#44

Department of Water and Power the City of Los Angeles

February 17, 2004

Mr. Craig J. Wilson
TMDL Listing Unit
Division of Water Quality
State Water Resources Control Board
P.O. Box 100
Sacramento, Ca 95812-0100

Via Facsimile

Dear Mr. Wilson:

Subject: Comments of the Draft Water Quality Control Policy for Developing California's 303(d) List (Draft Policy)

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to review and comment on the December 2003 Draft Policy. LADWP applauds State Board staff in developing a Policy that employs a scientific approach to waterbody evaluations and listing/delisting recommendations. In particular, LADWP supports the use of the binomial evaluation method, which has also been used successfully for TMDL listing efforts in the states of Arizona, Nebraska, Texas, and Florida. LADWP further appreciates the State Boards efforts to create a policy document that is straight forward, uniform and consistent. LADWP also offers the following comments and suggestions on the Draft Policy.

Future Lists and Multiple Lists

LADWP encourages the State to apply this Policy to the current 2002 Impaired Waters 303(d) List when the time comes to generate the 2004 list. Much of the data and anecdotal information upon which the current listing is based is flawed or would not stand up to the standards being put forth in the Draft Policy. LADWP believes that if the waters cannot stand up to the new Policy, they should not be on the list. The 2004 impaired waters list should be based on sound science, a valid and updated use assessment that the beneficial uses to be protected are actually attainable, an updated review of the water quality standards established in many Basin Plans, and a credible review of the lines of evidence indicating that the waterbody is in fact impaired. Any waterbody with insufficient data to support an impaired listing needs to be placed on a separate list for further assessment. As with the Governor's argument that a bankrupt

state cannot help anybody or any cause, so too with an impaired water list that contains "everything but the kitchen sink". In order to focus efforts and maximize the use of limited resources for the good of restoring impaired waters, the state should be able to concentrate on a list of waters whose underpinning data clearly indicates that they are impaired and the reasons for those impairments. A separate "Watch" or Needs Monitoring" List does not mean that the waters will drop off the radar screen and never get attention. In the creation of such a "Watch" list, the State Board could require the Regions to prioritize the listing, continue to gather missing information, and annually review the "Watch" waters for "ripeness" in either listing or delisting. As impaired waterbodies get TMDLs approved, they can be moved to the completed list, allowing new listing candidates from the "Watch" list to take their place on the active 303(d) list.

Data Quality Assessment

LADWP believes that additional assessment categories of information should be included in the "minimum QA/QC requirements" listed in the Policy on page 19. Specifically, LADWP suggests revising the bullets as follows:

- Methods used for sample collection and handling;
- Field and laboratory measurement and analysis;
- Data management, validation, verification, and recordkeeping (including proper chain of custody) procedures;
- Quality assurance and quality control requirements (including matrix spikes, duplicates, blanks, lab QA/QC samples, lab certification, etc.);

Additionally, LADWP believes that the Regional Boards should be required to identify the criteria that are used to review, verify, and validate the data. LADWP recommends that the fifth paragraph (after the second set of bullets) be revised as follows:

> "The RWQCBs shall clearly evaluate and make a finding in the fact sheets on the criteria used to review and validate the data, the appropriateness of data collection and analysis practices, and the data verification process including the chain of custody, detection limits, holding times, statistical treatment of data, precision and bias, etc.."

Available Data Evaluation

The federal regulations require states to "assemble and evaluate all existing and readily available water quality-related data and information to develop the 303(d) list". It is important to note that the rule does not require the states to apply all data and information regardless of representativeness when making impairment determinations. This distinction between gathering data and applying data is very important and creates the need for states to determine data adequacy. The Policy sets out to define the requirements for data quality and quantity. EPA, in their 2001 Draft CALM Guidance, notes that "not all data are of equal value for assessing water quality standards attainment/impairment. Results of chemical data, or any other type of data, analysis are of limited value unless they are accompanied by documentation about sample collection, analytical methods and quality control protocols. Poorly documented monitoring results

may provide an indication of potential problems, corroborate other data and information, or trigger additional monitoring, but they are unlikely to support an attainment or impairment decision if they fail to meet accepted data quality objectives". LADWP believes that it is important for the State Board to explicitly recognize in the Policy that while all available data will be assembled, its role is determining waterbody impairment will be subject to data quality and quantity scrutiny. [LADWP also believes this is the reason why the existing 303(d) list must be subject to this Policy for the development of the new 2004 list.]

Age of Data

In the context of data evaluation, the Policy allows for data and information older than 10 years to be used in the waterbody assessment if the original listing was based on that data. LADWP believes that only the most recent five-year period of data and information should be used unless, on a case-by case basis, it is necessary to consider older data (such as in drought conditions where water supply and water quality impacts can effect the data). Rationale exists for limiting the review period to the most recent five years. Watershed management cycles are often on a five-year rotating basis. Additionally, ongoing improvements in sampling, analytical methods, and analytical instrumentation provide more accurate results, making data older than five years of lesser scientific relevance and quality. LADWP concurs with the Policy stated on page 20 that if older data are used, they should first be subject to the same level of quality and quantity scrutiny as the new data subject to this Policy and, secondly, the old data should be used in conjunction with the newer data. LADWP further concurs that if data older than five years are used in an assessment, the State should be required to explain why the older data continues to reflect current water quality conditions. Lastly, the State should appropriately reflect the value of the old data in a hierarchy structure and apply a weight of the evidence approach to its assessment.

Data Hierarchy

As just mentioned, LADWP believes it is important for the State to establish within the Policy a hierarchy scheme for the weighting of acceptable sources and types of data for use in the assessment process. LADWP requests that the State Board consider the following concepts:

- Actual monitored water quality data (chemical, physical or biological) collected under a Quality Assurance Project Plan should be given the greatest weight, and should serve as the primary basis for determining impairments.
- Data supporting an impaired waterbody listing should be based on actual data that can be quantified and qualified, and not estimated, hypothesized, or projected data. While EPA guidance encourages states to use probabilistic monitoring designs to obtain statistical representations of water quality to assist in determining monitoring priorities, it does not suggest that states should use probabilistic data to determine that a specific waterbody is impaired. An impairment decision is only valid when based on monitored data that meets the data quality and quantity requirements of the state's methodology.

- Other information such as, reports of fish kills and evaluated data (such as models and land use projections) may be extensive in quantity but are not objective indicators that impairment is actually occurring and are not subject to the same procedural safeguards as water quality criteria. These types of useful assessment information should be acquired by states and used for identifying water bodies of concern for the "Watch" list or the 305(b) Report.

Weight-of-Evidence

LADWP also believes that when evaluating several types of data for making impairment decisions that the Policy should employ a weight-of-evidence approach. This approach would consider the amount of each type of data, the quality of each set of data, the variability of each set of data, and the strength of the linkage of each set of data to protection of the water quality standards. Under a weight-of-evidence approach, all available data would be evaluated using fundamental scientific principles concerning the assessment of data quality, sufficiency, and data applicability, which would ensure that the best scientific analysis and the best available data are used to make impairment decisions. LADWP requests that the State consider the following concepts in establishing a weight-of-evidence approach to evaluating the gathered information:

- Higher quality data are given more weight.
- Newer data will be given more weight than older data, unless older measurements are determined to be more representative of critical flow or climatic conditions.
- Direct measures of impacts on a designated use will be weighted heavier than measurements of an indicator or surrogate parameter.
- More frequent data collection will be weighted heavier than nominal data sets.
- Data or information collected during critical flow conditions concerning flow, season, weather, or anthropogenic activities may be considered separately from the rest of a data set.
- Data that do not represent persistent, recurring or seasonal conditions may be used to place waters on the state's planning list, not on the 303(d) list of impaired waters.

Monitored vs. Probabilistic and Evaluative Data

As alluded to above, LADWP believes that states should not base impairment listing decisions on probabilistic data (estimates based on statistical manipulations) or evaluated data (data concerning land use, location of sources, questionnaires, etc.). Probabilistic and evaluated data may be helpful in making decisions about where to target monitoring efforts; however, only measured data that meet the quality and quantity requirements in the Policy should be used for listing decisions. A number of factors diminish the practicality and validity of using probabilistic data or evaluated data. Some of these factors include:

- Increased uncertainty. While uncertainty is part of the TMDL process and should be taken into account, mechanisms to diminish uncertainty should be taken wherever possible. Using probabilistic and evaluated data to predict exceedances of water quality standards unnecessarily increases the level of uncertainty in the

TMDL process because the data are not based on direct water quality measurements. While probability-based monitoring is often used to assess a waterbody's water quality status or calculate a percentage of all waters in the state that exceed criteria, it cannot identify specific impaired waterbody segments.

- High cost. The volume of data necessary to use these types of predictive tools is significant and costly.

Use of this type of information, if gathered, should not be used for listing decisions.

Use of Narrative Criteria

The Policy addresses the evaluation of narrative water quality objectives using numerical evaluation guidelines in the listing process and puts parameters around the selection of these evaluation guidelines. The Policy also provides some data quality guidelines for the use of the narrative objectives in the listing decision. LADWP believes that the numerical guideline should be adopted/promulgated as part of the states standard setting process (e.g., during the triennial review period) as a translator mechanism for converting narrative criteria to numeric criteria. Absent a promulgated translator, narrative criteria, with or without numerical guidelines, cannot be used to make listing decisions.

Use of Health Advisories

The Policy allows for the use of health advisories as a listing criteria in waterbodies that have a fish consumption beneficial use and where the fish tissue guideline is exceeded. LADWP is concerned that fish tissue health advisories are not water quality standards and have not been subject to the public comment and rulemaking procedures that are required for water quality standards. The validity and accuracy of the fish tissue data and the risk assessments used in issuing the advisory can vary. Therefore, the Policy should require that fish tissue data specifically come from the water segment that is suspected of being impaired. The use of generic or area-wide data is not appropriate.

Toxicity

LADWP supports that a waterbody must have a statistically significant number toxicity "hits" with a 90% confidence level, as well as an identified pollutant, before a it can be listed as impaired. LADWP believes that in addition to a sufficient number of tests, the proper type of test and endpoints are also needed to indicate that an actual toxicity problem exists before an impairment decision can be made. LADWP believes that the toxicity results should reflect a persistent problem. Sporadic toxicity data over time would be questionable as to the source or cause of the toxicity.

Biological Impairments

The Policy allows for adverse biological response in the water segment to be a factor in the listing process. LADWP believes that the biological impacts should have a strong "association with" (i.e., a known or suspected causation) water or sediment pollutants. Additionally, comparisons of conditions in a waterbody to conditions in a reference

waterbody must be made during similar season and/or hydrologic conditions for both waterbodies.

Legacy Pollutants

LADWP believes that the Policy should address the existence of legacy pollutants and the fact that very little in the way of implementing control mechanisms (e.g., in the TMDL Implementation Plan) can be done since there is no new source of these pollutants or the responsible party may either no longer exist or may no longer be discharging the pollutant. The State should consider whether legacy pollutants should be dealt with in the same manner as natural background pollutants.

Delisting

The Policy should reflect that the delisting process can be initiated at any time and need not correspond to the listing cycle.

If you have any questions on, or would like to discuss the comments raised, please feel free to contact me at (213) 367-0279.

Sincerely,

Susan M. Damron

Susan M. Damron
Manager of Wastewater Quality Compliance