both to differing project alternatives and recreation will be revised. Discussion of water movement/reallocation relative to H&H, agriculture and so forth will also be rephrased to clarify why selected effects either are, or are not, significant and to clarify the costs. For example, this area's agricultural fields are already abandoned due to increased urbanization.

Discussion: The district explained that there was a need to review some of these areas to determine if impacts needed to be assessed differently. For example, there may actually be positive impacts to aesthetics and property values. Concerns related to induced economic activity were discussed. It was agreed that it would be the role of the sponsor to ensure

induced development is managed appropriately. The need to consider potential impacts to scenic mountain views may need to be considered by the district. The district expects affected publics who have concerns to review and identify potential issues.

Required Action: The district will review the draft EIS to ensure it focuses on the significantly impacted resources, while at the same time balancing the need for conveying information of potential interest to the public.

31. Tables 4.3-2, 4.3-3, 4.3-4, etc – Exhaustive lists should not be included in the EIS. If including these lists contributes to the selection of an alternative, they should be in the support documents and incorporate them by reference. If this is just “good information”, leave it out.

District Response: Concur. The lists can, we agree, be incorporated in appendices or other attachments, or even by reference. We shall contemplate all these alternatives as we seek to trim EIS excess.

Discussion: Noted.

Required Action: The district will review the referenced lists and determine the need for inclusion in the draft EIS or appendices as appropriate.

32. Chapter 5 – The Future No Action Condition is not well developed, nor is it supported by the references in the Main Report or appendices. Will there be additional development in the area that will further degrade the project area directly or indirectly? What will the city or county do with this area if the Corps does not implement a project? What is the source of this information?

District Response: Concur. The Future No Action Condition will be explored in greater depth both here and in the main report, to include discussion of future development that probably will degrade the project area directly and indirectly. The source of this information will also be provided.

Discussion: Noted.

Required Action: The district will include a fuller discussion of land use actions being undertaken by local entities in both the draft feasibility report and EIS.

33. Chapter 5 – The discussions address only the Future No Action Condition and the effects of Alternative 2h. The full final array of reasonable alternatives must be addressed in the EIS. The Future No Action does not indicate the expected decline in ecosystem quality presented in the Ecosystem Assessment Documentation Appendix. The appendix also shows

several alternatives were cost effective, had acceptable incremental costs and satisfied the minimum acceptable output criteria established by biologists from USFWS, and the state and local agencies. Based on the limited information in PDEIS Table 3-6, Alternative 2f clearly meets all requirements for inclusion in the final array and 2g & 2e may.

District Response: Concur. As recommended, the final array/range of reasonable alternatives will be addressed in the EIS to include representation of the Future No Action alternative; all in a manner consistent with the Main Report and Ecosystem Assessment Appendix. Alternatives 2f, and possible 2g and 2e will be addressed, as well, if they meet all requirements for inclusion in the final array.

Discussion: Noted.

Required Action: The district will ensure both the draft feasibility report and EIS adequately assess the effects and outputs of the final array of alternatives.

34. Section 5.2 – Each Alternative in the final array involves supplementing the natural water sources, or altering how long water is retained to increase soak-in. These measures alter water availability to other users relative to the No Action condition. The effects of these diversions must be considered in the EIS as direct and indirect affects of the project.

District Response: Concur. The effects of water diversions (direct, indirect and cumulative) will be discussed to clarify how water availability to and usage by other users will be impacted, or not, relative to the No Action condition.

Discussion: Noted. Further, there are no concerns related to water rights associated with the alternatives being considered. The need to include a summary discussion of water rights as it relates to the alternatives was discussed.

Required Action: The district will include a discussion of the effects of water diversions (direct, indirect, and cumulative) in the draft feasibility report and EIS. Further, the district will include a discussion of water rights as it relates to the alternatives under consideration in both documents.