

Draft Excerpts from the *Establishment of a Region-wide Municipal and Domestic Supply (MUN) Beneficial Use Evaluation Process in Agriculturally Dominated Surface Water Bodies Basin Plan Amendment Staff Report*

Program of Implementation, Chapter 11

11 PROGRAM OF IMPLEMENTATION

This section describes the proposed program of implementation for the Preferred Alternative for a region-wide water body categorization framework identified in Section 7. The Water Code requires that a Basin Plan Amendment include an implementation program to achieve water quality objectives. More details about the Water Code regulations can be found in Section 4. This section includes a review of potential implementation options and addresses all elements of the preferred implementation program, with the exception of the monitoring and surveillance program, which is described in Section 12.

11.1 REVIEW OF IMPLEMENTATION OPTIONS

Two implementation options for a water body categorization framework were proposed as viable approaches to ensuring a consistent process for evaluating the MUN beneficial use in Ag dominated surface water bodies across the region. The two options are: 1) Implement the process on an as needed basis or; 2) Implement the process on a time schedule. The options are discussed in more detail below, followed by staff's recommendation in Section 11.2.

11.1.1 "As Needed Basis"

For the "As Needed Basis" option, Ag dominated surface water bodies are evaluated for the MUN beneficial use only as needed or desired by an interested party, such as a local water agency, irrigation district or the Central Valley Water Board. The Applicant submitting the evaluation, with the exception of the Central Valley Water Board, must either manage/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 would have no change to their current MUN beneficial use designation.

An important element of this "As Needed" option is the use of a Reference Document to list evaluated water bodies and their proposed water body categories and MUN designations until such time that the refinements are adopted into the appropriate Central Valley Water Quality Control Plan (Basin Plan). The Reference Document could then be utilized to set interim water quality permit limits for a finite period. During this interim period, the Triennial Review process or a similar public Board approval process would be used to incorporate evaluated water bodies and associated beneficial uses listed in the Reference Document into the Basin Plan(s). This option provides flexibility to water districts or other stakeholders to decide whether or not they

want to evaluate the MUN beneficial use designation in their area. The Reference Document enables the Central Valley Water Board to set interim permit limits that appropriately protect the MUN beneficial use while efficiently processing Basin Plan Amendments.

11.1.2 Time Schedule

For the “Time Schedule” option, a schedule with specific dates would be established to have all Ag dominated surface water bodies across the region categorized and accordingly designated with the appropriate MUN beneficial use designation. Evaluated water bodies would be adopted into the Basin Plans with their appropriate MUN beneficial use designation according to the requirements set forth in the Time Schedule. For example, different completion dates for the evaluation could be set for each basin in the region. This option would provide a definitive timeline for completing the MUN evaluation of all Ag dominated surface water bodies throughout the Central Valley. Water bodies not evaluated during this process would have no change to their current beneficial use designation unless evaluated in the future under a site specific Basin Plan Amendment.

11.1.3 Evaluation of Implementation Options and Recommendation

The following criteria were used to evaluate the implementation options:

- 1) Maintain consistency with federal and state water quality laws and policies as applicable (e.g. Sources of Drinking Water Policy, Antidegradation Policy).
- 2) Provide the appropriate protection of MUN in Ag dominated surface water bodies with consideration given to the current and potential future use of drinking water.
- 3) Assure compliance with all relevant water quality objectives downstream.
- 4) Allow constructed Ag dominated water bodies to be utilized for their intended design and purpose.
- 5) Provide a solution for dischargers faced with implementing treatment measures to meet MUN use-based water quality criteria/objectives when no such use exists in their Ag dominated surface water bodies.
- 6) Make efficient (reasonable) use of Central Valley Water Board and stakeholder resources to develop and implement water quality standards.

More details of the evaluation given to the two implementation options, including the scoring each received for the relevant selection criteria, is provided in Table D.5 in Appendix D. Both implementation options scored the same for all selection criteria except for # 5 (“Provide a solution to dischargers faced with implementing treatment measures to meet MUN use-based water quality criteria/objectives when no such use exists in their Ag dominated surface water bodies”). . The “As Needed Basis” option has a rating of High, whereas the “Time Schedule” option has a rating of Low for selection criteria #5.

The “As Needed” option provides more flexibility to dischargers by allowing them to decide whether or not they need the MUN evaluation in their area and when to start the application process. The “As Needed Basis” also provides the flexibility of allowing a Reference Document to be used for interim permit limits and a rolling review and adoption process that ensures new and/or changed water bodies can be addressed in the future.

In terms of selection criteria # 6 (“Make efficient (reasonable) use of Central Valley Water Board and stakeholder resources to develop and implement water quality standards”), both options will require significant resource and time commitments by staff and stakeholders to complete the necessary submittal, review and approval steps. The “As Needed Basis” option is less of an immediate time and resource commitment, but would require ongoing Central Valley Water Board support to the process. Conversely, adoption of the “Time Schedule” option would require a large upfront commitment of resources from Central Valley Water Board staff and the region’s Ag dischargers and associated water agencies to ensure that over six thousand Ag dominated water bodies are evaluated in a timely manner.

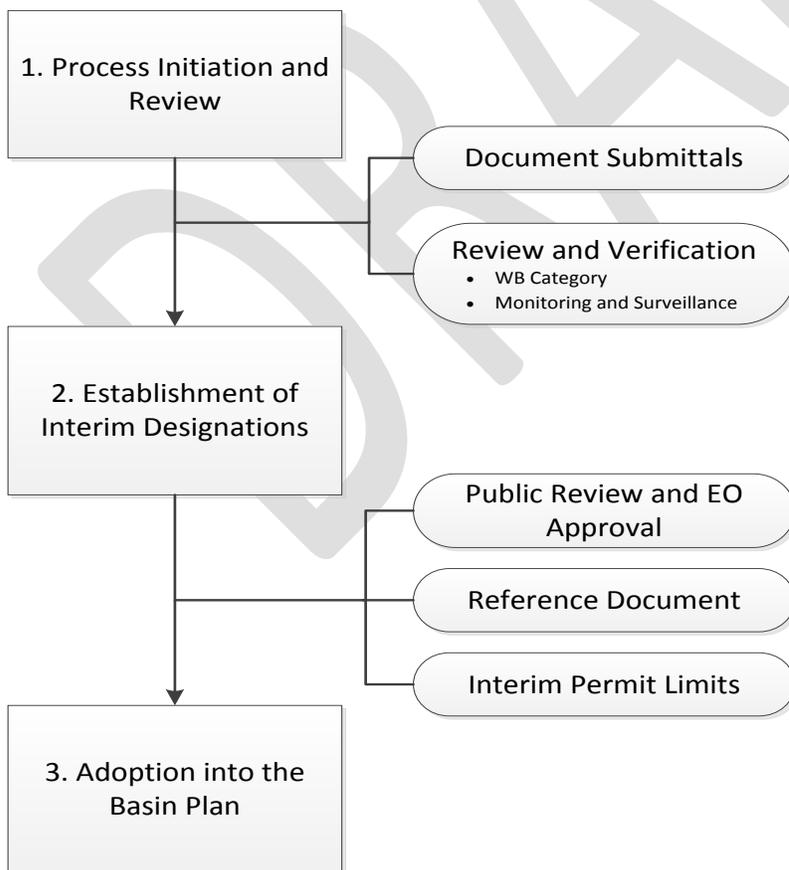
11.2 PROPOSED IMPLEMENTATION PROGRAM

11.2.1 Three Key Steps of the Implementation Program

The implementation program can be summarized in three main steps:

- 1) Process Initiation and Review
- 2) Establishment of Interim Designations
- 3) Adoption into the Basin Plan

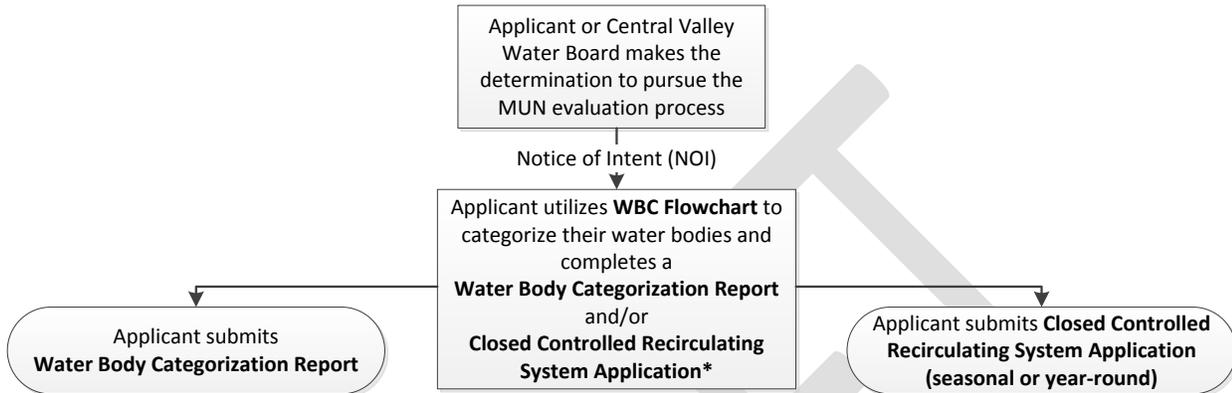
Figure 6. Simplified Schematic Overview of Region-wide MUN Evaluation



Each of the three steps is described in more detail in the following sections and then summarized in a schematic overview (Figure 7).

11.2.2 Step 1: Process Initiation and Review

11.2.2.1 Submittal of Report and/or Application



The MUN evaluation process begins when an applicant submits a Notice of Intent (NOI). The applicant must include the following items in a NOI:

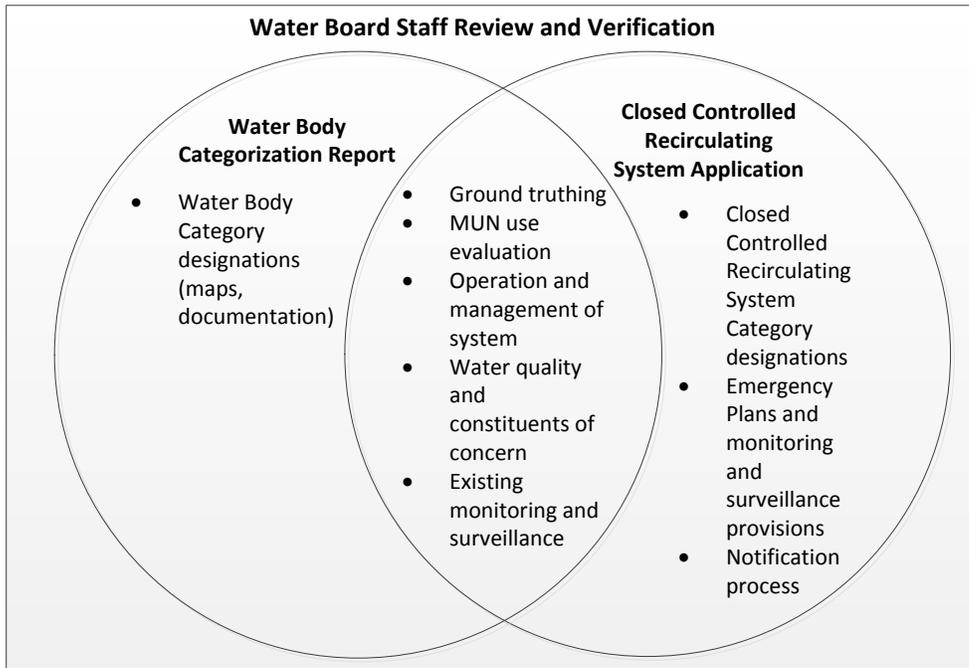
- Applicant name and mailing address
- Managing/operating entity (if different from the applicant)
- Contact person (include phone and email)
- Total number of water body(ies) or approximate area under consideration
- Anticipated date of required documents submittal - must be within one year of NOI unless extension approved by the Executive Officer (EO).

An email notification will be sent out to interested parties when the Central Valley Water Board receives an NOI. Staff will periodically update the Central Valley Water Board website and the EO report with submitted NOIs.

The Applicant will utilize the Water Body Categorization (WBC) Flowchart (See Figure Y of the proposed Basin Plan Language) to categorize their water bodies and complete either a WBC Report (template is presented in Appendix F) and/or a Closed Controlled Recirculating System Application (templates are presented in Appendix G and H)¹. Once the Applicant submits a report and/or application, Central Valley Water Board staff will start the review and verification process.

¹ 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 Central Valley 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.

11.2.2.2 Central Valley Water Board Staff Review and Verification



Once the applicable documents are submitted to the Central Valley Water Board, the subsequent staff review and verification process will consist of multiple key assessments as described in the steps below. An example of staff's review process for the SLCC case study is included as Appendix C—Staff review of SLCC report.

11.2.2.2.1 Water Body Categorization Report Review

1. Verification of Water Body Category Designations
 - a. Review submitted documentation (including photos and construction records) that describe the operation/management of the receiving waters and support the Applicant's water body category designations
 - b. Cross-check Applicant's water body category designations with information provided in the National Hydrography Dataset, reports submitted in 1992 as part of the ISWP (if applicable) and other publically available information as needed.
 - c. Ground-truth the area by conducting site surveys of a portion of the Applicant's water bodies. Central Valley Water Board staff will conduct a site visit to all water bodies categorized as natural or modified (B1, B2, M1, M2 water bodies). In addition, approximately 10% of constructed water bodies (C1, C2 water bodies) will be visited and verified as appropriately categorized. Additional water bodies may be visited if staff finds any discrepancies while conducting the reviews in steps 1.a and 1.b above.

2. Verification of MUN diversions within and downstream of the area
 - a. Verify the Applicant's identification of any diversions for municipal or domestic supply within and/or downstream of the receiving water bodies under consideration using publically available information such as the State Water Resource Control Board's Electronic Water Rights Information Management System (eWRIMS) (State Water Board , 2014).
 - b. Any Water Rights permits or filings for potential future surface water MUN diversion within or downstream of the water bodies identified in the report and prior to the first existing MUN diversion will be considered in evaluating the MUN beneficial use. *Note - any water body that is found, through this evaluation process, to be providing or wheeling municipal or domestic supply will not have its current MUN designation changed through this process.*
3. Identification of water quality constituents of concern.
 - a. Highlight information on any identified water quality constituents of concern to MUN beneficial use identified by the Applicant in their report.
 - b. Review relevant publically available water quality information to identify any additional water quality constituents of concern within or downstream of the system. At a minimum, staff will review the California Integrated 303(d) and 305(b) Report. This task may also include reviewing documents such as the Irrigated Lands Regulatory Program's Management Plans, NPDES self-monitoring reports, Division of Drinking Water's Watershed Sanitary Surveys and, as applicable, other outside data sources.
 - c. Confirm any control programs in place (e.g. TMDLs, Management Plans) to address these constituents of concern.
4. Review of existing water quality monitoring in and downstream of the water bodies identified in the report.
 - a. Review information on any water quality monitoring identified in the district's report.
 - b. Evaluate additional water quality monitoring program information within and downstream of the district at a minimum to the first identified existing or petitioned future diversion for municipal or domestic supply using the Central Valley Water Board's comprehensive monitoring guides (Central Valley Water Board, 2015).

The comprehensive monitoring guides include detailed monitoring information (including site location, monitored constituents, frequency, etc.) for Central Valley Water Board's regulatory programs (e.g., DDW, NPDES, ILRP, SWAMP), as well as outside agencies and entities (e.g.,

Department of Water Resources (DWR), U.S. Geological Survey (USGS), U.S. Bureau of Reclamation (USBR), San Francisco Estuary Institute (SFEI)). References are maintained by Central Valley Water Board staff and will be updated and expanded every 3 to 5 years in conjunction with Basin Plan updates as available resources permit.

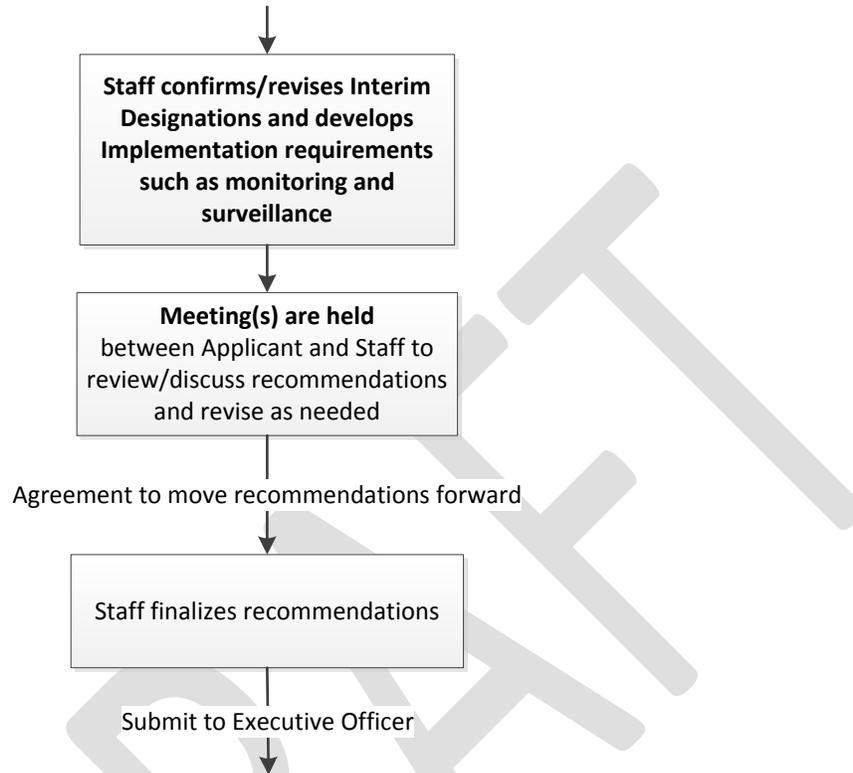
11.2.2.2.2 Closed Controlled Recirculating System Application Review

1. Verification of Closed Controlled Recirculating System designation
 - a. Review submitted documentation describing the operation/management of the closed controlled recirculating system, including closure period and purpose for closure.
 - b. Staff will conduct a site survey of the water bodies in the system, especially in areas with natural outlets, drainage, or seasonal closure points.
2. Verification of MUN diversions within and downstream of the system.
 - a. Verify the Applicant's identification of any diversions for municipal or domestic supply within and/or downstream of the system using publically available information like the State Water Resources Control Board's Electronic Water Rights Information Management System (eWRIMS) (State Water Board , 2014) and/or site surveys.
 - b. Any Water Rights permits or filings for potential future surface water MUN diversion within or downstream of the system and prior to the first MUN diversion will be considered in evaluating the MUN beneficial use. *Note – any closed controlled recirculating system that contains a water body that is providing or wheeling municipal or domestic supply will not have its application to remove MUN under the umbrella of a closed controlled recirculating system approved.*
3. Emergency Plans and Notification Process
 - a. Due to the nature of closed controlled recirculating systems, water quality in the recirculating system may impact surface waters outside the system in the event of a flood or other emergency releases. Staff will review the Applicant's flood control/emergency plan. Staff will also review the monitoring activities and notification process that are in place if an emergency release does occur. This will include, at a minimum, a list of water diverters downstream of the system who could be potentially impacted by an emergency release.
4. Identification of water quality constituents of concern.

- a. Highlight information on any identified water quality constituents of concern identified by the Applicant in their application.
 - b. Review relevant publically available water quality information to identify any additional water quality constituents of concern within or downstream of the system. At a minimum, staff will review the California Integrated 303(d) and 305(b) Report. This task may also include reviewing documents such as the Irrigated Lands Regulatory Program's Management Plans, NPDES self-monitoring reports, Division of Drinking Water's Watershed Sanitary Surveys and, as applicable, other outside data sources.
 - c. Confirm any control programs in place (e.g. TMDLs, Management Plans) to address the concerns.
5. Review of existing water quality monitoring in and downstream of the district.
- a. Compile information on any water quality monitoring identified in the Applicant's report. For Seasonally Closed Controlled Recirculating Systems (Seasonally Closed System), monitoring conducted before and after systems are open is especially critical.
 - b. Evaluate additional water quality monitoring program information within and downstream of the system to the first identified existing and petitioned future diversion for municipal or domestic supply using the Central Valley Water Board's comprehensive monitoring guides (Central Valley Water Board, 2015).

11.2.3 Step 2: Establishment of Interim Designations

11.2.3.1 Staff Recommendations on Interim Designation and Implementation Requirement



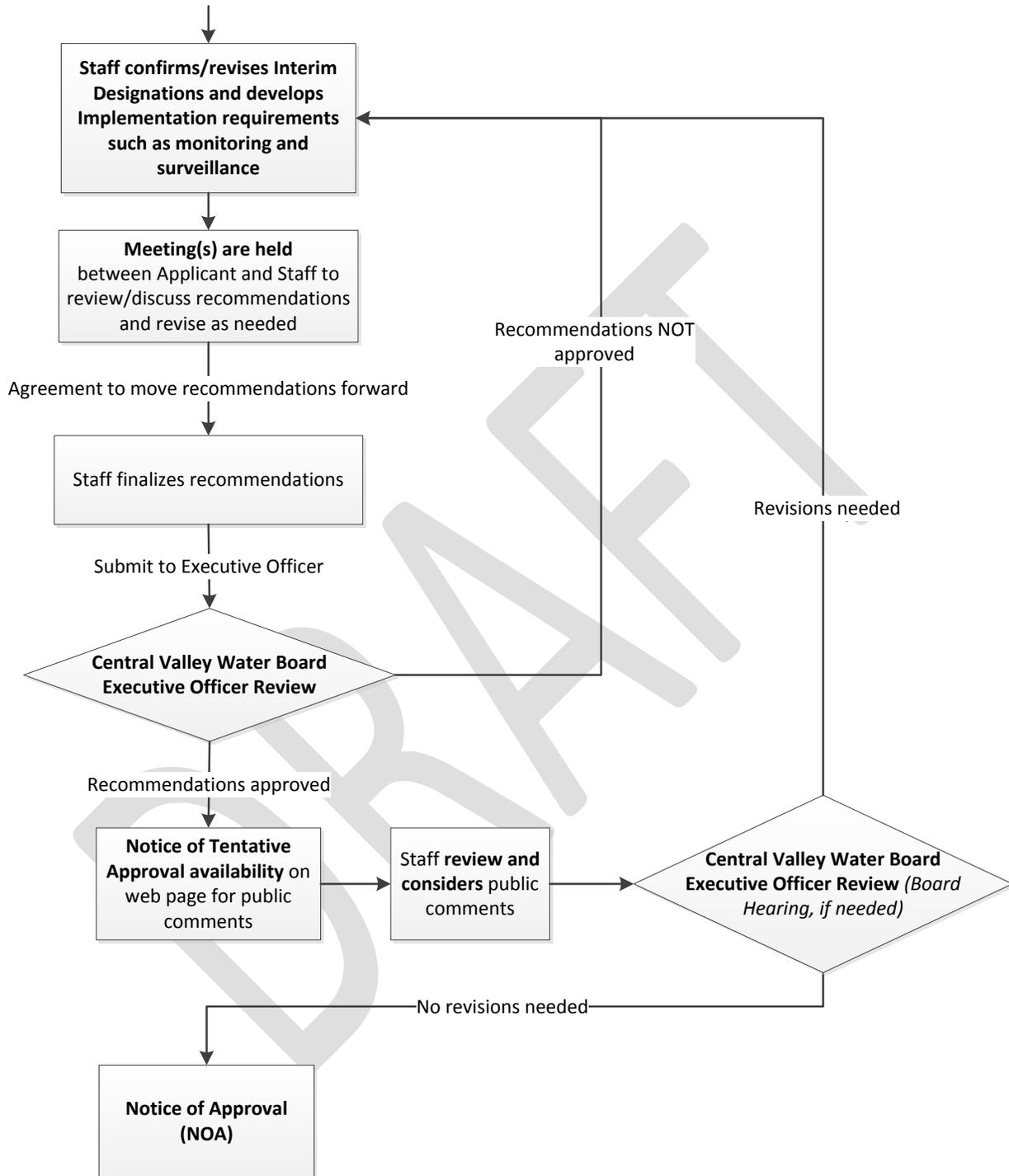
Based on the review and verification of the Water Body Categorization Report and/or Closed Controlled Recirculating System application, staff will develop draft recommendations for interim designations and implementation requirements. Interim designations will be developed for each water body or system, including the B1, B2, M1, M2, C1, C2 and Closed Controlled Recirculating System categories. Staff will also develop recommendations for the MUN beneficial use designations (MUN, No MUN, or LMUN) for each water body or system. Water bodies in a Seasonally Closed System may have different MUN beneficial use designations, dependent on the open and closure period of the system. See Table 1 of the proposed Basin Plan Language for the proposed default MUN designations by water body category.

As part of the recommendation, staff will identify any data gaps in existing monitoring and/or control program efforts to track and assess potential constituents of concern within or downstream of the water bodies being evaluated. This information will guide staff's recommendation as to whether existing monitoring and surveillance efforts are adequate to evaluate potential future impacts of refining and/or de-designating MUN in the water bodies identified including consistency with ensuring protection of downstream beneficial uses required under the Sources of Drinking Water Policy or whether changes and/or additions are needed. If monitoring data gaps are identified, monitoring and surveillance options may include requirements for a change in existing regulatory monitoring requirements or support of a

regional coordinated water quality monitoring program to track constituents of concern (which may include the use of representative monitoring sites). Other monitoring and surveillance recommendations may include additional ambient surface water monitoring by Central Valley Water Board's SWAMP program, or fate and transport data modeling of specific constituents (presented in more detail in Section 12). Staff will present the draft recommendations for review and discussion in meetings with the applicant to allow for revisions.

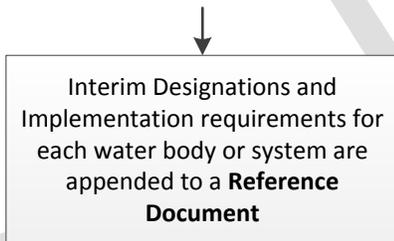
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11.2.3.2 Executive Officer Approval and Public Review Process



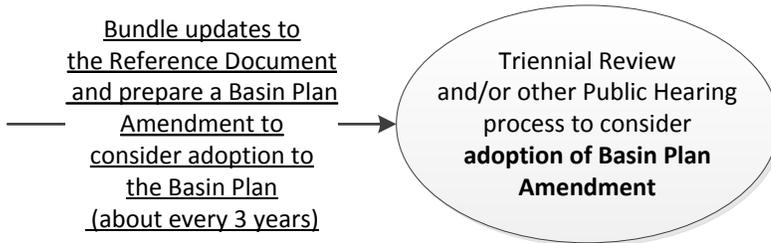
Once Central Valley Water Board staff and the applicant reach an agreement to move forward with the recommendations, staff will finalize the recommendations and submit them to the Water Board Executive Officer (EO) for review. If the EO does not approve the recommendations, staff will resume back at the recommendation development phase of the process to make changes as needed. If the EO approves the recommendations, a Notice of Tentative Approval (NOTA) will be sent out to a subscription email and postal mailing list of interested parties. The NOTA will be available for public comments for a minimum of 45 days. The NOTA will include the interim water body categories and MUN beneficial use designations approved by the EO. Any monitoring and surveillance measures that are a condition of the approval will be included as an appendix to the NOTA. Staff will consider public comments and if revisions to the recommendations are needed, staff will resume back at the recommendation development phase of the process. If sufficient controversy exists, the EO may elect to schedule a Board Hearing to review the NOTA. If no revisions are needed on the NOTA, a Notice of Approval (NOA) will be sent out to a subscription email list, publically posted on the Central Valley Water Board website and noted in the EO report to notify interested parties that the provisions set forth in the NOTA will be appended to the *Central Valley Agriculturally Dominated Water Bodies Evaluation Reference Document* (Reference Document).

11.2.3.3 Reference Document Updates



The *Central Valley Agriculturally Dominated Water Bodies Evaluation Document* (Reference Document) is a separate document outside of the Basin Plans and will contain a table listing evaluated water bodies and their approved interim water body categories, MUN beneficial use designations and monitoring and surveillance program. Interim permit limits may be developed based on beneficial use refinement identified in the Reference Document. The Reference Document will be available online at the Central Valley Water Board website. Interim designations in the Reference Document will be valid for 5 years. An extension, no greater than 3 years, may be granted by the EO in cases where there is reason to delay the Basin Plan Amendment approval process, such as requests from interested parties for additional time or the submittal of new information to review.

11.2.4 Step 3: Adoption into the Basin Plan



11.2.4.1 Central Valley Water Board Adoption

Updates to the Reference Document will be bundled approximately every three years and prepared for a Basin Plan Amendment by Central Valley Water Board staff. The Central Valley Water Board will consider adoption of Basin Plan Amendments containing water body category and MUN beneficial use designations from the Reference Document during a Triennial Review or other Public Hearing process. Specific monitoring and surveillance requirements for considered water bodies will be adopted in a Board-approved resolution. Adopted water bodies will be listed in an appendix in the Basin Plan(s). GIS layers of the adopted water bodies will be stored in a GIS File Geodatabase and staff will coordinate with the State Water Board's GIS unit to ensure that they are notified of any updates and/or changes to the Basin Plans.

11.2.4.2 State Board/OAL/USEPA Approval

Adoption by the Central Valley Water Board will be followed by the Basin Plan Amendment approval processes of the State Water Resources Control Board, OAL and US EPA.

11.2.5 Time Schedule

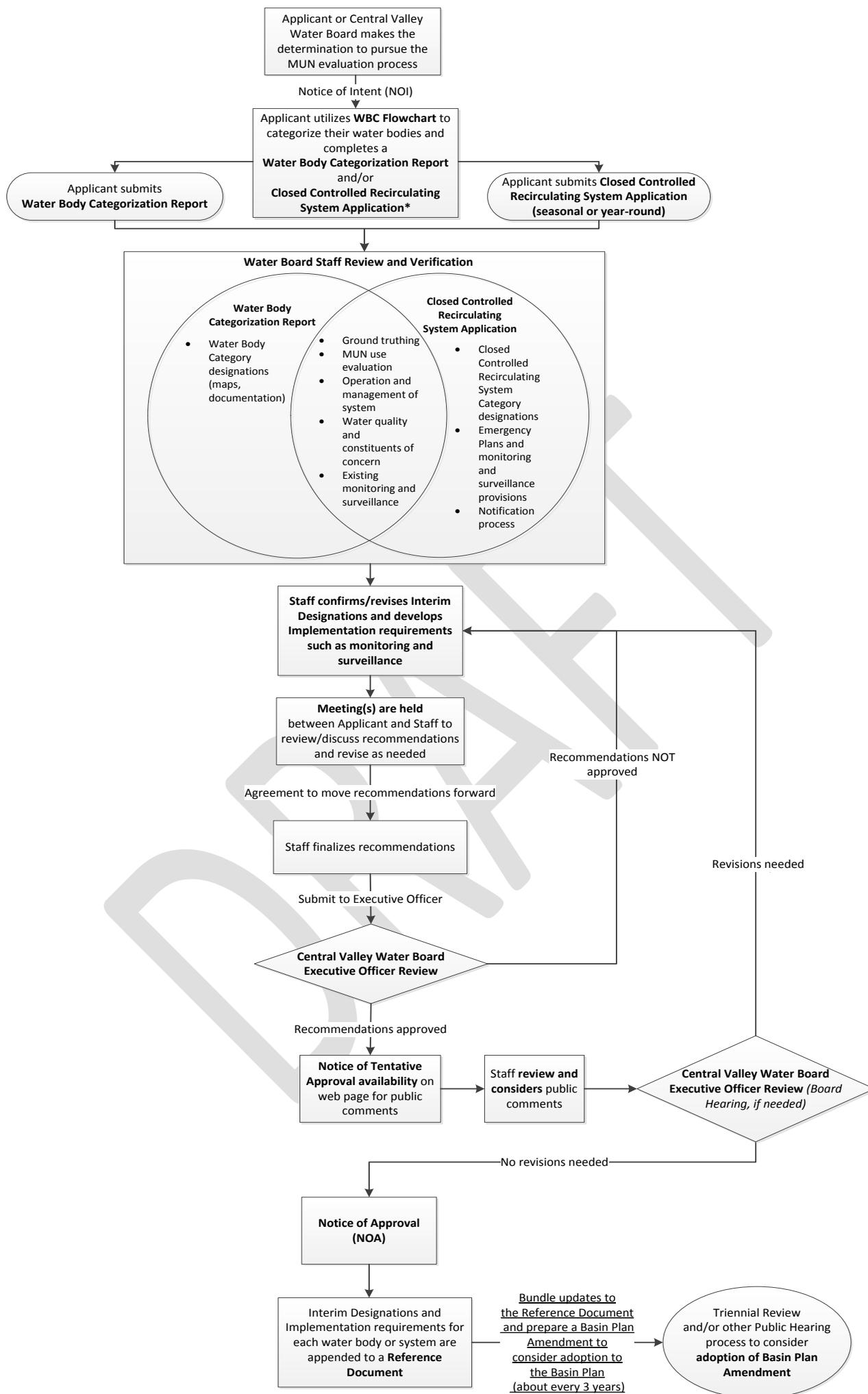
Since the proposed Implementation Program will be carried out on a rolling and "As Needed" basis, there is no specific Time Schedule for the MUN Evaluation Process. However, Table 11.1 below provides the approximate time requirements needed to complete the tasks in each step of the process. The time estimates provided are based on the San Luis Canal Company (SLCC) case study and may change based on the number of applicants, size and complexity of the water bodies and/or systems.

Table 11.1: Time Estimates for tasks associated with each step of the MUN Evaluation Process

Task	Approximate Time Needed
Step 1 – Process Initiation and Review	
Submittal of Documents	3 months—1 year
Staff Review/Recommendations	2 months
Step 2 – Establishment of Interim Designations	
NOTA for Public Comments	45 days
Staff Review Comments and Revise	45 days
NOA/Reference Document	8 months—1 ½ years
Step 3 – Adoption into the Basin Plan	
Regional Board Adoption	Updates Bundled every 3 years
State Board/OAL/USEPA Approval	1 year

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Figure 7. 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 Central Valley 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.