Attachment 4

County of San Diego

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April 23, 2002

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SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

Mr. John H. Robertus, Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Dear Mr. Robertus:

WRITTEN COMMENTS ON PROPOSED BASIN PLAN AMENDMENT MODIFYING PORTIONS OF CHAPTER 4, IMPLEMENTATION TO INCLUDE RAINBOW CREEK NUTRIENT TMDLS AND IMPLEMENTATION PLAN

Attached are the County of San Diego's written comments on the proposed Basin Plan Amendment, modifying portions of Chapter 4, Implementation, to include Rainbow Creek Nutrient TMDLs and Implementation. The County welcomes any comments on its submission and encourages the California Regional Water Quality Control Board, San Diego Region, to consider a meeting to discuss our response prior to the Public Hearing and Notice of Filing Scheduled on May 8, 2002.

Please contact Jack Miller at (619) 338-2201, if you have any questions concerning our comments or would like to establish a meeting time.

Sincerely,

GARY W. ERBECK, Director
Department of Environmental Health

cc: Lisa Brown, SDRWQCB
Don Steuer, Land Use & Environment Group
Rod Lorang, County Counsel
Jack Miller, DEH
Jon Van Rhyn, DEH

County of San Diego Comments on
Proposed RWQCB Resolution R9-2002-0108
Rainbow Creek TMDL and WLA
(Submitted April 23, 2002)

Introduction

The Rainbow Creek Total Maximum Daily Load (TMDL) proposal addresses Nitrogen (N) and Phosphorus (P) loadings to Rainbow Creek from point source discharges to surface water, non-point source discharges to surface water, and from groundwater discharges into the creek. The current 303(d) listing for Rainbow Creek was put in place in 1996, and is for eutrophic conditions. However, Regional Water Quality Control Board (RWQCB) staff have acknowledged in their draft reports and in response to peer reviewer comments that there is presently no evidence of eutrophic conditions in Rainbow creek. A revised proposed 303(d) listing for Rainbow Creek is scheduled for a hearing before the State Water Resources Control Board (State Board) in late May of this year.

Based on the draft RWQCB staff report that supports this TMDL proposal, the most significant sources of N (in descending order) are undeveloped land, residential septic systems, orchards, agricultural fields, and commercial nurseries. Septic systems are not a significant source of P. The RWQCB proposal includes a Waste Load Allocation (WLA) for N and P for each of these categories of sources.

None of these identified categories of significant sources involves discharges by the County.

Despite the fact that it is not a significant discharger, the County should play a significant part in regional efforts to address water quality in Rainbow Creek. The County is the principle land use authority for this watershed. The County issues or denies permits to install most conventional septic systems County-wide under an existing RWQCB delegation.[1] The County also responds when sewage from septic systems surfaces and poses a health threat. Finally, the County has established working relations with the agricultural community that are

[1] The RWQCB remains the principle agency regulating wastewater system discharges to groundwater; the County's delegated authority is limited. For example, the County cannot issue permits for or require installation of advanced domestic wastewater systems. The RWQCB and the County will need to review their programs for onsite sewage treatment systems to implement A.B. 885, enacted last year. This could results in significant program changes sometime after 2004.

likely to be helpful in seeking to reduce N and P loadings from nurseries, orchards and crops.

The County also has a role to play in this process as a "local agency" subject to Water Code section 13225(c). The County acknowledges that the RWQCB has authority pursuant to that subsection "to require as necessary [the County] to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water . . . ." The County notes however that this authority is subject to conditions.[2]

While the County is not a significant discharger in this watershed, the County intends to continue to work with the RWQCB to address water quality issues in this watershed (and County-wide) on a coordinated and cooperative basis. The County has recently demonstrated its resolve to cooperate with the RWQCB in many ways—e.g., by accepting the municipal stormwater permit;[3] by stepping forward as principle copermittee under that permit without seeking reimbursement for coordination costs; by developing model ordinances and program elements that were adapted and used by other copermittees; and by continuing its support for and leadership of Project Clean Water (also without reimbursement). The County is also cooperating with other local governments and state and federal agencies to ensure that appropriate watershed planning is undertaken throughout the County.

Summary of County Position on the Proposed TMDL and WLA

The County as a governmental entity hopes and intends to work with the RWQCB to address water quality issues affecting Rainbow Creek. However, the County will not be able to support the implementation of this TMDL and WLA as currently proposed by RWQCB staff. Significant changes are needed to gain the County's support and to allow effective RWQCB/County cooperation.

County staff have worked with RWQCB staff during the development of this proposal. The County agrees with RWQCB staff on many fundamental points, e.g., that any strategy for improving water quality in Rainbow Creek should

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[2] Conditions imposed by the Water Code are included in subsection 13225(c). First, the requirement must be "necessary." Necessary reports can be required "provided that the burden including costs, of such reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained therefrom." State laws concerning unfunded mandates may also require that the state provide funding to the County to carry out any directives issued pursuant to subsection 13225(c). The County does not waive its right to assert in the appropriate forum that directions issued to the County pursuant to this subsection are unfunded state mandates.

[3] The County's decision not to petition or appeal this permit was made only after significant modifications were made to the permit in response to comments by the County and others.

include phased implementation of a TMDL and WLA; that more study is needed to define problems, to track progress and to better inform key decisions; and that an appropriate opportunity should be provided to achieve "voluntary" reductions in loadings before drastic regulatory measures are applied to septic systems, orchards and crops. The County also agrees with RWQCB staff that the County should play a substantial role both in conducting further studies where needed, and in securing load reductions from septic systems and agricultural activities.

The County acknowledges that some of the most significant comments it provided during the development of this proposal were accepted and implemented by RWQCB staff and/or legal counsel. In particular, the County wants to acknowledge that the proposal calls for "requests" that the County take action in many areas where RWQCB staff had formerly proposed to attempt to compel County action.

These areas of agreement are significant and provide a good foundation for cooperation. However, many other significant County concerns were not resolved by RWQCB staff. This TMDL/WLA proposal remains fundamentally flawed for the following reasons:

1. The proposal has not been peer reviewed. (A less stringent proposal was peer reviewed.)

2. The proposal is not consistent with the law or with the available data.

3. The proposal is not realistic in seeking a 50% reduction in releases of N from residential septic systems.

4. The proposal sets policy precedents that are unacceptable to the County, and that are likely to be unacceptable to the San Diego community generally once those policies are understood.

These concerns are addressed further in the text that follows.

We appreciate the opportunities for dialog that RWQCB staff and mid-level managers have provided to County staff and legal counsel. The County offers these written comments in the same spirit of cooperation as its prior comments. Many of these comments were offered to RWQCB staff orally after the release of the proposed resolution package. We understand that RWQCB staff are still considering some of those comments, and we do not mean by repeating a comment here to imply that RWQCB staff have finally and firmly determined to oppose the County's position on the point addressed.

While the County will continue to work with RWQCB staff, these formal comments are direct and specific. The County believes that at this stage in the TMDL promulgation process, a clear written statement of its concerns and positions may assist RWQCB senior managers, legal counsel, and Board members. We hope to resolve the issues raised in these comments in a manner that would make continued County / RWQCB cooperation possible. We hope that RWQCB managers and Board members will accept the offer of cooperation that the County is extending with these comments. The County does of course welcome further discussion of its proposals—before, during, or after any public hearing or RWQCB action on this proposal.

The County's efforts to resolve these issues are not based solely on the effects this TMDL would have on the County or on Rainbow Creek. This TMDL will be one of the first TMDLs implemented in this region, and it will be closely watched. Therefore, this TMDL should be crafted and implemented in a manner that will lay a strong foundation for public and stakeholder acceptance of TMDLs in San Diego. As proposed, however, this TMDL would likely have the opposite effect: it is likely to undermine public confidence in the RWQCB's TMDL process, to the ultimate detriment of water quality in the San Diego region.

The specific comments that follow address timing, scientific flaws in the proposed TMDL, and cost sharing and other changes to this proposal that would facilitate continued RWQCB/County cooperation.

This TMDL Should Be Delayed Until a Revised 303(d) Listing is in Place

The current 303(d) listing for Rainbow Creek was put in place in 1996, and is for eutrophic conditions. But, RWQCB staff have acknowledged in their draft reports and in response to peer reviewer comments that there is presently no evidence of eutrophic conditions in Rainbow creek. This may be due in part to reductions in nutrient loadings achieved since 1996.

In response to changed conditions, the RWQCB has proposed to revise the impairment listing for Rainbow Creek. That proposed revision is set for review by the State Board in late May of this year. The revised listing would directly address loadings of N and P that (1) are causing violations of the drinking water standard for nitrate; and (2) are believed to be causing N and P levels in the creek in excess of the Basin Plan's narrative objective for biostimulatory substances. That narrative objective states: "Inland surface waters, . . . shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses."

As a matter of law, TMDLs must be promulgated after and must be based on impairment listings. Peer reviewers have noted and RWQCB staff have acknowledged that the current impairment listing for Rainbow Creek no longer has a basis in fact. Moreover, it is clear that RWQCB staff are not proposing a TMDL to address the eutrophication-based impairment listing for Rainbow Creek, but are instead proposing a TMDL that *anticipates* the modifications to the Rainbow Creek impairment listing that are now pending at the State Water Resources Control Board. This sequencing is backwards, legally and scientifically. It is an abuse of the public participation processes the law mandates for 303(d) listings and for TMDLs. No TMDL for Rainbow Creek should go forward until a revised impairment listing for Rainbow Creek is in place.

The County recognizes that the RWQCB is committed to promulgating a TMDL for Rainbow Creek in the very near future. This appears to be achievable. Rainbow Creek is assigned an MUN beneficial use in the basin plan, and available data show directly that parts of Rainbow Creek sometimes contain nitrates in excess of the applicable drinking water standard. Therefore, there is little doubt that a revised 303(d) listing will support a TMDL for nitrates based on this drinking water standard. The March 2002 staff report would support this TMDL. Therefore, it should be feasible to promulgate an appropriate TMDL to address this drinking water standard with virtually no delay, once a revised 303(d) listing is in place.

A TMDL for Rainbow Creek should be delayed briefly, and should be limited in its initial scope, for two additional reasons.

First, this basin has not yet reaped the full benefits that can be expected when appropriate technology-based controls have been in place at all commercial nurseries for a reasonable period of time. These nurseries are discrete and significant sources of contamination, and they are still in the process of developing and implementing nutrient control and irrigation control BMPs to limit N and P in their discharges. In addition, the draft Staff Report notes (at pp. 3-4) that one commercial nursery in the watershed has actually placed a dam in Rainbow Creek, and uses the creek to impound and recirculate irrigation water. Restoring the natural flow of the creek may have significant effects. Whether the controls put in place at these sources are "voluntary" or "mandatory" is not the key issue here.[4]

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[4] RWQCB staff have asserted to County staff and legal counsel that discharges from these nurseries are "agricultural return flows" and therefore are not point source discharges subject to the federal Clean Water Act. If this were correct, then the Clean Water Act would not require that these nurseries be placed under permit before a TMDL was developed. Without commenting on the assertion that nurseries may be exempt from *federal* discharge permits, the County notes that state Water Code section 13260(a) allows the RWQCB to issue and enforce WDRs to "any person discharging waste," and that Water Code section 13050 defines "waste" to

In either case, it is clear there are further reductions in pollutant discharges that can be attained using cost-effective technology-based measures. It will take some time to see what further effects these reductions in N and P loadings will have on Rainbow Creek. The interim reductions already achieved have had a significant beneficial effect on the creek.

A second reason to limit the scope of an intial TMDL is that the state has just established and is in the process of implementing a new program, complete with financial incentives, that may allow some properly functioning conventional septic systems in this watershed to be replaced with advanced systems, that would discharge less N. TMDL implementation in this watershed should be tied to the phased implementation of AB 885, but those new programs will not be in place until 2004.

The short delay and initial limitations proposed here are consistent with the federal Clean Water Act and the state Water Code. TMDLs are intended to be "second-step" programs, deployed to address water quality problems that persist after technology-based controls have been implemented. TMDLs that are promulgated before reasonable technology-based controls are in place may be unnecessary or poorly calibrated.

It is important to note that the initial TMDL that the County proposes here need not interfere with progress on water quality improvement in Rainbow Creek, in comparison to the TMDL proposed by RWQCB staff. The TMDL proposed by RWQCB staff would allow four years to achieve this drinking water standard. Before these initial efforts to attain the drinking water standard were completed, a revised 303(d) listing would be in place, more would be known about the creek, and the AB 885 program would be taking shape. A revised TMDL for N and P could take this new information into account, and still be promulgated before implementation of an initial TMDL had been completed.

The Proposed TMDL is Scientifically Flawed

The proposed TMDL has not been peer reviewed. The RWQCB's peer reviewers examined a November, 2001 draft staff report. That report proposed a TMDL for N of 3,400 kg/yr, plus a 2,400 kg/yr allowance for undeveloped land and margin of safety. (November, 2001 draft staff report at pp. 25-27.) No peer

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include discharges from "any producing operation." Commercial nurseries that discharge polluted water from a pipe into a creek could therefore be required under state law to obtain WDRs, whether or not the nurseries are required to have permits under the federal Clean Water Act.

reviewer has endorsed the much more stringent TMDLs actually proposed in the draft Basin Plan Amendment.

A TMDL program for Rainbow Creek is also subject to two special complications that increase the importance of basing the TMDL on sound science.

First, because this is one of the first TMDLs in San Diego, it will receive extra scrutiny as an indicator of RWQCB's intentions and standards for the TMDL program in San Diego generally. Stakeholders with no interest in Rainbow Creek itself will review this TMDL looking for flaws in the RWQCB's use of data, adherence to the law, scientific process, and decision-making process. If this TMDL is to advance the cause of water quality region-wide, it should merit the support of stakeholders broadly as a model for future TMDLs. It must have a strong scientific foundation, must set reasonable goals that will be broadly acknowledged to be appropriate and important, and must allocate costs and other pain in a manner that is generally acknowledged to be fair. It must be capable of being implemented at a reasonable cost, i.e., at a cost that can be justified by the benefits that will be obtained.

Second, a Rainbow Creek TMDL is unlikely to be limited to imposing more stringent numerical limits on effluent discharges by significant point sources. Instead, people will be affected where they live, and agriculture will be affected. Success in reducing loading of pollutants from existing septic systems, from agricultural activities, and from land uses such as parks and preserves is not merely a matter of governments wanting to do the right thing and having the political will to impose necessary regulations. Success in these areas will ultimately depend on the consent of the governed. Therefore, a Rainbow Creek TMDL must also be a tool for building consensus among those directly affected.

These aspects of this process increase the importance of proposing a TMDL that is both well founded scientifically, and well calibrated. The TMDL proposed by staff does not appear to be calibrated to fit the available science, or fundamental policies for TMDLs.

<u>The Proposed TMDL Is Not Realistic in Seeking a 50% Reduction in Releases of N from Residential Septic Systems</u>

Achieving a 50% reduction in septic system-derived loadings of N to Rainbow Creek is almost certainly not feasible, and is probably physically impossible under the most ideal of soil conditions, unless significant numbers of properly functioning conventional septic systems are replaced with very costly alternative systems. Properly functioning conventional septic systems are not designed to remove large quantities of N. They are designed to convert organic N and

ammonia to nitrate, to remove some N altogether through denitrification, and to remove all pathogens. Additional N is removed by plant assimilation in the septic system leach field. While failing septic systems would undoubtedly add more N to the subsurface than functioning systems, most of the systems in the Rainbow Creek watershed are functioning properly.

The AB 885 program will provide new tools to address releases of N from septic systems, where those releases impair beneficial uses. Those tools may include a revolving, low-interest loan fund. The determination of a realistic WLA for septic systems should be deferred until further progress is made in defining and implementing programs based on AB 885.

If reduction in loadings from onsite wastewater treatment systems must be achieved more quickly than would be the case under AB 885, or if ultimate reductions must exceed what AB 885 programs would achieve, then the RWQCB must take the responsibility to secure those reductions. As noted above, the regulation of discharges to ground water from onsite wastewater treatment systems is primarily an RWQCB responsibility, and the delegation that County has accepted (i.e., to administer a permit program for new conventional septic systems) is limited in scope. The County should not be asked to accept responsibility to secure greater reductions in septic system loadings of N than AB 885 programs will achieve.

The Proposed TMDL Is Not Internally Consistent

The proposed TMDL is scientifically and mathematically flawed. In recent discussions with County staff and legal counsel, RWQCB staff were unable to explain how the allowable loadings proposed in this TMDL are related to estimated natural loadings to Rainbow Creek, or to estimated loadings required to reach the staff's numerical water quality targets.

A simple table that is not contained in the draft staff report or the proposed Resolution or Basin Plan Amendment, but which is based entirely on the numbers included in those documents, is enlightening:

How Much Nitrogen?

Item	Value	Source
N loading from remaining undeveloped land	1,507 kg/yr	Staff Report, p. 13
% of land in the basin that is still undeveloped	63 %	Staff Report, p. 13
Total N loading if all land was undeveloped	2,403 kg/yr	calculated[5]
Total N nominally[6] allowed by the TMDL	≤1,507 kg/yr	Plan, p. 2
Total N to achieve target of 1.0 mg N/L	≤402 kg/yr	Plan, p. 2, note 1
Total N actually allowed by the Resolution	≤402 kg/yr	Plan, pp. 2-3

Even though pre-human nitrogen loadings to Rainbow Creek were likely to have been about 2,400 kg/yr, this TMDL package proposes a nominal TMDL for N that would require total N loadings to be reduced to less than two-thirds that level. Under this scenario, undeveloped land could be left to nature and could continue to release N to the creek, but all N discharges from land touched by man (even if only touched by designation as a "preserve") would eventually have to be eliminated. It would *not* be sufficient merely to reduce discharges back to natural levels.

Moreover, RWQCB staff's proposed approach to actually implementing this TMDL would not treat the TMDL itself as a stopping point. Instead, the draft Basin Plan Amendment proposes that incremental reductions in N loading must continue to be achieved somehow until the numerical objective of 1.0 mg N/L is met in the creek. (See draft Amendment at pp. 2-3.) If RWQCB staff are correct that meeting these targets will require reducing loadings to 402 kg N/yr as stated in footnote 1 to the Resolution, then the effective TMDL for N is 402 kg/yr, not

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[5] Calculated at 1507 kg/yr divided by 0.627. This applies the loading rate for remaining undeveloped land to the entire land area of the basin, to approximate the "natural" or "baseline" load of N to Rainbow Creek prior to any human intervention. The calculation is potentially inaccurate to the extent already developed land would have had a different natural loading factor than remaining undeveloped lands.

[6] The draft Resolution nominally sets a Nitrogen TMDL of 1,507 kg/yr. (Resolution, p. 2.) However, the Resolution also states that incremental reductions of 10% every four years will be required "*until the biostimulatory targets for nitrogen and phosphorus are met.*" (Resolution, pp. 2-3.) In other words, it is these numeric targets for water quality, not the nominal TMDL that would define the stopping point for further controls.

1,507 kg/yr. This would require total loadings of nitrogen to be reduced to 402 kg/yr—*less than one fifth of estimated natural levels.*

Efforts to reduce N to these levels would themselves have environmental consequences for the lands affected. Reducing loadings of N and P to Rainbow Creek to below the level of natural loadings could also have environmental impacts on Rainbow Creek—under the plan proposed by RWQCB staff, Rainbow Creek would receive less N and P than it did in its natural condition. The environmental effects of driving nutrient loadings down to these unnatural levels were not disclosed or addressed in the environmental checklists and analyses prepared for this project.

None of these numbers are certain, of course. But it is nonetheless clear that the RWQCB should not launch the TMDL process in San Diego by proposing to set TMDLs for Rainbow Creek at levels that are two-thirds to one-fifth of natural loadings, based on an impairment listing that staff concedes has no basis in fact. To do so would be scientifically unsupportable, inconsistent with the Water Code, and politically unwise. Any such proposal would be damaging to the successful implementation of TMDLs in San Diego and elsewhere.

Whether the Basin Plan Water Quality Objective for Biostimulatory Substances in Rainbow Creek is Exceeded or Not is Still Uncertain

The Basin Plan's narrative water quality objective for biostimulatory substances prohibits substances in concentrations that promote growth "to the extent such growths cause nuisance or adversely affect beneficial uses."

RWQCB staff consider the algal and emergent plant growth they have visually observed in Rainbow Creek to be excessive. (See draft Staff Report, p. 7.) This observed condition is not creek-wide. Rainbow Creek is about five to six miles long. Much of it is shaded by a plant canopy, and no excess algae have been observed in shaded areas. The growth of algae was visually judged by staff to be excessive at only two locations in 1999, and at only four locations in 2000. All of these areas have shallow slow moving water and no overhanging canopy. (Draft Staff Report at p. 7-8, and attached photos.)

Moreover, these visual characterizations may not be reliable even as to the locations called out by staff. Two of the RWQCB's three peer reviewers have questioned the use of visual observations alone to determine whether algae and plant growth is "excessive." Dr. Rhea Williamson notes that determining visually whether there is excessive algae growth "can be misleading." (Attachment F.2, at second [unnumbered] page, first comment re page 5 of the staff report.) Dr. David Jenkins asks, "where are the data on emergent plant and algal numbers to support

your statement that both are 'excessive'." RWQCB staff were unable to respond with data, as no data are available yet to make this showing. (Attachment F. 3 at "Summary of asterisked comments" for page 8 of the staff report).

Another factor not explicitly considered in the draft Staff Report is that the Basin Plan water quality objective is not violated merely by accelerated or "excessive" growth of algae or emergent plants. The plan narrative objective is violated only if growth is so excessive it is a nuisance, or so excessive it adversely affects beneficial uses.

A principle reason RWQCB staff have not made a convincing scientific case for impairment by biostimulatory substances may be that staff misconstrue the Basin Plan as also setting numerical Water Quality Objectives for N and P. The Basin Plan states that "a desired goal for total phosphorus appears to be 0.1 mg/L total P." Staff would style this as creating a Water Quality Objective. Staff admit that no "analogous threshold value" for N is set in the Basin Plan. (Staff Report at p.7.) They nevertheless derive a limit of 1.0 mg/L for N from a discussion in the Basin Plan of natural ratios of N to P that should be used as default values in the absence of any water-body-specific data. Staff characterize even this constructed number, which is derived from rather than called out in the Basin Plan, as a "Water Quality Objective." (Draft Staff Report p.6, and draft Resolution p.1, Finding No. 5).

The scientific basis for both of these targets is weak. Dr. David Jenkins of U.C. Berkeley, one of the RWQCB's peer reviewers for the draft staff report, addressed these targets as follows: "An arbitrary assumption that the P limit should be one-tenth of the N limit is absolutely insupportable, bordering on the ridiculous! Reductions in P and further reductions in NO_3-N must be justified on the basis of determining which limits algal growth in the Creek." (Attachment F.3, transmittal letter at page 1.)

In the RWQCB staff's response to this comment, "absolutely insupportable, bordering on the ridiculous" becomes merely "unfounded." Staff's more substantive response is essentially that the Basin Plan allows the use of a 0.1 mg/L target for P, and a ratio-based 1.0 mg/L target for N, when no data are available. (Response to comments at page 2.) RWQCB staff have chosen to respond to a stinging scientific objection by a designated peer reviewer by (1) softening the true force of that comment in their summary, and (2) by offering up a legal rather than a scientific response to the comment.

But, RWQCB staff are also incorrect on the application of the law. The "apparent" or "desired" "goal" for phosphorus that staff would rely on was not identified during the Basin Plan amendment process as a numerical Water Quality

Objective, for informed public comment and RWQCB adoption. It is therefore not a Water Quality Objective, but is only what the Basin Plan says it is: a number that appears to be a desirable goal. Similarly, the limit of 1.0 mg/L total N that staff derive by applying a 10:1 ratio to this apparent desirable goal is also not legally a Water Quality Objective, or even an identified "desirable goal." It is a default in the absence of any data. The RWQCB should be gathering the data to avoid a resort to such defaults, rather than proclaiming default values to be Water Quality Objectives that should drive the TMDL process.

Any TMDL for biostimulatory substances in inland surface waters in San Diego must be based on the Basin Plan narrative standard as the applicable Water Quality Objective. Staff's targets of 0.1 and 1.0 mg/L for P and N respectively should be properly identified as interim numerical targets, rather than as Water Quality Objectives. Basic studies should be completed in the near future to allow replacement of these default values with numerical targets that reflect actually going on in Rainbow Creek.

The evidence currently available to the RWQCB to establish and characterize a biostimulatory impairment of Rainbow Creek is weak and equivocal. It does not provide an adequate basis for the public to accept the very stringent TMDL that RWQCB staff have proposed.

County Proposals for TMDL Amendments and Inter-Agency Cooperation

TMDL programs for Rainbow Creek should be implemented on a phased basis, both to sequence regulatory actions properly and to ensure that appropriate science is in place to support policy decisions.

Phase one of this process is underway, and should continue with promulgation of an interim TMDL for nitrates based on the applicable drinking water standard for nitrates. This interim TMDL should be put in place after completion of the 303(d) listing amendment process for Rainbow Creek.

During the early stages of implementing this interim TMDL, appropriate studies should be pursued on a cooperative and shared-cost basis to determine whether and if so where Rainbow Creek is actually impaired for biostimulatory substances based on the narrative standard in the Basin Plan. These studies should also determine the actual levels of N and P that are limiting for biostimulatory effects in the potentially impaired portions of this creek. The studies should confirm or refine estimates of natural N and P loadings to Rainbow Creek, and should determine the characteristics the creek would have if only natural loadings entered the creek.

During this period the County and the RWQCB should also cooperate to pursue the best available opportunities to reduce incremental man-made loadings of N and P to Rainbow Creek. This should include securing all appropriate additional reductions at commercial nurseries.

The County and RWQCB should also cooperate to implement AB 885 programs for onsite wastewater treatment systems.

A second phase of TMDL implementation should be based on a revised 303(d) listing and on the results of phase one studies. This could mean that more stringent TMDLs for N and P would be put in place. However, because the numbers in the draft Staff Report do not add up, the RWQCB should also be open to revising the designated beneficial uses of Rainbow creek, or numerical targets for N and P to support those uses, to reflect conditions in the creek that would be consistent with natural loadings. Any numerical targets for N and P concentrations in the creek, and any revised TMDLs, should be set at levels that will allow N and P loadings to remain at levels at least equal to base-line or natural loadings. Higher loadings should be tolerated if those existing loadings do not cause a nuisance or impair valid beneficial uses. Unless the RWQCB agrees that the results of future studies will be used appropriately during the regulatory process, the County would have little interest in coordinating and in helping to fund such studies.

Some specific actions that would be needed to implement this two-phased strategy are as follows:

1. Respect the Basin Plan. Staff's numeric targets for N and P should not be characterized anywhere in the Resolution, Basin Plan Amendment, or Staff Report as Water Quality Objectives. Only the narrative standard for biostimulatory substances actually established by the Basin Plan, after clear public notice and an opportunity to comment, has this status.

2. Cooperate to practice good science. The RWQCB must progress beyond invocations of the Basin Plan in ways that peer reviewers can characterize as scientifically "absolutely insupportable, bordering on the ridiculous," to solid science. Impairments must be verified and localized. The RWQCB must determine how N and P interact to stimulate algal growth in specific parts of the creek. TMDL implementation must be focused on these specific problems. The County is prepared to participate in this study process.

3. Set realistic TMDLs. In phase two, TMDLs must not be set lower than estimated natural loadings for the basin, and should be set higher if that is consistent with protecting the beneficial uses of Rainbow Creek that are identified as being achievable after further study.

4. Give the County more flexibility re study designs, monitoring, and reporting. The County remains willing to *coordinate and to contribute* to the cost of the studies and monitoring that are needed in this watershed.[7] However, read together, the draft Basin Plan amendment and draft Staff Report set very specific mandatory parameters for this work. Those specifications would lock in future research for a four-year period, and would require the County (or the County and others) to spend more than $1.0 million for studies, monitoring and reports. Much more flexibility is needed for the County to willingly undertake this work.[8]

5. Do not characterize the County as a "responsible party" or as a "discharger" for this watershed. The County acknowledges that is a "local agency" that is subject to RWQCB direction related to studies and monitoring, under certain conditions, pursuant to Water Code section 13225(c). The County also acknowledges that it has a significant role to play in this watershed as a land use authority, a public health agency, and a permitting agency for some new septic system installations. However, these various roles do not make the County a "discharger" or a "responsible party" for N and P loadings to Rainbow Creek.

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[7] The draft Resolution (at page 2, item 8.a) proposes to direct the County to "undertake an investigation to access [sic] nutrient loadings to Rainbow Creek from groundwater and septic systems." This section further states that the County "has indicated a willingness to undertake this investigation." That statement is incorrect. The County indicated a willingness to coordinate this study effort. County staff also provided basic study parameters and a cost estimate for an "ideal" study effort, including not only a study of loadings from septic systems but also other research. RWQCB staff have proposed to transform these study parameters and cost estimates into mandatory requirements—including a requirement that the County in fact spend the amounts it estimated would be needed for an ideal study of all issues. The County did not state that it was willing to do this work in exactly the manner postulated in its cost estimate, and thereafter specified in the draft Staff Report. The County did not indicate that it was willing to pay the entire cost of this work. The County is not willing to be locked into an inflexible four-year research plan, and is not willing to bear the entire cost of any studies of Rainbow Creek by itself.

[8] In the absence of an agreement concerning this work, the County would consider whether to challenge directives based on Water Code section 13225(c) as being inconsistent with the Water Code, and as unfunded state mandates. See footnote 2.

6. Make and support required findings before imposing investigation, reporting or analysis requirements on the County. Water Code section 13225(c) allows the RWQCB to impose these requirements on a local agency only if the requirements are "necessary" and only provided the burdens of the imposition including costs are reasonable in comparison to the need for the report and the benefits to be obtained therefrom. RWQCB staff have not done the work required to support the imposition of study requirements on the County under these standards. They have reported the costs of an ideal study as reported to them by County staff, but analysis and findings concerning necessity, burden, and benefits are lacking. The draft Resolution includes proposed Finding No. 17, but that is a general finding concerning all benefits and all costs of the TMDL, not a finding that addresses the requirements of section 13225(c).

7. Share study costs equitably, including a substantial state contribution. The County is not a significant discharger in this watershed, and is not the principle governmental agency with responsibility for promulgating and implementing TMDLs. The studies the RWQCB is seeking would provide basic data and science that should underlie any TMDL. This work should be the RWQCB's job. The County is willing to contribute to needed study efforts, but will not bear the entire cost of needed studies, plans and monitoring. The RWQCB or state, and major dischargers in the watershed, must also provide significant funding. The County's obligations to do work pursuant to section 13225(c) must be contingent on receipt of funds from those sources.

8. Set realistic load reduction targets for onsite wastewater treatment systems, tied to AB 885 program implementation. As discussed above, achieving a 50% reduction in septic system loadings watershed-wide is almost certainly not feasible and is probably physically impossible under the most ideal of soil conditions, unless properly functioning systems are replaced. Replacement are only likely to be achievable to the extent state financial subsidies are provided under the AB 885 program. Waste load allocations and implementation schedules must reflect these limitations.

9. Don't require reduced discharges of N or P from preserves. Discharges from preserves are natural, background discharges. They cannot be reduced without interfering with preservation of the land in its natural state. Yet, the proposed TMDL would require the same

proportional reductions in N and P loadings from these lands as from agriculture and septic systems.

10. Take reasonable technology-based reductions in loadings from nurseries into account. The RWQCB should secure reasonable further reductions in loadings from commercial nurseries (by voluntary means or through regulation) and should observe the effects of those reductions on Rainbow Creek, before promulgating a TMDL to address biostimulatory impairment of Rainbow Creek. When TMDLs are promulgated, waste loads allocated to these nurseries should begin from their discharges after reasonable technology-based controls are in place.

11. Evaluate alternatives to "proportional" waste load allocations. RWQCB staff have proposed to reduce allowable loads from significant categories of sources in proportion to baseline loads. That approach does not take into account the feasibility, costs, or cost-effectiveness of further controls, and does not address fairness issues. The resulting WLA for septic systems is infeasible, as discussed above. The resulting allocation for other categories of sources may not take advantage of opportunities to secure further reductions in loadings at modest cost.