

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

RESOLUTION R5-2017-0088

AMENDMENTS TO THE WATER QUALITY CONTROL PLANS FOR  
THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS AND TULARE LAKE BASIN  
TO  
ESTABLISH A REGION-WIDE MUNICIPAL AND DOMESTIC SUPPLY (MUN) BENEFICIAL  
USE EVALUATION PROCESS IN AGRICULTURALLY DOMINATED SURFACE WATER  
BODIES AND TO REMOVE THE MUN BENEFICIAL USE FROM 231 CONSTRUCTED OR  
MODIFIED AG DRAINS IN THE SAN LUIS CANAL COMPANY DISTRICT

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board or Board) finds that:

1. The Central Valley Water Board adopted the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin (Basin Plans) in 1975 and has amended them as necessary.
2. The Central Valley Water Board has incorporated State Water Board Resolution No. 88-63, the Sources of Drinking Water Policy (*Sources of Drinking Water Policy*), into the Sacramento and San Joaquin River Basin Plan and the Tulare Lake Basin Plan. The *Sources of Drinking Water Policy* designates all surface and ground water bodies in the Basin Plans as supporting the MUN beneficial use unless a particular water body is specifically designated as not supporting the MUN beneficial use in the Basin Plans.
3. The *Sources of Drinking Water Policy* identifies exceptions to the MUN beneficial use designation that can apply to certain water bodies, including Exception 2b for surface water bodies designed or modified for the primary purpose of conveying or holding agricultural drainage waters, provided that the discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Boards.
4. The Board may only exempt water bodies in the Sacramento and San Joaquin River Basins and the Tulare Lake Basin from MUN beneficial use designations by amending the Basin Plans.
5. The Section 303 of the Federal Water Pollution Control Act (Section 303) requires the Central Valley Water Board to develop water quality objectives that are sufficient to protect beneficial uses designated for each water body found within its region. (33 U.S.C. § 1313.)
6. Section 303 also requires that the Board review the Basin Plan at least every three years and, where appropriate, modify water quality objectives or beneficial uses in the Basin Plan.
7. The Central Valley Water Board directed staff during the 2011 and 2014 Triennial Reviews (Resolution R5-2011-0074 and R5-2015-0021, respectively) to evaluate the appropriate MUN beneficial use designations in agriculturally (Ag) dominated surface water bodies,

including those receiving discharges from Publically Owned Treatment Works (POTWs) in the Sacramento River Basin.

8. On 16 April 2015, the Central Valley Water Board adopted Resolution R5-2015-0022, amending the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to remove the MUN beneficial use in twelve constructed and/or modified water bodies in the Sacramento River Basin. The amendment was approved by the State Water Board and the Office of Administrative Law later in 2015, and the final approval was provided by the U.S. Environmental Protection Agency on 21 April 2016.
9. The proposed Amendments will establish:
  - a. A region-wide process for evaluating the appropriate MUN beneficial use designations and associated water quality objectives in Ag dominated surface water bodies;
  - b. Implementation and monitoring requirements when the MUN beneficial use is de-designated or refined in Ag dominated surface water bodies; and
  - c. A Limited-MUN (LMUN) beneficial use that would apply to Ag dominated water bodies that have inherent limiting conditions such as low or intermittent flows and/or elevated natural background constituent concentrations.

In addition, the proposed Amendments will apply the evaluation process to remove the MUN beneficial use from 231 constructed or modified Ag dominated surface water bodies within the San Luis Canal Company (SLCC) service area, located within the San Joaquin River Basin.

10. A characterization study was completed pertaining to 231 constructed or modified Ag dominated surface water bodies within the SLCC service area and included information on construction, management, and water quality monitoring of the water bodies in question as well as downstream water bodies.
11. The Central Valley Water Board staff surveyed over 10% of the water bodies in the SLCC service area and conducted an evaluation of the water quality and established water quality monitoring programs within the SLCC service area and downstream of the discharge locations to the nearest Municipal and Domestic intake in the San Joaquin River near the city of Stockton.
12. The completed evaluation finds that the 231 constructed and modified Ag dominated surface water bodies within the SLCC service area meet the *Sources of Drinking Water Policy* Exception 2b, which applies to water bodies that have been designed or modified for the primary purpose of conveying agricultural drainage, provided that discharge from such systems is monitored to assure compliance with all relevant water quality objectives as required by the Regional Board.
13. The completed evaluation finds that the existing water quality monitoring conducted are sufficient to assure that all discharges meet relevant water quality objectives as required by the Regional Board.

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14. Central Valley Water Board staff has prepared proposed Amendments to standardize a process to evaluate appropriate designations and level of protection of the MUN beneficial use in Ag dominated water bodies, utilizing information gained during the de-designation of 12 constructed or modified Ag drains in the Sacramento River Basin that met the *Sources of Drinking Water Policy* Exception 2b and the characterization study in the SLCC service area.
15. The proposed Amendments will revise Chapter 2 (Beneficial Uses) of the Sacramento and San Joaquin River Basin Plan to add the LMUN beneficial use and Chapter 2 (Beneficial Uses, Surface Waters) to:
  - a. De-designate the MUN beneficial use from the 231 water bodies in the SLCC service area and add the 231 water bodies to Appendix 44 in the Basin Plan for water bodies that meet one or more of the *Sources of Drinking Water Policy* exceptions.
  - b. Include a reference to a new appendix (Appendix 45) in the Basin Plan for water bodies designated with the LMUN beneficial use.
16. The proposed Amendments will revise Chapter 3 (Water Quality Objectives, Chemical Constituents) of the Sacramento and San Joaquin River Basin Plan to move MUN-specific Water Quality Objectives to a new heading, Municipal and Domestic Supply (MUN), located under Chapter 3 (Water Quality Objectives, Water Quality Objectives for Inland Surface Waters). The water quality objective for LMUN will be included under this new heading.
17. The proposed Amendments will revise Chapter 4 (Implementation, Continuous Planning for Implementation of Water Quality Control) of the Sacramento and San Joaquin River Basin Plan to add implementation requirements for the MUN evaluation process.
18. The proposed Amendments will revise Chapter 5 (Surveillance and Monitoring) of the Sacramento and San Joaquin River Basin Plan to establish a surveillance and monitoring program to evaluate compliance with relevant water quality objectives.
19. The proposed Amendments will revise Appendix 44 (Water Bodies That Meet One or More of the Sources of Drinking Water Policy (Resolution 88-63) Exceptions) of the Sacramento and San Joaquin River Basin Plan to identify water body categories and water bodies to be grouped by system.
20. The proposed Amendments will revise Chapter 2 (Beneficial Uses) of the Tulare Lake Basin Plan to add the LMUN beneficial use and to include references to two new appendices (Appendix 35 and Appendix 36) in the Basin Plan for water bodies that meet one or more of *Sources of Drinking Water Policy* exceptions and for water bodies designated with the LMUN beneficial use, respectively.
21. The proposed Amendments will revise Chapter 3 (Water Quality Objectives, Chemical Constituents) of the Tulare Lake Basin Plan to move MUN-specific Water Quality Objectives to a new heading, Municipal and Domestic Supply (MUN), located under Chapter 3 (Water Quality Objectives, Water Quality Objectives for Inland Surface Waters). The water quality objective for LMUN will be included under this new heading.

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22. The proposed Amendments will revise Chapter 4 (Implementation, Continuous Planning for Implementation of Water Quality Control) of the Tulare Lake Basin Plan to add implementation requirements for the MUN evaluation process.
23. The proposed Amendments will revise Chapter 6 (Surveillance and Monitoring) of the Tulare Lake Basin Plan to establish a surveillance and monitoring program to evaluate compliance with relevant water quality objectives.
24. The proposed Amendments will establish a reference document that will catalogue the Executive Officer's initial approvals regarding MUN beneficial use de-designations and/or LMUN beneficial use refinements. In regulating discharges to water bodies that are listed in the reference document, the Board may establish interim permit limits, initially valid for up to 5 years, that implement the beneficial use de-designation or refinement before the relevant Basin Plan is amended to incorporate the waterbody's revised beneficial use designation(s). These interim permit limits may be extended by up to 3 years upon the Executive Officer's approval.
25. In conjunction with amending the Basin Plan to incorporate revised beneficial use designations, or in conjunction with other periodic reviews of the Basin Plans, the Board may develop additional guidance, as needed, for implementing the Region-wide MUN Evaluation Process established by this Resolution.
26. The Central Valley Water Board has considered the costs of implementing the proposed Amendments as discussed in the Substitute Environmental Documentation.
27. The proposed Amendments include an estimate of the cost of the proposed implementation program to agriculture, and identify potential sources of financing as required by Water Code section 13141.
28. In establishing the water quality objectives associated with the LMUN beneficial use, the Board has considered the factors described in Water Code section 13241, as discussed in the Substitute Environmental Documentation.
29. The proposed Amendments contain no new science and therefore are not subject to the peer review requirement of Health and Safety Code section 57004.
30. State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California (*State Antidegradation Policy*) generally prohibits the Central Valley Water Board from authorizing activities that will result in the degradation of high-quality waters unless it has been shown that:
  - The degradation will not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives;
  - The degradation will not unreasonably affect present and anticipated future beneficial uses;
  - The discharger will employ Best Practicable Treatment or Control (BPTC) to minimize degradation; and
  - The degradation is consistent with the maximum benefit to the people of the state.

When implementing the proposed Amendments, the Board will still be obligated to impose requirements (including monitoring requirements, where necessary) to ensure that downstream water bodies that remain designated as supporting the MUN beneficial use will be protected. Therefore, any degradation that may occur as a result of the adoption of the proposed Amendments will neither result in water quality less than that prescribed in state and regional policies nor unreasonably affect present and anticipated future beneficial uses. Further, the Staff Report and the case studies for the twelve constructed and/or modified water bodies in the Sacramento River Basin and for the water bodies in the SLCC service area demonstrate both the high cost of compliance associated with the imposition of MUN-derived limitations on discharges into Ag dominated waterbodies where the waterbody is not being used, nor is expected to be used, for MUN purposes, and the limited utility of imposing such requirements when the Board will still be obligated to protect water bodies that remain designated as supporting the MUN beneficial use. The Board may therefore find that the proposed Amendments are consistent with the maximum benefit to the people of the state. Lastly, when authorizing discharges into water bodies where the MUN use may be de-designated or modified pursuant to the proposed Amendments, the Board will still impose requirements requiring that dischargers employ BPTC of the wastes in their discharges where water quality is better than that needed to support the designated beneficial uses. For the above reasons, the Board finds that the proposed Amendments are consistent with the *State Anti-Degradation Policy*.

31. The regulatory action meets the “necessity” standard of the Administrative Procedures Act, Government Code section 11353, subdivision (b).
32. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. The proposed Amendments do not lessen water quality protections in any portion of the basins that is currently serving, or is expected to serve, as a domestic or municipal water source. The proposed Amendments are consistent with Water Code section 106.3.
33. The Central Valley Water Board is the Lead Agency under the California Environmental Quality Act (CEQA)(Pub. Resources Code, § 21000 et seq.) and is responsible for evaluating potentially significant environmental impacts that may occur as a result of the proposed Amendments. The Secretary of Resources has determined that the Board’s Basin Planning Process qualifies as a certified regulatory program pursuant to Public Resources Code section 21080.5 and California Code of Regulations, title 14, section 15251(g). This determination means that the Board may prepare Substitute Environmental Documentation, which includes the Staff Report and an Environmental Checklist, instead of preparing an environmental impact report. The Substitute Environmental Documentation satisfies the requirements of State Water Board’s regulations for the implementation of CEQA for exempt regulatory programs. (Cal. Code Regs., tit. 23, §§ 3775 et seq.)
34. The Central Valley Water Board staff held CEQA scoping meetings on 24 October, 2 November, and 7 November 2012 to receive comments on the proposed Amendments and to identify any significant issues that must be considered.
35. The Central Valley Water Board staff developed and evaluated alternatives for the proposed Amendments with stakeholder input, which was provided during public meetings held on 3 May 2012, 9 August 2012, 16 January 2013, 26 March 2013, 28 May 2013,

19 August 2013, 12 September 2013, 26 September 2014, 14 January 2015, 20 February 2015, 3 June 2015, 3 September 2015, 24 September 2015, and 13 November 2015.

36. Central Valley Water Board staff prepared draft Amendments and a Staff Report dated January 2017. The Staff Report included a description of the proposed Amendments and analysis of reasonable alternatives to the proposed Amendments. The Staff Report included an analysis of the reasonably foreseeable environmental impacts of the methods of compliance and an analysis of the reasonably foreseeable alternative methods of compliance with the proposed Amendments.
37. Central Valley Water Board staff completed an Environmental Checklist that concluded that the proposed Amendments do not have the potential to significantly impact the environment. Because the proposed Amendments do not have the potential to significantly impact the environment, no mitigation measures are proposed.
38. Central Valley Water Board staff has circulated a Notice of Public Hearing/Notice of Filing, a written Staff Report, an Environmental Checklist, and the proposed Amendments to interested individuals and public agencies, including persons having special expertise with regard to the environmental affects potentially involved with the proposed Amendments, for review and comment in accordance with state environmental regulations. (Cal. Code Regs., tit. 23, section 3775.)
39. The Central Valley Water Board held a public hearing on 23 February 2017, for the purpose of receiving testimony on the draft Basin Plan Amendment project. Notice of the public hearing was sent to all interested persons and published in accordance with Water Code section 13244.
40. The Central Valley Water Board received public comments on the Staff Report, an Environmental Checklist, and the proposed Amendments from 23 January 2017 through 24 March 2017, and has prepared a final draft staff report dated July 2017 which includes responses to comments received on the January 2017 draft.
41. The Central Valley Water Board held a public hearing on 11 August 2017 for the purposes of receiving testimony and considering approval of the proposed Basin Plan Amendment project. Notice of the public hearing was sent to all interested persons and published in accordance with Water Code section 13244.
42. Based on the record as a whole, including the Staff Report, Environmental Checklist, proposed Amendments, and public comments received, the Central Valley Water Board concurs with staff's conclusion that no actions are expected to cause a potentially significant impact to the environment as a result of the adoption of the proposed Amendments. The Central Valley Water Board finds that the record as a whole and the procedures followed by staff comply with applicable CEQA requirements. (Cal. Code Regs., tit. 23, § 3775 et seq., Pub. Res. Code §§ 21080.5, 21083.9, and 21159, Cal. Code Regs., tit. 14, § 15250 et seq.)
43. The proposed Amendments must be approved by the State Water Board, the Office of Administrative Law (OAL), and the U.S. Environmental Protection Agency (USEPA). The

proposed Amendments becomes effective under state law after OAL approval and becomes effective under the federal Clean Water Act after USEPA approval.

44. The Central Valley Water Board finds that the proposed Amendments were developed in accordance with Water Code section 13240, et seq.

**THEREFORE BE IT RESOLVED:**

1. Pursuant to Water Code section 13240, et seq., the Central Valley Water Board, after considering the entire record, including oral testimony received at the hearing, hereby approves the Staff Report and adopts the Amendments into the Sacramento and San Joaquin River Basin Plan and the Tulare Lake Basin Plan as set forth in Attachment 1.
2. The Executive Officer is directed to forward copies of the Basin Plan Amendments to the State Water Board in accordance with the requirements of section 13245 of the Water Code.
3. The Central Valley Water Board requests that the State Water Board approve the Basin Plan Amendments in accordance with the requirements of Water Code sections 13245 and 13246 and forward it to OAL and the USEPA for approval. The Central Valley Water Board specifically requests USEPA approval of all Basin Plan Amendments provisions that require USEPA approval.
4. If, during its approval process, the Central Valley Water Board staff, State Water Board, or OAL determines that minor, non-substantive corrections to the language of the Amendments are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Central Valley Water Board of any such changes.
5. The Central Valley Water Board hereby approves and adopts the CEQA Substitute Environmental Documentation, which was prepared in accordance with Public Resources Code section 21159, California Code of Regulations, title 14, section 15187, and California Code of Regulations, title 23, section 3777.
6. Following approval of the Basin Plan Amendments by the OAL, the Executive Officer shall file a Notice of Decision with the Secretary for Resources in accordance with Public Resources Code section 21080.5, subsection (d)(2)(E), and California Code of Regulations, title 23, section 3781.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 11 August 2017.

Original Signed By  
PAMELA C. CREEDON, Executive Officer

Attachments

**Attachment 1:** Amendments to the Sacramento and San Joaquin River Basin Plan and to the Tulare Lake Basin Plan to establish a region-wide Municipal and Domestic Supply (MUN) beneficial use evaluation process in agriculturally dominated surface water bodies and remove the MUN beneficial use from 231 constructed or modified Ag drains in the San Luis Canal Company District.



**ATTACHMENT 1  
RESOLUTION R5-2017-0088**

**AMENDMENT LANGUAGE FOR THE SACRAMENTO RIVER AND  
SAN JOAQUIN RIVER BASIN PLAN**

The proposed changes to the Basin Plan are as follows. Text additions to the existing Basin Plan language are underlined and *italicized*. Text deletions to the existing Basin Plan are in ~~strike~~through.

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**CHAPTER 2 BENEFICIAL USES**

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Modify the Basin Plan in Chapter 2 Beneficial Uses (page II-1.00), as follows:

***Limited Municipal and Domestic Supply (LMUN)*** – *Uses of water for municipal and domestic supply in agriculturally dominated water bodies where the use is limited by water body characteristics such as intermittent flow, management to maintain intended agricultural use and/or constituent concentrations in the water body.*

Modify the Basin Plan in Chapter 2 Beneficial Uses under the heading, “Surface Waters” (page II-2.01), as follows:

In making any exemptions to the beneficial use designation of MUN, the Regional Water Board will apply the exceptions listed in the *Sources of Drinking Water Policy* (Appendix Item 8) and the excepted water bodies will be listed in Appendix 44.

*Water bodies designated with the LMUN beneficial use are listed in Appendix 45.*

## CHAPTER 3 WATER QUALITY OBJECTIVES

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Chemical Constituents” (page III-3.00), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

~~At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To protect all beneficial uses the Regional Water Board may apply limits more stringent than MCLs.~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Water Quality Objectives for Inland Surface Waters” (page III-4.01), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

### **Cryptosporidium and Giardia**

~~Waters shall not contain Cryptosporidium and Giardia in concentrations that adversely affect the public water system component<sup>1</sup> of the MUN beneficial use. This narrative water quality objective for Cryptosporidium and Giardia shall be applied within the Sacramento-San Joaquin Delta and its tributaries below the first major dams (shown in Figure A44-1) and should be implemented as specified in Section IV of the Basin Plan. Compliance with this objective will be assessed at existing and new public water system intakes.~~

<sup>1</sup> ~~Public water system as defined in Health and Safety Code, section 116275, subdivision (h)~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Pesticides” (page III-6.00), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

- ~~• Waters designated of use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.~~
- ~~• Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thibencarb in excess of 1.0 µg/l.~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Radioactivity” (page III-6.01), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

~~At a minimum, waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table~~

~~64442 of Section 64442 and Table 64443 of Section 64443 of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect.~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, "Water Quality Objectives for Inland Surface Waters" (page III-9.00), as follows:

### **Municipal and Domestic Supply (MUN)**

In addition to other applicable water quality objectives including but not limited to narrative and site specific, the following sections specifically address waters designated for use as domestic or municipal supply (MUN).

### **Chemical Constituents**

At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To protect all beneficial uses the Regional Water Board may apply limits more stringent than MCLs.

### **Cryptosporidium and Giardia**

Waters shall not contain Cryptosporidium and Giardia in concentrations that adversely affect the public water system component<sup>1</sup> of the MUN beneficial use. This narrative water quality objective for Cryptosporidium and Giardia shall be applied within the Sacramento-San Joaquin Delta and its tributaries below the first major dams (shown in Figure A44-1) and should be implemented as specified in Section IV of the Basin Plan. Compliance with this objective will be assessed at existing and new public water system intakes.

<sup>1</sup> Public water system as defined in Health and Safety Code, section 116275, subdivision (h)

### **Pesticides**

Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/l.

**Radioactivity**

At a minimum, waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 64442 of Section 64442 and Table 64443 of Section 64443 of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect.

**Limited Municipal and Domestic Supply (LMUN)**

Water quality and downstream beneficial uses will be protected consistent with the state antidegradation policy.

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## CHAPTER 4 IMPLEMENTATION

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Modify the Basin Plan in Chapter 4 Implementation under the heading, "Continuous Planning for Implementation of Water Quality Control" (page IV-30.01), as follows:

**Municipal and Domestic Supply (MUN) Evaluation in Agriculturally Dominated Water Bodies**  
Agriculturally (Ag) dominated surface water bodies will be evaluated for the MUN beneficial use only as needed or desired by an interested party. The MUN evaluation process can be initiated by an outside party or the Regional Water Board. The Applicant submitting the evaluation must manage and/or control the water bodies under consideration or jointly submit the evaluation with such a party. Ag dominated surface water bodies that do not go through the MUN evaluation process will have no change to their MUN beneficial use designation. For the purposes of this evaluation, agricultural drainage is defined as water leaving an agricultural field either from irrigation practices or precipitation.

An Interim Ag Dominated Water Body Designation Reference Document will be used to list evaluated water bodies and their proposed water body categories and MUN designations until such a time that the list is incorporated into this Water Quality Control Plan via an amendment.

The Reference Document will be utilized to set interim water quality permit limits for a finite period, during which a public Board approval process would be used to incorporate evaluated water bodies and associated beneficial uses listed in the Reference Document into this Water Quality Control Plan. The finite period shall not exceed 5 years, with an allowance for a 3 year extension with Regional Water Board EO approval.

Using the process laid out in Figure X, Schematic Overview of Region-wide MUN Evaluation, the Applicant will utilize Figure Y, Water Body Categorization (WBC) Flowchart and Table X, Assigned MUN Beneficial Use Designations by Water Body Category to propose appropriate MUN beneficial use designations of Ag dominated water bodies.

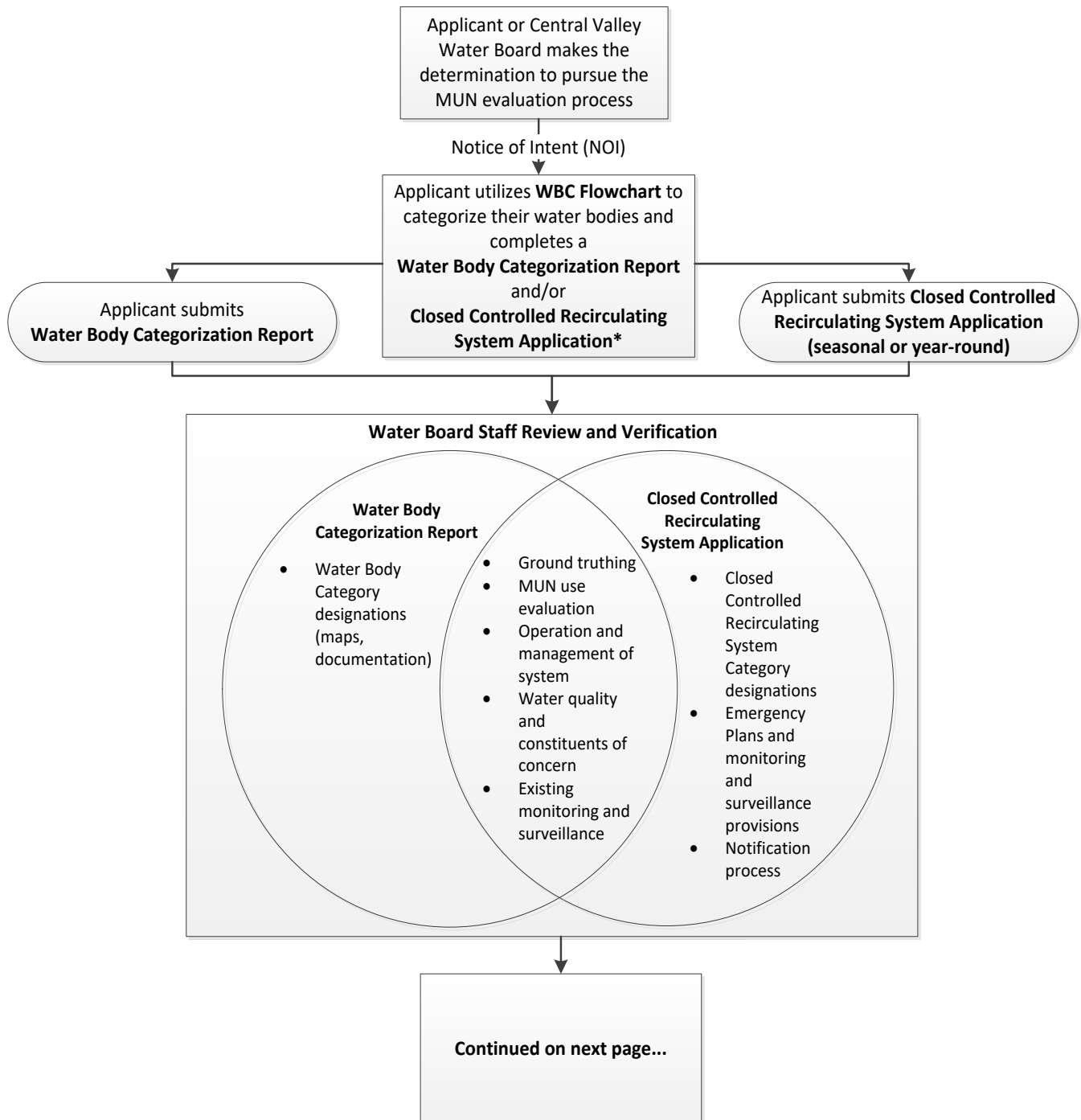
The proposed designations are subject to change based on the Regional Water Board staff and public review process outlined in Figure X,

The Region-wide MUN Evaluation process will not apply to water bodies that are already listed in Table II-1 of the Basin Plan or water bodies that are currently used for municipal or domestic water supply. Such water bodies would continue to be eligible for site specific beneficial use evaluations.

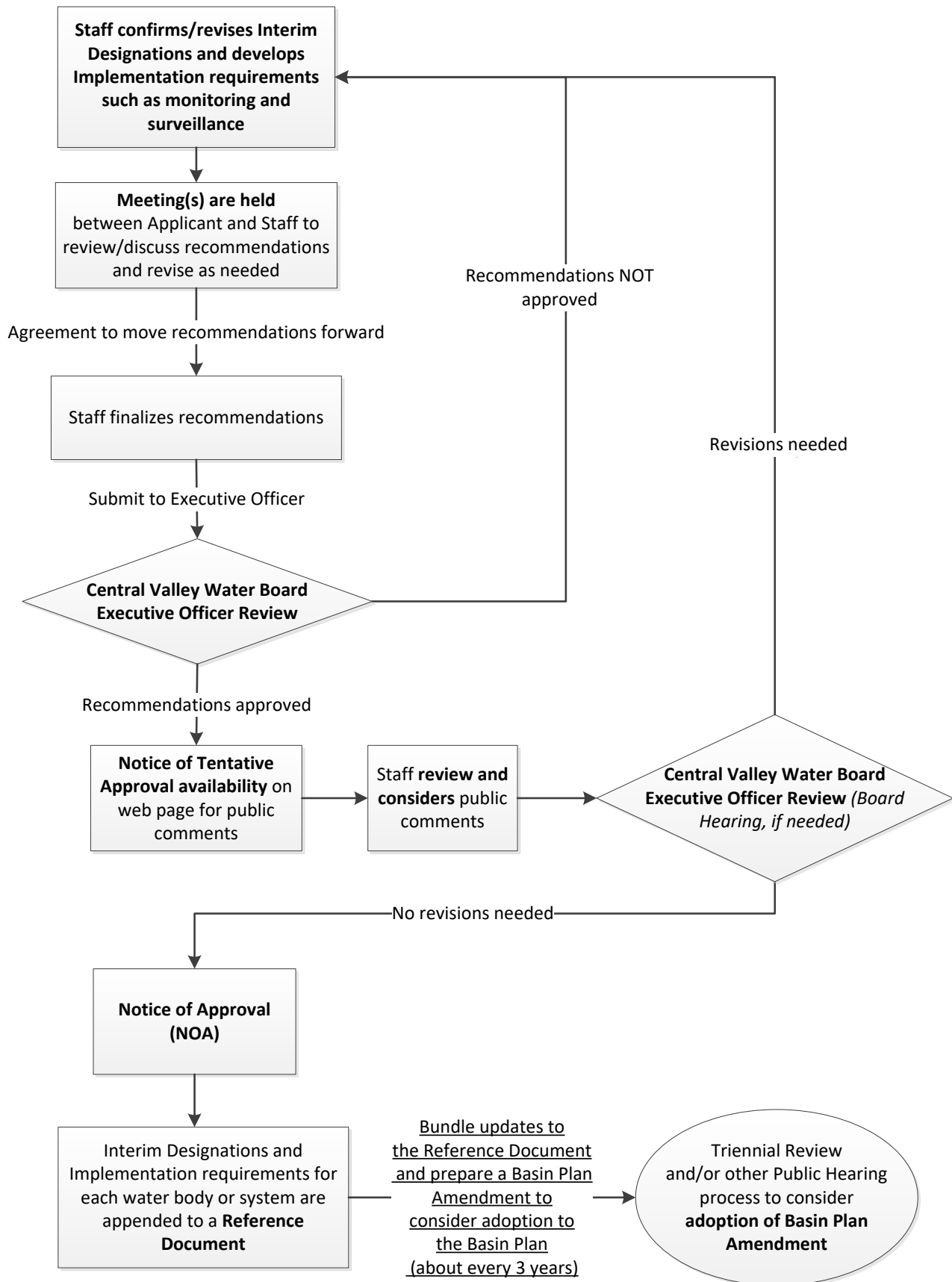
Table X Assigned MUN Beneficial Use Designations by water body category

<u><b>Water Body Category</b></u>	<u><b>MUN Beneficial Use</b></u>
<u><i>C1 (Constructed Aq Drainage/Combo)</i></u>	<u><i>No MUN</i></u>
<u><i>M1 (Modified Aq Drainage/Combo)</i></u>	<u><i>No MUN</i></u>
<u><i>C2 (Constructed Aq Supply)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>M2 (Modified Aq Supply)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>B1 (Natural Aq Drainage/Combo)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>B2 (Natural Aq Supply)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>Closed Controlled Recirculating Systems</i></u>	
<u><i>Year-Round Closed</i></u>	<u><i>No MUN</i></u>
<u><i>Seasonally Closed</i></u>	<u><i>No MUN during closure period</i></u>

*Figure X. Schematic Overview of Region-wide MUN Evaluation*



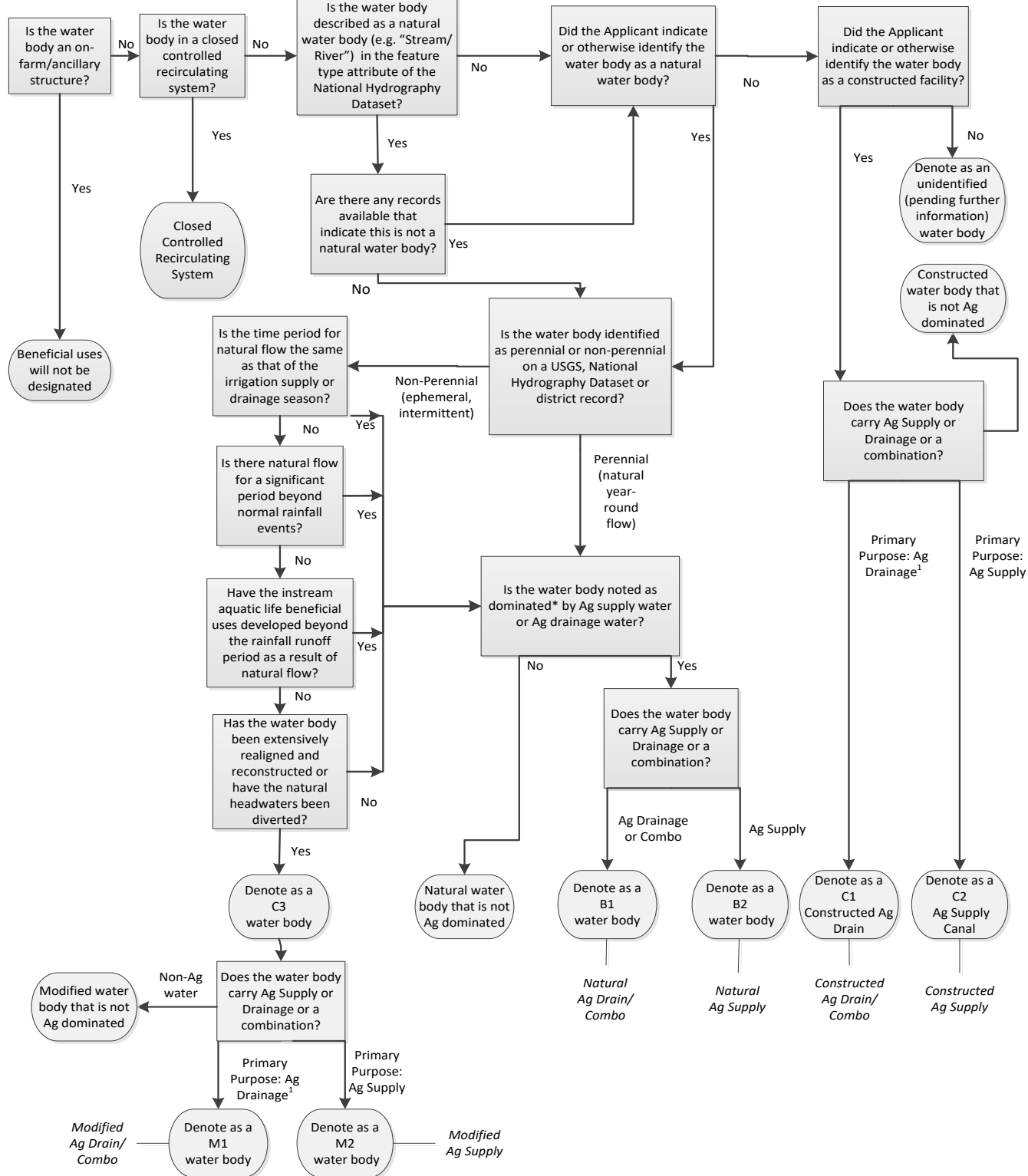
*\* There are two types of Closed Controlled Recirculating Systems: Seasonally Closed and Year-Round Closed. For Seasonally Closed Controlled Recirculating Systems, both the Water Body Categorization Report and the Closed Controlled Recirculating System Application are required for submittal. The Regional Water Board will have the discretion to ask for a full report for Closed Controlled Recirculating Systems depending on the size and complexity of the system.*





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Figure Y. Water Body Categorization (WBC) Flowchart



<sup>1</sup> Designed or modified for the primary purpose of conveying or holding agricultural drainage waters

\* **“Ag Dominated”** is defined as: systems designed or modified for the primary purpose of conveying or holding waters used for or resulting from agricultural production, and/or water bodies with greater than 50 percent of the flow dependent on agricultural operations for greater than 50 percent of the irrigation season.

Any non-listed constructed (C1 or C2) water body that is less than one mile and/or serving less than 640 irrigated acres from a study area that has been approved through the MUN Evaluation Process shall have their MUN beneficial use designation apply via the following rules:

- A non-listed C1 water body that provides or receives flow to or from an identified C1 water body shall be assigned the same MUN designation as the identified C1 water body
- A non-listed C2 water body that provides or receives flow to or from an identified C2 water body shall be assigned the same MUN designation as the identified C2 water body

## CHAPTER 5 SURVEILLANCE AND MONITORING

Modify the Basin Plan in Chapter 5 Surveillance and Monitoring under the heading, "Surveillance and Monitoring" (page V-5.01), as follows:

### **Municipal and Domestic Supply Beneficial Use (MUN) Evaluation in Agriculturally Dominated Water Bodies**

#### Water Bodies with MUN Beneficial Use De-designated or LMUN Beneficial Use Designated

As resources permit, Regional Water Board staff will work with other agencies and regional monitoring programs to monitor chemical constituents, pesticides, and radionuclides contained in the Title 22 of the California Code of Regulations, as well as relevant constituents associated with the narrative and site specific water quality objectives associated with MUN use, approximately every 3 to 5 years in major water bodies identified with existing or potential MUN use including but not limited to the Sacramento River, Feather River, San Joaquin River and Delta. The data gathered will support Watershed Sanitary Surveys (Cal. Code Regs, tit. 22, § 64665 et seq.) as well as the California Integrated Report (Clean Water Act Section 303(d)/305(b)).

The Regional Water Board will ensure that water quality monitoring data are sufficient to demonstrate that neither the de-designation of the MUN beneficial use nor the change of a MUN beneficial use designation to an LMUN beneficial use designation will result in unreasonable impacts to downstream water bodies designated as supporting the LMUN or MUN beneficial uses.

1. As part of the MUN evaluation process initiated by the Applicant, the Regional Water Board will conduct an evaluation of all existing and available water quality data to determine whether the de-designation of the MUN beneficial use or the change of a MUN beneficial use designation to a LMUN beneficial use designation will result in unreasonable impacts to water quality downstream of the water body being evaluated.
  - a. If existing and available water quality data support the conclusion that a change to a MUN beneficial use designation will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, the Regional Water Board need not require additional monitoring to comply with Exception 2b of the Sources of Drinking Water Policy.
  - b. If existing and available water quality data are not sufficient to support the conclusion that the change to the MUN beneficial use designation will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, the Regional Water Board shall evaluate whether monitoring requirements imposed by existing regulatory programs, such as the Irrigated Lands Regulatory Program or the NPDES Permitting Program, are sufficient to ensure that discharges from the system will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses. If such monitoring programs provide sufficient monitoring to ensure the protection of the LMUN or MUN beneficial uses in downstream water bodies, the continued implementation of those monitoring programs shall satisfy the monitoring requirement of Exception 2b of the Sources of Drinking Water Policy. Such monitoring programs shall remain in effect at least until such time that water quality data demonstrate that the change to the MUN beneficial use designation has not resulted in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, at which point the monitoring requirements may be altered or reduced consistent with applicable regulatory

requirements.

2. If neither existing and available water quality data nor monitoring requirements imposed by existing regulatory programs are sufficient to support the conclusion that the change to the MUN beneficial use designation will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, the Regional Water Board shall either modify existing monitoring programs or issue an order pursuant to Water Code section 13267 to ensure that discharges from the system do not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses. Such modified requirements or orders shall remain in effect at least until such time that water quality data demonstrate that the change to the MUN beneficial use designation has not resulted in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses.
3. In water bodies where the MUN beneficial use has been changed, the burden of ensuring that neither new discharges into the waterbody nor material changes in the character, location, or volume of existing discharges will result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses shall be borne by the applicant initiating the new discharge or making the material changes to the character, location, or volume of the existing discharge.

Water Bodies with LMUN Designated

To interpret the narrative objective and to evaluate compliance with the proposed objective for LMUN, existing Regional Water Board monitoring programs may use numeric triggers for chemical constituents, pesticides, and radionuclides concentrations in their process of issuing permits or waste discharge requirements. Exceedances of the triggers would not be violations of the proposed narrative objective nor are the triggers to be used for numeric effluent limits. Triggers may be used to evaluate conditions in the water body itself as well as potential impacts to downstream beneficial uses and ensure appropriate management and best practical treatment actions are taken to protect those uses.

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**APPENDIX**

Modify the Basin Plan in Appendix 44, Water Bodies That Meet One or More of the Sources of Drinking Water Policy (Resolution 88-63) Exceptions (page XX), as follows:

**Appendix 44**  
**Water Bodies That Meet One or More of the Sources of Drinking Water Policy (Resolution 88-63) Exceptions**

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description <u>(optional)</u>	Approximate GIS Coordinates {WGS84 Datum} <u>(optional)</u>		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
Butte		Cherokee Canal	Cherokee Canal runs southwest from the Richvale area (near Nelson Shippee Road) to Butte Creek, west of the City of Live Oak	(39.537741, -121.707079)	(39.285685, -121.921656)	<u>22</u>	<u>C1</u>
Butte		Lateral K	Lateral K is part of Reclamation District 833 and starts near 8th Street in the City of Biggs and travels southwest past the City of Bigg's Wastewater Treatment Plant to the Main Drainage Canal	(39.421894, -121.71297)	(39.406837, -121.725361)	<u>1.7</u>	<u>C1</u>
Butte		Main Drainage Canal	The Main Drainage Canal (also known as the Main Drain C) is part of Reclamation District 833 and starts on the south end of the City of Biggs near Trent Street and runs southwest to the Cherokee Canal	(39.41041, -121.704258)	39.327924, -121.882067	<u>13</u>	<u>C1</u>
Colusa		New Ditch (2011)	New Ditch (2011) starts near the south end of the Colusa Wastewater Treatment Plant and runs south, parallel to the unnamed tributary, until the two water bodies join near the effluent outfall and weir	(39.180224, -122.031358)	(39.174267, -122.031274)	<u>0.4</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
Colusa		Powell Slough	Powell Slough begins just north of Highway 20, downstream of Hopkins Slough, and runs south until its confluence with the Colusa Basin Drain	(39.211133, -122.062955)	(39.161267, -122.038445)	<u>5</u>	<u>M1</u>
Colusa		Sulphur Creek	Lower two miles from Schoolhouse Canyon to its confluence with Little Bear Creek	(39.035631, -122.437619)	(39.040144, -122.408168)		
Colusa		unnamed tributary (to Powell Slough)	unnamed tributary to Powell Slough starts near Will S. Green Avenue and runs west and southwest to Powell Slough	(39.188028, -122.02328)	(39.166857, -122.034722)	<u>2.1</u>	<u>C1</u>
Glenn		Ag Drain C	Glenn-Colusa Irrigation District's Ag Drain C (segments also known as North Fork Logan Creek and Logan Creek) runs southeast from Highway 5 near Highway 99W through the Sacramento Wildlife Refuge to the Colusa Basin Drain	(39.498519, -122.199216)	(39.356401, -122.082675)	<u>17</u>	<u>M1</u>
Sutter		East Interceptor Canal	The East Interceptor Canal starts at Pease Road and runs west until it meets the Wadsworth Canal.	(39.170745, -121.670588)	(39.171003, -121.727014)	<u>3</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <i>optional</i> )	Approximate GIS Coordinates (WGS84 Datum) ( <i>optional</i> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
Sutter		Lateral 1	Lateral 1 is part of Reclamation District 777 and starts near the City of Live Oak's Wastewater Treatment Plant and runs south and west to the Western Intercepting Canal	(39.257501, -121.678718)	(39.201248, -121.696329)	<u>5</u>	<u>C1</u>
Sutter		Lateral 2	Lateral 2 is part of Reclamation District 777. It starts on the south end of the City of Live Oak near Treatment Plant Access Road and runs south and then west past the City of Live Oak's Treatment Plant outfall until it meets Lateral 1	(39.264739, -121.669314)	(39.257501, -121.678718)	<u>1</u>	<u>C1</u>
Sutter		West Intercepting Canal ( <i>not to be confused with West Interceptor Canal</i> )	Western Interceptor Canal is under shared management between Reclamation District 777 and Reclamation District 2056. It starts south of Sanders Road and runs south until it meets the East Interceptor Canal	(39.201248, -121.696329)	(39.17092, -121.695374)	<u>2</u>	<u>C1</u>
Sutter		Wadsworth Canal	The Wadsworth Canal starts just north of Butte House Road and runs southwest until it meets the Sutter Bypass	(39.171003, -121.727014)	(39.113605, -121.768985)	<u>5</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>Arroyo Canal</u>				<u>18</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>Belmont Ditch</u>				<u>2</u>	<u>C1</u>



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County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>Clark Ditch</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>Cocke Ditch</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>Cowden Ditch</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>North Toscano Ditch</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>North Toscano Ditch No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>Schmidt Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>West Toscano Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>West Toscano Ditch North Ext.</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>West Willow Ditch</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>Arroyo Canal System</u>	<u>West Willow Ditch Extension</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Bennett Ditch</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Boundary Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Cement Lined Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Dairy Field Ditch No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Escano Ditch Br. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Escano Ditch Br. 2</u>				<u>0.2</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Escano Ditch North Br.</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Highway Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Orchard Ditch Extension</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Orchard Ditch No.2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Red Tank Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Santa Rita Orchard Ditch</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Temple Santa Rita Canal Ext.</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Temple- Santa Rita Canal System</u>	<u>Temple-Santa Rita Canal</u>				<u>12</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>Loop Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>Loop Ditch No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>Loop Ditch No. 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>Middle Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>Middle Ditch No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>Middle Ditch No. 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>North Bypass Lift Ditch</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>P.A. # 31 Lift Ditch</u>				<u>0.4</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Pick Anderson System</u>	<u>River Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>South Bypass Lift Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>South Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson System</u>	<u>South P. A. Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>Carlucci Ditch</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>Cement - Lined Ditch</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>Coute Ditch</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>Fagundes Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>San Juan No. 1 Canal</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>San Juan Canal</u>				<u>6</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Canal System</u>	<u>San Juan Canal Extension</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Delta No. 1 Canal System</u>	<u>Delta No. 1 Canal</u>				<u>6</u>	<u>C1</u>
<u>Merced</u>	<u>Delta No. 1 Canal System</u>	<u>M Ditch # 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta No. 1 Canal System</u>	<u>M Ditch # 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Boundary Lift Ditch</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>County Road Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Dambrosia Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Delta Canal</u>				<u>10</u>	<u>C1</u>

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				Starting Location	Ending Location		
<u>Merced</u>	<u>Delta Canal System</u>	<u>Delta Canal Extension</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Duni Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Duni Ditch Branch A</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Duni Ditch Branch B</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>East Delta Canal</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Eastside Canal</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Noble Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>Pugliese Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>West Delta Branch No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>West Delta Branch No. 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Delta Canal System</u>	<u>West Delta Canal</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>Island Canal System</u>	<u>Island "A" Canal</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>Island Canal System</u>	<u>Island "B" Canal</u>				<u>1.1</u>	<u>C1</u>
<u>Merced</u>	<u>Island Canal System</u>	<u>Island "C" Canal</u>				<u>1.2</u>	<u>C1</u>
<u>Merced</u>	<u>Island Canal System</u>	<u>Island "D" Canal</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Alberti Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Backer Ditch</u>				<u>0.1</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Cipriani Concrete - Lined Ditch</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Community Ditch</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Guaspari - Laveglia Comm. Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Lone Tree Canal</u>				<u>8</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Lone Tree Spur</u>				<u>0.4</u>	<u>C1</u>

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				Starting Location	Ending Location		
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Mackenzie Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Midway - Highway Ditch</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Midway - San Pedro Intertie</u>				<u>0.1</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Midway Canal</u>				<u>7</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Parsley Ditch</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>San Pedro Canal</u>				<u>7</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Swamp Ditch</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Midway &amp; San Pedro Canal System</u>	<u>Swamp Ditch Branch No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Belmont Drain</u>				<u>12</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Belmont Drain Extension North</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Belmont Drain No. 1</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>M-20W - Delta Seep Ditch</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>M-20W - Delta Seep Ditch Ext. # 1</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>M-20W - Delta Seep Ditch Ext. # 2</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>M-20W - Delta Seep Ditch Ext. # 3</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Miano Seep Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Plow Camp Drain</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Raven Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>San Juan Seep Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Spina S/D Br.</u>				<u>0.3</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Belmont Drain</u>	<u>Spina Seep Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Tallant Drain</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>Belmont Drain</u>	<u>Tallant Seep Drain</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Boundary Drain</u>				<u>10</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Derrick Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Derrick Drain Ext.</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Guaspari Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>H - R Willis Drain</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Knight Drain</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Mc Donald Drain</u>				<u>0.9</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Parsley Ditch Spill</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Sirse Drain</u>				<u>0.9</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>TL-6 Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain</u>	<u>Urzanqui Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 1</u>	<u>Boundary Drain No. 1</u>				<u>5</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 2</u>	<u>Boundary Drain No. 1 Br.</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 3</u>	<u>Boxcar / Neves Drain</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 4</u>	<u>Brista Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 5</u>	<u>Silva Drain</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 5</u>	<u>Boundary Drain No. 5</u>				<u>5</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 6</u>	<u>Boundary Drain No. 5-2</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 7</u>	<u>Boundary Drain No. 5-2-2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 8</u>	<u>Cipriani Drain</u>				<u>1</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Boundary Drain No. 9</u>	<u>Cipriani Drain Br. # 1</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 10</u>	<u>Gilardi - Johnson Drain</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 7</u>	<u>Boundary Drain No. 7</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Boundary Drain No. 8</u>	<u>Hooper Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>Circle Island Drain</u>	<u>Circle Island Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Devon Drain</u>	<u>Borba Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>Devon Drain</u>	<u>Devon Drain</u>				<u>6</u>	<u>C1</u>
<u>Merced</u>	<u>Devon Drain</u>	<u>Devon Drain Br. No. 1</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>Devon Drain</u>	<u>Lone Tree Seep Drain</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>Devon Drain</u>	<u>Panama Ditch</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>Hereford Drain</u>	<u>Hereford Drain</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>Hereford Drain</u>	<u>Hereford Drain Br. 1</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>Hereford Drain</u>	<u>Hereford Drain Br. 2</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>Hereford Drain</u>	<u>Hereford Drain Br. 3</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Hereford Drain</u>	<u>Hereford Drain Br. 4</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Hereford Drain</u>	<u>Island "A" Spill</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>Lift Pump Slough</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>Loop Drain No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>Middle Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P. A. Drain Ext., - River Br.</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P. A. Drain No.1</u>				<u>0.6</u>	<u>C1</u>

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County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description <u>(optional)</u>	Approximate GIS Coordinates (WGS84 Datum) <u>(optional)</u>		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P.A. Drain No. 3</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P.A. Drain No. 4</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P. A. Drain No. 5</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P. A. River Drain # 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>P. A. Seep Drain No. 2</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>Pick Anderson Bypass Drain</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>Pick Anderson Drain</u>				<u>5</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>River Drain No. 3</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>South Drain No. 1</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>South Drain No. 2</u>				<u>0.9</u>	<u>C1</u>
<u>Merced</u>	<u>Pick Anderson Bypass Drain</u>	<u>South P.A. Drain # 3</u>				<u>0.0</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Arroyo S/D</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Belmont Drain Cut Off</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Belmont Drain Extension South</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Branco Drain</u>				<u>0.7</u>	<u>C2</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Branco Drain No. 1</u>				<u>0.3</u>	<u>C3</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Buie Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Buie Drain Extension</u>				<u>0.9</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Poso Drain</u>				<u>10</u>	<u>C1</u>
<u>Merced</u>	<u>Poso Drain</u>	<u>Poso Slough</u>				<u>4</u>	<u>M1</u>



County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description <i>(optional)</i>	Approximate GIS Coordinates (WGS84 Datum) <i>(optional)</i>		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>Poso Drain</u>	<u>Poso Slough Drain Re-route</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Dairy Field 10-11 Drain</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Dairy Field Drain No. 2</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Dairy Field Drain No. 3</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>East Delta Drain</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Intake S/D</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Island B Seep Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Levee Drain</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Orchard Ditch Ext. Spill</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Salt Slough</u>				<u>7</u>	<u>M1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Salt Slough Ditch</u>				<u>3</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>Salt Slough Drain</u>				<u>8</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>San Joaquin River Drain</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>Salt Slough</u>	<u>South Dairy Field Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Azevedo Drain</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Kaljian Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Ledford Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Ledford Drain No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Lopes Drain</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Lopes Drain Ext.</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>M-22 Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>M-22 J-39, 40 &amp; 41 Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>San Juan Drain</u>				<u>10</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description <i>(optional)</i>	Approximate GIS Coordinates (WGS84 Datum) <i>(optional)</i>		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>San Juan Drain</u>	<u>San Juan Drain No. 3</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>San Juan Drain No. 3 - North Br.</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>San Juan Drain No. 3 - South Br.</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Sec. 14 Road Drain</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>San Juan Drain</u>	<u>Temple Santa Rita S/D</u>				<u>0.9</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Baffuna Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Bisignani Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Bisignani Drain No. 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Bisignani Drain No. 1</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Crayne Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>D - 36 Drain</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Dambrosia S/D</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Deep Well Road Drain</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Gun Club Drain</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>H - H Willis Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>M-2, D-6 &amp; D-7 Drains</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Pedro Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>TL-7 Drain</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>Vieira Drain</u>				<u>0.7</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>West Delta Drain</u>				<u>6</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>West Delta Drain Br. No. 1</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>West Delta Drain Br. No. 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>West Delta Drain Branch "A"</u>				<u>0.5</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>West Delta Drain</u>	<u>West Delta Drain No. 2</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>West Delta Drain</u>	<u>West Delta Seep Drain No. 1</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>Delta 1 Spill 1</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>M-20-W Drain No. 1</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>M-20-W Drain No. 2</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>North San Juan No. 1 S/D</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>San Juan 1 Spill</u>				<u>0.2</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>South San Juan No. 1 S/D</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>W. San Juan Silva Branch Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Carlucci Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Carlucci Drain No. 1</u>				<u>0.9</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain</u>				<u>6</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain Ext.</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain No. 1</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain No. 1-1</u>				<u>0.3</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain No. 1-2</u>				<u>0.4</u>	<u>C1</u>

County	<u>Primary Water Body or Main System Name (if applicable)</u>	Water Body Name	Description ( <u>optional</u> )	Approximate GIS Coordinates (WGS84 Datum) ( <u>optional</u> )		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				Starting Location	Ending Location		
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain No. 1-3</u>				<u>0.5</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>West San Juan Drain Reroute</u>				<u>0.8</u>	<u>C1</u>
<u>Merced</u>	<u>West San Juan Drain</u>	<u>Willis Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>Auxiliary Drain</u>				<u>1</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>Christiana Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>Elgin Co-op Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>Escano Drain</u>				<u>2</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>Fialho Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>North Escano Drain</u>				<u>0.4</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>West Santa Rita Drain</u>				<u>4</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>West Santa Rita Drain Branch No. 1</u>				<u>0.6</u>	<u>C1</u>
<u>Merced</u>	<u>West Santa Rita Drain</u>	<u>West Santa Rita Drain By-pass</u>				<u>0.5</u>	<u>C1</u>



## AMENDMENT LANGUAGE FOR THE TULARE LAKE BASIN PLAN

The proposed changes to the Basin Plan are as follows. Text additions to the existing Basin Plan language are underlined and *italicized*. Text deletions to the existing Basin Plan are in ~~strikethrough~~.

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### CHAPTER 2 BENEFICIAL USES

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Modify the Basin Plan in Chapter 2 Beneficial Uses (page II-1), as follows:

**Limited Municipal and Domestic Supply (LMUN)** – *Uses of water for municipal and domestic supply in agriculturally dominated water bodies where the use is limited by water body characteristics such as intermittent flow, management to maintain intended agricultural use and/or constituent concentrations in the water body.*

Modify the Basin Plan in Chapter 2 Beneficial Uses (page II-2), as follows:

The existing and probable future beneficial uses which currently apply to surface waters are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams. In some cases a beneficial use may not be applicable to the entire body of water. In these cases the Regional Water Board's judgement will be applied. It should be noted that it is impractical to list every surface water body in the Region. For unidentified water bodies, the beneficial uses will be evaluated on a case-by-case basis.

*In making any exemptions to the beneficial use designation of MUN, the Regional Water Board will apply the exceptions listed in the Sources of Drinking Water Policy (Appendix Item 8) and the excepted water bodies will be listed in Appendix 35.*

*Water bodies designated with the LMUN beneficial use are listed in Appendix 36.*

## CHAPTER 3 WATER QUALITY OBJECTIVES

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Chemical Constituents” (page III-3), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

~~At a minimum, water designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated MUN shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Pesticides” (page III-4), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

~~At a minimum, waters designated MUN shall not contain concentrations of pesticide constituents in excess of the maximum contaminant levels (MCLs) specified in Table 64444-A (Organic Chemicals) of Section 64444 of Title 22 of the California Code of Regulations, which is incorporated by reference into this plan. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, “Radioactivity” (page III-4), as follows and move under heading, “Municipal and Domestic Supply (MUN)”:

~~At a minimum, waters designated MUN shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 64442 of Section 64442 and Table 64443 of Section 64443 of Title 22, California Code of Regulations, which are incorporated by reference into this plan. This incorporation by reference is prospective, including future changes to the incorporated provisions as the changes take effect.~~

Modify the Basin Plan in Chapter 3 Water Quality Objectives under the heading, "Water Quality Objectives for Inland Surface Waters" (page III-7), as follows:

**Municipal and Domestic Supply (MUN)**

In addition to other applicable water quality objectives including but not limited to narrative and site specific, the following sections specifically address waters designated for use as domestic or municipal supply (MUN).

**Chemical Constituents**

At a minimum, water designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated MUN shall not contain lead in excess of 0.015 mg/l. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs

**Pesticides**

At a minimum, waters designated MUN shall not contain concentrations of pesticide constituents in excess of the maximum contaminant levels (MCLs) specified in Table 64444-A (Organic Chemicals) of Section 64444 of Title 22 of the California Code of Regulations, which is incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. The Regional Water Board acknowledges that specific treatment requirements are imposed by state and federal drinking water regulations on the consumption of surface waters under specific circumstances. To ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.

**Radioactivity**

At a minimum, waters designated MUN shall not contain concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 64442 of Section 64442 and Table 64443 of Section 64443 of Title 22, California Code of Regulations, which are incorporated by reference into this plan. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect.



**Limited Municipal and Domestic Supply (LMUN)**

Water quality and downstream beneficial uses will be protected consistent with the state antidegradation policy.

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## CHAPTER 4 IMPLEMENTATION

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Modify the Basin Plan in Chapter 4 Implementation under the heading, “Continuous Planning for Implementation of Water Quality Control” (page IV-30), as follows:

### **Municipal and Domestic Supply (MUN) Evaluation in Agriculturally Dominated Water Bodies**

Agriculturally (Ag) dominated surface water bodies will be evaluated for the MUN beneficial use only as needed or desired by an interested party. The MUN evaluation process can be initiated by an outside party or the Regional Water Board. The Applicant submitting the evaluation must manage and/or control the water bodies under consideration or jointly submit the evaluation with such a party. Ag dominated surface water bodies that do not go through the MUN evaluation process will have no change to their MUN beneficial use designation. For the purposes of this evaluation, agricultural drainage is defined as water leaving an agricultural field either from irrigation practices or precipitation.

An Interim Ag Dominated Water Body Designation Reference Document will be used to list evaluated water bodies and their proposed water body categories and MUN designations until such a time that the list is incorporated into this Water Quality Control Plan via an amendment.

The Reference Document will be utilized to set interim water quality permit limits for a finite period, during which a public Board approval process would be used to incorporate evaluated water bodies and associated beneficial uses listed in the Reference Document into this Water Quality Control Plan. The finite period shall not exceed 5 years, with an allowance for a 3 year extension with Regional Water Board EO approval.

Using the process laid out in Figure X, Schematic Overview of Region-wide MUN Evaluation, the Applicant will utilize Figure Y, Water Body Categorization (WBC) Flowchart and Table X, Assigned MUN Beneficial Use Designations by Water Body Category to propose appropriate MUN beneficial use designations of Ag dominated water bodies.

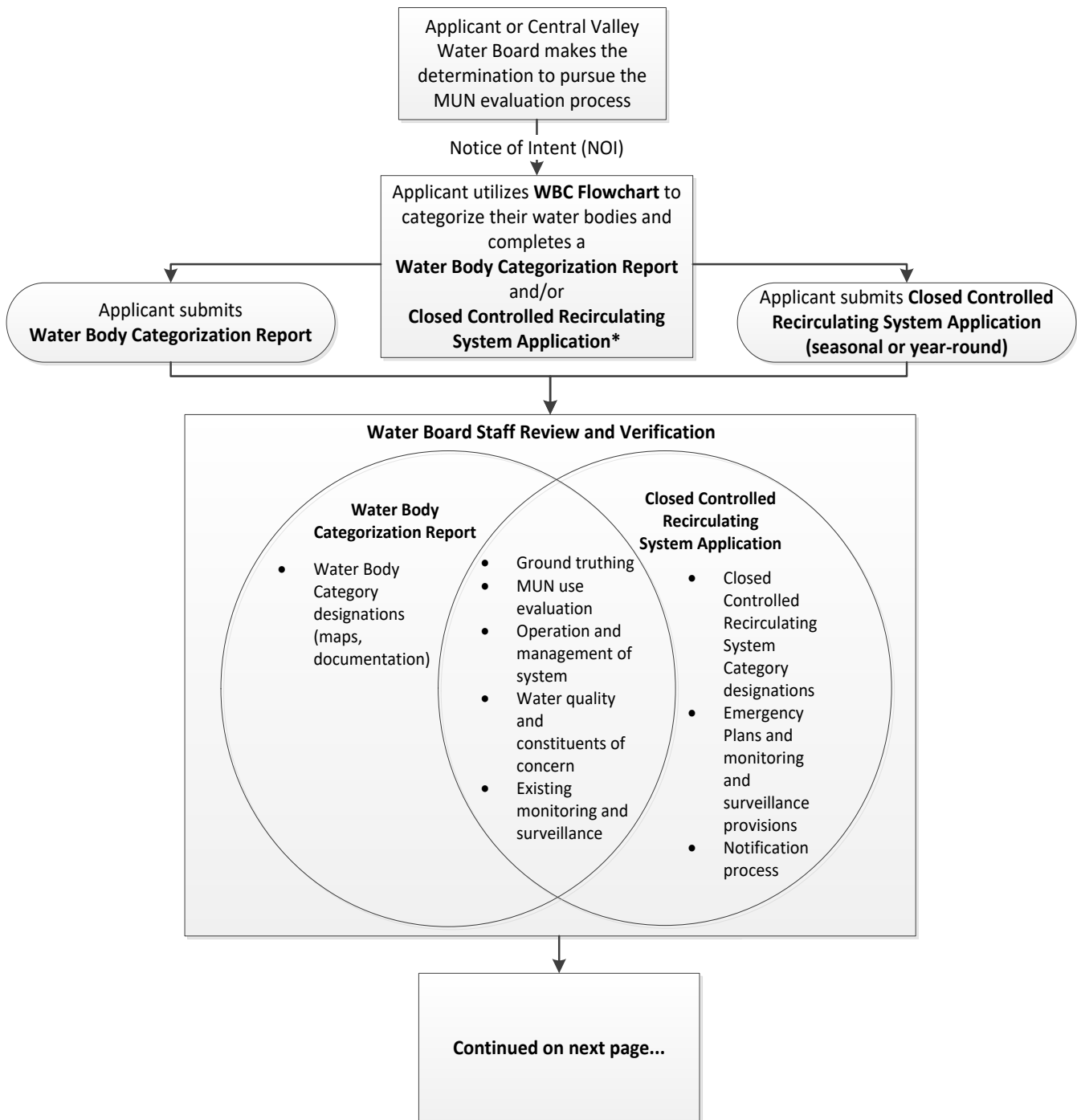
The proposed designations are subject to change based on the Regional Water Board staff and public review process outlined in Figure X.

The Region-wide MUN Evaluation process will not apply to water bodies that are already listed in Table II-1 of the Basin Plan or water bodies that are currently used for municipal or domestic water supply. Such water bodies would continue to be eligible for site specific beneficial use evaluations.

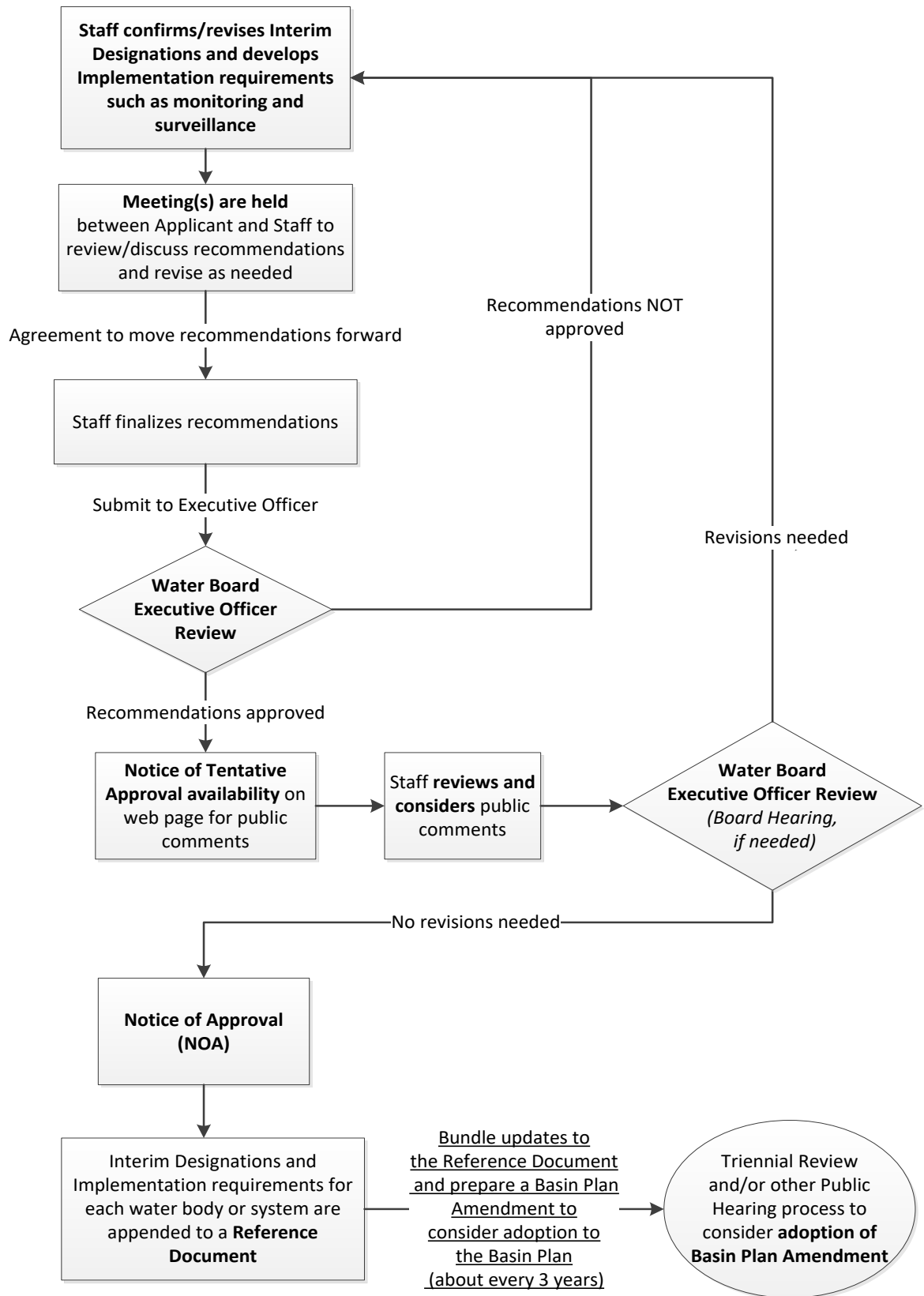
Table X Assigned MUN Beneficial Use Designations by Water Body Category

<u><b>Water Body Category</b></u>	<u><b>MUN Beneficial Use</b></u>
<u><i>C1 (Constructed Aq Drainage/Combo)</i></u>	<u><i>No MUN</i></u>
<u><i>M1 (Modified Aq Drainage/Combo)</i></u>	<u><i>No MUN</i></u>
<u><i>C2 (Constructed Aq Supply)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>M2 (Modified Aq Supply)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>B1 (Natural Aq Drainage/Combo)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>B2 (Natural Aq Supply)</i></u>	<u><i>LIMITED-MUN</i></u>
<u><i>Closed Controlled Recirculating Systems</i></u>	
<u><i>Year-Round Closed</i></u>	<u><i>No MUN</i></u>
<u><i>Seasonally Closed</i></u>	<u><i>No MUN during closure period</i></u>

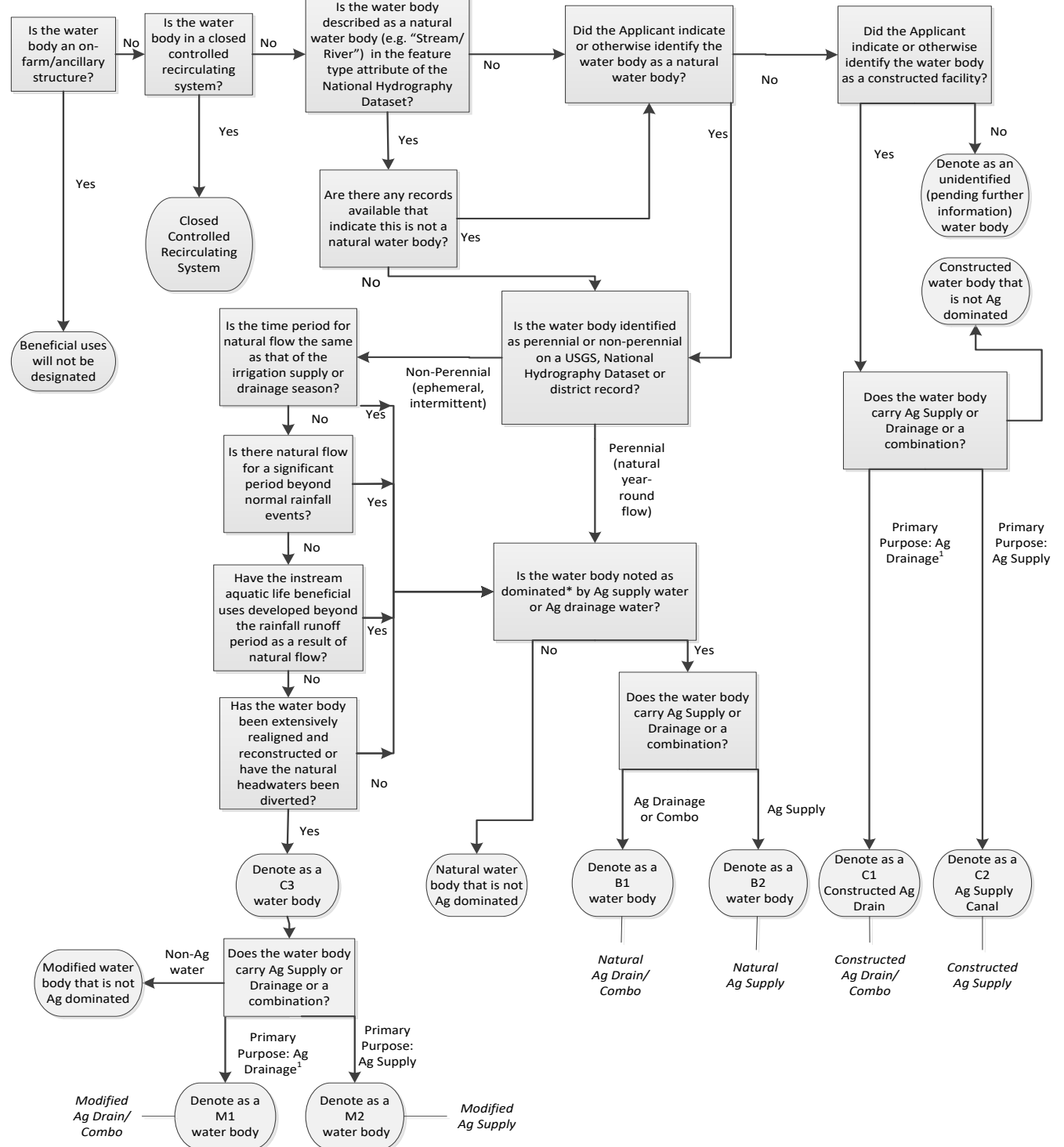
*Figure X. Schematic Overview of Region-wide MUN Evaluation*



*\* There are two types of Closed Controlled Recirculating Systems: Seasonally Closed and Year-Round Closed. For Seasonally Closed Controlled Recirculating Systems, both the Water Body Categorization Report and the Closed Controlled Recirculating System Application are required for submittal. The Regional Water Board will have the discretion to ask for a full report for Closed Controlled Recirculating Systems depending on the size and complexity of the system.*



**Figure Y. Water Body Categorization (WBC) Flowchart**



<sup>1</sup> Designed or modified for the primary purpose of conveying or holding agricultural drainage waters

\* **“Ag Dominated”** is defined as: systems designed or modified for the primary purpose of conveying or holding waters used for or resulting from agricultural production, and/or water bodies with greater than 50 percent of the flow dependent on agricultural operations for greater than 50 percent of the irrigation season.

Any non-listed constructed (C1 or C2) water body that is less than one mile and/or serving less than 640 irrigated acres from a study area that has been approved through the MUN Evaluation Process shall have their MUN beneficial use designation apply via the following rules:

- A non-listed C1 water body that provides or receives flow to or from an identified C1 water body shall be assigned the same MUN designation as the identified C1 water body
- A non-listed C2 water body that provides or receives flow to or from an identified C2 water body shall be assigned the same MUN designation as the identified C2 water body

## CHAPTER 6 SURVEILLANCE AND MONITORING

### **Municipal and Domestic Supply Beneficial Use (MUN) Evaluation in Agriculturally Dominated Water Bodies**

#### Water Bodies with MUN Beneficial Use De-designated or LMUN Beneficial Use Designated

As resources permit, Regional Water Board staff will work with other agencies and regional monitoring programs to monitor chemical constituents, pesticides, and radionuclides contained in the Title 22 of the California Code of Regulations, as well as relevant constituents associated with the narrative and site specific water quality objectives associated with MUN use, approximately every 3 to 5 years in major water bodies identified with existing or potential MUN use. The data gathered will support Watershed Sanitary Surveys (Cal. Code Regs, tit. 22, § 64665 et seq.) as well as the California Integrated Report (Clean Water Act Section 303(d)/305(b)).

The Regional Water Board will ensure that water quality monitoring data are sufficient to demonstrate that neither the de-designation of the MUN beneficial use nor the change of a MUN beneficial use designation to an LMUN beneficial use designation will result in unreasonable impacts to downstream water bodies designated as supporting the LMUN or MUN beneficial uses.

1. As part of the MUN evaluation process initiated by the Applicant, the Regional Water Board will conduct an evaluation of all existing and available water quality data to determine whether the de-designation of the MUN beneficial use or the change of a MUN beneficial use designation to a LMUN beneficial use designation will result in unreasonable impacts to water quality downstream of the water body being evaluated.
  - a. If existing and available water quality data support the conclusion that a change to a MUN beneficial use designation will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, the Regional Water Board need not require additional monitoring to comply with Exception 2b of the Sources of Drinking Water Policy.
  - b. If existing and available water quality data are not sufficient to support the conclusion that the change to the MUN beneficial use designation will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, the Regional Water Board shall evaluate whether monitoring requirements imposed by existing regulatory programs, such as the Irrigated Lands Regulatory Program or the NPDES Permitting Program, are sufficient to ensure that discharges from the system will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses. If such monitoring programs provide sufficient monitoring to ensure the protection of the LMUN or MUN beneficial uses in downstream water bodies, the continued implementation of those monitoring programs shall satisfy the monitoring requirement of Exception 2b of the Sources of Drinking Water Policy. Such monitoring programs shall remain in effect at least until such time that water quality data demonstrate that the change to the MUN beneficial use designation has not resulted in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN



beneficial uses, at which point the monitoring requirements may be altered or reduced consistent with applicable regulatory requirements.

2. If neither existing and available water quality data nor monitoring requirements imposed by existing regulatory programs are sufficient to support the conclusion that the change to the MUN beneficial use designation will not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses, the Regional Water Board shall either modify existing monitoring programs or issue an order pursuant to Water Code section 13267 to ensure that discharges from the system do not result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses. Such modified requirements or orders shall remain in effect at least until such time that water quality data demonstrate that the change to the MUN beneficial use designation has not resulted in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses.
3. In water bodies where the MUN beneficial use has been changed, the burden of ensuring that neither new discharges into the waterbody nor material changes in the character, location, or volume of existing discharges will result in unreasonable impacts to water quality in downstream water bodies that are designated as supporting the LMUN or MUN beneficial uses shall be borne by the applicant initiating the new discharge or making the material changes to the character, location, or volume of the existing discharge.

#### Water Bodies with LMUN Designated

To interpret the narrative objective and to evaluate compliance with the proposed objective for LMUN, existing Regional Water Board monitoring programs may use numeric triggers for chemical constituents, pesticides, and radionuclides concentrations in their process of issuing permits or waste discharge requirements. Exceedances of the triggers would not be violations of the proposed narrative objective nor are the triggers to be used for numeric effluent limits. Triggers may be used to evaluate conditions in the water body itself as well as potential impacts to downstream beneficial uses and ensure appropriate management and best practical treatment actions are taken to protect those uses.

**APPENDIX**

Modify the Basin Plan by adding Appendix 35, Water Bodies That Meet One or More of the Sources of Drinking Water Policy (Resolution 88-63) Exceptions (page XX), as follows:

**Appendix 35**  
**Water Bodies That Meet One or More of the Sources of Drinking Water Policy (Resolution 88-63) Exceptions**

<u>County</u>	<u>Primary Water Body or Main System Name (if applicable)</u>	<u>Water Body Name</u>	<u>Description (optional)</u>	<u>Approximate GIS Coordinates (optional)</u>		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				<u>Starting Location</u>	<u>Ending Location</u>		

Modify the Basin Plan by adding Appendix 36, Water Bodies with LMUN Beneficial Use (page XX), as follows:

**Appendix 36**  
**Water Bodies with LMUN Beneficial Use**

<u>County</u>	<u>Primary Water Body or Main System Name (if applicable)</u>	<u>Water Body Name</u>	<u>Description (optional)</u>	<u>Approximate GIS Coordinates (optional)</u>		<u>Length of Water Body Segment (miles)</u>	<u>Water Body/System Category Designation</u>
				<u>Starting Location</u>	<u>Ending Location</u>		