

Chapter 3

Summary Analysis of Preferred Alternative (Based on Revised Project Description)

As described in Chapter 2, the Preferred Alternative (Alternative 3) has been revised in response to comments received on the Draft EIS/EIR and with regard to project refinements made by Reclamation and the Corps. The following summary analysis of the Preferred Alternative describes how the project refinements described in Chapter 2 relate to various aspects of the natural, physical, and social environments and how certain environmental impacts would be avoided, reduced, or otherwise modified by virtue of those project refinements, as compared to the impacts identified in the Draft EIS/EIR for the original proposal (i.e., Alternative 3 in the Draft EIS/EIR). The analysis below focuses especially on any changes in impacts identified in the Draft EIS/EIR as being significant and/or adverse, inasmuch as the ability to avoid or reduce such impacts, where feasible, is particularly relevant to the NEPA and CEQA review processes.

The presentation of the resource areas (natural, physical, and social environments) in this Chapter follows same order as that presented that of Chapter 3 of the Draft EIS/EIR with the exception of Socioeconomics. In the Draft EIS/EIR, Socioeconomics was presented as Chapter 4.0. In the Final EIS/EIR, Socioeconomics is presented as Section 3.20. Because the environmental baseline, or the basis by which environmental impacts were determined in the Draft EIS/EIR, has not changed since issuance of the Draft EIS/EIR in December 2006, the Affected Environment portion of the Draft EIS/EIR is not repeated here. Appendix C of the Final EIS/EIR includes that text. The sections below only present the changes in impact determinations based on the refinements to the Preferred Alternative, as presented in Chapter 2.0 of this Final EIS/EIR.

3.1 Hydrology, Water Quality, and Groundwater

There would be no notable changes to the impacts related to hydrology and groundwater from those described in the Draft EIS/EIR. In the Draft EIS/EIR, the project-related effects to hydrology and groundwater were determined to be less than-significant. Mitigation monitoring activities proposed in Section 3.1 of the Draft EIS/EIR to demonstrate no significant adverse impact would occur from the project would still be followed under implementation of the revised Preferred Alternative.

The reduction of the project footprint, elimination of borrow activities in most areas along the reservoir shoreline, and elimination of cofferdams at Dikes 7 and 8, are expected to reduce, but not eliminate, the potential for adverse water quality impacts due to construction. Section 2.2.3 of this document shows the difference between the project footprints in the Draft EIS/EIR and revised Preferred Alternative graphically. Table 3-1 summarizes the difference by acreage. Nevertheless, the Partner Agencies will implement Storm Water Pollution Prevention and Water Quality Control plans to ensure that the water quality of Folsom Reservoir is protected during construction.

Construction Zone	Draft EIS/EIR (total area in acres)	Final EIS/EIR (total area in acres)
Contractor Staging Areas	377	215
Borrow Areas	1,040	154
Dike Construction Zones	261	261
Internal Haul Routes	94	35
Total	1,772	665

Based upon additional engineering analysis since the Draft EIS/EIR was published, the Corps has concluded that with optimization of all elements of its Selected Plan, including the 6STG Auxiliary Spillway, emergency spillway gate modification, and a 3.5-ft facility raise, an increase to maximum reservoir water surface elevation beyond current dam crest elevation is not anticipated in order to provide for flood damage reduction benefits. The future maximum water surface elevation for all flood events, inclusive of a PMF event, eliminates the risk that surrounding properties or habitat would be flooded beyond which occurs under existing conditions. Consequently, no property takes, flowage easements, or additional small scale impoundment features, such as dikes or berms, beyond the existing take line are planned as part of the Corps' Selected Plan. The 3.5-ft raise of the Corps' Selected Plan will undergo further design during pre-construction, engineering, and design phase and, if needed, addressed through supplemental NEPA/CEQA documentation.

Because the engineering details of the approach channel for the Auxiliary Spillway are not known at this time, mitigation measure HWQ-13 has been revised as follows:

HWQ-13: During the process of dredging material to construct the approach channel for the Auxiliary Spillway, sediment containing mercury will be controlled using a variety of methods, including, but not limited to, silt curtains, silt fences, as well as other BMPs and construction methods approved by the CVRWQCB.

Dredged material will be placed on the downstream side of the reservoir in a contained area for drying and processing. The dredged material will then be contained either in the MIAD overlay or transported to a permanent disposal site outside of the reservoir.

3.2 Water Supply

The Draft EIS/EIR concluded that any construction-related impact to water supply provided by Folsom Reservoir would not be significant. There is no notable change in impacts to water supply resources as a result of the refinements of the Preferred Alternative; thus, that conclusion remains the same.

3.3 Air Quality

The Partner Agencies are required to conform to federal U.S. Environmental Protection Agency (USEPA) air quality regulations, being enforced by the SMAQMD. All air quality emissions will be required to be controlled to levels that must be in compliance with limits established by SMAQMD in the project's air quality permits. In addition to watering roadways, excavation, and deposition sites to minimize dust, the Partner Agencies will be required to use the most up-to-date pollution reduction equipment on all fossil fuel powered construction equipment. The specific air pollution control measures to be employed and adhered to will be described in detail in the project's air quality permits. Refinements to the project, including an air quality assessment of a more practical project, have shown that the project can conform to the Clean Air Act requirements. These refinements include:

- Identification of available air quality emission credits,
- Redistribution of material hauling and disposal to minimize haulage miles
- Scheduling and sequencing of excavation and hauling work so that there is not a significant overlap with other project activities that contribute to air quality emissions,
- Use of electrical power for all stationary equipment (note: electrical power will be obtained from commercial sources and will not impact Western Area Power Authority or CVP users and customers), and
- Use of the most recent pollution control equipment for all off-road equipment.

3.4 Aquatic Resources

The Draft EIS/EIR concluded that potential impacts due to construction would not be significant because the shoreline habitat is marginal and the fish occupying the habitat are non-native. Notwithstanding, the elimination of some borrow activity around the shoreline of Folsom Reservoir has the potential for reducing impacts to fish. Figures 2-1 and 2-2 of this document illustrate the difference between the project footprints in the Draft EIS/EIR and revised Preferred Alternative. Table 3-1 above summarizes acreage differences.

The Draft EIS/EIR concluded that staging site and construction work could adversely affect habitat supporting vernal pool species. The reduction of project footprints and some borrow activity may reduce the potential for impact vernal pool species; however, because the species are protected under the ESA, any disturbance of vernal pool habitat would be considered significant. As such, the refinements to the Preferred Alternative could ostensibly reduce the potential for, and/or extent of, significant impacts to vernal pools; but, for the purposes of this Final EIS/EIR, the basic earlier conclusion that significant impacts to vernal pools species may occur would not change. The measures identified in Section 3.4 of the Draft EIS/EIR to mitigate such impacts are still applicable and would be implemented under the revised Preferred Alternative. In the event of retention of floodwaters above the existing conditions maximum reservoir water surface elevation, all applicable federal laws will be followed by the responsible Federal Agency to mitigate impacts to vernal pool invertebrates and their habitats.

Aquatic invertebrate mitigation measure AQINV-1c has been deleted as it is redundant to mitigation measure BIO-4"

3.5 Terrestrial Vegetation and Wildlife

The refinements to the project footprint for staging, haul roads, and stockpiling could reduce impacts to vegetation and wildlife. Figures 2-1 and 2-2 of this document illustrate the difference between the project footprints in the Draft EIS/EIR and revised Preferred Alternative. Table 3-1 above summarizes acreage differences. Table 3-2 delineates, by habitat type, the amount of habitat impact reduction that would occur under the revised Preferred Alternative compared with Alternative 3 in the Draft EIS/EIR. The reduction in the project footprint would reduce impacts to oak/grey pine woodland, chaparral, and seasonal wetland, but not riparian woodland. Impacts to riparian woodland would increase due to moving haul roads closer to the reservoir, which avoids oak woodland and cultural resources sites, but not riparian habitat. Also, a recent survey of the Dike 4 area identified additional riparian acreage. The four percent increase in impacts to riparian woodland area would not be substantial, especially when considered in light of the 37 percent reduction in impact area for the other habitat types, based on the project refinements. Nevertheless, because 52.4 acres of oak/grey pine woodland, 42.7 acres of riparian woodland, 0.7 acres of chaparral, and 1.2 acres of seasonal wetland would still be affected, impacts to terrestrial vegetation and wildlife would remain significant and require mitigation. Mitigation measures introduced in Section 3.5 of the Draft EIS/EIR would be implemented to minimize the impact or to replace habitat lost as part of project construction.

Based upon additional engineering analysis since the Draft EIS/EIR was published, the Corps has concluded that with optimization of all elements of its Selected Plan, including the 6STG Auxiliary Spillway, emergency spillway gate modification, and

a 3.5-ft facility raise, an increase to maximum reservoir water surface elevation beyond current dam crest elevation is not anticipated in order to provide for flood damage reduction benefits. The future maximum water surface elevation for

**Table 3-2
Comparison of Habitat Impacted Alternative 3 in
Draft EIS with Revised Preferred Alternative**

Habitat Type	Alternative 3 in Draft EIS/EIR (Impacted Acres)	Revised Preferred Alternative (Impacted Acres)
Oak/grey pine woodland	80.4	52.4
Riparian woodland	41.0	42.7
Chaparral	1.26	0.7
Seasonal wetland	4.29	1.2
Total	126.95	97.0

all flood events, inclusive of a PMF event, eliminates the risk that surrounding properties or habitat would be flooded beyond which occurs under existing conditions. Consequently, no property takes, flowage easements, or additional small scale impoundment features, such as dikes or berms, beyond the existing take line are planned as part of the Corps' Selected Plan. The 3.5-ft raise of the Corps' Selected Plan will undergo further design during pre-construction, engineering, and design phase and, if needed, addressed through supplemental NEPA/CEQA documentation. In the event of retention of floodwaters above the existing conditions maximum reservoir water surface elevation, all applicable federal laws will be followed by the responsible Federal Agency to mitigate impacts to wildlife and their habitats.

The mitigation measure BIO-3 has been clarified and supplemented to further mitigate any adverse effects to federally listed species and their habitats not already covered within the project mitigation measures. The refined mitigation measure, referred to as BIO-11, is as follows.

BIO-11: To minimize adverse effects to federally listed species and their habitats, the responsible Federal agency shall implement avoidance and minimization measures from the project Biological Assessment and anticipated in the Biological Opinion from the USFWS. These measures will supplement and supersede, if necessary, other project mitigation measures.

3.6 Soils, Minerals, and Geological Resources

The quantity of in-reservoir area borrow that was proposed for excavation in the Draft EIS/EIR would reduce as part of the refinements to Alternative 3. Therefore, impacts to soil and geological resources would be less than those identified in the Draft EIS/EIR. The measures identified in Section 3.6 of the Draft EIS/EIR to mitigate significant impacts related to soil erosion and asbestos disturbance are still applicable and would still be implemented under the revised Preferred Alternative; hence, the earlier conclusion that such impacts to be reduced to a level less than significant still stands.

3.7 Visual Resources

The Draft EIS/EIR concluded that the potential for a raise of Folsom facilities that would result in a raise of the reservoir surface water elevation could result in the possible need for new embankments. The new embankments could introduce a significant visual impact for local residents and Folsom Lake State Recreation Area (FLSRA) visitors. Engineering evaluations conducted by the Reclamation and the Corps since release of the Draft EIS/EIR indicates that there no longer is a need to increase the reservoir water surface elevation to provide dam safety and flood damage reduction benefits. Therefore, construction of new embankments (dikes or berms) is not part of the Folsom DS/FDR actions and such is not included in the revised Preferred Alternative as addressed in this Final EIS/EIR.

The revised Preferred Alternative that is currently proposed and addressed in this Final EIS/EIR does, however, include the possibility of construction of a 3.5-ft parapet wall or earthen raise, which would primarily provide increased freeboard capacity at the Folsom Facility¹. The visual impacts of such a wall are acknowledged in Section 3.7 of the Draft EIS/EIR as being significant and unavoidable, which would still be the case for the revised Preferred Alternative. Similarly, temporary impacts to visual resources during construction, as described in the Draft EIS/EIR, would, under the revised Preferred Alternative, remain until disturbed areas are recontoured, stabilized, and revegetated. The new Auxiliary Spillway will be a new dam site visual feature that would be visible from the new Folsom Dam Bridge. Mitigation measures identified in Section 3.7 of the Draft EIS/EIR would still be applicable and would be implemented; however, as with Alternative 3, the revised Preferred Alternative would result in unavoidable significant visual impacts during construction.

¹ The additional freeboard capacity provided by the 3.5-ft wall serves as a safety area above the reservoir water elevation during major storm events, to accommodate spontaneous changes in peripheral water surface elevations such as from winds or waves.

3.8 Agricultural Resources

The Draft EIS/EIR concluded that the Folsom DS/FDR actions would not affect agricultural resources, as none are within the project area. The refinements to the Preferred Alternative do not change this conclusion.

3.9 Transportation and Circulation

The Draft EIS/EIR identified several locations where LOS indices could be reduced as a result of transport of materials and supplies to the project sites. The Draft EIS/EIR noted the importance of a Traffic Management Plan to prevent significant impacts from occurring. Although refinements to the Preferred Alternative have changed some of the sequencing of hauling of materials, the refinements have not substantially changed the quantities of material transported to the project sites. The Partner Agencies remain committed to a Traffic Management Plan to ensure that significant disruption of traffic flow does not occur as a result of the hauling of materials. The Traffic Management Plan will include a peak hour analysis to aid in the determination of timing of construction traffic flow versus existing and future level of service information.

3.10 Noise

The refinements to the Preferred Alternative have eliminated a materials processing plant near Folsom Point and opposite to Mooney Ridge, reducing noise sources at those locations. Processing of materials would still occur south of Beal's Point, at the Auxiliary Spillway excavation site (LWD and Observation Point), and at MIAD (D1/D2 locations). The processing of materials at Beal's Point would have the potential for impacting recreational activities, including camping, near the processing site. At present, the Partner Agencies plan to conduct processing during the winter months when recreational use is at its lowest. Construction of seepage filters at Dike 5 would be in the vicinity of the RV parking lot. Construction at this location would be only off-peak recreation season months and would not occur at night.

The hauling of material from the Auxiliary Spillway site eastward to MIAD would still occur, although the Partner Agencies would seek to use stockpile and disposal sites at the LWD, Observation Point, and Dike 7 first to minimize truck noise. As part of the refinements to the Preferred Alternative, the Partner Agencies would reinforce their commitment to employ all possible noise-reduction measures to keep noise levels from excavation, hauling, placement, and processing materials to remain below local noise ordinance limits.

3.11 Cultural Resources

One aspect of the refinement of the Preferred Alternative was the reduction in project footprint, including the siting of proposed haul road routes that avoid cultural resources and the elimination of the potential borrow areas at Beal's Point. The

reduction in the project footprint reduces the overall extent of potential impacts to cultural resources resulting from project construction. Section 2.2.3 of this document shows the difference between the project footprints in the Draft EIS/EIR and revised Preferred Alternative in tabular format and graphically. The measures identified in Section 3.11 of the Draft EIS/EIR to mitigate impacts to cultural resources would still be applicable to the revised Preferred Alternative and would reduce the potential impacts to a level less than significant. The Partner Agencies will complete the State Historic Preservation Office (SHPO) consultation process as necessary to comply with NHPA requirements.

3.12 Land Use, Planning, and Zoning

The Draft EIS/EIR analysis of land use, planning, and zoning considerations associated with the project is influenced largely by the issue of a potential raise in reservoir water surface elevation, and the associated improvements and measures such as new flood control berms, easements, or property acquisition. The requirement for new flood control berms, easements, or property acquisition was removed from the Preferred Alternative because Reclamation and the Corps have determined that there no longer is a need for a raise in the reservoir water surface elevation to address dam safety and flood damage reduction concerns. Therefore, the revised Preferred Alternative would have no impact to land use, planning, or zoning.

3.13 Recreation Resources

The Draft EIS/EIR assessed impacts to recreation resources at FLSRA as a result of closure of recreational facilities due public safety and construction staging needs. In response to public comments on the Draft EIS/EIR, the Partner Agencies have reduced the amount of acreage needed for staging purposes by eliminating, consolidating, or reducing acreage from that presented in the Draft EIS/EIR (see Table 3-1 above). In principle, contractor staging areas would emphasize use of areas with no current public access, away from residential areas, use of excess materials to create platforms above the normal operating reservoir water surface elevation of 466.0 feet and be placed so as to maintain existing or equivalent public recreation access and use capacity during the peak recreation season.

To minimize potential impacts to recreation, staging areas at Beal's Point and Folsom Point would be placed on constructed platforms or on adjacent unimproved areas a safe distance from primary recreational activities. Public safety would be maintained through the use of fencing or other similar measures. There would be nearly continuous public access to recreation areas and trails throughout the construction period through the use of traffic control measures and/or grade separated vehicular and/or pedestrian crossings and/or temporary alternate public access detours. Closures could occur while the Partner Agencies are implementing these new measures that allow continued access or to address public safety and

facility security objectives. In such cases, temporary closures would be accomplished during off-peak days or the off-season to minimize impacts on recreation activities. Reclamation's Central California Area Office would notify local agencies and the general public and accept input in advance of any possible extended closure(s) that may be necessary due to unforeseen project circumstances.

The Draft EIS/EIR also introduced the possibility of construction use at, or near, Granite Bay and Browns Ravine. Under the revised Preferred Alternative, use or work at Granite Bay and Browns Ravine has been eliminated. There would also be no impacts at Rattlesnake Bar, the Peninsula Campground, Doton's Point, Beeks Bight.

The Partner Agencies remain committed to providing year round access to FLSRA, although it is recognized that some inconvenience to the visiting public remains possible to address public safety and facility security objectives. The Partner Agencies also remain committed to replace any recreation structure, facility, or trail that is damaged or moved as part of construction work. Under current authorities, the Partner Agencies can replace in-kind existing facilities affected by the project, but cannot enhance or improve existing or new facilities.

3.14 Public Services and Utilities

Utility relocations discussed in the Draft EIS/EIR would still be necessary to construct elements of the revised Preferred Alternative. The Partner Agencies would relocate utilities in a manner that will not disrupt services to utility customers.

3.15 Hydropower Resources

The Draft EIS/EIR concluded that none of the Folsom DS/FDR alternatives would significantly affect hydropower resources because the alternatives would not change current operations. The revised Preferred Alternative also would not change current reservoir operations so it would not significantly impact hydropower resources.

3.16 Population and Housing

Construction of all features of the revised Preferred Alternative would be temporary, employing workers from within the region. There would not be a need for new housing for the construction workers. Because a raise of reservoir surface elevation is not part of the revised Preferred Alternative, there is no longer a potential for inundation impacts above the current federal take line around the reservoir. Therefore, the revised Preferred Alternative would not have impacts to population and housing.

3.17 Public Health and Safety

The Partner Agencies remain committed to implement and construct all features of the revised Preferred Alternative in a manner that is protective of public health and safety. The refinements to the Preferred Alternative do not change that commitment.

3.18 Indian Trust Assets

There are no Indian Trust Assets within the footprint of the construction areas proposed for the revised Preferred Alternative.

3.19 Environmental Justice

There are no predominately minority and/or low income groups defined by Environmental Justice guidance within the revised Preferred Alternative project area that would be disproportionately adversely impacted by Folsom DS/FDR activities. Notwithstanding, the Partner Agencies remain committed to implement and construct all features of the revised Preferred Alternative fairly and justly in a manner that considers all peoples including race and economic status.

3.20 Socioeconomics

The Draft EIS/EIR presented the results of an economic analysis based on the assumption that recreational facilities would be closed for extended periods, including during the peak summer recreation period. The results of this analysis indicated a loss of revenues to the local economy due to reduced recreational visits, but a benefit to the economy due to the local purchases by the work force employed by an approximately \$1 billion construction project. CDPR would experience an adverse economic impact because of lost revenues during the summer at the closed recreation sites.

In response to public comments on the Draft EIS/EIR, the Partner Agencies are no longer planning to close any recreation facility during the peak recreation season (May through September). Facility entry kiosks staffed by CDPR personnel would remain open and CDPR would continue to collect revenue. During the non-peak season when use of the recreational facilities is low, visitors would still be able to use volunteer pay stations when they access open recreation sites. Because FLSRA would remain accessible throughout the year, frequent users would still purchase annual passes. Therefore, under the revised Preferred Alternative, there would not be a notable loss of revenues to CDPR. In the event of closures to recreation facilities due to uncontrollable circumstances, impacts to the local economy and CDPR would occur. Regional economic impacts would be minimal because visitors would still be able to recreate at other local recreation areas and open FLSRA facilities; therefore, they would likely spend money within the region. Also, the benefits of construction worker spending would continue to offset any losses in recreational expenditures.

CDPR would lose some revenues as a result of unexpected closures, but they would be substantially less than those described in Chapter 4 of the Draft EIS/EIR.

3.21 Impacts and Corresponding Mitigation Measures Eliminated in the Final EIS/EIR

Section 2.5 provides the listing of mitigation measures proposed to reduce impacts to less than significant levels. These are essentially the same mitigation measures proposed in the Draft EIS/EIR. As a result of the revisions to the project description, several mitigation measures proposed in the Draft EIS/EIR are no longer necessary and/or applicable, and have therefore been eliminated relative to this Final EIS/EIR. Table 3-3 presents a list of the mitigation measures that have not been carried into the Final EIS/EIR, and the reasons for their elimination.

**Table 3-3
 Mitigation Measures Eliminated since the Draft EIS/EIR**

Number in Draft EIS/EIR	Mitigation Measure	Reason for Elimination
Hydrology, Water Quality, and Groundwater		
HWQ-10	HWQ-10: Reclamation will monitor groundwater and surface water levels in wetlands downstream of MIAD and within the Mormon Island Wetland Preserve during dewatering of the MIAD foundation for excavation and replacement. If water levels decrease because of dewatering, the water obtained from dewatering will be tested and treated to meet surface water standards prior to being pumped back into the wetlands.	This mitigation measure is no longer applicable. Excavation and replacement of the MIAD foundation would not occur under the Preferred Alternative (revised Alternative 3), as described in Chapter 2 of this Final EIS/EIR.
Aquatic Resources		
AQINV-1c	AQINV-1c: On-site personnel will receive instruction (from Reclamation, Corps, or trained representative) regarding the potential presence of listed species and the importance of avoiding impacts.	This mitigation measure is redundant to mitigation measure BIO-4.
AQINV-1e	AQINV-1e: Effects caused by emergency retention of floodwaters will be minimized by conducting baseline surveys below the maximum potential surface elevation. Protocol surveys for vernal pool fairy shrimp and California vernal pool tadpole shrimp will be conducted by a USFWS-approved biologist at seasonal pools capable of supporting these vernal pool species. <ul style="list-style-type: none"> • If these vernal pool species are not found, no additional minimization measures will be required. • If vernal pool fairy shrimp and/or California vernal pool tadpole shrimp are found, sites supporting populations will be recorded. 	This mitigation measure is no longer necessary, as the Preferred Alternative (revised Alternative 3) would not increase the reservoir surface elevation (See Chapter 2 of this Final EIS/EIR for the current project description).

Table 3-3 Mitigation Measures Eliminated since the Draft EIS/EIR		
Number in Draft EIS/EIR	Mitigation Measure	Reason for Elimination
	<ul style="list-style-type: none"> Following a large hydrologic event that temporarily increases Folsom reservoir surface elevation above the normal operations maximum, affected pools supporting vernal pool fairy shrimp and/or vernal pool tadpole shrimp populations will be again surveyed by an approved biologist for presence/absence, and the responsible Federal agency will re-initiated consultation with the USFWS if necessary or appropriate. 	
Terrestrial Vegetation and Wildlife		
BIO-8	<p>BIO-8: In the event of emergency operations that increase the reservoir surface elevation of Folsom Reservoir above the normal OHWM, supplemental environmental compliance will be completed. It is anticipated that surveys would be completed after the event and post-inundation surveys would be compared to the most recent pre-inundation survey data available to assess impacts and compensatory mitigation. The responsible Federal agency would contact other federal, state, and local agencies to develop appropriate mitigation measures. These measures would be based on the extent and duration of the emergency inundation and survey data. Based on the results of these surveys, formal Section 7 consultation would be reinitiated by the responsible federal agency and consultation with CDFG would also be conducted.</p>	<p>This mitigation measure is no longer necessary, as the Preferred Alternative (revised Alternative 3) would not increase the reservoir surface elevation (See Chapter 2 of this Final EIS/EIR for the current project description).</p>
Visual Resources		
VIS-1	<p>To minimize the visual impact to less than significant level, move the processing facility at Browns Ravine southeast into the cove area.</p>	<p>The processing facility at Browns Ravine has been dropped from the Preferred Alternative.</p>
VIS-2	<p>To lessen the impacts directly in front of the Granite Bay beach area, reduce the size of the borrow area so that excavation</p>	<p>Borrow work at Granite Bay has been dropped from the Preferred Alternative.</p>

Table 3-3 Mitigation Measures Eliminated since the Draft EIS/EIR		
Number in Draft EIS/EIR	Mitigation Measure	Reason for Elimination
	would not occur in front of the beach area.	
Land Use, Planning, and Zoning		
LU-1	LU-1: If a raise feature is selected, the determination regarding structural solutions (i.e., flood damage reduction berms) and/or acquisition of real estate rights (easements or fee title) for any impacted non-federal parcel will be made on a case by case basis and will depend upon feasibility, cost, and acceptability to the landowner(s). Efforts will be made to design and construct flood damage reduction structures that will reduce or eliminate the need for building flood damage reduction berms and/or acquiring real estate rights (easements or fee title), including potential relocation of residents, on impacted non-federal parcels.	This mitigation measure is no longer necessary as the Preferred Alternative (revised Alternative 3) would not increase the reservoir surface elevation (See Chapter 2 of this Final EIS/EIR for the current project description).
LU-2	LU-2: The responsible agency will follow the procedures of local jurisdictions for zoning district changes, as needed to provide flood damage reduction measures.	This mitigation measure is no longer necessary as the Preferred Alternative (revised Alternative 3) would not increase the reservoir surface elevation (See Chapter 2 of this Final EIS/EIR for the current project description).
LU-3	LU-3: To lessen visual impacts of flood damage reduction berms and reduce potential conflict with local visual resource policies, a berm will be located on a parcel so as to conceal it in the viewshed, if practical, and/or construction materials will be used to make the berm less visually conspicuous.	This mitigation measure is no longer necessary as the Preferred Alternative (revised Alternative 3) would not increase the reservoir surface elevation (See Chapter 2 of this Final EIS/EIR for the current project description).
Public Services and Utilities		
PSU-7	PSU-7: Notification will be provided to the appropriate agencies if any additional utilities could be inundated as a result of the implementation of the Folsom DS/FDR.	This mitigation measure is no longer necessary as the Preferred Alternative (revised Alternative 3) would not increase the reservoir surface elevation (See Chapter 2 of this Final EIS/EIR for the current project description).

Chapter 4

Comments and Responses

4.1 Introduction

This chapter and associated appendix (Appendix A) contain responses to all comments received to the Folsom DS/FDR Draft EIS/EIR during the public comment period. The Folsom DS/FDR Draft EIS/EIR was released for public review on December 1, 2006. The Partner Agencies conducted two public hearings where verbal and written comments on the Draft EIS/EIR were accepted. All comments on the Folsom DS/FDR Draft EIS/EIR were due by January 22, 2007; however, at the Partner Agencies' initiative, the comment period was extended four additional days to January 26, 2007. All forms of written comments were accepted during the comment period, including e-mails, letters, and comment forms. Numerous telephone calls were also received during the comment period. NEPA and CEQA do not require responses to comments made through telephone calls; however, the telephone call comments were similar to many of the written comments received during the comment period.

This Chapter of the Final EIS/EIR provides the following information:

Section 4.2 summarizes the project background, describing the overall setting for why the project is necessary, and also explaining the technical and policy basis for many of the comment responses.

Section 4.3 provides responses to “topical comments”. Topical comments reflect recurrent or common issues raised by reviewers during the comment period.

Section 4.4 lists the entities that submitted written comments on the Draft EIS/EIR.

Section 4.5 describes the public hearing locations and comment process, and identifies individuals that provided verbal and/or written comments at the hearings.

Section 4.6 introduces the specific responses to comments submitted on the Draft EIS/EIR. Comments and their respective responses are provided in Appendix A of this document.

Section 4.7 describes the petition forms that were submitted on this project.

Section 4.8 presents the comments and responses received on the Corps' Project Authorization Change (PAC) Report.

4.2 Project Background

Folsom Dam is comprised of 12 impoundment facilities. These include the Main Concrete Dam, two adjacent wing dams, MIAD, and eight separate dikes. Evaluations of the operational flexibility and structure of the dam and associated facilities indicate that improvements are necessary to maintain dam safety and to improve flood damage protection benefits along the lower American River. Although there is potential for work on all 12 of the facilities, the major work proposed with potential recreation impacts is the construction of an Auxiliary Spillway to improve hydrologic control of extreme flooding events, modifications to the Right Wing Dam and Dikes 4, 5 and 6 to reduce seepage and piping concerns and construction of an overlay at MIAD due to seismic risk concerns.

Folsom Dam and Reservoir were constructed between 1948 and 1956. By law, the dam must be operationally and financially integrated with all other features of the CVP. The authorized project purposes are flood control, water supply, hydropower, water quality, navigation, and fish and wildlife. Recreation activities at Folsom Dam and Reservoir are allowed under the authority of the Central Valley Project Reauthorization Act dated August 30, 1935 and the Federal Water Project Recreation Act. However, recreation is not a primary purpose of Folsom Reservoir.

Reclamation administers project lands and the recreation program through a long-term agreement with CDPR. Under the terms of their long-term agreement with Reclamation, CDPR manages the full scope of lands and the recreation program on federally-owned lands at Folsom Dam and Reservoir, including resource management, fire protection, cultural resource protection, public health and safety, and law enforcement. Reclamation does not fund CDPR through appropriations. Instead, most land management activities are funded by CDPR through revenues generated by the recreation program.

43 CFR 429 prohibits Reclamation from granting easements for projects that impact Reclamation functions and programs (i.e., dam safety and reservoir operations). Therefore, in order for the proposed project to proceed on Reclamation managed land, the project proponent must fully mitigate impacts to Reclamation's land management, which includes resource management, fire protection, cultural resource protection, public health and safety, and law enforcement for Reclamation lands and recreation program.

Additionally, under the authority of the Safety of Dams Act as cited in the Draft EIS/EIR, under which Reclamation exercises its authority to make the proposed modifications under this EIS/EIR, Reclamation cannot provide additional recreation

or other benefits. The Corps and local sponsor(s) ability are also limited in scope and nature under its authorities relevant to recreation, which include but are not limited to:

- 1) Section 4, 1944 Flood Control Act (P.L. 78-534) as amended, Federal Water Project Recreation Act 1965 (P.L. 89-72) as amended;
- 2) Section 103(c)(4) and 103(e) Water Resources Development Act 1986 as amended; and
- 3) Reclamation Projects Authorization and Adjustments Act, Section 2804 (PL 102-575).

As public stewards of Federal interests and the property that the project is being undertaken, Reclamation, the Corps, DWR, and the local sponsors (Partner Agencies) acknowledge that the potential exists in the future to provide new beneficial recreational or other beneficial improvements which could be made to potential remnant temporary unimproved platforms, roads, and or trails following completion of the Folsom DS/FDR project construction. Such potential improvements are viewed at this time as being consistent with conceptual plans put forth in the Draft Folsom State Park Resource Management Plan and with other local recreation plans. These plans are conceptual in nature at this time. They are not funded and/or approved plans. As such, they are not considered an existing project future condition and are not required to be considered as offsetting mitigation for potential impacts. Future beneficial improvements may be undertaken by Reclamation under other applicable authorities and/or by the Corps, local sponsor(s) and/or other parties on approval by Reclamation, subject to future environmental, economic and other required analysis, but do not represent a commitment to provide such improvements as part of this EIS/EIR.

4.3 Topical Responses

Topical responses address those comments received during the formal comment period that were either frequent in nature, involved a common theme, or both.

4.3.1 Recreation Mitigation

The recreation impact analysis in the Draft EIS/EIR provided a very conservative (i.e., “worse-case”) assessment of closing recreation facilities for use as construction, contractor staging and processing sites. Many Draft EIS/EIR-related comments concerned the actual or perceived impacts of the project on recreation activities. Commenters were particularly concerned that all five alternatives presented in the Draft EIS/EIR assumed that Folsom Point could be closed for an extended period of time during construction. Various alternatives also assumed potential impacts at Beal’s Point and Granite Bay recreation areas. A large number of comments

pertained to the loss of convenience to recreational opportunities, including hiking, boating, swimming, picnicking, biking, and nature watching. In order to reduce impacts, many commenters suggested the use of alternative sites for the contractor's main staging area or the construction of temporary facilities such as boat launches.

Folsom Point was considered in the Draft EIS/EIR as one of the potential staging areas because it is the only currently relatively flat, large area centrally located between the spillway site and MIAD that could serve as a staging point for contractor office use, parking of equipment, and storage of supplies and materials. All other locations would require greater construction effort, impact a greater area to wildlife habitat, and possibly require filling of the reservoir's shoreline.

Reclamation has evaluated a number of potential alternative staging locations in lieu of staging at Folsom Point. These include locations within and outside of federal property. The possibility of staging at areas outside of federal property was eliminated due to security and safety considerations. The large number of vehicles and trucks required for this project will need to be contained on federal land and not be crossing public streets. This will particularly preclude staging west of the dam along Auburn-Folsom Road because access to the east side of the dam would involve use of city roads.

Alternative staging sites within federal property include staging below the LWD along the alignment of the Auxiliary Spillway, at the Overlook parking lot, staging along the closed Folsom Dam Road, construction of staging near Dikes 7 and 8, construction of staging west of Folsom Point, and construction of staging north of Green Valley Road. The Overlook parking lot could be used for staging at least initially while project mobilization and road construction is started, but the area is too small to stage the number of equipment vehicles anticipated for the project. Staging near Dikes 7 and 8, and Folsom Point would require placement of fill within the reservoir. Staging near Green Valley Road would be temporary because the area would end up as a disposal site for excess excavated material. Staging along the closed portion of Folsom Dam Road is not possible due to limited area available and interference with construction of the new Folsom Dam Bridge.

Since the issuance of the Draft EIS/EIR, project details have been refined (See Section 2.2), including identification of the most likely staging, processing, and haul road locations under Alternative 3. As a result of the refinement of the project details, there will be nearly continuous public access to recreation areas throughout the construction period through the use of traffic control measures and/or grade separated vehicular and/or pedestrian crossings and/or temporary alternate public access detours. Exceptions could include temporary closure incidental to completing construction of the grade separation itself or other access measures or to meet unforeseen project circumstances. In such cases, temporary closures would be accomplished during off-peak days or off-season to minimize impacts on recreation

activities. Reclamation's Central California Area Office will notify local agencies and the general public and accept input in advance of any possible extended closure(s) that may be necessary due to unforeseen project circumstances.

Any recreation facility impacted by construction will be repaired or replaced, in kind, to its existing function following disturbance during construction. As public stewards of the Federal interests and property which the project is being undertaken, The Partner Agencies acknowledge the potential exists in the future to provide new beneficial recreational or other beneficial improvements which could be made to potential remnant unimproved platforms following completion of project construction as an incidental benefit.

The potential improvements are viewed at this time as being consistent with conceptual plans put forth in the Draft Folsom Lake State Park Resource Management Plan and with other local recreation plans. These plans are conceptual in nature at this time and are not funded and/or approved plans and thus not considered an existing project future condition and thus are not required to be considered as offsetting mitigation for potential impacts. Future beneficial improvements may be undertaken by Reclamation under applicable authorities and/or by other parties on approval by Reclamation, subject to future environmental, economic and other required analysis but do not represent a commitment to provide such improvements as part of this EIS/EIR. The Partner Agencies are committed to promoting these opportunities in partnership with other agencies and the public.

The measures proposed by the Partner Agencies for reducing construction impacts to recreation to a level less than significant are discussed in detail in Section 4.3.1.1 below.

4.3.1.1 General Recreation Mitigation Strategy

The primary federal objective is to expedite completion of projects that provide greater than 1/200 year flood protection and address critical dam safety requirements at Folsom Dam and Reservoir. Public health and safety are therefore paramount. Within this context and to the extent practicable, the Partner Agencies would schedule and manage construction activities to avoid impacts on recreation activities on and around Folsom Lake. There would be no significant impacts at Granite Bay, Rattlesnake Bar, the Peninsula Campground, Doton's Point, Beeks Bight, or Browns Ravine. There would be some unavoidable, though largely incidental impacts to recreation activities at Folsom Point, Beal's Point and trails at MIAD, Dikes 4, 5, 6, and the RWD. As a general principle, construction plans would not assume any extended closures to either Folsom Point or Beal's Point. In order to meet project objectives, however, the Partner Agencies must necessarily retain the option for extended closures in the event of unforeseen project circumstances.

Regarding recreation site access, the Partner Agencies would evaluate and implement reasonable alternatives to reconfigure entrance roads as necessary at

Folsom Point and/or Beal's Point to allow concurrent construction traffic and public access. Cross traffic from haul routes and other construction activities would be managed through the use of traffic control measures and/or grade separated vehicular and/or pedestrian crossings and/or temporary alternate public access detours. Access to Folsom Point and Beal's Point may be closed temporarily in order to construct grade separation and other access project features.

Impacts to formal, existing access roads, bike paths and/or pedestrian trails would be minimized by constructing or identifying temporary, in-kind roads, bike paths and/or pedestrian trail detours in conjunction with public safety and traffic control measures. Access to and use of such roads and trails may be interrupted in order to construct detours or in-kind facilities themselves.

In addition to access, the Partner Agencies have adopted other substantive measures to preserve the quality of the recreation experience as much as possible.

Improvements to the project since the Draft EIS/EIR include:

1. Batching and materials processing operations would be consolidated within the Folsom Industrial Area, at the Observation Point and the adjacent area below the LWD. This greatly diminishes the potential for noise, dust and other impacts within the main recreation areas. The one exception is Beal's Point where, in order to reduce impacts elsewhere, the Partner Agencies must preserve the opportunity for materials processing at the area adjacent to the RWD or north of Dike 6.
2. Staging areas at Beal's Point and Folsom Point have been adjusted. New staging areas will be constructed adjacent to the Beal's Point recreation area on constructed platforms at a safe distance from primary recreational activities. In the Draft EIS/EIR, existing facilities, primarily paved parking facilities, were identified as potential staging areas. To the extent practicable, existing recreation capacity would be fully maintained by relocating staging areas to adjacent areas which would not adversely impact the public's ability to use these existing facilities. Staging requirements which cannot be practically avoided and result in impacts to recreational facilities during the peak recreating season would be mitigated by providing alternative access to the facilities and trails during the work week and maintaining full access capacity on holidays and weekends.
3. The primary borrow source for the project would be material excavated from the Auxiliary Spillway and the new Folsom Dam Bridge. This diminishes traffic and other construction impacts at most recreation areas. The Partner Agencies must preserve the option to excavate from a site north and adjacent to Beal's Point. Borrow from these sites may be necessary for material quality or quantity, or to avoid other significant impacts.

Project construction scheduling will be sequenced to minimize recreation impacts with an emphasis on avoidance and conducting recreation disturbing activities during the off-season from mid-September to May. Construction activities would occur at various locations over the period of the project in a phased approach. Phases are expected to be in 1- to 3-year increments with periods of inactivity ranging from 6 months to 2 years. The duration of any single phase of work in the vicinity of any single recreational facility is not expected to exceed 3 years. By the above actions, impacts incurred are further reduced to less than significant as recreational facilities would not be impacted continuously for extended periods of time.

Every effort has been made to avoid impacts to recreation; however, it is possible that unforeseen project circumstances may occasionally require more extended closures of various recreation facilities. Such closures may be necessary to regain time lost as a result of flood events or extended periods of inclement weather, substantive changes in materials assumptions or calculations, major public safety issues, infeasibility, and the like. Reclamation's Central California Area Office will notify local agencies and the general public and accept input prior to initiating more extended delays.

By the above general actions, and those specifically listed in this Final EIS/EIR below, impacts to recreation would be reduced to less than significant as nearly continuous existing or equivalent access capacity would be maintained to recreational facilities during the peak recreation season of approximately May to mid-September. The following text provides the Partner Agencies' general response to the issues raised regarding construction impacts to FLSRA recreation facilities.

4.3.1.2 Construction Relationship to Recreational Facilities

Construction of the Auxiliary Spillway would involve the excavation of up to 3.5 million cubic yards of earthen material and the transportation of this material to various temporary and/or permanent stockpile locations. Principle material distribution has been assumed to be off road haul trucks; however, through continued engineering analysis, the Partner Agencies continue to evaluate equipment size and other conveyance methods to reduce impacts, including recreation.

Movement of excavated material would involve a significant number of haul truck round trips. To keep this amount of truck traffic off of city streets, a haul road would be located on federal property between the maximum high (480.5 ft) and normal operational water levels (425.0 to 466.0 ft) of the reservoir. The haul road would be approximately 40-ft wide. The haul route would be designed and maintained to minimize noise and fugitive dust emissions.

To the extent practicable, the Partner Agencies would use existing topography and stockpiled materials to reduce noise along haul routes and control fugitive dust emissions by use of combinations of water, dust control surfactants, and gravel or

similar pavements. Public safety would be maintained via fencing or other similar measures.

Currently, this volume of material equates to an estimated 120,000 haul truck round trips for the excavation and stockpile sites. Over the expected term of the excavation, this equates to a truck trip approximately every fifteen minutes to the various stockpile locations. Duration and intensity will vary over time, but noise and dust impacts would be maintained at or below regulatory limits, based on best management practices and mitigation measures outlined in Section 2.5 of this document.

A soil overlay at MIAD would use 1.5 to 2 million cubic yards of the material excavated from the spillway site. This material would be placed at the D1/D2 staging sites near MIAD for temporary stockpiling prior to construction. Any excess material would be permanently stockpiled at locations identified in Chapter 2 of the Final EIS/EIR.

Folsom Point

In order to minimize traffic and other impacts on local arteries, the Draft EIS/EIR has proposed a haul route located entirely on Federal property. This haul route intersects the entrance road to Folsom Point. The Draft EIS/EIR originally proposed that Folsom Point be designated as a major staging area because of its optimal location as the only currently relatively flat, large area centrally located between the spillway site and MIAD. Because of the impact of construction traffic on the entrance road, combined with use of Folsom Point as a major staging area, the Draft EIS/EIR made a preliminary assumption that Folsom Point would not be available for recreation use for most of the construction period.

The Partner Agencies received numerous comments from members of the public regarding a potential closure of Folsom Point. In response to these public comments, the Final EIS/EIR includes measures that provide the public with nearly continuous access to Folsom Point throughout the construction period as outlined below.

Impacts to recreation access at Folsom Point would be reduced in accordance with the general recreation mitigation strategy outlined in Section 4.3.1.1 above. The public access entrances at all impacted recreation facilities including Folsom Point would be reconfigured, to the extent practical, to allow concurrent construction activity and continued public access. Access would be maintained with minimal disruption through the implementation of traffic control measures and/or grade separated vehicular and/or pedestrian crossings and/or temporary alternate public access detours. The Partner Agencies would place emphasis and priority on maintaining full recreation access at Folsom Point throughout the construction period. However, the project may require unavoidable impacts to Folsom Point and Beal's Point due to unavoidable construction impacts.

Limitations and exceptions include temporary or extended closures would be to protect public safety and health, complete recreation accommodation measures, or responses to unforeseen project circumstances. Reclamation's Central California Area Office would notify local agencies and the general public and accept input in advance of proposed temporary or extended closure(s) of Folsom Point. As a result of the measures outlined in this document, the public would be able to access Folsom Point throughout the year using one of the multiple existing access points or alternate new access points and would be fully informed of recreation impacting activities.

In the unlikely event that construction related impacts cannot be reasonably avoided to recreational facilities, they would be mitigated by providing alternative access to facilities and trails. Access closures, when necessary to protect public safety, would be limited in duration to normal work hours, with no closure on weekends or holidays. Construction impacts to other facilities such as existing access roads, bike paths, trails, picnic areas, etc. would be minimized through providing alternative access and rerouting of trails where possible. Access and rerouting of trails could be temporarily limited for public safety, traffic control, and security concerns.

Because other adjacent facilities would remain open and accessible, such as Browns Ravine, Beal's Point, and Granite Bay, the public would still have access to Folsom Reservoir for boating, hiking, and picnicking. Existing recreation facilities and improvements would not be significantly impacted and incidental damage would be repaired or replaced in-kind. No new recreational facilities or improvements would be constructed under this action outside incidental reuse of facilities following construction.

To maintain public access during the hauling of material to the MIAD stockpile sites, Reclamation would construct either a grade separation, a traffic control measure such as a stop light, and/or new access route/detour where the new construction haul road and the existing Folsom Point entrance road merge to allow continued safe public access. Contractor staging areas would not be located on existing improved parking facilities. Any staging previously identified at Folsom Point would be relocated on undeveloped federal property adjacent to the entranceway, at the D1/D2 location, so as not to close the boat ramp or limit boat parking capacity at Folsom Point. No processing of earthen material would occur at Folsom Point.

Folsom Point has also been identified as a temporary and/or permanent stockpile site. Material may be stockpiled around the southeast tip of Folsom Point towards the right abutment groin of MIAD extending into the reservoir. Upon completion of construction activities this area would be reseeded. Permanent stockpiles and haul roads no longer in use would be graded and reseeded. Additionally, stockpiles, staging platforms, and haul roads no longer in use may be regraded to provide additional unimproved terrestrial recreation areas, trails and/or boat ramps. No new recreational improvements would be made outside of grading and contouring.

The above actions would allow Folsom Point to remain open nearly continuously throughout the construction period, and maintain the current experience enjoyed with minimal impacts. However, there could be times that Folsom Point would be closed temporarily to accommodate road construction/maintenance, construction of recreation accommodation measures and/or to insure public safety. As indicated in Section 4.3.1.1, the Partner Agencies must preserve the option to close the facilities for more extended period of time in response to unforeseen project circumstances. Should that be necessary, Reclamation's Central California Area Office will notify local agencies and the general public and accept input prior to initiating the closure.

Based upon the above measures, which have been added in conjunction with the revised Preferred Alternative, the potential impacts associated with loss of recreational use at Folsom Point would be substantially reduced compared to those identified in the Draft EIS/EIR. With these new measures and the mitigation measures presented in Section 2.5 of the Final EIS/EIR, the potential impacts associated with loss of recreational use at Folsom Point would be reduced to a level less than significant.

Beal's Point

The Draft EIS/EIR assumed the primary entry for construction at the Right Wing Dam and Dikes 4, 5 and 6 would be the main access to Beal's Point. Construction traffic from the RWD and Dikes would need to cross the public access route.

In order to minimize traffic and other impacts on local arteries, the Draft EIS/EIR proposed a northern haul route located entirely on Federal property. This haul route would intersect the entrance road to Beal's Point. The Draft EIS/EIR further proposed that Beal's Point be designated as a major staging area because of its optimal location as the only currently relatively flat, large area centrally located on the north shore of the reservoir. Because of the impact of construction traffic on the entrance road, combined with use of Folsom Point as a major staging area, the Draft EIS/EIR made a preliminary assumption that Beal's Point would also periodically not be available for recreation use for a short portion of the construction period.

The Partner Agencies received numerous comments from members of the public regarding a potential closure of Beal's Point. Recognizing the public may have similar concerns but did not substantially comment in regards to Beal's Point specifically, in response to these public comments, the Final EIS/EIR includes measures that ensure the public would have nearly continuous access to Beal's Point or at readily available equivalent access points to the reservoir, throughout the construction period as outlined below.

Impacts to recreational access to Beal's Point would be reduced in accordance with the general recreation mitigation strategy outlined in Section 4.3.1.1 above. The public access entrances at Beal's Point would be reconfigured, to the extent practical,

to allow concurrent construction activity and continued public access. Access would be maintained with minimal disruption via traffic control measures and/or grade separated vehicular and/or pedestrian crossings and/or temporary alternate public access detours. The Partner Agencies would place emphasis and priority on maintaining full recreation access at Beal's Point. However, the project may incur unavoidable impacts to the loss of convenience (but not opportunity) to recreational opportunities, including hiking, boating, swimming, picnicking, biking, and nature watching as defined by certain limitations and exceptions.

Limitations and exceptions include temporary or extended closure to protect public safety and health, complete recreation accommodation measures, or respond to unforeseen project circumstances. In that event, Reclamation's Central California Area Office would notify local agencies and the general public and accept input in advance of extended closure(s). Therefore, by the measures outlined in this document, the public would be able to access Beal's Point throughout the year using one of the multiple existing access points or alternate new access points and be fully informed of recreation impacting activities.

In the unlikely event construction related impacts could not be practically avoided to recreational facilities, they would be mitigated by providing alternative access to the facilities and trails during the work week and by maintaining full access capacity on holidays and weekends. Access closures, when necessary to protect public safety, would be limited in duration to normal work hours, with no closure on weekends and on holidays. Construction impacts to existing access roads, bike paths, trails and picnic areas would be minimized by providing alternative access and rerouting of trails where possible. Access and rerouting of trails may be temporarily limited by public safety, traffic control, and security concerns at times.

Because other adjacent facilities would remain open and accessible, such as Granite Bay, Rattlesnake Bar, Folsom Point and Browns Ravine, the public would have continuous access to Folsom Reservoir for boating, hiking, and picnicking should a temporary closure be required. Existing recreation facilities and improvements would not be significantly impacted and incidental damage would be repaired or replaced in-kind. No new recreational facilities improvements would be constructed under this action outside incidental reuse of facilities following construction.

Beal's Point has been identified as a possible contractor staging area and fill material may be used to create staging platforms above elevation 466.0 feet to maintain existing parking capacity. Contractor staging areas would not be located on existing improved parking facilities during peak season. Equipment staging would not include noise intensive rock crushing or concrete batching equipment and would be limited to contractor accommodations, equipment and materials storage and low noise intensity material screening operations.

Upon completion of construction activities this area would be reseeded. Temporary stockpiles and haul roads no longer in use would be graded and reseeded with similar vegetation. Additionally, stockpiles, staging platforms, and haul roads no longer in use may be regraded to provide additional unimproved terrestrial recreation areas, trails and/or boat ramps. No new recreational improvements would be made outside of grading and contouring.

The above actions would allow Beal's Point to remain open to the public through most of the construction period. However, there would be times that Beal's Point could be closed to accommodate road construction/maintenance, construction of recreation accommodation measures and/or to insure public safety. To the extent possible, these activities would be done during off-peak days or off-season for recreation.

Granite Bay

No use or closure of the Granite Bay recreation site is planned by the Partner Agencies under the revised Folsom DS/FDR Preferred Alternative actions.

Recreation Trails

A number of recreation trails cross or are immediately adjacent to the areas planned for construction work. The Draft EIS/EIR assumes some access roads, haul roads, and trails may be temporarily closed to public access, or rerouted to accommodate construction or until construction itself is completed. Although the Draft EIS/EIR also assumes that foot and bicycle traffic would be allowed on most trails, or alternate routes around Beal's Point and north to Granite Bay, trails on or around Dikes 7 and 8, Folsom Point, and MIAD could be closed for longer periods.

In response to public comment, the Final EIS/EIR adopts measures to reduce trail closures. The Partner Agencies would provide alternative trail and trail access when possible, depending on proximity to construction and public safety concerns. The management, closure, and rerouting of trails would be discussed in a Recreation Facilities Management Plan that the Partner Agencies would develop and provide to CDPR. The Partner Agencies would also post and provide public notices of all intents to close or reroute trails and trail accesses.

4.3.2 Public Involvement

NEPA requires that all Federal agencies disclose and consider the environmental implications of their proposed actions. The President's Council on Environmental Quality (CEQ) has procedures and guidelines that Federal agencies must follow to implement NEPA. CEQ regulations include specific provisions for public involvement. Additionally, CEQA also includes specific provisions for public involvement. Numerous comments on the Draft EIS/EIR included concerns about public involvement. These concerns included claims of late/inadequate notification

of the proposed project environmental document preparation, late/inadequate notification of the public hearings, requests for additional meetings, and insufficient presentation materials and public hearing format. Reclamation and the Corps have complied with the applicable requirements for NEPA and the Partner Agencies have complied with CEQA relative to public involvement, as discussed in detail below. Table 4-1 provides an overview of public involvement for the Folsom DS/FDR project.

The environmental review processes established by the NEPA and CEQ Regulations, and by CEQA and the CEQA Guidelines, provide multiple opportunities for public participation. Scoping, public notice and public review of NEPA/CEQA documents, public hearings, and requiring lead agencies to respond to public comments in Final EIS/EIRs serve to encourage, promote, and support public engagement. Reclamation and Partner Agencies undertook appropriate steps and measures to fully comply with the requirements of NEPA and CEQA, as well as agency-specific requirements, to involve the public throughout the Folsom DS/FDR environmental review process.

Consistent with NEPA guidance, CEQ regulations, and Reclamation requirements on public notification, Reclamation and Partner Agencies have published multiple notices in the Federal Register associated with the Folsom DS/FDR environmental review process. A Notice of Intent (NOI) to prepare an environmental impact statement, and announce two public scoping meetings, was published in the Federal Register on October 6, 2005. A Federal Register notice of change to public scoping meeting dates and locations was published on December 2, 2005, and a notice announcing a third scoping meeting, with the addition of the Partner Agencies, was published in the Federal Register on December 14, 2005.

As integral components of the NEPA/CEQA process, public scoping meetings and public hearings were held to provide information and encourage public participation and input on alternatives, concerns, and issues to be addressed in the Folsom DS/FDR EIS/EIR. Opportunities for public involvement in the development and review of the EIS/EIR have complied with NEPA/CEQA and agency guidance and have been advertised through a variety of different channels.

**Table 4-1
Public Involvement for the Folsom Dam Safety and Flood Damage Reduction Project**

Activity	Date	Published In:
Notice of Intent (NOI)/Notice of Preparation (NOP)		
Notice of Intent (NOI) to Prepare an Environmental Impact Statement and to hold Public Scoping Meetings published in the Federal Register.	October 6, 2005	Federal Register
Notice of Preparation (NOP) to prepare an Environmental Impact Report was filed at the State Clearinghouse.	February 17, 2006	State Clearinghouse
Public Scoping Meetings		
Register Notices/Press Releases announcing Scoping Meetings mailed to 2,800 surface mail addresses and media.	November 29, 2005 and December 1, 2005	2,800 Surface mail addresses and media
Notices mailed to 180 newspaper and other media outlets, public entities, governmental and non-governmental organizations, tribes, and other interested parties.	November 29, 2005 and December 1, 2005	Sacramento Bee, Roseville and Granite Bay Press-Tribune, Folsom and El Dorado Hills Telegraph
Press release announcing Public Scoping meetings on Reclamation's Website.	December 1, 2005	Reclamation website
Notice of change to Public Scoping Meeting dates and locations published in the Federal Register.	December 2, 2005	Federal Register
Public Scoping Meeting held at Granite Bay Activity Center.	December 12, 2005	See Above
Public Scoping Meeting held at Folsom Community Center.	December 14, 2005	See Above
Notice announcing a third Public Scoping Meeting with the addition of Partner Agencies was published in the Federal Register.	December 14, 2005	Federal Register
Public Scoping Meeting held at Sacramento County Administration Center.	December 15, 2005	See Above
Release of the Draft EIS/EIR and Notice of Availability (NOA)		
NOA announcing the availability and means to obtain the Draft EIS/EIR, the public review and comment period for the document, and upcoming public hearings was published in the Federal Register.	November 28, 2006	Federal Register
Press releases announcing availability and means to obtain the Draft EIS/EIR, 53-day comment period, and public hearings were mailed to 2,800 surface mail addresses and e-mailed to media.	December 1, 2006	2,800 surface mail addresses and media

**Table 4-1
Public Involvement for the Folsom Dam Safety and Flood Damage Reduction Project**

Press release announcing release of Draft EIS/EIR appeared in the Sacramento Bee.	December 1, 2006	Sacramento Bee
Notice e-mailed to 180 Sacramento area newspaper and other media outlets, public entities, governmental and non-governmental organizations, tribes, and other interested parties.	December 1, 2006	E-mail to 180 media outlets and interested parties.
Draft EIS/EIR released to public for review and posted on Reclamation's website.	December 1, 2006	Reclamation website
NOA announcing the availability and means to obtain the Draft EIS/EIR, the public review and comment period for the document, and upcoming public hearings was published in the State Clearinghouse.	December 4, 2006	State Clearinghouse
News article announcing release of Draft EIS/EIR and public hearings appeared in Folsom Telegraph.	January 2, 2006	Folsom Telegraph
Public Hearings		
News article announcing both public hearings ran in Sacramento Bee.	December 1, 2006	Sacramento Bee
Press release announcing public hearings mailed to 1,600 surface mail addresses and emailed to 180 interested parties and media.	December 21, 2006	1,600 surface mail addresses and media
Corps sends mailer to 1,600 surface mail addresses to announce public hearings.	December 21, 2006	1,600 surface mail addresses
Press release announcing the public hearings on Reclamation's website.	December 21, 2006	Reclamation website
Print ad announcing public hearings ran in Sacramento Bee.	January 5, 2007	Sacramento Bee
Print ad announcing public hearings ran in Roseville and Granite Bay Press-Tribune.	January 6, 2007	Roseville and Granite Bay Press-Tribune
News article announcing public hearings appeared in Folsom Telegraph.	January 9, 2006	Folsom Telegraph
Public Hearing held at Sacramento Library Galleria.	January 9, 2007	See Above
Print ad announcing public hearings ran in Folsom and El Dorado Hills Telegraph.	January 10, 2007	Folsom and El Dorado Hills Telegraph
Article announcing public hearings in El Dorado Hills Telegraph.	January 10, 2007	El Dorado Hills Telegraph
Public Hearing held at Folsom Community Center.	January 10, 2007	See Above
Comment Period on Draft EIS/EIR		
Comment period extended by four days to January 26, 2007.	January 19, 2007	See Below
Press releases sent out to media to announce extension of comment period.	January 19, 2007	Media
Press release on Reclamation's website announcing extension of comment period.	January 19, 2007	Reclamation website

Table 4-1		
Public Involvement for the Folsom Dam Safety and Flood Damage Reduction Project		
News article announcing extension of comment period appeared in the Sacramento Bee.	January 21, 2006	Sacramento Bee
News article announcing extension of comment period appeared in the Folsom Telegraph.	January 24, 2006	Folsom Telegraph
Close of comment period.	January 26, 2007	See Above
Additional Information Meetings		
Press release mailed to media outlets announcing additional information meetings.	February 14, 2007	Media
Press release announcing additional information meetings on Reclamation's website.	February 14, 2007	Reclamation website
News article announcing additional information meeting in Sacramento Bee.	February 16, 2007	Sacramento Bee
News article announcing additional information meeting in Folsom Telegraph.	February 16, 2007	Folsom Telegraph
News article announcing additional information meeting in Folsom Telegraph.	February 20, 2007	Folsom Telegraph
Information meeting held at Folsom Community Center.	February 20, 2007	See Above
Final EIS/EIR		
Final EIS/EIR released to public.	March 30, 2007	
Record of Decision (ROD)		
Dam Safety ROD released to public.	May, 2007	
JFP ROD released to public.	May, 2007	
Flood Damage Reduction ROD released to public.	Will be determined at a later date.	

Three public scoping meetings were held in the project impact area, which provided the public an opportunity to review informational displays about proposed Folsom DS/FDR Draft EIS/EIR alternatives and ask questions as well as provide written and/or oral comments on alternatives development and significant issues related to the proposed action. These scoping meetings were held on December 12, 2005, at the Granite Bay Activity Center, December 14, 2005, at the Folsom Community Center, and December 15, 2005, at the Sacramento County Administration Center. Representatives from Reclamation, the Corps, SAFCA, and DWR were in attendance to answer questions and explain the proposed modifications to the Folsom Facilities. In addition to the Federal Register notices, press releases announcing the scoping meetings were mailed on November 29 and December 1, 2005 to over 2,800 surface mail addresses and 180 newspaper and other media outlets, public entities, governmental and non-governmental organizations, tribes, and other interested parties.

Consistent with CEQA guidance to facilitate intergovernmental coordination and enhance public participation, a Notice of Preparation (NOP) to prepare an EIR was filed with the State Clearinghouse on February 17, 2006.

Almost a year after the scoping meetings, the Folsom DS/FDR Draft EIS/EIR was released for public review and comment on December 1, 2006. Per NEPA and CEQA direction, a Notice of Availability (NOA) announcing the availability and means to obtain the Draft EIS/EIR, the proposed project description and location, impacts of project construction, public review and comment period for the document, and upcoming public hearings, was published in the Federal Register on November 28, 2006. A Notice of Completion of a Draft EIR was filed with the State Clearinghouse on December 1, 2006. The State's NOA of the Draft EIS/EIR was published in the Sacramento Bee on December 4, 2006. Press releases announcing the availability and means to obtain the Draft EIS/EIR, the project description and location, alternatives development and procedures, 53-day public review and comment period for the document, and upcoming public hearings, were mailed on December 1, 2006 to over 2,800 surface mail addresses as well as e-mailed to 180 Sacramento area newspaper and other media outlets, public entities, governmental and non-governmental organizations, tribes, and other interested parties.

Beginning December 1, 2006, copies of the Folsom DS/FDR Draft EIS/EIR were couriered or mailed to any individual or organization requesting them. In addition to four local public libraries and three agency libraries, the document is also available on Reclamation's NEPA website and the Corps' website. Several members of the public reported having difficulty accessing the document on the website. When such messages were received, Reclamation offered to mail copies of the document, if agreeable and convenient for the recipient. With each report of website malfunction, Reclamation checked and ensured that the website was functioning properly; any

reported malfunctions appear to have been temporary and/or perhaps related to high internet traffic on the website.

Two public hearings provided the public an opportunity to ask questions, review informational displays about the project and EIS/EIR alternatives, and provide written and/or oral comments on the Folsom DS/FDR Draft EIS/EIR. To further enhance public participation, the public hearings were held near the project site rather than agency headquarters and scheduled in accordance with Reclamation guidance allowing interested individuals and organizations an opportunity to review the document for at least 15 days but conducting the hearings at least 10 days prior to the closure of the public comment period on January 22, 2007. The hearings were held on January 9, 2007 at the Sacramento Library Galleria and January 10, 2007 at the Folsom Community Center. A court reporter and Hearing Officer were present at both meetings to record oral comments. Representatives from Reclamation, the Corps, SAFCA, and DWR were also in attendance to assist the public in providing comments, answer any questions, and explain the modifications being proposed to the Folsom Facilities in the action alternatives.

With growing interest in the Folsom DS/FDR project, the public hearings received wider local attention by the public and media. Press releases on the public hearings were mailed on December 21, 2006 to over 1,600 surface mail addresses and e-mailed to over 180 representatives for public entities, governmental and non-governmental organizations, tribes, and other interested parties as well as media outlets, including 105 radio and television stations and newspapers in Sacramento, the Bay Area, and northern California. Note that the surface mail address list used for the announcement of the public release of the Draft EIS/EIR generated numerous returns; an updated and corrected list was used for the public hearings announcement and the project mailing list continues to be updated and corrected as such information is received. A display ad publicizing the hearings ran in the Sacramento Bee on January 5, 2007, the Roseville and Granite Bay Press-Tribune on January 6, 2007 and the Folsom and El Dorado Hills Telegraph on January 10, 2007. The advertisement included information on the project, the hearing locations and times, and information on obtaining the Draft EIS/EIR. Contact information for providing written comments and the comment due date were also included.

In response to requests for an extension, the 53-day public comment period on the Folsom DS/FDR Draft EIS/EIR was extended by an additional four days to January 26, 2007. Press releases announcing the extension were sent on January 19, 2007 to over 1,600 surface mail addresses and e-mailed to over 180 representatives for public entities, governmental and non-governmental organizations, tribes, and other interested parties as well as media outlets, including 105 radio and television stations and newspapers in Sacramento, the Bay Area, and northern California. Approximately 350 unique comments were received on the Draft EIS/EIR from individuals and organizations (not including the public-generated comment forms).

Some reviewers repeated their comments in multiple formats. A total of 427 written comment forms, letters and e-mail messages, including 23 oral comments transcribed from the public hearings, 440 public-generated comment forms submitted as one package, and petitions with 1,085 signatures were received on the Draft EIS/EIR. Reclamation and Partner Agencies have read and responded to these comments in this Final EIS/EIR, and the Preferred Alternative has changed in response to these comments.

In addition to press releases, print advertisements, and Federal Register notices about the availability of the Folsom DS/FDR Draft EIS/EIR and the public involvement process, over 50 news stories on the project and/or Folsom Dam have been published since October 2005 in local media outlets including the “Sacramento Bee”, “Folsom Telegraph”, “El Dorado Hills Telegraph”, “Yuba Net”, “Rocklin and Roseville Today”, “Auburn Journal”, Channel 10 KXTV, Channel 40 KTXL, and Channel 3 KCRA. Moreover, each of the Partner Agencies maintains project-related websites and/or newsletters plus Reclamation’s NEPA website for obtaining the EIS/EIR.

At the request of the City of Folsom, the Partner Agencies met with congressional representatives, the City of Folsom, and other local entities on January 18, 2007 to review the project and comments on the Draft EIS/EIR. The Partner Agencies inaugurated planned neighbor-to-neighbor information meetings at the Folsom Community Center on February 20, 2007. Approximately 80 agency and local community members attended this initial meeting.

This Folsom DS/FDR Final EIS/EIR was publicly released on March 30, 2007. Copies of the document were mailed to individuals and organizations requesting a copy, or who previously requested and/or commented on the Draft EIS/EIR, and for whom Reclamation has a current surface mailing address on file. The public will have an opportunity to review the responses to comments on the Draft EIS/EIR, and revisions to the Preferred Alternative, during the 30-day review period for this Folsom DS/FDR Final EIS/EIR. A NOA announcing the public release of the Final EIS/EIR was published in the Federal Register, coinciding with the public distribution of the document. Press releases announcing the public release of the Final EIS/EIR were sent to surface mail addresses, other interested parties, and media outlets as described above. In addition, with CDPR’s permission and at public request, press releases were also posted in high visitor use areas in the FLSRA.

Coinciding with the release of the Final EIS/EIR, the Partner Agencies are continuing their planned series of community neighbor-to-neighbor meetings to discuss activities planned as part of implementing the Folsom DS/FDR actions. Additionally, the Partner Agencies will continue to coordinate with the City of Folsom on project activities.

Reclamation and Partner Agencies are responsive and committed to continuing the dialog with the public and neighboring communities throughout Folsom DS/FDR project development and construction. To promote communication about the project and enhance awareness of the flood damage reduction and dam safety improvements to Folsom Dam and Reservoir, a series of additional information meetings and discussions are planned for surrounding communities, with the first one held on February 20, 2007 at the Folsom Community Center. A press release announcing the meeting was e-mailed on February 14, 2007 to over 180 representatives for public entities, governmental and non-governmental organizations, tribes, and other interested parties as well as media outlets, including 105 radio and television stations and newspapers in Sacramento, the Bay Area, and northern California. Channel 3 announced the meeting on the February 20 morning news show. Future press releases will announce forthcoming meetings.

In early May 2007, Reclamation and the Corps are planning to issue a joint ROD on the JFP features of the Folsom DS/FDR EIS/EIR; Reclamation is also planning to issue a ROD on the Dam Safety and Security project features. The Corps also intends to issue a ROD on its separate flood damage reduction features, although that date has not been established at this time.

As summarized in the above discussion, Reclamation and Partner Agencies have complied with, and, in fact, gone well beyond, public notification requirements in efforts to engage the public in the Folsom DS/FDR environmental review process. Public involvement in the EIS/EIR review process is just the beginning of an ongoing dialog between the Partner Agencies and local communities about the Folsom DS/FDR project and interested citizens are assured of additional opportunities for public participation as the project proceeds to, and throughout, construction.

4.3.3 Socioeconomics

The Draft EIS/EIR provided an economic analysis of impacts to CDPR and the local economy as a result from the closure of recreational facilities. The very conservative (i.e., worse-case) analysis predicted an economic loss to CDPR, but demonstrated little to no net adverse impact to the local economy as a result of the infusion of construction dollars into the economy. The Draft EIS/EIR analysis assumed recreation facility closures, which are not currently planned in this Final EIS/EIR.

The potential economic impacts from the construction of the Folsom DS/FDR actions could occur from the loss of expenditures in the regional economy because of interruptions of recreational sales at or near Folsom recreation facilities. The analysis assumed that people who visit Folsom Reservoir spend varying amounts of money depending on the recreation activity. This money trickles through the regional economy because of linkages between different industrial sectors. For example,

visitors to Folsom may spend money on gas, food supplies, recreation equipment, and park fees. These stores purchase these goods from other producers, which in turn, also buy goods and services. The buying of goods and services continues until leakages from the region stop the cycle. Leakages represent purchases of goods and services from a producer outside of the specified region.

The economic analysis also addressed expenditures by construction workers, who would be purchasing similar items (gas, food, etc.) during the work week. The analysis showed that worker spending would offset the lost recreational dollars for the local economy, but that if recreational facilities were closed during the peak recreation periods, there would be a loss of revenues to CDPR.

The economic model used input-output (IO) linkages between local sales and industries providing the materials sold, and it measures the total economic impacts from a change in final demand for a product. IO modeling derives multipliers that describe the change of output for each and every regional industry caused by a one dollar change in final demand in another industry. These multipliers are used to estimate indirect and induced effects caused by a direct impact to the regional economy. In general, larger multipliers indicate a greater interdependence of the sector on the rest of the regional economy. Further definitions are as follows:

- Direct effects – changes in final demand
- Indirect effects – changes in expenditures within the region in industries supplying goods and services
- Induced effects – changes in expenditures of household income

The economic analysis used IMPLAN® to estimate regional economic impacts. IMPLAN is a widely used regional economic modeling and forecasting software that uses the most recent available individual industry data from a variety of government economic censuses to build a computer model of a specified regional economy. IMPLAN estimates multipliers for five measures of regional economic activity, total industry output, personal income, total income, value added, and employment. The Folsom DS/FDR analysis shows impacts for total output, value added, and employment.

The specified economic region in the IMPLAN model includes Sacramento, El Dorado, and Placer Counties. This region is expected to capture most economic effects of the project alternatives. Section 4.1 of the Folsom DS/FDR Draft EIS/EIR summarizes the existing economic setting in the region.

The Folsom DS/FDR alternatives would result in two types of direct impacts: (1) losses in recreational expenditures and (2) increased expenditures from construction

laborers. These impacts were estimated using local data and statistics on Folsom Reservoir recreation and construction worker requirements and schedules.

Recreation impacts include decreases in those expenditures that are related to spending a day at FLSRA. CDPR provided data on number of visitors, concessionaire sales, and park fees. The Corps national recreation spending profiles were used to estimate spending on other expenses, such as food, gas, and equipment. Section 4.3 in the Folsom DS/FDR Draft EIS/EIR presents results on the economic impacts analysis for reduced recreational expenditures. The analysis estimates that should Folsom Point be closed during the peak recreation season, and the added value of additional construction activities be excluded from the analysis, the value of output in the region would decrease by about \$4.9 million (0.005 percent of 2002 baseline output), total value added would decrease about \$2.3 million (0.002 percent of 2002 baseline value added), and employment would decrease by about 46 jobs (0.004 percent of 2002 baseline employment). These estimates only incorporate direct losses in spending on food, gas, park fees, etc. and the losses to the economy because of the linkages between sectors, as described above. Further analysis inclusive of the value added from construction activities results in an offsetting economic effect in both dollars and jobs for the local economy. See Chapter 4 of the Draft EIS/EIR for more information.

In the event of unforeseen closures at FLSRA facilities during the peak recreation season for construction activities (see Section 4.3.1 of this document for potential circumstances), economic impacts to the regional economy and CDPR revenues would occur. These economic impacts would be substantially less than those identified in the above paragraph and Chapter 4 of the Draft EIS/EIR. The frequency and magnitude of economic impacts would be commensurate to the time period that the facility is closed. Economic impacts would be further decreased because visitors could access other local recreation areas and all other FLSRA facilities during the time Beal's Point or Folsom Point would be closed; however, CDPR would lose some revenues because of visitors turned away from the closed facility. Reclamation would take efforts to reduce unexpected closures to the shortest period possible, reducing economic impacts.

Losses in recreation expenditures do not include decreases in boat sales. Boat purchases are not considered an economic activity directly related to recreational spending at FLSRA. People purchase boats for many factors, including, but not limited to, disposable personal income, participation in water sports, proximity to water bodies, personal preferences, economic growth, and consumer confidence. Boats are typically considered a luxury good in which demand increases more than proportionately as income rises. For most people, disposable personal income is a larger deciding factor in purchasing a boat relative to use of FLSRA. Limiting the access to any recreational facility would not result in a direct economic effect to boat sales.

Boat sales in the Sacramento Valley are typically higher than other areas because of economic growth in the region, increases in personal income, and the proximity to numerous reservoirs, lakes, and rivers. For example, people living in the Folsom area have access to 104 boating opportunities within approximately 3 hours. Any closure of Folsom Point may require longer travel times for boating activities, but it is not a substantial disruption to the entire Sacramento Valley's boating opportunities. Therefore, it is not expected that boat sales would decrease because of closure of a single boat launch facility.

The three county region has a large economic base that would not be substantially affected by decreases in recreational spending. The region has been growing since 2000, both in population and commercial development. Population in the three counties increased from 1.6 million in 2000 to about 1.9 million in 2006. Cities are building new housing and commercial developments to accommodate growth. Private earnings in Sacramento County increased from \$21.3 billion in 2001 to \$25.6 billion in 2004. Private earnings in Placer and El Dorado counties also increased substantially from 2001 to 2004, about \$1.8 billion and \$0.5 billion, respectively. Retail trade is currently a major sector within each county; food services are also growing. Discount stores and new restaurants have generated high revenues and will continue to generate economic output and sales tax revenue for the region. Other major economic sectors within the region include information services, finance and insurance, construction, and manufacturing. The region's economy is further fueled by many job opportunities and low unemployment rates. In December 2006, the unemployment rate ranged from 3.6% to 4.4% in the three counties. The economy within the three county region is stable and continuing to grow. Because of this strong baseline economy, temporary, unforeseen closures of any recreation facility at Folsom Reservoir would not result in a major adverse effect to the region's economy.

Furthermore, the Folsom DS/FDR action is a major construction effort, which would temporarily boost the local economy. More than \$1 billion of construction work for the Folsom DS/FDR actions is planned for the next 10 years which will be a significant, but temporary boost to the local economy. Construction workers will purchase products within the local region, increasing output and sales tax revenues. This additional spending would significantly positively offset any possible incidental decreases in recreational spending. Therefore, the combined effects of decreased recreational spending and increased construction spending would result in fewer economic effects.

4.3.4 Affected Property

The Draft EIS/EIR introduced the possibility of a Folsom Facility raise of greater than 4 ft that could require new embankments to contain reservoir water resulting from an increased reservoir surface elevation beyond existing conditions. Since

publishing the Draft EIS/EIR, Reclamation has determined that a Fuseplug Spillway alternative could pass a PMF event without the need for embankment raises above the current crest elevation. As a result, Reclamation has determined that no property takes, flowage easements, or additional small scale impoundment features such as dikes or berms would be planned as part of its role in the Folsom DS/FDR actions.

Based upon additional engineering analysis since the Draft EIS/EIR was published, the Corps has concluded that with optimization of all elements of its Selected Plan, including the 6STG Auxiliary Spillway, emergency spillway gate modification, and a 3.5-ft facility raise, an increase to maximum reservoir water surface elevation beyond current dam crest elevation is not anticipated to provide flood damage reduction benefits. The future maximum reservoir surface elevation with the Corps' Selected Plan would not exceed the existing federal property take line for a 200-year flood design event. The anticipated lower maximum water surface elevation for all flood events, inclusive of a PMF event, eliminates the risk that surrounding properties would be flooded. Consequently, no property takes, flowage easements, or additional small scale impoundment features such as dikes or berms beyond the existing take line are planned as part of the Corps' Selected Plan. The 3.5-ft raise of the Corps' Selected Plan will undergo further design during pre-construction, engineering, and design phase and, if needed, would be addressed through a supplemental NEPA/CEQA document.

4.3.5 Property Values

A number of comments received on the Draft EIS/EIR expressed the concern that property values would decline as a result of construction at the Folsom Facility and the closure of Folsom Point and other lake access areas. The concern that the project would adversely affect property values has been addressed mainly through the modifications in the project use of Folsom Point and through revisions to the project description that allow recreation facilities to remain open during peak recreation times. Thus, the attraction to FLSRA would not be changed.

Residential property values (i.e., prices), particularly those associated with single-family homes such as in the case of the proposed project, within the same neighborhood are influenced primarily by macroeconomic factors that operate independently of locally specific conditions. These include forces that determine the general demand for single-family homes, such as national, regional, and local employment growth rates and distributions; quality of schools; proximity to amenities; neighborhood settings; population age group growth trends; rates of household formation; regional economy; and household income trends. They also include the way these demand trends operate with respect to the supply of available housing (i.e., the number, type, and distribution of existing and new units) in a given market area. Values are also highly influenced by what households can afford to pay for housing, based on household income trends, mortgage interest rates, general price inflation, and changes in federal and state income tax law treatment of housing costs.

They are also influenced by the direct cost of new housing development, including the cost of land, construction, professional fees, development fees and permit costs, and construction loan rates. All of these factors interact in complex ways that change over time, and will continue to do so independently of any decisions that are made in conjunction with the finalization of the proposed project.

4.3.6 Auburn Dam

Comments received on the Draft EIS/EIR questioned why the Auburn Dam project was not being considered as a viable alternative to the modifications being proposed for the Folsom Facility. The potential for an upstream storage facility, including Auburn Dam, to meet the objectives of the Folsom DS/FDR was evaluated early in the alternatives assessment process (see Section 2.1.6 of the Draft EIS/EIR) and was eliminated because it could not meet seismic and static dam safety deficiencies at Folsom Dam and/or be accomplished in an expedited manner as required to meet dam safety requirements. There is an immediate need to upgrade the Folsom Facility which can be accomplished under current authorities.

4.3.7 Operations

Comments were received questioning why the Folsom DS/FDR Draft EIS/EIR did not address in greater detail operations and the proposed changes to the Water Control Manual. Although the Draft EIS/EIR recognized current operations and the Water Control Manual, the Draft EIS/EIR did not address impacts of operations and changing the Water Control Manual.

The Folsom DS/FDR EIS/EIR does not address operational impacts because construction of any of the Folsom DS/FDR features would not require a change to the Water Control Manual. The manner in which water is stored and released from Folsom Reservoir, for water supply, hydropower, and flood storage space would not need to change with the proposed new features. However, there is an unrelated requirement to update the Water Control Manual that is separate from the Folsom DS/FDR actions. Because the Water Control Manual update will be completed with or without the DS/FDR actions, it is not being linked to this project.

The authorization for the Folsom Modifications Project directs the Corps to change the variable flood storage space at Folsom Reservoir from the current interim operation of 400,000 acre-ft to 670,000 acre-ft to a 400,000 acre-ft to 600,000 acre-ft (400/600) permanent variable flood space operation once the Folsom Modifications Project has been implemented. The Corps, with coordination by Reclamation, will develop a new flood control manual for Folsom Dam for implementation prior to completion of the JFP Auxiliary Spillway. The new flood control manual feature is currently being scoped as a parallel process. Therefore, in this EIS/EIR, operations are analyzed and disclosed based upon current operational requirements. The parallel flood control manual development and study will include variable flood storage space, including analysis of forecast based operations, new flood release

schedules and a plan component for repayment of potential water supply losses resulting from implementation of this flood control manual. This parallel study will be a collaborative process with the appropriate level of environmental analysis, public, agency and stakeholder coordination, and appropriate NEPA/CEQA documentation.

4.3.8 Relationship of Safety of Dams, Dam Security, Joint Federal Project, and Flood Damage Reduction

Several comments relating to the Draft EIS/EIR indicated a need for additional explanation as to the components of the Folsom DS/FDR. The Draft EIS/EIR presents the results of a joint agency study that incorporates the Safety of Dams risk reduction objectives and dam security obligations under the authorities of Reclamation, flood damage reduction objectives of the Corps and Partner Agencies, and an integration of the overlapping components of both objectives.

The Corps' initial studies to address Folsom Facility issues resulted in plans to increase outlet efficiencies and flood storage capacity at Folsom Dam and Reservoir, respectively. The focus of these studies was to increase flood damage reduction potential of the populace protected by levees along the lower American River.

Reclamation evaluated public safety risk due to hydrologic, seismic, and static concerns to all of the Folsom facilities, and national security concerns of a reservoir upstream of a major metropolitan area. The focus of Reclamation's evaluations was protection of the populace living adjacent to the Folsom Facility and the general populace downstream.

The Draft EIS/EIR addressed project alternatives that included elements of the individual missions and combined missions of Reclamation and the Corps. The JFP gated Auxiliary Spillway was developed jointly by the two agencies to address their primary hydrologic concerns related to dam safety and flood damage reduction. The seismic and static upgrades proposed by Reclamation address dam safety objectives. The dam gate replacement and dam raise address the Corps flood damage reduction objectives.

Although somewhat related, the Corps' and Partner Agencies' efforts to improve the capacity of downstream levees and work on upstream facilities such as L.L. Anderson Dam are not part of the Folsom DS/FDR actions. Changing of current operations is also not part of the Folsom DS/FDR action (see Section 4.3.7 above for more information on operations).

4.3.9 Transportation and Circulation

Comments on the Draft EIS/EIR questioned the effects of potential increases in traffic. The projected traffic volumes and circulation patterns were analyzed in the Draft

EIS/EIR using an accepted methodology to evaluate transportation and circulation during construction activities of the Folsom DS/FDR. The analyses indicated that if construction traffic, including workers and materials deliveries, were to be managed under a traffic management plan, there would not be a significant impact to local traffic circulation. No permanent long-term traffic volume increases or changes in traffic patterns are expected as a result of implementing the Folsom DS/FDR alternatives. The Partner Agencies will work closely with City of Folsom traffic engineers on traffic management to ensure that traffic effects are controlled.

4.3.10 Noise

Comments were received on the Draft EIS/EIR related to issues of noise. Specific comments included concerns relating to haul trucks, general construction, and increased traffic. Section 3.10 of the Draft EIS/EIR presented potential noise impacts associated with construction and mitigation measures to control noise. As legally required and in response to public comment, the Partner Agencies would implement mitigation measures, in compliance with local noise ordinances so that noise levels remain within the allowable standards established for the local communities. Noise mitigation measures being considered include, but are not limited to, construction/placement of noise barriers, hauling of supplies during daylight hours, moving of processing facilities away from sensitive receptors, minimizing noise producing activities during night hours, and maintaining all equipment to ensure that noise baffles and mufflers are properly functioning.

4.3.11 Air Quality

Some comments on the Draft EIS/EIR included references to air quality effects during the construction phase of the Folsom DS/FDR. Specific issues included concerns regarding fugitive dust/particulate matter and emissions from construction machinery and vehicles. The Partner Agencies will be required to conform to federal USEPA air quality regulations, being enforced by the Sacramento Metropolitan Air Quality Management District. All air quality emissions will be required to be controlled to levels that must be in compliance with limits established by the District in the project's air quality permits. In addition to watering roadways, excavation, and deposition sites to minimize dust, the Partner Agencies will be required to use the most up-to-date pollution reduction equipment on all fossil fuel powered construction equipment. The specific air pollution control measures to be employed and adhered to will be described in detail in the project's air quality permits.

Comments were also received regarding the project's ability to conform to Clean Air Act de minimus standards. The very conservative (i.e., worse-case) air quality analyses presented in the Draft EIS/EIR indicated that there could be a non-conformity issue. Refinements to the project, including an air quality assessment of a more practical project, have shown that the project can conform to the Clean Air Act requirements. These refinements include:

- Identification of available air quality emission credits,
- Redistribution of material hauling and disposal to minimize haulage miles
- Scheduling and sequencing of excavation and hauling work so that there is not a significant overlap with other project activities that contribute to air quality emissions,
- Use of electrical power for all stationary equipment (note: electrical power will be obtained from commercial sources and will not impact Western Area Power Authority or CVP users and customers), and
- Use of the most recent pollution control equipment for all off-road equipment.

4.3.12 Vegetation and Wildlife

Comments were received on the Draft EIS/EIR that presented concerns regarding the potential impacts to vegetation and wildlife, including the potential impacts to special status species (e.g., bald eagle, burrowing owls), possible loss of habitat/wildlife, and the loss of trees. Potential effects to vegetation and wildlife due to the Folsom DS/FDR alternatives are presented in Section 3.5 of the Draft EIS/EIR and Section 3.5 of this Final EIS/EIR relative to the currently proposed revised Preferred Alternative. Impact estimates to habitat and wildlife were analyzed and mitigation measures developed jointly with USFWS. Mitigation measures that will be employed to protect vegetation and wildlife include pre-construction surveys to identify any protected species within or adjacent to the project footprint, fencing of sensitive habitats from construction work (including oak trees and vernal pool habitat), on-going surveys conducted during construction to ensure compliance by construction crews to mitigation requirements, mitigation measures to remove from the project area protected species (for example, transplanting of valley elderberry shrubs has already been initiated), replacement of sensitive habitats (such as riparian and oak woodlands), and revegetation and re-establishment of habitat in disturbed areas following construction.

4.3.13 New Folsom Bridge

Several comments received on the Draft EIS/EIR confused the New Folsom Bridge project for the Folsom DS/FDR. The New Folsom Bridge is a separate project being carried out by the Corps as part of Section 128 of the Energy and Water Development Appropriations Act of 2004 (P.L. 108-137), which authorizes the construction of a permanent bridge downstream of Folsom Dam. The Corps has completed separate environmental documentation for this project, entitled American River Watershed Post Authorization Decision Document Folsom Dam Raise Folsom Bridge Final Supplemental EIS/EIR, September 2006. Although construction of the New Folsom Bridge will likely occur parallel to that of construction of the Folsom DS/FDR, this project is a separate action. The New Folsom Bridge is evaluated only as a cumulative project in the Folsom DS/FDR Draft EIS/EIR (Chapter 5).

4.4 Written Comments

4.4.1 Elected Officials and Representatives Comments

Several elected officials and representatives submitted comments on the Folsom DS/FDR Draft EIS/EIR. Table 4-2 presents a list of the elected officials and representatives who submitted comments during the comment period and also provides the comment number which corresponds to the comments/responses found in Appendix A.

Government Official or Representative	Comment Number
Dave Cox, Senator, First District	255
Alan Nakanishi, Assemblyman, 10th District	255
Ted Gaines, Assemblyman, Fourth District	255
Roger Niello, Assemblyman, Fifth District	255

4.4.2 Federal Agency Comments

The U.S. Environmental Protection Agency (USEPA) was the only federal agency to submit comments on the Draft EIS/EIR. The USEPA comment is number 416 on the comment list.

4.4.3 State Agency Comments

Table 4-3 contains a list of the state agencies that submitted comments on the Draft EIS/EIR and also provides the comment number which corresponds to the comments/responses found in Appendix A.

State Agency	Comment Number
California Department of Transportation (CALTRANS)	5
California Department of Boating and Waterways	169
California Department of Parks and Recreation	312

4.4.4 Local Agency and Organization Comments

Table 4-4 contains a list of the local agencies, commerce organizations, and non-profit organizations that submitted comments on the Draft EIS/EIR and also provides

the comment number which corresponds to the comments/responses found in Appendix A.

Table 4-4 Local Agency and Organization Comments	
Local Agency	Comment Number
Sacramento Metropolitan Chamber of Commerce	334
Folsom Tourism Bureau	32, 390
Folsom Chamber of Commerce	17, 389
City of Folsom	392
El Dorado County	310, 394
Sacramento Metropolitan Air Quality Management District	406
El Dorado Irrigation District	415
El Dorado County Water Agency	400
San Luis and Delta Mendota Water Authority	184 to 186
East Bay Municipal Utility District	166
County Sanitation District 1/Sacramento Regional County Sanitation District	395
Central Valley Project Water Association	20, 78 to 94
Friends of the River	347
Sacramento Valley Marine Association	42
Northern California Marine Association	34, 187
Northern California Power Agency	19, 232

4.4.5 Public Comments

Table 4-5 contains a list of the members of the public that submitted comments on the Draft EIS/EIR. This list includes comments submitted at the public hearings.

Table 4-5 Public Comments					
Comment Made By:	Comment Number	Comment Made By:	Comment Number	Comment Made By:	Comment Number
Keoni Almeida	1	Ann Lindner	152	Scott and Viera Weldy	287
Jason Zarghami	2	Lynn Derrick	153	Greg Mercurio	288
Patrick Porgans	3	Terry and Jim Lehman	154	Clyde Matson	289
Anonymous	4	Greg Fales	155	Kasia Turkiewicz	290
Jim Silvester	6	Doug Pepper	156	Mike Wall	291
Bruce Beck	7	Vicky Cackler	157	Michael Cann	292
Rosemary Beck	8	Chantell Harp	158	Mark and Kathy Van Saun	293
Robin Sharp	9	Anonymous	159	Keith Faust	294
Alan Hersh	10	Robert Flores	160	Dean Deguara	295
Frank Myers	11	Naomi Wooten	161	Shari Warr	296

**Table 4-5
Public Comments**

Comment Made By:	Comment Number	Comment Made By:	Comment Number	Comment Made By:	Comment Number
Phil Maestre	12	Kristine Olding and Family	162	Phil Vaughan	297
Mary Henriksen	13	Daryl Stieve	163	George Wyatt	298
Aaron Boring	14	Dan & Sheri Stafford, and Family	164	John and Sharon Sarno	299
Mach Bishop	15	Robert Halldorson	165	Janelle & Curtis Mau	300
Chris Hodges	16	Kelly James	167	Randy Pike and Family	301
Steve Hodges	18	Gary Devers	168	Susan Akin and Family	302
Madeleine Moseley	21	Karin Miller	170	Nicole Benson	303
Robert Giacometh	22	Joel & Cathy Miller	171	Debbie Sultan	304
Doug Pepper	23	Leslie Nagel	172	Lynn & Eric Bonzell	305
Alfred P. Bulf	24	Derek & Deborah Reinbolt	173	Aimee Wendell	306
Mechelle Gooch	25	Stacey Mefford	174	Lynn Derrick	307
Ian Cornell	26	Cheryl & Andy Kurimay	175	Ann Lindner	308
Carol James	27	Chere' Presley	176	Ken & Susan Doherty	309
Elinor Brady	28	Dan Otis	177	Bruce and Rosemary Beck	311
Renee Howle	29	Angie McLaughlin	178	Robert H. Miller III	313
Mike Coffman	30	Liz Young	179	Greg Cook	314
Patricia Gibbs	31	Teresa Romero	180	Jeremy Bernau	315
Don Reid	33	Chris Landry	181	Catherine Vestito	316
Victor Becerril	35	Carrie Cain	182	Jeff Kirsten	317
Kent Zenobin	36	Maria Errante	183	Jeff Mittner	318
Kris Gardner	37	Jane Pearson	188	Brian Joder	319
Taylor Zenobin	38	Branton and Jennifer Obenaus	189	David and Karen Delparte	320
Sarah Griffith	39	Michael Avakian	190	Kelly Beninga	321
Keoni Almeida	40	Marcus MacTaggart	191	Peg Coverdale	322
Cindi Dulgar	41	Jill Ellis	192	Maureen Snyder	323
Gene Moynier	43	Mair Auerbach	193	Chris Wagner	324
Michelle Lipowski	44	Lisa Tomiak	194	Kristin and Robert Jeffrey	325
James Clayburn	45	Jackie Kolander	195	Don Hendricks	326
Jon Soderman	46	DS	196	Cheryl Walters	327
Charles A Hooper	47	John and Cheryl Mandsager	197	Sharon Kindel Rosalie Barton	328
Renee Howle	48	Anonymous	198	Obie Miller	329
Dennis Swenson	49	George R Koch	199	Clint Claassen	330
Ken Christensen	50	Ian B Cornell et al.	200	Jennifer Claassen	331
Russ Knapp	51	Carole and David Jones	201	Russ Fay	332
Duane Cooney	52	Rick Miller	202	Anonymous	333
Cindy Speer	53	David Graves	203	Laura Hudak	335
Melissa Green	54	John and Sandii Dalessi	204	Kay Ann Markham	336

Chapter 4
Comments and Responses

**Table 4-5
Public Comments**

Comment Made By:	Comment Number	Comment Made By:	Comment Number	Comment Made By:	Comment Number
Russ and Lisa Hoy	55	Anonymous	205	Jodi Wright	337
Jason Zarghami	56	Thomas E. Leard	206	Anonymous	338
Ericka Cooney	57	Phil Lugo	207	Kevin A. Miller	339
Brian and Cindi Dulgar	58	Ted and Maggie White	208	Dianna Bowling	340
Sandy McKaig	59	Mark Rucker	209	Kim Carrasco	341
Jim Snook	60	Nigel Olding	210	Richard A. Shaw	342
Craig R Larson	61	Brady Beckmann	211	Denise Hackett	343
Carol James	62	Brett Heeke	212	Debra Rose	344
Chet Bloyd	63	Matt Henry	213	Chris Jennings	345
Mike Garner	64	Sonia Deauville	214	Leslie Grayson	346
John Poimiroo	65	Darrell Fullerton, Robert Hicks, Diane Star Anderson Hicks	215	Duran Quick	348
John Poimiroo	66	P McM	216	Bonnie Amoruso	349
Kevin Kraft	67	Susan Patchett	217	Jerry Boyd	350
Peter Clark	68	Mr. Kelley V. Thorn	218	Dave Buck	351
Todd Drybread	69	Barbara	219	Daylene Buck	352
Scott Howlett	70	Fernando Gaudy	220	Neil Pearl	353
Rick and Pam Patterson	71	Anonymous	221	James D. Sprenger	354
Sheila and Tom Leard	72	Robert Jeffrey	222	Maria Noori	355
G R Petersen	73	Charlie Parrish	223	Julia Fox	356
Greg Fales	74	Anonymous	224	Linden 'Chip' Lim	357
Marco and Patti Palilla	75	Vicky Walasek	225	Jim Donnell	358
Jonathan Walburger	76	Andy Benson	226	Barbara Zawadzki	359
Dawn Lockwood	77	Teresa Black	227	Jane Cook	360
Jim Bayless	95	Roy Moore	228	Bruce R. Thomas	361
Lyndsay Smith	96	Jim Kinnicutt	229	Barry Fowler	362
Anonymous	97	Neva J Cimaroli	230	David Pate	363
Terry and Jim Lehman	98	Kristi Cooper	233	Casey Keller	364
Brian Austerman	99	Marilyn and Alan Daily	234	Jeff Onderko	365
Mark Duer	100	Matt & Emily Brayton	235	Robert Simpson	366
Tim Steele	101	Michael G Butler, Jr	236	James A Cost	367
Beth and Jim Carlsen	102	Sherri McNear	237	Steve Canova	368
Cindy Becker	103	Sandy Econome	238	Barry Calfee	369
Jim Thompson	104	Gail and Dennis Wierzba	239	Richard Reid	370
Michael S. Hardoin	105	Linton A. Brown	240	Scott T. Davis	371
Angela Ankhelyi	106	Sharlene & Calvin Kasadate	241	James A. Roberts	372
Chris and Susan Zaffree	107	Deb and Tony Baratta	242	James A. Roberts	373
Lynda Lescault	108	Raymond D. Hart, P.E. G.E	243	Dan and Dalisa Sanford	374

**Table 4-5
Public Comments**

Comment Made By:	Comment Number	Comment Made By:	Comment Number	Comment Made By:	Comment Number
Doug Zezoff	109	Jason Fanselau	244	Elizabeth and Brian Kastern	375
Jim Cassio & Deborah Moreno	110	Bruce R. Thomas	245	Martin Kiff	376
Jamie Ellsworth	111	Jim Carlsen	246	Michelle Schelgel	377
Darcie Eichner	112	Jeff Angeja	247	Emily Daniels	378
Vicky Cackler	113	Amber Kennedy	248	Veronica Thompson	379
Casey Keller	114	Margaret Wong	249	Kathi Hamburg	380
Chris Storz	115	Ron Wisdom	250	Vickie Lee	381
Leslie Storz	116	Mark Younger	251	Marty and Judy Boyea	382
Donna Gentry	117	C. Fred Wilcox	252	Annette Manz	383
Joanna Diaz	118	Scott and Teri Becker	253	Jean Peterson	384
Kimberlee Jones	119	Stephen Templeton	254	Fred Tombo	385
Liz and Andrew Byer	120	Dave Cox	255	Pam Langbehn	386
Chris Jennings	121	Rana and Bryan Church	256	Taira Byrne	387
Mike Brady	122	Jeanne and Albert Pfaff	257	Thomas E Martin	388
Kathy Boyd	123	Jeff Hopkins	258	Anonymous	391
The Colldeweih	124	Robert Dulinski	259	Kelly Richardson	393
Mr. Neely Downing	125	Arthur D. Shmarak	260	Robert W Bense	396
David and Patty Soulsby	126	Lori Neal	261	John P Fondale	397
Mike Stinson	127	Troy and Shari War	262	Rich Rumsey	398
Marianne P. Blake	128	John Dillon	263	Ben Roth	399
Steve Paladino	129	Mary Strauss	264	Linda Freeman	401
Gary & Lia Odell	130	Amy Cooke	265	Peter	402
Nina Pucci	131	Connie Freese	266	Robin Clary	403
Kevin, Suzanne, Katie, and Amanda Reinard	132	Carmella Santos	267	Paul & Connie Freese	404
Allen and Julie Carlson	133	Carrie Cota	268	Steve & Jan Volker	405
Julie Calderwood	134	Aimee Peterson	269	Christopher Hodges	407
Kenneth Doherty	135	Jody Biaggi	270	John M. Sanfilipia	408
Maria & Jeff Sickenger	136	Bob Grunsky	271	Rob Langbehn	409
Frances Leon	137	Sandra J. Gallardo & Michele Flores	272	Jeffrey Paylor	410
Cindy Sobotta	138	Christina Flores	273	Nicole Johnston	411
Tracy Nordheim	139	Franco Salluce	274	Joseph and Jeanette Abbate	412
Lisa Tomiak	140	Kevin Long	275	Scott Schaffer	413
Mark and Kathy Van Saun	141	Judy Henderson	276	Katrina Jackman	414
Jennifer Thompson	142	Sandra and Lanny Pixler	277	Jan and Steve Volker	417
Assunta L. Seivert	143	Phil Lee	278	Beth Luser	418
John and Cheryl Mandsager	144	Tara Davis	279	Michelle Hamilton	419

Comment Made By:	Comment Number	Comment Made By:	Comment Number	Comment Made By:	Comment Number
Maria Paladino	145	Dan Normoyle	280	Patricia Gibbs	420
Phil	146	Rennie and Norma James	281	K. Leonard	421
Jennifer Hamilton	147	Gary Frolich	282	Ron Adley	422
Michelle Thompson	148	Scott Wiemerslage	283	Brian and Jolene Shirey	423
David Lancisi	149	Troy Watson	284	Eric & Heather Olson	424
Ann Lindner	150	David L Brown	285	Robert Walter	425
Heather Sibilla	151	Krista Fisher	286	Kathy and Troy	426

4.4.6 Folsom Point Closure Forms

Members of the local community distributed a comment form to the local populace related to, and in opposition of, the proposal for closing Folsom Point during construction. These forms were provided to Reclamation at the closure of the public comment period. Approximately 440 signed forms were submitted. Table 4-6 contains a list of each person who signed such an opposition form, with copies of all forms incorporated in Appendix A. These forms were reviewed for comment issues, but primarily reflected the communities desire to keep Folsom Point open. In addition to the no-closure request, the majority of forms requested that consideration be given to establishing alternate sites for the proposed centralized staging/construction facility area. Numerous forms offered suggestions for alternate staging areas or alternate construction methods that could alleviate the need to close Folsom Point. The forms also included concerns regarding negative impacts to socioeconomic conditions, transportation, property, remaining recreation, vegetation and wildlife, air quality, sound quality, and visual quality if Folsom Point were closed. The topical responses presented in this chapter respond to the above-listed concerns.

Sammuel Griffin	Jill Morrison	Cory Dow	Katherine Sims	James Moffitt
Dana Corey	Mark Tappan	Rocky Dow	Carli Pichard	Shirley Delao
Mike Mello	Paul Phillips	Susan Doherty	Jon Smith	Dean Deguara
Katie Wood	Suzanne Reinard	Alis Wanninger	Mats Jansson	Lauren Huber
J. Dermer	Holly Larson	Cassie Dow	Bruce Bailey	Jim McCarthy
M.E. Michna	Tom Esselstrom	Cody Dow	Mike Pendleton	Laura Moffitt
Polly Petersen	Daniel Nemiroff	Michelle Carrey	Tim Harris	Cheryl Green
Mark Hogge	Richard Sebren	Ray Debenedetto	Greg Smith	Chris Newman
Autumn Gartamala	Lori Sebren	Travis Kane	Andrian Kurimay	Robert W. Peterson

Table 4-6
Folsom Point Closure Forms

Cody Bridenbaker	Jeff Hopkins	Miler Allarea	Curtis & Janelle Mau	James V. Cagney
Katie Arnold	Naomi Haueter	Mike Stinson	Kent Zenobia	Darin Homer
Keith Nicholson	Christa Cobabe	Russ Cunningham	Jill Huckaby	Ernest Green
Nick Hromyak	Shirley Norris	Lisa Hunter	Ellen Zenobia	Charles F. Ingram III
Dan Marlatt	Mikaela	Luis Bottini	Jillian Mintz	David Frey
Lisa Baker	Charles Welsh	Paul Freese	Jody Johns	Julie Ingram
Alyse Marlatt	Gail Borgman	Mary Cake	Doug Fisero	Aarti Pendse
Katherine Rhodes	Dan Otis	Angela Graves	Chip Huckaby	Steve Wetklow
Sandy Kaul	Leigh Sippel	David Graves	Mair Auerbach	Seth Frey
Jessica Womack	Donna Gentry	Brad Catalan	Lesley Storz	Terrell Frey
Samuel Goldsby	V.V. Pendse	Payton Burri	Chris Tomiak	Heidi Garner
David Sanders	Karen Collins	Devin Burri	Lisa Tomiak	Chad Holloway
Steve Thomson	Liz Bryant	Dove Burri	Paul M. Deauville	Kathryn Clayton
Amber Kennedy	James Anthony	Jake Decker	A. R. Spencer	Lee Wieband
G.L Alvarado	Anthony Galatti	Steven Jones	Liz Sliger	Rob Adair
Naomi Shoemaker	D Murray	Anne Petchaller	R. Hansen	Larry Larosa
Jennifer Kamuhey	Kevin	Kelsey Decker	Y. Darly	S. Wilkins
Nathan Norwood	Don Glueckert	Rita Decker	Awe Brosamte	Dana Keffer
Rebecca Pavan	Liz Winter	Bill Luce	Alan Haynes	Jesse West
Robert Gehbauer	Annette Slack	Austin Web	Elaine Lotta	John Lensch
Rachel Schwab	Deborah Winter	Robin Bottini	Keven Carmichael	Caroline Hindmarsh
Kathy Bradley	Kevin Pine	Jean Marks	Joe Curcio	Charles S. Strom
Brandon Schwab	Allison Pina	Colby Sykes	Jeff Leonetti	Peggy McGinness
Carolyn Nelson	Julie Surry	Don Decker	Eric Portela	Cynthia Anderson
Marsha Robinson	Jaquay Knowles	Julie Marshall	Lilly Sinnott	Ashley Smith
Camella McIntosh	Lori Tel	Sandra Davis	Natalie Flasco	Tarah Eavly
Dusty Combs	Joann	Curtis Webb	Chris Curcio	Jason Pick
Dale Raisbeck	Kimberly Lopez	Lynn Webb	Mary Wayne	Christina Brazzel
Scott Headington	Judy Major	Nicole Webb	Duane Cooney	Keith Faust
Tony Guerrera	Brett Yenzer	Bill Petchauer	Jeff Sipora	Joseph Thomas
Mary Martineau-Pealer	Steve Schmiesing	Ray & Sylvia Specent	Courtney Garahan	Camille Faravelli
Amanda Rusk	Cramer P	Janice Pettit	Sonia Deauville	TM Roehm
Mandy Price	Carolyn Bollinger	Katie & Brady Whitlow	Dee Shawhan	Deena Lynch
Alberta Strom	Caree Wentz	Susan Greendale	Kathie Graening	Jodi Albalos
Lisa Ratajczak	Paul Guevara	Mike Beretta	Andy Dale	Bill & Denise Silvan
Sim Ratajczak	Wayne Toutges	Theresa Perez	Cheryl Kurimay	Aelena Gayton
Kailey Ziebarth	Alex Cosentini	Janet Arnold	Emma J.	Kevin Schneider
Jennifer Westover	William Coles	Carol Kinnicutt	John Collins	Johnny Bennett
Michelle Harrison	Pia Knight	Doug Swystun	Louis V. Borges	Chris Kamucha
Henry Collins	Daniel Westmoreland	Dana Richardson	Leslie Woods	Manlu Ward
Steve House	Jack McCarthy	Scott Arnold	David Ramirez	Kylee Heuer
Lori Phillips	William Safford	Kelly Richardson	Ann Musso	Meredith Santos
Lori Moore	Frank Torrente	Bill Palmer	Cesca Brown	Nina Robyn
Thomas Okeeffe	Carol Rondeau	Jine Kinnicutt	Scott Spangler	Mike Bowden

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Comments and Responses

**Table 4-6
Folsom Point Closure Forms**

Karan Crofut	Tom Robinette	Catherin O'mardha	Tiffani Gibs	Hannah Bowden
Vivian Welsh	Gabriela Sienna-Cuno	Bob Weiss	Steve Hansen	Carrie Brown
Dennis Werzlin	Bruce and Carmie Brincka	Marjorie Marmorstein	Barbara Luerandorsel	Tracy Sharpe
Andy and Carolyn Hudson	Dylan Schwarz	Lydia Rodrigez	Lisa Malatesta	Garret Jennings
Tom Leard	Nicole Schwarz	Bruce Williams	Amanda Garvin	Alice Huerta
M Sipprel	Tom Hippenstell II	K Jackson	Dawn Adicoff	Tony Scharle
Cristin Bassham	Tara Blanton	Charles Cornell	Dave Williams	Karin Miller
Chad Hewitt	Beverley Farrell	Melissa Caris	Corrie Johnson	Lisa Jarrett
Raymond Garit	Katy Oreskes	Neda Dehgahani	Jim Castro	Kristen Spaylor
Carlos Gaudy	J Reese Gary	Manzer Mazloom	Marty Finato	Charlene Dougherty
Elsa Gaudy	John Sherry	Roberto Medina	Stephanie Winthrop	Bahman Fozeuni
Dennis Jarret	Nini Dow	Catherine Subryan	Brad Cahooow	Ginger McMurkey
Connie Freese	Jane Pearson	Nancy Shisa	Don Chesney	Kristin Napolillo
Todd and Becky Wolger	Annette Mastroieni	Ann Lake	Anna Ruggiero	Cary Gallagher
Jennifer Daniels	Harish Reddy	Jesus Garcia	Stella Winingham	Brian Vidlock
Michelle Gray	Rod, Karen, Jordan, Tyler (and Chloe and Scout)	Kathleen Leveille	Tracy Folau	Katalin K.B. Walcott
Jeannette Clark	Victor Cosentini	Sally Dermenjian	Joshua Morell	Victoria Murphy
Esther Amezcua	Eddie Rodgers	Juan Amezcua	Lisa Griffin	Randy Griffin
Alexis Tarczy	Mercury Acosta	Gail Price Hebert	Hiren D Vashi	Dean Campbell
Chris Tarczy	Velma E Gand	Lori Deauville	Nora Allarea	Jaime Derrick
Julene Nichols	Roberta Ward	Lynn Derrick	Tina Campbell	Vicky Cackler
Bernard T Homme	Jim Arellano	Linda Crawford	Dan Vincent	Shanan L. Hewitt
Judy Homme	Dana Lee	Roy E. Coverdale	Karyl Sutton	Jamie Capps
Albert Newman	Todd Carrey	Frank Jacobs	Aflinba Nrowahue	John Dunne
Nancy Rucker	Chuck & Deena Lynch	Colin Glueckert	Dale & Julie Kolodziej	Les Compagno
Karen Burri	Rebecca N. Kraemer	Michael Codina	The Laymans	Cameron Tarczy
Scott Seibel	Brett Quackenbush	Robert Goolis	John Leung	Greg Buck
Denis Fitts	Sally Giampapa	Jim Aitken	Debra Leung	Stephen Parra
Kara Tumminelli	Robert Cline	Taira Byrne	Randy & Julie Cannedy	Todd Cackler
Daniel & James Lanham	Tim Rametta	Elizabeth Biggers	Robie A Coles	Leonard Auerbach
Carol A Gray	Allison Meeker	M. Franklin	Joanne Tepper-Saffren	Mary Tarczy
Don Wanninger	Paris Muller	Kelly Richardson	Robert Saffren	Marty and Ronni Sloan
Ken Nichols	Kevin Unruh	Brad Graham	Joey Saffren	Sandra Pixler
Alan Fahndrich	Todd Kolodzig	Charles D. Gray	Pete Tumminelli	Jeff Pettit
Paul M. Deauv	Joe Daniels	Pete Leonard	Lanny Pixler	

4.4.7 Telephone Calls

Numerous telephone calls were received by Reclamation and the Corps during the comment period. CEQA and NEPA do not require responses to such comments; however, the comments were of a similar nature to the many written comments received during the comment period and the topical responses presented in this chapter respond to those concerns.

4.5 Public Hearing Comments

Reclamation, the Corps, SAFCA, DWR, and the State Reclamation Board held two public hearings in January 2007 for the Folsom DS/FDR Draft EIS/EIR. The first hearing took place on Tuesday, January 9 at the Sacramento Library Galleria in Sacramento, and the second hearing took place on Wednesday, January 10 at the Folsom Community Center in the City of Folsom.

Approximately 100 people attended the two hearings, including members of the public, elected officials, and representatives from public agencies, water resources, waterways, and electric power and flood control.

During each of the hearings, the public had an opportunity to give verbal comment to the Hearing Officer. Twenty-three verbal comments were given during the two public hearings. Each verbal comment was recorded by a court reporter. In addition to verbal comments received at the public hearings, agencies also accepted written comments on comment cards that were distributed to each attendee. There were 60 written comments received at the two public hearings. Copies of the public hearing transcripts and all written comments from the public hearings are available in the Folsom DS/FDR Draft EIS/EIR Public Hearing Summary Report, found in Appendix C of this document.

4.5.1 Transcripts

A copy of the transcripts from the public hearing meetings can be found in the Folsom DS/FDR Draft EIS/EIR Public Hearing Summary Report in Appendix C. Table 4-7 presents a list of all speakers that provided verbal comments at the public hearings.

<i>Table 4-7 Public Hearing Verbal Comments</i>			
<i>Commenter</i>	<i>Comment Number</i>	<i>Commenter</i>	<i>Comment Number</i>
Madeleine Moseley	21	Don Reid	33
Robert Giacometti	22	M.K. Veloz	34
Doug Pepper	23	Victor Becerril	35

Table 4-7 Public Hearing Verbal Comments			
Commenter	Comment Number	Commenter	Comment Number
Alfred Bulf	24	Kent Zenobia	36
Mechelle Gooch	25	Kris Gardner	37
Ian Cornell	26	Taylor Zenobia	38
Carol James	27	Sarah Griffith	39
Elinor Brady	28	Chris Hodges	16
Renee Howle	29	Bill Watson	17
Mike Coffman	30	Steve Hodges	18
Patricia Gibbs	31	Jerry Toenyes	19
Robert Holderness	32		

4.5.2 Written comments

A copy of all written comments received during the public hearings is available in the Folsom DS/FDR Draft EIS/EIR Public Hearing Summary Report, included in this Final EIS/EIR as Appendix C. Table 4-8 presents a list of all reviewers that provided written comments at the public hearings.

4.6 Responses to Comments

Appendix A presents the index of entities submitting comments, the text of the comment, and the Partner Agencies' responses to the comments. To save paper, the comments and responses are provided in electronic format only. For members of the public without the means to access/read the electronic format version, hard copies of the comments and responses are available for review at the El Dorado County Public Library, Folsom Public Library, Roseville Public Library, and Sacramento Central Public Library.

4.7 Petitions

During the comment period, the Folsom DS/FDR agencies received a total of 64 pages of petitions that stated “I oppose the closing of Folsom Point for any period of time for the Bureau of Reclamation and the U.S. Army Corps of Engineers to modify the dam”. The petitions contained a total of 1,085 signatures. The petitions do not pertain to, or raise, environmental issues related to the proposed project alternatives. The petitions that were received during the public review period for the Draft EIS/EIR are included as part of Appendix A of this Final EIS/EIR and may be considered by decision-makers during project deliberations; however, written responses to such comments are not required by NEPA or CEQA.

Table 4-8 Public Hearing Written Comments			
Commenter	Comment Number	Commenter	Comment Number
Phil Maestre	12	Russ Knapp	51
Mary Henriksen	13	Duane Cooney	52
Aaron Boring	14	Cindy Speer	53
Mach Bishop	15	Melissa Green	54
Russ Harrington	20	Russ and Lisa Hoy	55
Keoni Almeida	40	Jason Zarghami	56
Cindi Dulgar	41	Ericka Cooney	57
Paul Moynier	42	Brian and Cindi Dulgar	58
Gene Moynier	43	Sandy McKaig	59
Michelle Lipowski	44	Jim Snook	60
James Clayburn	45	Craig R Larson	61
Jon Soderman	46	Carol James	62
Charles A Hooper	47	Chet Bloyd	63
Renee Howle	48	Mike Garner	64
Dennis Swenson	49	John Poimiroo	65
Ken Christensen	50	John Poimiroo	66

4.8 Comments on Corps PAC Report

The Corps' PAC Report documents recommended changes to the Folsom Modifications and Folsom Dam Raise projects for the JFP and flood damage reduction elements of the Corps' Selected Project (6STG Auxiliary Spillway, 3.5-ft dam raise, and replacement of the 3 emergency spillway gates on the Main Concrete Dam). The draft PAC Report was made available for public review in conjunction with the Draft EIS/EIR. Table 4-9 provides the comments received relating to the draft PAC Report and responses to those comments.

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
1	Gary Estes		Pg. ES-1, Lines 23-24. Of concern is the continued use of the 1986 "unprecedented high outflows from Folsom Dam" for justification of increased flood protection for Sacramento from the American River. The cause of these "unprecedented high outflows" was explained by the National Research Council's (NRC) Committee on Flood Control Alternatives in the American River Basin in its 1995 report entitled, " <u>Flood Risk Management and the American River Basin: An Evaluation</u> ". Based upon the NRC Report, I recommend changing the sentence on Line 24 beginning "Unprecedented..." to read: "These record flood flows together with high flows in the Sacramento River prompted a reevaluation of the flood management system protecting the Sacramento area."	Concur in part. The following revisions were made to the final PAC Report. Reference to "unprecedented" deleted. Reference to "record high flows" included. Text referencing the cause of high flows also revised for clarity.
2	Gary Estes		Pg. ES-3, Lines 25-31. The focus is on the physical or structural changes, but this project also includes operational changes which the structural changes make possible. Since this report might lead to additional Congressional authorization, it is important that updating the Flood Management Plan found in the Defense Appropriations Act of 1993 in Section 9159 (f)(2) and in the Water Resources Development Act of 1999 in Section 101(a)(6)(E) be described. We do not want this work to be inadvertently left out of any new Congressional authorization because the Folsom Modification Project consists of structural changes and operating changes. The structural changes make the operational changes possible. This should be made clear in the Project description.	A separate long term reoperation study which includes an update to the flood management plan is currently under way. This effort also includes forecast based operations. Text clarifying this has been added to Section 1.3 of the final EIS. This is also described in Section 2.5.1 of the PAC.
3	Gary Estes		Table ES-1 needs description of units added to "Design Flood Event" line. What do those numbers mean?	Concur. The following revisions to the final PAC Report were made. Reference to "frequency in years" provided in table and a footnote is added clarifying that the "design flood event" numbers.
4	Gary Estes		Table ES-3 lacks "Note 2" being used in the table body. Either insert or remove this note.	Concur. The following revision to the final PAC Report was made. The second footnote "1" was changed to "2".

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
5	Gary Estes		Pg. ES-12, Lines 8-10 please add language explaining the difference between "updating prices to October 2006 price levels" and "if priced at current price levels." It also reads at line 14, "This cost would also be significantly greater if repriced at current price levels." Don't we want to know what the actual real cost will be? So why are we not using these higher prices?	Concur. The following revision to the final PAC Report was made. The second footnote "1" was changed to "2".
6	Gary Estes		Table ES-4 and Table ES-5 are confusing in "Note 1."	As noted in comment 5, text added to Chapter 5 explaining the difference between the two price increase procedures.
7	Gary Estes		Page 1-2, Line 26 is a repeat of above comment for Pg. ES-1, Lines 23-24 as this is the same language repeated.	Concur in part. The following revisions were made to the final PAC Report. Reference to "unprecedented" deleted. Reference to "record high flows" included. Text referencing the cause of high flows also revised for clarity.
8	Gary Estes		Line 3-14 is a repeat of Comment for Pg. ES-3, Lines 25-31 above.	A separate long term reoperation study which includes an update to the flood management plan is currently under way. This effort also includes forecast based operations. Text clarifying this has been added to Section 1.3 of the final EIS. This is also described in Section 2.5.1 of the PAC.
9	Gary Estes		Pg. 1-8, Lines 10-11 refers to 160,000 cfs outflows "for a sustained time (currently being evaluated)." The qualifier of "currently being evaluated" appears to be in conflict with Note 1 of Table ES-3 which says "up to 48 hours." Can you clarify which is correct? Seems the length of the sustained time has been decided.	The following revision was made to the final PAC Report. Text referencing "up to 48 hours" replaced with "(currently being evaluated)". Efforts made to be consistent throughout report.
10	Gary Estes		Pg. 2-1, Lines 25-26 refers to PMF. Is date correct for 2001 PMF? Is date correct for 2001 PMF as I understand the PMF report was 2004? Also provide a reference on the PMF report on this page and in Chapter 8, References.	The 2001 PMF date is correct. The report is titled: American River Basin, California, Folsom Dam and Lake Revised PMF Study, and was prepared by the Sacramento District in October 2001. The reference will be added where requested.
11	Gary Estes		Repeat above comment from Pg. 1-8, Lines 10-11.	The following revision was made to the final PAC Report. Text referencing "up to 48 hours" replaced with "(currently being evaluated)". Efforts made to be consistent throughout report.

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
12	Gary Estes		Pg. 3-2, line 11-14 contains the sentence beginning "To date..." which is wrong and should be removed. The problem with this sentence can be found in the presentation entitled, "Spring Forecast Based Operations, Folsom Dam, California" given by Paul Pugner. It is a printed Symposium's Proceedings.	Concur. Sentence deleted.
13	Gary Estes		Pg. 4-8, Lines 37-40 states the percent chance the selected plan has to protect Sacramento from flooding. Percentages are given for the 250-year and 500-year storm. In 1999 the National Research Council's Committee on American River Flood Frequencies published its report entitled "Improving American River Flood Frequency Analyses." The report was in response to a request by the Corps of Engineers. Extrapolating the size of floods beyond the 200-year flood on the American River cannot be scientifically supported and should not be done. Computing the unregulated peak inflow to Folsom Dam past the 200-year flood is not appropriate for planning purposes without doing other analyses. This is especially true for the 500-year storm mentioned.	This description of risk (CNP) is no longer presented.
14	Gary Estes		Pg. 4-11, Lines 27-30 is a repeat of comment above (Pg. 4-8, Lines 37-40)	This description of risk (CNP) is no longer presented.
15	Gary Estes		Appendix E, Attachment B has a tables showing peak unregulated inflow to Folsom Dam as computed by HEC-FDA. Floods with the annual chance up to 1-in-550 chance per year are shown. Comment 14 applies to these tables. Using this data past the 1-in-200 chance flood is not supported by scientific data and the NRC Committee says it is an area needing further research. Decision-makers should be based upon reliable information. Remember, garbage-in equals garbage-out.	This description of risk (CNP) is no longer presented.

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
16	James Pope	NCPA	Recommend that the EIS/EIR more clearly state in the opening paragraphs the various components of the DS/FDR, which agency has the responsibility for completion of each component, and the proposed cost sharing responsibility. Table ES-1 could be expanded to include the above request, and should include ecosystem restoration and L.L. Anderson work. The opening paragraphs should clarify that the only joint federal project is the auxiliary spillway.	Section 1.1 of the final EIS/EIR contains text clarifying this.
17	James Pope	NCPA	The process to allocate the joint federal project auxiliary spillway costs between safety of dams and flood control should also be discussed, along with the opportunity for public input on the proposed allocation. The 2002 Corp of Engineers Chief's Report indicated that approximately 48% of the proposed project cost would be allocated to safety of dams and 52% would be allocated to flood control. Later, a computation error was found in the report, and the proposed allocation was changed to 43% for safety and 57% to flood control. The basis of these allocations was not disclosed. We recommend the cost allocation process be made transparent for all of the project features and allow for public input.	The Corps definition of cost allocation is division of costs between project purposes. The term "cost distribution" is used because dam safety is not a purpose that generates benefits. Cost distribution and the development of Reclamation and Corps' work packages" are fully discussed in the final PAC report. Work packages are lists of work items each agency will do to complete the JFP. The final PAC report will be available for public review. The flood damage reduction (Corps) cost of the JFP will be reported in the PAC. The dam safety (Reclamation) work package cost of the JFP will be reported in the Reclamation Modifications report, which has no standard public review. The cost distribution done for the 2002 Long Term Study will be out of date if the JFP is approved. The JFP will provide the dam safety, and the Folsom Dam Raise will be 100 percent flood damage reduction purpose.

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
18	James Pope	NCPA	We believe the separable costs/remaining benefits allocation procedure should be used to allocate the joint federal project costs for the auxiliary spillway. The costs that are specific to the Corps should be allocated to flood control, and Reclamation costs specific to safety of dams should be allocated in accordance with the existing safety of dams formula. We also believe that the estimated costs of the five alternatives, along with the benefits, should be included in the EIR/EIS. The estimated cost and benefits for the Preferred Alternative were shown on an informational display at the public hearing, but were not shown in the socioeconomics section of the EIS/EIR.	Separable Cost Remaining Benefit (SC-RB) is not used as it is not fully applicable to this project. SC-RB is designed for allocation between project purposes, and dam safety is not a project purpose. The project team found a more useful method is the proportional method that is described in the PAC Report. SC-RB as an alternative method is discussed in the Cost Distribution Appendix.
19	James Pope	NCPA	We are concerned that a flood control reservation is being set at between 400,000 acre-feet and 600,000 acre-feet for Folsom Dam, when a more flexible reservation system would greatly increase the value of the water resource. A flexible reservation should include factors such as the water type, the ability to make earlier releases to increase the flood control reservation as needed, and forecast based operations. Pre-releases could be made if a large storm approaches the area in order to create a larger flood control reservation. A strict acre-foot flood control reservation system may create too large of a hole in a dry water year to allow the reservoir to fill and meet the Folsom Dam water requirements.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place until completion of the Folsom Modifications Project. A long-term reoperation study which includes forecast based operations and the implementation of a new water control manual is currently being scoped parallel to this project. The final PAC report contains further information on this. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.
20	James Pope	NCPA	We also support the continued utilization and improvement of forecast based operations to predict flood events. We believe it is important for the Corps to incorporate an advanced release methodology based on weather forecasts to reduce the flood exposure in California. A discussion of how the Folsom Reoperations Study ties into this EIS/EIR should be included in the document.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place until completion of the Folsom Modifications Project. A long-term reoperation study which includes forecast based operations and the implementation of a new water control manual is currently being scoped parallel to with this project. The final PAC report contains further information on this. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
21	James Pope	NCPA	There is little discussion on the temperature control shutters in the document. We believe this presents a great opportunity to design a more comprehensive temperature control device, similar to that being used for Shasta Dam, where water can be gathered from all levels of the reservoir and put through the generation penstocks. This would greatly enhance the ability to control American River temperatures, and would also eliminate the need to bypass the generators in dry water years, which deprives California of greenhouse gas emissions free power generation.	Comment Noted. Ecosystem Restoration function (which includes the shutters) is proposed to be carried forward as "Other Features" in the PAC.
22	James Pope	NCPA	The security features are only obliquely discussed under the alternatives listed in this EIS/EIR. The document did not provide any details regarding the anticipated cost or how those costs would be allocated to the various project purposes. We believe these issues should also be vetted in a public forum.	The Security Upgrades were adequately described in the EIS/EIR and all impacts to the human and natural environment were disclosed. The EIS/EIR is not the appropriate document for disclosing costs as related to the Security upgrades.
23	Alexander Coate	EBMUD	The document does not adequately support the use of the 400,000/670,000 acre foot variable reservation of flood control space (operating rule) as a key assumption in the No Action Alternative. The No Action Alternative should use the pre-1993 400,000 acre foot rule as the default.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place until completion of the Folsom Modifications Project. A long-term reoperation study which includes forecast based operations and the implementation of a new water control manual is currently being scoped parallel to this project. The final PAC report contains further information on this. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
24	Alexander Coate	EBMUD	The Draft EIS/EIR's discussion of impacts and alternatives is insufficient because the document fails to address the implementation of new operations. The document states that any consideration of the impacts of changed operations cannot be determined and defers this discussion and development of operational alternatives to a point after this project has commenced. At that later point, however, operational alternatives could be constrained or favored by the physical solution that is selected and constructed. In addition the range of alternatives examined in the Draft EIS-EIR does not encompass alternatives involving downstream levees. The flood control alternatives and their impacts are too narrowly described in the Draft EIS/EIR to meet the requirements of NEPA.	As described in the final PAC report, one of the objectives of this effort is to work collaboratively with Reclamation to determine a project that would be functionally equivalent to the Folsom Modifications and Folsom Dam Raise projects while also addressing Reclamation's dam safety objective. Downstream alternatives would not address dam safety objectives, and are out of scope for a Safety of Dams project. Once the Auxiliary Spillway has been constructed and is functional, all releases made using the spillway will adhere to current operational criteria, and would not require changes to the Water Control Manual in order to operate.
25	Alexander Coate	EBMUD	The Draft EIS/EIR should address the range of financial impacts on CVP water contractors. Because the Draft EIS/EIR has deferred any discussion or evaluation of operational rules, there are no estimates of the economic/financial impact to CVP water contractors, due to likely changes to the operation of Folsom reservoir resulting from the Proposed Project and other alternatives. In turn, no remedies have been identified to compensate CVP water contractors for likely operational changes that could result in reduced water supply. The document, in other words, has failed to consider the indirect and cumulative impacts that are likely to result from the project.	Comment noted. Reservoir operations will not be impacted as a result of this project. All releases will be made in accordance with the current Water Control Manual. No impacts have been identified to water or power deliveries as a result of this project; therefore, no mitigation is required. Impacts to permanent reoperations, which are outside the scope of this project, will be addressed in a separate study that is currently being scoped. The final PAC report contains further information on this. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.
26	Daniel Nelson	San Luis & Delta-Mendota Water Authority	Any costs attributed solely to Flood Damage Reduction must not be reimbursable by CVP contractors. For example, since Reclamation has determined that a dam raise and operable spillway gates are not required for Dam Safety, the DEIS/R should make it clear that any costs for a dam raise or in excess of the cost of a fuseplug spillway will not be borne by water and power users.	Comment noted. The final PAC report contains text clarifying this

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
27	Daniel Nelson	San Luis & Delta-Mendota Water Authority	The bridge to be constructed immediately downstream of the dam is not related to either Dam Safety or Flood Damage Reduction and no portion of the costs for the bridge are to be borne by CVP water and power users.	The EIS and the PAC are not on the bridge. The bridge was evaluated in an earlier EIS and Corps decision document in 2006. The report notes that Reclamation will make a determination on potential dam safety costs associated with the bridge.
28	Daniel Nelson	San Luis & Delta-Mendota Water Authority	We understand the Folsom operations are not a part of this environmental review, but some of the language in the DEIS/R could be confusing regarding this issue. It should be made clear that the Interim Operations pursuant to the agreement between Reclamation and SAFCA is a temporary plan and has not been analyzed under NEPA or CEQA as a long-term operations plan. Therefore, the baseline or "without project" alternative must be based on the 400,000 AF flood reservation only and not the variable flood reservation levels in the Interim Operations agreement.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place or until completion of Folsom Modifications. A permanent reoperation study, which will include the implementation of a new water control manual, is currently being scoped parallel to this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.
29	Robert Stackhouse	CVP	Use of the 400,000/670,000 Acre-Foot rule as a key assumption in the No Action Alternative is flawed due to the uncertainty on continuation of that rule for Folsom reservoir operation over the design life of the Proposed Project. Firstly, although the 400,000/670,000 rule is embodied in the 2004 agreement between Reclamation and the Sacramento Area Flood Control Agency (SAFCA), that agreement terminates in 2018 or earlier and nothing compels SAFCA to enter into a new agreement with Reclamation with the same rule to span the design life of the Proposed Project. Secondly, the Water Resources Development Act of 1996 (WRDA) characterized the 400,000/670,000 rule as an interim rule until such time as a flood damage reduction plan for the American River has been implemented. The pre-1993 400,000 Acre-Foot rule presents the most plausible default for incorporation in the No Action Alternative.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place or until completion of Folsom Modifications. A permanent reoperation study which will include the implementation of a new water control manual is currently being scoped parallel to this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.

Chapter 4
Comments and Responses

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
30	Robert Stackhouse	CVP	The Proposed Project enables and comtemplates studying a wider range of operations rules for flood control and other purposes than those in use today, and any changed rules resulting from those studies will have various impacts, both positive and negative, on water users and the environment. In addition, the range of alternatives for flood control does not address the range of possible alternatives involving downstream levees. Simply adopting existing plans for levee strengthening and upgrades fall far sort of the realistic range of alternatives that should be addressed. The	Comment Noted. As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place or until completion of Folsom Modifications. A permanent reoperation study, which will include the implementation of a new water control manual, is currently being scoped parallel to this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation. The selected plan would be operated using existing criteria until this study is completed, which is anticipated one year prior to completion of construction of the Auxiliary Spillway.
31	Robert Stackhouse	CVP	Extension to the prior comment: there are no estimates of the economic/financial impact to CVP water contractors, power customers of the Western Area Power Administration (WAPA), or other water users, or plausible or likely changes to operation of Folsom reservoir operation as a result of the Proposed Project or other alternatives. No remedies are identified to compensate CVP water contractors, power customers or WAPA, or other users, due to reduced water or power supply caused by plausible or likely changes to Folsom reservoir operation as a result of the Proposed Project or other alternatives. In short, the document fails to consider fully the indirect and cumulative impacts of the Proposed Project.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place or until completion of Folsom Modifications. A permanent reoperation study which will include the implementation of a new water control manual is currently being scoped parallel to this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.
32	Robert Stackhouse	CVP	We would also like to reiterate our general understanding that there cannot be an allocation to CVP Contractors for costs for projects that do not meet an authorized CVP Project Purpose and/or are not designated as a Financially and Operationally Integrated part of the CVP. Neither document provides the background calculations from which the cost allocations were derived. In addition, neither document specifies entities. We are very interested in this information.	Comment noted. The final PAC report contains text clarifying this. Costs are not discusses in the EIS/EIR, it is not a financial disclosure document.

Table 4-9				
Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
33	Robert Stackhouse	CVP	We also believe that any Safety of Dam allocation for any of these costs would be of sufficient significance to warrant a separate repayment period beyond the 2030 repayment deadline for pre-existing CVP Plant-In-Service costs as of 1980. Because these projects are not expected to be completed until time periods ranging from 2010 (at the very earliest) to 2020 (if there are scheduling delays), a 2030 repayment period would considerably compress the repayment period for these costs relative to the useful life of the project. Moreover, the CVP rate setting policies incorporate a 50-year repayment period for capital costs, which was used as the basis for determining a 2036 repayment date for the San Felipe Unit out-of-basin facilities costs.	Comment noted. The final PAC report contains text clarifying this
34	Robert Stackhouse	CVP	Within the last paragraph, elements that Reclamation and the Corps of Engineers would implement separately are mentioned, and a list "as summarized in the following paragraphs" is referenced. On what page is this list provided?	Comment Noted. Additional language and figures have been finalized since the Draft Report and will be included in the Final Report.
35	Robert Stackhouse	CVP	Regarding the top paragraph, was separate authorizing legislation provided for the Folsom Outlet Modifications Project, which was morphed by the Corps of Engineers into the Auxiliary Spillway Project? What was the PL number for this authorizing legislation for the Folsom Outlet Modifications Project?	Page 1-19, 1.5.9: Energy and Water Development Appropriations Action of 2006 (PL109-103) for the Auxiliary Spillway. Page 1-17 Mods authorization is WDRA 1999 (PL 106-53)
36	Robert Stackhouse	CVP	Will the referenced fuseplug in the top paragraph be built prior to the completion of the auxiliary spillway?	No, the proposed joint project is a 6 STG Auxiliary Spillway that will take the place of Reclamation's fuseplug.
37	Robert Stackhouse	CVP	In the top paragraph, why is there a reference to security activities? Have security activities been defined as part of the Joint Federal Project and either the Flood Damage Reduction or Safety of Dams program?	The Security upgrades are included in the EIS/EIR because they are a necessary part of the overall facilities upgrades. Much of the work required to install the security upgrades will take place on a dike, or a dam, and therefore any potential impacts from that work are required to be disclosed along with all of the other project features.

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
38	Robert Stackhouse	CVP	Did the authorizing legislation for the Folsom Outlet Modifications project (which was subsequently revamped as the Auxiliary Spillway) specify a 100% flood control allocation?	No, but the purpose of flood damage reduction is implicit in the authorization, because it is specified in the documents referenced by the legislation. Section 128 of the Energy and Water Resources Appropriations Act of 2006 (PL109-103) authorizes the Corps and Reclamation to work together on an Auxiliary Spillway. .
39	Robert Stackhouse	CVP	What incremental acre-foot storage capacities would be provided by 3 1/2 foot, 7 foot, and 17 foot raise levels to the Folsom Storage facility? How does this compare to the acre-foot capacities that are expected to be generated through a Probably Maximum Flood?	The JFP and the TSP both lower the PMF pool elevation from the existing 483.3' el.
40	Robert Stackhouse	CVP	Are there specific (non-security related) safety requirements for the Folsom facility on the basis that it is designated as a National Critical Infrastructure facility?	Drew Lessard has been given this comment.
41	Robert Stackhouse	CVP	Why is the authorizing legislation for the Folsom Outlet Modifications project not included in the legislative citations?	Section 1.5 provides all authorities specific to the Folsom project (pages 1-9 to 1-20)
42	Robert Stackhouse	CVP	Is site security being incorporated into this project? If so, under what authorization is this being done?	USBR
43	Robert Stackhouse	CVP	Why is alternative 1 designated as a purely Safety of Dams alternative?	Alternative 1 does not provide any flood damage reduction benefits. It was designed to specifically address Safety of Dams issues.
44	Robert Stackhouse	CVP	Would any of the proposed projects impact water deliveries while construction is in progress?	The project will not have significant impacts to water or power deliveries. It may be necessary to disrupt service on a temporary basis during construction. Reclamation and the Corps are aware of the limitations of
45	Robert Stackhouse	CVP	Would deliveries to the City of Roseville, San Juan Water District, and Suburban Water District be significantly impacted during construction of any of the Corps' Folsom Dam Modifications projects?	The Corps is no longer proposing to build the Folsom Modifications Project. The Corps will participate in the construction for of the Auxiliary Spillway with Reclamation, and the Corps is proposing to construct a 3.5-ft raise. The construction of these features will not have significant impacts to water or power delivery.

Table 4-9
Corps Project Authorization Change (PAC) Report Comments and Responses

No.	Commenter	Agency	Comment	Response
46	Robert Stackhouse	CVP	The no action plan should be based on the fixed 400 thousand acre-foot storage space that has only been superseded on an interim basis.	As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place or until completion of Folsom Modifications. A permanent reoperation study which will include the implementation of a new water control manual is currently being scoped parallel to this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.
47	Robert Stackhouse	CVP	Why does the No-Action Plan include the implementation of several projects that will affect the Folsom Dam's flood capacity and one project (the Folsom Bridge) that will not have any bearing on the safety or flood capacity of the Folsom Dam.	The Folsom Bridge is being carried forward as congressionally authorized as part of the Folsom Dam Raise project. Chapter 1 of the EIS/EIR and the final PAC Report contain text clarifying this.
48	Robert Stackhouse	CVP	It is our understanding that there will be no cost allocation to CVP Contractors on the basis that the LL Anderson facility is not an integrated component of the CVP and is not owned by the Federal Government. Our understanding is further reinforced by the statement that the Placer County Water Agency will independently implement this project.	Improvements to the LL Anderson Dam are not part of the currently recommended project. Placer County Water Agency is the owner of the dam responsible for improvements required for FERC relicensing.
49	Robert Stackhouse	CVP	In figure ES-2, how do we get access to the back-up calculations that were used to derive the 172.8 million Dam Safety allocation in the section titled "6 STG Element"?	Some of the backup calculations are in Appendix F Cost Distribution. Further backup may be obtained by contacting the Corps, Sacramento District, and Reclamation Central California Area office.

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
50	Robert Stackhouse	CVP	In figure ES-2, how was the Non-Federal Share for the Temporary Bridge of \$9.6 million determined? Why is there an additional \$28.0 million in non-Federal cost estimated for Added Features"? What are these additional features, and who will pay these costs?	Cost sharing determination of the Folsom Dam Bridge is shown in the American River Watershed Project Folsom Dam Raise, Folsom Bridge Post Authorization Decision Document, September, 2006, available at the Corps. The term "added features" has been revised to "other features" to reflect the other features of the authorized Raise Project that are being carried forward with no recommended changes (Folsom Bridge and ecosystem restoration). Costs of the ecosystem restoration project would be paid by the Corps and its non-federal sponsors. The final PAC contains text clarifying this.
51	Robert Stackhouse	CVP	In table ES-6, why does the Authorized Folsom Modification Project have no Safety of Dams allocation, while the "6 STG Element" includes \$172.8 million in safety of Dams costs?	See Section 3.1 Folsom Modifications Project, especially Section 3.1.3. The Folsom Modifications Project earlier design had no significant dam safety function. The Auxiliary Spillway design under the Recommended Plan in table ES-6 provides hydrologic dam safety and costs are distributed to both dam safety and flood damage reduction.
52	Patrick Porgans	Porgans & Associate	The Folsom Dam facilities should be returned to the Army Corps of Engineers and jointly operated with the Sacramento Area Flood Control Agency, primarily for "flood control" protection, power production, recreation, and fish and wildlife enhancements/protections within the American River Watershed. A minimum of 500,000 acre-feet of the reservoir should be made available during the entire flood season for flood control storage, weather and watershed conditions permitting. This recommendation can be accommodated by the proposed structural changes at the dam, designed to allow for the release of water when the reservoir is at lower elevations. Furthermore, the reduction in the rate of discharge will limit the erosive impacts on downstream levees along the American river and throughout the Delta.	Comment Noted. As per WRDA 1999 (PL 106-53) an interim operation agreement is assumed to continue in place or until completion of Folsom Modifications. A permanent reoperation study, which will include the implementation of a new water control manual, is currently being scoped in parallel with this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation.

No.	Commenter	Agency	Comment	Response
53	Patrick Porgans	Porgans & Associate	Based upon the proposed alternatives for the Folsom facilities, the impacts on existing storage may be minimal under most scenarios. It may be argued that under the proposed alternatives, accomplishment of the safety and flood protection can be achieved without any reduction in annual yield to Reclamation's federal Central Valley Project water contractors. It is P&A's position that the water that Reclamation delivers to its contractors has and continues to impact public trust resources and private property within the American River watershed.	Comment Noted.
54	Patrick Porgans	Porgans & Associate	All water impounded in the reservoir after the flood season has ended, should be allocated for existing municipal and industrial purposes, recreation, power production and for the protection and enhancement of "public trust" resources.	Comment Noted.
55	Patrick Porgans	Porgans & Associate	The outstanding capital component owed by the agricultural contractors can be derived from Congress, sale of power, and/or from other local sources. If you need more information, please contact P&A accordingly.	Comment and information offer noted.
56	Bruce De Terra	Dept. of Transport	Under the Common Features levee improvements below Folsom Dam, it is planned that completion of improvements to the levees along the lower American and Sacramento Rivers would allow these levees to "safely contain sustained water releases of up to 160,000 cubic feet per second (cfs) from Folsom Dam." The DEIR needs to identify the potential damage to bridges downstream from Folsom Dam due to such sustained releases. With sustained high velocity water releases, mitigation to minimize structural bridge damage and potential traffic disruption should be identified.	Comment Noted. The Auxiliary Spillway, once completed, will be operated in accordance with the existing Water Control Manual. All releases will fall within current operations criteria. The project, as described in the EIS/EIR, will not have impacts to structures downstream, including bridges. This will be further analyzed, with the appropriate level of environmental analysis, agency, stakeholder and public coordination during the long-term reoperation study that is currently being scoped parallel to this project.

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57	Bruce De Terra	Dept. of Transport	On October 24, 1995, FHWA delegated Caltrans the responsibility of informing local City and County Governments and their respective agencies of the need to bear responsibility and cost for bridge impacts if local governments have been found negligent in their actions toward the protection of such structures. Accordingly, the Project needs to identify measures, if any, needed to protect the stability and structural integrity of downstream bridges from high velocity water release impacts.	Comment Noted. The Auxiliary Spillway, once completed, will be operated in accordance with the existing Water Control Manual. All releases will fall within current operations criteria. The project, as described in the EIS/EIR, will not have impacts to structures downstream, including bridges. This will be further analyzed, with the appropriate level of environmental analysis, agency, stakeholder and public coordination during the long-term reoperation study that is currently being scoped in parallel to this project.
58	Bruce De Terra	Dept. of Transport	It is not clear whether studies of hydraulic impacts and water surface elevations adequately discuss proposed increases in water velocities and any attendant erosion upstream, downstream or at the bridge sites. The proposed raising of the levees on both the American and Sacramento Rivers and the resulting increased flows could have significant impacts on the ability of the bridge structures to safely handle the increased flows. The proposed 160,000 cfs volume is considerable higher than the 120,000 cfs used in our current analysis. Additionally, the increased water height may inundate some of the bearings on the lower clearance bridges. Consequently, we request hydraulic reports, along with the detailed scour analysis of all the bridges below Folsom Dam on the American River. To the extent that the high velocity water releases will create adverse impacts beyond the confluence, we will need similar information for the affected bridges on the Sacramento River.	Comment Noted. The Auxiliary Spillway, once completed, will be operated in accordance with the existing Water Control Manual. All releases will fall within current operations criteria. The project, as described in the EIS/EIR, will not have impacts to structures downstream, including bridges. This will be further analyzed, with the appropriate level of environmental analysis, agency, stakeholder and public coordination during the long-term reoperation study that is currently being scoped parallel to this project.

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Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
59	Bruce De Terra	Dept. of Transport	With higher velocity releases planned from the Folsom Dam, the EIR should address whether changes in bridge inspection procedures should be made to respond to higher water volume and velocity releases. Caltrans would be pleased to meet with project proponents to discuss how to address this matter and to provide technical information that we have that will assist in evaluating bridge issues. To schedule a meeting, please call Ken Champion at (916) 274-0615.	Comment Noted. The Auxiliary Spillway, once completed, will be operated in accordance with the existing Water Control Manual. All releases will fall within current operations criteria. The project, as described in the EIS/EIR, will not have impacts to structures downstream, including bridges. This will be further analyzed, with the appropriate level of environmental analysis, agency, stakeholder and public coordination during the long-term reoperation study that is currently being scoped parallel to this project.
60	Beth Lusar	Citizen	The Folsom Dam was originally built with certain specifications regarding the height, water holding capacity, and number of outlets in the base. To raise the height in order to increase the holding capacity and at the same time cut more outlets in the base, in my thinking, would weaken the original base. Also, late last year, the Sacramento Bee published a statement from the Corps of Engineers saying that it would be very difficult to find competent workers to do this kind of reconstruction. The answer to flood protection is the complete the Auburn Dam promptly.	Comment noted. The proposed joint project is a 6-STG Aux spillway, instead of the authorized project to enlarge the outlets on the Main Concrete Dam.
61	Clyde Matson	Citizen	As I recall, after some number of years, the management of the dam facilities decided that now was the time to "test the gates." This was during a period of high inflows and the first gate broke upon opening. The broken gate was open and put almost enough water down river to over top the levees. I have looked at the levee plans (not well) and looked at the sketch of the dam modifications. As I see it, more gates are being added and on the south end of the dam, a dirt berm is planned. The comment that was made about this berm was that if the water got to the point of over-topping, then this berm would wash out and prevent over-topping the dam. The problem I see is the berm is at least as wide as three gates, at a minimum. And once washed out is uncontrollable as to flow. The looks like a REAL problem to me and will be to most of Sacramento. I believe this is asking for another New Orleans levee failure. What do you think?	If Reclamation was doing a dam safety only project they would use a fuse plug design ("dirt berm"). What is proposed for the joint project is a permanent 6 submerged tainter gate structure that would address flood damage reduction and dam safety. Please see the description of Alternative 1 in the EIS/EIR.

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
62	Ronald Stork	Friends of the River	PAC pp. ES-1 & 1-2: The background discussion could benefit from greater precision. Specific sections (see memo) may incorrectly lead readers to conclude the following: 1) The 1986 American River flows were record inflows, 2) these record flood flows required the release of “unprecedented” high flows from Folsom Dam, and 3) there was widespread encroachment of design freeboard of Sacramento Area levees. There are problems with each of these statements that may mislead the reader. The final documents should be revised to provide the reader with a more accurate, complete, and useful description of the background circumstances that resulted in the last two decades of flood-control planning in the Sacramento area. (See Friends of the River memo for more specific details and recommendations).	<p>The reviewer's analysis does not paint the full picture regarding record inflow. Note that the data cited does not reflect the effects of the Auburn cofferdam failure. Concur that release of 130,000 cfs was not <u>required</u>. Suggested replacement text is as follows:</p> <p><i>In February 1986, major storms in Northern California caused record flood flows in the American River basin. Due to the failure of the Auburn Dam cofferdam, Folsom officials released 130,000 cfs. Unprecedented high outflows from Folsom Dam and Reservoir, together with high flows in the Sacramento River, caused water levels to rise above near the design freeboard of levees protecting the Sacramento River area.</i></p>
63	Ronald Stork	Friends of the River	PAC Report, p. 3-2: The PAC report asserts the following: "To date, and based on current technology, no reliable forecast-based operation has been identified that could be implemented without the potential for both induced flooding in other areas of the Central Valley and major impacts to other water resources outputs from Folsom Reservoir." This statement makes inferences as to facts and law that both appear to be both premature and in error. The draft EIS/EIR appears to provide a more careful and satisfactory explanation of the process and considerations that may result in operational (including forecast-based) changes to Folsom Reservoir operations once construction is complete. Other similar discussions concerning revisions to the Water Control Manual can be found throughout the draft EIS/EIR (pp. 1-8, 1-9, 1-43, for example). If language in the PAC Report cannot be constructed to provide the reader with a clearer grasp of the opportunities and considerations involved in developing a revised Water Control Manual that resumes forecast-based operations, the misleading PAC report language should be deleted and the draft EIS/EIR language can stand alone.	A permanent reoperation study which will include the implementation of a new water control manual is currently being scoped in association with this project. The reoperation study will also analyze forecast based operations. The reoperation study will include the appropriate level of environmental analysis, agency, stakeholder and public coordination, and environmental compliance documentation. Section 2.5.1 of the final PAC Report contains language clarifying this.

Table 4-9 Corps Project Authorization Change (PAC) Report Comments and Responses				
No.	Commenter	Agency	Comment	Response
64	Ronald Stork	Friends of the River	<p>We noted with some interest the depiction of the calculated annual risk or recurrence interval associated with the Corps of Engineers' or Reclamation's estimated PMF(s). By their very conception and purpose, PMFs are not high probability events. Indeed, they are created by modelers to size dam-safety features such as spillways so that an exceedance never occurs. We suggest that the draft EIS/EIR contain a more accurate description of the purposes for which PMFs are created and their highly improbable nature. Also, when describing the annual risk or recurrence intervals of such a high-flow event, it would be helpful to explain that these are calculated extrapolation estimates and that the actual probability distribution of the American River PMF, or any PMF, is not known. Nevertheless, regardless of calculated frequency estimates, it is Reclamation's policy and a general dam-safety standard to construct spillways adequate to convey PMF estimated flows where the consequences of failure are significant.</p>	<p>Concur. Generally, the PMF event is extremely rare such as 1/10⁵ to 1/10⁴. Statistical gurus have dissuaded us from estimating or labeling events beyond the 1/200 using the unregulated frequency curves developed for the American R basin. At this time, several interested parties are trying to develop a method for determining the frequency for extreme events. Suggested replacement text is as follows:</p> <p><i>Recent estimates indicate that a frequency of flood approximately the same size as a PMF would have a recurrence interval somewhere between 1 in 7,100 and 1 in 22,000 years. between 1 in 10⁵ and 1 in 10⁴. At this time, several interested parties are trying to develop a method for determining the frequency for such an extreme event on the American River. For dam safety purposes, the PMF event is necessary for sizing the spillway to prevent dam overtopping where the consequences of failure are significant.</i></p>
65	Ronald Stork	Friends of the River	<p>Finally, we request that project performance also be portrayed in terms of the reservoir design flood—that is, the volume of the design hydrograph in terms of peak, 1-day mean, and 3-day mean, or perhaps 5-day mean flows in cfs that can be accommodated before some critical design constraint such a design freeboard at the dam, dike, or levee is encroached. These operational constraints should, of course, be documented as well. The purpose for such documentation is to permit comparison of historic and modeled floods with contemporary performance estimates as well as those that are available in historical flood-damage-reduction planning documents before the adoption of level-of-protection or risk-and-uncertainty-based performance descriptions.</p>	<p>Do not concur. This information would be better suited in the hydrology section of the EDR rather than in the PAC or EIS/EIR.</p>

Chapter 5

Document Recipients

This Chapter lists Federal, State, regional, and local public and private agencies and organizations that have either received a copy of this Final EIS/EIR or a notification of document availability. In addition to the regulatory agencies, agencies with special expertise or interest in evaluating environmental issues related to the project are included. Private agencies, organizations, and individuals who may be affected by the project or who have expressed an interest in the project through the public involvement process are also included.

The Folsom DS/FDR Final EIS/EIR is available on the internet at:

http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=1808

Copies of the Final EIS/EIR are available for public review at the following locations:

- Bureau of Reclamation, Denver Office Library, Building 67, Room 167, Denver Federal Center, 6th and Kipling, Denver, CO 80225
- Bureau of Reclamation, Mid-Pacific Regional Office Library, 2800 Cottage Way, W-1825, Sacramento, CA 95825-1898
- El Dorado County Library, 345 Fair Lane, Placerville, CA 95667-5699¹
- Folsom Public Library, 300 Persifer Street, Folsom, CA 95630¹
- Natural Resources Library, U.S. Department of the Interior, 1849 C Street NW, Main Interior Building, Washington, DC 20240-0001
- Roseville Public Library, 225 Taylor Street, Roseville, CA 95678¹
- Sacramento Central Library, 828 I Street, Sacramento, CA 95814-2589¹

¹ Hard copies of the Final EIS/EIR are available at this library and include a separate volume (Vol. IV) that contains hard copies of all comments received on the Draft EIS/EIR and all responses.

5.1 Elected Officials and Representatives

Governor of California
 Honorable Arnold Schwarzenegger
United States Senate
 Honorable Barbara Boxer
 Honorable Dianne Feinstein
House of Representatives
 Honorable John Doolittle
 Honorable Doris Matsui
 Honorable Daniel Lungren
California Senate
 Honorable Dave Cox
California Assembly
 Honorable Roger Niello
 Honorable Ted Gaines
 Honorable Alan Nakanishi

5.2 Government Departments and Agencies

5.2.1 U.S. Government

Advisory Council on Historic Preservation
Agricultural Stabilization and Conservation Service
Army Corps of Engineers
Bureau of Land Management
Bureau of Reclamation
Council on Environmental Quality
Environmental Protection Agency
Federal Emergency Management Agency
Federal Highway Commission
Fish and Wildlife Service
Geological Survey
National Marine Fisheries Service
National Park Service
Natural Resources Conservation Service
Office of Environmental Project Review
Western Area Power Administration

5.2.2 State of California

Senate Committee on Natural Resources
Assembly Committee on Water, Parks, and Wildlife
Air Resources Board

California Water Commission
Central Valley Regional Water Quality Control Board
Department of Conservation
Department of Corrections
Department of Fish and Game
Department of Parks and Recreation
Department of Transportation
Department of Water Resources
Native American Heritage Preservation
Office of Transportation Planning
Reclamation Board
State Clearinghouse
State Lands Commission
Water Resources Control Board

5.2.3 Regional, County, and City

City of Folsom
Folsom Tourism Bureau
Folsom Chamber of Commerce
El Dorado County
Granite Bay Advisory Council
Placer County
Sacramento Area Flood Control Agency (SAFCA)
Sacramento County
Sacramento Metropolitan Air Quality Management District (SMAQMD)
Sacramento Metropolitan Chamber of Commerce
El Dorado County Water Agency
San Luis and Delta-Mendota Water Authority
East Bay Municipal Utility District (EBMUD)
County Sanitation District 1 (CSD-1)/Sacramento Regional County
Sanitation District (SRCSD)
Central Valley Project Water Association
Northern California Power Agency

5.3 Private Organizations and Businesses

SARA – Save The American River Association
El Dorado Irrigation District
Friends of the River
LARTF – Lower American River Task Force
Sacramento Valley Marine Association
Northern California Marine Association

5.4 Members of the Public

All members of the general public who requested a copy of the Final EIS/EIR will be mailed either an electronic version (on CD) or a hard copy of the document.

Additionally, those who submitted comments on the Draft EIS/EIR and provided complete mailing addresses will also receive a copy of the Final EIS/EIR document.

Chapter 6

References

U.S. Army Corps of Engineers. 2002. *American River Watershed, California, Long-Term Study Final Supplemental Plan Formulation Report EIS/EIR, (Vol. I-III)*. February 2002.

U.S. Army Corps of Engineers. 2004. Letter to SAFCA regarding release capacity of dam and capacity of downstream levees. December 9, 2004.

U.S. Army Corps of Engineers. 2005. *American River Watershed, California, Folsom Dam Modification Project Final Environmental Assessment/Initial Study*, October 2005.

U.S. Army Corps of Engineers. 2006. *American River Watershed Project, Folsom Dam Raise, Folsom Bridge Public Draft Supplemental Environmental Impact Statement/ Environmental Impact Report* May 2006.