

**EXHIBIT “26”**



Winston H. Hickox  
Secretary for  
Environmental  
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# State Water Resources Control Board

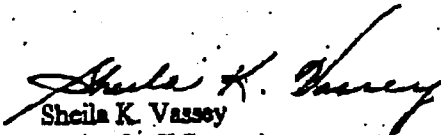
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TO: Stefan Lorenzato  
TMDL Coordinator  
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FROM:   
Sheila K. Vassey  
Senior Staff Counsel  
OFFICE OF CHIEF COUNSEL

DATE: OCT 27 1999

SUBJECT: ECONOMIC CONSIDERATIONS IN TMDL DEVELOPMENT AND  
BASIN PLANNING

### ISSUE

When are the Regional Water Quality Control Boards (Regional Water Boards or Boards) legally required to consider economics in Total Maximum Daily Load (TMDL)<sup>1</sup> development and water quality control planning (basin planning)?<sup>2</sup>

### CONCLUSION

The Regional Water Boards, in general, adopt TMDLs as basin plan amendments. Under state law, there are three triggers for Regional Water Board consideration of economics or costs in basin planning. These are:

- The Regional Water Boards must estimate costs and identify potential financing sources in the basin plan before implementing any agricultural water quality control program.
- The Boards must consider economics in establishing water quality objectives that ensure the reasonable protection of beneficial uses.

<sup>1</sup> See 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7.

<sup>2</sup> See Wq Code §§ 13240-13247.

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- The Boards must comply with the California Environmental Quality Control Act (CEQA)<sup>3</sup> when they amend their basin plans. CEQA requires that the Boards analyze the reasonably foreseeable methods of compliance with proposed performance standards and treatment requirements. This analysis must include economic factors.

Economic factors come into play under federal law when the Regional Water Boards designate uses. Specifically, the Boards can decide not to designate, dedesignate, or establish a subcategory of, a potential use where achieving the use would cause substantial and widespread economic and social impact.

## DISCUSSION

### I. STATE LAW

Under federal and state law, the Regional Water Boards are required to include TMDLs in their basin plans.<sup>4</sup> There are three statutory triggers for an economic or cost analysis in basin planning. These triggers are:

- adoption of an agricultural water quality control program;
- adoption of water quality objectives; and
- adoption of a treatment requirement or performance standard (CEQA).

Each category is briefly discussed below.

#### A. Agricultural Water Quality Control Program

Agricultural activities are significant sources of nonpoint source pollution. Many waterbodies in the state are impaired due to one or more agricultural operations. As a result, the Regional Water Boards will be faced with developing programs to control agricultural activities, as part of TMDL development.

Under the Porter-Cologne Water Quality Control Act (Porter-Cologne),<sup>5</sup> before a Regional Water Board implements an agricultural water quality control program, the Board must identify

<sup>3</sup> Pub. Resources Code § 21000 et seq.

<sup>4</sup> See 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7(d)(2) (TMDLs must be incorporated into the state's water quality management plan. In California the basin plans are part of the state's water quality management plan.); Wat. Code §§ 13050(j), 13242.

<sup>5</sup> Wat. Code § 13000 et seq.

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the total cost of the program and potential sources of financing.<sup>6</sup> This information must be included in the basin plan.

The statute does not define "agricultural" programs. The Legislature has, however, defined agricultural activities elsewhere to mean activities that generate "horticultural, viticultural, forestry, dairy, livestock, poultry, bee, or farm product[s]."<sup>7</sup> Because "agricultural" programs under Porter-Cologne are not restricted to particular activities, presumably, the Legislature intended that the term be interpreted broadly. Thus, the Regional Water Boards should identify costs and financing sources for agricultural water quality control programs<sup>8</sup> covering not only typical farming activities but also silviculture, horticulture, dairy, and the other listed activities.

The statute focuses only on costs and financing sources. The statute does not require the Regional Water Boards to do, for example, a cost-benefit analysis or an economic analysis.

#### B. Water Quality Objectives

Porter-Cologne requires that the Regional Water Boards take "economic considerations", among other factors, into account when they establish water quality objectives.<sup>9</sup> The objectives must ensure the reasonable protection of beneficial uses and the prevention of nuisance.<sup>9</sup>

Attached to this memorandum is a 1994 memorandum containing guidance on the consideration of economics in the adoption of water quality objectives.<sup>10</sup> The key points of this guidance are:

- The Boards have an affirmative duty to consider economics when adopting water quality objectives.
- At a minimum, the Boards must analyze: (1) whether a proposed objective is currently being attained; (2) if not, what methods are available to achieve compliance with the objective; and (3) the costs of those methods.

<sup>6</sup> *Ibid.* § 13141.

<sup>7</sup> Food & Agr. Code §§ 564(a), 54004.

<sup>8</sup> Wqt. Code § 15241. The other factors include the past, present, and probable future beneficial uses of water; environmental characteristics of the hydrographic unit under consideration; water quality conditions that could reasonably be achieved through the coordinated control of all factors affecting water quality in the area, the need for developing housing, and the need to develop and use recycled water.

<sup>9</sup> *Ibid.*

<sup>10</sup> Memorandum, dated January 4, 1994, from William R. Atzwanger, Chief Counsel, to Regional Water Board Executive Officers and Attorneys, entitled "Guidance on Consideration of Economics in the Adoption of Water Quality Objectives".

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- If the economic consequences of adoption of a proposed objective are potentially significant, the Boards must state on the record why adoption of the objective is necessary to ensure the reasonable protection of beneficial uses or the prevention of nuisance.
- The Regional Water Boards can adopt objectives despite significant economic consequences.
- The Boards are not required to do a formal cost-benefit analysis.

### C. CEQA

The Regional Water Boards must comply with CEQA when they amend their basin plans.<sup>11</sup> The State Resources Agency has certified the basin-planning program as exempt from the requirement to prepare environmental documents under CEQA.<sup>12</sup> In lieu of preparing an environmental impact report or negative declaration, the Boards must comply with the State Water Resources Control Board's regulations on exempt regulatory programs when they amend their basin plans.<sup>13</sup> These regulations require the Boards to prepare a written report that analyzes the environmental impacts of proposed basin plan amendments.<sup>14</sup> In general, CEQA requires the Regional Water Boards to consider economic factors only in relation to physical changes in the environment.<sup>15</sup>

CEQA also has specific provisions governing the Regional Water Boards' adoption of regulations, such as the regulatory provisions of basin plans that establish performance standards or treatment requirements. The Boards must do an environmental analysis of the reasonably foreseeable methods of compliance with those standards or requirements.<sup>16</sup> They must consider economic factors in this analysis.

CEQA does not define "performance standard"; however, the term is defined in the rulemaking provisions of the Administrative Procedure Act.<sup>17</sup> A "performance standard" is a regulation that describes an objective with the criteria stated for achieving the objective.<sup>18</sup>

<sup>11</sup> See Pub. Resources Code § 21080.

<sup>12</sup> See Cal. Code Regs., tit. 14, § 15251(g).

<sup>13</sup> See Cal. Code Regs., tit. 23, §§ 3775-3782.

<sup>14</sup> *Id.* § 3777.

<sup>15</sup> See Cal. Code Regs., tit. 14, § 15064(e).

<sup>16</sup> Pub. Resources Code § 21159.

<sup>17</sup> Gov. Code §§ 11340-11359.

<sup>18</sup> *Id.* § 11342(d).

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TMDLs will typically include performance standards. TMDLs normally contain a quantifiable target that interprets the applicable water quality standard. They also include wasteload<sup>19</sup> allocations for point sources, and load allocations<sup>20</sup> for nonpoint sources and natural background to achieve the target.<sup>21</sup> The quantifiable target together with the allocations may be considered a performance standard. Thus, the Regional Water Board must identify the reasonably foreseeable methods of compliance with the wasteload and load allocations and consider economic factors for those methods. This economic analysis is similar to the analysis for water quality objectives discussed above. That is, the Regional Water Board should determine: (1) whether the allocations are being attained; (2) if not, what methods of compliance are reasonably foreseeable to attain the allocations; and (3) what are the costs of these methods.

## II. FEDERAL LAW

Under federal law, economics can be considered in designating potential beneficial uses. Specifically, the federal water quality standards regulations allow a state to dedesignate, to decide not to designate, or to establish a subcategory of a potential beneficial use on economic grounds. To rely on this basis, the state must demonstrate that attaining the use is infeasible because the controls necessary to attain the use "would result in substantial and widespread economic and social impact."<sup>22</sup>

The states can take this action only for potential uses. These are uses that do not meet the definition of an "existing use". Existing uses are those uses actually attained in the water body on or after November 28, 1975.<sup>23</sup>

### Attachment

<sup>19</sup> See 40 C.F.R. § 130.2(g). A wasteload allocation is the portion of the receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution.


<sup>20</sup> See *id.* § 130.2(g). A load allocation is the portion of the receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources.

<sup>21</sup> See *id.* § 130.2(i). A TMDL is the sum of the individual wasteload and load allocations.

<sup>22</sup> See *id.* § 131.10(g)(6).

<sup>23</sup> *Id.* § 131.3(e).

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State of California

**m e m o r a n d u m**

To : Regional Water Board  
Executive Officers  
  
Regional Water Board Attorneys

Date: JAN -4 1994

From : William R. Attwater  
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Mail Code: C-8

Subject: GUIDANCE ON CONSIDERATION OF ECONOMICS IN THE ADOPTION OF WATER QUALITY OBJECTIVES

ISSUE

What is required of a Regional Water Quality Control Board (Regional Water Board) in order to fulfill its statutory duty to consider economics when adopting water quality objectives in water quality control plans or in waste discharge requirements?

CONCLUSION

A Regional Water Board is under an affirmative duty to consider economics when adopting water quality objectives in water quality control plans or, in the absence of applicable objectives in a water quality control plan, when adopting objectives on a case-by-case basis in waste discharge requirements. To fulfill this duty, the Regional Water Board should assess the costs of the proposed adoption of a water quality objective. This assessment will generally require the Regional Water Board to review available information to determine the following: (1) whether the objective is currently being attained; (2) what methods are available to achieve compliance with the objective, if it is not currently being attained; and (3) the costs of those methods. The Regional Water Board should also consider any information on economic impacts provided by the regulated community and other interested parties.

If the potential economic impacts of the proposed adoption of a water quality objective appear to be significant, the Regional Water Board must articulate why adoption of the objective is necessary to assure the reasonable protection of beneficial uses of state waters, despite the potential adverse economic consequences. For water quality control plan amendments, this

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discussion could be included in the staff report or resolution for the proposed amendment. For waste discharge requirements, the rationale must be reflected in the findings.

### DISCUSSION

#### A. Legal Analysis

##### 1. Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, Water Code Section 13000 et seq. (Porter-Cologne Act or Act), the State Water Resources Control Board (State Water Board) and the Regional Water Boards are the principal state agencies charged with responsibility for water quality protection. The State and Regional Water Boards (Boards) exercise this responsibility primarily through the adoption of water quality control plans and the regulation of waste discharges which could affect water quality. See Water Code Secs. 13170, 13170.2, 13240, 13263, 13377, 13391.

Water quality control plans contain water quality objectives, as well as beneficial uses for the waters designated for protection and a program of implementation to achieve the objectives. Id. Sec. 13050(j). In the absence of applicable water quality objectives in a water quality control plan, the Regional Water Board may also develop objectives on a case-by-case basis in waste discharge requirements. See id. Sec. 13263(a).<sup>1</sup>

When adopting objectives either in a water quality control plan or in waste discharge requirements, the Boards are required to exercise their judgment to "ensure the reasonable protection of beneficial uses and the prevention of nuisance". Id. Secs. 13241, 13263; see id. Sec. 13170. The Porter-Cologne Act recognizes that water quality may change to some degree without

<sup>1</sup> The focus of this memorandum is limited to an analysis of the Boards' obligation to consider economics when adopting water quality objectives either in water quality control plans or, on a case-by-case basis, in waste discharge requirements. This memorandum does not discuss the extent to which the Boards' are required to consider the factors specified in Water Code Section 13241 in other situations. Specifically, this memorandum does not discuss the applicability of Section 13241 to the development of numeric effluent limitations, implementing narrative objectives contained in a water quality control plan. Further guidance on the latter topic will be developed at a later date.

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causing an unreasonable effect on beneficial uses. Id. The Act, therefore, identifies factors which the Boards must consider in determining what level of protection is reasonable. Id.<sup>2</sup> These factors include economic considerations. Id.<sup>3</sup>

The legislative history of the Porter-Cologne Act indicates that "[c]onservatism in the direction of high quality should guide the establishment of objectives both in water quality control plans and in waste discharge requirements". Recommended Changes in Water Quality Control, Final Report of the Study Panel to the [State Water Board], Study Project--Water Quality Control Program, p. 15 (1969) (Final Report). Objectives should "be tailored on the high quality side of needs of the present and future beneficial uses". Id. at 12. Nevertheless, objectives must be reasonable, and economic considerations are a necessary part of the determination of reasonableness. "The regional boards must balance environmental characteristics, past, present and future beneficial uses, and economic considerations (both the cost of providing treatment facilities and the economic value of development) in establishing plans to achieve the highest water quality which is reasonable." Id. at 13.

2. Senate Bill 919.

The Boards are under an additional mandate to consider economics when adopting objectives as a result of the recent enactment of Senate Bill 919. 1993 Cal. Stats., Chap. 1131, Sec. 8, to be codified at Pub. Res. Code, Div. 13, Ch. 4.5, Art. 4. The legislation, which is

2 Other factors which must be considered include:

- (a) Past, present, and probable future beneficial uses of water;
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
- (d) The need for developing housing within the region;
- (e) The need to develop and use recycled water.

3 See also Water Code Section 13000 which mandates that activities and factors which may affect water quality "shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible" (emphasis added).

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effective January 1, 1994, amended the California Environmental Quality Control Act, Public Resources Code Section 21000 et seq. (CEQA), to require that, whenever the Boards adopt rules requiring the installation of pollution control equipment or establishing a performance standard or treatment requirement, the Boards must conduct an environmental analysis of the reasonably foreseeable methods of compliance. This analysis must take into account a reasonable range of factors, including economics. For the reasons explained above, the latter requirement is duplicative of existing requirements under the Porter-Cologne Act regarding consideration of economics.

**B. Recommendation**

The meaning of the mandate to "consider economics" in the Porter-Cologne Act is not entirely clear. It is clear that the Porter-Cologne Act does not specify the weight which must be given to economic considerations. Consequently, the Boards may adopt water quality objectives even though adoption may result in significant economic consequences to the regulated community. The Porter-Cologne Act also does not require the Boards to do a formal cost-benefit analysis.

The Porter-Cologne Act does impose an affirmative duty on the Boards to consider economics when adopting water quality objectives. The Boards probably cannot fulfill this duty simply by responding to economic information supplied by the regulated community. Rather, the Boards should assess the costs of adoption of a proposed water quality objective. This assessment will normally entail three steps. First, the Boards should review any available information on receiving water and effluent quality to determine whether the proposed objective is currently being attained or can be attained. If the proposed objective is not currently attainable, the Boards should identify the methods which are presently available for complying with the objective. Finally, the Boards should consider any available information on the costs associated with the treatment technologies or other methods which they have identified for complying with a proposed objective.<sup>4</sup>

<sup>4</sup> See, for example, *Managing Wastewater In Coastal Urban Areas*, National Research Council (1993). This text provides data on ten technically feasible wastewater treatment technologies, which can be used to make comparative judgments about performance and to estimate the approximate costs of meeting various effluent discharge standards, including standards for toxic organics and metals.

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In making their assessment of the cost impacts of a proposed objective, the Boards are not required to engage in speculation. Rather, the Boards should review currently available information. In addition, the Boards should consider, and respond on the record, to any information provided by dischargers or other interested persons regarding the potential cost implications of adoption of a proposed objective.

If the economic consequences of adoption of a proposed water quality objective are potentially significant, the Boards must articulate why adoption of the objective is necessary to ensure reasonable protection of beneficial uses. If the objective is later subjected to a legal challenge, the courts will consider whether the Boards adequately considered all relevant factors and demonstrated a rational connection between those factors, the choice made, and the purposes of the Porter-Cologne Act. See California Hotel & Motel Assn. v. Industrial Welfare Com., 25 Cal.3d 200, 212, 157 Cal.Rptr. 840, 599 P.2d 31 (1979).

Reasons for adopting a water quality objective, despite adverse economic consequences, could include the sensitivity of the receiving waterbody and its beneficial uses, the toxicity of the regulated substance, the reliability of economic or attainability data provided by the regulated community, public health implications of adopting a less stringent objective, or other appropriate factors. These factors may also include the legislative directive that a "margin of safety [ ] be maintained to assure the protection of all beneficial uses." Final Report, p. 15 and App. A, p. 59.

If objectives are proposed for surface waters and adverse economic consequences stemming from adoption of the objectives could be avoided only if beneficial uses were downgraded, the Boards should address whether dedesignation would be feasible under the applicable requirements of the Clean Water Act and implementing regulations. See 40 C.F.R. Sec. 131.10. Dedesignation is feasible only for potential, rather than existing, uses. See *id.* Sec. 131.10(g). If dedesignation of potential beneficial uses is infeasible, the Boards should explain why, e.g., that there is a lack of data supporting dedesignation.<sup>5</sup>

<sup>5</sup> It should also be noted that, even if dedesignation of potential beneficial uses is feasible, in the great majority of cases it will not have any significant effect on the selection of a proposed objective. This is so because the proposed objective will be necessary to protect existing beneficial uses, which cannot be dedesignated.

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The State or Regional Water Board's rationale for determining that adoption of a proposed objective is necessary to protect water quality, despite adverse economic consequences, must be discernible from the record. This reasoning could be included in the staff report or in the resolution adopting a proposed water quality control plan amendment. When objectives are established on a case-by-case basis in waste discharge requirements, the rationale must be included in the findings.

*bbarrera*

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