

1 MEMORANDUM OF UNDERSTANDING
2 BETWEEN THE U.S. BUREAU OF RECLAMATION
3 AND
4 THE U.S. FISH AND WILDLIFE SERVICE
5 PROVIDING FOR
6 PROJECT AND ACQUIRED WATER SUPPLIES
7 TO
8 THE SACRAMENTO, DELEVAN, COLUSA, AND SUTTER
9 NATIONAL WILDLIFE REFUGES
10 CALIFORNIA

11 THIS MEMORANDUM OF UNDERSTANDING (MOU), made this ____ day of
12 _____, 20____, by and between THE UNITED STATES BUREAU OF
13 RECLAMATION (Reclamation), and THE U.S. FISH AND WILDLIFE SERVICE (Service),
14 hereinafter called the “parties,” defines the parties’ roles and responsibilities to meet the
15 requirements of Section 3406(d) of the Central Valley Project Improvement Act of October 30,
16 1992, Title XXXIV of Pub. L. No. 102-575 (CVPIA) which states, in pertinent part,”... the
17 Secretary shall provide, either directly or through contractual agreements with other appropriate
18 parties, firm water supplies of suitable quality to maintain and improve wetland habitat areas on
19 units of the National Wildlife Refuge System in the Central Valley of California; ...”

20 EXPLANATORY RECITALS

21 WHEREAS, the United States has constructed and is operating the Central Valley
22 Project, California (Project), for diversion, storage, carriage, and distribution of the waters of the
23 Sacramento River, the American River, the Trinity River, and the San Joaquin River and their
24 tributaries for the following beneficial uses, including, but not limited to, flood control,

25 irrigation, municipal, domestic, industrial water service, the protection, restoration and
26 enhancement of fish, and wildlife, and associated habitats in the Central Valley, the generation
27 and distribution of electric energy, salinity control, and navigation; and

28 WHEREAS, the wetlands of the Central Valley have declined to approximately
29 300,000 acres and these remaining wetlands provide critical wildlife habitat and other
30 environmental benefits, and important recreational and educational opportunities; and

31 WHEREAS, the Bureau of Reclamation's 1989 Refuge Water Supply Report
32 concluded that "... it is clear that each refuge requires a dependable supply of good quality water
33 to facilitate proper wetland habitat management for the migratory birds of the Pacific Flyway and
34 resident wildlife and flora."; and

35 WHEREAS, Section 3406(d) of the CVPIA requires the Secretary to provide firm
36 water supplies of suitable quality, through long-term contractual agreements with appropriate
37 parties, to maintain and improve certain wetland habitat areas in the Central Valley
38 in furtherance of the objectives of the Central Valley Habitat Joint Venture and the Central
39 Valley Project to protect, restore and enhance fish and wildlife and associated habitats; and

40 WHEREAS, the directives of Section 3406(d) of the CVPIA have been carried
41 out through a cooperative and collaborative effort between the Bureau of Reclamation and Fish
42 and Wildlife Service, acting for the Secretary of the Interior, the California Department of Fish
43 and Game, the Grassland Water District, and the Central Valley Habitat Joint Venture partners;
44 and this cooperative and collaborative effort is expected to continue; and

45 WHEREAS, Reclamation intends to use Project facilities, in part, to provide firm
46 water supplies of suitable quality to maintain and improve the Refuges; and

47 WHEREAS, the Service has demonstrated to the satisfaction of Reclamation that
48 the Service has fully utilized the water supplies available to it for reasonable and beneficial use
49 for fish and wildlife preservation and enhancement (wetland management) and/or Reclamation
50 has concluded through the Bureau of Reclamation's 1989 Refuge Water Supply Report and the
51 San Joaquin Basin Action Plan/Kesterson Mitigation Action Plan Report that the Service has
52 projected future demand for water use such that the Service has the capability and expects to
53 fully utilize for reasonable and beneficial use the quantity of water to be made available to it
54 pursuant to this MOU; and

55 WHEREAS, Reclamation and the Service are willing to execute this MOU
56 pursuant to subsection 3406(d) of the CVPIA on the terms and conditions set forth below;

57 NOW, THEREFORE, in consideration of the mutual and dependent covenants
58 herein contained, it is hereby mutually agreed by the parties hereto as follows:

59 DEFINITIONS

60 1. When used herein unless otherwise distinctly expressed, or manifestly
61 incompatible with the intent of the parties or expressed in this MOU, the term:

62 (a) "Calendar Year" shall mean the period January 1 through December 31,
63 both dates inclusive;

64 (b) "Service's Boundary" shall mean the Refuge(s) to which the Service is
65 permitted to provide Delivered Water under this MOU as identified in Exhibit "A". Exhibit "A"
66 may be revised without amending this MOU upon mutual agreement of the Service and
67 Reclamation;

68 (c) Omitted

69 (d) "Critically Dry Year" shall mean any Year in which either of the following
70 eventualities exists:

71 (1) The forecasted full natural inflow to Shasta Lake for the current
72 water year (October 1 of the preceding Calendar Year through September 30 of the current
73 Calendar Year), as such forecast is made by Reclamation, on or before February 20, and
74 reviewed as frequently thereafter as conditions and information warrant, is equal to or less than
75 3,200,000 acre feet: or

76 (2) The total accumulated actual deficiencies below 4,000,000 acre-
77 feet in the immediately prior water year or series of successive prior water years, each of which
78 had inflows of less than 4,000,000 acre-feet, together with the forecasted deficiency for the
79 current water year exceed 800,000 acre-feet;

80 For the purpose of determining a Critically Dry Year, the computed inflow
81 to Shasta Lake under present upstream development above Shasta Lake shall be used as the full
82 natural inflow to Shasta Lake. In the event that major construction completed above Shasta Lake
83 materially alters the present regimen of the stream systems contributing to Shasta Lake, the
84 computed inflow to Shasta Lake used to define a Critically Dry Year will be adjusted to eliminate
85 the effect of such material alterations.

86 After consultation with the State, the National Weather Service, and other
87 recognized forecasting agencies, Reclamation shall select the forecast to be used and will make
88 the details of it available to the Service. The same forecast used by Reclamation for operation of
89 the Project shall be used to make forecasts hereunder.

90 (e) "CVPIA" shall mean the Central Valley Project Improvement

91 Act, Title XXXIV of the Act of October 30, 1992 (106 Stat. 4706);

92 (f) "Delivered Water" shall mean the Level 2 Water Supplies and the
93 Incremental Level 4 Water Supplies diverted by the Service pursuant to this MOU at the Point(s)
94 of Delivery in accordance with Article 4(c) of this MOU;

95 (g) "Hydrologic Circumstances" shall mean the conditions described in
96 subdivision (d) of this Article;

97 (h) "Incremental Level 4 Water Supplies" shall mean the difference between
98 the Level 2 Water Supplies and the Level 4 Water Supplies depicted in Exhibit "B";

99 (i) "Level 2 Water Supplies" shall mean the quantities of water referred to in
100 section 3406 (d)(1) of the CVPIA and depicted in Exhibit "B" of this MOU;

101 (j) "Level 4 Water Supplies" shall mean the quantities of water referred to in
102 section 3406 (d)(2) of the CVPIA and depicted in Exhibit "B" of this MOU;

103 (k) "Non-Project Facilities" shall mean any non-Project water conveyance or
104 storage facilities;

105 (l) "Non-Project Water" shall mean water or water rights, other than "Project
106 Water", acquired, appropriated by, transferred to or assigned to the Service or, transferred to the
107 United States for delivery to one or more of the Service's Refuges, as identified in Exhibit "B";

108 (m) "Point(s) of Delivery" shall mean the location(s) established and revised
109 pursuant to Article 5(a) of this MOU, at which Level 2 Water Supplies of Project Water and
110 Incremental Level 4 Water Supplies are deemed to be delivered to the Service and at which the
111 Service shall assume the responsibility for the further control, carriage, handling, use, disposal or

112 distribution of such water supplies so long as such water supplies are being used in accordance
113 with the terms and conditions of this MOU;

114 (n) "Project" shall mean the Central Valley Project owned by the United
115 States and managed by the Department of the Interior, Bureau of Reclamation;

116 (o) "Project Water" shall mean all water that is developed, diverted, stored, or
117 delivered by the Secretary in accordance with the statutes authorizing the Central Valley Project
118 and in accordance with the terms and conditions of applicable water rights acquired pursuant to
119 California law;

120 (p) "Refuge(s)" shall mean the lands in the units of the National Wildlife
121 Refuge System in the Central Valley of California; Gray Lodge, Los Banos, Volta, North
122 Grasslands and Mendota state wildlife management areas; and the Grassland Resource
123 Conservation District all identified in the Refuge Water Supply Report and the land(s) identified
124 in the San Joaquin Basin Action Plan/Kesterson Mitigation Action Plan Report prepared by the
125 Bureau of Reclamation as set forth in Section 3406(d) of the CVPIA and/or as revised in
126 accordance with subdivision (b) of this Article;

127 (q) "Refuge Water Supply Report" shall mean the report issued by the Mid-
128 Pacific Region of the Bureau of Reclamation of the United States Department of the Interior
129 entitled "Report on Refuge Water Supply Investigations, Central Valley Hydrologic Basin,
130 California" (March 1989);

131 (r) "Secretary" shall mean the Secretary of the Interior, a duly appointed
132 successor, or an authorized representative acting pursuant to any authority of the Secretary
133 through any agency of the Department of the Interior;

134 (s) "Year" shall mean the period from and including March 1 of
135 each Calendar Year through the last day of February of the following Calendar Year;

136 TERM OF MOU

137 2. (a) This MOU shall be effective on March 1, 2001 and shall remain in effect
138 through February 28, 2026.

139 (b) Upon request by the Service, this MOU shall be renewed for successive periods
140 of twenty-five (25) years each, subject to the terms and conditions mutually agreeable to the
141 parties. The Service shall request renewal of the MOU at least two (2) years prior to the date on
142 which this MOU expires.

143 WATER TO BE MADE AVAILABLE AND DELIVERED TO THE SERVICE

144 3. (a) During each Year, consistent with State water rights, permits and licenses,
145 federal law, and subject to the provisions set forth in Articles 8 and 9 of this MOU, Reclamation
146 shall make available at the established Point(s) of Delivery, and/or convey to the Service the
147 maximum quantities of Project Water and Non-Project Water, respectively, required to provide
148 each of the Refuges with the Level 2 Water Supplies set forth in Exhibit "B" and the Incremental
149 Level 4 Water Supplies set forth in Exhibit "B". The quantities of Level 2 Water Supplies and
150 Incremental Level 4 Water Supplies made available and/or conveyed to the Service shall be
151 scheduled in accordance with the provisions of Article 4 of this MOU; Provided, that, Section
152 3406(d)(2) of the CVPIA provides that the Incremental Level 4 Water Supplies shall be acquired
153 in cooperation with the State of California and in consultation with the Central Valley Habitat
154 Joint Venture and other interests in cumulating increments of not less than ten percent per
155 annum, from the date the CVPIA was enacted, through voluntary measures which include, but

156 are not limited to, water conservation, conjunctive use, purchase, lease, donations, or similar
157 activities, or a combination of such activities which do not require involuntary reallocation of
158 Project yield, water being provided as all or part of the Incremental Level 4 Water Supplies for
159 each of the Refuges can be made available only to the extent that Reclamation is able to acquire
160 the Incremental Level 4 Water Supplies from willing sources; Accordingly, Reclamation shall
161 use its best efforts to acquire the Incremental Level 4 Water Supplies and shall coordinate
162 acquisitions of Level 4 Water Supplies with acquisitions of Environmental Water Account
163 (EWA) water pursuant to the Operating Principles Agreement, dated August 28, 2000, attached
164 to the Record of Decision for the CALFED Bay-Delta Program, dated August 28, 2000, and/or
165 other acquisitions of water for environmental purposes to ensure that acquisitions of Incremental
166 Level 4 Water Supplies have a priority at least equal to acquisitions of EWA and/or other
167 environmental water each year. Reclamation also agrees that the Interagency Refuge
168 Management Team shall be included among the interests consulted in acquiring Incremental
169 Level 4 Water Supplies.

170 (b) The Service shall continue use of the Non-Project Water component of the
171 Level 2 Water Supplies set forth in Exhibit "B" as long as such Non-Project Water remains
172 available to the Service and is of suitable quality. In the event that such water supply is
173 unavailable to the Service, or is not of suitable quality, subject to the provisions set forth in
174 Articles 8 and 9 of this MOU, Reclamation shall deliver to the Service sufficient substitute
175 Project Water to ensure that the quantities of Level 2 Water Supplies are available to the Service
176 in accordance with subdivision (a) of this Article.

177 (c) The Service shall comply with all requirements of any biological
178 opinion(s) addressing the execution of this MOU developed pursuant to Section 7 of the
179 Endangered Species Act of 1973, as amended, which are applicable to each of the Refuge(s) and
180 comply with environmental requirements applicable to each of the Refuge(s) as may be required
181 for specific activities.

182 (d) The Service shall make reasonable and beneficial use of all Delivered
183 Water furnished pursuant to this MOU consistent with the wetland habitat water management
184 plan(s) described in Article 15 of this MOU.

185 (e) In order to maximize water available to Refuges and better manage such
186 water, the Service may request Reclamation's permission to reschedule a portion of the Level 2
187 Water Supplies and/or a portion of the Incremental Level 4 Water Supplies made available to the
188 Service for use within the Service's Boundary during the current Year for use within the
189 subsequent Year. Reclamation may permit such rescheduling in accordance with applicable law,
190 and the then-current applicable rescheduling guidelines and policies. Upon execution of this
191 MOU, Reclamation shall have adopted amendments to any applicable rescheduling guidelines
192 and policies to provide for the rescheduling of refuge water in accordance with this Article.
193 After execution of this MOU and annually thereafter, Reclamation shall provide the Service with
194 a copy of the then-current rescheduling guidelines and policies.

195 (f) Reclamation shall not interfere with the Service's right pursuant to Federal
196 Reclamation law and applicable California law to the beneficial use of water furnished pursuant
197 to this MOU so long as the Service fulfills all of its obligations under this MOU. A reduction in

198 water supplies pursuant to Article 9 of this MOU shall not be deemed to constitute such
199 interference.

200 TIME FOR DELIVERY OF WATER

201 4. (a) On or about February 20 of each Calendar Year, Reclamation shall provide
202 the Service, in writing, with a preliminary forecast of whether the upcoming Year will be a
203 Critically Dry Year; and, if a Critically Dry Year is forecast, the extent to which Level 2 Water
204 Supplies to be made available to the Service during the upcoming Year are to be shorted pursuant
205 to Article 9 of this MOU; and the amount of Incremental Level 4 Water Supplies estimated to be
206 made available to the Service pursuant to this MOU for the upcoming Year. The forecast will be
207 updated monthly, as necessary, based on then-current hydrologic conditions. Upon the request of
208 the Service, Reclamation shall make available to the Service the data on which Reclamation
209 relied to determine whether the Year in question will or will not be a Critically Dry Year and to
210 determine the amounts of Level 2 Water Supplies and Incremental Level 4 Water Supplies to be
211 made available to the Service pursuant to this MOU during a Critically Dry Year.

212 (b) Based on the forecast(s) referred to in subdivision (a) of this Article, on or
213 before March 1 of each Calendar Year, the Service shall submit to Reclamation a written
214 schedule, satisfactory to Reclamation, showing both the monthly and annual quantities of Level 2
215 Water Supplies and Incremental Level 4 Water Supplies to be delivered by Reclamation to each
216 of the Refuges pursuant to this MOU. Each schedule shall be updated on a monthly basis to
217 reflect actual use and remaining estimated needs.

218 (c) In accordance with subdivision (a) of Article 3 of this MOU, Reclamation
219 shall make available and/or convey Level 2 Water Supplies and Incremental Level 4 Water

220 Supplies for diversion by the Service at the Points of Delivery in accordance with the schedule
221 submitted by the Service pursuant to subdivision (b) of this Article, or any written revision(s)
222 thereto, mutually agreed to by Reclamation and the Service which are submitted to Reclamation
223 within a reasonable time prior to the date(s) on which the requested change(s) is/are to be
224 implemented.

225 POINT OF DIVERSION, MEASUREMENT AND RESPONSIBILITY FOR DISTRIBUTION
226 OF WATER

227 5. (a) The original Point(s) of Delivery shall be established by written mutual
228 agreement of the Service and Reclamation. Such Point(s) of Delivery may be revised without
229 amending this MOU upon written mutual agreement of Reclamation and the Service.

230 (b) All water delivered to the Service pursuant to this MOU is to be measured
231 at the Point(s) of Delivery to reflect the quantities of Level 2 Water Supplies and Incremental
232 Level 4 Water Supplies delivered to the Service's Boundary. Upon the request of the Service or
233 on Reclamation's own initiative, Reclamation shall investigate the accuracy of such
234 measurements and the parties will jointly take any necessary steps to adjust any errors appearing
235 therein. For any period of time when accurate measurement has not been made, Reclamation
236 shall consult with the Service prior to making a determination of the quantity of Delivered Water
237 for that period of time. The Service shall advise Reclamation on or before the 10th calendar day
238 of each month of the quantities of Level 2 Water Supplies and Incremental Level 4 Water
239 Supplies taken during the preceding month at the Point(s) of Delivery.

240 (c) Reclamation shall not be responsible for the control, carriage, handling,
241 use, disposal, or distribution of water delivered to the Service pursuant to this MOU beyond the
242 Point(s) of Delivery specified in subdivision (a) of this Article.

243 POOLING OF WATER SUPPLIES

244 6. (a) Whenever the maximum quantities of Level 2 Water Supplies and/or the
245 Incremental Level 4 Water Supplies depicted in Exhibit “B” are reduced pursuant to Article 9 of
246 this MOU, the remaining Level 2 Water Supplies and/or the Incremental Level 4 Water Supplies
247 may be pooled for use on other Refuge(s); Provided, that no individual Refuge shall receive more
248 Level 2 Water Supplies than would have been made available to it absent a reduction pursuant to
249 Article 9 of this MOU; or be reduced by more than twenty-five (25) percent; Provided further,
250 that Reclamation makes a written determination that pooling of water for use on other Refuge(s)
251 would not have an adverse impact, that cannot be reasonably mitigated, on Project operations,
252 other Project Contractors, or other Project purposes; Provided further, that Reclamation
253 determines that such reallocation is permitted under the terms and conditions of the applicable
254 underlying water right permit and/or license; and Provided still further, that water made available
255 under this MOU may not be scheduled for delivery outside the Service’s Boundary without prior
256 written approval of Reclamation.

257 (b) An Interagency Refuge Water Management Team, to be chaired by
258 Reclamation and to be established upon execution of this MOU, shall be entitled to
259 collaboratively allocate the pooled water supplies and provide a schedule for delivery of the
260 pooled supplies to meet the highest priority needs of the Refuge(s) as depicted in Exhibit “B”;
261 Provided, however, nothing in this Article is intended to require the Service to pool the water

262 supply provided for in this MOU. The Interagency Refuge Water Management Team shall be
263 composed of designees of the Bureau of Reclamation, the United States Fish and Wildlife
264 Service, the California Department of Fish and Game, and the Grassland Water District.

265 TRANSFERS, REALLOCATIONS OR EXCHANGES OF WATER

266 7. Subject to the prior written approval of Reclamation, the Project Water made
267 available under this MOU may be transferred, reallocated or exchanged in that Year to other
268 Refuge(s) if such transfer, reallocation or exchange is requested by the Service and is authorized
269 by applicable Federal and California State laws, and then-current applicable guidelines or
270 regulations.

271 TEMPORARY REDUCTIONS--RETURN FLOWS

272 8. (a) Consistent with the authorized purposes and priorities of the Project and
273 the requirements of Federal law, Reclamation shall make all reasonable efforts to optimize water
274 deliveries to the Service as provided in this MOU.

275 (b) The quantity of water to be delivered to the Service as herein provided
276 may be temporarily discontinued or reduced when investigation, inspection, maintenance, repair,
277 or replacement of any of the Project facilities and/or Non-Project Facilities or any part thereof
278 necessary for the delivery of water to the Service is required. Reclamation shall give and/or
279 arrange to have the owner/operator of Non-Project Facilities give the Service due written notice
280 in advance of such temporary discontinuance or reduction, except in case of an emergency, when
281 no advance notice is possible, in which case Reclamation shall notify and/or arrange to have the
282 owner/operator of the Non-Project Facilities notify the Service of said discontinuance or
283 reduction as soon as is feasible; Provided, that Reclamation shall use its best efforts to avoid any

284 discontinuance or reduction in such service. Upon resumption of service after such reduction or
285 discontinuance, and if requested by the Service, Reclamation will make all reasonable efforts,
286 consistent with other obligations and operational constraints, to deliver the quantity of water
287 which would have been delivered hereunder in the absence of such discontinuance or reduction.

288 (c) The United States reserves the right to all seepage and return flow water
289 derived from Delivered Water which escapes or is discharged beyond the Service's Boundary;
290 Provided, that this shall not be construed as claiming for the United States any right to seepage or
291 return flow being put to beneficial use pursuant to this MOU within the Service's Boundary by
292 the Service or those claiming by, through, or under the Service.

293 WATER SHORTAGE AND APPORTIONMENT

294 9. (a) In a Critically Dry Year, Reclamation may temporarily reduce, for that
295 Year, the availability of Level 2 Water Supplies up to twenty-five (25) percent of the maximum
296 quantities set forth in Exhibit "B" whenever reductions due to Hydrologic Circumstances are
297 imposed upon agricultural deliveries of Project Water; Provided, that such reductions shall not
298 exceed in percentage terms the reductions imposed on agricultural service contractors. The
299 quantity of Non-Project Water available to one or more of the Refuges as part of its/their Level 2
300 Water Supplies may be reduced by more than twenty-five (25) percent in Years when the
301 quantity of Project Water made available to the Service can be reduced by no more than twenty-
302 five (25) percent. In such cases, Reclamation shall make up the supply difference with water
303 supplies provided by Reclamation to ensure that Level 2 Water Supplies from all sources are not
304 reduced by more than twenty-five (25) percent.

305 (b) Reductions in the Level 2 Water Supplies to be made available to the
306 individual Refuge(s) pursuant to this MOU, shall be imposed only in a Critically Dry Year. For
307 the Incremental Level 4 Water Supplies provided from Non-Project Water and Project Water,
308 reductions shall be imposed in accordance with the priority or priorities that were applied to such
309 Non-Project Water and the shortages assigned to Project Water prior to its transfer or acquisition
310 as Incremental Level 4 Water Supplies.

311 RULES AND REGULATIONS

312 10. The parties agree that the delivery of water pursuant to this MOU is subject to
313 Federal Reclamation law, as may be amended and supplemented, as applicable, and the rules and
314 regulations promulgated by the Secretary of the Interior under Federal Reclamation law.

315 QUALITY OF WATER

316 11. (a) Consistent with other legal obligations, the water delivered by
317 Reclamation to the Service pursuant to this MOU shall be of suitable quality to maintain and
318 improve wetland habitat areas and of comparable quality to water provided to other Project
319 purposes within the same geographical areas; Provided, that Reclamation is under no obligation
320 to construct or furnish water treatment facilities to maintain or to improve the quality of the water
321 furnished to the Service pursuant to this MOU. The quality of Delivered Water may be
322 monitored by the Service at the Point(s) of Delivery on an as needed basis. Should Reclamation,
323 in consultation with the Service, determine that the Level 2 Water Supplies and/or the Level 4
324 Water Supplies to be made available to the Service pursuant to this MOU during all or any part
325 of a Year will not be of the quality that the Service feels is suitable to maintain and improve
326 wetland habitat areas, the Service and Reclamation shall meet within 48 hours or at a time

327 mutually agreeable to the parties and determine the appropriate actions necessary to identify and
328 address the source of the water quality problems.

329 (b) The operation and maintenance of Project facilities shall be performed in
330 such manner as is practicable to maintain the quality of raw water made available through such
331 facilities at the highest level reasonably attainable as determined by Reclamation. The Service
332 shall be responsible for compliance with all State of California and Federal water quality
333 standards and directives applicable to surface return flows arising from water conveyed to the
334 Refuges pursuant to this MOU. This MOU does not create any obligation on Reclamation to
335 provide drainage services.

336 USE OF NON-PROJECT FACILITIES FOR WATER DELIVERY

337 12. Any use of Non-Project Facilities, including use of State Water Project facilities
338 pursuant to Joint Point of Diversion or other use of State Water Project facilities to deliver the
339 water supplies provided for in the MOU, or any agreement for the use of such Non-Project
340 Facilities, shall in no way alter the obligation of Reclamation to make available and deliver water
341 supplies in accordance with all of the terms and conditions of this MOU. In addition, any costs
342 incurred in the use of Non-Project Facilities to deliver water supplies pursuant to this MOU shall
343 be paid for in accordance with Section 3406(d)(3) of the CVPIA.

344 OPINIONS AND DETERMINATIONS

345 13. (a) Where the terms of this MOU provide for actions to be based upon the
346 opinion or determination of either party to this MOU, said terms shall not be construed as
347 permitting such action to be predicated upon opinions or determinations that are arbitrary,
348 capricious or unreasonable. Both parties, notwithstanding any other provisions of this MOU,

349 expressly reserve the right to seek relief from and appropriate adjustment for any such arbitrary,
350 capricious, or unreasonable opinion or determination. Each opinion or determination by either
351 party shall be provided in a timely manner. Nothing in this subdivision of this Article is intended
352 to or shall affect or alter the standard of judicial review applicable under federal law to any
353 opinion or determination implementing a specific provision of federal law embodied in statute or
354 regulation.

355 (b) Both parties to this MOU shall have the right to make determinations
356 necessary to administer this MOU that are consistent with the provisions of this MOU, the laws
357 of the United States and of California, and the rules and regulations promulgated by the Secretary
358 of the Interior. Each party shall make such determinations in consultation with the other party to
359 the extent reasonably practicable.

360 WATER CONSERVATION

361 15. (a) The Service shall prepare individual refuge wetland habitat water
362 management plan(s) in order to ensure the effective use of water supplies to meet wetland
363 resource needs and to meet the objectives of the Central Valley Habitat Joint Venture and the
364 purposes of the CVPIA to maintain and improve certain Central Valley wetland habitat areas.
365 Criteria to prepare and evaluate refuge wetland habitat water management plan(s) shall be
366 developed by the Interagency Refuge Water Management Team within one (1) year of the
367 execution of this MOU, and reviewed and updated every five (5) years thereafter taking into
368 consideration the provisions of the Interagency Coordinated Program Task Force report dated
369 June 1998. The criteria shall include economically feasible water management measures which
370 can improve the Services' efficient use of water in a manner appropriate for wetland and wildlife

371 management, and shall also include time schedules for meeting the water use efficiency and
372 conservation objectives. The criteria shall grant substantial deference to on-going state efforts
373 related to wetlands water management and shall take into account the unique requirements
374 associated with water use for the maintenance and enhancement of wetland and wildlife habitat.
375 The Service shall make all reasonable efforts to complete the original wetland habitat water
376 management plan(s) within one (1) year of the establishment of the criteria. Reclamation will
377 review and determine if the wetland habitat water management plan(s) meet the established
378 criteria for evaluating said plan within ninety (90) days of receipt of each plan.

379 (a) Prior to the Service being afforded opportunities such as pooling
380 and rescheduling of water supplies pursuant to Articles 3 and 6 of this MOU, the Service must be
381 implementing a wetland habitat water management plan that has been determined by
382 Reclamation to meet the established criteria developed pursuant to subdivision (a) of this Article
383 for preparing and evaluating said plan. Continued pooling and rescheduling benefits pursuant to
384 Articles 3 and 6 of this MOU shall be contingent upon the Service's continued implementation of
385 such wetland habitat water management plans. In the event Reclamation determines the Service
386 is unable to implement its wetland habitat water management plan, due to circumstances beyond
387 its control, the benefits of Articles 3 and 6 of this MOU shall be continued so long as the Service
388 diligently works with Reclamation to obtain such determination at the earliest practicable date,
389 and thereafter the Service begins implementing its wetland habitat water management plan
390 immediately after the circumstances preventing implementation have ceased.

391 (c) In the event that implementation of the wetland habitat water management
392 plan(s) prepared pursuant to subdivision (a) of this Article results in water savings, all conserved

393 water supplies may be transferred/reallocated, under the terms and conditions of this MOU, to
394 other wetland, wildlife and fishery needs in accordance with the recommendations of the
395 Interagency Refuge Water Management Team established pursuant to Article 6 of this MOU;
396 Provided, that Reclamation makes a written determination that such transfer/reallocation of
397 conserved water would not have an adverse impact, that cannot be reasonably mitigated, on
398 Project operations, other Project Contractors or other Project purposes; Provided further, that the
399 transfer/reallocation is requested by the Service and Reclamation determines that the
400 transfer/reallocation is authorized by applicable laws, and then-current applicable guidelines
401 and/or regulations.

402 (d) The Service shall submit to Reclamation an annual update on the status of
403 its implementation of the wetland habitat water management plan(s) for the previous Water Year.

404 (e) At five (5) year intervals, the Service shall revise its wetland habitat water
405 management plan(s), as necessary, to reflect the then-current criteria for preparing and evaluating
406 said plans and submit such revised plan(s). Upon completion of such revised plan(s), the Service
407 shall submit such revised plan(s) to Reclamation for review and so Reclamation can determine
408 whether such plan(s) meet the then-current criteria.

409 EXISTING OR ACQUIRED WATER OR WATER RIGHTS

410 16. Except as provided in subdivision (b) of Article 3, the exercise of existing water
411 rights by the Service, or its acquisition of additional water or water rights from other than the
412 United States, shall not alter the obligation of Reclamation to provide the maximum quantities of
413 Level 2 Water Supplies and Incremental Level 4 Water Supplies under subdivision (a) of Article
414 3 of this MOU.

DRAFT MOU

DRAFT 11/15-2000 (RWS)

415 IN WITNESS WHEREOF, the parties hereto have executed this MOU as of the day and

416 year first above written.

417 By: _____

418 Regional Director, Mid-Pacific Region

419 Bureau of Reclamation

420 By: _____

421 Manager, California, Nevada Operations Office

422 U.S. Fish and Wildlife Service

423