

EXECUTIVE SUMMARY

The Agricultural Waters Task Force (AWTF) was formed by the State Water Resources Control Board (SWRCB) to make recommendations on how to best implement water quality standards in agricultural waters. The recommendations will be used by the SWRCB during the development of the Inland Surface Waters Plan (ISWP). Agricultural waters include natural water bodies dominated by agricultural drainage or management, natural water bodies which have been modified for the purpose of agricultural water management, and water bodies constructed for conveyance of agricultural water supply and/or drainage.

Throughout the course of its meetings, the AWTF agreed that agricultural water bodies are unique and may not support full beneficial uses traditionally associated with perennial, natural streams. The recommendations in this report attempt to address the limitations in the current regulatory framework for water quality control in agricultural waters. The hydrology of agricultural regions of the arid West is composed of managed flows and man-made channels which create limitations to fully supporting beneficial uses associated with perennial streams in natural hydrologic regimes.

Task force members initially identified a draft series of issues pertinent to agricultural waters (Appendix B). Due to time constraints, all the issues could not be addressed. However, most were discussed to a limited degree within one of the final issue categories presented in this document: policy; definitions; exemptions; categorization of water bodies; beneficial uses; objectives; and implementation.

The AWTF did reach consensus on a number of recommendations, which are summarized below. In addition, various options (nonconsensus), the reasoning behind most of the recommendations, as well as the reasoning and concerns with each option are included in the body of the report to provide background to the State Water Board when reviewing this document.

DEFINITIONS

The AWTF believes it is important to define the terminology used when discussing agricultural waters in the Inland Surface Waters Plan. The terms defined in the body of the report are intended to be used as working definitions, not as recommendations.

EXEMPTIONS FROM WATER QUALITY OBJECTIVES

The AWTF recognized the need to clearly indicate what water bodies and activities do not fall under regulation of the federal Clean Water Act or the Porter-Cologne Water Quality Control Act and therefore do not require the implementation of water quality objectives. The AWTF achieved consensus on the following three recommendations, and presented additional options on which consensus was not reached.

Recommendation #1: Exemption for Water in Agricultural Fields and On-Farm Ancillary Structures

Objectives set forth in the ISWP do not apply to water in agricultural fields, including but not limited to furrows, beds, and checks, nor to on-farm ancillary structures which

generally include ditches, sumps, and ponds contained on lands associated with agricultural operations. The determination of these agricultural production areas and what constitutes an ancillary structure shall be made by the Regional Boards.

Objectives do not apply to agricultural evaporation ponds or lagoons designed to meet requirements of the federal Clean Water Act or the Porter-Cologne Water Quality Control Act.

Recommendation #2: Guidance Document for Ancillary Structures

The SWRCB should prepare a guidance document concerning what may be considered an ancillary structure. This document would include a basic definition and criteria with examples, so Regional Boards can more easily and consistently make exemption determinations.

Recommendation #3: Exemption for Individual Closed Recirculating Systems

Objectives do not apply to closed recirculating systems (tail water recovery or closed irrigation systems) that service individual farms. It is, however, recognized that discharges to surface waters from such systems are subject to the ISWP. The State Water Board needs to provide guidance on what constitutes an individual farm for purposes of this exemption.

CATEGORIZATION OF WATER BODIES

Due to the unique hydrologic characteristics of agricultural waters, the AWTF developed three recommendations and five flow chart options for categorizing agricultural water bodies.

Recommendation #1: Water Body Categorization Framework

The AWTF supports a water body categorization framework similar to the one proposed by the SWRCB in the 1991 Inland Surface Waters Plan and recommends that, at a minimum, the Plan present a logical decision tree which would identify natural, agriculturally dominated natural, reconstructed natural, and constructed agricultural water bodies. This decision tree should be used as guidance by the Regional Boards, with the final category designations adopted through a public hearing process.

Recommendation #2: Flow Charts to Aid Categorization

The five flow chart options presented in the report should be evaluated and used to the maximum extent practicable as State Board staff prepares a water body categorization decision tree.

Recommendation #3: Reliance on Water Management Agencies for Categorization

Regional Boards would rely on the water management agencies to initially categorize the water bodies within their jurisdiction. Any water bodies not characterized would default to

the natural water body category for the purpose of assigning appropriate Beneficial Uses and numeric objectives. If there is disagreement with the categorization of a water body, it will be resolved through a Regional Board public hearing process. Regional Boards would then adopt the final categorization and submit it to the State Board for final adoption.

BENEFICIAL USE DESIGNATIONS

The AWTF agreed that water bodies dominated by agricultural drainage are unique waters which may not have all of the hydrologic, ecological and water quality characteristics necessary for the full attainment of the beneficial uses normally associated with perennial streams. The State at this time does not recognize that these water bodies have distinct beneficial uses. Therefore, the AWTF reviewed the characteristics and developed recommendations that address beneficial uses for these unique types of agricultural water bodies.

Recommendation #1: Recognition that Agricultural Waters are Unique

The State should recognize that water bodies dominated by agricultural drainage are unique waters which may not have all of the hydrologic and ecological characteristics and water quality necessary for the full attainment of the beneficial uses normally associated with perennial streams.

Recommendation #2: Ancillary Structures and Individual Closed Recirculating Systems do not Require Beneficial Use Designations

Exempted ancillary agricultural structures and individual closed recirculating systems do not require the designation of beneficial uses.

Recommendation #3: Need for New or Limited Beneficial Uses

The State Board should evaluate whether new or limited beneficial use categories would be more appropriate for agricultural dominated natural water bodies and constructed water bodies than the use categories currently recognized.

Recommendation #4: Protection of "Existing" Uses

Beneficial uses should be designated which, at a minimum, protect existing uses. Definition of existing uses should be clarified (see Policy Issue #3 in "Other Policy Issues" section).

WATER QUALITY OBJECTIVES

In the AWTF's limited time, it was not possible to develop and assign actual limits and levels of constituents to protect designated beneficial uses. The task force believed its responsibility was to provide guidance and input to the State Water Board in setting the appropriate limits and levels for water quality objectives for agricultural waters.

The Regional Boards are at varying levels in the process of designating or assigning beneficial uses to water bodies in their regions. Given these differences, objectives may need to be assigned in some water bodies to protect downstream resources even if beneficial uses are not yet designated.

The AWTF reviewed both narrative and numeric objectives. Consensus was achieved on one recommendation and several nonconsensus options were developed, as well.

Recommendation #1: Narrative Toxicity Objective for All Non-Exempted Inland Surface Waters

Upon adoption of the ISWP, a narrative toxicity objective should apply to all non-exempted inland surface waters. This narrative objective will be considered a permanent baseline.

Potential language: "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal or aquatic life" (from Region 5 Basin Plan). For agricultural dominated and constructed water bodies, the State Board should recognize that aquatic habitat is likely to exist and be the most limiting use. The narrative objective should be implemented as follows:

<u>Water Body</u>	<u>Objective</u>
Agricultural dominated natural water bodies	No acute or chronic toxicity
Constructed agricultural water bodies	No acute toxicity

Flexibility is needed for objectives that would apply on a seasonal basis and during extremely high and low flow years.

IMPLEMENTATION

Recommendation #1: Goals

The Task Force recommends that implementation follow a logical sequence that allows for consistency while being flexible; prioritizes water quality problems while allowing realistic timelines; and allocates appropriate funding while avoiding duplication of effort. Implementation actions should consider a watershed philosophy where appropriate with the Regional Boards forming the initial watershed boundaries. The Regional Boards should identify watershed boundaries within their regions with the help of local stakeholders, to help prioritize areas of impairment and also determine if the watershed approach is the most effective mechanism for mitigating a beneficial use impairment. The steps in the implementation process should include: designation of area boundaries; initial assessment; prioritization of water quality concerns; development of a management plan; evaluation of the program; and as needed, refinement of the management plan, assessment/reassessment of beneficial uses and objectives, and further regulatory actions. Beneficial use impairments will be regulated through provisions of the State Nonpoint Source Management Plan (the three tiered process).

Recommendation #2: Hierarchy For Regulation

The following hierarchy should be followed when implementing the ISWP in agriculturally dominated systems:

- 1) Protection of downstream beneficial uses in natural water bodies.
- 2) Protection of beneficial uses to the extent to which they occur in agriculturally dominated natural streams.
- 3) Protection of beneficial uses to the extent to which they occur in constructed facilities.

The State should recognize that agricultural water management may provide net ecological benefits with incidental beneficial uses which would not otherwise be available. It is a goal of the ISWP to provide protection of incidental uses through reasonable management activities. Therefore, the hierarchy should be used to prioritize implementation activities, recognizing that not all beneficial uses and objectives will be attained in the short-run.

Recommendation #3: Process

The Task Force recommends that the overall implementation of the ISWP occur in two phases. The initial phase would consist of the planning process during which time water bodies are categorized; sub basins are developed within Regional Board boundaries to facilitate assessment; assessments are conducted; and areas as well as water bodies of concern are prioritized. The second phase would consist of actions taken based on the findings of the initial planning and assessment phase. The table below summarizes the two-phase process.

Table 1. Overall Inland Surface Water Plan Implementation in Agriculturally Dominated Water Bodies.

I. Planning

- A. Categorization of water bodies
- B. Development of sub basins for assessment
- C. Assessment
- D. Prioritization of areas and water bodies of concern

II. Response to Findings from the Planning Phase

- A. Area and/or water body not impaired or threatened
 1. Watershed management group formation encouraged
- B. Area and/or water body prioritized
 1. Activation of relevant interagency agreements
 2. Where action by Regional Board and State Board necessary
 - a. Actions as defined through the NPSMP
 - b. Actions as defined through a watershed management program

Recommendation #4: Guidance On A Draft Implementation Plan

The SWRCB should consider using the draft Implementation Plan found in Appendix D for guidance as it develops the ISWP. All the reasoning supporting the draft Implementation Plan is included in the appendix.

OTHER POLICY ISSUES

The AWTF discussed a number of issues that did not fit neatly into the sections of this report but were considered too important to simply drop. While some of these issues are being more fully addressed by other task forces, these points are meant to focus the agricultural waters perspective on those issues.

Recommendation #1: Incorporation of Basin Plans' Existing Site Specific Objectives into the ISWP

Site specific objectives currently adopted into Basin Plans should be incorporated into the ISWP as site specific objectives for those water bodies.

Recommendation #2: Water Conservation Clause

The State Water Board needs to identify if and how water conservation will be achieved in areas where water conservation measures result in decreased water quality, reduced groundwater recharge, and potential loss of wildlife habitat.

Recommendation #3: Clarification of Term "Existing"

The Task Force recommends the State Water Board move to clearly define the term "existing" as it is used in the context of both aquatic life and beneficial uses.

Recommendation #4: Net Environmental Benefit

"Net Environmental Benefit" is a concept that deserves additional consideration and should be reviewed and defined by the State Water Board in terms of meeting water quality objectives.

Recommendation #5: Further Investigation of Protocols for Toxicity Monitoring

Methodologies and species used for determining acute and chronic toxicity must be scientifically defensible and approvable by the regulatory agencies. Further investigation of protocols may be warranted for agricultural water systems.

Recommendation #6: Economic Considerations

Economic considerations must be factored into the development of the ISWP as required by the Porter-Cologne Water Quality Control Act. The State Water Board should develop clear guidelines for how economics will be evaluated in agricultural waters. The guidelines should be designed to meet the requirements of both State and federal laws.