

CENTRAL VALLEY WATER BOARD
Long-term Irrigated Lands Program Straw Proposal

Introduction

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2
3 The purpose of this straw proposal is to serve as a basis for discussion between Central
4 Valley Water Board staff (staff) and the working groups of the Long-term Irrigated Lands
5 Regulatory Program (ILRP) Stakeholder Advisory Workgroup (Advisory Workgroup). The
6 proposal is based on the goals, objectives, and programmatic alternatives developed by the
7 Advisory Workgroup. In addition, staff have considered applicable legal requirements,
8 Water Board policies, and the experience gained in implementing the current ILRP in
9 developing the straw proposal.

10
11 Since this is a straw proposal, this document does not represent the staff preferred
12 alternative. However, it is meant to provide insight into how staff are taking into
13 consideration stakeholder interests, while meeting the Central Valley Water Board's legal
14 obligations (e.g., California Water Code, Basin Plans, and State Policies). Staff anticipate
15 making adjustments to this straw proposal based on feedback from the stakeholder
16 workgroups prior to circulating a staff preferred alternative.

17
18 To fully understand this proposal, the reader should be familiar with the Stakeholder
19 Advisory Workgroup and Central Valley Water Board's December 2009 *Proposed Long-*
20 *term Irrigated Lands Regulatory Program Alternatives* (Alternatives Document) available at:
21 [http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term pr
22 ogram_development/](http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/long_term_program_development/). Ideas and proposed requirements developed in the Alternatives
23 Document have been merged to develop this proposal. In order to provide the reader with
24 background, references to specific alternatives within the Alternatives Document are given
25 using brackets.

Context for Straw Proposal

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28
29 Virtually all Water Board regulatory programs rely on the same fundamental activities: 1)
30 monitoring; 2) assessment; 3) planning; and 4) implementation. These activities are
31 related and often iterative. Broadly speaking, monitoring involves the collection of data
32 that allows us (stakeholders and the Board) to assess whether the objectives of the
33 regulatory program are being achieved. Based on the assessment of the data, plans are
34 developed or adjusted to address any identified water quality issues. Alternatively, the
35 information from the assessment may lead to a conclusion that no changes are needed.
36 Finally, any plan that is developed must be implemented with adequate monitoring or
37 feedback mechanisms to ensure the planned activities are being carried out.

38
39 The monitoring, assessment, planning, and implementation activities are considered in the
40 context of the water quality issues that must be addressed. For certain areas and crops,
41 available information may indicate:

- 42
43 1. no or limited effects of agricultural discharge on water quality;
44 2. clear relationships between discharge and water quality problems; or

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- 1 3. uncertainty as to whether irrigated agriculture is contributing to an identified
2 problem (e.g. agricultural waste discharges are often commingled, either in a
3 shared drainage conveyance or shared groundwater aquifer. This commingling of
4 discharge makes it more difficult to determine whether specific irrigated
5 agricultural operations are contributing to a water quality problem or whether
6 there is a general practice used by all operations that must be changed to improve
7 water quality).
8

9 Each of these circumstances suggests a different regulatory approach – limited
10 requirements in the first instance; a focus on implementing appropriate practices to
11 correct the water quality problem in the second instance; and a focus on additional
12 investigation in the third case.
13

14 In developing this straw proposal, Water Board staff are also mindful that there is a
15 balancing of costs associated with a new regulatory program. A more stringent regulatory
16 program may increase the likelihood of improving and protecting water quality, but the
17 cost of compliance for dischargers and the State to oversee the program can be overly
18 burdensome. The California Water Code requires that costs be considered when
19 developing programs for agriculture. Given that agricultural operators are price takers in
20 the market and cannot directly pass on their costs to consumers, these costs become
21 especially important. Conversely, a regulatory program that is lax or allows too much time
22 for compliance can lead to an exacerbation of water quality problems and prolonged
23 impacts on beneficial uses.
24

25 Finally, this straw proposal reflects staff's review of existing Water Board regulatory
26 programs that have addressed irrigated agriculture or are structured to deal with a large
27 group of waste dischargers. Staff gave special consideration to agricultural programs in the
28 Central Valley, such as the current ILRP, dairy program, the Grasslands Bypass Project, and
29 the Rice Pesticide Program. We also considered other Water Board irrigated lands
30 programs, as well as State-wide programs, such as the stormwater program. These existing
31 programs provide insight into what has worked and not worked in designing a regulatory
32 program that protects water quality and is cost effective.
33

34 **Proposed Long-term ILRP**
35

36 This section describes the proposed general information to be found in, and the potential
37 general approach of the long-term ILRP. This section includes the following topics:
38

- 39
- 40 • Scope
 - 41 • Goals and Objectives
 - 42 • Timeframe for Implementation
 - 43 • Implementation Mechanisms
 - 44 • Lead Entities
 - 45 • Regulatory Requirements
 - Monitoring Provisions

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1
2 Scope – all discharges from irrigated lands that could affect the quality of waters of the
3 State within the Central Valley. Irrigated lands include land irrigated to produce crops for
4 commercial purposes; nurseries, including greenhouses; private and public managed
5 wetlands; irrigated pasture. Examples of covered waste discharges would include the
6 current surface water discharge definition, leaching of waste to groundwater, overspray of
7 pesticides or other wastes into State waters, waste discharge to groundwater due to
8 backflow of waste into wells (backflow during fertigation), irrigated agricultural waste
9 discharged into unprotected wells (wellhead protection).

10
11 Goals/Objectives – those adopted by the Advisory Workgroup (Alternatives Document);
12 comply with the California Water Code, and applicable State policy (e.g., Nonpoint Source
13 Policy, Basin Plans).

14
15 Timeframe for Implementation – the changes proposed for the long-term ILRP will require
16 the development of new institutional structures and will likely add two million additional
17 acres to the program.¹ To minimize the disruption to the current surface water program
18 and provide for a smooth transition to the new program, a phased three-year
19 implementation time frame is proposed prior to the new requirements taking full effect.
20 Compliance during this transition will be based on completing required actions for each
21 phase (e.g., non-enrolled irrigated agricultural operations enrolling within two years). The
22 specific actions and phases will be determined based on the adopted long-term program.

23
24 The Central Valley Water Board will likely gradually enroll operations in the new program
25 as the specific provisions for the new program are established through waste discharge
26 requirements (WDRs) or conditional waivers of WDRs (waivers). Current ILRP participants
27 would be automatically enrolled (i.e., grandfathered into new program; reapplication
28 would not be required) as the relevant provisions are established. Under this proposal,
29 current ILRP management plans to address surface water quality problems would continue
30 as part of the long-term ILRP. Individual irrigated agricultural operations would not be
31 required to submit a formal Report of Waste Discharge. Application requirements would be
32 similar to the current ILRP with individual operations enrolling directly with the Central
33 Valley Water Board for approval to join a third-party group.

34
35 Implementation Mechanism [described in Alternatives Document]

36 Irrigated agricultural operations vary considerably throughout the Central Valley.
37 Environmental conditions are also considerably variable. These variations lead to non-
38 uniformities in discharge waste parameters and also associated management practices that
39 would be best suited to reduce waste discharge. For example, in areas with fine clay soils,
40 implementing management practices to reduce potential leaching of waste to groundwater
41 may not address the main discharge pathways (e.g., tailwater discharge, runoff to
42 unprotected wellheads). In some cases, management practices have been identified that

¹ The estimated additional two million acres would be due to the increased scope of the long-term ILRP to include waste discharge to groundwater.

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1 could intensify waste discharge; examples would include holding tailwater in an area with
2 coarse soils and shallow groundwater.
3

4 On numerous occasions stakeholders have urged that the program be flexible and allow
5 irrigated agricultural operations to implement practices that make the most sense at their
6 particular site. Staff agree with these stakeholder concerns and have noted that the
7 variability of conditions and agricultural operations must be given primary consideration
8 when developing regulatory requirements. In order to address these concerns, a series of
9 general waste discharge requirements and conditional waivers, based on local conditions,
10 are proposed.

11
12 General orders or waivers would be developed for similar areas/ watersheds/
13 commodities, with the regulatory and monitoring requirements tailored to the conditions
14 and waste discharge pathways. It is envisioned that these orders and associated
15 requirements would generally be geographically-based. However, there may be occasions
16 where commodity-based requirements are appropriate. One such example would be rice,
17 due to commodity specific water quality management practices and general geographic
18 continuity. To provide a degree of flexibility while limiting the number of orders that must
19 be developed, a total of 8-12 tailored orders would be developed. This proposal would
20 establish prioritization factors for determining the type of requirements (e.g., planning,
21 management) and monitoring that would generally be applied. The ideas for this
22 prioritization system have already been developed in long-term ILRP Alternatives 2 and 4
23 by the Advisory Workgroup (low threat, and tiered program, see Alternatives Document).
24 The proposed prioritization factors are described below in the “Regulatory Requirements”
25 section.

26
27 Developing general orders and waivers for specific areas/ commodities would provide the
28 Board and third-party groups the opportunity to tailor requirements most effectively to
29 applicable waste discharge conditions. For example, areas with multiple surface water
30 concerns due to pesticides would not be subject to the same requirements as areas with
31 minimal pesticide concerns. This approach would also facilitate effective coordination with
32 other water quality programs.

33
34 Throughout the development of the long-term ILRP, the Central Valley Water Board has
35 been urged to coordinate with California Department of Pesticide Regulation’s (DPR’s)
36 Groundwater Protection Program, other regulatory programs, and local groundwater
37 management programs. Developing orders specific to geographic areas would allow the
38 Central Valley Water Board to coordinate and consider existing practices and monitoring
39 associated with DPR, local groundwater management programs, other programs, and
40 consider existing local regulatory efforts; preventing duplication of efforts and multiple
41 overlapping regulatory requirements.

42
43 The implementation mechanisms that would be developed include*:
44

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1 **Conditional Waiver of Waste Discharge Requirements** – applicable to lower priority
2 (see description below) areas/ watersheds/ commodities. Benefits of establishing waivers
3 for these areas would include potential program fee reduction and the requirement for re-
4 assessment every five-years. Periodic re-assessment would provide assurance that waste
5 discharge conditions have not changed in a way that could degrade State waters.

6
7 **General Waste Discharge Requirements** – applicable to higher priority (see description
8 below) areas/ watersheds/ commodities. Benefits of establishing general waste discharge
9 requirements for higher priority areas include increased stability. Higher priority areas
10 would include those where agricultural operations are causing or contributing to a water
11 quality problem. Once adopted, general waste discharge requirements would require that
12 irrigated agricultural operations implement practices and programs to solve water quality
13 problems. This may take longer than five-years. General waste discharge requirements do
14 not expire and would allow the Central Valley Water Board, third-party groups, and
15 irrigated agricultural operations to focus on solving problems instead of renewing
16 regulatory requirements.

17
18 * *In general, there would be a single, main regulatory mechanism for waste*
19 *discharges to surface and groundwater applicable to a geographic area or in some*
20 *cases a commodity. Where a large geographic area has multiple low and high priority*
21 *sub-areas, the mechanism would be WDRs [high/low prioritization is defined below in*
22 *the Regulatory Requirements section]. The requirements of the WDRs may then be*
23 *tailored to address the sub-areas. An example of this approach can be seen where an*
24 *area encompasses vulnerable groundwater areas. The requirements inside of the*
25 *vulnerable groundwater areas may be different than the requirements outside of the*
26 *vulnerable areas.*

27
28 **Conditional Basin Plan Prohibition of Discharge** – applicable to irrigated agricultural
29 operations whose discharge could affect the quality of the State’s waters that have not
30 obtained necessary regulatory coverage within X years of adoption of the new program; Y
31 years of obtaining the irrigated lands; or Z years of converting the land use to one that
32 meets the irrigated lands definition (note – X, Y, Z may be the same or may differ). The
33 prohibition would only be applicable to irrigated agricultural operations with waste
34 discharges that could affect the quality of State waters that have not obtained coverage
35 under the ILRP.

36
37 **No Regulatory Program** – where evidence has been provided to the Central Valley Water
38 Board and the Central Valley Water Board has concurred that the irrigated lands operation
39 could not affect the quality of the State’s waters. This determination would include a
40 thorough review of site specific information that would be used to characterize and
41 determine whether irrigated lands waste discharge can affect the quality of the State’s
42 ground and/ or surface waters.²

² This option is identified since the Central Valley Water Board can only have a regulatory program if the discharge of waste could affect the quality of waters of the State. The Central Valley Water

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Lead Entity [from Alternative 2, Lead Entity Responsibilities]

As part of the ILRP, specific lead entities will need to be identified. This section describes the likely lead entity categories and their roles and responsibilities.

Third-party – Under this alternative, a coalition or other third-party group would be responsible for general administration of the ILRP. In order to be approved by the Central Valley Water Board for administration of this alternative, third-party groups would need to agree to assume the following responsibilities.³

Third Party Roles and Responsibilities

1. Enroll member growers. Provide summary member information to the Central Valley Water Board.
2. Provide members and the Central Valley Water Board an organizational or management structure identifying persons responsible for ensuring that program requirements are fulfilled.
3. Agree to provide or make available to group members the annual summaries of expenditures of fees used to comply with the ILRP. ⁴
4. Notify potentially affected third-party group members each time the group has received a notice of violation or other enforcement action from the Central Valley Water Board and provide information regarding the reason for the enforcement.
5. Develop and implement monitoring/management practice tracking plans.
6. Conduct required water quality monitoring.
7. Inform growers of program requirements and provide coordination to ensure that water quality concerns are addressed.

Additional third-party requirements are included below in the Regulatory Requirements section.

Board does not currently have information identifying any irrigated agricultural areas in which such an option could apply. Given the potential discharge pathways to ground and surface waters from irrigated agriculture, staff expects that this option may not be applicable or may only apply in limited, site-specific circumstances.

³ To represent irrigated agricultural operations, a third-party must receive Central Valley Water Board approval to act as a representative (similar to the NOA for the current ILRP). In its application for approval as a third party, the applying entity must demonstrate that its governance structure is accountable to its members and it has the capacity to carry out the responsibilities identified in this program. Third-party entities would not be required to submit a Report of Waste Discharge.

⁴ It is not the intent of this provision for the Central Valley Water Board to review and approve these reports. The intent is to promote accountability and transparency on the part of the third-party entities.

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1 General Central Valley Water Board Role and Responsibilities [Alternative 2,
2 General Central Valley Water Board Role and Responsibilities]
3

- 4 1. Require 100% ILRP participation.⁵
- 5 2. Review and approve monitoring plans.
- 6 3. Review and approve surface water quality management plans.
- 7 4. Review and approve groundwater quality management plans (GQMPs) (and,
8 where applicable, local groundwater management plans requested to
9 substitute for GQMPs)
- 10 5. Review monitoring reports.
- 11 6. Review overall program performance with regard to achieving ILRP
12 objectives.
- 13 7. Respond to individual problems and complaints dealing with irrigation
14 discharge and informing/coordinating with the responsible third-party
15 group.
- 16 8. In an iterative process, require additional monitoring, information, and/or
17 management measures where applicable water quality objectives are not
18 being met.
- 19 9. Enforcing ILRP requirements.

20
21 **Central Valley Water Board** – the Central Valley Water Board will be the lead entity
22 working directly with operators who have chosen not to enroll with a third-party entity or
23 who, through their action or inaction, demonstrate that direct Central Valley Water Board
24 oversight is required to ensure compliance with the ILRP.
25

26 Regulatory Requirements

27 The regulatory requirements for the long-term ILRP would include planning and
28 implementation of water quality management practices that would reduce waste discharge
29 to State waters associated with irrigated agricultural operations. Under the current ILRP
30 and other programs there have been vast amounts of water quality data collected
31 characterizing impacts to Central Valley waters associated with irrigated lands (2009
32 Central Valley Water Board *Existing Conditions Report* or “ECR”). The ECR also suggests that
33 there are watersheds and groundwater basins with irrigated agricultural operations with
34 little to no measured water quality impacts.⁶
35

36 In general, irrigated agricultural operations have the potential to discharge waste;
37 however, the overall impact of the waste discharge is dictated by various conditions such
38 as:

- 39 • management practices,
- 40 • commodity type,
- 41 • cultural practices,

⁵ Where growers have a waste discharge that would be regulated under the ILRP.

⁶ In some cases, monitoring data is not available. Inadequate monitoring data would not provide justification that an area does not have impacts.

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- 1 • other sources, and
- 2 • environmental conditions (annual rainfall, geology, intensity of operations).

3
4 This concept, coupled with availability and adequacy of water quality data must be the
5 building block of any successful long-term ILRP. This proposal incorporates the importance
6 of the above conditions as “priority factors” (described later in this section) that will be
7 used to establish general threat conditions and associated regulatory requirements to be
8 applied using the area/ watershed/ commodity specific implementation mechanisms. The
9 implementation mechanisms would be tailored to the discharge pathways (mode by which
10 waste is reaching State waters, e.g., leaching to groundwater through coarse soils).

11
12 Regulatory requirements for irrigated agricultural operations would include the following
13 [Alternative 2, Regulatory Requirements]:

- 14
15 1. Submit an application to the third-party group to enroll in the program and pay
16 applicable program fees. The third-party group would apply for coverage on behalf of
17 members. Required application information would include name and contact
18 information of owner/operator and parcel numbers. Coalition groups would collect the
19 application information for each member grower and report the information to the
20 Central Valley Water Board.
- 21 2. Implement water quality management practices in accordance with any water quality
22 management plans, including GQMPs. Water quality management practices could be
23 instituted on an individual basis, or be installed to serve a group of growers
24 discharging to a single location (e.g., combined tailwater return or wetlands serving a
25 group of growers).
- 26 3. Prevent nuisance conditions and/or exceedance of water quality objectives in state
27 waters associated with waste discharge from their irrigated agricultural lands.
- 28 4. Provide the third-party group with information requested for compliance with the
29 ILRP.

30
31 Irrigated agricultural operations that do not meet the above requirements would be
32 required to work directly with the Central Valley Water Board and obtain waste discharge
33 requirements or an individual waiver of waste discharge requirements.

34
35 **Priority Factors:** The proposed program would use the following factors to determine the
36 priority (e.g. high or low) and the associated requirements for a given area:

- 37
38 1. Irrigated agricultural operations – identified as causing or contributing to a water
39 quality problem for surface and/or groundwater (e.g., exceedance of water quality
40 objectives, trending degradation of water quality⁷) [Alternative 2, Optional Watershed
41 or Area Management Objectives Plan; Alternative 4, Criteria for Tier System];

⁷ Trending degradation is considered here to comply with State Water Board Resolution 68-16, *State Antidegradation Policy*.

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- 1 2. Located within a high-threat area based upon environmental conditions (e.g., DPR,
2 State Water Board groundwater vulnerability area, intensity of operations,⁸ geology,
3 proximity to surface water bodies, or in an area of shallow groundwater) [Alternative
4 4, Criteria for Tier System];
- 5 3. Management practices in place to protect water quality [Alternative 2, Optional
6 Watershed or Area Management Objectives Plan];
- 7 4. Demonstrated non-compliance with ILRP [Alternative 2, Regulatory Requirements –
8 lines 22-24].

9
10 The general requirements that would be applied under high and low priority scenarios are
11 given below as a two tier system. Tier 1 requirements would be applicable within low
12 priority areas and Tier 2 requirements would be applicable within higher priority areas.
13 The requirements established in any given area would be applied separately to surface and
14 groundwater depending on the above factors. However, the decision of the type of
15 implementation mechanism would be based on whether the area contains high priority
16 areas for surface or groundwater. The implementation mechanism would then be tailored
17 to the appropriate high priority waste discharge(s). Figure 1 contains a flowchart
18 summarizing the proposed prioritization process.

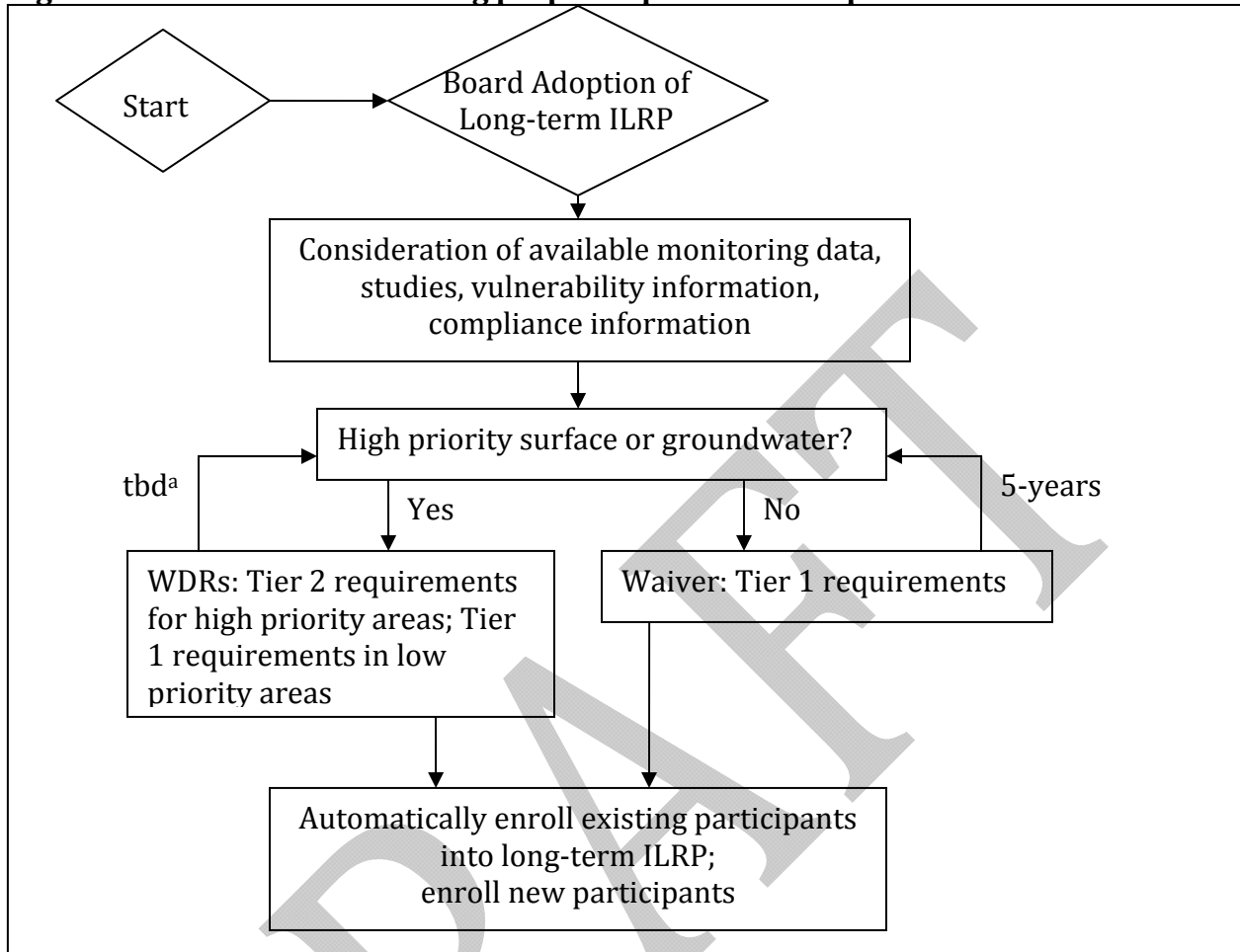
19
20 Third-party groups and the Central Valley Water Board would identify low and high
21 priority areas in the development of watershed/ area / commodity specific implementation
22 mechanisms during the three-year transition period.⁹ The Central Valley Water Board
23 intends to use existing information in this prioritization. However, there will be the
24 flexibility for third-party groups to provide additional information during the process. The
25 Central Valley Water Board would make the final determination regarding area/ discharge
26 priority. Examples of high priority areas for surface water would be those under surface
27 water quality management plans in the current ILRP.

⁸ Consideration of intensity of operations would include information such as estimations of amount of waste discharge, relative amount of irrigated agricultural use compared to other land uses in the geographic area and pesticide use.

⁹ During this process, there would be opportunity for public input.

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1 **Figure 1. Flowchart summarizing proposed prioritization process**



2
3 a. Reassessment time frame dependent on time schedule for compliance with water
4 quality objectives.

5
6 **Tier 1**–Tier 1 requirements would be applicable within low-priority areas described using
7 the factors above. These requirements would be aimed to ensure that irrigated agricultural
8 operations maintain or improve upon existing level of water quality protection (e.g.,
9 maintain or improve existing management objectives unless they are found as not
10 benefiting water quality). Management objectives would establish goals for water quality
11 protection that irrigated agricultural operations would achieve through implementation of
12 specific management practices. Operations would be required to continue achievement of
13 current water quality protection (e.g., management objectives); however, the management
14 practices that are utilized may change and/or evolve over time. This flexibility is especially
15 important where a less expensive, perhaps more protective practice or technology
16 becomes available that meets the same objective. The Central Valley Water Board does not
17 wish to limit irrigated agricultural operations to singular practices, only to ensure that they
18 continue meeting their existing level of water quality protection.
19

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1 Under this tier, the Central Valley Water Board would consider the existing level of
2 management objectives as protecting surface and groundwater quality. Third-party groups
3 would be required to describe the area’s existing water quality management objectives in a
4 report to the Central Valley Water Board. Management practices tracking, every five years,
5 would be the method by which the Central Valley Water Board would evaluate, in general,
6 whether operations are continuing to meet existing management objectives. [similar to
7 Alternative 2, Optional Watershed or Area Management Objectives Plan; extended to
8 protection of groundwater]
9

10 **Tier 2** – Tier 2 requirements would be applicable in high priority areas.
11

12 **High priority surface water:** Third-party group develop and implement a surface
13 water quality management plan [Alternative 2, Lead Entity Responsibilities, 7].
14 Surface water quality management plans developed under the existing ILRP would
15 be accepted under the long-term ILRP.
16

17 **High priority groundwater:** Third-party group develop and implement GQMP
18 within 4-years of adoption of the ILRP by the Central Valley Water Board [except in
19 areas where a local groundwater management plan has been developed and
20 approved (by the Central Valley Water Board) for substitution] [Alternative 2, Lead
21 Entity Responsibility 8].¹⁰ GQMPs are defined in Alternative 2, Groundwater Quality
22 Management Plans.
23

24 Individual farm water quality management plans (FWQMPs) would be required if
25 objectives are not met or improvements in water quality do not occur within the approved
26 time schedule for implementation. FWQMPs would be aimed to minimize waste (e.g.,
27 nutrients, pesticides, sediment, and pathogens) discharge to surface water and
28 groundwater (to include wellhead protection practices)—this plan would also be kept on
29 the site and submitted to the Central Valley Water Board upon request. Proposed FWQMP
30 requirements are summarized in Attachment F, Alternatives Document.¹¹ [Alternatives 4
31 and 5, Regulatory Requirements, FWQMPs]

¹⁰ For example, where the constituent of concern is nitrate, and the discharge pathway of concern is leaching to groundwater, the GQMP would need to include nutrient budgeting and efficient irrigation. In such cases, plan implementation would be tracked, and groundwater monitoring data and/ or other information would be reviewed to determine whether program objectives are being met. Plan requirements may need to be iteratively adjusted based on program tracking/ monitoring feedback.

¹¹ There may be cases where regional management plans fail to be effective at meeting the goals of the long-term ILRP. This could be due to a variety of reasons, such as individual grower refusal to participate in the regional management plan or coalition failure to implement plan objectives. In such cases, the Central Valley Water Board would need to ensure that program goals are achieved through establishing requirements at the individual operation level. This is mainly because the permitting and enforcement authorities of the Central Valley Water Board are applicable to the entity responsible for the waste discharge. Coalitions are third-party groups, not responsible for the waste discharge. This option would only be exercised as part of iterative enforcement where

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1
2 **Optional Certified Farm Water Quality Management Plan (FWQMP)**– This would be an
3 optional program that would not apply geographically, but at the individual farm level. In
4 this option, the operation would implement a certified¹² farm water quality management
5 plan. It is envisioned that these plans would be developed by commodity groups or other
6 third-parties for operations with similar waste discharges; however, individual operations
7 would be required to implement practices in the certified plan. Individual operations could
8 also develop and implement their own certified farm water quality management plan. The
9 certified farm water quality management plan must address both discharges to ground and
10 surface water. Irrigated agricultural operations implementing certified plans would be
11 considered lower priority because there has been on-farm verification (by Central Valley
12 Water Board or approved certifier) of practices implemented to control waste discharge to
13 surface and groundwater. The Central Valley Water Board or approved certifier would be
14 the lead entity for this option. [except for monitoring (described below), this option is
15 described in detail as Alternative 3, Alternatives Document].

16
17 Monitoring Provisions

18 Monitoring requirements would be tailored to address the concerns specific to the areas or
19 commodities for which they would apply. Development of the monitoring requirements
20 would occur during the development of implementation mechanisms (waste discharge
21 requirements [WDRs], waivers). The Central Valley Water Board intends that regional
22 monitoring programs would be coordinated with DPR surface and groundwater
23 monitoring, local groundwater management plan, the Central Valley Water Board dairy
24 program, and other existing programs. The primary goal of this coordination is to prevent
25 duplicative monitoring programs. For example, existing water quality data (e.g., Surface
26 Water Ambient Monitoring Program, SWAMP data; California Department of Pesticide
27 Regulation groundwater data; etc.) could be used, and the monitoring parameters would be
28 tailored to the farm inputs and water quality issues in the watershed or groundwater basin.

29
30 Areas with surface and/or groundwater quality problems (e.g., exceedance of water quality
31 objectives, trending degradation of water quality), where irrigated agricultural operations
32 have not been identified as a source, but may be a potential contributor, would be required
33 to work with the Central Valley Water Board and other potential sources (e.g.,
34 municipalities, dairies) to conduct monitoring and applicable source studies.

35

regional management plans have failed or enforcement directed towards individuals not in compliance is necessary. Certification of the individual plans would not be required.

¹² Certification includes Central Valley Water Board, or approved Certification Entity, approval of the plan. As part of certification program, the Water Board or Certification Entity would conduct an initial certification inspection and a minimum annual inspection frequency of 5% of operations with approved plans. Certification entities would report results to the Central Valley Water Board.

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1 **Tier 1 and Optional Certified FWQMP**
2

3 **Surface water:** Monitoring would consist of tracking management practices and
4 watershed-based assessment monitoring one year every five years (similar to the
5 assessment monitoring required under the current ILRP). Monitoring and tracking
6 results would be submitted in a report every five years to the Central Valley Water
7 Board. [this monitoring is described in Alternatives 1 and 2, Monitoring Provisions]
8

9 **Groundwater:** One year every five years, participate in regional groundwater
10 monitoring program (see regional groundwater monitoring for Tier 2 below).
11

12 **Tier 2**
13

14 **Surface water:** Watershed-based assessment and core monitoring similar to the
15 monitoring required under the current ILRP (Central Valley Water Board Order No.
16 R5-2008-0005). Under this monitoring scheme, third-party groups would work with
17 the Central Valley Water Board to develop monitoring plans during the
18 development of implementation mechanisms. These plans would specify monitoring
19 parameters and site locations. Monitoring and tracking results would be submitted
20 in an annual report to the Central Valley Water Board. [Alternatives 1 and 2,
21 Monitoring Provisions]
22

23 **Groundwater:** Participate in regional groundwater monitoring. The Central Valley
24 Water Board and third-parties will engage and coordinate with local groundwater
25 management agencies and other programs conducting groundwater monitoring in
26 meeting this requirement so as to prevent duplication of monitoring. Regional
27 groundwater monitoring would consist of [Alternative 4, Groundwater Monitoring]:
28

- 29 1. Regional monitoring for constituents of concern to provide baseline
30 groundwater information and track trends in groundwater quality over time.
31 Nutrient application tracking and associated modeling may be used to
32 evaluate discharges to groundwater in place of monitoring, where technically
33 feasible and appropriate.
- 34 2. Targeted site-specific studies to evaluate the effects of changes in
35 management practices on groundwater quality (this would occur only at a
36 selected number of sites—the Fertilizer Research and Education Program
37 [FREP] would be approached as a potential funding source for this
38 monitoring).
- 39 3. Gathering management practices tracking information from member
40 growers.
- 41 4. Submitting an annual report to the Central Valley Water Board summarizing
42 management practice tracking and the regional and targeted site-specific
43 monitoring results.
- 44 5. Utilizing a database system to compile existing groundwater quality data and
45 data collected during regional and site-specific monitoring (e.g., the State

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1 Water Resources Control Board’s Groundwater Ambient Monitoring and
2 Assessment [GAMA]/GeoTracker database could be used).

3
4 Figure 2 provides an illustration of how the Central Valley Water Board envisions the
5 application of the prioritization scheme and associated requirements.

6
7 **Time Schedule for Compliance**¹³
8

9 High priority surface and ground water quality issues are identified and would be subject
10 to the compliance time schedules described. It is likely that the practices to address the
11 high priority issues will also lead to improvement or achievement of objectives for the non-
12 high priority issues. Through periodic review of the irrigated lands program, the Central
13 Valley Water Board will determine whether additional compliance time schedules need to
14 be established for the non-high priority water quality issues.

15
16 The following general time schedules apply when irrigated lands are causing or
17 contributing to a discharge that results in exceedances of water quality objectives. The
18 Executive Officer or Water Board may modify these schedules based on evidence that
19 meeting the compliance date is technically or economically infeasible (e.g., where irrigated
20 agriculture demonstrates reduction in contributions, but cannot influence complete
21 compliance due to other sources; where irrigated agriculture has implemented best
22 practical treatment or control and water quality objectives are not achieved).

23
24 Management plan time schedules developed under the current ILRP would continue to
25 apply in the long-term ILRP. Any other applicable time schedule for compliance or
26 priorities established in the Central Valley Water Board’s Basin Plans would take
27 precedence over the schedules below.

28
29 **High Priority Surface Water Quality Issues**
30

- 31 1. Which water bodies are considered high priority?– specific water bodies with
32 beneficial uses identified in the Basin Plans; streams tributary to water bodies in the
33 Basin Plan with aquatic life uses based on the “tributary rule”¹⁴; tributary streams with
34 identified municipal or domestic drinking water intakes; water bodies with specific
35 time schedules established in the Basin Plans.
36 2. Which beneficial uses are considered high priority? – aquatic life, drinking water, and
37 human consumption uses in the above water bodies.

¹³ The State Water Board’s NPS Implementation Policy requires the establishment of a time schedule for compliance with water quality objectives.

¹⁴ Resolution R5-2005-0137 describes the application of the tributary rule. Agricultural drains and other constructed conveyances (not identified in the Basin Plans) would not be considered high priority.

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- 1 3. Which pollutants are considered high priority? – those pollutants that cause or
2 contribute to a violation of water quality objectives associated with the high priority
3 beneficial uses and water bodies.
4

5 Compliance time schedule – five to ten years. For watershed areas with multiple water
6 body/ pollutant issues to address, compliance schedules may be staggered between five
7 and ten years, but cannot exceed ten years.
8

9 High Priority Groundwater Quality Issues

- 10
11 1. Which ground water aquifers are considered high priority?– aquifers with identified
12 municipal or domestic drinking water wells; aquifers in which drinking wells were
13 closed due to exceedances of water quality objectives.
14 2. Which beneficial uses are considered high priority? –drinking water uses.
15 3. Which pollutants are considered high priority? – those pollutants that cause or
16 contribute to a violation of water quality objectives associated with drinking water
17 uses.
18

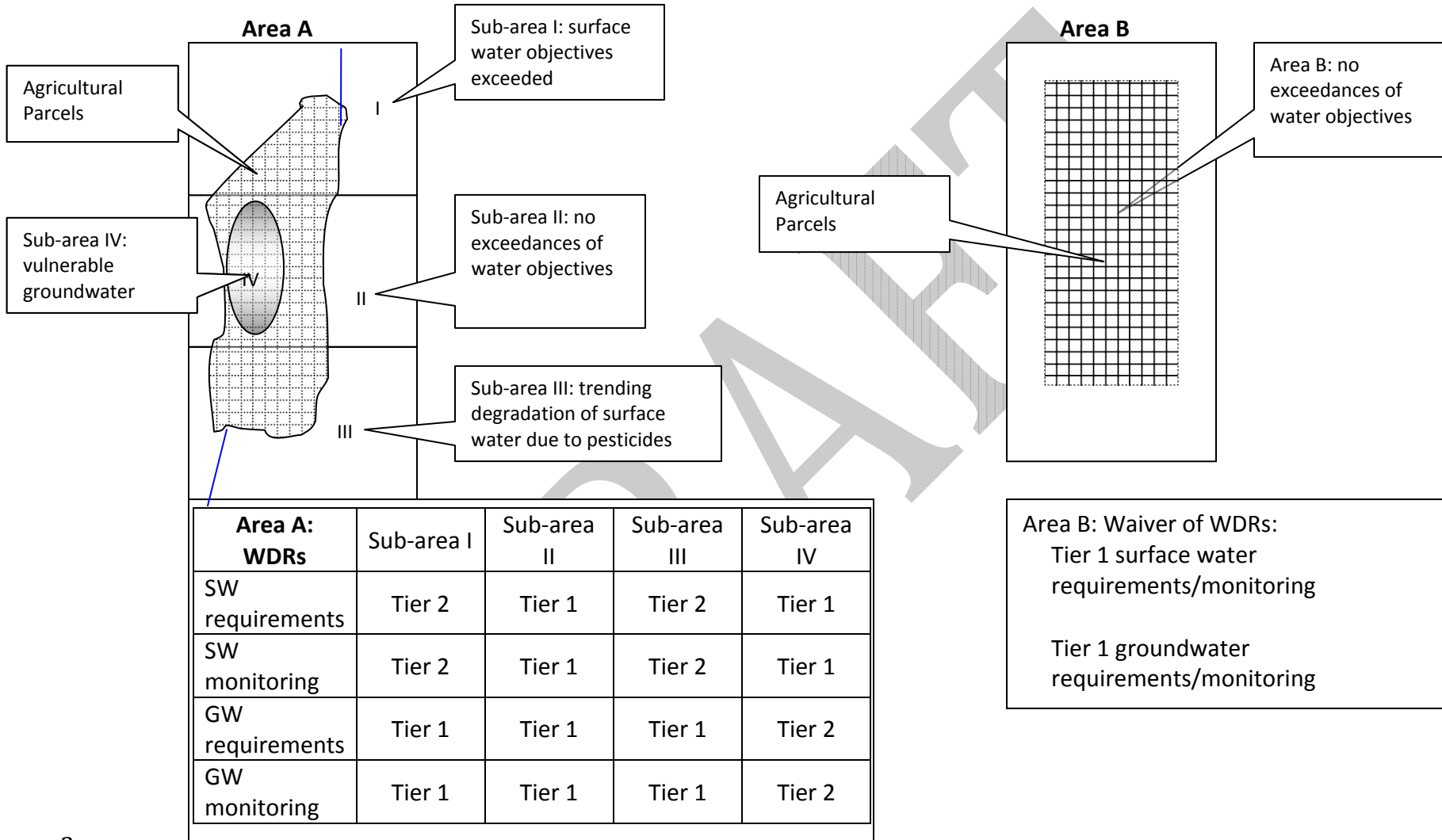
19 Compliance time schedule – five to ten years. For areas with multiple aquifer/ pollutant
20 issues to address, compliance schedules may be staggered between five and ten years, but
21 cannot exceed ten years. Compliance is considered to be demonstrated improvement in
22 water quality or reduction in discharge based on evaluation of available data of first
23 encountered ground water in the high priority aquifer. However, with Central Valley Water
24 Board approval, compliance can be demonstrated through documented implementation of
25 management practices, assessment of water quality data, and/or ground water quality
26 modeling.
27

28 Fees

29
30 Fees charged will be determined by the State Water Resources Control Board based on the
31 staff effort required to implement the program. The Central Valley Water Board will
32 recommend that the fee structure reflect the differing levels of effort for the different tiers
33 and oversight of irrigated agricultural operations as individuals versus as part of a third-
34 party group.

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1 **Figure 2. Long-term ILRP prioritization scheme example**



2
3