

Environmental Impact Statement—Content

8.1 Preparation

To achieve NEPA's purposes for an EIS (see chapters 2 and 3), Reclamation offices shall prepare EISs in the following manner:

EISs shall:

- Be analytic rather than encyclopedic.
- Be prepared by an interdisciplinary team, formed as soon as an EIS is determined to be likely, and integrated into all aspects of project development.
- Discuss impacts in proportion to their significance, with only a brief discussion of less than significant issues. As in a FONSI, only enough discussion should be included to show why more study is not warranted.
- Be concise and no longer than absolutely necessary to comply with NEPA and CEQ regulations. Length should vary primarily with potential environmental issues and then with project complexity.
- State how alternatives considered in the EIS and decisions based on it will or will not achieve the requirements of Sections 101 and 102(1) of NEPA and other environmental laws and policies.
- Present a range of alternatives to be considered by the ultimate agency decisionmakers.

The document should not be written in such a way that it appears to justify decisions already made or to promote an alternative. The analysis must remain objective and free from editorial comment.

EIS preparers should strive to keep EISs within the 150-page limit set by the CEQ regulations. However, proposals of great complexity may require additional text, up to 300 pages in length. However, proposals of great complexity may require additional analyses. The document

should be written in a clear, concise fashion, based on the necessary environmental analysis. Every attempt should be made to avoid overly technical language or jargon. The text and appropriate graphics should be presented so the decisionmakers and the public can readily understand them.

8.2 Format and Organization

The EIS may be organized in several ways. Some of the more common variations are:

- Have a combined “Affected Environment” and “Environmental Consequences” discussion
- Have separate “Affected Environment” and “Environmental Consequences” sections
- Display effects on an alternative-by-alternative basis, analyzing each affected resource or feature under one alternative before turning to the next alternative and its effects
- Describe one affected resource, or a group of similar resources, and then compare the impacts of all alternatives upon it on an alternative-by-alternative basis

All these approaches, or different combinations of them, are acceptable. Generally, the combined “Affected Environment/ Environmental Consequences” chapter is more difficult to write but is considered by some to be easier for the reader, and it reduces redundancy. An EIS with more than a few alternatives and resources to be analyzed may use separate chapters to best present the information so readers can compare alternatives. The EIS team should carefully consider which of these presentations is most appropriate for a particular EIS, since other approaches may be appropriate for specific situations. CEQ regulations (40 CFR 1502.10) identify a preferred standard format that can be modified to fit a particular situation. The regional and Commissioner’s environmental staffs should be consulted before a nonstandard format is used.

The standard CEQ format includes:

- a. Cover sheet
- b. Summary
- c. Table of contents
- d. Purpose of and need for action
- e. Alternatives including the proposed action

- f. Affected environment
- g. Environmental consequences
- h. List of preparers
- i. Distribution list
- j. Index
- k. Appendixes (if any)

Sections a, b, c, h, i, and j are required and shall be in any format used. The substance of sections d, e, f, g, and k shall also be included in any EIS.

Each environmental resource or feature should be analyzed by alternative in the same manner; each should have the net environmental effects, or residual impacts, given in summary form either at the beginning or end of the discussion. When the analyses are complete, their net effects should be summarized and placed in tabular form at the conclusion of the section.

Alternatives and resources should be presented in the same order throughout the document. Generally, the no action alternative is presented first to form the basis for comparison of impacts among the action alternatives. If the impacts of an alternative are the same as those of a previously presented alternative, then this fact should be noted, and the impacts should not necessarily be restated. If the impacts of the alternative are significantly different than those of the previously presented alternatives, these significant impacts should be described in detail.

When biodiversity, ITA, or environmental justice may be affected, impacts should be specifically addressed in separate, identified sections. When there are no ITAs or environmental justice issues related to the proposed action, it shall be explicitly stated in the EIS.

8.2.1 Organization by Affected Resources or Features

If the affected resources approach is used, the resources to be affected are discussed along with historic and present conditions and no action conditions; then, the impacts of the alternatives on the affected resource or feature are presented alternative by alternative and are compared to the no action alternative. If a resource or feature will not be affected by the alternatives, and the resource or feature is of significant local concern, the fact that the parameter will not be affected should be stated. The fact that alternatives may have the same or similar impacts should be stated and supported—it will not be necessary to redescribe each and every impact of similar alternatives upon a given resource or feature.

8.2.2 Organization on an Alternative-by-Alternative Basis

If the alternative-by-alternative approach is used, the impacts of each alternative are described on a resource-by-resource basis under each alternative. The impacts of the action alternatives are determined by comparison to the no action alternative. In the absence of reasonably foreseeable changes, the no action alternative may be no different than the existing affected environment. If it is, the differences between the existing affected environment and the no action alternative should be displayed.

When separate alternatives have the same impact on a resource or feature, redundancy can be reduced by analyzing the impacts of one alternative and simply referring back to that analysis for other alternatives with similar impacts.

8.3 Cover Sheet

CEQ regulations recommend the use of a cover sheet, unless there is a compelling reason not to do so. The cover sheet should not exceed one page (figure 8.1) and should include:

- A list of the responsible agencies, including the lead agency and any cooperating agencies.
- The title of the proposed action (and, if appropriate, the titles of related cooperating agency actions), together with the State(s) and county(ies) (or other jurisdiction if applicable) where the action is located.
- The name, address, and telephone number of the person at Reclamation who can supply additional information. In most cases, this person will have an overall direct responsibility for the development of the EIS.
- A designation of the statement as a draft or final, or as a draft or final supplement, and the name of any other document with which it is integrated (EIS/feasibility study, etc.).
- A one-paragraph abstract of the EIS to include a statement as to whether the EIS is intended to serve any other review or compliance requirements (i.e., Section 404(r) exemption or compliance with EOs 11988 and 11990).
- Due date for comments in the case of a DEIS.

8.4 Summary

The summary may be a separate document to stand in place of the EIS and can be circulated separately if the EIS is unusually long. It should adequately and accurately summarize the EIS and contain at least four elements—the purpose and need statement, the alternatives considered, a comparison of impacts of the alternatives, and identification of the preferred alternative (if known for the DEIS and always for the FEIS). The summary shall stress the major conclusions; areas of controversy; issues raised by agencies and the public; and the issues to be resolved, including the choice of alternatives. It should include a clear definition of the action and the alternatives considered in the EIS (including the no action alternative). It should also include a comparison of the alternatives that highlights unresolved or controversial issues with appropriate discussion of ITA and environmental justice issues. It should not contain material not found in the main EIS and should be less than 15 pages long. The format should parallel the format of the EIS, when possible (especially if circulated separately).

8.5 Purpose and Need Statement

This section shall present a brief statement explaining why the action is being considered—the underlying purpose and need to which the agency is responding. The statement is brief and does not necessarily define the purpose separately from the need but, rather, defines the purpose of and need for the project in one brief statement. This brief statement is a critical element that sets the overall direction of the process and serves as an important screening criterion for determining which alternatives are reasonable. All reasonable alternatives examined in detail must meet the defined purpose and need.

A brief background discussion may be included for additional information, as appropriate. Appropriate background information can include a brief history leading to the current situation, a summary of the authorizations that exist for the action and the legal constraints that limit action, and other information that assists a reader in understanding how the purpose of and need for the project came to exist. This background discussion should be general and not tied to any specific alternative.

Care must be taken to ensure an objective presentation rather than a justification. A purpose and need statement will generally allow a range of reasonable alternatives. If a purpose and need statement

appears to allow only one reasonable solution, the statement and the reasons for rejecting other alternatives should be re-examined and confirmed or revised, as appropriate.

8.5.1 Defining the Federal Action

Simultaneously with the development of the purpose and need statement, the EIS should define, in a brief statement, what Federal action is under consideration. The Federal action is not the same thing as the preferred alternative but may be considered the same thing as the proposed action. The Federal action is the general response to the purpose and need and has a number of alternatives. For example, if the purpose and need statement indicates that a refuge is suffering from disease problems because of low water during the summer months, the proposed Federal action could be defined as supplying water to the refuge; the alternatives would encompass ways in which to supply water to the refuge (groundwater, pipeline, new reservoir, etc.).

8.6 Description of Alternatives

CEQ Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1502.14) characterize the alternatives chapter as “the heart of the environmental impact statement.” CEQ regulations require Federal agencies to:

- a. Rigorously explore and objectively evaluate all reasonable alternatives and, for alternatives that were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

When preparing a planning report/environmental impact statement (PR/EIS), the PR portion must also consider the Water Resources Council’s P&Gs, and the EIS portion must consider CEQ regulations. Whenever two similar, but different, levels of requirements are to be met, every effort should be made to meet both levels of requirements. In every case, present the most restrictive requirements.

- b. Devote substantial treatment to each alternative considered in detail (reasonable alternatives), including the preferred alternative, so that reviewers may evaluate their comparative merits.

- c. Include reasonable alternatives not within the jurisdiction of the lead agency.

d. Include the no action alternative. “No action” is defined as the most likely future that could be expected to occur in the absence of the project. Where this future is different from the existing conditions, the differences should be clearly defined.

e. Identify the agency’s preferred alternative, if one or more exists in the DEIS, and identify such alternatives in the FEIS unless another law prohibits the expression of such a preference (see also 516 DM 4.10A, attached).

f. Include appropriate mitigation measures not already included in the alternatives. This will include identification of mitigation measures requested by an agency with jurisdiction by law but not included. The reasons for not including the recommendations should be provided.

The physical features and operational criteria of each reasonable alternative must be described in a concise fashion and a map included. The descriptions are to help the reader understand the environmental impacts that will be discussed later.

The preferred order of presentation of alternatives is:

- a. General discussion
- b. No action
- c. Action alternatives—Present these in a logical order. This may be from simplest to most complex, or the preferred alternative may be first, or some other logical sequence may be followed. Use the same order of presentation throughout the document. Note that the preferred alternative should be identified (if known for the DEIS and always for the FEIS).
- d. Brief summary of alternatives considered, but not studied in detail, along with the reasons for their having been eliminated.

The alternatives (and, if applicable, the proposed action per 516 DM 4.10A) should be presented in a logical sequence. When preparing the EIS, the preferred alternative and other action alternatives studied in detail should receive comparable levels of analysis. CEQ requires the environmental impacts of the preferred alternative and reasonable alternatives to be presented in comparative form, sharply defining the issues and providing a clear basis for choice. The presentation of alternatives should focus on differences—where alternatives are the same, the text can be reduced by referring to the descriptions of alternatives already discussed. Mitigating measures to reduce or eliminate adverse environmental

consequences (including, but not limited to, effects on fish, wildlife, unique areas, cultural resources, economic, and social) should be integrated into the action alternatives (516 DM 4.10B).

8.6.1 No Action Alternative

A no action alternative must always be evaluated in the EIS. Because the no action alternative is the basis to which all other alternatives are compared, it should be presented first, so the reader can easily compare the other alternatives to it. "No action" represents a projection of current conditions to the most reasonable future responses or conditions that could occur during the life of the project without any action alternatives being implemented. The no action alternative should not automatically be considered to be the same as the existing condition of the affected environment, since reasonably foreseeable future actions may be taken whether or not any of the project action alternatives are chosen. When the no action alternative is different from the existing condition, as projected into the future, the differences should be clearly defined. Differences could result from other water development projects, land use changes, or municipal development. "No action" is therefore often described as "the future without the project." Sufficient discussion should be devoted to the no action alternative so that readers can make the needed comparisons for the evaluation. For O&M studies, the no action alternative assumes continuing current O&M activities with no change.

For projects with staged development, in which major features have been constructed but the project is not yet operational, it is not appropriate to select a no action alternative that assumes existing project facilities would not be used or would be removed. The appropriate characterization would be to assume an operational scenario based on those existing facilities. In some cases, however, it may not be possible to operate a project which is only partially constructed. In those instances, the no action alternative could describe a situation in which existing facilities would not be put into service. Authorized projects in the area being carried out by Reclamation, other Federal agencies, or other entities, with a reasonable certainty of occurring, should be considered in the no action alternative as being constructed.

8.6.2 Action Alternatives

In examining the range of alternatives, CEQ memorandum of July 22, 1983, states in part that "an agency's responsibilities to examine alternative sites has always been bounded by some notion of

desirability.” CEQ stresses that agencies should not disregard the “common sense realities” of a given situation in developing alternatives. While this guidance is aimed at considering alternatives to an applicant’s proposal, it has equal relevance in considering proposals generated within Reclamation (i.e., when considering the range of viable alternatives to the preferred action, the agency should strive for a realistic range of alternatives that reasonably could be considered and that will accomplish the project purpose and need). The range should include alternatives based upon input from other agencies and the public.

Action alternatives include the proposed action and all other feasible and reasonable alternatives that will be evaluated in the EIS. Each action alternative should fulfill the requirements of the purpose of and need for the action as described in the “Purpose and Need” chapter of the document. The discussion of alternatives should also state how each alternative would or would not achieve the requirements of section 101 and 102 (1) of NEPA and other environmental laws and policies. The appropriate discussion should be presented for each alternative so that reviewers may evaluate the environmental impacts of each alternative by comparing them to the no action alternative. The proposed action (see section 7.5.1) should be identified in the document to make the readers aware of the action that is being contemplated, allowing them to focus their review on that action.

Alternatives outside the agency’s authority to implement should be considered. If such an alternative became the preferred alternative, implementation would depend on a change in authorization, a change of lead Federal agency to one with the appropriate authority, or a transfer of the project to a non-Federal entity. It could also lead to the cancellation of the project.

Because issues and objectives may be complex and sometimes competing, a particular alternative should be a distinctly different approach from others and may emphasize the achievement of some objectives at the expense of others. Minor variations should be considered subalternatives rather than separate alternatives. Any reasonable alternative with anticipated environmental consequences that differ significantly from those of the preferred alternative should be considered a major alternative and analyzed fully.

For clarity, each major alternative should be given a descriptive name, number, or letter, although a descriptive name is preferred to a number or letter. When an alternative is assigned a number or letter the first time it is presented, and, thereafter, it is presented by the letter or number, it can be problematic because it is difficult for most readers to retain and associate the number or letter with that particular alternative throughout the remainder of the EIS. For instance, it is easier for the reader to associate an alternative with a

name like “San Juan Alignment” than it is to retain “Alternative 3” or “Alternative C.” In addition, it is easier to change the order in which alternatives designated by name appear than it is to change those designated by letter or number.

The discussion of the alternatives should conclude with a graphic comparison of the alternatives based mainly on the impact summaries found in the “Environmental Consequences” chapter.

Mitigation measures and environmental commitments that are to be incorporated as a result of the EIS’s analyses should be integrated into the appropriate alternatives. These mitigation measures then become an integral part of those alternatives—in other words, those particular alternatives cannot be described without the mitigation measures. However, other alternatives without the integrated mitigation measures may also be reasonable and should still be included.

Any additional mitigation measures not integrated into the action alternatives will be included in the “Environmental Commitments” section of the EIS. Agreement may be necessary with the Corps, Service, BIA, and other responsible Federal agencies and should be described in the “Consultation and Coordination” chapter of the EIS.

The discussion of the alternatives should include, where appropriate:

- Location of alternatives and alternative project features, including legal description and a map or sketch
- Amount and ownership of lands to be affected
- Area to be disturbed
- Numbers, locations, and photographs or drawings of structures to be constructed, including utilities
- Water and wastewater quantities, wastewater disposal plans, and water conservation measures
- Mitigation plans and landscape restoration plans
- Costs associated with the alternative, including those for mitigation
- Descriptions of operational criteria

8.6.3 Alternatives Eliminated from Detailed Study

Other alternatives considered, but not found to be technically feasible or reasonable, should be presented briefly, along with the reasons they were eliminated from further analysis. Examples of reasons for elimination are: (1) failure of the alternative to meet the requirements of the purpose of and need for the action, (2) the alternative cannot be technically implemented, (3) the alternative is prohibitively greater in cost or in environmental impacts than the other alternatives, or (4) the alternative cannot be reasonably implemented. A complete listing of all alternatives seriously considered or publicly discussed in the scoping process should be included. If the public involvement process was unusually complex, it may be appropriate to provide an appendix that summarizes those alternatives identified during public involvement and later considered and eliminated.

The issue of reasonableness is a judgment call by Reclamation. Usually, after scoping an action, Reclamation will have an idea if an alternative may be unreasonable to implement due to social, cultural, or political realities.

During the process of eliminating alternatives, the interdisciplinary team should develop a set of screening criteria against which all alternatives should be measured. This will assist in making the process more objective and defensible. The criteria could include such items as cost limits, geographical boundaries, scheduling goals, or time constraints. Some of these items may be dictated by the authorization for the project.

8.6.4 Identifying a Preferred Alternative

Reclamation shall identify an agency-preferred alternative in the FEIS (unless prohibited by law) (40 CFR 1502.14(e) and Departmental Manual Part 516, Chapter 4, 4.10A). It should be noted that CEQ regulations do not require the identification of a preferred alternative in the draft if none has been determined. The Department of the Interior should be notified if no preferred alternative exists for the draft statement.

The preferred alternative should be an alternative that completes the action and that best meets the purpose of and need for this action as defined in the EIS. Defining the preferred alternative does not define the agency's final decision. The intention is to let the public know what the agency considers the best alternative, based upon the information available. Public comments or other considerations may

result in a change in the preferred alternative and may even result in the final decision (recorded in the ROD) not being the preferred alternative in either the DEIS or the FEIS.

8.6.5 Environmentally Preferred Alternative

The alternative, or alternatives, considered to be environmentally preferred should be specified. The “environmentally preferred alternative” under NEPA is defined as “the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101.” Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources (NEPA’s *Forty Most Asked Questions by CEQ*, attached). It is implicit in NEPA that the “environmentally preferred alternative” is a reasonable and feasible alternative. Reclamation is not obliged to select the “environmentally preferred alternative” but must identify it in the ROD and should, if possible, identify it in the FEIS.

8.6.6 Summary Comparison of Alternative Impacts

A summary table comparing the impacts of all alternatives (including no action) should be attached to the end of this chapter. Whenever possible, numerical comparisons should be used. Brief narrative comparisons are permissible if numerical comparisons cannot be made. In the case of the PR/EIS, tables displaying information required by the P&G must also be included. The graphic display should provide a comparison of the tradeoffs between alternatives and a listing of proportionate effects and merits of each alternative. The display should be placed at the end of the “Alternatives” chapter. If more explanation is required, footnotes may be used to qualify the importance of a particular impact.

8.7 Affected Environment

This section should begin with a general description of the physical environment of the project area and a map defining the project area, the associated ecosystem(s), and the affected environment. If the area that may be affected by the project extends beyond the project area, the entire area of potential effect is included in the affected environment. The general description will be followed by more specific descriptions of the resources to be affected under each alternative. If available, the historic changes and trends affecting a resource or

feature, up to and including present conditions, should be described to set the stage for the projection of future changes and trends concerning the resource or feature. Emphasis should be placed on environmental parameters that would be significantly affected by the alternatives. Only brief treatment should be given to characteristics that would not be affected. This brief treatment can include a statement that no further analysis of the resource is included in the EIS. All EISs should include a discussion of biodiversity, ITAs, and environmental justice.

For critical environmental areas or issues—such as ITAs, invasive species, environmental justice, cultural resources, and T&E species—a brief discussion of ongoing activities that may affect them is needed. When ongoing activities may be having significant effects upon these areas or issues, the discussion should summarize both the significance of the ongoing effect and what specific ongoing activity is causing the effect.

The general description constitutes a basis from which specific environmental effects can be assessed. The general description should include not only the physical setting for the project, but it should describe those features—geographic, cultural, recreational, or unique or significant wildlife or vegetation—that distinguish the affected area from other areas.

When discussing the area resource or feature affected by each alternative, the discussions become far more specific than in the general description and provide details on those features which would be affected by the project. For instance, if alternative B is found in the Sonoran Desert Life Zone but is in an area with a high number of Joshua trees, the Sonoran Desert Life Zone should be discussed in the general description, and the specific description of the Joshua trees should be saved for the vegetation parameter under the alternative. This organization allows the flexibility to provide a complete general description of the project area while, at the same time, avoiding detailed and specific description of parameters that will only be affected by one alternative.

If two or more alternatives share the same affected environment (as will often be the case), it is not necessary to repeat the description of that environment. Instead, reference should be made to the description already provided. For instance, if the preferred alternative would affect 300 acres of riparian vegetation, the area should be described in sufficient detail that the extent and severity of the impact on it are understood. However, if another alternative involves the same 300 acres of riparian vegetation, plus an additional 50-acre parcel of the same vegetation, the description of the original 300 acres would not be repeated for this other alternative.

8.8 Environmental Consequences

This discussion forms the basis for the comparison in the summary table and in the description of alternatives. The impacts of each alternative should be quantified and analyzed separately, with the analysis of the no action alternative presented first, followed by the alternatives in the order they appear in Chapter 2, "Alternatives." This impact analysis should include at least the following items:

- The direct effects and their significance
- The indirect effects and their significance
- Quantification of the impact (when possible)
- Mitigation for the impact
- The resultant net, or residual, impact

The impact analysis should focus on potentially significant effects and should not include discussion of impacts that are minor and short term.

Whenever possible, data from the Service, U.S. Geological Survey, or other technically acceptable sources should be used to support the impact analysis.

CEQ characterization of "effect," as described in Section 1508.8, cites:

- a. Direct effects, which are caused by the action and occur at the same time and place.*
- b. Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.*

The terms "effects" and "impacts," as used in these regulations, are synonymous. Effects include those involving ecological (natural resources, and the components, structures, and functioning of affected ecosystems), esthetic, historic, cultural, economic, social, or health resources, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if the agency believes that the effect will be beneficial.

The analysis will compare the reasonable action alternatives to the no action alternative to determine the net effect or impact of each of the action alternatives. This allows the analysis to focus upon the impacts

that would be the result of the action under consideration, sharply distinguishing the different impacts associated with each of the alternatives.

This section should also include discussions of any potential conflicts with existing land use policies or energy requirements of the various alternatives and any differences in energy conservation potential, ITAs, and environmental justice.

An example of a residual or net impact:

If the preferred alternative of a certain project would result in the loss of 300 acres of riparian vegetation, and Reclamation has developed a mitigation plan that would mitigate for this 300 acres of riparian vegetation, then the net loss, or residual impact of the proposal on riparian vegetation, amounts to 0 acres.

If, however, alternative B would result in the loss of 350 acres of riparian vegetation, and the mitigation plan is the same (mitigation of only 300 acres), the net effect of alternative B would be the loss of 50 acres of nonmitigated riparian vegetation.

This same procedure should be followed throughout the impact analysis of all the parameters. Once the residual or net impacts have been determined, they are transferred to a chart which can be used to compile the tabular comparison of alternatives.

8.8.1 Issue Tracking

All discussions of potential impact areas should track the same basic sets of issues that have been identified by scoping. The statement should be prepared so that any reader can track any of the identified issues easily and quickly throughout the document.

8.8.2 Analysis in the Absence of Information (40 CFR 1502.22)

When the agency is evaluating reasonably foreseeable adverse impacts, and there is incomplete or unavailable information, the agency shall make clear that such information is lacking. Every effort should be made to collect all information essential to a reasoned choice between alternatives. If the information relevant to a reasoned choice cannot be collected because of exorbitant cost or because no means exists to gather the information (i.e., it does not exist, and there is no way to get it), the agency shall, in the EIS:

- State that such information is incomplete or not available
- Indicate the relevance of the incomplete or unavailable information to reasonably foreseeable adverse impacts
- Include a summary of existing credible scientific evidence relevant to the foreseeable adverse impact
- Include an evaluation of the reasonably foreseeable adverse impact, based upon theory or research methods generally acceptable to the scientific community.

Reasonably foreseeable adverse impacts must be within the rule of reason and based upon credible scientific evidence, not just conjecture. Impacts of low probability, if supported by credible evidence and the rule of reason, shall be displayed.

The EIS analysis is not limited to readily available information. If information exists that is relevant to a potentially significant adverse impact, that information should be included in the analysis. If new information is needed that is relevant to reasonably foreseeable significant adverse impact and that can be gathered at reasonable expense, the information should be gathered and incorporated into the analysis (it should be noted that the time needed to gather necessary information is not a rationale for not gathering needed information; timeframes should be established that recognize the potential need for new information).

8.8.3 Direct and Indirect Impacts

The direct and indirect impacts on the human and natural environment also must be identified and quantified. Project activities may directly result in the relocation of people, powerlines, pipelines, oil and gas wells, mining roads, and railroads and may also result in such indirect impacts as the loss of agricultural lands. These relocations and losses, and the indirect losses associated with them, must be identified and quantified, as appropriate. Additional social and economic impacts, such as changes to cultural or ethnic groups, should be addressed.

Impacts may be either beneficial or adverse. Examples of some environmental parameters that may be affected by the preferred alternative are listed in section 8.7, "Affected Environment."

The appropriate investigations, data collection, and data analysis that are required to identify and quantify direct and indirect impacts and to develop project features, including enhancement and mitigation features, should be conducted by technically qualified persons.

Some examples of direct impacts are those associated with highway and railroad relocations; reductions in downstream low flows; loss of a natural stream or river; or losses of fish, wildlife, endangered species, archeological sites, farmland, wetlands, homes, oil wells, or unique areas caused by the construction of a dam and related water conveyance system.

Although indirect impacts are frequently difficult to identify and measure, the indirect impacts that can reasonably be expected to occur, should Reclamation proceed with a given proposal, would need to be addressed.

The indirect impacts generally are associated with the intended use of the water and include economic and human population growth inducement, changes in land use (including associated fish and wildlife habitat changes), potential industrial development, and others. These impacts must be addressed to provide the decision-maker with a clear understanding of the potential range of impacts associated with the proposal.

State and local administrative requirements that could have an effect on the proposal or range of alternatives must be considered in arriving at a net impact scenario. However, there must be a high degree of certainty that applicable legal requirements would be implemented in a timely manner should the Federal action take place.

8.8.4 Cost-Benefit Analyses of Alternatives (40 CFR 1502.23)

An EIS is not required to contain a cost-benefit analysis if such an analysis is not relevant to the choice between action alternatives. The situation calling for such an analysis will likely be rare but may occur in some proposals for environmental enhancement and others. If a cost-benefit analysis is relevant to the alternatives being considered, it shall be included in the EIS—either in the text or appended.

8.8.5 Cumulative Impacts (40 CFR 1508.7, 1508.25)

CEQ regulations implementing NEPA define cumulative impacts as:

. . . the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Cumulative impacts are to be considered along with direct and indirect effects in determining the scope of an EIS. The scoping process should be designed to identify associated actions (past, present, or future) which, when viewed with the proposed or alternative actions, may have cumulative significant impacts. Future cumulative impacts should not be speculative but should be based on known long-range plans, regulations, or operating agreements.

Cumulative impacts can be categorized as additive or interactive. An **additive** impact emerges from persistent additions from one kind of source, whether through time or space. An **interactive** impact results from more than one kind of source. Piecemeal physical destruction of wetlands is additive; physical destruction of wetlands combined with damage from toxic substances is interactive. Courts have ruled on the need to consider additive and interactive cumulative impacts and to broaden time horizons. For example, courts have required both BLM and the NPS to prepare EISs that assess the additive impacts of multiple placer mining operations. Courts have also required the Federal Energy Regulatory Commission (FERC) to consider the additive impacts of multiple permits for hydroelectric projects. FERC was ordered to comply with the FWCA's provisions requiring the gathering of baseline data so that the data could then be used to assess cumulative impacts.

The Forest Service was required by a district court ruling, subsequently appealed, to evaluate all leases in a geographic area. Although the circuit court did not rely on the cumulative impact issue in its ruling on the appeal, it did hold that, under the ESA, the Forest Service must prepare comprehensive biological assessments on the effects of oil and gas activities.

At least one court has ruled that interactive impacts must be considered. In that ruling, the court decided that building a road and

timber sales were sufficiently related to require analysis in a single EIS. The court highlighted cumulative impacts as the controlling factor in determining the scope and timing of the EIS.

On the other hand, in the case of cumulative Reclamation impacts resulting from the Colorado River Storage Project, the court ruled that the Department's decision not to prepare a comprehensive EIS for the entire Colorado River Basin was not a violation of NEPA. The decision indicates that the requirement for a cumulative impacts analysis does not imply that a basinwide EIS always needs to be done to address cumulative impacts.

Cumulative impacts can be presented in the document in a variety of ways. Normally, the no action alternative includes the cumulative effects of all other actions upon the affected environment. However, cumulative impacts are rarely discussed with the no action alternative but, most commonly, are displayed in a separate section, "Cumulative Impacts," that consolidates the discussion. Another option is to discuss cumulative impacts for each resource discussed in the EIS. That is, when discussing wetlands, for example, all the direct, indirect, residual, net, and cumulative impacts to wetlands related to the alternative being presented would be described.

While an expectation exists among reviewers and the public that there will be a separate section discussing cumulative impacts, the most appropriate means to include cumulative impacts within the document is at the discretion of Reclamation. There is no required format for displaying cumulative impacts. It is required, however, to include cumulative impacts within the scope of the analysis.

8.8.6 Energy and Depletable Resources

Energy requirements, conservation potential, and effects on natural or depletable resources should be a part of the impact analysis.

8.8.7 Mitigation Measures

Mitigation measures can include proposals that avoid an impact, changes that minimize an impact, actions that rectify an impact, or actions that compensate for the impact. Mitigation can relate to either site-specific effects (the most usual case) or to ecosystem effects.

The effects of mitigation measures will be analyzed in the "Environmental Consequences" discussion in two ways. First, the impacts of the mitigation feature will be discussed. For example, if

Reclamation purchases a 500-acre farm as wildlife habitat replacement, certain social and economic impacts occur by taking this farm out of agricultural production and off the local tax rolls. These impacts come from the purchase of the mitigation feature and need to be analyzed. Second, the mitigation potential of the habitat replacement area, and the amount to which this will reduce the impacts on a given environmental resource or feature, should be included. In the case of the 500-acre farm, this would be an analysis of its habitat potential and how much this would lessen the impact on wildlife habitat. The change in net wildlife habitat due to the alternative under discussion, including the 500-acre habitat replacement, is the impact.

8.8.8 Unavoidable Adverse Impacts

(NEPA Section 102(2)(c)(ii) and 40 CFR 1502.16)

Unavoidable adverse impacts are those environmental consequences of an action that cannot be avoided, either by changing the nature of the action or through mitigation if the action is undertaken. The discussion of impacts for all alternatives will include a discussion of the adverse impacts that cannot be avoided. These should also be highlighted in the summary discussion of alternatives.

8.8.9 Relationship Between Short-Term Uses and Long-Term Productivity

(NEPA Section 102(2)(c)(iv) and 40 CFR 1502.16)

Each resource area should include a discussion of long-term versus short-term effects (positive and negative). When a short-term positive effect is counterbalanced by a long-term negative effect (and vice versa), this should be highlighted in alternative descriptions. This is an area where analysis is difficult, and some special effort may be required to develop an adequate analysis.

8.8.10 Irreversible and Irretrievable Commitments of Resources

(NEPA Section 102(2)(c)(v) and 40 CFR 1502.16)

Irreversible commitments are decisions affecting renewable resources such as soils, wetlands, and waterfowl habitat. Such decisions are considered irreversible because their implementation would affect a resource that has deteriorated to the point that renewal

can occur only over a long period of time or at great expense, or because they would cause the resource to be destroyed or removed.

Irretrievable commitments of natural resources mean loss of production or use of resources as a result of a decision. They represents opportunities foregone for the period of time that a resource cannot be used.

The analysis shall, for each alternative, identify those actions that are irreversible and irretrievable.

8.8.11 Environmental Justice (Executive Order 12898)

The affected environment discussion in the EIS will contain a separate, titled section identifying minority and/or low-income populations that exist in the project area or will contain a statement that there are no minority and low-income populations affected by the proposed action. This section will include full descriptions of involved minority and low-income populations, or this will be summarized elsewhere in the chapter.

When potential impacts to minority or low-income populations are identified, the chapter describing environmental impacts will contain a section entitled “Environmental Justice.” The section will include a full analysis of such impacts, or a summary of impacts will be fully described elsewhere in the chapter. When impacts to a minority or low-income population are identified, the discussion should address whether the populations are being disproportionately affected by the action and the reasonable efforts made to avoid any disproportionate effect. If the alternative had no disproportionate impact on minority or low-income populations, this should be so stated. Finally, the discussion of public involvement in the EIS will include a summary of the efforts made to assure that all income groups and minority populations within the area potentially affected by the action were included in the public involvement process, including the means used to overcome language and cultural barriers to participation.

8.8.11.1 Background of Environmental Justice

On February 11, 1994, the President issued Executive Order 12898, “*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*” (attached). The EO established environmental justice, for the first time, as a Federal Government priority and directed all Federal agencies to make environmental justice part of their mission. The EO had three goals:

1. To focus Federal agency attention on the environment and human health conditions in minority communities and low-income communities
2. To promote nondiscrimination in Federal programs that substantially affect human health and the environment
3. To provide minority communities and low-income communities greater access to information on, and opportunities for public participation in, matters related to human health and the environment

The Executive order directed various agencies and White House Offices to participate in the environmental justice initiative. Each Federal agency was directed to review its programs, policies, and activities and develop a strategy for addressing, as appropriate, any disproportionately high and adverse human health or environmental effects on minority and low-income populations. The developed strategies would include guidance on how to best form interagency partnerships and how to consider environmental justice principles in conjunction with NEPA.

8.8.11.2 Identifying Affected Minority and Low-Income Populations

The NEPA process should consider potential impacts to minority and low-income populations at the earliest reasonable time in the decisionmaking process. The initial step is to identify and evaluate affected minority and low-income populations in or near the affected area during the scoping and/or planning process. The U.S. Bureau of Census and local city and county data bases can be helpful in identifying these populations within the affected environment.

8.8.12 Impacts on Other Federal and Non-Federal Projects and Plans (40 CFR 1502.16(c))

Every EIS shall discuss all related Federal and non-Federal projects in the study area. The effects of the proposed action, either positive or negative, shall be presented in the EIS and shared as soon as available with the Federal or non-Federal project operators. Possible conflicts with all existing land use plans, policies, and controls shall be discussed. Reasonable options to avoid and/or mitigate negative effects should be investigated in the EIS.

8.8.13 International Impacts

(Executive Order 12114, January 4, 1979 attached)

Federal agencies are required to consider the effects of their actions when they may have a significant effect upon the environment outside the jurisdiction of any nation, upon the environment of an uninvolved foreign nation, upon the environment of a foreign nation that may benefit from the action, and upon global resources protected by treaty or designated by the President. This discussion should be in both the draft and final EISs and EAs. The consideration can be modified or averted, as appropriate, by considerations of sovereignty, significance, information availability, confidentiality, national security, and other applicable factors.

8.8.14 Indian Trust Assets

All EISs shall address the potential effects of alternatives upon ITAs. If no effects to ITAs are foreseen, the EIS should explicitly say so. Reclamation has prepared ITA guidance (attached) which provides assistance in defining, scoping, and analyzing potential impacts to ITAs.

8.9 Adaptive Management

Sometimes there is not sufficient scientific data or knowledge available to make an accurate prediction regarding the social, economic, and ecological impacts of a proposed action or alternatives, or from proposed mitigation. If the impacts could be significant and there is considerable controversy over the outcome, the decisionmaker should consider developing an adaptive management program to monitor the results of the decision. Adaptive management formalizes the process and provides for redirection of projects and programs based on new information. Adaptive management may be carried out according to the following steps: participants determine measurable goals for management and then: (1) outline their understanding of system functions and outputs, (2) establish quantified objectives and controls, (3) initiate the action, (4) monitor and evaluate the outcomes, (5) review goals and objectives, and (6) redirect the action, if necessary.

An adaptive management program should be developed in coordination and collaboration with other governmental agencies, stakeholders, and interest groups, as appropriate. The proposed program should be detailed in the DEIS for public review and comment. The

ROD would lay out the final program as part of the Environmental Commitments Program. If it becomes necessary to redirect an action, additional NEPA compliance may be required if the change is not within the range evaluated in the original NEPA analysis. The public should be made aware in the ROD that this possibility exists.

8.10 Consultation and Coordination

This chapter of the EIS will contain a narrative history of relevant public involvement activities that have taken place, or are expected to take place, during the planning of the project. Also included will be consultation with agencies or technical experts that have participated in the project planning process and that have provided significant information and recommendations for analysis and for inclusion into the analysis process. The chapter will include separate, titled sections summarizing or describing public involvement activities undertaken to identify and assess impacts to ITAs and minority or low-income populations.

This chapter may contain a listing or narrative description of specific work meetings, scoping sessions, public meetings, news releases, newsletters, and any other consultation and coordination activities. It should include discussions and consultation with agencies or experts that provide significant information for the analysis, including FWCA recommendations, ESA consultation, and cultural resources coordination. Times and dates of meetings or activities, and the purpose and results of the meetings or activities, should be included.

8.10.1 Related Laws, Rules, Regulations, and Executive Orders

CEQ regulations (40 CFR 1500.2 and 1502.25) encourage related environmental laws, rules, regulations, and Executive orders to be integrated concurrently to the fullest extent possible in an EIS.

Brief explanations of how the EIS has complied with these legal requirements may be added to the “Consultation and Coordination” chapter or to the “Purpose and Need” chapter.

The EIS shall list all Federal permits, licenses, and other entitlements which must be obtained to implement the proposal. The laws, rules, regulations, and Executive orders that usually are addressed in an EIS include:

- Clean Water Act of 1977, P.L. 95-217
- Endangered Species Act of 1973, P.L. 93-205
- Fish and Wildlife Coordination Act, P.L. 85-624
- Executive Orders 11988 (Floodplain Management), 11990 (Protection of Wetlands), 12898 (Environmental Justice), and 13112 (Invasive Species)
- CEQ memorandum dated August 11, 1980, “Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act and the Farmlands Protection Policy Act,” P.L. 97-98, dated December 22, 1981
- Wild and Scenic Rivers Act, P.L. 90-542
- National Historic Preservation Act of 1966, P.L. 89-665, as amended by P.L. 95-515
- Others, as appropriate

Additional permits, compliance activities, and other processes may be necessary for State, tribal, local municipality, or other Federal agency compliance. A summary of other related environmental laws and Executive orders is included in chapter 11, and a summary of environmental laws and EO is attached.

8.10.2 Distribution List

An EIS distribution list is required and may be included in the “Consultation and Coordination” chapter (see figure 8.2 for a suggested distribution list, which will be project specific for each EIS).

In the FEIS, the distribution list should be updated to include other agencies, organizations, and individuals who requested the FEIS, and an asterisk (*) should be included before those organizations or individuals who commented on the DEIS. A double asterisk (**) may be used to denote those who made statements or commented at the public hearings.

8.11 List of Preparers and Other Sections (40 CFR 1502.17)

The EIS shall list the names, together with their qualifications (expertise, experience, professional discipline), of the persons who were primarily responsible for preparing the EIS.

Figure 8.3 is an example of a list of preparers. The list will include persons from other agencies who furnish substantive information, as well as people who provide information under contract or cooperative agreement, since all disciplines may not be represented on Reclamation staffs.

A “Bibliography” section should be included after the list of preparers, followed by an optional glossary. An optional list of abbreviations and acronyms can be included, as appropriate.

8.12 Environmental Commitments

The DEIS and FEIS shall present reasonable mitigation proposals for all reasonable alternatives. In the FEIS (it is not required in the draft), a list of the mitigation commitments that will be carried out as part of the implementation of the preferred alternative is to be included. This list of commitments should be specific to the preferred alternative and include a monitoring program to assure successful mitigation, as necessary. If the preferred alternative from the FEIS is selected in the ROD, this list can be used to meet the requirement to identify mitigation in the ROD (see section 9.3). If a different alternative is selected, however, a comparable list must be developed for the selected action for inclusion in the ROD.

8.13 Index

The index, which is required for the FEIS and recommended for the DEIS, should be arranged in a double-column format and placed at the end of the report, before appendixes and attachments. The style for entries may be found in the 1984 *Government Printing Office Style Manual*, pages 202-203. To prepare an adequate index, the following points should be kept in mind:

- a. An introduction to the index should be prepared to explain symbols or abbreviations used. The introduction also explains anything unique or different about the index.

b. The index is a listing of names, places, and topics in alphabetical order with page numbers indicating where they are discussed. It helps the reader find information. Therefore, headings and topics selected should be those most familiar to the average reader. However, the index may be cross-referenced with the specialist in mind.

c. The index should be as specific as possible. For example, biological entries should be at the species level; air quality entries should be by components (sulfur dioxide, particulates); socio-economic entries would be by specific unit of measurement (housing, elementary schools, police protection, fire protection); and so on.

d. Two categories—one specific and one general—should not be enumerated for the same entry. For example, if a species like “bald eagle” is enumerated under “endangered species,” the general heading should not also be enumerated (an entry “endangered species” could be used, but it should be further broken down into species).

Example:

Endangered Species

Bald Eagle, 17, 34, 85

California Condor, 26, 85, 101

The subtopics under the main topics above are listed in alphabetical order. This is the preferred way, unless some other arrangement is required for consistency or logic. For example, a chronological arrangement could be used when timing is important.

e. A large number of undifferentiated page listings after a topic in the index should be avoided. A good index entry should not exceed 5 to 6 page numbers. In some cases, the page listings may approach 9 to 10 page numbers, but this number of listings should be rare. If the page number listings following an entry exceed 10 page references, an attempt should be made to further break this topic into subtopics.

Examples:

Bad Listing

Schools, 5, 10, 17, 25, 36, 108, 119, 124, 138, 145,
176, 201, 209, 215-219, 224

Good Listing:

School, 5, 25, 108, 224

Junior High, 10, 17, 36, 215-219

Senior High, 119, 124, 201

Junior College, 138, 145, 176, 209

f. The most common synonyms should be used as cross- references. When a large part of the expected readership might be familiar with one particular term rather than its synonyms, both terms and cross-references should be indexed (generally from the less well-known term to the better known one). For example, if a number of readers use the term “air pollution” and are not familiar with the fact that such topics are discussed under “air quality,” then “air pollution” should be an index entry which refers the reader to “air quality.”

g. Items that might be confusing to the reader should be defined. For example:

Water and Power Resources Service (see Bureau of Reclamation)

Bureau of Reclamation (formerly Water and Power Resources Service)

h. Material in footnotes should not be forgotten if they contain significant information. In addition, index material in plates, tables, and maps should be indexed.

i. A common mistake in preparing indexes is to heavily index the first 50 pages of the document and then slide over the remaining pages. To avoid this error, some criterion of selection has to be used to pick out the significant topics. For the EIS, impacts, description of environmental parameters, and the comparison of alternatives are the most important topics.

An ideal index should cover the complete contents of a document, including the summary, introduction, footnotes, and bibliography, if these contain important information not found elsewhere in the document. However, if it becomes necessary to make choices, the most significant topics should receive the best coverage in the index.

The key element in any index is consistency. Once a certain selection method has been used, it should be used throughout. Once symbols, abbreviations, or acronyms have been designated, these same symbols, abbreviations, and acronyms should be used throughout. An arbitrary and preselected index cannot be imposed on the document. The index must grow from within the document. Reclamation may prepare the index, or it may be prepared under contract.

The index cannot be prepared until the document has received final review and has final page numbers. When authorization to print the EIS is received, the index can be prepared and added. In integrated documents, the index covers the entire document.

8.14 Attachments and Appendixes

Attachments are for amplification or support of critical analysis of the EIS. They are not a data bank and library for its total reference support. They should contain only major substantiating data, essential relevant descriptions of environmental components, important professional reports, copies of major legislative and executive documents, and other information necessary for complete use of the EIS for analytical and decisionmaking purposes. Negotiated agreements regarding various compliance requirements (endangered species, cultural resources) are also included.

Comprehensive technical appendixes are required prior to the preparation of the PR. These appendixes are used to prepare the report and are the appendixes providing the technical support for the PR. Technical appendixes are normally provided to cover cultural resources and plan formulation and economic, engineering, environmental, hydrologic, social, and recreational aspects. These appendixes are primarily for internal technical support for the PR, are not referenced in the PR/EIS, and are not distributed with the PR/EIS. The appendixes are retained in the originating office and may be provided upon request.

CEQ regulations (40 CFR 1502.18) state that, if an agency prepares an appendix to an EIS, the appendix shall:

- a. Consist of material prepared in connection with an EIS (as distinct from material that is not so prepared and that is incorporated by reference (1502.21))
- b. Normally consist of material which substantiates any analysis fundamental to the EIS
- c. Normally be analytic and relevant to the decision to be made
- d. Be circulated with the EIS or be readily available on request

Department of the Interior Instructions 516 DM 4.11 state, Appendix (1502.18):

If an EIS is intended to serve other environmental review or consultation requirements pursuant to section 1502.25, any more detailed information needed to comply with these requirements may be included as an appendix.

In addition to the points stated in 1502.18 and 516 DM 4.11, Reclamation will provide EIS attachments for the following items:

- a. An environmental commitment listing of all the environmental commitments made for any aspect of the proposal covered by the EIS. It should be included in both the DEIS and FEIS. (See section 8.1.2 for a list of environmental commitments.)
- b. Letters and comments received on the DEIS (see section 8.15.2).
- c. FWCA recommendations with analysis of the disposition of the recommendations made. The recommendations and Reclamation's responses should be included as a part of the "Consultation and Coordination" chapter. If not too long, the FWCA report may be attached.

Documentation of compliance with other legal requirements (ESA, NEPA, and others) may also be attached.

8.15 FEIS

8.15.1 Revising the DEIS

After public circulation of the DEIS, the public and other agencies will supply some comments on the DEIS. Reclamation shall assess and consider the comments, both individually and collectively, and shall respond to the comments in one of several ways (40 CFR 1503.4), as described below.

The EIS may be modified in response to comments received by adjusting alternatives, adding new alternatives, supplementing or improving the analysis, or making factual corrections. If comments do not warrant any changes in the EIS, Reclamation shall explain why the comments do not warrant further agency response.

All substantive comments shall be attached to the EIS (summaries may be used if the comments are exceptionally voluminous). Substantive comments do not necessarily merit individual discussion in the text of the EIS.

If, and only if, the only changes needed to the DEIS are minor factual corrections, the FEIS may consist of an errata sheet attached to the draft statement. Only the comments, the responses, and the changes need be circulated; however, the entire draft document, with the new cover sheet and errata, will be filed as the FEIS.

Changes to the EIS involving new or modified alternatives that do not have any significant differences in environmental impacts to alternatives analyzed in the draft may be fully incorporated into the document and circulated as the FEIS. A modified analysis that is within the range of impacts analyzed in the draft, or that does not significantly change the results relative to impacts in the draft, may also be integrated into the document and circulated as the FEIS. New alternatives, modified alternatives, or new analyses, however, that are outside the range displayed in the DEIS, or that are significantly different from the alternatives or analysis presented in the draft, will require the circulation of a supplemental or revised DEIS.

The discussion on supplemental EISs (section 7.11) described appropriate actions if the changes to the proposed action are substantial and relevant to environmental concerns or if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action.

8.15.2 Responding to Comments

Substantive public comments must be specifically identified in and attached to the FEIS, and a Reclamation response provided (40 CFR 1503.4 (b)). Comments expressing support or nonsupport need not be displayed. Responses to comments must be factual and nonargumentative and should clearly address the issue(s) raised. In preparing the FEIS, possible responses include:

- a. Modify alternatives, including the preferred alternative
- b. Develop and further evaluate alternatives not given serious previous consideration
- c. Supplement, improve, or modify the analyses
- d. Make factual corrections
- e. Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons that support Reclamation's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response
- f. Acknowledge the comment if it is simply offering an opinion or if it contains advice not pertinent to the EIS

8.15.2.1 Format of Response to Comment

Two commonly used formats for comments and responses exist: (1) the comment letter and responses are placed opposite each other on the same page; and (2) the responses to comments follow each letter. When comments are exceptionally numerous, the significant comments may be summarized and consolidated to condense the volume of the responses. Even in this case, all comments should be addressed and a clear reference to each comment made so that an individual commentor can track individual comments. Some circumstances may dictate an alternative approach that would be more effective. Any corrections to the body of the statement should be referenced by section title and/or page number so the reviewer will be able to find the new material. A list of commentors should be provided before the “Comment-Response” section to aid in identifying the location of the comments. The preferred approach is to place letters received in the same order as they appear on the distribution list. In no case should the responses appear argumentative. Answers should be factual, courteous, and straightforward.

An asterisk (*) will be placed in the distribution list before an entity that provided comments during the official review period (or their name is added to the list with an asterisk [*]).

8.15.2.2 Public Hearing Comments

If public hearing(s) on the DEIS were held, the comments received should be summarized and included in the “Response to Comments” attachment. In general, all comments received at the hearing should be reviewed and responded to in a manner similar to that described in section 8.15.2. The entire verbatim testimony should not be included in the FEIS, nor should hearing transcripts be appended to the FEIS. The hearings, including all relevant comments, should be summarized and included in the “Response to Comments” attachment. For each individual who testifies, the relevant points that directly pertain to the document or the proposal should be specifically identified and answered. Relevant points include questions on the proposal or the analysis, contradictions, identification of new data, or discussion of deficiencies or omissions. Expressions of support or opposition to a proposal need not be acknowledged. Each individual who made the effort to testify should be acknowledged.

It is permissible to group commentors and their concerns in those instances where numerous similar concerns were raised. In this case, the issue should be listed, identifying all the individuals who expressed the concern, followed by a response.

8.15.2.3 Request for a Time Extension to Prepare Comments

The request for a comment period time extension may originate with the public, other agencies, or from within Reclamation. The decision to extend the comment period is the responsibility of the originating office.

If a general extension of time is granted, a notice should be prepared by the originating office and placed in the *Federal Register*. The manager will also notify EPA of the extension. The originating office will also publish a news release on the time extension.

8.15.2.4 Late Comments

Reclamation is not obligated to accept late comments on a DEIS. However, as a practical matter, late comments do occur and should be addressed if the PR/EIS or the FEIS has not been finalized and sent to the printer. When an agency has jurisdiction by law over the action, Reclamation should make a serious effort to see why comments are not received, even if the comments would be late.

8.15.3 Abbreviated FEIS

An abbreviated FEIS may be prepared when the only changes to the DEIS are: (1) to make factual correction(s) or (2) to explain why the comments on the DEIS do not warrant further response.

The following format is recommended for abbreviated FEISs:

- a. Cover sheet—Prepared according to 40 CFR 1502.11
- b. Foreword—Explains that this document is an abbreviated FEIS, and its contents must be integrated with the DEIS (giving name, filing number, date of issuance, and availability source) to be considered a complete document reflecting the full proposal, its alternatives, and all significant environmental impacts
- c. Errata sheet(s)—Prepared according to 40 CFR 1503.4(c)
- d. Comments and responses—Prepared according to 40 CFR 1503.4 and 516 DM 4.17 and organized according to section 8.15.2 of this handbook

In addition to the above requirements, the abbreviated FEIS should contain the summary from the DEIS, the DEIS distribution list, and a list of agencies, organizations, and persons who commented on the DEIS.

Once prepared, only the abbreviated FEIS is distributed to the public.

Draft Environmental Impact Statement
Delta Export Water Contracting Program
Fresno, Kern, Kings, Madera, Merced, San Joaquin, Tulare, Monterey,
San Benito, Santa Clara, and Santa Cruz Counties, California

Prepared by _____
In cooperation with _____

This Environmental Impact Statement (EIS) is prepared in compliance with the National Environmental Policy Act (NEPA) and U.S. Bureau of Reclamation (Reclamation) NEPA procedures.

Reclamation is proposing to resume long-term contracting of approximately 1.5 million acre-feet/year (af/yr) of available and uncommitted water from the Central Valley Project (CVP). The water proposed for contracting originates from existing storage reservoirs in the northern CVP (Shasta, Trinity River, and American River Divisions). The 1.5 million af/yr would be sufficient to meet a portion of the 3.4 million af/yr of the identified CVP water needs.

This EIS analyzes the impacts of Reclamation's Proposed Action in the Delta Export Service Area (DESA), which calls for contracting up to 880,150 af/yr of firm yield and intermittent water within the DESA for agricultural, municipal and industrial, and wildlife refuge uses. In addition to the Proposed Action, the EIS also analyzes the impacts of several alternatives, including the No Action alternative.

The EIS focuses on the regional impacts of water contracting within the DESA, emphasizing impacts on surface water, groundwater, fish and wildlife, recreation, aesthetics, economics, land use, and cultural resources. The EIS also assesses cumulative impacts of water contracting within all three service areas (Sacramento River, American River, and Delta Export) on CVP-wide resources, the Sacramento-San Joaquin Delta, and San Francisco Bay. Subsequent site-specific NEPA reviews, of much narrower scope, will be conducted prior to execution of contracts with individual agencies.

Comments must be received by _____.

For further information regarding this EIS, contact Mr. Bill Payne, U.S. Bureau of Reclamation, MP-750, 2800 Cottage Way, Sacramento, California 95825-1898, telephone 916/978-5488.

Figure 8.1.—Example of an environmental impact statement cover sheet.

SUGGESTED DISTRIBUTION LIST

To be distributed for review and comment

1. Federal agencies (Washington level)
2. National environmental groups

To be distributed for information

1. U.S. Senators
2. U.S. Representatives

To be distributed by the Regional Director or Area Office for review and comment

1. Federal agencies (local level)
2. Governors of the states affected by the project
3. Potentially affected Indian tribes
4. State agencies
5. Local agencies, private organizations, and individuals
6. Potentially affected Indian holders of allotted trust or restricted lands
7. State and local environmental groups

To be distributed by the Regional Director or Area Office for information

1. U.S. Senators (local offices)
2. U.S. Representatives (local Offices)
3. State Senators
4. State Representatives
5. Libraries
6. News media

Figure 8.2.—Example of a distribution list.

LIST OF PREPARERS

This environmental impact statement was prepared by Bureau of Reclamation, Lower Colorado Region, Post Office Box 427, Boulder City, Nevada 89005. A list of persons who prepared various sections of the statement, significant background material, or participated to a significant degree in preparing the statement is presented below:

Name	Qualifications	Participation
Richard G. Bauman	B.S. Wildlife Biology; Natural Resources protection, USFS, 4 years	Biological Resources data collection and analysis
Thomas G. Burbey	B.S. Civil Engineering; water resource planning and project operation, Bureau of Reclamation, 19 years	Water quality surface and ground-water resources
Donald C. Campbell	B.S. Forestry; land management and land acquisition, Corps of Engineers, National Park Service, and Bureau of Reclamation, 20 years	Portions of EIS
Gail E. Cordy	B.S., M.S. Geology; Engineering Geologist, Dames and Moore, 2 years; Bureau of Reclamation, 1 year	Geology portion of EIS
E. Frank Disanza	B.S. Engineering, P.E.; Civil Engineer, Bureau of Reclamation, 6 years	Planning team leader; overall review
Bruce E. Ellis	B.A. Anthropology; Environmental Specialist, Bureau of Reclamation, 3 years	Overall EIS Coordinator assembly and editing of EIS, impact tables, summary, Indian Trust Assets
Bradley K. Flint	Realty technician; Bureau of Reclamation, Power, 4 years	Land use and ownership maps
Christopher R. Gehlker	B.A. Economics; Economist, Corps of Engineers, 8 years; Planning economist, Bureau of Reclamation, 1 year	Economic and social assessment

Figure 8.3.—Example of a list of preparers.

