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AB 982 PAG REGULATED CAUCUS

September 14, 2002

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Via Electronic and U.S. Mail

SUBJECT: AB 982 REGULATED CAUCUS COMMENTS REGARDING THE "DRAFT CONCEPTS FOR DEVELOPING A POLICY FOR LISTING AND DE-LISTING ON CALIFORNIA'S 303(d) LIST" (Dated July 11, 2002)

Dear Craig,

On behalf of the membership of the Regulated Caucus of the AB 982 Public Advisory Group (PAG), I am pleased to provide our comments regarding the draft Listing Concepts (dated July 11, 2002) as presented at the July 23, 2002 PAG meeting. We hope you will find these comments helpful as you prepare the draft Listing and De-Listing Policy for public review and comment.

As an initial comment, we believe many of the principles employed by the SWRCB in reviewing the regional board listing submittals for 2002 are sound and should be further developed and carried through to the Listing and De-Listing Policy. These include:

- Establishment of a "Watch" List for waters where data is insufficient to make an impairment determination; where the stressor is unknown, and where an alternative enforceable program is in place,
- De-Listing where the impairment is due to natural conditions;
- De-Listing where data show no impairment of beneficial uses.
- Requiring water body specific information for listing;
- Development of a "TMDLs Completed" List.

In short, we believe the SWRCB has begun to move in a positive direction with the 2002 303(d) Listing process, and we offer these comments to help ensure a workable, technically sound Listing Policy for future listing cycles.

Scope of the Policy (Page 2)

The Regulated Caucus strongly supports reviewing all listed waters for consistency with the adopted policy. We endorse the discussion language (paragraph 3) that states that each water body on the 2002 list shall be evaluated using the provisions of the policy, as a one-time reassessment. This review is appropriate, as the State has never before employed a consistent listing policy subject to public review and comment. This approach is endorsed by the U.S. EPA in its forthcoming "Watershed Rule", as well as by the National research Council.

The 2002 list will include waters that have been "grandfathered" in over time and that were never subject to any structured or meaningful review. This assessment is also necessary if the Listing Policy is to be credible and meaningful, as some 1400 water quality limited segments are already listed. Adopting a "blinders on" approach to these listings will not serve the goal of developing a list of waters for which TMDLs are to be completed. The Regulated Caucus rejects the position, argued by members of the Environmental Caucus at the July 23 PAG meeting, that requiring a review of previously "grandfathered" waters will result in unreasonable TMDL development delay, or invite continuous challenges. Indeed, this approach is consistent with the "triage" approach to listing and TMDL development recently advocated by SWRCB Chair Art Baggett.

The concept paper states that the policy will be used to interpret existing narrative standards. We do not oppose this concept outright. We continue to maintain, however, that narrative objectives may not be used as a substitute for, or to implement new, numeric objectives without first adopting those numeric objectives in accordance with Sections 13241 and 13242 of the Water Code. Any numeric values which are used as the basis for 303(d) listing are being used in exactly the same manner that adopted numeric water quality objectives would be used. Therefore, the policy should require that numeric "guidelines" used as the basis for 303(d) listing as an interpretation of a narrative objective either be adopted as water quality objectives under the Water Code procedures or that the numeric guidelines be adopted as part of the 303(e) continuing planning process subject to notice and comment.

Process: RWQCB and SWRCB Approval of Proposed List (Pages 3-4)

The Regulated Caucus supports Alternative 3, management of the process by both the regional boards and the SWRCB. The regional boards should apply the policy and the SWRCB should review the regional board listings for consistency with the policy.

We endorse the process laid out in the discussion section, in particular the regional board adoption of Fact Sheets for each listing decision. We do believe it is important to clarify that new information may be brought forward at each stage of the process, up until SWRCB adoption, within reasonable parameters established in the policy. Precluding such information is in conflict with the Clean Water Act requirement that all "readily available information" be considered when making listing decisions.

Existing and Readily Available Data and Information (Pages 5-6)

As required by federal rules, the policy should require the state and regional boards to assemble all existing and readily available water quality-related data. State and regional boards should solicit data from all available sources including federal, state, regional and local agencies and institutions, environmental and volunteer groups, private and public organizations, watershed groups, tribes, point and non-point dischargers and private individuals. Data from the SWAMP should be provided to the regional boards.

Once assembled, the policy should then provide the minimum quality assurance and quality control requirements that will allow the boards and the public to evaluate and ensure that data is credible and scientifically defensible so as to assure that all listing and de-listing decisions are appropriate. (See comments regarding Data Quality below.) Any listing/de-listing decision not supported with sufficient, credible data will be flawed, increasing the likelihood of administrative and judicial challenges.

The policy should require that all data must be reviewed and presented in the 305(b) water quality assessment report. Data not used for impairment assessment should be included in the report with comments on why it was not used. The policy should allow for use of data that does not meet minimum QA/QC requirements only if the missing elements will not impact the quality of the listing determination.

With regard to the specific information enumerated, we recommend that the use of Toxics Release Inventory estimates be limited to a support role, e.g. to validate that significant sources exist for a listed pollutant in a listed water body. TRI estimates should never be used as the sole basis for listing, as this information has no direct relationship to pollutants being discharged to a water body and therefore does not provide a credible impairment indicator. Similarly, data used to support a fish advisory or beach posting/closure should be employed as the basis for listing, rather than using the advisory or closure itself as the sole basis for listing

The policy should specify that predictive models alone are insufficient for determining impairment, and that ambient data are necessary to document actual conditions.

Solicitation of Readily Available Data and Information (Pages 7-8)

The Regulated Caucus supports Alternative 3, requirement of specific data submittal and quality of data acceptable for use in listing. We believe that the discussion language set forth is a good approach to data submittal, and we especially support the statement that data already submitted to the regional boards, such as discharge monitoring reports, need not be re-submitted during the listing process. We believe it would be helpful to clarify that ambient receiving water data and information is the primary type of data to be used in the 303(d) listing process.

Anecdotal information by itself should be given lower credibility, and in general should be used as a basis for listing only with additional supporting data or information. We also recommend that the proposed list of parties from whom data for 303(d) listing will be requested be expanded to include local public agencies and watershed groups. These parties often have information about a given water segment that meets the data quality requirements, and must be considered.

Assessment Methodology (Pages 9-10)

The Regulated Caucus supports Alternative 11, development of a California-specific Weight-of-Evidence Approach. We believe that many elements of the work done in other states, including Arizona and Florida, are scientifically sound and should form the starting point for the California policy. Moreover, these elements have been thoroughly vetted in the public processes before those rules were adopted and, in the case of the Florida rule, approved by U.S. EPA.

Many of these specific elements are discussed subsequently in our comments regarding particular listing factors. Contrary to the discussion language presented in this section, we do not agree that the following conditions are sufficient to serve as the sole basis for listing:

(1) Data exceeds drinking water MCLs (MCLs are applicable to tap water, not to ambient waters);

(2) Beach postings or closures (Beach closures and postings occur for reasons unrelated to ongoing water quality impairment. See subsequent comments);

(3) Consumption of aquatic species (we are unclear what is meant by this factor but we do not agree that fish or shellfish consumption advisories are acceptable as the sole basis for listing, unless the basis for these advisories has been adopted as existing, legally-adopted state water quality objectives).

We also support the requirement that multiple lines of evidence be considered using a variety of listing factors such as adverse biological response and degradation of aquatic life populations or communities. These factors are not sufficient by themselves as a basis for listing since these responses may be attributed to factors other than exceedances of water quality objectives (i.e., physical habitat limitations).

Documentation (Pages 11-12)

We support Alternative 4, requiring the regional boards to submit specific information in a standard format to allow the SWRCB and the public to have a clear idea of the source, quality, and quantity of the data used for listing. The Regulated Caucus believes it is critical that the Fact Sheet clearly identify the water quality standard that is exceeded and the basis for that determination. For example, if the basis for the determination is an exceedance of a narrative criterion, the translator used or the basis for the decision must be laid out in a manner transparent to all stakeholders." In the language for discussion, a number of items are described in relation to numeric data. In addition to the number of samples exceeding a guideline or standard, we recommend that the degree or magnitude of the exceedances also be provided, similar to the item under non-numeric data and information ("perspective on magnitude of problem").

Interpreting Narrative Water Quality Objectives (Pages 13-15)

The determination as to when a narrative objective is being attained is inherently less objective and consistent than for numeric objectives. Therefore, the policy should provide for a quantitative, objective manner to determine when a water body is impaired based on narrative objectives. Federal guidance recommends that states translate narrative objectives, but federal regulations do not identify numeric advisory guidelines

as the sole basis for listing based on narrative objectives. The requirement to "assess" or translate narrative objectives can be implemented using an approach similar to that outlined in several Basin Plans. In the Central Valley Basin Plan, for example, the regional board is directed to use biological measures (toxicity tests or results from biological studies) to interpret the narrative toxicity objective. Where biological effects are seen, a connection to a specific pollutant must be demonstrated. In cases where the evidence that a specific pollutant has produced an observed biological effect is compelling, the listing of a water body for that pollutant on the basis of the narrative objective would be warranted.

As noted above, the Regulated Caucus does not support the proposed approach of using narrative objectives as an avenue to use numeric "guideline" values that have never been subject to public review and comment as de facto water quality objectives. Unless directly adopted as numeric water quality objectives under the process specified in Sections 13241 and 13242 of the Water Code, the "guideline" values listed in the table on page 14 should ***not*** be used as the basis of 303(d) listing decisions. For factors such as fish advisories and beach postings, the necessary step is to adopt the numeric threshold values used as the basis for setting an advisory or posting a beach as numeric water quality objectives.

We recognize that this may be an onerous task, but to do less would entirely subvert the process for establishment of water quality objectives that is mandated in the Water Code. Water quality objectives are the cornerstone of both the State and federal regulatory processes. End-running the Water Code process eliminates the critical step in the statutory process wherein the SWRCB and regional boards balance important values and set objectives that are reasonably attainable.

Listing and De-Listing Factors (Pages 16-17)

The Regulated Caucus supports Alternative 4--List only for controllable sources of pollutants or pollution. Establish statewide policy for determining the standard if background concentrations of naturally occurring substances are high.

A water body should not be included on the 303(d) list if pollutant loadings (or pollution) are known to be from naturally occurring conditions alone and are the cause of non-attainment of water quality standards. Instead, the waterbody should be included on the "Watch" list to allow reevaluation of the water quality objective.

There are several situations in Region 4 (Los Angeles), for example, where water quality objectives were developed in 1975 to reflect background conditions. Unfortunately, the data used to establish the background conditions do not reflect temporal or spatial conditions of the water body. These objectives were developed based on limited data sets and were only intended to reflect water quality conditions at a specific location (where sampling occurred) within the waterbody. Over the years these objectives have been reinterpreted to apply throughout the entire stream reach, and in some cases, objectives originally adopted as flow-weighted annual averages have been re-interpreted as "never to exceed" maximums. In cases where the objectives were based on background conditions, a reevaluation of the objectives is warranted prior to a final determination of impairment. Furthermore, U.S. EPA recommends that under conditions where it is suspected that standards are not attainable due to natural biological, physical, and/or chemical limitations, irreversible man-made factors, or economic reasons, a Use Attainability Analysis (UAA) be conducted to analyze these factors and confirm non-attainability.[1] The UAA is used to substantiate a change in designated uses and corresponding standards.

Additional information that should be considered when determining whether a water quality standard is exceeded due to naturally occurring substances includes soil type, geology, hydrology, flow regime, biological communities, geomorphology, climatic factors (e.g., drought conditions), natural processes, and anthropogenic influences in the watershed. In particular, the SWRCB should carefully consider the way in which drought conditions should be considered, given the fact that large amounts of water are moved from one basin to another in California, and changes in water quality in one basin can therefore dramatically affect the water quality in another basin. This has become a particularly thorny issue in southern California (Regions 4 and 9) due to the establishment of mineral objectives based on "background" conditions in the 1970s (as described above), when water imports may not have been occurring (or the quantity or quality of imported water may have been different). We appear to be moving toward a situation where dischargers to effluent dependent waters are being asked to treat wastewater (or dewatered groundwater) to the level necessary to "correct for" drought conditions. We would consider drought to be a "natural condition," but currently drought is being considered to be the "critical" condition for which the TMDL must correct.

With regard to the other alternatives included in this section, we disagree with the characterization of their legitimacy and legality. Alternative 2, for example, states that it would not be legal to exclude from listing those waters where a water quality objective is

[1]Reference EPA website at http://www.epa.gov/waterscience/models/allocation

exceeded but the beneficial use is not impacted. We strongly disagree with this statement. A water quality standard consists of a beneficial use AND the criterion to protect that use. A water quality standard is both the use and the criterion, together. The criterion has no independent relevance—it is established at a level necessary to protect the beneficial use.

The concept paper also suggests that exclusion of short-term events such as spills and permit violations from the list may be inconsistent with federal regulations. We believe it is not only consistent with the regulations but, more importantly, the language of the Clean Water Act. The Act calls for listing those waters where compliance with point source controls are not sufficient to attain water quality standards. Permit conditions are clearly point source controls, which, if violated, are not being complied with. In addition, U.S. EPA regulations affirm that waters need not be listed where an alternative enforceable program is in place. (CITE) Finally, U.S. EPA has approved listing policies in other states, including Arizona and Florida, which exclude short-term events from their listing approaches.

Listing Factor #1: Numeric Water Quality Standards (Page 18)

In general, the Regulated Caucus supports the binomial approach. We believe it would be helpful to establish a technical working group to flesh out this aspect of the policy and reach a common base of understanding for complicated statistical concepts regarding hypothesis testing. Among the issues that need to be addressed:

1. The selection of exceedance percentages and confidence intervals should be appropriate for the objectives in question (i.e. aquatic life versus human health objectives). Proper averaging periods must be considered in the analysis. Additionally, the exceedance frequency specified in the USEPA criteria documents should be evaluated.
2. The suggested statistical de-listing approach should only be applied to waters that are originally listed using the proposed statistical listing approach. Otherwise, waters that were listed using questionable data may be retained on the list due to the restrictive requirements on de-listing (see page 30, last table).
3. Criteria that will be used in selecting the values to be used for exceedance percentages and confidence levels will be important policy determinations if the proposed method is selected.

4. The binomial approach does not take into account the magnitude or time duration of exceedances, and this may in some cases be problematic. For a toxic pollutant, for example, the actual toxicity is based on these factors (dose and exposure). Therefore, a limitation of the proposed approach appears to be that it does not address these important factors.

Data Quality (Pages 19-20)

The Regulated Caucus supports Alternative 3. The SWRCB should establish specific guidelines on the quality of numeric data to be used in the listing process. The minimum quality assurance and quality control requirements for data to be used in impairment assessments should be detailed in the policy and should include at least the following requirements:

- a quality assurance plan that identifies sampling methods, field and lab analysis, data management and personnel training.
- a sampling and analysis plan that identifies rationale for sampling sites, water quality parameters to be measured, sampling frequency and methods to ensure that samples are representative of temporal and spatial surface water quality and to ensure that data are reproducible.
- use of generally acceptable standard methods for data collection, presentation and analytical procedures.
- use of state licensed or certified laboratories
- use of test procedures identified in 40 CFR 136.

The above is consistent with US EPA Listing Guidance and CALM Guidance, which provide for the states to develop and implement data quality and evaluation requirements.

Age of Data (Page 21)

The Regulated Caucus supports the establishment of guidance on the age of data. In general, we believe that only recent data should be used, to ensure that TMDLs are being developed to address existing, rather than historical, conditions. Data greater than five years old should generally not be used. In some cases, analytical data older than this may be questionable (e.g., heavy metals such as mercury). Additionally, older data for sediment and tissue are not acceptable, as they do not account for depuration and fate

processes which may have improved the levels. However, we agree that older data may be used on a case-by-case basis if used in conjunction with newer data to demonstrate trends.

Water Body-Specific Information (Page 22)

The Regulated Caucus supports the approach set forth in the discussion language requiring data for a specific water body to support listing, and that estimated, modeled or projected information not be used in listing or de-listing decisions. We note, however, that where model results are based on actual data for a water body and are used to amplify the understanding of a complicated problem, we believe that such information should be considered in the listing/de-listing decisions.

Temporal Representation (Page 23)

The Regulated Caucus endorses Alternative 2, establishment of specific guidance regarding temporal representation, including a requirement that no more than two-thirds of the samples should come from any one year. Data should be distributed over at least two distinct seasons (i.e., in California we really mean low flow and high flow seasons). There should be guidelines on how much data can come from low flow or high flow conditions (e.g., no more than 2/3 each) to avoid a bias to one condition. Again, the SWRCB should consider how the temporal sampling requirements will play out during drought conditions (which may last several years), and whether impairments due solely to drought are appropriate for listing. We also support the discussion language requiring sampling events to be temporally independent.

Spatial Representation (Page 24)

We support Alternative 2, establishment of general guidance on the requirements for spatial representation such that samples represent the intended geographical extent. We recommend that stations should be at least 200 meters apart.) For rivers/streams/coastline, a single station should not be used to represent more than 25 miles. For lakes, reservoirs and estuaries, one station should not be used to represent more than 25% of the area. Vertical profile guidance, is also warranted, especially in areas influenced by tides.

Minimum Number of Samples (Page 25)

The Regulated Caucus supports Alternative 3, establishment of specific guidance regarding the minimum number of samples required for listing and de-listing. We are not able at this time to endorse a specific number of samples required for listing and de-listing. Instead, we recommend the formation of a technical working group to evaluate the issues identified in our discussion regarding interpretation of numeric objectives (pages 5-6, above.)

Analysis of Numeric Data (PAGES 26-31)

The Regulated Caucus supports Alternative 2, the use of the binomial model advocated by other states such as Florida, Nebraska, Texas, and Arizona. Numeric water quality standards should be interpreted using a binomial statistical approach that minimizes Type I and Type II errors.

We advocate using binomial statistical approaches to assess impairment determinations, as these approaches account for Type I and II errors. A Type I error in the context of impairment determinations would be falsely declaring a water body as impaired, while a Type II error would be falsely declaring a water body as un-impaired. Utilizing the binomial procedure allows Type I and Type II errors to be managed by controlling the number of samples, selecting acceptable and unacceptable exceedance rates, and/or by selection of cutoff values to declare a waterbody as impaired. The current "raw score" approach results in unusually large error rates (both Type I and Type II), and this method does not allow for the control of these error rates. With the binomial statistical approach, a Type I error rate may be selected, and the Type II error rate can be controlled through sample size. As sample size increases, Type II errors using the binomial method can be mitigated.

The Type I error rate (falsely determining a water body impaired) for the "raw score" method is very high relative to the binomial method. For example, with a sample size of 10 samples, the raw score approach results in a Type I error rate of 26%, which is roughly 3 times the error rate resulting from the binomial method. Type I errors, or false positives, result in the diversion of limited financial resources from actual to perceived water quality problems, and therefore the SWRCB should utilize a statistical approach that minimizes Type I errors.

The Bayesian method is a version of the binomial approach that can be used as an alternative to the raw score approach. This method is also effective at minimizing Type I and Type II errors, and is particularly useful in controlling error rates in datasets smaller than 20 samples. The Bayesian approach however requires a basis for establishing a prior expectation about the condition of a water body or stream reach. Sites where there is a high prior belief that the site is impaired require fewer violations to declare impairment, whereas sites with a high prior belief that there is no impairment would require more violations to declare the site as impaired. Use of this method would become difficult and subjective when there is limited existing information about the condition of the water body. However, this approach may be warranted in cases where it is obvious that a use is not impaired even though the WQO has been exceeded in the waterbody and listing was justified based on the use of the "raw score" method. Such circumstances have been experienced in the Santa Clara River Watershed, for example, whereby various segments of the river were added to the 1998 303(d) list due to chloride levels in the river exceeding the WQO that was established in 1978 to protect agricultural crops. Although the river was listed as impaired due to chloride the avocado crops have continued to produce yields at their highest recorded levels. Conversely, this approach may be useful when the waterbody does not exceed any water quality objective, yet there is scientific evidence that shows an impaired use as a result of water quality conditions.

In addition, the Regulated Caucus supports using the "weight-of-evidence" concept for determining impairment. This approach provides assurance that water bodies will not be listed as impaired nor de-listed based solely on analyses of collected analytical data, but instead will be evaluated based on combined information from multiple lines of evidence. All appropriate water quality factors should be considered in addition to analytical data (including geology, hydrology, flow regime, climate and other natural processes and anthropogenic influences) when making impairment determinations. Also, consideration of the quality of data should be given when assessing the water body. For example, newer measurements (representing spatial and temporal conditions) should be given greater weight than older measurements, and more frequent data collection given greater weight than nominal datasets. We caution, however, that the approach must truly reflect a weight of evidence approach and not be used as a means to justify unfettered discretion in the guise of "best professional judgment." Guidance on how "weight-of-evidence" should be considered for listing and de-listing decisions should be developed by the SWRCB in an effort to provide consistency in the exercise of best professional judgment.

Listing Factor #2: Numeric Bacterial Water Quality Standards (Page 32)

The Regulated Caucus supports Alternative 3, the use of a consistent trigger value that distinguishes between wet and dry weather conditions. Beach contamination in Southern California is particularly associated with wet-weather events. Case-by-case determinations lack the clarity that allows interested parties and the public to review and evaluate proposed listings. This approach requires development of an appropriate threshold number of exceedances over the standard, to determine impairment. This number should be consistent with a threshold for de-listing.

Listing Factor #3: Health Advisories (Page 33)

The presence of fish advisories should not be the basis for 303(d) listings. Health advisories are risk management tools adopted by other agencies (Department of Health Services, OEHHA, or county health departments) outside the jurisdiction of the Clean Water Act. TO address this issue within the context of the Clean Water Act, the numeric guidelines or threshold values used as the basis for setting advisories should be used in the 303(d) listing/TMDL process. As noted above, however, these values should only be used for listing where those values have been adopted as fish tissue objectives under the process specified in the Water Code.

Any health advisory levels to be used for listing should be adopted as water quality standards. In any event, one fish should not be sufficient – tissue levels from several commonly eaten fish weighted across various trophic levels using appropriate human health consumption data at each trophic level should be used to establish the true risk.

Listing Factor #4: Fish Tissue (Pages 34-35)

The Regulated Caucus supports Alternative 1—this factor should not be used for listing. Tissue pollutant levels such as National Academy of Sciences (NAS) Guidelines, U.S. Food and Drug Administration (FDA) Action Levels, Median International Standards (MIS), and Maximum Tissue Residue Levels (MTRLs) are informal guidance criteria, and are not water quality objectives adopted in accordance with state and federal legal requirements. If adopted numeric water quality objectives are not providing adequate use protection, then it is the obligation of the SWRCB and regional boards to modify these objectives in accordance with the Porter-Cologne Water Quality Control

Act or to adopt and incorporate into the Basin Plans legally adequate translation mechanisms so that narrative objectives may be used in the interim while numeric standards are being derived. Listing waters based on informal criteria or guidelines that are not adopted as water quality standards circumvents the standard-setting process, and renders that process meaningless. (*City of Los Angeles et al. v. U.S. Environmental Protection Agency* (U.S. District Court, Central District of California, Western Division, No. CV 00-08919 R(RZx), December 18, 2001),"For toxic pollutants, where a State adopts narrative criteria to protect designated uses, the State must "provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria." (Citation omitted) These procedures provide the public and regulated community with fair notice of what is expected of them, and also ensure that the narrative criteria have clear bounds and a rational basis for their implementation.")

Listing Factor #5: Beach Postings and Closures (Page 36)

The Regulated Caucus supports Alternative 1—Beach postings and closures, by themselves, should not be used for listing. As noted in the discussion language, closures are acute episodes caused by discrete events that can and should be addressed by enforcement of existing permits, waste discharge requirements and other regulatory authority. In some cases, the local health officer may close a beach as a precautionary measure based on a potential threatened condition (e.g., a reported sewer spill incident that reaches an inland water body or storm drain). Further investigation or receipt of additional information, however, may demonstrate that the waterbody was not affected (e.g., the spill was contained and never reached the beach). In cases like this it would not make sense to include the beach on the 303(d) list, as there was no actual impairment. Furthermore, TMDLs should be used to address water body impairments that are ongoing, not snapshots in time.

Where REC 1 and REC 2 are designated beneficial uses, water quality objectives are in place to protect theses uses. These objectives provide a basis for reviewing water quality monitoring data to determine whether or not these waters are impaired. Using the number of beach postings based on beach sanitation standards is not a direct measurement to an **applicable** numeric standard.

Listing Factor #6: Toxicity (Pages 37-38)

The Regulated Caucus believes it is imperative that a strong connection exist between a pollutant or pollutants and observed conditions to support a listing decision. Evidence of this connection should be sufficient to support the significant investment of resources on a TMDL for that pollutant. This comment applies equally to listing factors 7, 8 and 9.

Because we view toxicity tests as useful diagnostic tools rather than confirmations of impairment, we recommend that toxicity not be used as a listing factor (Alternative 1). Toxicity tests tell us that something is wrong, but unless we know the cause of the toxicity, it is not possible to address the problem through a TMDL or other regulatory tool. If toxicity is to be used, the SWRCB must develop very specific guidance on interpreting narrative standards (Alternative 4). A significant amount of work has been done evaluating WET methods, and the science is evolving. For example, a study conducted by the Western Coalition of Arid States (WESTCAS) showed that one WET method returned 43% false positives. In other studies conducted by U.S. EPA in response to litigation, U.S. EPA's own selected contract labs were unable to follow U.S. EPA's protocols consistently.

Listing Factor #7: Nuisance (Pages 39-40)

The Regulated Caucus supports Alternative 1—Conditions of nuisance should not be used for listing. We believe that use of a vague concept such as nuisance will allow circumvention of the data quality and quantity standards, narrative translators and other requirements set forth in the policy. Use of this factor will contribute to "drive-by" listings that are not based on credible, verifiable information.

We do not support the use of visual surveys, photographic monitoring or other anecdotal information as a basis for listing, particularly if there are no numeric objectives for the parameters being observed and the assessment of that information will be solely a matter of staff judgment. The problem with relying on such photographic or anecdotal information is best illustrated by the mirror situation, where someone seeks to de-list a water based on photographic or anecdotal information. In other words, relying on such information to make de-listing decisions would enable a party to take photographs or present anecdotal information contrary to the initial information, and a regional board would have to consider and weigh equally such information. We believe sound science

dictates that only objective and verifiable information be used to make these important decisions.

Listing Factor ##8&9: Adverse Biological Response; Degradation of Biological Populations or Communities (Pages 41-43)

We reiterate our earlier comment that it is imperative that a strong connection exist between a pollutant or pollutants and these observed conditions to support a listing decision. Evidence of this connection should be sufficient to support the significant investment of resources on a TMDL for that pollutant. We do not support the use of these factors for 303(d) listing, though they may be used to identify areas where additional monitoring and study are needed to identify the pollutant or stressor causing the observed conditions. As mentioned previously, multiple lines of evidence should be considered, since these biological responses may be attributed to factors other than exceedances of water quality objectives (e.g., physical habitat limitations, disease, or invasive exotic species, none of which are conducive to a TMDL solution).

Listing Factor #10: Trends in Water Quality (Page 44)

Relying on "trends in water quality" to dictate TMDL listing and development decisions is indicative of the mindset that has evolved wherein the 303(d) list must include every conceivable water quality issue and every existing piece of water quality information. That is not the purpose of the 303(d) list, which is to set forth those waters that do not meet water quality standards and for which TMDLs are to be completed. Clean Water Act section 305(b) requires the states to prepare comprehensive assessments of all waters within the state. Clean Water Act section 303(e) requires the states to have a continuing planning process (CPP). The 305(b) Report and the CPP are the appropriate vehicles for reporting on water quality trends—not the 303(d) list.

Forming the California List of Surface Waters Not Meeting Water Quality Standards – the Section 303(d) List, Section 305(b) Report, and the Integrated Water Quality Report (Pages 45-47

The Regulated Caucus supports Alternative 4, integration of the section 303(d) listing and section 305(b) reporting requirements as proposed in U.S. EPA's integrated report guidance. At the July 23, 2002 meeting of the PAG, there was significant

discussion regarding Alternative 3, which calls for subdividing the 303(d) list itself into four categories: TMDLs completed, Alternative Enforceable Program, Pollution List and TMDL list. We support the policy direction of this approach, but cannot support adoption of an overly broad 303(d) list.

We believe it is perfectly appropriate for the SWRCB to track separately those waters impaired by "pollution" rather than "pollutants", to inventory waters where other enforceable programs are in place to attain standards, and to maintain a list of completed (but perhaps not fully implemented) TMDLs. However, we do not believe that these categories of waters should be included on the section 303(d) list. The 303(d) list should be the list of waters impaired by pollutants for which TMDLs will be developed. Other water quality concerns can be addressed by other programs.

Waters meeting standards, and threatened waters, should be inventoried in the comprehensive water quality assessment required under section 305(b), and may also be listed for advisory TMDLs under section 303(d)(3). The SWRCB should follow the direction outlined by the U.S. EPA guidance, where only those waters for which TMDLs are to be developed are included on the section 303(d) list. Any other approach may lead to confusion, debate about the legal significance of listing, and potentially, unworkable consent decrees.

The Regulated Caucus supports the establishment of a "Watch" or Monitoring Priority List as a part of the integrated report. The "Watch" list provides a mechanism to identify and track water bodies where more information must be collected to determine whether water quality standards (beneficial uses and water quality criteria or objectives) are attained. The Watch list is also an appropriate tool for reassessing waters when application of the "weight-of-evidence" approach shows there is no impairment despite the exceedance of a water column objective. In those cases, the water quality objective should be re-examined before embarking on the TMDL process. Water bodies on the "Watch" list should receive high priority for monitoring or further study before the next update of the 303(d) list. The policy should specify criteria for inclusion on the "Watch" list as well as the various other components of the integrated report.

Priority Ranking for the Water Quality Limited Segments Still Requiring TMDLs (Pages 48-49)

The Regulated Caucus supports the establishment of priority setting factors to be used by the regional boards. We support the discussion language, with one caveat. We

caution that the overall need for an "adequate pace of TMDL development" not result in unrealistic schedules that will short circuit stakeholder participation in the process. We also recommend that the SWRCB consider adding another factor for prioritizing TMDLs. If restrictive interim permitting conditions are to be imposed upon point source dischargers, we believe that TMDLs for waters with point source discharges should be given higher priority. Lastly, we recommend that there be a requirement that an explanation for the priority ranking be provided in the Fact Sheet.

TMDL Schedule for the Next Two Years (Page 50)

The Regulated Caucus believes there should be a relationship between TMDL prioritization and scheduling. We support development of high priority TMDLs in the short term and lower priority TMDLs in the out years. We also believe complex TMDLs should be scheduled to begin early even if they may not be completed until after the two year time period. We do not want to end up with a number of complex, high priority TMDLs stacked up to be completed 10 years out.

Thank you for the opportunity to provide our comments on the proposed listing concepts. As always, we would be happy to discuss our recommendations with you and the members of the Environmental Caucus.

Sincerely,

AB 982 Regulated Caucus, by

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AB 982 Public Advisory Group

cc: Celeste Cantu, Executive Director
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