STATE WATER RESOURCES CONTROL BOARD

PUBLIC HEARING

WATER QUALITY CONTROL POLICY FOR DEVELOPING
CALIFORNIA'S CLEAN WATER ACT SECTION 303(D) LIST
AND DRAFT FUNCTIONAL EQUIVALENT DOCUMENT

WEDNESDAY, JANUARY 28, 2004 10:00 A.M.

JOE SERNA CAL/EPA BUILDING COASTAL HEARING ROOM SACRAMENTO, CALIFORNIA

NO NO

REPORTED BY:

ESTHER F. SCHWARTZ CSR NO. 1564

1	
2	APPEARANCES
3	STATE WATER RESOURCES CONTROL BOARD:
4	ARTHUR G. BAGGETT, JR., CHAIR
5	GARY M. CARLTON NANCY H. SUTLEY
6	STAFF:
7	CRAIG J. WILSON
8	LAURA SHARPE PATRICIA GOUVEIA
9	COUNSEL:
10	MICHAEL LEVY
11	HEARING PARTICIPANTS:
12	TOM MUMLEY LINDA SHEEHAN
13	SARAH NEWKIRK BILL JENNINGS
14	LEO O'BRIEN
15	ALAN LEVINE DAVE PARADIES
16	DAVID BECKMAN PETER KOZELKA
17	TOM HERMAN CRAIG JOHNS
18	VALERIE NERA TESS DUNHAM
19	SHARON GREEN STEVEN ARITA
20	KAREN ASHBY BOB LUCAS
21	ARMAND RUBY STERLING MCWHORTER
22	BILL BUSATH TIM PIASKY
23	00
24	
25	

## SACRAMENTO, CALIFORNIA

2.3

WEDNESDAY, JANUARY 28, 2004, 10:00 A.M.

## ---000---

CHAIRMAN BAGGETT: Good Morning. This is the time and place for a public hearing before the State Water Resources Control Board, regarding the proposed water quality control policy for development of California's Clean Water Act Section 303(d) list.

This is the first of two public hearings on the draft policy. The second will be on February 5th down in Torrance.

I am Art Baggett, Chair of the Board, here with my colleagues Nancy Sutley and Gary Carlton. And the staff that have been working on this for the last year or so. We have Craig J. Wilson, Patricia and Melenee Emanuel, Laura Sharpe and Mike Levy from the Office of Chief Counsel.

that the State Water Board develop guidelines describing the process by which the State and Regional Boards shall comply with listing requirements of the Clean Water Act, Section 303(d). The policy will ultimately establish a standardized approach for developing California's list. This hearing is being held to solicit comments on the proposed policy's recommended procedures for evaluating

the information solicited in the form of listing or delisting candidate water bodies for the 303(d) list. The policy addresses prioritization of listed water bodies and eventual development and implementation of TMDLs.

2.0

The State Board staff has prepared a draft
Functional Equivalent Document for the draft policy in
compliance with CEQA. And FED represents an analysis of
the environmental issues and alternative to be considered
by the State Board in adopting the proposed policy. In
today's hearing, the order of procedure will be a brief
presentation by staff, followed by testimony from
interested parties.

I think you all know the blue card drill if you want to speak.

We also will receive written comments regarding the policy and encourage those if you can summarize your comments today, it would be helpful.

The hearing will not be conducted in accordance with technical rules of evidence. Testimony that is reasonably related to the proposed policy will be accepted. Written and oral comments are all part of the record. To expedite today's proceedings, oral presentations should be limited to no more than five minutes. Please before you begin your testimony, if you can identify yourself, your name and your address, for the Court Reporter, it will be

helpful. If you have a card, you can leave it; that is also helpful.

1.5

1.8

2.5

If you agree with the previous speaker's comment, as always, if you can just note that agreement instead of repeating argument, I think it would help in the interest of time. Help us all.

The administrative record will remain open until February 11th, 2004. Following the close of the record, the State Board staff will review and respond to all comments in writing. Written responses will be included in the final FED with the revised policy as necessary. Staff will make the revised policy available to interested parties at least 15 days before consideration by the Board. Interested parties will be notified of the date and place of the future Board workshop and then the subsequent meeting where the proposed policy will be considered for adoption.

With that, Craig, did you have any opening comments?

MR. CRAIG J. WILSON: Thank you and good

morning. My name is Craig J. Wilson. I am chief of the

TMDL Listing Unit in the Division of Water Quality at the

State Water Resources Control Board.

I would like to begin my presentation with a brief overview of the Section 303(d) requirements and the process that led to the development of the policy. Then I

will very briefly describe the documents that are the subject of this hearing.

Section 303(d) and the accompanying federal regulations require states to regularly identify water bodies that cannot achieve applicable water quality standards after certain technology-based controls have been implemented. In complying, California has developed successive lists of waters not meeting water quality standards biennially since 1976.

After 1996, public attention increasingly focused on an important consequence of Section 303(d) listing, which is the development and implementation of total maximum daily loads or TMDLs. Simultaneously, public demand for regional consistency and transparency in the listing process intensified.

In response, the Water Code now requires the State Board to prepare guidelines for listing and delisting water bodies on the Section 303(d) list. These guidelines contained within the draft policy provide consistent and transparent approaches for the identification of water quality limited segments using a standard set of tools and principles to evaluate data. It also provides a scientifically defensible approach to address the identification of these waters on the list and a transparent public participation process.

State Board regulations independently require that an environmental review equivalent to a California Environmental Quality Act or CEQA document accompany a policy proposed for State Board adoption. State Board staff has developed a functional equivalent document, an FED, that contains, as required by regulation, a brief description of reasonable alternatives to and mitigation measures for the proposed activity.

The purpose of the FED is to present alternatives in State Board staff recommendations for the policy and to guide the development of the 303(d) list. The FED identifies eight main issues. First, the scope of the policy. Second, the structure of the 303(d) list. Third, the weight of evidence for listing or delisting. Fourth, listing or delisting with single lines of evidence. Fifth, listing and delisting with multiple lines of evidence. The sixth part is statistical evaluation of numeric water quality data. Seventh part is policy implementation. And lastly, is TMDL priority ranking and completion schedule.

The 2001 Budget Act Supplemental Report also requires the use of the weight of evidence approach in developing the policy. And it requires the use of criteria to ensure that data and information used are accurate and verifiable.

The FED discusses and the draft policy contains a weight of evidence approach that uses both single and multiple lines of evidence. It provides for alternate data analysis procedures and an alternate, a way for Regional Boards to identify alternate exceedance frequencies. The FED also recommends approaches for evaluation of numeric data consistent with the expression of numeric water quality objectives or water quality criteria. Lastly, the FED assesses the potential adverse impacts of the recommended policy.

In conclusion, the intent of the proposed policy is to provide the Regional Boards with flexibility before listing decisions are made, while at the same time providing a listing process that is consistent, transparent and based on a standard scientifically defensible approach for placement of waters on the 303(d) list.

Should the need arise during the hearing, we are prepared to answer any questions that you may have. This concludes my presentation. If you have any questions now, I would be happy to answer them.

CHAIRMAN BAGGETT: No.

Thanks, Craig.

1.5

1.9

2.2

MR. CRAIG J. WILSON: Thank you.

CHAIRMAN BAGGETT: With that, Tom Mumley from

Regional Boards. And then we have the gang of seven.

MR. MUMLEY: Good morning. My name is Tom

Mumley, and I have the title of the Statewide TMDL Program

Manager, but I am also chief of the Planning and TMDL

Division at San Francisco Bay Regional Water Quality

Control Board. I am here today representing the Regional

Board participants on the TMDL Roundtable. And I have a

difficult mission of communicating to you that the

Regional Board staffs have some significant concerns with

the proposed policy.

We think that there are technical, procedural and legal shortcomings. We also feel that there are constructive opportunities to fix them. Probably of most concern to us is that proposed policy has some inconsistencies and conflict with water quality standards, the surface water and monitoring program and our newly proposed TMDL guidance. Again, these inconsistencies and conflicts can be fixed with some constructive changes.

As you may know, that the Regional Board participants of the TMDL Roundtable along with a number of our staff -- we had over 50 Regional Board staff working on a number of work groups, generating 32 recommendations for consideration in development of this policy. What we find is that a majority of our recommendations are not reflected in the proposed policy, and we believe a number

of our recommendations would serve as constructive correction of some of the shortcomings that I alluded to.

We intend to provide detailed written comments to communicate our issues and our constructive resolution of them and in particular to improve the integrity and ultimately the implementation of the policy. We would like to make sure you realize that we clearly want to work in partnership with this process. The Regional Board staff are going to be charged with implementation of this along with the action by their Boards, and we do represent large number of practitioners in the sector side of doing assessments. So we hope that our constructive comments can be considered as we move forward.

Right now I would just like to highlight four critical issues that we would like to have considered.

And as I said, more detailed comments will be put forward to writing.

The first has to do with the use of a standard statistical method and the weight of evidence approach. We endorse the concept of a standard statistical method as long as it is complemented with opportunity to apply a full weight of evidence approach. We find the current policy doesn't do that.

It promotes a stand-alone by -- a stand-alone standard statistical approach based on a binomial

approach. We have some concerns with that approach in and of itself, but we can live with it if the policy provided a more broader weight of evidence procedure for allowing a weight of evidence effort. In other words, if there is evidence of impairment and the binomial approach does not result in a determination of impairment, that we would receive when applying other methodologies to weigh those lines of evidence to conclude whether indeed there is impairment.

.1

1.7

The current policy proposal has an alternative data analysis clause in it, but we feel, as applied, is rigid and does not give us full range of tools that we would want to use in such a weight of evidence approach. And in particular those of us who would be charged with applying that have problems understanding how that alternative data evaluation would be applied, and that in and of itself is cause for concern. If we don't understand it, then it will be subject to interpretation by others as well.

Another critical issue is that we believe that in many places the policy is confusing, redundant, includes unnecessary direction. The ideal policy here will be short, to the point. Folks seeing requirements on making listing decisions and allowing for supplemental technical modules to deal with guidance and direction on data uncertain, more technical aspects of things.

For example, just a couple of examples to point that The policy unnecessarily repeats the application of the binomial approach over and over again, where we think it could be stated right up front and how it would apply to the various categories. And there is another clause that shows up later in the policy regarding interpretation or application of narrative water quality objectives. it states that the policy would supersede any statewide plan or regional Basin Plan in terms of any conflict. don't understand why that is there. The only reason there would be any conflict would be interpretation or the definition of water quality standard or its implementation. And clearly, the purpose of this policy is not to revise water quality standards, so that appears totally unnecessary.

1

2

3

4

5

6

7

8

9

10

11

12

1.3

14

1.5

16

17

18

19

20

21

22

23

24

2.5

And another concern is that in a few places the policy goes beyond just to call for assessing waters and determining a change in water quality standards. And we feel this is somewhat problematic given our limited resources and the constraints that we are already faced with as we can point out. Our surface water ambient water monitoring program will generate data that falls far short of applying this policy in many circumstances, but as proposed the policy also calls for going beyond just assessing water, but calls for identifying sources of

pollutants and even in some cases could force us into the challenge of identifying the solution of the problem. And we feel those issues should be better served throughout applying our TMDL guidance which allows for a broader process or a transparent process for going forward and doing the appropriate amount of source analysis, determining what pollutants are, where they are coming from and ultimately what the solution is.

And lastly we feel that the way the policy proposes setting priorities and scheduling is not consistent with current practice and with the regulation, and we propose some alternative language that is more consistent.

So to summarize, we intend to submit written comments and propose provisions for your consideration. And most importantly we commit to providing assistance, as we have to date and will want to in the future, to ensure that the policy is workable and effective. Particularly we have some strong ideas and support for proving the technical procedure and legal validity of the policy.

Thank you for your consideration.

MEMBER CARLTON: One question for you, Tom.

In your historic role as the TMDL coordinator, I think you had the opportunity to observe how the listing process historically has come out of the regions and has created quite a few inconsistencies, which has to be dealt with

here at this Board and then later at EPA.

1.0

How do you see the balance between what we are trying to do here to improve consistency and maintain the flexibility that you want without continuing to have these kinds of inconsistencies?

MR. MUMLEY: Obviously, that is the challenge at hand. I appreciate what you are saying. I first got involved in the listing process in 1988 and probably most of the listing cycle since. Up to now we have had no guidance, and we were operating under the threat of legal challenges associated with underground rules. So the process just promoted inconsistency, if you will. The most important way to resolve this is documentation that because not all water quality standards are created equal, not all water bodies and watersheds are created equal. Is problematic to promote the one-size-fits-all approach.

Procedurally what would fit is that all listing recommendations or decisions must be documented. So evidence that is used must be clearly stated. Threatened indicators or thresholds or definitions of the standards used should be clearly stated so it would be very transparent.

And I believe in doing -- just by focusing on that aspect, we would get much more consistency because we would strive to be -- the policy would allow us then to

probably collaborate more on how to make decisions where in the absence of a policy and any guidance we were threatened with the challenge of underground rules.

So I think, again, that we have recommended in our recommendations that we could establish some, if you will, high bars where we have sufficient data that there would be no question, that we would have consistency for listing where there is lots of evidence. But at the same time a transparent process, requiring a lot of documentation, would be the vehicle to deal with all the variable challenges that we have throughout the state.

MEMBER CARLTON: Thank you.

CHAIRMAN BAGGETT: Thanks. Thanks, Tom.

Enviro PAG. Do you know what order you are in?

Linda Sheehan.

MS. SHEEHAN: Good morning. Linda Sheehan with the Ocean Conservancy. I will provide a card with my address for the record.

We are here today, obviously, to develop a sound state policy for identifying waters that are impaired for purposes of the 303(d) listing. The policy that is before you, while a significant amount of effort has gone into it, doesn't do that. There are still some very major deficiencies in that. Today, various members of the environmental community are going to talk about the

different aspects of those deficiencies, and give you an overview. What we intend to do is provide far more detail in our written comments along with specific suggestions with respect to revisions of the policy that we think will address most of these deficiencies.

1.7

Just as an outline of what people will address today, the policy fails on three grounds: science, legal and actual practical application, the policy aspect of it. With respect to the science, you've heard that this is statistically scientifically defensible binomial model approach. We have actually hired Ph.D. statisticians to do an analysis of this policy in terms of how it is applied in the assessment of whether water bodies are impaired or not. And we find there are a number of significant flaws with how it is developed and how it is applied.

And we can go into that in more detail. But basically it skews error very significantly in favor of not listing waters that are impaired. And we've got quite a bit of detail on that, as well as suggestions on how to rectify that situation. I think the fact that the guidance doesn't explain the methodology by which the binomial model was developed and its implications and the policy decisions behind it, as is required by EPA regulation and guidance, illustrates the fact that there

are a number of deficiencies, and that you can't actually make that explanation. You can't show how this model actually identifies impaired bodies because it doesn't.

The second major area of deficiency is, of course, with respect to the law. And I think you have heard some concerns today, and you will hear more about different legal concerns with respect to the policy. Number one is, obviously, CEQA. The draft FED talks about not having any significant adverse environmental impacts with respect to the application of the policy because it is both consistent and scientifically defensible. We'll show that it is not scientifically defensible. And one of the problems is that it is trying to be consistent. It's trying to develop this binomial model. This sort of black and white approach. And the whole thing really hinges on this binomial model being appropriate.

In fact, you can't apply that consistently. There is just no way to apply that across all pollutants, all stressors, all streams, applications across the state; you just can't do it. There may be a number of areas where you can, but a blanket approach is not going to work.

What you need to do is have -- if you are going to go that way, we have some concerns about that, to have appropriate alternative data evaluation process which we don't have in the policy. The policy has a discussion of

that. It is unclear. It seems to be based on many of the same restrictions that are applied to the binomial model. And there are a number of other issues in terms of application and as you've heard today is going to be very difficult to apply.

It is also not based on the weight of evidence approach that the Supplement Budget Act Report of 2001 requires that you address in your alternative data evaluation policy.

So I think that that could be significantly beefed up to address that legal concern. With respect to legal antidegradation, is a big issue. We believe the policy violates antidegradation requirements by allowing significant degradation of state waters. Again, tied to this idea that the binomial model over counts errors and allows for a much more significant ignorance of impaired waters, and, therefore, allowing them to continue to degrade rather than listing them and cleaning them up.

It also ignores water quality standards, especially with respect to toxicity and CTR. It violates the regulations in EPA regulations requiring the state to develop existing and readily available data. And the information that the policy guidelines go into, data quantity, data quality, data age, other aspects of using the data that are quite restrictive, much more restrictive

than many other states. It violates the rule that a state look at all reasonably available existing data. You can put some limits on how the date is used, but all of it needs to be considered, and there needs to be a process, perhaps through the alternative data evaluation process, where all of these different types of data are considered in some way rather than just reject the whole pot.

And then one of the other significant legal issues, of course, is something we've raised before, is it doesn't address threatened waters. It has to address threatened waters, how waters are going to be addressed that will fail water quality standards before the next listing cycle.

Finally, with respect to policy and the practical application of what is going to be a new regulation. The concern is that not only does it not allow for the clear identification of impaired water bodies, it's just almost impossible to implement. The Regional Boards, who actually will do this work, are saying we don't understand how we are going to implement this in real life. EPA has raised concerns in the past on the past listing cycle with respect to actual application of this policy in terms of throwing waters back.

So it seems to be a little bit of passing the buck. It is hard to write this policy, but we can't write a

policy that is impossible to implement, that is just going to result in other people doing the work anyway. It is going to result in more work at the Regional Boards, more work at EPA and ultimately more work at the State Water Board level where you have to be reviewing all these different applications and petitions for water bodies to be looked at again because the original policy was unclear. It is also from a policy perspective discourages sound monitoring. Because if you are hinging everything on the binomial model, which seems to be the real focus of the policy, since alternative data evaluation is deemphasized, then there is no real incentive to collect a whole lot of monitoring data and list a whole lot of water bodies as being impaired.

And then finally, I think it just bears reemphasizing from a policy perspective that this doesn't even balance error between not listing impaired water bodies versus accidentally listing clean water bodies. It doesn't even balance it. It skews it in terms of precautionary principle upside-down. And instead of having a policy to try to protect clean waters, we have a policy where we are speeding towards rapidly dirty waters. And I don't think that this is a policy that this state wants to take.

We will go into each of those comments in somewhat

more detail today just as an overview. And then, again, our written comments will have much more specific suggestions on how to address a lot of these issues.

Thank you.

CHAIRMAN BAGGETT: Do you all know what order your are in?

Sarah Newkirk and then Bill Jennings.

MS. NEWKIRK: Good morning, Chairman Baggett, Members of the Board. My name is Sarah Newkirk, and I represent Water Law & Policy Consulting.

When I saw the Functional Equivalent Document, I saw that the listing criteria for many of the parameters, in fact, most of the parameters, is this: that water quality objectives are exceeded in greater than 10 percent of samples with a confidence level of 90 percent using the binomial distribution. Now, I am not a statistician, but when I looked at Table 3.1, showing the minimum number of exceedances required for listing, I noticed that the threshold for listing was always higher, substantially higher, than 10 percent. So I asked some statisticians what they thought about this, and they had some important things to say.

First, the application of the binomial model, this application of the binomial model, results in a dramatic minimization of type one error at the expense of type two

error. I am not a statistician either, so let me explain what I mean. Type one error is an error in which you would erroneously fail to list a dirty water body, an impaired water body. A type two error is an error in which you would erroneously list a clean water body. I'm sorry, I have those reversed. A type one error is an error in which you would erroneously list a clean water body, and that is the type of error that this application of the binomial model seeks to minimize. Type two error is failing to list a dirty water body.

1.8

Now everything in California's policy assumes that it is preferable to make type two errors in order -- in other words, to fail to list dirty water bodies. In fact, the probability of failing to list an impaired water body under this method is between 80 and 362 times the probability of listing a clean water body.

The implicit assumption here is that in the state of California we are up to 362 times more comfortable with having impaired water bodies unattended to than we are with putting clean water on the list. We find this assumption unacceptable, especially in light of potential consequences of not dealing with impairment, contamination of drinking water, obligation of aquatic communities and lots of recreational opportunities, among others.

Second, the confidence level implicit in the

proposed policy amounts to double counting of error. In other words, the idea behind applying EPA's 10 percent rule in the first place is to account for possible error. It is not that we are just comfortable with 10 percent exceedance rates. So by stacking a high level of confidence in the binomial model on top of this 10 percent rule already in a statistical method that favors leaving water bodies unlisted anyway, you are correcting for possible error twice, and that is not even to mention the correction of error that goes on at the lab at the stage of sample analysis.

Under California QAQC policy there are already controls for these types of errors. Consequently, there are three levels of control which stack on top of one another and resulted in a method that basically prevents the listing of water bodies under most circumstances.

Third and finally, the FED claims that type two error cannot be effectively controlled under most statistical methods. While this is true under ordinary circumstances in the binomial model, it is not true in this case where there is a functional relationship between the null hypothesis, which is that water bodies are clean, and the alternative hypothesis which is that water bodies are dirty. Anytime water bodies are not clean, they are obviously going to be thought of as impaired.

And this functional relationship means that anytime you increase the likelihood of making type one error, you consequently decrease the likelihood of making type two error. Both of these types of errors can be controlled. And when we try to balance -- we did an analysis that balanced these types of errors so that the likelihood of making type one error was equal to the likelihood of making type two error, we found that water bodies should be listed when, quite simply, 10 percent of samples exceeded the threshold. Get's us back to the original 10 percent rule in the first place.

This just goes to show that simply by shifting the decision criteria we can significantly change the outcome of this model.

If you have any questions, I would be happy to answer them.

CHAIRMAN BAGGETT: Thank you.

Bill and Leo O'Brien.

MR. JENNINGS: Good morning, Chairman Baggett, Board Members. Bill Jennings representing DeltaKeeper CSPA, San Joaquin Audubon. We will be submitting written comments jointly and perhaps individually, and I'll limit my remarks to a few observations.

Observing this process, several things have become obvious, that this isn't a technically driven bottom up

process, but rather it's a top down, I think, politically driven process that is biased in favor of not listing or delisting waterways when staff essentially ignored opinions that don't conform to, I think, their preconceptions or their predeterminations.

1.5

Among these are the December '02 submittal by all -joint submittal by all nine Regional Boards that assails
the binomial method for its lack of flexibility and its
inconsistencies with water quality objectives. In June
'03 EPA submitted a detailed letter, detailing a multitude
of concerns about the binomial approach, its inconsistency
with regulatory requirements and water quality standards.
The Regional Boards in October of '03 again submitted a
joint comment, recommendations, contained a strike-through
of proposed policy. That was ignored. SWAMP staff has
even expressed serious concerns regarding the policy, but
now they've been forbidden from commenting or even
contacting Craig's staff.

An illustration of how petty and paranoid this process has become is that there is a Regional Board Roundtable strategy session listing, unit staff left the room and then anonymously eavesdropped on the conversation. Certainly isn't illegal, but it is certainly unprofessional and unethical. Rather than engaging in a transparent collaborative process to develop

a workable, protective policy, staff has essentially circled the wagons, to fend off criticism of a policy that was largely proposed by the regulated communities. It is a thinly veiled attack on water quality standards. CTR and NTR aquatic life criteria are predicated on not being exceeded more than once in three years. In other words, an ecosystem suffers irreparable harm if standards are exceeded in two hours out of 26,280 hours or 0.0076 percent of the time. And these toxic standards are laboratory derived. They assume pristine water with a single stressor. They ignore additive or synergistic interactions, and as such they are marginally protective as they are.

Criteria in various Basin Plans are frequently expressed as maximum or minimal concentrations and absolutes not to be exceeded. The listing policy proposes to raise the bar and to require the criteria must be exceeded in 10 to 33 percent of samples for a water body to be listed. This is inconsistent with the existing Basin Plans and certainly inconsistent with federal regulations.

Now rigorous QAQC procedures, perhaps a standard deviation is the proper way to address sample uncertainties. The hypothesis testing procedures described into EPA testing manuals and guidance documents

certainly provide adequate protection against indirectly concluding that waters are toxics when they are not.

1.7

1.8

2.0

absurd, given the state's crippled monitoring program. I mean, the Toxic Substance Monitoring Program, the Coastal Fish Contaminate Program, the Mussel Watch, toxicity testing program, even the ambient monitoring requirements have all ended, and the SWAMP itself is in disarray. Several regions have not received monitoring funds for several years.

The minimum sample requirements can only encourage dischargers to impose increased monitoring budgets or lead them to structure sample collection to avoid toxic pulses; in other words, to arrange for the majority of the sampling to occur when there is not a problem.

Under the proposed policy, it is unlikely that runoff from the rice herbicides, the dormant spray insecticides or the chlorpyrifos applied to alfalfa would have ever been listed. As an example, in 2001 and 2002 DeltaKeeper University of California and USGS conducted a joint program in which we collected samples from Ulatis Creek among others. There were a series of sampling points, but Ulatis -- over the two years seven of 42 chlorpyrifos samples exceeded the one-hour criteria by as much as six times. Five of the 42 samples exceeded the

diazinon aquatic acute criteria by as much as three times.

Under the proposed policy, Ulatis Creek would not have been listed because it didn't exceed eight samples or eight samples didn't exceed criteria.

If you are collecting monthly samples, acute toxicity identified in one or two months of every year would never justify listing, would never rise to the threshold. The same goes for the low DO in Old and Middle Rivers in Stockton sloughs. In fact, it is even questionable whether Spring Creek would have been listed as far as the runoff from Iron Mountain before they built the debris dam. Because you had metals, more metals that come off from all POTW plants in the nation, but it comes off in toxic pulses in rains, and it is unlike that it could have ever risen to the threshold to list.

Regional Boards must not be placed in procedural straightjackets. They must have the latitude to employ weight of evidence and best professional judgment. A greater than one in three year violation of toxic standards must trigger listings, as they do in many other states. Contrary to common dogma, the use of the null hypothesis has little utility in science. Binomial methodology is highly controversial. There are hundreds of peer reviewed papers questioning the indiscriminate and inappropriate use of that statistical hypothesis test. A

binomial approach cannot address spatial or temporal effects or magnitude. Any policy based on the probability of failing to list an impaired water body that is 80 to 362 times the probability of listing a clean water body is DOA, is just not going to fly.

1.0

You can use a reverse null hypothesis or an equalized probability, but that is not necessarily protective. I don't want you to say the 10 percent rule is not protective, does not comply with water quality standards. In Florida the binomial method lead to the delisting of a large number of waterways, which EPA promptly put back on.

So I would suggest or urge the Board to take a deep breath and direct staff to return to the drawing boards and convene a facilitated process that involves the Regional Boards, EPA, the PAG and interested parties to develop an approach that is functional and protective to establish a transparent multi-step peer review process that includes biostatisticians.

And with that I will shut up and end my comments. Thank you.

CHAIRMAN BAGGETT: Thank vou.

MR. O'BRIEN: Good morning, Chairman Bagget,
Board Members. Leo O'Brien with WaterKeepers of Northern
California and San Francisco Baykeeper.

You will have to forgive me if I wander a little bit. I was up last night with my wife's statistics textbook trying to sort out what is proposed here. I'll talk a little bit about some policy problems and then focus my comments on a couple of the legal problems.

As has been noted, what you're -- part of this policy does is balance two types of errors. And it's clear that the policy is strongly biased in favor or what we think is the wrong direction. In fact, the Functional Equivalent Document demonstrates that the application of this policy will result in impaired water bodies going unlisted. It also demonstrates that the rate at which water bodies go unlisted, that impaired water bodies go unlisted and the rate at which water bodies that are impaired will be delisted will be higher than the rate today.

Now if we assume that the Regional Boards and State Board do what the law requires and implement the TMDL for every listed water body, we can assume that pollution will be reduced when impaired water bodies are listed. That sounds to me like a significant adverse environmental effect, and we will get to that a little later.

So I guess what I am saying is, if you adopt this policy, you will dramatically increase the probability that some environmental problems will go unaddressed. How

does this policy accomplish that? What is the mechanism?

1.6

1.8

Is because there is a series of choices embedded in the policy, in the binomial method, you know, and at every turn. Every single time there was one of these choices, the bias of the policy is picked. So in selection of the confidence internal, in the selection of so-called critical exceedance criteria, in the selection of the null hypothesis, in the selection of the binomial method and the statistical assumption, in the selection of minimum sample size, all of those decisions which had an array of choices, the policy always picks the choice that will favor not listing unimpaired water bodies over the failure to list an impaired water body.

So, I mean, I guess the point is that beneath the statistics, hidden under there are some really important and critical policy decisions which you will be making. I am asking you to examine those policy decisions. Do you really want to favor essentially the economic costs of falsely listing over the economic, ecological and health costs of falsely delisting and falsely not listing? And I think if you critically examine that question, you will come to the conclusion that this is the wrong way to go.

Those policy assumptions are inconsistent with common sense. They are inconsistent with the precautionary principle and they put an unfair burden on

the public.

So in terms of the legal problems, the policy conflicts with applicable water quality standards. Just to illustrate this, Bill mentioned this, CTR for toxics says that the numbers laid out in CTR, the standards assume that one hour for the acute criteria, one hour in three years is a problem. One sample. So that works out to be -- EPA has worked it out that that is one out of every 1,095 samples. That is .09 percent should be sufficient to list something for toxics. For chronic-type criteria it is one out of 274. So we are talking about hundreds of times less protective. They cannot be reconciled. CTR cannot be reconciled with this policy.

The FED violates CEQA. And the policy violates antideg for the same reason, and that reason is that these — that we know, if we apply this policy, impaired water bodies will not be addressed. It is — the FED says so. And at the same time the FED says there is no significant impact, and those two things cannot both be true. So we have a FED which fails to identity this significant environmental impact and importantly fails to mitigate it.

So I would say if you go forward with the policy, you need to do a statement of overriding considerations.

In fact, that statement is designed to unbury exactly the kind of policy considerations or the policy assumptions

which you're making here, which is that the economic consequences over here are more important than the ecological consequences or the economic consequences on this side. So if you are going to go forward with the policy, I don't see you can avoid that.

I would suggest that perhaps you should revise the policy to mitigate this significant environmental impact.

And one final point is this policy will destroy the incentive of dischargers to cooperate in data collection, monitoring and data generation. As soon as this comes on line, their incentive will be to make sure samples aren't taken so that these thresholds are never met. And they will fight funding for SWAMP in the legislature. They will fight — they will pull out of collaborative efforts like the Regional Monitoring Program in the Bay, and you will find it a lot harder to get the data done. Your budget doesn't allow us to collect the data, and it is certainly the case that the public is not going to be able to fund it on their own.

So I would ask you to send this back and have it rethought out.

Thank you.

2.4

CHAIRMAN BAGGETT: Thank you.

Alan Levine and Dave Paradies.

MR. LEVINE: Good morning. My name is Alan

Levine, and I represent Coast Action Group, Box 215, Point Arena, California.

I am going to address this listing policy in reference to my favorite rivers, the North Coast rivers and what's gone down with them. So I will start with the original set of listings that occurred a while ago. Wouldn't have passed muster under this new proposed policy, and the reason why is there just — basically there weren't enough samples at the time. Now ten years later with more samples we find more than ample justification, and the river is in worse shape.

I want you to know that every timber harvest plan, 9 percent of all the timber harvest plans that come into Coast Cascade in the community impact section or water assessment or habitat assessment process, they say holes are filled and streams are suffering from impairment due to sediment.

That's plenty of evidence. They didn't know where to look at the time of the original listing. There was evidence for it in the files of THPs.

The current system that we are operating under now has worked pretty well. All the North Coast rivers are listed except for the Smith River, and we have 600 water bodies or more statewide listed. The big problem is we don't have implementation plans. And I just remember in

the waiver hearings that North Coast Region was promising that part of their WDR setup is to have Basin Planning and TMDLs. And I guess Gary is going to push them in that direction when he goes to their meetings.

How many water bodies have we listed inappropriately? Not very many. Then I understand the drive is towards consistent policy. Here is some of the concerns. With the biological monitoring and just term sediment, it's hard to get large enough sample sets, and the binomial method really doesn't apply very well to small sample sets. You need fairly significant sizes, and we're not getting them and we may never get them because there is not enough funding for getting such large size samples. However the binomial controversy or the model related to that controversy --

CHAIRMAN BAGGETT: I have a question.

Clearly under biological populations, if you've got less than 20 samples, that is not a lot, is it, 20 samples?

MR. LEVINE: For sediment 20 samples on a river might be a large number or for some other problem. It just depends.

CHAIRMAN BAGGETT: It says if it is less than 20, than five show exceedance, which isn't --

MR. LEVINE: No.

CHAIRMAN BAGGETT: Doesn't seem like a great burden in monitoring. In terms of the volume you are talking about.

MR. LEVINE: Right. But what I said was the binomial wasn't the limiting factor here. The limiting factor in assessment process is the weight of evidence issue, which you are bringing up right now. And I will get to that. Okay.

I mean, the level of confidence that you are looking for is in the threshold area, not in the percentages. Like the percentage that you just gave me, I feel okay about. But you want to have a level of confidence in the criteria which comes up and that comes up in the evaluation guidelines section, in Section 623. And I guess I will jump right to that.

The use of professional judgment finds the level that you just offered me, not the binomial process. And the binomial process you substantiate that or reject it. But in your case it would substantiate. I think the minimum number of cases needs to be something around ten or something like that. But, yeah, it would work. Binomial is not the limiting factor. But the use of professional judgment and making determinations of thresholds of exceedance and allowance for multiple lines of evidence or the weight of evidence and allowance of the

current science.

1.4

1.6

1.8

And what I am saying is that section, 6 2 3, 6.2.3, needs to be slightly clarified and made more flexible to accept those lines of reasoning in there and the use of the expertise of the Regional Board staff in setting those standards. I think that they can do a good job for you. I think the Regional Board staff is fairly confident or very confident and judicious in their approach to this, and I don't think they want to list rivers inappropriately. It is a whole lot of extra work for them. I think they know they need to put their assets and their energy where it counts.

And then I will finish with referencing Gary's need for consistency. There is many, many differences in variables in water bodies and pollutants, both, and it just leads to variation in the whole process. And all you can do is the best job that you can do in substantiating your choices in those thresholds and exceedance levels that I was talking about.

Thank you.

CHAIRMAN BAGGETT: Thank you.

Dave.

MR. PARADIES: Morning. I think we all appreciate Mr. Carlton's question that sought consistency between the Regional Boards and the various listing

methodologies, come whatever anomalies there were in the past. It seems, though, that we should not be looking to achieve consistency through an oversimplification and restricting the ability of people to make judgments based on sound scientific method.

1.4

2.2

The policy as we see it here today in attempting to select a single statistical method confuses statistical significance with ecological significance. We hit a number 10 percent being passed around. As example in trying to apply 10 percent to all the different things we might measure in water. Considering an illustration. If I put ten glasses of water over here, ten glasses of water over there, and told you that one of these glasses, 10 percent, contained ten times the arsenic drinking water should. One of those glasses contains ten times the nitrate drinking water. Should —

If you know anything about chemistry, which set of glasses would you take your chances on? Type one and type two errors, you get it all involved in sample counts and things. The fact is you want the same confidence for dioxin as you do for suspended sediment. That's what we are faced with here.

Another issue with respect to the multiple lines of evidence. We talked about five samples not being very much. When you're dealing monthly samples -- the SWAMP

program as it sits typically does conventional water quality sampling monthly. Typically if it does toxicity, metals or synthetic organic, if it does those at all, they do them once a year or so. We look at the table over here, Table 3.1, in Appendix 8, which has all these sample The level of monitoring being conducted in the counts. state of California for screening purposes right now, you don't need this whole table, you only need the first two cells on the upper left-hand side. If a SWAMP array, based on state contract prices, were actually measured at a single site or a single water body sample with a count like this and we start talking about 500 samples, these things are in excess of \$10,000 for a full screening. are talking \$5,000,000. The state of California only has \$4,000,000 to cover the entire state. This table only refers to a single site or a single water body. You aren't going to get any more money to the Regional Boards. So apparently, to measure this single site at levels like this, these poor dischargers are going to be 13267 to death.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

On the other hand, if you use a reasonable strategy and allow for multiple lines of supporting evidence, in other words, we go out, we find toxicity in the stream, let's say it kills the insect, it kills a fish. Then we go out and do a rapid bioassessment.

CHAIRMAN BAGGETT: Right.

1.0

1.3

2.1

MR. PARADIES: We have one toxic sample in effect. We took one bottle of water, but it killed the fish; it killed the insect that lives in the water column. It kills the insect that lives in the sediment. Then we go out and we find out that the benthic invertebrate community in the stream is also hampered by the standards in the region. And then we find that we've got three or four nitrate samples that are, say, ten times the drinking water standards. No biologist in their right mind will call that water anything but impaired. And this policy would not allow it to be listed because it meets no sample counts.

The policy would refer you to this alternative data evaluation. And I think by way of making some constructive resolutions and specific suggestions we would alter language here so that Regions, Boards would not -- they go here, and in a case like that, and there's probably not that many sentences here that would need to change to permit the application of rational science.

CHAIRMAN BAGGETT: That is exactly what I was going to go to. I think people seem to be missing it.

The first cut's the binomial. This is the second cut. So that makes it easy to list. I think in ten years, you go through that approach, it is easy. You listed those.

Then these others were set aside. The ones --

1.6

1.7

MR. PARADIES: One, one --

CHAIRMAN BAGGETT: Which is exactly why it is put in here, which is wide open. Have you looked at the bottom yet?

MR. PARADIES: It is why it is in there, but again I think --

CHAIRMAN BAGGETT: Outstanding national resource waters. State water quality protection areas. All those are just to make it simple. Whatever establish.

MR. PARADIES: Right.

CHAIRMAN BAGGETT: Whatever establishes --

MR. PARADIES: There is some language here that still concerns me. For example, just one example. I think there is three or four elements here.

Measurements can be analyzed using scientifically defensible procedure. That is good. And provides an equivalent level of confidence as the listing factors in Section 3.1 and tests the null hypothesis that water quality standards were attained. Testing all null hypotheses is not the only method of human reasoning. It's quite questionable in many applications. The example I gave you, which, by the way, is a real one, and I've got more samples like that that was done in the Central Coast

reasonably.

2.

2.2

CHAIRMAN BAGGETT: Number four?

MR. PARADIES: You can't have the hypotheses and you can't have the same level of confidence by gosh where the sample comes. I can show you a lot of sites where that is the case, where you've got one water body that is listed and here, a half mile away, you finally got around to monitoring that water body and find that it has characteristics just like the other one. Why do I have to go sample?

CHAIRMAN BAGGETT: Dave, go to the bottom of the page.

MR. PARADIES: Okay. RWQB may use alternate exceedance frequency, if justified. Justification may include -- basically you can read that and say anything you want. I can read that way as long as you would go -- refer to the last sentence in 3.1.11: At a minimum the justification must demonstrate.

And then I've got to fulfill those bullets. I don't get to that other paragraph until I fulfill these other bullets. If we modified the language in that top paragraph, I'd completely agree with you that this provides an outlet and mechanism for making sound --

CHAIRMAN BAGGETT: You will be providing language?

CAPITOL REPORTERS (916) 923-5447

MR. PARADIES: We would be happy to do that.

I think that this may even be just a case of unintended consequences in the drafting of the document. There's other places where we might see this as well. There is another place that says all samples taken in one day should be averaged and represented as one sample. There is a scientific difficulty with that for certain kinds of parameters.

One other good example would be dissolved oxygen. A characteristical problem with dissolved oxygen due to nutrients is that the oxygen is just screaming high in the daytime and crashes and burns just before dawn. If I take a really high number here and real low number here, and I average them, I got fish dying at noon from super saturation. I have fish dying at dawn because they can't breathe at all. And the site still passes the test. So again there is some nuance of language here and some of the overly specific things, with a few minor modifications, can -- the problems can probably be remedied.

But the bottom line is if a stream kills a variety of organisms and so on. When you've got six or seven things that are saying there is a problem here and you don't have a convenient hypotheses to test, then all this sample count debate doesn't mean very much.

I thank you.

1.9

THE COURT REPORTER: Would you put your name on the record, please.

MR. PARADIES: My name is Dave Paradies. I'm with the Bay Foundation of Morro Bay.

MR. BECKMAN: Good morning, Chairman Baggett, Board Member Sutley and Carlton. I'm David Beckman with the Natural Resources Defense Council. I am the last of the enviro PAG speakers this morning.

What I wanted to do is just mention a few more points that were not touched on by the speakers before me and then make a more general point about the problems with the policy. The exchange actually between Chairman Baggett and Dave Paradies is a good example of the problems. It would be wonderful if that simple piece on that page could be addressed, and we fix the problems with the policy as a whole. But the policy in the FED together are hundreds of pages and each page has similar problems, which doesn't mean that they are not correctable problems. But it means that the challenge is much more significant than a few lines here or a few lines there.

Sort of the thing about the comments you heard and the few additional examples I will provide I think is -- poses a question to each of you. And the question fundamentally is: Is this policy -- has it become through

intention or through the process result strip, and is the result that the policy leads to, in many situations, the result that's the proper one for the state and the one that you, each of you as Board Members, want to approve?

1.2

1.4

1.6

Let me mention a few additional examples that feed into this issue of whether multiple alternatives in a given situation. This policy almost always reaches a conclusion which reinforces either not listing a dirty water body or providing some kind of escape, some kind of exit from the TMDL approach.

One example is the policy maintains and really puts into practice the enforceable programs, so-called enforceable programs exemption, which we talked about many times and still has all sorts of loopholes, still provides an open exit ramp that can be used in too many circumstances. I suggest to you that it's bad policy in addition to being totally inconsistent with 303(d), which requires a TMDL when certain existing technological approaches to cleaning up water have not been effective. It's a very simple question. You read through the 303(d) and it is pretty straightforward. This policy, however, will open up the door, and you will have Regional Boards swamped, no pun intended, by dischargers who say, "Look, there is an enforceable program." And at a minimum that is going to be a huge roadblock to the real important work

that the Regional Board staffs have to do.

1.0

1.5

1.7

2.1

Not withstanding all the comments we've made about that, that program is still there. That's professional judgment as other speakers have touched on and others to follow may also touch on, including your Regional Boards, it's being severely limited, if not ruled entirely in many circumstances.

Why do you employ a thousand people or more at Regional Boards if you don't want their professional judgment? If, in fact, you don't want their professional judgment, then perhaps there is a much more thorough and effective kind of change you could make to listing water bodies. But there are certainly many circumstances that everybody could agree where best professional judgment is very important, whether it be permitting, whether it be identifying impaired water bodies. This policy seems to move far to the other extreme.

Bases of species is another example. That problem will not be addressed by the 303(d) list. Many alternatives that were proposed, but the one that was selected is not to deal with the issue.

Threatened water bodies. Perhaps this is another one of the more astounding examples clearly required by 303(d) in the regulations. Right there, the plan text.

CHAIRMAN BAGGETT: It is not -- I guess I am

missing it. Right there on 3.1.1.

MR. BECKMAN: No, there are no --

CHAIRMAN BAGGETT: It is clear, there are significant water bodies. If the Regional Board says it is in an ASBS area, that automatically puts it into the whole --

MR. BECKMAN: Speaking of ASBSs, I am talking about the fact that 303(d) lists are supposed to include both impaired water bodies and those that are considered not to meet standards or may not meet standards in the future. In other words, those that may be cleaned out but degrading, those that may be approaching the quote-unquote impaired level. The whole theory that is so self-evident that you want to intervene if you can as a regulatory agency before the problem becomes bad, because it is easier to deal with.

CHAIRMAN BAGGETT: That is why we had a monitoring list once upon a time.

MR. BECKMAN: Right. That is true.

CHAIRMAN BAGGETT: You didn't want us to have a watch list. That was the original, the previous draft had a watch list which was exactly to address that concern.

MR. BECKMAN: The problem that we had with the watch list was not that we didn't -- I hope you didn't

believe that the environmental community wasn't interested in identifying waters that were degrading but not yet impaired. The problem there had to do with the fact that the 303(d) list is supposed to be a coherent list; it is not supposed to be a set of sublists.

1.0

The point I am trying to make, however, is simply that this policy does not require the listing. In fact, it provides for a series of hurdles for Regional Board to list a water body that it believes is threatened. This is not an area, I believe, that the Board has any discretion here. Threatened water bodies are supposed to be part of the 303(d) list.

Now sort of to have a broad or concluding point for our comments this morning.

The whole setup of this approach, including maybe probably, the null hypothesis that you're assuming the water bodies are clean and you want evidence that they are dirty, conflicts, I would argue, with the very premise of 303(d), and the very situation that Congress dealt with in 1972 and throughout the '70s and '80s in the Clean Water Act; and that it is that in 303(d) Congress assumed that notwithstanding efforts to clean up the nation's water bodies, there would nevertheless be circumstances in which those efforts were unsuccessful.

They assumed, I would contend, that water bodies

will be or could be dirty, to put it plainly.

notwithstanding the efforts of Boards like yours. But

what you are doing is flipping that assumption on its head

in this policy. You are making the assumption that all of

your efforts have been successful and, therefore, you only

want to list when you have evidence to the contrary. But

as I emphasized, that is exactly opposite of the way this

regulatory approach works and the safety net role that the

303(d) in particular plays.

1.3

1.4

1.8

So with putting aside the binomial issues and the statistical issues, all of which are very important, I am not suggesting you not pay attention to them, but just at a very basic level, I think its incumbent upon each of you to ask why are you making that kind of assumption in this program. This is a safety net program. This is not your first effort out of the box with multiple other approaches available to you if you are unsuccessful. It is the last. As we pointed out, you're adopting or could adopt, if you adopt this staff proposal, an approach which is 300 more times more likely or up to 300 more times more likely to result in not listing than in listing.

I have asked you if you were a board sitting in another endeavor of society, would that make sense? For example, if you were a board that was faced with approving or disapproving a medical device that was shown to be 300

more times likely to kill the patient than to save his or her life, would you approve that device? If you were regulating air transportation and there was a mechanical rule that was 300 times more likely to cause an airplane to crash than to land safely, would you approve that policy?

1.7

2.1

You can pose hypotheticals all day long along those lines, but I would argue that they are very germane to the question. Because your point of emphasis in terms of your regulatory jurisdiction is protecting clean water. That is sort of self-evident. Nevertheless, there's evidence that we are going to give to you in detail that this proposal, if you adopt it, really is far more likely to result in the failure of the programs you are administering than in its success. And for that reason alone it deserves to be rethought.

So by way of conclusion, I think that we would like

-- we would hope that both the Board and staff,

notwithstanding the effort that staff has put into this

plan, would read the comments that we are going to provide

and those that we've articulated today with an open mind.

It is a very important endeavor, 303(d) list and the TMDL

program, and there is a certain sense that we are

beginning to get over the years when we culminate where we

are today that perhaps, whether it is intended or not, the

institutional hurdles and the institutional requirements of dealing with this 303(d) list are seeping into judgment in a way that is causing a proposal to be floated which has the effect of reducing the 303(d) list and thereby making the bureaucratic effort necessary, less significant. It is really not the Board's role or the staff's role to worry about those things, although it may be human nature to have them affect one's work. But it is really at this point most important that the policy that is adopted work for California today and work for California in the future. And the implications of the policy should not be -- should not reverse engineer it to get to a point where you think you can manage a smaller number of water bodies on the list.

CHAIRMAN BAGGETT: I guess I fail to see how it does that.

MR. BECKMAN: The policy itself admits that it will actually reduce the number. I can point to the number of places in the FED. I can give you the citation.

CHAIRMAN BAGGETT: If you do the binomial approach, you may get through that. You've got the sample sizes. It is listed automatically if it meets the stats. If it doesn't meet the stats, it is not listed, then you still go to the whole alternative data evaluation. And the Regional Board who has the expertise in those

watersheds will be looking in setting the criteria. What kind of water body? Where does it flow into? If they see the sample size is like Dave or Alan mentioned, if you've got five samples of sediment, maybe it should be less than 200 meters. I don't know. Spaced apart. You've got five samples, the NTUs, it's off the scale. Then they list it is. There is a lot of flexibility here, it seems to me. This is the first cut. Binomial, just to make it clean off the bat. Regardless of what happens next. Then you would go into the next -- you have all these alternatives. I guess that is what I'm really frustrated, where the lack of Regional Boards and I guess you-all feel there is a lack of alternatives.

1.5

2.3

 $$\operatorname{MR.}$$  BECKMAN: Let me see if I can respond to that with two points.

CHAIRMAN BAGGETT: Maybe you need to change some language in there. I don't know. That is the way I read it.

MR. BECKMAN: We don't read it that way. Maybe it is a question of changing, but I think the way we read it is currently accurate. The alternative as you are referring to it is not unguided. It is not that if you think there is a problem, Regional Board, you're invested with the power to do something about it.

What it actually says is that you can put together,

you, Regional Board staff person, can, overburdened as he or she may be with work, can put together a significantly defensible alternative which has a procedure that provides an equivalent level of confidence as the listing factors in Section 4.2.

So what you are really saying is that the Regional Board cannot depart from the levels of confidence in other statistical measures and that they have to put together something that looks and feels and perhaps is an equally scientific and statistically valid approach. That's the problem. So the alternative that you're surmising is not correct --

CHAIRMAN BAGGETT: You have three toxicity hits on a mile of river in the matter of a one-month period, don't you think that that would qualify as a problem?

MR. PARADIES: It won't pass the hypotheses test.

MR. BECKMAN: It depends on the -- I think what you're saying, Chairman Baggett, is you agree it is a problem, and we do, too. But what we're saying is that the language that would have to be implemented doesn't provide the same flexibility as you're saying you want in the --

CHAIRMAN BAGGETT: I assume we'll get some

written comments on the language.

MR. BECKMAN: Right.

Let me make one other very brief point. I still don't think that you should accept a binomial approach that is riddled with errors simply because you have -- even if you do fix and provide sort of a second approach, it would seem to me that the whole point of this effort is to have a more implementable, more consistent and efficient way to deal with the water bodies.

so if we don't fix that problem, we're not really going to be successful with this policy, because you are just going to be putting people always into that default position, which is going to be challenged and be subject to all sorts of review. And in the end you will end up maybe where we are now, where Regional Boards basically use their own judgment to do what is best. That judgment needs to be preserved. Certainly we are not opposed to making it more regularized and consistent.

CHAIRMAN BAGGETT: One last question. The last listing cycle, and I had four full days in this room. We added, what, 200 water bodies, us and USEPA, was about 200, we went from 16 to 18, roughly, something like that.

MR. LEVY: That is correct.

CHAIRMAN BAGGETT: It seems like that wasn't -- everybody -- we didn't seem to get a lot of argument.

We certainly didn't get any litigation or EPA didn't cover that. So I guess you don't see -- so you are actually -- where the state listed so many of the major impairments. All the North Coast streams are listed already for sediment and temperature. We can't -- I guess the Smith, have one exception. It seems to me you are going to have a diminishing number anyway.

1.8

MR. BECKMAN: Hopefully. And that is -CHAIRMAN BAGGETT: Hopefully. We've already
identified the really bad actors. We are down to where we
are making these fine cuts.

MR. BECKMAN: There is two things to say about that. First, it is not -- I don't think it is clear that we've identified the bad actors. The whole SWAMP process which has buy-in from all stakeholders around the table shows that the state monitors only a small portion of its water bodies. That is number one.

Number two, by your own decision or by the urging of other parties, there could be some pressure brought to reevaluate the entire list, including the bad actors that you have identified under an approach that, which we've just -- we will show in our comments we've articulated today, will remove a lot of the water bodies. That is the problem.

Notwithstanding the list as it exists today, this is

still significant.

2.0

question. I think I agree with you that if there is a problem with the binomial method, it's just the fact that there is at least an attempt to put an off-ramp shouldn't overcome -- shouldn't be enough to overcome the problem with the binomial method. I will be very interested to see not only your comments on the statistical method, but the staff response to that. If we have a problem with it with respect to even the hypothesis and the measurement, and I will -- this is all reminding me of my graduate school statistics classes which were not my favorite, anyway.

But it seems to me that based on my experience in the environmental agencies and, in fact, with setting standards that the way that you measure standards — the way that you measure is a part of the standard as much as the actual data. So it is important that we get this right. But I guess my question for you is: It seems to me that, and this is the first time I'm going through this process, through the listing process at all, that a lot of concern, instead of being generated by the consequence of being listed and then what happens after that, and I thought I heard you say that that wasn't the purpose of the 303(d) list. In a sense we can't correct those

problems or those issues in this policy.

Did I understand --

1.5

MR. BECKMAN: Not exactly. I guess my point may have been not well articulated. I was trying to indicate that the policy should be analyzed by whether it identifies impaired water bodies, not by whether there are so many of those that the state and the folks who work for the state are going to have a difficult time in dealing with that large number, and that I was afraid that intentionally or unintentionally that the concern over workload, that is significant, was infiltrating into how to do this testing is put together.

But to address your concern, and certainly we are aware having sat through the PAG meetings, we started out, actually, with perhaps that being one of the most significant issues that the regulated community was raising, although they will speak for themselves I am sure. But we heard a lot of concerns about, well, we are going to be on the list, this is going to mean that we are not going to be able to expand, and it could be erroneous, and we think the Regional Boards picked our impairment out of a hat one day in 1972, and it is no longer valid.

The truth of the matter is, though, that those apocryphal stories have not been demonstrated over the last three years to be true, number one. Number two,

since the '98-99 period of time when the large list that you just added to was put in place, a number of legal decisions, including ones by this Board, Tosco and others, that have minimzied the immediate impacts of listing.

There is no -- frankly, we don't agree with it, but practically speaking being on the list does not mean that your permit gets altered or that you are required not to discharge immediately. So I think, practically speaking, that being on the list is not -- it has far less consequences to the regulated entity on the list than not being on the list has to the environment, the broader economy and the interest the public has in those water bodies.

In our comments, if you're interested, we can provide some of those citations about how this Board has dealt with that issue.

Thank you.

CHAIRMAN BAGGETT: Thank you.

Peter Kozelka.

MR. KOZELKA: Peter Kozelka, EPA Region 9. I work in the water division, in the TMDL monitoring assessment unit. Speaking on behalf of Dave Smith and Alexa Strauss who are unable to be here.

As you know, EPA reviewed the policy several times, and we will be providing written comments before the close

of the comment period. And as you also know, EPA actually doesn't, according to federal regulations, approve each state's assessment methodology, rather we review and approve or disapprove a state's decisions, i.e., the 303(d) list that is submitted.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

As you all are aware, in the past EPA has partially disapproved the 303(d) list submitted by California and added impaired waters. Direct words from Alexa Strauss, we would like to minimize that effort as much as possible. I think it is in the interest of the state as well as EPA.

Based on our interpretation of the policy, we find serious inconsistencies with the existing state standards as well as federal regulations. I will get into those in a minute. I don't want to belabor some of them that have already been pretty well laid out. But as you also heard, there is some parts of this policy that are relatively clear and there are some parts that are not so clear. it is hard for us to make definitive stance to say that a state lists submitted based on this policy would dramatically conflict with one that we would review. In some ways we think the alternative data evaluation, which is probably more appropriately called the weight of evidence approach, could save the day, and there are states that have that in there, and it does make a dramatic difference.

There are some good aspects of the policy. Let me get to those. We appreciate the fact that the state has gotten into the idea of interpreting unconventional data, biological information, sediment tissue, et cetera. And it supports the translation of narrative objectives into numerical criteria or guidelines for assessments. It does provide some or attempts to provide some clear assessment criteria. And we believe that should be the goal of the policy to streamline assessments as well as to provide greater consistency across the Board.

Regarding the major inconsistencies with existing state standards and federal regulations, toxics is certainly number one. The California Toxics Rule has clearly explained that it is part of the Basin Plan objectives. It is a federal regulation, and currently the policy allows too many exceedances as explained in the policy.

Conventionals and other parameters. It seems to imply that a 10 percent exceedance is where you are going to go with this. And in my review of Basin Plans, only Regional Board 9 actually allows that for certain conventionals: nitrates, TDS and a variety of other things. The only other area that seems to imply that a 10 percent is allowed in the existing standards is in the bacterial monthly mean standard. But both of those, the

conventionals as well as the bacterial, often have single sample maximum criteria, and those would not be addressed according to this particular binomial approach. So there is an inconsistency there with the existing state standards.

Toxicity. Most Basin Plans actually state no toxics in toxic amounts or no toxicity whatsoever. We find there is an inconsistency there. There is a provision which hasn't been talked about yet called natural source exclusions, and those are not provided in any of the state standards. So regarding natural source exclusions, which we think we could go with you on that one, as long as it is clearly documented that it is all related to natural source, this is actually considered to be a water quality revision and you'd actually have to provide it, and review it under 303(c), not as part of the existing policy. That is -- I think we can work with you, but it may have to go through a different route, a different revision, to tell you the truth.

Minimum sample sizes. EPA does not advocate use of the use of minimum sample sizes. We believe there is no basis for high sample sizes or excursion frequencies if any sample sizes are not met.

Data quality requirements. The policy seems to say that you need to have a quality assurance project plan or

equivalent. We would like a definition on equivalent.

And federal regulations say that essentially all data information shall be considered. We would offer the fact that if you feel that you have more confidence, that you could provide more weight to that which you consider to be better data than other data, but you can't absolutely exclude data whatsoever.

Some other key concerns of this whole weighted evidence approach. I think that that is not meant to be the solution to be it here. The FED has laid out essentially some options with the weight of evidence approach, but I think there should be some more clear protocols, essentially sort of a decision tree that could be laid. There are plenty of examples that exist in other states' assessment methodologies that this state can start off with, and we would be happy to provide you with.

There is some vague assessment methods related to nuisance and nutrients. And the nuisance essentially refers to trash and algae and odors and that sort of stuff. We would appreciate dramatically more clear information there. As you know, trash are not small TMDL issues in any state. There are no clear sediment guideline or metrics numeric values. There is discussion of them, but there is not, like, well, if we have this value, we consider an exceedance. Do the best you can and

go after it. People have been doing Oregon and Washington already.

1

2.

3

4

5

6

7

8

9

1.0

11

12

13

14

15

16

17

18

19

2.0

21

22

23

24

25

The issue of priority setting and scheduling is simply something that could be resolved with a few clarifying information. Let me provide a little bit of perspective here.

Arizona came forward with a proposed policy. looks somewhat like this. We made some comments, and they made some revisions. They made some revisions that essentially excluded some -- that provided for exclusions related to toxics. It simply says, regardless of sample size, if there is more than one exceedance in a three consecutive year period, we will list. It also does the same thing for nitrate and also does the same thing for bacteria. And those are to be consistent with their standards. So that is the sort of change that I think that could be made, and I'm not saying that that is the easiest language to put in there and is not meant to take anything away from the consistency approach that we are trying to advocate to you. But we are promoting the idea of getting things to be close to the standards. Otherwise it becomes this revision change.

So, in conclusion, the proposed policy, as far as we can tell, would likely yield state listing decisions that are inconsistent with standards and federal listing

requirements and that would trigger disapprovals by us and could, yet to be determined, result in significant additions by EPA.

As far as recommendations, I think there are some fixes regarding those five or six elements mentioned above. We strongly suggest the idea of improving the weight of evidence approach. We believe there is some clarifying procedures for the nutrient, sediment, nuisance, et cetera.

And then, finally, we ask that the revised policy, once approved by you-all, should start to be addressed to waters that are currently on the list as well as to ensure the list to be accurate.

I guess that's it.

1.2

1.3

1.6

. 23

MEMBER SUTLEY: Just a question. In your recommendations you talk about improving the weight of evidence. But if I understood your comments with respect to the inconsistency with state standards, that is a different problem that you wouldn't necessarily solve by changing -- making changes to the weight of evidence?

MR. KOZELKA: Correct.

MEMBER SUTLEY: Your recommendation is to take a look at actual statistical models and ensure that it doesn't yield results that are inconsistent with water quality standards.

Am I understanding you correctly?

MR. KOZELKA: If the statistical model happens to coincide with state standards, then you can go forward. There are clear examples where it doesn't, and that is where we think we can offer some.

MEMBER SUTLEY: That is the toxics --MR. KOZELKA: Bacteria.

MEMBER SUTLEY: And others. And your written comments will go into that in more detail?

MR. KOZELKA: Sure, sure. The weight of evidence is another item. It is not meant to address those issues, but it is still important.

CHAIRMAN BAGGETT: Thank you.

I think we will take a five-minute break. We have about nine more cards. We will go straight through and not break for lunch, then.

Take five.

1

2

3

4

5

6

7

8

9

1.0

11

12

1.3

14

1.5

1.6

17

1.8

19

2.0

21

22

23

24

25

## (Break taken.)

CHAIRMAN BAGGETT: Resume. We will start back out with Tom Herman, and then Valerie. Heads up so we can be ready.

MR. HERMAN: Good morning, Members of the Board. My name is Tom Herman. I am an attorney from Eureka, California. I am here today representing one of my clients, the Soper Wheeler Company that is a

nonindustrial California timber landowner.

They've long been interested in the 303(d) list and the TMDL process. And I have just given the clerk my written comments, so I won't belabor you with all those details and just try to give you some general summary.

Certainly, we are happy to see efforts towards a listing policy. We, too, support statewide consistency. We think it is necessary for effective and appropriate protection of our state's waters. I think when we look at the listing process, I think it is important for you folks to keep in mind the cost associated with a listing. Not only does it require a substantial expenditure of public funds, but listing in either directly or indirectly results in significant reductions in land management productivity and reductions in land value of watersheds of these listed water bodies.

I think it is also important for you to keep in mind the insurmountable number of water bodies currently listed in the state of California and scheduled for expenditure of these funds and impacts on lands, and tie that together with the budget shortages that we have in California. I think these factors together dictate to you policy makers to make reasonable decisions on behalf of our citizens.

And we think that those all contribute to you supporting a policy that assures that no water body is listed

unnecessarily. We support a policy that puts the discretion -- really, the question here is: Who is going to be judge of whether these bodies should be listed or not? We would like that discretion closer to the top. Closer to the top where policy makers are subject to scrutiny by the public, closer to the -- or affected by the will of the public when they exercise their votes. We would support a policy that would result in the listing of only those water bodies where there is credible scientific evidence that water quality is impaired by humans, and where implementation of control measures is feasible to achieve actual remedial results.

2.2

To that end we urge you to consider the weight of evidence standard that is discussed in your policy, and we would hope that the weight of that evidence would or the evidence standard you would apply would be more like a clear and convincing level of evidence before a water body would be listed. We just can't support scheduling 30 or 40 years of bureaucratic efforts to fix water bodies when in five or six years the policies will probably change and we will have our priorities in another area. Let's focus our attention on where we can get the most bang for our dollar.

We are particularly concerned about the interpretation of narrative standards and the adoption of

thresholds of concern without a notice and opportunity to be heard by the public. We would support numerical criteria wherever it is possible, and we'd rather see discretion exercised by the Board and not the staff.

2.5

An example of thresholds adopted that I think is particularly egregious and it is even mentioned in your policy document was in the area of sediment. Some of the Boards adopted a percentage for a V star metric, and they cite right in the literature that is available for this hearing that they had two studies they used to establish their threshold. One study found in 60 watersheds calculated that a V star less than 21 percent represented good stream condition. Sixty, a population of 60 resulted in a mean of 21 percent. Another study several years later sampled one water body and found a V star value of 9 percent. So staff decided, well, we've got 21 and nine The average of that is 15. We will use 15.

Well, I think even a sixth grader would see the mathematical error in that kind of calculation, and if the public has an opportunity to participate in the establishment of these thresholds, I think these kind of silly errors would not emerge. We certainly support the policy that listings not be based on natural conditions. We have long urged that, and we certainly urge you to recognize the natural range of watershed dynamics and not

list watersheds where the evidence shows that we are within that range particularly with respect to pollutants such as sediment and temperature that are really a part of the ecosystem and far beyond any reasonable human control.

I think that with those comments, I provided specific comments on the text of the policy and my written document, and with that I would just say thank you.

CHAIRMAN BAGGETT: Thank you.

Craig Johns and then Valerie.

1.

MR. JOHNS: Thank you, Mr. Chair and Members of the Board. My name is Craig Johns. For the record, I am here on behalf of California Manufacturers and Technology Association, 980 Ninth Street, Suite 2200, in Sacramento.

I would like to say, first of all, that I am surprised actually not to hear from my colleagues and friends on the environmental side, recognizing even though they may disagree with some of the results of the policy, some of the very hard work by Craig Wilson and his staff along with the many others at the State Board and Tom Howard and Celeste Cantu, Stan Martinson and Mike Levy, of course. This has been a three-year process, as you all know, having sat through many of our PAG meetings. It's been an interesting process along the way, and I've enjoyed getting to know and working with David Beckman and Linda Sheehan, David Paradies and others on the

environmental caucus. And even though we don't agree on everything, I think one thing that we do agree on is we need a policy that somehow makes more consistent the approach that we are going about listing waters in the state.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

One of the things that this policy does that we support very strongly is begriming at an attempt, anyway, of providing reasonable and objective approach to doing that. Clearly I don't need to remind you that the choices that you will be facing in the next several months are very difficult policy choices, some of which David and Linda mentioned. But clearly, I think and the regulated caucus presented a letter on this back in September. All of the aspects and elements of the current draft, even though we disagree with some of the elements, and I am talking about just a couple of those, are clearly supported by the law, and we can provide many citations to that. I want to touch on one of the questions that Ms. Sutley asked a moment ago regarding the binomial method and the impact of whether that was a water quality standard change.

The positive aspects of this policy that we strongly support include the requirements for specific data quality and quantity. And on that point I noted that Mr. Kozelka from EPA stated in his comments, and I was confused by

this, frankly, that the EPA has never supported or advocated minimum data requirements. The reason I am confused is because the 200-, I believe 2002 CALM guidance says EPA encourages states, territories and interstate commissions, et cetera, to use data quality objectives, processes to define minimum quality data requirements, including information on appropriate sample size and monitoring design.

So clearly EPA headquarters recognizes the need for this, and we would support the staff's move in this direction. We also support strongly the requirements for consistent and valid data evaluations and the strong move towards more elaborate, public and stakeholder involvement.

A couple items I want to bring to your attention. I will be leaving them with staff, a copy of a letter detailing these in a little bit more from Jack Stewart at CMTA. Just three minor points. That we still have some concerns about policy with an overarching concept behind these comments, that's something that the Chairman mentioned at the 2002 hearings on the 2002 revisions. And that is that we are faced with a critical situation of having way more work. We meaning collectively the Boards, the Regional Boards, the State Board and the interested stakeholders that deal with the watersheds, way more work

on water quality issues with dwindling resources, particularly at the state side, as you well know. And we need to find a better way to triage the important water quality challenges that are facing all of us.

We think that much of the policy that is presented goes that way. We have a couple of suggestions for improving it still a little bit more. The first one is the review criteria for existing 303(d) listings in Section 6.1. The July administrative draft, for lack of a better way to refer to it, set forth a specified process for reviewing the historical listings, and this December draft took that out of the current criteria for review of only new data or information, which to us makes no logical sense given that we all know and heard at many of the PAG meetings that many historical listings are based on little or no data that we can find or that have some credibility questions, often for convenience and even to secure EPA grant money.

We would urge the State Board to put something back into the policy, I believe EPA supports this concept, that would allow for a review of these historical listings, using the final policy that you will finally adopt. And ultimately this is the only way we can go back and confirm that those historical listings are legitimate. One middle ground, if I might, might be that if an individual or an

entity wishes to require or request a review, the burden will be on them to request it in writing and maybe showing that the burden that they have to show that under the new policy the listing might change to diminish the staff resource allocation.

CHAIRMAN BAGGETT: That is obviously one of the big challenges.

MR. JOHNS: We would agree. And that is why we think that to the extent that the party believes that there might be a questionable listing, the burden should fall on them to bring forth adequate information for the Regional Board to consider.

MEMBER SUTLEY: Craig, can I just ask on that issue?

MR. JOHNS: Please.

MEMBER SUTLEY: You said you thought that there were a lot of historical listings that were based on less than evidence. Do you or does anybody who has been a part of some of these discussions have a sense of -- maybe have some data or some way of quantifying exactly how many of those that are problematic?

MR. JOHNS: I don't know if we have quantifiable -- if we can quantify the exact number. I know in the PAG discussions we were presented with information from folk members of the PAG, and I believe

Ms. Dunham is here today. She might be able to speak to that, about efforts to go into Regional Board offices to find the files that substantiated or justified the basis for some of the historical listings and found very little or nothing in those files. I don't believe that those are significant or substantial, and I don't think that this would be an inordinate burden.

The other point, perhaps, you also are referring to is we also heard from staff at the State Board during PAG meetings that before there was any real consequence, if you will, to adding waters to the list, there was actually a benefit, if you will, because adding more waters carried with it additional grant money from EPA. So that is something I think that is justified in at least looking at.

Continuing on, then, with just two more minor points. The consolidation of lists. In the July draft there were several lists, as was pointed out earlier by Chairman Baggett, which drew varied objections from the environmental and regulated caucuses. I think there were eight in total. Our view is that by maintaining a single list there will be many listings that will continue to be made with limited or questionable data or information, particularly with some of the sort of fallback provisions that has gotten some attention here. We think that there

is a very good reason to have a planning or monitoring or watch list, whatever is the appropriate term for it that you would like to come up with. So if there is some evidence that there may be an impairment but not enough to get past the binomial approach or get past the alternative data evaluation section, at least we all know that we are watching that. We can spend some additional resources to find out if the problem truly exists.

I wanted to point out also that the NASA report strongly supports this approach as a means by which to better triage and make good decisions on listing and expenditure of money.

One of the points that Ms. Sutley brought up through a question I believe, and I can't remember to whom, but the issue was your concern, Ms. Sutley, with regard to binomial approach, as to whether or not it might actually be a revision of water quality standards. I think it should be pointed out, and I know Mr. Levy from the Office of Chief Counsel, has read the decision that came out last May and the challenge of environmental groups to the Florida rule where the District Court ruled that, in fact, that policy which I think that the State Board staff would agree this one is based on, started on, the binomial approach, the statistical method, is not a revision of water quality standards. It is just an approach to try to

determine whether or not there is a minimum data set that has been reached to actually render a listing. I would encourage perhaps Mr. Levy to provide that information if you are interested, and we can certainly do that as well.

With that, I will conclude and just say thank you for the opportunity to comment. Be happy to answer any more questions. I will leave with staff a copy of Mr. Stewart's letter.

CHAIRMAN BAGGETT: Thank you.

Valerie and then Tess.

2.0

MS. NERA: Good morning. Valerie Nera for the California Chamber of Commerce. We are at 2715 K Street here in Sacramento.

In general we support the comments made by Mr. Johns on behalf of CMTA. And we definitely support the State Board's goal in establishing a standardized approach for assigning water bodies to the state's 303(d) list. We have a particular concern with previous 303(d) listings. We find that there are companies working in an area where the water bodies have been listed can be severely restricted in what they may discharge. So for us going back and looking at those lists again and being really sure that these water bodies are, indeed, impaired is of great importance.

We find that once a body is listed, even though it

may come of a list at some point, there is a public perception that this water in this area is impaired and is not a good place to do business.

So that is our particular concern with this, and those are my brief comments.

CHAIRMAN BAGGETT: Thank you.

Tess and then Sharon Green.

1.1

MS. DUNHAM: Thank you. Tess Dunham here today on behalf of the California Coalition for Clean Water.

The California Coalition is a newly formed informal association, and it was formed to start addressing some issues related to the state's water quality program and particular the state's implementation of water quality standards. And to that end I want to focus a little bit on the standards issue in relation to the TMDL list.

And I think what we'd first like to point out is the listing process and the policy itself. What it really fails to do, of course, is address the fundamental issue we have with water quality standards in the state of California and the fact that many of the standards that currently the listings are being based upon are inappropriate. They have been adopted 30 years ago without going through the proper process. They are being interpreted far beyond to the level that they were ever intended to be interpreted. And, of course, a lot of this

has been documented in two recent reviews of Basin Plans, one for the Los Angeles region and one for the Central Valley Basin.

1.0

1.3

1.9

Second, we'd also like to point out that again to that end the policy does allow what we would consider the inappropriate interpretation of narrative standards through the health advisory and some of the bioaccumulation. And again, these are unadapted water quality criteria. They should not be the basis for listings under any 303(d) listing policy.

We would also like to point out that through the reevaluation process, because of the inadequacy of many of the standards that are currently in place in California, there must be provisions within the reevaluation that does allow a revision of a listing based upon whether the standard is appropriate or not. Of course, the person requesting that needs to make some type of a good faith performance to put forward that it is an inappropriate standard.

And I am the Ms. Dunham that Craig mentioned just a few minutes ago with regards to the adequacy of data within the listing process. And what we found back in 1998 in my previous life at the California Farm Bureau, we had some of our members go through and request the files related to specific TMDL listings throughout the state.

And a number of our members, after making these requests, went into the Regional Boards, and as the Regional Boards pulled out the file for that listing, the file was either empty, nothing in there or there was one page of handwritten notes. This obviously was not the case for all TMDL listings, and, in fact, I would say the 2002 listing process was greatly improved in trying to cert documents, some of that. It does go to show that there has been in some cases no data or at least within the Regional Boards' files to substantiate listing, and because the standards in many cases have been adopted improperly and are not appropriate, that is what calls into the need for strict data provisions within this listing policy. If we were all confident that the standards in place were appropriate, had been done correctly, had been done pursuant to Porter-Cologne, we probably would not need to go to the level of data requirements that we are looking for in this policy.

Thank you.

1

2

3

4

5

6

7

8

9

10

11

1.2

13

14

15

16

17

18

19

20

21

22

23

24

25

CHAIRMAN BAGGETT: Thank you, Tess.
Sharon Green and Steve Arita.

MS. GREEN: Well, I guess I can still say, good morning, Mr. Chairman and Members of the Board and staff.

I am Sharon Green. I am here today on behalf of the California Association of Sanitation Agencies and Tri-TAC,

a statewide advisory group for publicly owned treatment works. The address for CASA is 915 L Street, Suite 1400, Sacramento.

I will endorse the comment of Mr. Johns and Ms. Dunham and several other people. I'll just be brief and summarize our points. We will be submitting comments in writing by the deadline. I would also just like to mention I'm here basically on behalf of Bobbi Larson. She is out sick today, unfortunately. I don't pretend to fill her shoes.

But in any case, we strongly support the goal of establishing a standardized approach for assigning water bodies to the state's 303(d) list, and we endorse the inclusion of the requirements for data quantity and quality, the requirements for a consistent and statistically valid data evaluation methodology and some of the implementation provisions.

I guess if I could summarize, one thing I would say to you is don't back away from this just because it's too hard. I think it underlies some of the comments you have heard today, is that this may be too hard to do. And I just encourage you to do what we think is the right thing. I think we see a need for more rigor in the process. I think some other speakers have mentioned the fact. Tess certainly mentioned that there have been listings in the

past that haven't had rigor applied to them, a rigorous approach applied in terms of what data were used or what the decision criteria really were. And I think that that is necessary to account for the variability in water quality, and basically to capture the real world complexities when you start going out and monitoring it.

2.4

One other thing that I wanted to point out that not many other speakers have touched upon is that we strongly support the transparent process that I think is being set forth in the document and that, through the fact sheets and documentation being required for listings in the future, and we support public access to the supporting data. And I think that is something that just about everybody should be in agreement on.

Just to touch on a couple of brief points. That I agree with Mr. Johns that the -- in this version of the policy you seem to be moving away from the more integrated water quality assessment report and from the multiple lists. We didn't think that the July draft was necessarily perfect, but we did think it was a good approach. It allows people to figure out what categories of waters we have and where they really belong, get a better picture of what's really happening, where you already have a TMDL, calling that out, and where you have an enforceable program in place, you would be calling that

out and not including it on the 303(d) list and requiring a TMDL for those.

1.8

As part of that, we also strongly support what you did in 2002 in establishing a planning or monitoring list, and I think that is a good way to address those water bodies where we need more information and need to be able to keep track of them and move forward on them, and not just ignore them. And by dropping them out of this sort of official process it is, I think, more likely that they may not get the attention that they need and deserve.

And finally, I would commend the Board for providing a mechanism for reevaluating water bodies that were on previous lists through the new policy criteria. But I would echo Mr. Johns' request that you broadened it just a little bit and allow interested parties to request a reevaluation even if new data and information aren't necessarily available. I think that would just highlight this point that there may be some existing listings. I don't know -- Ms. Sutley asked how many of these do we think there are. I don't know if anybody had a comprehensive notion of that. If anybody does, I would suppose it would be your staff. But Craig is shaking his head. But I do think that there are some that would merit a reevaluation, and putting that criteria on it will possibly preclude a more consistent approach to listing

and TMDL development.

Thank you very much.

CHAIRMAN BAGGETT: Thank you, Sharon.

Steven, and then Karen Ashby.

MR. ARITA: Chairman Baggett, Members of the Board. For the record, my name is Steven Arita, Western States Petroleum Association, 1415 L Street, Suite 600, Sacramento 95814.

On behalf of WSPA we too would like to express our appreciation for the Board's commitment to developing a standardized process for assigning water bodies to the 303(d) list. Clearly this draft policy is very important towards ensuring that the State Board is able to do, based on their limited resources, identify those water bodies that clearly need to be of highest priority and need to be addressed and rectified immediately.

As we stated in the past, we can't stress enough the importance of data quality analysis. In that regard we do support staff's recommendation for their weight of evidence approach. And further to that earlier you heard comments from Mr. Mumley. We also do support his suggestions for additional information, weight of evidence process if that could be included as well into the draft policy.

We do have some issues of concern with the draft

policy, but I will just focus on two, two of them, and we will be submitting written comments.

As you heard from other speakers, we do not support the removal of the planning lists from the draft policy. Clearly, there currently exists several hundred water bodies out there that are listed based on questionable data, lack of data or no data. And certainly a planning list will provide the opportunity to look at those water bodies, questionable water bodies, and provide additional information, monitoring data, that is necessary to determine, in fact, whether they should be listed on the 303(d) list.

If I may, you've heard comments from other speakers, concerns about water bodies that are threatened or water bodies that are being degraded, but yet might not be quite in terms of being listed. We certainly share those same concerns. And certainly you have had some discussions with some of the speakers about those issues. It only illustrates the point that and supports the point quite frankly that a planning list should be reinstituted back into the policy. Clearly we understand and are very sensitive to the fact that resources and budgetary constraints that Water Board faces today are very important and that those create a stress in terms of addressing these water bodies. However, I would suggest

that from a long-term perspective I don't think we can afford not to look at having water bodies through a categorized process. So again we would urge that a planning list be reincorporated back into the draft policy.

Secondly, we urge the Board to allocate what available resources they have to reassess the water bodies in the previous 303(d) listings. Again, we do understand that there are limited resources and budgetary challenges. However, such a reassessment will again in the long term help the Water Board to better prioritize, manage and allocate their limited resources to those water bodies in need of immediate actions.

Again, we will be providing additional comments and appreciate the opportunity to provide these comments.

Thank you.

2.2

CHAIRMAN BAGGETT: Thank you.

Karen Ashby, and then Bob Lucas.

MS. ASHBY: I think I can officially say good afternoon; it's ten past noon. My name is Karen Ashby. I am here today in my capacity as chair of the California Storm Water Quality Association. My address is 707 Fourth Street, Suite 200, in Davis 95616.

The association would first of all like to thank the State Board for all of its efforts to put forward a sound

listing process, and overall we support the goal of the draft policy to establish a standardized approach for developing the 303(d) list. However, we do have some general concerns with the December draft policy.

First, we are concerned that the revised draft policy departs from the July draft by deleting the multilist structure for classifying California waters. The use of the multiple assessment categories in the July draft water control policy was consistent with EPA guidance and the National Academy of Science's report on TMDLs to Congress. The multilist approach would help to focus limited staff and fiscal resources on identified and verified water quality impairments while ensuring that other waterways are appropriately monitored to determine if impairments exist. We respectfully request that the process used in the July draft be reconsidered.

Second, the association is concerned that the December draft combines two other separate lists into the 303(d) list. The TMDLs completed list and the alternative enforceable program list are not required by either the state or federal regulations to be included in the actual 303(d) list which is intended to include waters that are impaired or no program has been identified to address the impairment and where a TMDL has not yet been prepared.

To that end the association requests that the TMDLs

completed category and enforceable program category be removed from the 303(d) list.

Third, the draft policy does not correct a significant flaw in the 2002 303(d) list. The 2002 list contains listings for which specific pollutants have not been identified. There are hundreds of listings on the 2002 303(d) list for which no specific pollutant has been identified and some of these listings are for conditions, some are for groups of pollutants and others are for indicators. These listings should be removed from the 303(d) list and placed on a separate list until specific pollutants can be identified. In our September 12 letter the association suggested a pollution list as a way of solving this problem.

Fourth, and I'm echoing some of our previous commenters, the association is also concerned about the elimination of the Board's commitment to the reevaluation of each water body pollutant combination on the current list. While the reevalution specified in the July draft might have taken several listing cycles, it at least created a mechanism to review and reevaluate all questionable listings based on the newly proposed listing standards. Without such a reevaluation many of the legacy listings will become even more questionable.

Finally, the association is concerned with the data

aggregate provisions that would allow listings based on data from adjoining water segments. This provision is inconsistent with other requirements for minimum number of samples and creates a loophole within the listing process itself. We request that this concept be rethought and that limits should be placed on the aggregation of data in order to prevent erroneous listings.

1.2

1.3

1.4

1.5

2.2

Thank you again for the opportunity to comment on the policy, and we will be following up with written comment letter.

CHAIRMAN BAGGETT: Thank you.

Bob and then Armand Ruby, County of Sacramento.

MR. LUCAS: Thank you. My name is Bob Lucas, representing the California Council for Environmental Economic Balance. For the record I'm at 1121 L Street, Suite 407, and that is Sacramento 95814.

Our primary concern was process from the beginning has been the accuracy of the list, and we view this document as actually a very thoughtful document, and it does reflect well on the three years of effort that have gone into putting it together. And for the most part we think that it will represent an improvement to the listing process, leading to reasonable and objective determinations.

We do have one concern, though, having to do with

the structure of the list. And it's been alluded to by other speakers before me. And briefly stated I think we would agree with the comments of the NAS that is included in the text of the report on Page 36, that the use of such a list, this is the monitoring list, improves the accuracy of the listing process for a number of reasons.

One, that it provides a setup for the parties to contribute to the monitoring program, and that then leads to an assessment of new data and a better understanding of the impacts on beneficial uses. For that reason we would urge you to reconsider this particular recommendation, whether you move from four lists to one list with three categories or that you restructure the list entirely and go back to what you had been using in the past. We urge that you at least include a planning list or monitoring list.

Thank you.

1.0

1.1

CHAIRMAN BAGGETT: Thank you.

Armand and then Sterling McWhorter.

MR. RUBY: My name is Armand Ruby. I am an alternate member of the AB 982 PAG representing municipal storm water agencies. I am providing comments today on behalf of the Sacramento County Storm Water Program.

We want to express our support for the Board's efforts to establish standard protocols for the 303(d)

listing process. A standardized approach will help the state meet its obligations to protect and improve impaired waters in reasonable and cost-effective way. We also support the efforts by the State Board staff to establish a technically sound set of criteria as a foundation of those standard protocols. This is essential in deriving a listing policy that will result in scientifically supportable listings of impaired waters.

1.7

We do have a few concerns that we wish to express as well as follows: Firstly, I would like to support the previous speakers who have advocated inclusion of a planning or monitoring or watch list. And we do believe that there is a clear need for some version of a monitoring or planning list that accounts for those waters for which data are incomplete or inconclusive. But I would like to take a slightly different take in approaching this issue.

First, Sections 3.1.6, 3.1.8 and 3.1.9 of the revised draft policy, it appears that a water body can be listed due to toxicity, adverse biological response or degradation of biological populations even in the absence of identification of a pollutant causing such effects.

And all three of these sections appear to acknowledge that such an association is necessary, at least before proceeding with the TMDL. But the language is not there

to require such an association prior to listing. We feel that is inappropriate. The situation cries out for a version of the old monitoring or planning or watch lists. One suggestion would be renaming it on the pollutant identification list to account for those surface waters where biological testing indicates impairment but the cause of the pollutant or pollutants have not been identified.

1.1

2.0

A second significant concern lies in the aggregation of data by reach or area. The last part of this section states data related to the same pollutant from two or more adjoining segments shall be combined provided that there is at least one measurement above applicable water quality objective in each segment of the water body. The pooled data shall be analyzed together.

This appears to me that if Reach A has the minimum number of required samples and meets the criterion for listing, and Reaches B, C, et cetera, could all be listed if this just one sample meets the criteria through pooling with the data. This is in conflict with the letter and spirit of the carefully crafted technical bases for which listing that is laid out in the policy.

As I lose my voice, I would like to say that there are several other concerns that we have that will be expressed in written comments.

Thank you.

1.8

CHAIRMAN BAGGETT: Thank you.

Sterling and then on deck is Bill Busath, City of Sacramento.

MR. MCWHORTER: Thank you, Chairman. Sterling McWhorter with the Humboldt County Cattlemens Association and the Buckeye Conservancy.

I appreciate the staff and the Board trying to come up with a policy to list and delist impaired water bodies. When the North Coast rivers were put on the list, there was no policy. It was basically testimony from one or two individuals saying that, for instance, the Mattole River was impaired, that it was put on the list. And so I think we definitely need a policy to assure that the data is gathered and accurate.

Kind of take offense to being called a bad actor up on the North Coast. The North Coast rivers are not bad actors. Our members own 300,000 acres of open space habitat. We provide food and fiber, timber for building homes, for the world economy. There's runs that -- very good salmon runs in the rivers right now. There have been for a few years. So there is things changing. Things look good out there. The Mattole River runs by my front door, and it is not a muddy mess every day of the year. I can guarantee you that.

There is no legal challenges coming before you right now because we have not been harmed. We are on a 303(d) Big deal. It is the implementation plans that are going to cause the legal challenges on the 303(d) list. Sediment is natural. They're drilling for oil wells -not oil wells, but natural gas wells in the Old River Valley. They were down 6,000 feet and they hit a redwood log. It's natural. You can't put a number on it. You can't -- you know, it's very frustrating being up here, coming to these meetings, listening to the environmental community or the world fishing fleet whine about that there is no fish. Well, they caught up all the fish. I am doing research on that to prove that. They've caught billions and billions of pounds of salmon. And that is where the fishery has gone to. And now that those regulations have been put in place the fish are coming back.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

2.1

22

23

24

25

We will be here to participate in these boards. I appreciate you guys are having a hard time dealing with this because it is a big subject. It is a huge hit on the taxpayers, and it is going to be a huge hit on the landowners if it does get implemented.

I appreciate your time and thank you.

CHAIRMAN BAGGETT: Thanks for making the trip down. You are making progress up there.

Bill and then Tim, if necessary.

2.4

MR. BUSATH: My name is Bill Busath. I am storm water manager for the City of Sacramento.

I just quickly want to go on record in support of the comments of both Armand Ruby and Karen Ashby with CAQA. We also support the Board's effort and goal in establishing a standardized approach to the 303(d) delisting process. Especially, and we especially would like to endorse the comments that have been made concerning the planning and monitoring list. And also the reevaluation of the bodies that are on the list now. We will also be submitting some written comments. That is all I have to say.

CHAIRMAN BAGGETT: Thank you.

That is all the cards I have.

MR. PIASKY: Chairman Baggett, Members of the Board. Real brief. I am Tim Piasky, representing the construction industry coalition of water quality. I do want to commend the Board and staff for all the hard work that went into developing this policy. I think it is an important policy. Obviously, there are some things that still need to be worked out. You've heard a lot of comments today. There is no new comments that I would bring, so I just wanted to come up and express my support for the Board's effort and the fact that we will be

submitting written comments that will detail a lot of the same things you heard today. Thank you. CHAIRMAN BAGGETT: Thank you. Anyone else? With that, if you want more, February 5th, Member Sutley and Silva will be down in Torrance on the South Coast. So you go down to that hearing or send us your written comments. We take this very seriously and we will read them all. I know my colleagues and I realize what a big issue this is. Thanks for coming. (Public hearing concluded at 12:20 p.m.) ---000---

## REPORTER'S CERTIFICATE 1 2 3 STATE OF CALIFORNIA 4 ss. COUNTY OF SACRAMENTO 5 6 7 I, ESTHER F. SCHWARTZ, certify that I was the 8 official Court Reporter for the proceedings named herein, 9 and that as such reporter, I reported in verbatim 10 shorthand writing those proceedings; 11 That I thereafter caused my shorthand writing to be 12 reduced to printed format, and the pages numbered 3 13 through 95 herein constitute a complete, true and correct 14 record of the proceedings. 15 16 IN WITNESS WHEREOF, I have subscribed this 17 18 certificate at Sacramento, California, on this 13th day of February, 2004. 19 20 21 22 23 24 ESTHER F. SCHWARTZ 25 CSR NO. 1564

96

Public Hearing Transcripts

540