

9/24/2004

### Comments – Refuge Criteria

The Criteria for Developing Refuge Water Management Plans (Refuge Criteria) provides a common methodology, or standard, for efficient use of water by Federal wildlife refuges, State wildlife management areas and resource conservation districts that receive water under provisions of the Central Valley Project Improvement Act (CVPIA). The Refuge Criteria documents the process and format by which Refuge Water Management Plans (Refuge Plans) should be prepared and submitted to the Bureau of Reclamation (Reclamation) as part of the Refuge/District Water Supply Contracts and Memorandum of Agreements.

On April 17, 2004, Reclamation held a public workshop to solicit comments on the draft Refuge Criteria. On June 28, 2004, the Refuge Criteria was noticed in the *Federal Register*. As provided in the *Federal Register*, the 30-day public comment period closed on July 29, 2004. Reclamation received comments as a result of the workshop and the *Federal Register* notice. Below are the comments followed by Reclamation's response. It is Reclamation's intent to accurately capture all of the public's concerns in regards to the Refuge Criteria. Many of the comments/questions have been taken directly from letters and e-mails received. Some comments have been edited to consolidate main issues.

**1. Per Article 17 of the Grassland Water District contract, the Refuge Criteria was to be developed within 1 year of the execution of the contract. The contract was executed January 19, 2001. Why are the criteria over 2 years late?**

**Response:** The contract called for the creation of an Interagency Refuge Water Management Team (IRWMT), which would develop the Refuge Criteria. Since this type of criteria had never been developed before, the IRWMT required extra time to determine what water management practices would be applicable to Refuges. The IRWMT also decided to undertake a pilot project to evaluate the effectiveness of the Refuge Criteria. This project, which proved successful, added additional time to the development of the Refuge Criteria.

**2. Article 17 also states that the Contractor shall make all reasonable efforts to complete the original water management plans within 1 year of the establishment of the criteria. When do you anticipate the (Refuge) Criteria will be established? Do you anticipate the Contractors will be able to complete the water management plans within 1 year of the criteria being established?**

**Response:** We anticipate the completion of the Refuge Criteria by early Fall 2004. As a result of the pilot project referred to in response #1, many of the Refuges have already begun developing their Refuge Plans; therefore we anticipate that they will be able to complete their Refuge Plans within the required time.

**3. Article 17 also required the Contracting Officer to review and determine if the water management plan meets the established criteria within 90 days of the receipt of each plan. The Contracting Officer's time requirement is not reflected in the**

**Refuge Criteria. Should it be? Do you anticipate the Contracting Officer will be able to meet the 90-day time requirement?**

**Response:** The Contracting Officer's time is reflected in the section on **Non-Compliance**. However, in regards to the review process, as per the Refuge Criteria, *"Refuges are responsible for submitting the draft Refuge Plan, which has been developed according to the Refuge Criteria, to Reclamation's appropriate Area Office for review. Upon receipt, Refuges will receive, within 90 days, notification of Reclamation's acceptance or request for modification."* The Water Conservation Team shall consult with the Contracting Officer in reviewing the Refuge Plans. We anticipate that the Water Conservation Team will be able to meet the 90-day time requirement.

**4. The last sentence of page two of the draft Refuge Criteria refers to "Water Service Agreements and Contracts." What are the "Agreements" referred to here? Should this be revised to eliminate reference to Agreements?**

**Response:** Refuge Criteria language has been modified to include the following: *"...Refuge Water Management Plans (Refuge Plan) should be prepared and submitted to Reclamation as part of the Refuge/District Water Supply Contracts and Memorandum of Agreements."*

**5. The fifth paragraph of page two references the "Standard Criteria;" several words in this paragraph are ambiguous: "certain," "suppliers," and "similar." Suggest the paragraph be revised to something like the following:**

**~~Certain~~ Pursuant to the provisions of CVPIA, Central Valley Project (CVP) agricultural and municipal and industrial (M&I) water ~~suppliers~~ service Contractors currently prepare and submit ~~similar~~ Water Management Plans.**

**Response:** Refuge Criteria language has been modified to include the following as a footnote: *"Pursuant to the provisions of the CVPIA, CVP agricultural and M&I water service and repayment Contractors currently prepare and submit Water Management Plans in accordance with the Standard Criteria for Evaluating Water Management Plans (Standard Criteria)."*

**6. The first section on page 3 – Non-Applicability of Exemptible Best Management Practices (BMPs) – is confusing. Reference is to 2(b), 6 and 7 in opening sentence, but the balance of the section talks about 2.b., 5, and 6. Can this section be revised for clarity?**

**Response:** Refuge Criteria language has been modified to include the following:

#### **Section K. Non-Applicability (NA) of Exemptible BMPs**

To establish that a BMP is not applicable to the Refuge, the Refuge Plan should explain the reasons why the particular BMP does not apply to the Refuge. This justification must be consistent with Section A of the Refuge Criteria titled, "Background." Examples of NA for exemptible BMPs are listed below. This list is not all-inclusive.

Exemptible BMPs

2. *Improve the distribution system*

b. *Line/pipe sections of distribution system.*

NA if the current system can distribute water effectively with regular maintenance and on-going improvements to open channels – thus maximizing habitat.

3. *Automate water distribution system.*

NA if the Refuge has a completely piped system that has no delivery constraints.

6. *Construct and operate operational loss recovery systems.*

NA if system is completely piped and there are no spill points.

7. *Optimize conjunctive use of surface and ground water.*

NA if there is no usable ground water.

8. *Facilitate use of available recycled urban wastewater that otherwise would not be used beneficially, meets all health and safety criteria, and does not cause harm to wildlife management goals.*

NA if no recycled urban wastewater is available

**7. The first paragraph on page 4 states, in part, “Reclamation’s Team will contact the Refuges regarding Refuge Plan adequacy.” I assume this means the Team will contact the appropriate Refuge to resolve the inadequacy. Recommend the ambiguity be edited out.**

**Response:** Refuge Criteria language has been modified to include the following:  
*“Refuges are responsible for submitting the draft Refuge Plan, which has been developed according to the Refuge Criteria, to Reclamation’s appropriate Area Office for review. Upon receipt of the Plan, The Refuge will receive (within 90 days) notification of Reclamation’s acceptance or request for modification.”*

**8. Paragraph 2 of page 4 states that in order for the Refuges to do pooling and rescheduling they “must be implementing a Refuge Plan” and that “Continued pooling and rescheduling benefits are contingent upon continued Refuge Plan implementation.” Actually, Article 17(b) of the Grassland Water District (GWD) contract requires that in order to do pooling and rescheduling the Contractor must be implementing a management plan that has been determined by the Contracting Officer to meet the established criteria developed pursuant to subdivision (a) of this Article for preparing and evaluating said plan. This section was put into the contract to provide an incentive for the Refuges to (1) prepare a water management**

plan, (2) ensure the plan complies with the established criteria, and (3) implement the provisions of the plan. Accordingly, reference to the Refuge Plan meeting the established Refuge Criteria needs to be reflected in this section of the Draft Refuge Criteria, perhaps with the insertion of the language similar to the following: . . . implementing a Refuge Plan, that has been determined by the Contracting Officer to meet the established Refuge water management criteria.

**Response:** Refuge Criteria language has been modified to include the following:  
*“Article 17 of the Refuge Water Supply Contracts addresses Water Conservation. Article 17(a) requires the Refuge to complete the original Refuge Plan within 1 year of the establishment of the Refuge Criteria. Article 17(b) states that prior to the Refuge being afforded opportunities such as pooling and rescheduling of water supplies pursuant to Articles 3 and 6 of the water supply contract, the Refuge must be implementing a Refuge Plan. Continued pooling and rescheduling benefits are contingent upon continued Refuge Plan implementation.”*

**9. The last sentence of Paragraph 3 of page 4 is slightly different from the actual contract Article referenced and could lead to some confusion on the requirements. I recommend the actual contract language be reflected in the Refuge Criteria, as appropriate, and recommend the following changes to the last sentence of this paragraph (suggested changes are underlined):**

**In such a case, the Contracting Officer must make a written determination ~~determine~~ that the transfer/reallocation of conserved water would not have an adverse impact ~~which~~, that cannot be reasonably mitigated, on project operations ~~and~~, other project Contractors or other project purposes.**

**Response:** This section of the Refuge Criteria has been removed.

**10. Why all the Key Terms? Many seem to be paraphrased from the Refuge Contracts, but many of the Key Terms are not used in the Draft Refuge Criteria and some Key Terms are no longer correct as a result of the editing (e.g. CVP does not include its primary function – flood control; critically dry year does not include the forecast date (on or before 1/20); and fiscal year needs to be inclusive). Additionally, there are terms used in the Draft Refuge Criteria that are not defined (ICP – Page 4; ET – Page 12). Recommend the Key Terms be limited to those actually used in the Draft Criteria, and those left in the Draft Criteria be vetted to ensure consistent treatment by Reclamation in other documents (especially the Refuge Water Service Contracts).**

**Response:** Key Terms have been modified to include only those terms used in the Refuge Criteria.

**11. Year type on Page 8. Will the Refuges be allowed to determine the year type on which to develop and implement their Water Management Plan cause consistency problems in evaluating the Refuge Plans?**

**Response:** No. As with the Standard Criteria, there is flexibility in selecting the appropriate year type in which to submit a Contractor’s Annual Update. However, we do

require Contractors remain consistent when reporting data. Arbitrarily selecting year types is not acceptable.

**12. Water Quality Monitoring on page 11. Why the qualifier “if.” Should not the Draft Refuge Criteria require a description of all water sources, etc.?**

**Response:** As with the Standard Criteria, there is no requirement for the Refuges to provide monitoring information on surface water that is not of poor quality. The “if” is included so that information will be provided only for water supplies which are of poor quality or have a high likelihood of being of poor quality, such as for ground water and drainage water.

**13. Water Shortage Contingency Plan on Page 11. Why a “50 percent” shortage threshold?**

**Response:** Based on Article 9 of the Refuge contracts and consistent with the provisions as specified in Section 3406 (d)(3) of the CVPIA, the Level 2 Refuge water supply will be reduced by 25 percent in critically dry years. Even though little or no Level 4 water may be available in those years, the total supply for all refuges would exceed 50 percent of the total of level 2 and level 4. Therefore, 50 percent was chosen as the floor for Water Shortage Planning purposes.

**14. Plan to measure outflow on Page 12. What is the basis that +/- 20 percent is a reasonable degree of accuracy?**

**Response:** Outflow measurement is a new practice which was not included in the Standard Criteria developed under CVPIA. This practice is intended to help Refuge managers develop more accurate water. Presuming future improvements in ability to measure outflow, the level of measurement accuracy may be increased when the Refuge Criteria and the Standard Criteria are next revised.

**15. The Refuge Criteria do not provide for the development of a detailed water balance/accounting which is required for Agricultural Service Contractors. The Refuge Criteria should be modified to require detailed accounting of water supply and use. The detail should be sufficient to calculate water utilization efficiency.**

**Response:** Reclamation’s Standard Criteria do not require Contractors to submit a water balance. The water balance is provided in the Water Management Planner as a tool for Contractors to better understand their water supply. The Standard Criteria requires water inventory tables. The comment will be taken under consideration during the next Refuge Criteria revision.

**16. The Refuge Criteria, under the Critical BMP section, refers to GWD providing “customer services,” but does not require the designation of a Water Conservation Coordinator.**

**Response:** A requirement for a Water Conservation Coordinator has been added as a Critical BMP.

**17. The Refuge Criteria should include water measurement as a Critical BMP. Paragraph 4 requires Grassland Water District to “plan to measure deliveries to**

customers,” but the measurement of water volumes delivered to habitat areas within a Refuge is not required. Current water measurement technology has advanced to a point that it should be feasible to measure water deliveries to habit areas within a Refuge. Many of the exemptible BMPs deal with improved conveyance which will facilitate more efficient water management and water measurement should be included in these improvements.

**Response:** The measurement BMP is for measurement of deliveries to customers. Since GWD is the only Refuge that has customers, this BMP refers only to them. This requirement is similar to that in the Standard Criteria. This comment will be taken into consideration for the next Refuge Criteria revision.

**18. There has been no provision for the use of available recycled water under the Exemptible BMPs, as in the case with the Agricultural Contractor’s Plan.**

**Response:** The Refuge Criteria have been modified and the following has been added as an Exemptible BMP.

*“Facilitate use of available recycled urban wastewater that:  
(a) otherwise would not be used beneficially,  
(b) meets all health and safety criteria,  
(c) does not cause harm to wildlife management goals.”*

**19. While the process to update the Refuge Water Conservation Plan is mentioned, the Refuge Criteria do not explicitly deal with plan implementation and (annual) updates.**

**Response:** The following language has been added to the Refuge Criteria:

*“The initial 5-Year Refuge Plan is due 1 year after the Refuge Criteria is finalized and once every 5 years thereafter. Refuges are responsible for submitting the draft Refuge Plan, which has been developed according to the Refuge Criteria, to Reclamation’s appropriate Area Office for review. Upon receipt, Refuges will receive, within 90 days, notification of Reclamation’s acceptance or request for modification. Following notification by Reclamation that the Refuge Plan has conditionally met the requirements of the Refuge Criteria, Refuges will submit three copies of the complete Refuge Plan. In addition, Grassland Resource Conservation District will submit a resolution from the Board of Directors formally adopting the Refuge Plan. The status of the Refuge’s Plan will then be noticed in the Federal Register, and the public is given 30 days in which to comment. Copies of the document will be available for review at Reclamation’s Mid-Pacific Regional Office and the appropriate Area Office. If no comments are received within 30 days, the review process will officially be complete. If public comments are received, additional changes may be required.*

*Refuges are also responsible for submitting Annual Updates to Reclamation. The Annual Update will address the actions taken in implementing the Refuge Plan for the previous year and forecast implementation actions and proposed changes for the current year. The Annual Update is limited to reporting on BMPs.”*

**20. Anyone discharging waste that could affect water quality must file a report of waste discharge. This includes irrigated agriculture, storm water runoff, and wetlands. We highly recommend that an element addressing a Refuge compliance with the Regional Water Quality Control Board's (RWQCB) regulatory program be included under Section A. Critical BMPs. It is a critical component that should be included in the Reclamation's Refuge Criteria.**

**Response:** Reclamation understands the role of the RWQCB in respect to regulations controlling the discharge of waste. However, the focus of the Refuge Criteria (as with the Standard Criteria) is improved water use efficiency. We defer the responsibility for this requirement to the RWQCB as a separate issue that should not be addressed in the Refuge Criteria. Further, the "Quality of Water" article in the Contracts states, in part, "(b)... The Contractor/Service shall be responsible for compliance with all State of California and Federal water quality standards and directives applicable to surface return flows and subsurface agricultural drainage discharges generated within its boundaries arising from water conveyed to the Refuges pursuant to this Contract. This Contract does not create any obligation on the Contracting Officer to provide drainage services"

**21. The water quality information required by the draft Refuge Criteria will document the ongoing efforts of the Refuges to improve water quality within their areas, as well as their efforts to improve water quality under the Irrigated Lands Waiver and with the San Joaquin River Water Quality Management Group. We request that Reclamation continue informal dialogue with our Subgroup as it finalizes the Refuge Criteria.**

**Response:** Although the comment period has closed, Reclamation realizes that the Refuge Criteria is a "living document." Therefore, the IRWMT will continue on-going dialog with groups in an effort to improve the Refuge Criteria for the next revision process.

**22. Water Saved Section: This section states that the "Contracting Officer must determine that the transfer/reallocation of conserved water would not have an adverse impact which cannot be reasonably mitigated on Project operations and other Project Contractors or other Project purposes." We believe that any water saved should be used to mitigate the adverse impacts on water quality in the San Joaquin River resulting from the delivery of this water to the wildlife Refuges. The delivery/release of this water should be timed so that it will provide dilution flow for the drainage coming off the Refuges.**

**Response:** This section of the Refuge Criteria has been removed. Reclamation determined that this section related to the contract issues and therefore was removed from the Refuge Criteria. Any transfer/relocation of conserved water will need to meet environmental requirement approved by the Contracting Officer.

**The response to items 23 through 28 are following comment 28.**

**23. Section 1 – Existing Information – A. Background: The background discussion should include a description of how and when the water is applied and a description of the timing and amount of discharge from the Refuges.**

**24. Section 1 – Existing Information – E. Environmental Characteristics:** The discussion of how soil characteristics affect water management should include the affects on water quality. Additionally, all Refuges must have a Water Quality Monitoring Program which includes analysis for salinity.

**25. Section 1 – Existing Information – G. Water Inventory:** The water inventory must describe the monthly acre-foot amount of drainage water leaving the Refuges as well as the quality of said drainage.

**26. Section 2 – Best Management Practices – A. Critical BMPs – 1. Management Programs – b. Water Quality Monitoring:** The water quality monitoring program must include monitoring the source water **and** also the water being moved internally through the Refuges **and** the water being discharged from the Refuges.

**27. Section 2 – Best Management Practices – B. Exemptible BMPs – 4. Plan to Measure Outflow:** This must be moved to “Critical BMPs.” In light of the serious adverse affects on water quality in the San Joaquin River caused by drainage of water from the Refuges, outflow, outflow timing, and outflow quality are essential to any Refuge Plan.

**28. Various Refuges – Specific Requirements:** For the North Grassland, Volta, and Los Banos Water Agencies (WA’s), these Refuges should include a description of actions that will reduce salinity into the San Joaquin River as well as the Grassland Marshes and Mud and Salt Sloughs. It is unclear why this section is placed where it is. The Refuge Plans for these WA’s must include what is described in this section and should not be allowed to be considered as Exemptible.

**Response: 22-28.** These comments address issues not covered by or subject to refuge water supply contracts and agreements. Further, most of them are not included in the Standard Criteria. Throughout the development of the Refuge Plans, the IRWMT has tried to use the Standard Criteria as a template, keeping in mind the differences between agriculture and wetland water management.

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