Chapter 2

Project Update

Reclamation's Preferred Alternative

Reclamation has identified a preferred alternative under NEPA.

The federal action supported by this EIR/EIS is execution of an amendment to the existing 1970 EBMUD/Reclamation water service contract (14-06-200-5183A). The amendatory contract will provide for a selection of one of the following alternative diversion sites under the identified and other appropriate conditions:

- A diversion of EBMUD's contractual supply at "Site 5" on the American River (Alternative 4) that must include the completion, prior to construction, of a satisfactory water storage strategy which will allow EBMUD to meet project purposes within the necessary flow pattern limitations. The storage strategy must include all necessary additional environmental documentation and be completed in a satisfactory manner. Additionally, the amendatory contract will include for "Site 5" specific diversion rates and schedules (e.g., Hodge flows for "Site 5"), which will be in effect for the duration of the contract and will assure compliance with the state Wild and Scenic Rivers Act.
- A diversion of EBMUD's contractual supply at Freeport on the Sacramento River (Alternative 6) instead of an American River diversion. The Freeport diversion would be structured to allow and encourage regional water management partnerships that will consider interim water supplies to be made available by regional partners.

The amendatory contract will prohibit deliveries of water diverted at Nimbus Dam as currently provided in Article 9(a) of the existing 1970 contract. However, if permitting and necessary agreements for another point of diversion are not completed by a date certain, EBMUD will have the right to deliveries as provided in Article 9(a) of the existing 1970 contract.

The amendatory contract will provide that in order for diversions to occur at any of the diversion sites identified above, all relevant state and federal laws and regulations must be complied with, and approval of the Contracting Officer is required. The Contracting Officer will initiate and complete consultation under Section 7 of the ESA and will comply with NEPA, as applicable, prior to approving any such diversions.

Activities Since Publication of the 1997 Draft EIR/EIS

Since publication of the 1997 Draft EIR/EIS, the following activities have taken place:

1. Negotiation of a draft amendatory EBMUD/Reclamation water service contract.
2. Revisions to Reclamation's PROSIM hydrologic model.
3. Completion of preliminary engineering of the various facilities and options associated with Alternatives 2 and 3.
4. Evaluation of additional pipeline routing refinements.
5. Actions by local, state, and federal agencies and concerned interests (see Section 5 below).

6. Preparation of responses to comments received on the 1997 Draft EIR/EIS.
7. Publication of the October 2000 REIR/SEIS.
8. Preparation of responses to comments received on the REIR/SEIS.

Each of these activities is discussed below.

1) Draft Amendatory Water Service Contract

EBMUD and Reclamation negotiated a draft amendatory water service contract in 1998. The draft contract was circulated for public review, and all comments received on the contract have been considered. The December 1998 draft amendatory water service contract between Reclamation and EBMUD is included as Appendix A to this document for reference purposes. The provisions of that draft contract amendment addressing delivery of water to EBMUD are excerpted below. These provisions were also used in new hydrologic modeling runs of Alternatives 2 and 3 using PROSIM99. Reclamation and EBMUD expect to replace the draft amendatory contract with a new draft amendatory contract that conforms to the preferred alternative in the Record of Decision.

Article 3(a)(2)

Under Article 3(a)(2) of the draft contract, EBMUD would be entitled to take delivery of up to 150,000 acre-feet in any year of Central Valley project (CVP) water diverted at Nimbus Dam and delivered through the Folsom South Canal, provided that periods of such delivery would not cause or increase:

- Shortages to be imposed on CVP water contractors on the American or Sacramento Rivers or Contra Costa Water District.
- Inability of the Contracting Officer to provide the flows to sustain the natural production of anadromous fish in accordance with section 3406(b) of the CVPIA, and meet the applicable Sacramento River, American River, and Delta water quality or flow standards.
- Inability to deliver CVP water under applicable law, including the Endangered Species Act.

Article 3(a)(1)

Under Article 3(a)(1) of the draft contract, EBMUD would be entitled to take delivery of up to a total of 133,000 acre-feet of project water in any year in which EBMUD's March 1 forecast of its October 1 total system storage, as revised monthly through May 1, is less than 500,000 acre-feet.

This Article 3(a)(1) entitlement shall not exceed a total of 165,000 acre-feet of delivered water in any consecutive 3-year period that EBMUD's total system storage forecast remains below 500,000 acre-feet. The practical effect of the proposed contract terms for Article 3(a)(1) is that EBMUD deliveries would be reduced as compared to the analysis contained in the 1997 Draft EIR/EIS.

Subarticle 3(a)(3)

Under Subarticle (3)(a)(3) of the draft contract, EBMUD would be entitled to take delivery of up to 150,000 acre-feet of project water to provide the opportunity for EBMUD to take its Pardee system off-line in such years that Reclamation determines that such quantities of water are available because of high carryover storage north of the Delta, because of forecasts of high inflow, and because all flow-based environmental commitments for the Sacramento River, American River, and the Sacramento-San Joaquin River Delta can be met.

Implications of the Draft Amendatory Contract

The draft amendatory contract contains provisions that are generally more restrictive than those discussed in the 1997 Draft EIR/EIS. Under Alternative 2 in the 1997 Draft EIR/EIS, an average of approximately 29,000 acre-feet per year would be delivered to EBMUD. Under the draft contract, average annual deliveries would be approximately 27,000 acre-feet. Similarly, under Alternative 3 in the 1997 Draft EIR/EIS, approximately 35,000 acre-feet would be delivered to EBMUD on an annual average basis. Under the draft contract, average annual deliveries would be approximately 21,000 acre-feet.

These conditions would result in reduced overall deliveries to EBMUD under the proposed contract as compared to the analyses conducted for the 1997 Draft EIR/EIS. Therefore, potential environmental consequences of the proposed contract would be slightly reduced as compared to those described in the 1997 Draft EIR/EIS. No significant impacts from project-related water deliveries were identified in the 1997 Draft EIR/EIS.

2) Revisions to Reclamation's PROSIM Hydrologic Model

The project alternatives have been reviewed in light of additional modeling information, and it has been determined that the information contained in the 1997 Draft EIR/EIS adequately analyzes the potential environmental effects of Alternatives 2 and 3. Based on a thorough review of the revised PROSIM99 hydrologic model, the overall impacts of Alternatives 2 and 3 relative to the No-Action base case have not changed. Generally, less reservoir storage is available in dry years. Although some minor changes in the impact analyses occur under the revised model, these changes are very small, are both positive and negative, and most importantly, do not show any consistent pattern or direction. Appendix B to this document contains additional information regarding the review of project-level impacts under both the 1997 Draft EIR/EIS modeling approach and revised PROSIM model. Please also see the response to the "PROSIM Modeling" major issue in Chapter 3 of this document.

Based on the information above, it has been determined that the draft amendatory contract would not result in substantially different or greater impacts than described in the 1997 Draft EIR/EIS or trigger the need for recirculation of the 1997 Draft EIR/EIS pursuant to State CEQA Guidelines Section 15088.5.

In addition, Reclamation and EBMUD prepared the REIR/SEIS (see below), which evaluates additional alternatives. These hydrologic and hydrology-dependent analyses were conducted using results from PROSIM99 modeling studies.

3) Alternatives Considered in the 1997 Draft EIR/EIS

Three primary alternatives were considered in the 1997 Draft EIR/EIS:

- Alternative 1: No Action
- Alternative 2: Folsom South Canal Connection (FSCC)
- Alternative 3: Joint Water Supply

The following provides information on each project alternative and the major factors affecting the implementation of the action alternatives.

Alternative 1: No Action

As described in Chapter 2 of the 1997 Draft EIR/EIS, this alternative assumes the proposed Supplemental Water Supply Project would not be implemented. For NEPA purposes, the federal action under review by Reclamation is an amendment of the existing EBMUD/Reclamation water service contract. The existing EBMUD/Reclamation water service contract allows EBMUD to take delivery of up to 150,000 acre-feet of water from the Folsom South Canal, pursuant to applicable state and federal laws and the Hodge Decision.

Alternative 2: Folsom South Canal Connection

As described in Chapter 2 of the 1997 Draft EIR/EIS, under this alternative, EBMUD would take delivery of its water directly from the Folsom South Canal subsequent to Reclamation's diversion from Lake Natoma, consistent with the Hodge Decision. Four primary pipeline alignments are described in the 1997 Draft EIR/EIS, and minor alignment options are also discussed below. Two pumping plants, one at the canal delivery point and one near the Mokelumne Aqueducts in San Joaquin County, would be needed.

In addition to the various permit actions typically required for such an undertaking, amendment of the EBMUD/Reclamation water service contract may be necessary for two of the alignments identified for this alternative (FSCC Alignments 2 and 3). Alignments 1 and 4 would not require an amendment of the existing water service contract, but the environmental effects of delivery of water under either the amendatory contract or the original contract are fully described in the 1997 Draft EIR/EIS.

Alternative 3: Joint Water Supply

As described in Chapter 2 of the 1997 Draft EIR/EIS, EBMUD, the County of Sacramento, and the City of Sacramento would jointly construct and operate the facility. The Joint Project includes an intake on the lower American River at one of five locations within approximately 2.5 miles of its confluence with the Sacramento River and a pipeline from the intake to a location near the City of Sacramento's E.A. Fairbairn Water Treatment Plant. A pumping plant and second pipeline would be constructed to connect to the existing Folsom South Canal. A third pipeline would be constructed from the terminus of the Folsom South Canal to the Mokelumne Aqueducts (FSCC Alignment 2), and a pumping plant would be constructed near the Mokelumne Aqueducts. In addition, this alternative would rely on the expansion of the City's E.A. Fairbairn and Sacramento River Water Treatment Plants.

In addition to the various permit actions typically required for such an undertaking, several approvals and agreements would be necessary to implement this alternative, including:

- Amendment of the EBMUD/Reclamation water service contract;
- Agreement between EBMUD, the City of Sacramento, and the County of Sacramento confirming the responsibilities of each party in financing, constructing, and operating the Joint Project facilities;
- Approval by the Alameda County Superior Court together with such modification to the 1990 Hodge Decision as might be necessary;
- Addition of the lower American River Joint Project delivery point to Reclamation's water rights permit;
- Specific provisions for precluding a diversion and delivery by Reclamation to EBMUD from Nimbus Dam and the upper reach of the Folsom South Canal.

After three years of negotiation, the City of Sacramento and the County of Sacramento notified EBMUD in January 1999 that, in their view, the Joint Project had substantial unresolved issues, and they concluded that this alternative, as a partnership project, was not feasible.

4) Additional Pipeline Routing Refinements

The 1997 Draft EIR/EIS identified three bypass options representing minor variations of the primary pipeline alignments. Since publication of the 1997 Draft EIR/EIS, EBMUD has reviewed public comments and input from local interests regarding potential additional refinements to the primary pipeline alignment options. Bypass routing options discussed in public comments on the 1997 Draft EIR/EIS, such as routing alternatives to C Street and Kiefer Boulevard, are covered in the Responses to Comments. Additional bypass options are described below. No determination has been made at this time whether or not to implement these new options. None of these options would result in new or increased environmental effects beyond those described in the 1997 Draft EIR/EIS.

57th Street Bypass Option

Based on discussions with City of Sacramento staff, an additional bypass option has been identified that would avoid construction along 57th Street. Under this bypass option (Figure 2-1), the pipeline alignment south of G Street would be routed to the southeast, underneath the Union Pacific railroad tracks, and then southerly, parallel to and east of the tracks, between the tracks and existing buildings, before crossing back under J Street and connecting back to the original alignment. No new or increased environmental effects would result from implementation of this bypass option beyond those effects described in the 1997 Draft EIR/EIS.

Update on Central California Traction (CCT) Railroad Closure

Since publication of the 1997 Draft EIR/EIS, portions of the CCT right-of-way that would be used under FSCC pipeline alignments 1 and 3 have been taken out of service; however, the federal abandonment process has not been completed.

FSCC Alignment 2 and 4 Refinements

Based on continuing discussions with landowners along the FSCC alignments 2 and 4 between the Folsom South Canal and the Mokelumne Aqueducts, potential refinements to

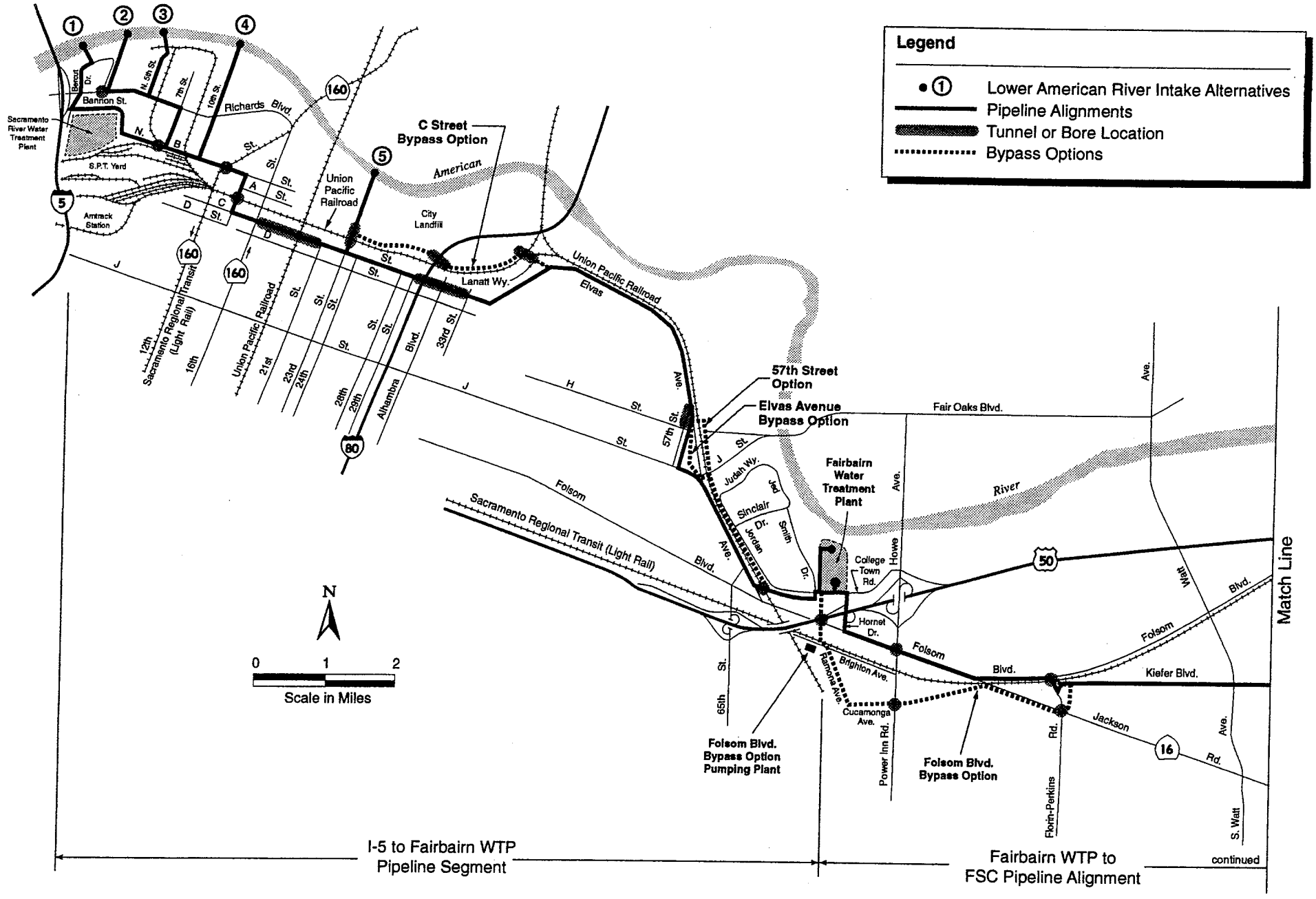

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Figure 2-1
Alternative 3: Intake, Pipeline, and Treatment Plant Expansion Locations

the original alignment (Figure 2-2) have been identified. These refinements would result in a slightly increased length of the alignment, because the refined alignment would more closely follow property lines than the original alignment. Although the pipeline would be slightly longer, no new or increased environmental impacts would result from these modifications beyond those already described in the 1997 Draft EIR/EIS, and property severance would be reduced.

Mokelumne Aqueducts Pumping Plant Location Option

Subsequent to publication of the 1997 Draft EIR/EIS and based on continuing engineering work, EBMUD has identified a new potential location for the Mokelumne Aqueducts pumping plant (Figure 2-3). Under this option, the pumping plant would be located on EBMUD property along pipeline alignments 2 and 4, approximately 3 miles north of the Mokelumne Aqueducts. As with the other options described above, no new environmental effects would result from implementation of this alternate pumping plant location beyond those described in the 1997 Draft EIR/EIS. The pumping plant would be located along the original alignment, for which environmental effects were thoroughly disclosed, and it would essentially be a relocation of the effects described in the 1997 Draft EIR/EIS, rather than an addition of new potential effects.

5) Related Actions by Others

Other Water Purveyor Actions

Since publication of the 1997 Draft EIR/EIS, several relevant actions related to the American River have taken place. These actions include:

- Publication and certification of the Final EIR/EIS for the Central Valley Project Water Supply Contracts Under Public Law 101-514 (Section 206): Contract between the U.S. Bureau of Reclamation and the Sacramento County Water Agency, Subcontract between Sacramento County Water Agency and the City of Folsom, and Contract between the U.S. Bureau of Reclamation and the San Juan Water District.
- Publication and certification of the Final EIR for the Sacramento Water Forum actions.
- Publication of the Final Programmatic EIS for the Central Valley Project Improvement Act.
- Publication of a Proposed Negative Declaration for the City of Sacramento Fish Screen Improvement Program.
- Publication of a draft EIR for the City of Sacramento's Water Facilities Expansion Project.
- Negotiation of a draft amendatory contract between Reclamation and Placer County Water Agency.

Each of these actions relates to the demand assumptions used in the 1997 Draft EIR/EIS. These documents confirm and are consistent with the assumptions used in the 1997 Draft EIR/EIS regarding future American River demands, which were lower than the water demands used in the CVPIA Programmatic EIS (PEIS). The CVPIA PEIS and 1997 Draft EIR/EIS both provide reasonable baseline scenarios, and the impact of the Supplemental Water Supply Project alternatives would be similar for either case.

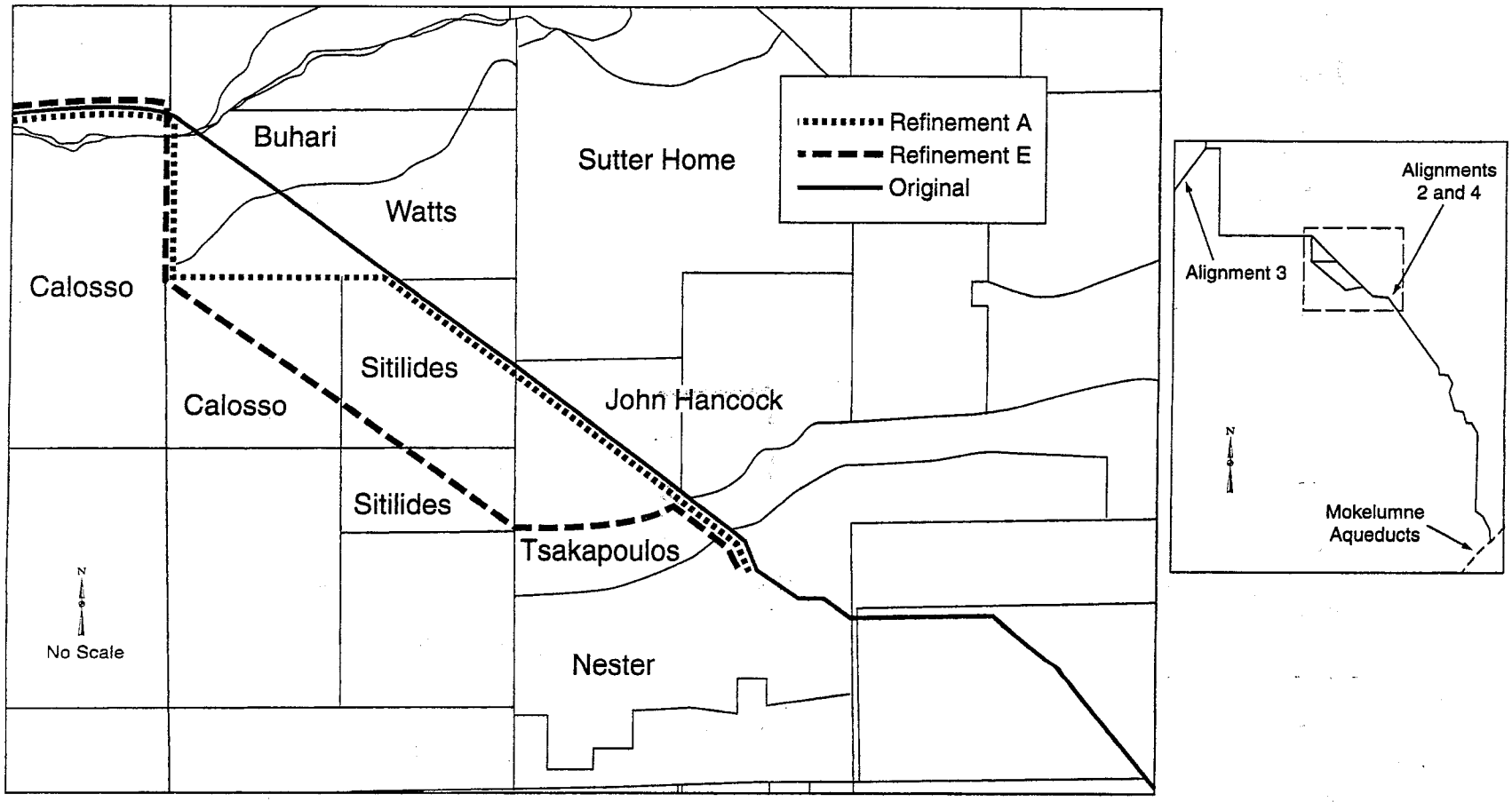

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Figure 2-2
Folsom South Canal Connection Alignment 2 Pipeline Refinements

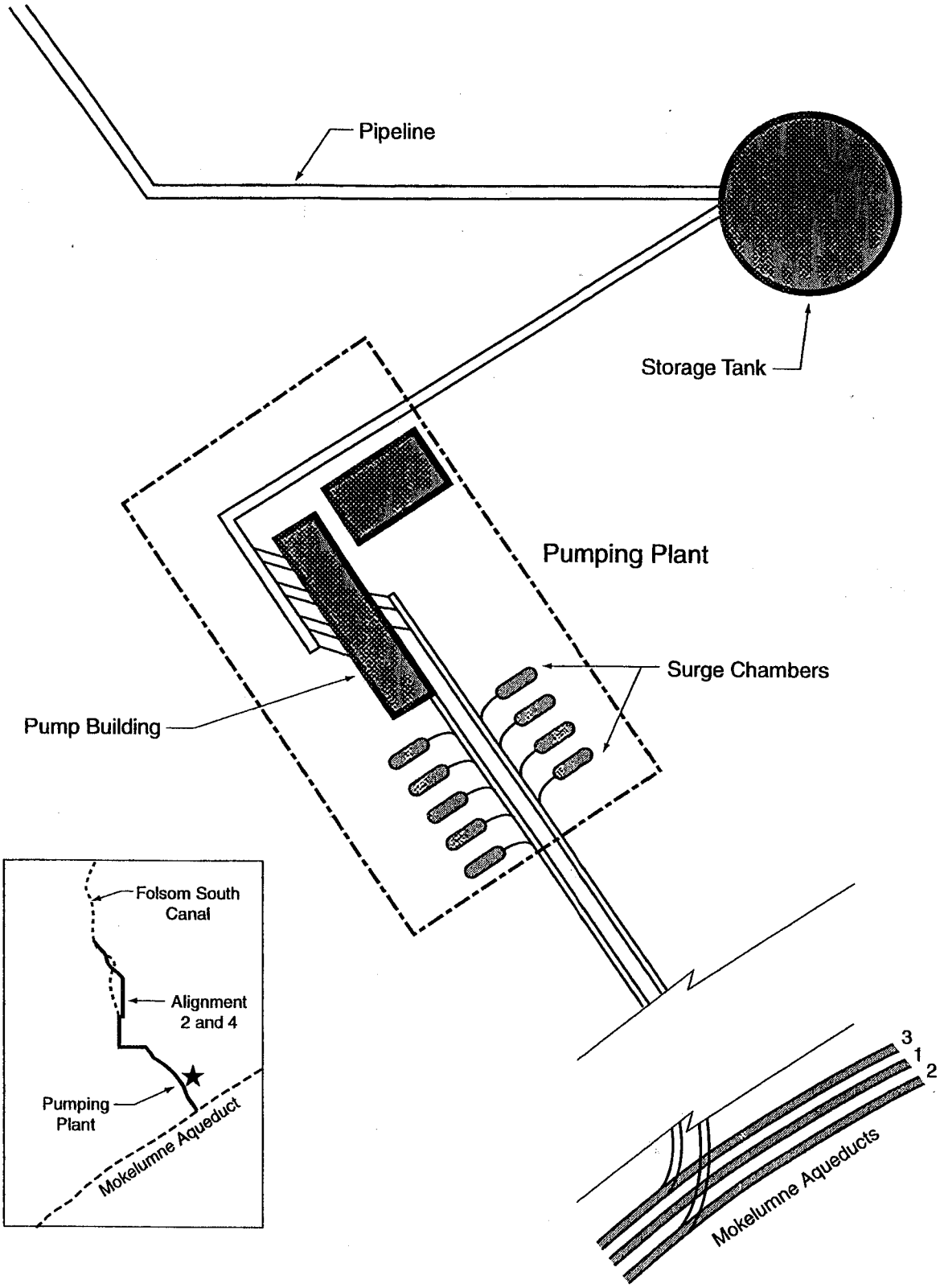

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Figure 2-3
Alternative Aqueduct Pumping Plant Location for Alignments 2 and 4

National Marine Fisheries Service and U.S. Fish and Wildlife Service

Since publication of the 1997 Draft EIR/EIS, the following actions have occurred:

- Central Valley steelhead Evolutionarily Significant Unit (ESU) were listed as threatened (63 FR 11481, March 9, 1998).
- Critical habitat for Central Valley steelhead was identified (65 FR 7764, February 16, 2000).
- Central Valley spring-run chinook salmon ESU were listed as threatened (64 FR 50394, September 6, 1999).
- Spring-run chinook salmon were listed as threatened under the California Endangered Species Act on February 5, 1999.
- Splittail were listed as threatened (64 FR 5963, February 8, 1999).

These actions do not affect the fisheries impact analyses contained in the 1997 Draft EIR/EIS. The 1997 Draft EIR/EIS already identified these species as sensitive because of their legal status at the time the 1997 Draft EIR/EIS was prepared and because of the noted importance of these species in the Central Valley ecosystem. The 1997 Draft EIR/EIS fully addresses the potential effects of the project alternatives on these species (Chapter 5 of the 1997 Draft EIR/EIS). Listing of steelhead and splittail therefore does not change the significance conclusions in the 1997 Draft EIR/EIS, because these species were already treated as de facto listed species for the purpose of impact analysis under CEQA and NEPA. The listing of steelhead and splittail does not require recirculation of the EIR/EIS. Under CEQA, recirculation of an EIR is only required if "significant" new information is added (State CEQA Guidelines Section 15088.5). New information added to an EIR is not considered significant unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project. Similarly, NEPA requires a supplement to an EIS only when there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts (40 CFR Section 1502.9[c][1][ii]).

Because the 1997 Draft EIR/EIS considered the potential impacts of the project alternatives on these species and their habitats in an in-depth manner, the public had the opportunity to provide input on the effects of the alternatives on these species. Listing and identification of critical habitat does not therefore constitute significant new information or significant new circumstances.

CALFED

CALFED has published its final EIR/EIS and Record of Decision. The relationship of the Supplemental Water Supply Project to CALFED is discussed in Chapter 3 of this document. CALFED studies of Delta water quality are included as part of the administrative record and incorporated by reference.

6) Preparation of Responses to Comments Received on the 1997 Draft EIR/EIS

A number of comments were received during the public review period for the 1997 Draft EIR/EIS. These comments have been considered, and responses to these comments are included in Chapters 5 through 11 of this document.

7) Publication of the October 2000 REIR/SEIS

The environmental impacts of the Supplemental Water Supply Project were analyzed in the 1997 Draft EIR/EIS. During the public comment period for that document, EBMUD and Reclamation received numerous comment letters, several of which discussed the selection of alternative considered in the 1997 Draft EIR/EIS. As a result of comments received, the lead agencies elected to prepare additional analysis of five additional alternatives to respond to concerns raised by interested agencies and members of the public. That analysis is contained in the 2000 REIR/SEIS, which is not a comprehensive reanalysis of the Supplemental Water Supply Project, but rather supplements the information presented in the 1997 Draft EIR/EIS. Together, the 2000 REIR/SEIS and the 1997 Draft EIR/EIS provide the complete draft EIR/EIS analysis of potential environmental effects of the Supplemental Water Supply Project, in compliance with CEQA and NEPA.

The 2000 REIR/SEIS considers the following five alternatives at an equal level of detail.

Alternative 4: EBMUD-Only American River Delivery

Alternative 4 is based on the City of Sacramento and County of Sacramento's "Modified Proposal," dated June 8, 1999. Essentially, this alternative combines many of the basic facility elements of "Alternative 3, Joint Water Supply," as described in the 1997 DEIR/EIS, with many of the basic operational concepts of "Alternative 2, Folsom South Canal Connection." Alternative e would involve the construction of a new intake on the lower American River at the "Site 5" location described in the 1997 Draft EIR/EIS. This new intake would be sized to provide EBMUD up to 155 cubic feet per second (cfs) of water, subject to Hodge Decision flow criteria. A new pipeline with a capacity of 155 cfs would be constructed from this new delivery point to the Folsom South Canal along the alignment described in the 1997 Draft EIR/EIS. As described for Alternative 3 in the 1997 Draft EIR/EIS, Alternative 4 would also involve the construction of a second pipeline to convey the water from the terminus of the Folsom South Canal to the Mokelumne Aqueducts, represented by alignment 2 of Alternative 2, as described in the 1997 Draft EIR/EIS. This pipeline would also have a capacity of 155 cfs. The Modified Proposal also provides that the Sacramento Parties would support EBMUD banking water in groundwater basins in Sacramento and San Joaquin Counties at reasonable ratios and subject to the Sacramento Parties' review of the details of the banking program. This alternative therefore includes a general assessment of groundwater storage utilization at a broad programmatic level.

Alternative 5: Sacramento River Delivery

Alternative 5 also combines many of the basic facility and operational elements of "Alternative 3, Joint Water Supply," as described in the 1997 DEIR/EIS, with elements of the basic facilities of "Alternative 2, Folsom South Canal Connection." Alternative r would

involve the construction of a new intake on the Sacramento River immediately downstream of its confluence with the lower American River and upstream of the location of the City of Sacramento's existing intake to the Sacramento River Water Treatment Plant. This new intake would be sized to provide EBMUD up to 155 cubic cfs of water. A new pipeline with a capacity of 155 cfs would be constructed from this new delivery point to the Folsom South Canal along the alignment described in the 1997 DEIR/EIS. As described for Alternative 3 in the 1997 DEIR/EIS, Alternative 5 would also involve the construction of a second pipeline to convey the water from the terminus of the Folsom South Canal to the Mokelumne Aqueducts, represented by alignment 2 of Alternative 2, as described in the 1997 DEIR/EIS. This pipeline would also have a capacity of 155 cfs.

Alternative 6: Freeport East Delivery

Alternative 6 is operationally similar to Alternative 5, Sacramento River Delivery Alternative, described above. Alternative 6 would involve the construction of a new intake on the Sacramento River upstream of the Freeport Bridge at the community of Freeport. This new intake would be sized to provide EBMUD up to 155 cfs of water. New pipelines with a capacity of 155 cfs would be constructed from this new delivery point to the Folsom South Canal at approximately Grant Line Road and from the terminus of the Folsom South Canal to the Mokelumne Aqueducts, represented by alignment 2 of Alternative 2 as described in the 1997 DEIR/EIS.

Alternative 7: Freeport South Delivery

Alternative 7 is also operationally similar to Alternative 5, Sacramento River Delivery, described above. Alternative 7 would involve the construction of a new intake on the Sacramento River upstream of the Freeport Bridge at the community of Freeport. This new intake would be sized to provide EBMUD up to 155 cfs of water. A new pipeline with a capacity of 155 cfs would be constructed from this new delivery point to the Mokelumne Aqueducts generally down the I-5 corridor to the City of Stockton.

Alternative 8: Bixler Delivery

Alternative 8 would involve the construction of a new intake in the Delta on Indian Slough adjacent to the Mokelumne Aqueducts at the location known as Bixler. This new intake would be sized to provide EBMUD up to 155 cfs of water. A new connection with a capacity of 155 cfs would be constructed from this new delivery point to the Mokelumne Aqueducts, and new treatment facilities would be constructed at or near the new delivery point.

8) Preparation of Responses to Comments Received on the 2000 REIR/SEIS

Approximately 50 written comments and 32 oral comments at public hearings were received on the 2000 REIR/SEIS. These comments are responded to in Chapters 15 through 19 of this document.